

**NEW ISSUE
FULL BOOK-ENTRY**

**RATINGS: Fitch: AA-
S&P: AA**

See “DESCRIPTION OF RATINGS” herein.

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the City, based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2017 Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended. In the further opinion of Bond Counsel, interest on the 2017 Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, taxes, although Bond Counsel observes that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the 2017 Bonds. See “TAX MATTERS.”



CITY OF TACOMA, WASHINGTON
\$70,575,000
Electric System Revenue Bonds, Series 2017

DATED: Date of Delivery

DUE: January 1, as shown on the inside cover

The City of Tacoma, Washington (the “City”), Electric System Revenue Bonds, Series 2017 (the “2017 Bonds”), will be issued as fully registered bonds under a bookentry system, initially registered in the name of Cede & Co., as nominee for The Depository Trust Company (“DTC”), New York, New York, which will act as securities depository for the 2017 Bonds. Individual purchases of the 2017 Bonds will be made in the principal amount of \$5,000 each or any integral multiple thereof within a maturity. Purchasers of the 2017 Bonds will not receive certificates representing their interest in the 2017 Bonds purchased.

The 2017 Bonds will bear interest payable semiannually on each January 1 and July 1, commencing January 1, 2018, to the maturity or prior redemption date of the 2017 Bonds. The principal of and interest on the 2017 Bonds are payable in lawful money of the United States of America by the fiscal agent of the State of Washington (the “Bond Registrar”), currently U.S. Bank National Association to DTC, which is obligated to remit such principal and interest to its broker-dealer Participants for subsequent disbursement to Beneficial Owners of the 2017 Bonds. See Appendix B—“BOOK-ENTRY SYSTEM.”

The 2017 Bonds are subject to redemption by the City prior to their stated maturities as described under “DESCRIPTION OF THE 2017 BONDS—Optional Redemption” and “—Mandatory Redemption.”

The 2017 Bonds are being issued to finance and refinance capital improvements to the Electric System and to pay costs of issuance. See “PURPOSE AND APPLICATION OF 2017 BOND PROCEEDS.”

The 2017 Bonds are payable solely from special funds of the City known as the Electric System Revenue Fund and the Electric System Revenue Bond Fund, and from Net Revenues of the Electric System (each as defined herein), and other funds pledged therefor, on a parity with the outstanding Electric System revenue bonds and other Electric System revenue bonds hereafter issued on a parity therewith. See “SECURITY FOR THE 2017 BONDS.”

The 2017 Bonds are not general obligations of the City, or the State of Washington, or a charge upon any general fund or other property of the City or the State of Washington not specifically pledged thereto by the Bond Ordinance, and neither the full faith and credit nor the taxing power of the City or of the State of Washington, nor any revenues of the City derived from sources other than the Electric System, are pledged to the payment thereof.

This cover page includes certain information for reference only and is not a summary of matters set forth herein. Investors should read the entire Official Statement to obtain information essential to the making of an informed investment decision.

The 2017 Bonds are offered for delivery when, as, and if issued, subject to the approval of legality by Orrick, Herrington & Sutcliffe LLP, Seattle, Washington, Bond Counsel and Disclosure Counsel. Certain legal matters will be passed upon for the Underwriters by Pacifica Law Group LLP, Seattle, Washington. It is expected that the 2017 Bonds will be available for delivery at the facilities of DTC in New York, New York, by Fast Automated Securities Transfer (FAST) on or about September 1, 2017.

Goldman Sachs & Co. LLC

Citigroup

Dated August 15, 2017

MATURITY SCHEDULE, INTEREST RATES, YIELDS, PRICES AND CUSIP NUMBERS

\$70,575,000 ELECTRIC SYSTEM REVENUE BONDS, SERIES 2017

Due January 1	Amount	Interest Rate	Yield*	Price	CUSIP No.†
2022	\$2,150,000	5.000%	1.120%	116.365%	873519NY4
2023	2,255,000	5.000	1.270	119.174	873519NZ1
2024	2,370,000	5.000	1.460	121.338	873519PA4
2025	2,490,000	5.000	1.650	123.046	873519PB2
2026	2,610,000	5.000	1.820	124.482	873519PC0
-	-	-	-	-	-
2028	2,745,000	5.000	2.160	123.886**	873519PD8
2029	2,880,000	5.000	2.270	122.842**	873519PE6
2030	3,025,000	5.000	2.380	121.808**	873519PF3
-	-	-	-	-	-
2036	3,175,000	5.000	2.820	117.776**	873519PG1
2037	3,335,000	5.000	2.850	117.506**	873519PH9
2038	3,500,000	5.000	2.880	117.238**	873519PJ5
2039	3,675,000	5.000	2.910	116.970**	873519PK2

\$12,170,000 5.000% Term Bond due January 1, 2042, yield of 3.010%*, price of 116.083%**,

CUSIP No. 873519PL0†

\$24,195,000 4.000% Term Bond due January 1, 2047, yield of 3.440%*, price of 104.434%**,

CUSIP No. 873519PM8†

* Provided by the Underwriters. The City makes no representation as to the accuracy of such numbers.

† Copyright © 2017, American Bankers Association. CUSIP numbers are included for convenience of reference only. CUSIP numbers are provided by CUSIP Global Services, which is managed on behalf of the American Bankers Association by S&P Global Market Intelligence. Neither the City nor the Underwriters assume any responsibility for the accuracy of such CUSIP numbers.

** Priced to the first par call date of January 1, 2027.

No dealer, broker, salesperson, or other person has been authorized by the City or the Underwriters to give any information or to make any representations in connection with the offering of the 2017 Bonds other than those contained in this Official Statement and, if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the 2017 Bonds, by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

The information set forth herein has been furnished by the City and other sources that are believed to be reliable, but it is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation by, the Underwriters. 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 hereunder shall, under any circumstances, create any implication that there has been no change in the information set forth herein since the date hereof.

This Official Statement contains forecasts, projections and estimates that are based upon expectations and assumptions that existed at the time such forecasts, projections and estimates were prepared. The inclusion in this Official Statement of such forecasts, projections and estimates should not be regarded as a representation by the City that such forecasts, projections and estimates will occur or be realized. Such forecasts, projections and estimates are not intended as representations of fact or as guarantees of results. As and when included in this Official Statement, the words “plan,” “expect,” “forecast,” “estimate,” “budget,” “project,” “intend,” “anticipate” and similar words identify forward-looking statements. Such statements inherently are subject to a variety of risks and uncertainties that could cause actual results to differ materially from those projected. These forward-looking statements speak only as of the date they were prepared.

The 2017 Bonds will not be registered under the Securities Act of 1933, as amended, in reliance upon an exception contained in such act.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as a part of, their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

This Official Statement is not to be construed as a contract or agreement between the City and purchasers or owners of any of the 2017 Bonds.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICE OF THE 2017 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME. THE UNDERWRITERS MAY OFFER AND SELL THE 2017 BONDS TO CERTAIN DEALERS, INSTITUTIONAL INVESTORS AND OTHERS AT PRICES LOWER THAN THE PUBLIC OFFERING PRICES STATED ON THE INSIDE FRONT COVER HEREOF, AND SAID PUBLIC OFFERING PRICES MAY BE CHANGED FROM TIME TO TIME BY THE UNDERWRITERS.

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TACOMA PUBLIC UTILITIES
3628 South 35th Street
Tacoma, Washington 98409
(253) 502-8512

MAYOR AND TACOMA CITY COUNCIL

Marilyn Strickland, Mayor

Keith Blocker
Marty Campbell
Anders Ibsen
Lauren Walker Lee

Joe Lonergan
Conor McCarthy
Ryan Mello
Robert Thoms

PUBLIC UTILITY BOARD

Monique Trudnowski, Chair
Woodrow Jones, Vice Chair
Karin Larkin, Secretary
Bryan Flint
Mark Patterson

DEPARTMENT OF PUBLIC UTILITIES, TACOMA POWER

William A. Gaines, Director of Utilities, Chief Executive Officer
Chris Robinson, Superintendent/Chief Operating Officer
Dolores Stegeman, Transmission and Distribution Manager
Chris Mattson, Generation Manager
Clay Norris, Power Manager
Tenzin Gyaltsen, Click! Network General Manager
John Lawrence, Utility Technology Services Manager
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OFFICIAL STATEMENT
CITY OF TACOMA, WASHINGTON

\$70,575,000
Electric System Revenue Bonds,
Series 2017

INTRODUCTION

The City of Tacoma, Washington (the “City” or “Tacoma”), a municipal corporation duly organized and existing under the laws of the State of Washington (the “State”), furnishes this Official Statement in connection with the offering of \$70,575,000 principal amount of its Electric System Revenue Bonds, Series 2017 (the “2017 Bonds”).

This introduction is qualified in its entirety by reference to the entire Official Statement, and a full review of the Official Statement should be made by potential investors. This Official Statement speaks only as of its date, and the information contained in it is subject to change.

The City is a municipal corporation under the Constitution and laws of the State. The Light Division, doing business as Tacoma Power (“Tacoma Power”), of the City’s Department of Public Utilities (the “Department”) operates the City’s electrical generation, transmission and distribution facilities and its telecommunication system (collectively, the “Electric System”). Tacoma Power is one of the largest municipally-owned utilities in the Pacific Northwest in terms of customers served and energy sold. In 2016, Tacoma Power served an average of 176,784 metered customers, had 838 employees and had operating revenues of approximately \$418.6 million. See “THE DEPARTMENT OF PUBLIC UTILITIES—TACOMA POWER.”

The 2017 Bonds are being issued in accordance with the Charter of the City, the applicable laws of the State, and Ordinance No. 28146, passed by the City Council on April 30, 2013, as supplemented and amended by Ordinance No. 28444 passed by the City Council on August 1, 2017 (collectively, the “Bond Ordinance”). Certain capitalized words and phrases used in this Official Statement not defined herein have the meanings given in the Bond Ordinance, unless the context shall clearly indicate that another meaning is intended. See Appendix A for certain definitions.

The 2017 Bonds are issued on a parity with the City’s outstanding Electric System Revenue Bonds, Series 2010B (Taxable Build America Bonds – Direct Payment) (the “2010B Bonds”) and Electric System Revenue Bonds, Series 2010C (Taxable Clean Renewable Energy Bonds – Direct Payment) (the “2010C Bonds,” and together with the 2010B Bonds, the “2010 Bonds”) and Electric System Revenue and Refunding Bonds, Series 2013A (the “2013A Bonds”) and Electric System Revenue Refunding Bonds, Series 2013B (the “2013B Bonds” and together with the 2013A Bonds, the “2013 Bonds,” and collectively, the “Outstanding Parity Bonds”). The City has reserved the right in the Bond Ordinance to issue additional parity bonds upon satisfaction of certain requirements (“Future Parity Bonds”). The 2017 Bonds, the Outstanding Parity Bonds and Future Parity Bonds are referred to as the “Parity Bonds.” The Outstanding Parity Bonds are currently outstanding in the aggregate principal amount of \$358,335,000. See “SECURITY FOR THE 2017 BONDS—Outstanding Parity Bonds” below.

The summaries of and references to all documents, statutes, reports and other instruments referred to herein do not purport to be complete, comprehensive or definitive, and each such summary and reference is qualified in its entirety by reference to each such document, statute, report or instrument. The capitalization of any word not conventionally capitalized, or otherwise defined herein, indicates that such word is defined in a particular agreement or other document and, as used herein, has the meaning given it in such agreement or document.

All references herein to the 2017 Bonds and the Bond Ordinance are qualified in their entirety to the actual documents, copies of all of which will be available for inspection at the offices of the City.

In the preparation of the projections in this Official Statement, the City has made certain assumptions with respect to conditions that may occur in the future. While the City believes these assumptions are reasonable for the purpose of the projections, they are dependent upon future events, and actual conditions may differ from those assumed. To the extent actual future events or conditions differ from those assumed by the City or provided to the City by others, the actual results will vary from those projected.

Additional Information Concerning the City

The City regularly prepares a variety of publicly-available reports, including audits, budgets and related documents. Such reports are not incorporated herein by this reference. An investor may obtain a copy of any such report, as available from the City.

Additional information regarding this Official Statement may be obtained by contacting the following:

Rates, Planning, and Analysis Manager
Tacoma Power
3628 South 35th Street
Tacoma, WA 98373
(253) 502-8294
PowerFinance@cityoftacoma.org

DESCRIPTION OF THE 2017 BONDS

General Terms

The 2017 Bonds will be dated and bear interest from the date of their initial delivery and will be issued in registered form in the denominations of \$5,000 or any integral multiple thereof within a single maturity. Interest will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The fiscal agent of the State (currently U.S. Bank National Association, Seattle, Washington) will act as Bond Registrar for the 2017 Bonds.

The 2017 Bonds will be issued in the aggregate principal amount of \$70,575,000 and will mature on the dates and in the principal amounts and will bear interest, payable semiannually on each January 1 and July 1, commencing January 1, 2018, to the maturity dates or prior redemption thereof, at the respective rates as set forth on the inside cover page hereof.

So long as Cede & Co. is the registered owner of the 2017 Bonds, principal of and interest on the 2017 Bonds are payable by wire transfer by the Bond Registrar to DTC, which in turn is obligated to remit such principal and interest to the DTC participants for subsequent disbursement to Beneficial Owners of the 2017 Bonds. See Appendix B—"BOOK-ENTRY SYSTEM."

Optional Redemption

The 2017 Bonds maturing in years 2022 through 2026, inclusive, are not subject to redemption prior to maturity. The 2017 Bonds maturing on or after January 1, 2028, are subject to redemption at the option of the City on or after January 1, 2027, in whole or in part at any time within one or more maturities selected by the City at a redemption price of par plus accrued interest, if any, to the date of redemption without premium.

Mandatory Redemption

The 2017 Bonds maturing in the years 2042 and 2047 are Term Bonds and are subject to mandatory redemption at a redemption price of par plus accrued interest, if any, to the date of redemption, without premium, on January 1 in the years and principal amounts as follows:

2042 Term Bond

<u>Year (January 1)</u>	<u>Principal Amount</u>
2040	\$ 3,860,000
2041	4,055,000
2042 ⁽¹⁾	4,255,000

(1) Maturity.

2047 Term Bond

<u>Year (January 1)</u>	<u>Principal Amount</u>
2043	\$ 4,470,000
2044	4,645,000
2045	4,830,000
2046	5,025,000
2047 ⁽¹⁾	5,225,000

(1) Maturity.

If the City optionally redeems or purchases 2017 Bonds that are Term Bonds, the par amount of the 2017 Bonds that are Term Bonds so redeemed or purchased shall be credited against one or more scheduled mandatory redemption amounts for those Term Bonds, as determined by the City.

Partial Redemption

Any 2017 Bond that is subject to optional or mandatory redemption may be redeemed in part in denominations of \$5,000 and integral multiples thereof. If less than all of the outstanding principal amount of any 2017 Bond is to be redeemed, the portion thereof to be redeemed shall be selected by DTC in accordance with its applicable procedures. If a 2017 Bond ceases to be held in book-entry form, the portion to be partially redeemed shall be selected randomly in such manner as the Bond Registrar shall determine.

Notice of Redemption

The City shall cause notice of any intended redemption of 2017 Bonds to be given by the Bond Registrar 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 each 2017 Bond to be redeemed at the address appearing on the Bond Register on the 15th day of the month preceding the redemption date. This requirement shall be satisfied when notice has been mailed as so provided, whether or not it is actually received by the owner of any 2017 Bond.

Interest on 2017 Bonds called for redemption shall cease to accrue on the date fixed for redemption, unless either the notice of redemption is rescinded as set forth below, or money sufficient to effect the redemption is not on deposit in the Electric System Revenue Bond Fund (the "Bond Fund") or in an escrow account established to carry out a refunding or defeasance of the redeemed 2017 Bonds. While a 2017 Bond is registered in the name of Cede & Co., as nominee of DTC, notice of redemption shall be given in accordance with the City's Letter of Representations with DTC.

In the case of an optional redemption, the notice of redemption may state that the City retains the right to rescind the redemption notice and the optional redemption of those 2017 Bonds by giving a notice of rescission to the affected registered owners at any time on or prior to the scheduled optional redemption date. Any notice of optional

redemption that is so rescinded shall be of no effect, and a 2017 Bond for which the notice of optional redemption has been rescinded shall remain outstanding.

Purchase for Cancellation

The City reserves the right to purchase any or all of the 2017 Bonds in the open market at any time at any price acceptable to the City plus accrued interest to the date of purchase.

Book-Entry System

When issued, the 2017 Bonds will be registered in the name of Cede & Co. (or such other name as may be requested by an authorized representative of DTC), as nominee of DTC. DTC will act as securities depository for the 2017 Bonds. Individual purchases will be made in book-entry form only through DTC, and purchasers will not receive physical certificates representing their interests in the 2017 Bonds purchased. For information about DTC and its book-entry system, see Appendix B—“BOOK-ENTRY SYSTEM.” So long as Cede & Co. is the registered owner of the 2017 Bonds, as nominee of DTC, references herein to the “registered owners” or “bondowners” shall mean Cede & Co. and shall not mean the beneficial owners of the 2017 Bonds.

If DTC resigns as the securities depository and no substitute can be obtained, or if the City has determined that it is in the interests of the beneficial owners of the 2017 Bonds that they be able to obtain bond certificates, the ownership of the 2017 Bonds may be transferred to any person as described in the Bond Ordinance and the 2017 Bonds no longer will be held in fully immobilized form. New bond certificates then will be issued in appropriate denominations and registered in the names of the Beneficial Owners.

PURPOSE AND APPLICATION OF 2017 BOND PROCEEDS

The 2017 Bonds are being issued to provide funds (a) to finance and refinance certain capital improvements to the Electric System included in the 2015-2016 and 2017-2018 Capital Improvement Program (including through the refinancing of Subordinate Obligations (as defined under “SECURITY FOR THE 2017 BONDS—Subordinate Obligations”)); and (b) to pay the costs of issuance of the 2017 Bonds. Included in the 2015-2016 and 2017-2018 Capital Improvement Program are projects involving additions, replacements and improvements to the distribution, transmission, smart grid, telecommunications related to power operations, power supply, utility technology and general plant systems, facilities and equipment and for conservation programs. For a description of the Electric System’s capital improvement program, see “CAPITAL IMPROVEMENT PROGRAM.”

Sources and Uses

The following table shows the estimated sources and uses of the 2017 Bond proceeds:

Sources of Funds	2017 Bonds
Par Amount of the 2017 Bonds	\$70,575,000.00
Original Issue Premium	9,881,267.70
Total	\$80,456,267.70
Uses of Funds	
Repay Subordinate Obligations	\$80,000,000.00
Issuance Expenses ⁽¹⁾	456,267.70
Total	\$80,456,267.70

- (1) Issuance expenses include underwriters’ discount, legal fees, financial advisor’s fees, rating agency fees, and other costs incurred in connection with the issuance of the 2017 Bonds.

SECURITY FOR THE 2017 BONDS

Pledge

Under the Bond Ordinance, the 2017 Bonds are special limited obligations of the City payable from and secured solely by (i) Net Revenues of the Electric System and (ii) the money and investments, if any, credited to the Electric System Revenue Fund (the "Revenue Fund") and the Bond Fund (which includes the Reserve Account) and the income therefrom.

Pursuant to the Bond Ordinance, the City has pledged as security for the payment of the principal of, premium, if any, and interest on the 2017 Bonds, subject only to the provisions of the Bond Ordinance restricting or permitting the application thereof for the purposes and on the terms and conditions set forth in the Bond Ordinance: (i) the proceeds of the sale of the 2017 Bonds to the extent held in funds established by the Bond Ordinance, (ii) Net Revenues, and (iii) the money and investments, if any, credited to the Revenue Fund and the Bond Fund, and the income therefrom.

All Parity Bonds shall be equally and ratably payable and secured under the Bond Ordinance without priority by reason of date of adoption of the ordinance providing for their issuance or by reason of their series, number or date of sale, issuance, execution or delivery, or by the liens, pledges, charges, trusts, assignments, and covenants made in the Bond Ordinance, except as otherwise expressly provided or permitted in the Bond Ordinance.

"Net Revenues," is defined in the Bond Ordinance to mean for any period, the excess of Revenues over Operating Expenses for such period, excluding from the computation of Revenues (a) any profit or loss derived from the sale or other disposition, not in the ordinary course of business, of investments or fixed or capital assets of the Electric System, or resulting from the early extinguishment of debt; (b) insurance and condemnation proceeds; (c) income from investment of money on hand in any construction fund and other investment income restricted to a particular purpose inconsistent with its use for the payment of debt service; and (d) any other extraordinary, non-recurring income or contribution.

"Revenues" is defined in the Bond Ordinance to mean all income (including investment income), receipts and revenues received by the City through the ownership and operation of the Electric System (including any income derived by the City through the ownership and operation of any facilities that may hereafter be purchased, constructed, or otherwise acquired and operated by the City as a separate utility system, which income is available after meeting all requirements of the obligations of such separate system and is paid into the Revenue Fund) "Revenues" do not include investment income restricted to a particular purpose inconsistent with its use for the payment of debt service, including investment income derived pursuant to a plan of debt refunding.

"Operating Expenses" is defined in the Bond Ordinance to mean the City's expenses for operation and maintenance of the Electric System, including all operation and maintenance expenses included in the Uniform System of Accounts and includes, without limiting the generality of the foregoing, (a) all costs of purchased Power and Services required under contracts existing as of the date of passage of the Bond Ordinance to be taken by the City for the account of the Electric System, and otherwise all costs of purchased Power and Services to the extent, but only to the extent, that the City is not obligated to make payment therefor unless the City is receiving Power and Services in return for such payment and (b) costs of Contract Resource Obligations upon satisfaction of the requirements established by the Bond Ordinance. "Operating Expenses" include payments to the City for services rendered to the electric utility by other departments or offices of the City but do not include any extraordinary, non-recurring expenses, any costs or expenses for new construction, interest, amortization, any allowance for depreciation or any taxes payable to the City (or payments in lieu of taxes) upon the properties or earnings of the Electric System or the earnings of any separate electric utility system derived from payments by the Electric System.

"Power and Services" is defined in the Bond Ordinance to mean energy, capacity, reserves and services, excluding the purchase of ownership of generating capability.

Limited Obligations

THE 2017 BONDS SHALL NOT IN ANY MANNER OR TO ANY EXTENT CONSTITUTE GENERAL OBLIGATIONS OF THE CITY OR OF 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 OR OF THE STATE, OR OF ANY POLITICAL SUBDIVISION OF THE STATE, NOT SPECIFICALLY PLEDGED THERETO BY THE BOND ORDINANCE. NEITHER THE FULL FAITH AND CREDIT NOR THE TAXING POWER OF THE CITY OR OF THE STATE, OR ANY POLITICAL SUBDIVISION OF THE STATE, NOR ANY REVENUES OF THE CITY DERIVED FROM SOURCES OTHER THAN THE ELECTRIC SYSTEM OF THE CITY, OR ANY OTHER MONEYS OR PROPERTY OF THE CITY, ARE PLEDGED TO THE PAYMENT THEREOF.

Washington State law provides that the owner of a bond, such as the 2017 Bonds, the payment of which is pledged from a special fund, such as the Bond Fund, has a claim only against that fund and proportionate amounts of revenue pledged to that fund. Under State law, any bond owner may bring an action to compel a city to set aside and pay into the special fund the amount that a city is obligated to set aside and pay therein if funds are sufficient and it has otherwise failed to do so.

Rate Covenant and Debt Service Coverage Covenant

The City has covenanted in the Bond Ordinance to establish, maintain and collect rates and charges for services, facilities and commodities sold, furnished or supplied through the facilities of the Electric System that will be fair and adequate to provide Revenues sufficient for the punctual payment of the principal of, premium, if any, and interest on the Parity Bonds for which the payment otherwise has not been provided, for all payments the City is obligated to make into the Bond Fund and for the proper operation and maintenance of the Electric System, including payment of all Contract Resource Obligations included in the Electric System's Operating Expenses, and all necessary repairs, replacements and renewals thereof, including the payment of all taxes, assessments or other governmental charges lawfully imposed on the Electric System or the Revenues therefrom, or payments in lieu thereof, and the payment of all other amounts that the City may now or hereafter become obligated to pay from the Revenues by law or contract. See "Contract Resource Obligations" below for conditions qualifying such obligations as Operating Expenses.

The City also has covenanted in the Bond Ordinance to establish, maintain and collect rates and charges which shall be adequate to provide, in each Fiscal Year, Net Revenues in an amount equal to at least 1.25 times the actual Annual Debt Service for such year. Solely for purposes of this calculation, there is added to Revenues in any Fiscal Year any amount withdrawn from the Rate Stabilization Fund in such Fiscal Year and deposited in the Revenue Fund, and there shall be subtracted from Revenues in any Fiscal Year any amount withdrawn from the General Account in the Revenue Fund and deposited in the Rate Stabilization Fund. See "Rate Stabilization Fund" below.

The calculation of the coverage requirement set forth above, and the City's compliance therewith, may be made without regard to changes in generally accepted accounting principles. If the City has changed one or more of the accounting principles used in the preparation of its financial statements, because of a change in generally accepted accounting principles or otherwise, then a default relating to the coverage requirement shall not be considered an Event of Default if the coverage requirement would have been complied with had the City continued to use those accounting principles employed at the date of the most recent audited financial statements prior to the date of the Bond Ordinance.

Rate Stabilization Fund

Tacoma Power has previously established by ordinance, and will maintain, a Rate Stabilization Fund as a means of managing potential volatility in rates and augmenting reserve policies. Funds are intended to mitigate the need for large changes in rates from one year to the next. The Fund also may be used as a rate stabilization account for purposes of the ordinances authorizing Tacoma Power debt. Amounts withdrawn from the Fund are deducted from Revenues in the year they are deposited into the Fund and counted as revenues in the year withdrawn from the Fund. See "Rate Covenant and Debt Service Coverage Covenant" above. The current balance in the Rate Stabilization

Fund is \$48,000,000. The City policy is to review the adequacy of the Fund's balance annually and make the necessary adjustments.

Debt Service Reserve Account

The Bond Ordinance established a Reserve Account in the Bond Fund and permits the City to establish subaccounts within the Reserve Account and separate Reserve Account Requirements in connection with the issuance of Parity Bonds. The City has previously established subaccounts in the Reserve Account in connection with the issuance of the Outstanding Parity Bonds (the "2010 and 2013 Reserve Subaccounts"). The Reserve Account Requirement with respect to the Outstanding Parity Bonds means an amount equal to the lesser of maximum Annual Debt Service in any Fiscal Year following the date of computation or 125% of average Annual Debt Service. See "2010 and 2013 Reserve Subaccounts" below. The 2010 and 2013 Reserve Subaccounts secure only the payment of principal of and interest on the Outstanding Parity Bonds and any Future Parity Bonds that the City elects to have secured by such subaccounts, and do not secure the payment of the principal of or interest on the 2017 Bonds.

The Reserve Account Requirement with respect to the 2017 Bonds will be zero. Thus, payment of debt service on the 2017 Bonds will not be secured by any debt service reserve account.

The Reserve Account Requirement with respect to any Future Parity Bonds will be an amount, if any, set forth in the Supplemental Ordinance authorizing the issuance thereof. The Supplemental Ordinance authorizing such Future Parity Bonds may provide a separate reserve account for such bonds or that such Future Parity Bonds will be secured by a common reserve account, including the 2010 and 2013 Reserve Subaccount or the 2017 Reserve Subaccount.

2010 and 2013 Reserve Subaccounts

As of December 31, 2016, the value of cash and investments the City had on deposit in the 2010 and 2013 Reserve Subaccounts was \$4,981,885. In addition, the City obtained, for the benefit of the 2010 and 2013 Reserve Subaccounts, a reserve account surety policy from Financial Security Assurance ("FSA"), now known as Assured Guaranty Municipal Corporation ("Assured"), with a policy limit of \$24,279,910. Moody's Investors Service ("Moody's") and S&P Global Ratings ("S&P") currently rate Assured "A2 (stable)" and "AA (stable)," respectively. The reserve surety policy from Assured applies to all Parity Bonds secured by the 2010 and 2013 Reserve Subaccounts and expires on January 1, 2020. The City expects to provide for full funding of the 2010 and 2013 Reserve Subaccounts by the expiration of the surety policy with either cash, a reserve surety policy, or a Qualified Letter of Credit.

No Acceleration

The Parity Bonds are not subject to acceleration upon the occurrence of an Event of Default. The inability to accelerate the Parity Bonds upon an Event of Default could give rise to conflicting interests between owners of earlier and later maturing Parity Bonds. The nature and extent of any such variance would depend in part upon the nature and duration of any default. The City thus would be liable only for principal and interest payments as they became due, and the bond owners may be required to seek a separate judgment for each payment, if any, not made. Any such action for money damages would be subject to any limitations on legal claims and remedies against public bodies under Washington law. Amounts recovered would be applied to unpaid installments of interest prior to being applied to unpaid principal and premium, if any, which had become due.

Contract Resource Obligations

The City has retained the right under the Bond Ordinance to create and incur Contract Resource Obligations. Contract Resource Obligations are payable from Revenues as an Operating Expense and thus prior to the payment of debt service on the Parity Bonds. The City does not have any Contract Resource Obligations.

A Contract Resource Obligation is defined in the Bond Ordinance to mean an obligation of the Electric System to pay the following costs, whether or not Power and Services are available to the Electric System in return for such payment:

(i) costs associated with generation, transmission or distribution facilities (including any common undivided interest therein) acquired, purchased or constructed by the City, and declared by the City to be a separate utility system, which such costs shall include but are not limited to costs of normal operation and maintenance, renewals and replacements, additions and betterments and debt service on the bonds or other obligations of such separate electric utility system, or

(ii) costs associated with the purchase of Power and Services under a contract.

The City may declare that the costs associated with any separate utility system shall constitute a Contract Resource Obligation and may be included in the Electric System's Operating Expenses; provided, however, no Contract Resource Obligation constituting the costs of a separate utility system for the retail distribution of electric power and energy may be included in the Electric System's Operating Expenses.

A Contract Resource Obligation may be included in the Electric System's Operating Expenses if at the time the Contract Resource Obligation is incurred:

(a) No Event of Default has occurred and is continuing;

(b) There shall be on file with the City Clerk a certificate of an Engineer stating that the average annual Net Revenues for the period beginning with the first Fiscal Year following the earlier of (1) the date to which interest is capitalized or (2) the date of initial operation of the facilities to be financed and ending with the fifth full Fiscal Year after such date shall be at least equal to 125% of maximum Annual Debt Service in any future Fiscal Year, as estimated by the Engineer; and

(c) There shall be on file with the City Clerk an opinion of the Engineer to the effect that;

(1) If the Contract Resource Obligation is to be utilized to supply power and energy, (A) the additional source of power and energy is sound from a power supply planning standpoint and is technically and economically feasible in accordance with prudent utility practice; and (B) the estimated cost is reasonable; or

(2) If the Contract Resource Obligation is to be utilized to supply transmission capability, (A) the transmission capability will be necessary within a reasonable time after the estimated date of commercial operation of the transmission facilities; and (B) the estimated cost is reasonable.

Future Parity Bonds

The City may issue Future Parity Bonds payable from the Bond Fund on an equal lien with the 2017 Bonds and the Outstanding Parity Bonds and any Future Parity Bonds for:

(i) any lawful purpose of the City related to the Electric System, including acquiring, but not limited to, constructing and installing additions, betterments and improvements to and extensions of, acquiring necessary equipment for, or making necessary renewals, repairs, replacements and capital improvements to the Electric System, and

(ii) the purpose of providing funds, with any other available funds, for retiring at or prior to their maturity or maturities any or all of the outstanding Parity Bonds of any series or any reimbursement obligation made pursuant to a Parity Bond Ordinance, including the payment of any redemption premium thereon, and, if deemed necessary by the City, for paying the interest to accrue thereon to the date fixed for their retirement and any expenses incident to the issuance of such Future Parity Bonds.

Future Parity Bonds may be issued in such denominations, bear interest at such fixed or variable rates payable on such dates and mature on such date or dates in such year or years as the City shall determine by ordinance. Future Parity Bonds may include Capital Appreciation Bonds, Deferred Income Bonds and Option Bonds.

The City may issue additional Future Parity Bonds only upon compliance with the following conditions:

A. Except as to Future Parity Bonds issued for purposes of (ii) immediately above, at the time of the issuance of those Future Parity Bonds, there is no deficiency in the Bond Fund, and no Event of Default has occurred and is continuing.

B. There shall be on file with the City Clerk either:

(i) A certificate of an appropriate financial officer of the City stating that Net Revenues in any 12 consecutive months out of the most recent 24 months preceding the authentication and delivery of the Future Parity Bonds then proposed to be issued were not less than 125% of the maximum Annual Debt Service in any future Fiscal Year on all outstanding Parity Bonds and the bonds then proposed to be issued, (provided, that (x) in the event that any adjustment in the rates, fees and charges collected by the City for the services of the Electric System shall be effective at any time on or prior to the date of authentication and delivery of the Future Parity Bonds then proposed to be issued, such officer shall reflect in the certificate the Net Revenues he or she estimates would have been collected in such 12-month period if such new rates, fees, and charges had been in effect for the entire 12-month period, and (y) with respect to any Variable Interest Rate Bonds outstanding on the date such certificate is delivered, such officer shall estimate the debt service based upon such assumptions as such officer shall consider reasonable and set forth in such certificate), or

(ii) A certificate of an Engineer stating that the average annual Net Revenues for the period beginning with the first Fiscal Year following the earlier of (x) the date to which interest has been capitalized, or (y) the date of initial operation of the facilities to be financed by such Future Parity Bonds, and ending with the fifth Fiscal Year after such date shall be at least equal to 125% of maximum Annual Debt Service in any future Fiscal Year, as estimated by the Engineer in accordance with the Bond Ordinance.

C. If Future Parity Bonds are being issued for purposes of retiring outstanding Parity Bonds or any reimbursement obligation, the City Clerk shall have on file either:

(i) A certificate of an appropriate financial officer of the City showing that the maximum Annual Debt Service in any Fiscal Year thereafter shall not be increased by more than \$5,000 by reason of the issuance of such Future Parity Bonds, or

(ii) Either of the certificates described under by paragraph B above.

Such Future Parity Bonds shall not be delivered unless the proceeds of such Future Parity Bonds, together with any other money that has been made available for such purposes, and the principal of and the interest on the investment thereof, shall be sufficient to pay the principal of and the redemption premium, if any, on the bonds to be refunded and the interest which will become due and payable on or prior to the date of their payment or redemption, and the expenses incident to the issuance of such Future Parity Bonds.

Flow of Funds

The City has covenanted under the Bond Ordinance to pay or cause to be paid all Revenues into the Revenue Fund as promptly as practicable after receipt thereof. The Revenues in the Revenue Fund are required by the Bond Ordinance to be held by the City in trust for the equal and ratable benefit of owners of the Parity Bonds and holders of reimbursement obligations ranking on a parity of lien with the Parity Bonds subject to application thereof in accordance with the Bond Ordinance. The City is further required by the Bond Ordinance to hold the Revenue Fund separate and distinct from all other funds of the City.

The City by ordinance has previously created in the Revenue Fund two accounts to be known as the General Account and the Operating Account. The Revenues paid into the Revenue Fund shall first be credited to the General Account and thereafter applied and used only for the following purposes and in the following order of priority:

First, to make all payments required to be made into the Operating Account to pay Operating Expenses;

Second, to make all payments required to be made into the Interest Account in the Bond Fund for the payment of accrued interest on the next interest payment date;

Third, to make all payments required to be made into the Principal Account in the Bond Fund for the payment of the principal amount of Serial Bonds next coming due, and into the Bond Retirement Account in the Bond Fund for the mandatory redemption of Term Bonds;

Fourth, to make all payments required to be made pursuant to a reimbursement agreement in connection with a Qualified Letter of Credit, Qualified Insurance or other equivalent credit facility, unless such payments are contractually obligated to be paid under Third above, provided that if there is not sufficient money to make all payments under reimbursement agreements the payments will be made on a pro rata basis;

Fifth, to make all payments required to be made into the Reserve Account in the Bond Fund for the Parity Bonds;

Sixth, to make all payments required to be made into any special fund created to pay and secure the payment of any revenue bonds, warrants or other revenue obligations of the City having a lien upon Net Revenues and money in the Reserve Fund and accounts therein junior or inferior to the lien thereon for the payment of the principal of and interest on the Parity Bonds;

Seventh, to pay any taxes (or payments in lieu of taxes) upon properties or earnings of the Electric System payable to the City;

Eighth, to deposit into the Rate Stabilization Fund the amounts budgeted or appropriated to be deposited therein; and

Ninth, for any lawful purpose of the City related to the Electric System, including capital improvements to the Electric System.

Reimbursement Obligations

In the event that the City elects to meet the Reserve Account Requirement as to any issue of Parity Bonds through the use of a Qualified Letter of Credit, Qualified Insurance, or other equivalent credit enhancement device, the City may contract with the entity providing such Qualified Letter of Credit, Qualified Insurance, or other equivalent credit enhancement device that the City's reimbursement obligation, if any, to such entity has a lien on Net Revenues equal to that of the Parity Bonds.

In the event that the City elects additionally to secure any issue of Option Bonds through the use of a Qualified Letter of Credit, Qualified Insurance, or other equivalent credit enhancement device, the City may contract with the entity providing such Qualified Letter of Credit, Qualified Insurance, or other equivalent credit enhancement device that the City's reimbursement obligation, if any, to such entity ranks on a parity of lien with the Parity Bonds; provided that the payments due under such reimbursement agreement are such that if such reimbursement obligation were a series of Future Parity Bonds, such bonds could be issued in compliance with the applicable provisions of the Bond Ordinance. See "Future Parity Bonds" above.

Subordinate Obligations

The Bond Ordinance permits the Electric System to incur debt obligations which are payable from Revenues, after the payment of Operating Expenses, on a basis junior and subordinate to the Parity Bonds. The City adopted a subordinate master bond ordinance in 2015 (the “Master Subordinate Ordinance”) authorizing and setting forth the terms and provisions of Subordinate Revenue Bonds of the Electric System (“Subordinate Obligations”).

Pursuant to the Master Subordinate Ordinance, the City entered into two agreements in 2015 with separate banks providing for the issuance of Subordinate Obligations – the first is intended as a short-term borrowing facility, and the second as a standby liquidity facility. The first facility with Wells Fargo Bank is in an authorized maximum principal amount at any time outstanding of \$100,000,000. The second facility with Key Bank is in an authorized maximum principal amount at any time outstanding of \$50,000,000. The outstanding balance under the first facility as of December 31, 2016, was \$80,250,000, a portion of which is to be refinanced from proceeds of the 2017 Bonds. See “PURPOSE AND APPLICATION OF 2017 BOND PROCEEDS.” The City has not drawn on the second facility and does not expect to unless exigent circumstances were to arise.

Additional Covenants

The City has covenanted in the Bond Ordinance to maintain the properties of the Electric System in good repair, working order, and condition; to sell or otherwise dispose of the Electric System in its entirety only if provision is made for the payment, redemption or retirement of all Parity Bonds then outstanding, and in part only upon satisfaction of certain conditions; to insure (or self-insure) the properties of the Electric System; to keep proper books of account of the Electric System; to comply with permits or licenses of the Electric System; and to satisfy certain other covenants for the benefit of the owners of the Parity Bonds. See Appendix A—“SUMMARY OF PRINCIPAL PROVISIONS OF THE BOND ORDINANCE” for a complete description of these and other covenants agreed to by the City for the benefit of the owners of the Parity Bonds.

Permitted Investments

Money held in the Revenue Fund, the Rate Stabilization Fund, the Construction Fund and the Bond Fund (and the accounts therein) may be invested in Permitted Investments, as defined in Appendix A. For a description of the funds and accounts created by the Bond Ordinance, see Appendix A.

Derivative Products

The City may enter into Derivative Products on a parity with the Parity Bonds upon complying with certain conditions. See Appendix A—“SUMMARY OF PRINCIPAL PROVISIONS OF THE BOND ORDINANCE—Derivative Products.” At this time the City has no Derivative Products.

Contingent Payment Obligations

The City has entered into, and may in the future enter into, contracts and agreements in the course of its business that include an obligation by the City to make payments or post collateral contingent upon the occurrence or nonoccurrence of certain future events, including events beyond the direct control of the City. These agreements may include interest rate swaps and other similar agreements, agreements with respect to the delivery of electric energy or other energy, letter of credit agreements, and other financial and energy hedging transactions. Such contingent payments or posting of collateral may be conditioned upon the future credit ratings of the City and/or other parties, maintenance by the City of specified financial ratios, future changes in energy prices, and other factors. The amount of any such payments or posting of collateral could be substantial. Some such payments may be characterized as Operating Expenses, and thus may be payable from Revenues prior to the payment of debt service on the Parity Bonds. Other such payments may be payable on a parity with debt service on the Parity Bonds, including any “scheduled and specified payments” with respect to Derivative Products. The City has entered into an agreement with the Bonneville Power Administration (“BPA”) that includes such contingent payment obligations. The agreement includes obligations on the part of the City to post collateral or a letter of credit contingent upon the occurrence or nonoccurrence of certain future events, such as credit rating downgrades. The City may enter into future agreements with such requirements. See Appendix A—“SUMMARY OF PRINCIPAL PROVISIONS OF

THE BOND ORDINANCE—Derivative Products” and “POWER SUPPLY RESOURCES AND COST OF POWER—Long-Term Purchases of Power Supply—*BPA Purchases*.”

DEBT INFORMATION

Description of the Outstanding Parity Bonds

The 2017 Bonds are issued on a parity with the Outstanding Parity Bonds and any Future Parity Bonds issued pursuant to the Bond Ordinance and hereafter outstanding. The aggregate principal amount of Outstanding Parity Bonds outstanding as of August 1, 2017 is \$358,335,000.

Tacoma Power Outstanding Parity Bonds As of August 1, 2017

Authorizing Ordinance	Bonds Dated	Principal Amount Originally Issued	Principal Amount Outstanding	Final Maturity
27889	July 27, 2010	\$187,255,000 ⁽¹⁾	\$171,255,000	1/1/2035
28146	May 13, 2013	217,230,000 ⁽²⁾⁽³⁾	187,080,000	1/1/2042

⁽¹⁾ Includes the City’s Electric System Revenue Bonds, Series 2010A (the “2010A Bonds”), the 2010B Bonds, and the 2010C Bonds. The 2010A Bonds are no longer outstanding.

⁽²⁾ Includes 2013A Bonds and the 2013B Bonds.

⁽³⁾ The Department currently intends to apply between \$19 million and \$28 million of its available cash to defease an equivalent amount of its 2013 Bonds maturing between 2019 and 2021 following the issuance of the 2017 Bonds. The purpose would be to reduce or eliminate a spike in aggregate debt service that would otherwise occur in that year. The proposed defeasance was approved by the City Council on August 1, 2017.

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Debt Service Requirements

After issuance of the 2017 Bonds, the debt service requirements of the Outstanding Parity Bonds and the 2017 Bonds will be as follows:

Tacoma Power Electric System Revenue Bonds Parity Bond Debt Service Requirements⁽¹⁾⁽⁵⁾

Year	Outstanding Parity Bonds ⁽³⁾⁽⁴⁾		2017 Bonds		Total ⁽²⁾
	Principal	Interest ⁽⁶⁾	Principal	Interest	
2017	-	\$ 9,194,655	-	\$ 1,095,600	\$ 10,290,255
2018	\$ 11,575,000	17,926,310	-	3,286,800	32,788,110
2019	10,095,000	17,471,560	-	3,286,800	30,853,360
2020	29,165,000	16,113,310	-	3,286,800	48,565,110
2021	11,970,000	15,564,810	-	3,286,800	30,821,610
2022	3,795,000	15,375,060	\$ 2,150,000	3,179,300	24,499,360
2023	3,985,000	15,175,810	2,255,000	3,066,550	24,482,360
2024	4,185,000	14,966,560	2,370,000	2,948,050	24,469,610
2025	4,395,000	14,832,512	2,490,000	2,823,550	24,541,062
2026	4,525,000	14,685,450	2,610,000	2,693,050	24,513,500
2027	24,185,000	13,321,174	-	2,693,050	40,199,224
2028	4,675,000	13,087,424	2,745,000	2,555,800	23,063,224
2029	4,905,000	12,842,174	2,880,000	2,411,800	23,038,974
2030	5,155,000	12,584,424	3,025,000	2,260,550	23,024,974
2031	27,310,000	11,002,902	-	2,260,550	40,573,452
2032	28,335,000	9,347,016	-	2,260,550	39,942,566
2033	29,335,000	7,596,889	-	2,260,550	39,192,439
2034	30,460,000	5,779,646	-	2,260,550	38,500,196
2035	31,630,000	3,892,600	-	2,260,550	37,783,150
2036	10,990,000	3,343,100	3,175,000	2,101,800	19,609,900
2037	11,535,000	2,766,350	3,335,000	1,935,050	19,571,400
2038	12,115,000	2,160,600	3,500,000	1,760,050	19,535,650
2039	12,720,000	1,651,800	3,675,000	1,576,300	19,623,100
2040	13,230,000	1,122,600	3,860,000	1,383,300	19,595,900
2041	13,755,000	572,400	4,055,000	1,180,550	19,562,950
2042	14,310,000	-	4,255,000	967,800	19,532,800
2043	-	-	4,470,000	789,000	5,259,000
2044	-	-	4,645,000	603,200	5,248,200
2045	-	-	4,830,000	410,000	5,240,000
2046	-	-	5,025,000	209,000	5,234,000
2047	-	-	5,225,000	-	5,225,000
Total⁽²⁾	\$358,335,000	\$252,377,130	\$70,575,000	\$63,093,300	\$744,380,430

(1) Based on fiscal years ending December 31.

(2) Column totals may not add due to rounding.

(3) The Department currently intends to apply between \$19 million and \$28 million of its available cash to defease an equivalent amount of its 2013 Bonds maturing between 2019 and 2021 following the issuance of the 2017 Bonds. The purpose would be to reduce or eliminate a spike in aggregate debt service that would otherwise occur in that year. The proposed defeasance was approved by the City Council on August 1, 2017.

(4) Excludes subordinate lien obligations payable from Net Revenues.

(5) Each fiscal year's debt service requirement includes interest that accrues in that year and principal due in that year.

(6) Does not reflect offsets resulting from the federal interest subsidies with respect to the 2010B Bonds and the 2010C Bonds.

A portion of the interest on the 2010B Bonds and 2010C Bonds is reimbursed to the City by the federal government. Federal government sequestration, however, which became effective on March 1, 2013, is expected to continue to reduce such federal subsidy. The City does not expect any such reduction to have a material adverse impact on the City's ability to pay debt service on such 2010B Bonds or 2010C Bonds.

Subordinate Lien Obligations

The City retains the right to issue revenue obligations with a subordinate lien on Net Revenues. The City adopted the Master Subordinate Ordinance authorizing and setting forth the terms and provisions of Subordinate Revenue Bonds of the Electric System. See "SECURITY FOR THE 2017 BONDS—Subordinate Obligations" above.

Future Financing

Other than the 2017 Bonds, the City has no authorized but unissued Parity Bonds secured by Net Revenues. The City does not expect to issue bonds secured by Net Revenues in the next 12 months. The City may issue Future Parity Bonds or Subordinate Obligations in the next 12 to 24 months to finance capital improvements to the Electric Utility. Issuance of such Future Parity Bonds and Subordinate Obligations is subject to approval by the Council. See "CAPITAL IMPROVEMENT PROGRAM."

THE CITY

The City of Tacoma was incorporated in 1884 and utilizes the council-manager form of government. The administration of the City's affairs is governed by the City's Charter, pursuant to which the City has relatively broad powers. The City Council is the legislative body of the City. The City Council is composed of a Mayor and eight Council Members, five of whom are elected from districts which have been apportioned according to population. The three remaining positions are "at large" positions, nominated and elected City-wide. The Council Member positions are four year terms with overlapping terms to allow for the election of four Council Members every two years. The Mayor is elected City-wide for a four year term and is the presiding officer of the City Council. Council Members, including the Mayor, can serve no more than 10 consecutive years as a member of the City Council, Mayor or combination thereof.

The City Council appoints a City Manager who is the chief executive officer of the City. The City Manager is responsible to the City Council for the administration of all departments of the City with the exception of the Department.

The City Manager appoints a Finance Director who supervises the financial and purchasing functions of the City, including the City's accounting system. The Finance Director is responsible for preparing the City's Comprehensive Annual Financial Report ("CAFR") in accordance with generally accepted accounting principles applicable to governmental entities such as the City and in compliance with requirements of the State Auditor's Office. The Finance Director is responsible for the payment of principal and interest on all bonds issued by the City, including the Parity Bonds.

The City Manager appoints a City Treasurer who is responsible for the receipt, custody and disbursement of all City funds, including funds of Tacoma Power. The City Treasurer receives all money due and belonging to the City, and keeps a detailed account of the same in the manner prescribed by law and by the Finance Director. The Government Performance and Finance Committee, composed of the Mayor and three council members, is responsible for the financial management and policies of the City.

THE DEPARTMENT OF PUBLIC UTILITIES-TACOMA POWER

Overview

The City Charter provides for the Department to be governed by a five member Public Utility Board (the "Board"). The Board is responsible for general utility policy, and its members are appointed by the Mayor and confirmed by

the City Council. The Department's budget is presented to the Board for review and approval and then forwarded to the City Council for approval and inclusion in the City's budget. The Board meets twice monthly.

The Department consists of the Light Division ("Tacoma Power"), Water Division ("Tacoma Water"), and Belt Line Railroad Division ("Tacoma Rail"). The Board has supervision and control over most Department business. In the case of budgets, rates, bond issues, and additions and betterments to a utility system and system expansions, actions approved by the Board must also be approved by the City Council.

The Board appoints the Director of Utilities who is the chief executive officer of the Department. The Board must evaluate the performance of the Director annually and reappoint the Director every two years subject to reconfirmation by the City Council with the next reconfirmation scheduled for 2017. The reappointment of the Director has been approved by the Board and is currently pending before the City Council. William A. Gaines will retire from the position, effective December 2, 2017. The Director, with the concurrence of the Board, has the power to appoint division superintendents.

Utility rates and charges are initiated by the Board and adopted by the City Council, and are not subject to review or approval by any other governmental agency. See "ELECTRIC SYSTEM CUSTOMERS, ENERGY SALES, REVENUES AND RATES—Electric Rates."

The City Charter provides that the revenues of utilities owned and operated by the City shall never be used for any purposes other than the necessary operating expenses thereof, including a reasonable gross earnings tax imposed by the City Council for the benefit of the general fund of the City, interest on and redemption of the outstanding debt thereof, the making of additions and betterments thereto and extensions thereof, and the reduction of rates and charges for supplying utility service to consumers. The funds of any utility may not be used to make loans to or purchase the bonds of any other utility, department, or agency of the City. See "FINANCIAL INFORMATION—Taxes Imposed on Tacoma Power."

Tacoma Power - General

Tacoma Power is organized into six business units:

- **Generation** operates and maintains Tacoma Power's four hydroelectric generating projects (Cowlitz, Cushman, Nisqually and Wynoochee) and the associated recreational facilities, fish hatcheries and other project lands.
- **Power Management** manages, schedules and directs the power supply portfolio which includes Tacoma Power-owned generation and power supply contracts. Power Management markets bulk and ancillary power supply services, performs power trading activities, plans for and acquires conservation resources, and is responsible for compliance with various state, regional and federal regulatory mandates.
- **Transmission and Distribution** plans, constructs, operates and maintains the transmission and distribution systems including substations, the underground network system, revenue metering facilities and all overhead transmission and distribution systems.
- **Rates, Planning and Analysis** plans for and manages the retail rate process, financial planning activities, operations and capital budget development and monitoring, strategic asset management, construction project management, strategy management, and energy risk management analysis and modeling.
- **Click! Network** plans, constructs, operates and maintains a hybrid fiber coaxial ("HFC") telecommunications network that supports the operation of Tacoma Power's electrical transmission and distribution system, provides retail cable TV, and wholesale high-speed Internet and data transport services to resellers.
- **Utility Technology Services** ("UTS") addresses existing and emerging technology requirements essential to managing Tacoma Power's computing systems. This includes supporting and enhancing utility system operations, communications, metering, cyber security, relevant smart grid applications, and the information technology strategic planning. UTS unifies the planning, design, deployment and maintenance of operational

computer systems, system interfaces and communication infrastructure used by Tacoma Power to sustain and improve system reliability and security. UTS is responsible for all matters related to Tacoma Power's compliance with the North American Electric Reliability Corporation ("NERC") Reliability Standards and manages Tacoma Power's Internal Reliability and Compliance Program.

Tacoma Power, which served an average of approximately 176,784 customer accounts in 2016, is one of the largest municipally-owned utilities in the Pacific Northwest. In 2016, it had 838 employees and operating revenues of approximately \$418.6 million. Tacoma Power was formed in 1893 when the City purchased the water and electric utility properties of the former Tacoma Water and Light Company. Tacoma Power is the fourth largest municipally-owned power utility in the State. In 1912, the City constructed its first hydroelectric generation facility on the Nisqually River. Since then it has acquired generating capacity to meet the growing needs of its customers through a variety of arrangements. In 2016 the four hydroelectric generating projects owned by Tacoma Power produced approximately 42% of Tacoma Power's resource portfolio. Tacoma Power's remaining power supply is purchased pursuant to power purchase contracts and market purchases. See "POWER SUPPLY RESOURCES AND COST OF POWER." Tacoma Power owns and operates 351 miles of transmission facilities and 2,014 miles of distribution lines to serve its retail loads and provides wholesale transmission to 10 small utilities. See "TRANSMISSION, DISTRIBUTION, AND TELECOMMUNICATIONS INFRASTRUCTURE."

The following table summarizes selected operating and financial data regarding Tacoma Power as of December 31, 2016.

**Tacoma Power
Selected Operating and Financial Data
Calendar Year 2016**

Average Number of Customer Accounts	176,784
Energy Sales in Megawatt-Hours (Retail)	4,627,528
Operating Revenues	\$418,614,388
Gross Investment in Utility Plant	\$2,004,204,782
Net Investment in Utility Plant	\$1,033,409,064
Total Municipal Equity	\$821,995,693
Net Current Assets	\$289,162,319
Ratio of Current Assets to Current Liabilities	4.0:1.2
Long-Term Debt to Total Capitalization ⁽¹⁾	35.76%
Parity Bond Debt Service Coverage	2.94x

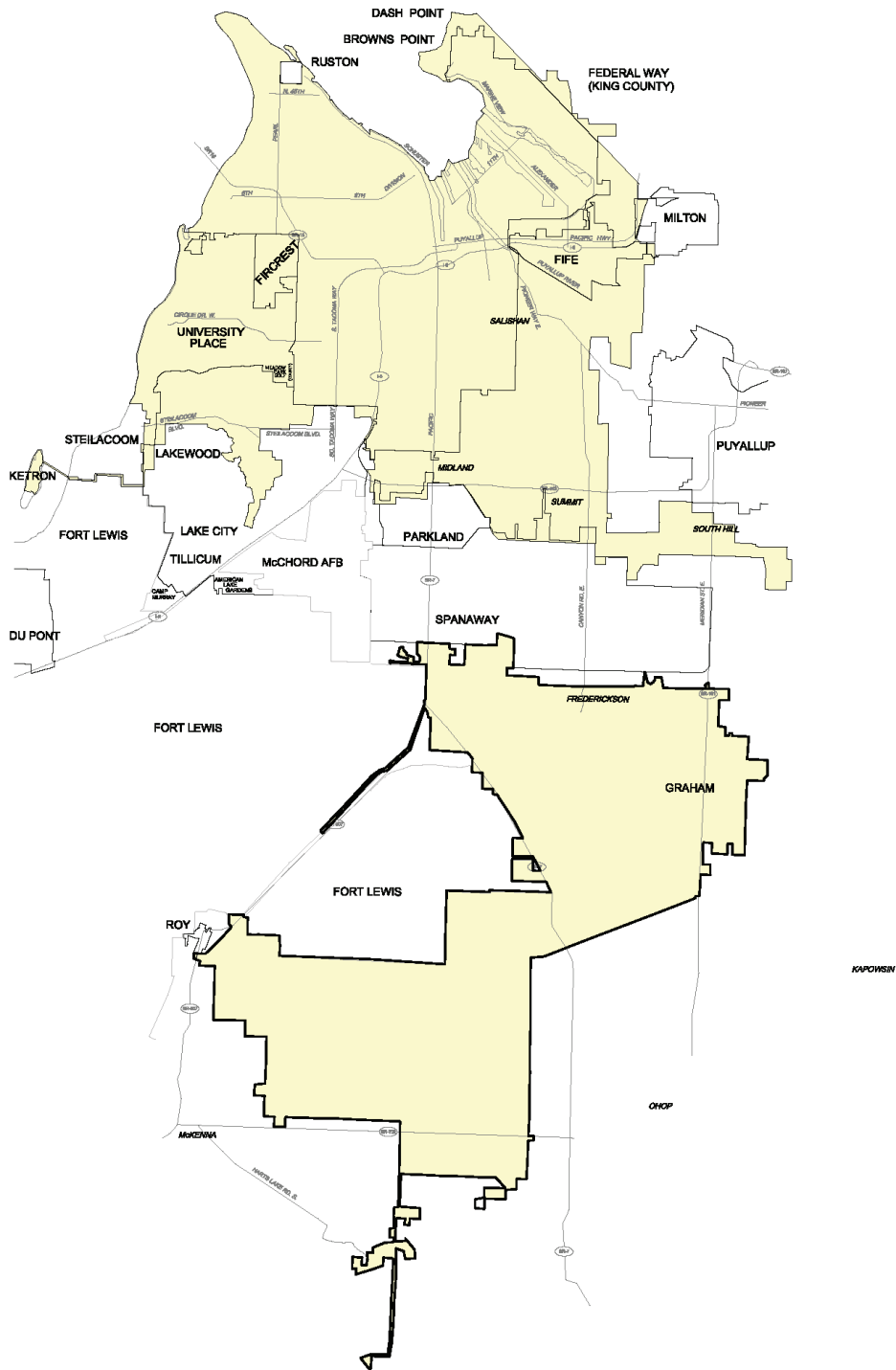
(1) Ratio of long-term debt to long-term debt plus equity. See footnotes (7) and (10) to the table entitled "Tacoma Power Operating Results and Debt Service Coverage 2012-2016."

Source: City of Tacoma

Service Territory and Map

Tacoma Power's service area consists of approximately 180 square miles, including the entire 43 square miles comprising the City of Tacoma. Tacoma Power provides electric service within its service area and indirectly serves other portions of the Tacoma metropolitan area through sales to Joint Base Lewis-McChord, the Town of Ruston and several other customers. The area that bounds Tacoma Power's service area is served by several cooperative utility companies, two municipal utilities, and Puget Sound Energy Company. The City Charter prohibits the City Council from granting any franchise to sell or supply electricity within the City as long as the City is engaged in supplying electricity. Click! Network currently provides a variety of commercial telecommunications services to the electric customers of Tacoma Power within the cities of Tacoma, University Place, Fircrest, Lakewood and Fife and portions of unincorporated Pierce County under agreements between those jurisdictions and Tacoma Power. A map showing Tacoma Power's service area follows.

TACOMA POWER SERVICE AREA



booper 3-16-10

Strategic Plan

Tacoma Power's principal planning objective is to ensure that the utility has sufficient power supplies to meet customer demand. Given its reliance on hydro-based generating resources, Tacoma Power plans based on adverse water conditions to preserve available power supply, even in unusual periods of low precipitation. This conservative planning approach at times provides Tacoma Power with a power supply in excess of demand. This benefits the utility because this additional energy is sold into the wholesale power market at a price typically in excess of the cost to acquire or generate it. Power that is sold into the wholesale market offsets the revenue the utility needs to recover from its retail customers.

Tacoma Power is committed to providing low cost, environmentally responsible and reliable electricity service. This commitment is grounded by the utility's long-standing strategy of managing and maintaining a power supply portfolio with significant hydroelectric generation, both owned by the utility and committed to the utility under long-term contracts.

Security Issues

In addition to security as mandated by NERC Critical Infrastructure Protection standards (see "TRANSMISSION, DISTRIBUTION AND TELECOMMUNICATIONS INFRASTRUCTURE—Transmission Reliability"), Tacoma Power seeks to utilize best practices for securing utility operational networks and systems. These practices include isolating command and control systems from the Internet; network surveillance; and overseeing physical access. Tacoma Power has defined processes, measures and controls that guard the reliability of its systems and protect it from cyber threats.

Management

Brief descriptions of the backgrounds of key officials of the Department and Tacoma Power follow.

William A. Gaines, Director of Utilities, assumed his position in October 2007, after serving as Superintendent/Chief Operating Officer of Tacoma Power for a year. Mr. Gaines, an experienced executive with approximately 36 years in the utility industry, came to Tacoma Power from Seattle City Light, where he served as Power Supply and Environmental Affairs Officer and as Power Management Executive. He spent much of his career as an executive officer at Puget Sound Energy, where he served as Vice President for Engineering and Contracting and as Vice President for Energy Supply. Mr. Gaines is active in regional industry groups including the Public Power Council, Pacific Northwest Utilities Conference Committee and Western Systems Power Pool ("WSPP"), and sits on the Board of the Tacoma/Pierce County Chamber of Commerce and the Pierce County Economic Development Board. Mr. Gaines received a B.S. degree in Electrical Engineering from Washington State University and an M.B.A. from the University of Puget Sound. He also attended the executive development program at Stanford University. William A. Gaines will retire from the position, effective December 2, 2017.

Chris Robinson, Superintendent/Chief Operating Officer, assumed his position in May 2015. He joined Tacoma Power in 2001 and became Power Manager in April 2010, after having previously served as Assistant Power Section Manager of Energy Resource Planning. Prior to his tenure with Tacoma Power, Mr. Robinson worked with various electrical utility clients as a private-sector consultant. He received his M.S. in Resource Economics from the University of Maine, and his B.A. in Economics and B.A. in Political Science from Rutgers University.

Dolores Stegeman, Transmission and Distribution Manager, joined the City in 1991 as a civil engineer working in the Power Management group. Prior to her appointment in Transmission & Distribution, she held a variety of positions in Resource Operations and Trading, including assistant manager, analyst and scheduler. Ms. Stegeman has modeled river flows and reservoir levels, generated operations and financial reports and represented Tacoma Power in legal cases as high as the federal level. Ms. Stegeman was appointed interim Transmission & Distribution manager in 2013, and permanently appointed in 2014. She received her B.S. in Civil Engineering from St. Martin's University and her M.B.A. from the University of Washington. Ms. Stegeman has announced that she plans to retire at the end of 2017 and recruitment for her replacement has already started.

Chris Mattson, Generation Manager, assumed this position in 2017. Mr. Mattson joined Tacoma Power in 1995 and served in various engineering positions before becoming Production Engineering Manager in 2012. He received his B.S. and M.S. in Electrical Engineering from the University of Washington and is a registered Professional Engineer.

Clay Norris, Power Manager, joined Tacoma Power as Power Manager in June of 2015. Previously, Mr. Norris served as Director of Stakeholder Relations at the Northwest Energy Efficiency Alliance, Division Director of Power Resources at Eugene Water and Electric Board, Senior Vice President of Planning and Marketing at ElectriCities of North Carolina, and in various roles at Illinois Power. He received a M.B.A. from the University of Illinois - Springfield, a B.S. in Electrical Engineering from Missouri University of Science and Technology, and a B.A. in Math and Physics from Illinois College.

Tenzin Gyaltzen, Click! Network General Manager, assumed his current position in October 2011. He was previously employed at the City of San Bruno, California, for eight years, serving as its Cable Television Director. Prior to that Mr. Gyaltzen held operations management positions at Charter Communications, Inc. and at Fanch Communications, Inc. He has over 20 years of experience in the cable telecommunications industry. Mr. Gyaltzen received a B.S. degree in Accounting from Metropolitan State College of Denver and an M.B.A. from the University of Colorado at Denver.

John Lawrence, Utility Technology Services Manager, was appointed to his current position in 2012. He joined Tacoma Power in 1987, and in 2009 accepted the role of leading Tacoma Power's Reliability and Compliance office. In 2012, Tacoma Power combined its Smart Grid and Reliability and Compliance business units into one section called Utility Technology Services which is now led by Mr. Lawrence. Since 1998, he has held positions as Assistant Transmission and Distribution Manager of Construction and Maintenance, Assistant Transmission and Distribution Manager of Planning and System Operations, and interim Transmission and Distribution Manager. Mr. Lawrence has 36 years of experience in the Transmission and Distribution Electrical industry and is a graduate of Willamette University's Graduate School of Management's Utility Management program.

Bill Berry, Rates, Planning and Analysis Manager, assumed his current position in 2012. He was previously employed at the San Francisco Public Utilities Commission as Assistant General Manager for Business Services with responsibility for Customer Service, Finance, Information Technology Services, Human Resources, and Commercial Land Management. Earlier in his career, Mr. Berry served as Vice President for Corporate Finance with the New York Power Authority and also as a Senior Vice President in the Public Power and Water group at Lehman Brothers. He received his B.A. in Political Science from Williams College.

Labor Relations

Tacoma Power has approximately 833 employees, of which 530 are represented by unions. The majority of employees are represented by the International Brotherhood of Electrical Workers ("IBEW") Local 483, one of twelve labor organizations that represent City employees. The current three-year agreement for the Tacoma Power collective bargaining unit expired on March 31, 2017. The terms of the prior agreement remain in effect for one year after the expiration date while negotiations for a successor contract are underway. Tacoma Power has experienced only one limited labor stoppage since 1974, a 15-day work stoppage by a clerical unit in 1992. Management of Tacoma Power promotes responsive and respectful labor relations that are beneficial both to its business operations and to its employees.

ELECTRIC SYSTEM CUSTOMERS, ENERGY SALES, REVENUES AND RATES

Tacoma Power Customers

Tacoma Power serves six classes of retail electricity customers: Residential; Small General; General, including other industrial and large commercial customers; High Voltage General; Contract Industrial, comprised of two large industrial customers; and Other (principally municipal). Tacoma Power's relatively low-cost resource base and its access to preference power from BPA permit the rates it charges to be lower than almost all Western Washington

investor-owned and municipally-owned utilities. See the table entitled “Comparative Monthly Electric Bills” under “Electric Rates” below.

Residential Customers. In 2016, Tacoma Power supplied electric energy to 157,540 residential customer accounts with a total usage of 206 annual average megawatts (“aMW”) (39% of total retail sales). Tacoma Power received approximately \$152.8 million in revenue (47.7% of total retail revenues) from this class in 2016. The following table provides billing history for the residential class.

Tacoma Power
Summary of Residential Usage⁽¹⁾—2012-2016

Year	Number of Customer Accounts	MWh Billed (1000 kWh)	Revenue	Annual kWh per Customer	Annual Revenue per Customer	Average Annual Cost (cents per kWh)
2012	150,306	1,891,357	\$140,108,770	12,583	\$932	7.41
2013	152,633	1,906,519	\$148,479,187	12,491	\$973	7.79
2014	153,541	1,846,972	\$149,751,516	12,029	\$975	8.11
2015	155,496	1,757,385	\$147,936,446	11,302	\$951	8.41
2016	157,540	1,810,757	\$152,830,273	11,494	\$970	8.44

(1) Includes only class A Residential customers, usage and revenues. This table may differ from information presented in Tacoma Power’s audited financial statements attached as Appendix D which combines other customers described below with residential customers.

Source: Tacoma Power

Small General Customers. This class includes small non-residential customers, including retail, restaurant and other small businesses, and consumed 36 aMW (6.8% of total retail sales) in 2016 and accounted for \$27.7 million in revenues (8.6% of total retail revenues). There were 15,688 Small General customers in 2016.

General Customers. This class includes medium and large commercial and industrial users. Tacoma Power had 2,634 General customers in 2016. Total retail sales for the group were approximately 175.8 aMW (33.4% of total retail sales) in 2016 and accounted for approximately \$98 million in revenues (30.6% of total retail revenues).

High Voltage General Customers. Tacoma Power serves two military bases and four industrial companies as the High Voltage General customer class. This class includes the Fort Lewis Army Post and the McChord Air Force Base, now known as Joint Base Lewis-McChord. All customers in this class are served at transmission level voltage. In 2016, Fort Lewis Army Post used 29.7 aMW and McChord Air Force Base used 8.8 aMW of electrical energy, ranking them among Tacoma Power’s 10 largest retail customers. Total sales in 2016 for the High Voltage General class were approximately 46.9 aMW (8.9% of total retail sales) and \$17.9 million (5.6% of total retail revenues), of which the two military bases accounted for 38.5 aMW (7.3% of total retail sales) and \$14.3 million (4.5% of total retail revenues).

Contract Industrial Customers. Tacoma Power currently serves two Contract Industrial customers that together accounted for 11% of retail energy sales and 6.7% of retail revenue in 2016. One of these customers manufactures paper products and the other industrial gases. These customers are served under contracts that specify contract demand quantities and include notice provisions for changes in these quantities.

Other Customers. Tacoma Power’s other electricity customers primarily consist of street lighting, traffic signals, and private off-street lighting. In 2016, there were 914 customers in this class with consumption of 4.4 aMW and \$2.7 million in revenues.

Largest Customers. The following table lists Tacoma Power’s 10 largest electric system customers based on revenue in descending order of percentage of revenues. In 2016, these 10 customers accounted for approximately 17% of revenues and 24.9% of retail energy sales. No single customer represents more than 9% of Tacoma Power’s load. See “High Voltage General Customers” and “Contract Industrial Customers.”

Tacoma Power's 10 Largest Electric System Customers—2016

Customer	Business Description	Percent of Retail Revenue
Westrock CP LLC*	Pulp and Paper	5.0%
Fort Lewis Army Post	Military Base	3.5
Praxair*	Industrial Gases	1.7
City of Tacoma	Government	1.4
McChord Air Force Base	Military Base	1.0
Tacoma School District	Education	1.0
Multicare Health System	Healthcare	1.0
Pierce County	Government	0.9
U.S. Oil & Refining	Oil Refining	0.7
Puyallup Tribe of Indians	Government	0.7
Total		16.9%

*Contract Industrial customers.

Source: Tacoma Power

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Energy Sales and Revenues

The following table shows Electric System customers, energy sales and revenues for the period 2012 through 2016. Historical annual total energy sales, excluding contractual sales for resale, in the period 2012-2016 averaged 4.7 million megawatt hours ("MWh"). The table does not include revenues from Click! Network.

Tacoma Power Customers, Energy Sales and Revenues from Electric Sales⁽¹⁾⁽²⁾

	2012	2013	2014	2015	2016
Average Number of Customer Accounts					
Residential ⁽³⁾	150,306	152,633	153,541	155,496	157,540
Small General ⁽⁴⁾	15,079	15,248	15,361	15,488	15,688
General ⁽⁵⁾	2,751	2,728	2,731	2,670	2,634
High Voltage General ⁽⁶⁾	6	6	6	6	6
Contract Industrial ⁽⁷⁾	2	2	2	2	2
Other ⁽⁸⁾	864	889	890	897	914
Total Customers	169,016	171,506	172,531	174,558	176,784
Energy Sales (MWh)					
Residential ⁽³⁾	1,891,357	1,906,519	1,846,972	1,757,385	1,810,757
Small General ⁽⁴⁾	306,835	311,846	315,888	309,650	316,086
General ⁽⁵⁾	1,539,352	1,543,321	1,561,200	1,553,902	1,541,704
High Voltage General ⁽⁶⁾	467,930	463,730	451,539	421,453	411,578
Contract Industrial ⁽⁷⁾	504,874	543,450	516,644	507,201	508,674
Other ⁽⁸⁾	37,940	37,895	37,695	37,757	38,729
Subtotal	4,748,287	4,806,761	4,729,936	4,587,347	4,627,528
Sales for Resale	3,136,927	2,244,963	2,842,694	1,917,685	2,731,076
Total Energy Sales	7,885,214	7,051,724	7,572,632	6,505,032	7,358,604
Revenue From Energy Sales					
Retail Sales:					
Residential ⁽³⁾	\$140,108,770	\$148,479,187	\$149,751,516	\$147,936,446	\$152,830,273
Small General ⁽⁴⁾	23,499,735	25,110,481	26,594,512	26,956,060	27,703,400
General ⁽⁵⁾	85,531,256	90,073,119	95,711,871	97,745,514	98,041,673
High Voltage General ⁽⁶⁾	18,410,083	19,283,029	19,333,330	18,628,248	17,892,033
Contract Industrial ⁽⁷⁾	18,870,807	19,804,613	21,150,771	21,356,911	21,462,712
Other ⁽⁸⁾	2,330,455	2,436,472	2,502,840	2,582,638	2,653,140
Subtotal Retail Sales	\$288,751,106	\$305,186,903	\$315,044,840	\$315,205,817	\$320,583,231
Change in Unbilled ⁽⁹⁾	\$4,615,802	\$1,651,808	\$(666,186)	\$677,091	\$(840,476)
Sales for Resale: ⁽¹⁰⁾⁽¹¹⁾⁽¹²⁾	\$53,532,081	\$64,210,259	\$82,796,740	\$50,380,147	\$54,506,535
Total Revenue From Energy Sales	\$346,898,989	\$371,048,970	\$397,175,394	\$366,263,055	\$374,249,290

(1) Years ending December 31. Totals may not add due to rounding.

(2) Customers, sales and revenues in this table may differ from Tacoma Power's audited financial statements attached as Appendix D which combines customers separated out in this table.

(3) Residential customers, (class A).

(4) Small commercial, (class B).

(5) Medium and large commercial and industrial, (class G).

(6) Industrial customers and military bases served at transmission level voltage, (class CP).

(7) Contract industrial customers served at transmission level voltage, (class HVG).

(8) Street Lighting and Traffic Signals and Private Off-Street Lighting, (class H-1 and H-2).

(9) Change from year-to-year in the amount of electric service consumed but not yet billed as of year-end. The unbilled revenue is an estimate based on the number of bills sent out in November and December. The number of bills sent out fluctuates due to inclement weather conditions, meter reading assignments, and information technology related items.

(10) Sales for Resale: 2012 through 2014 water conditions were well above normal, and 2015 through 2016 water conditions were near normal; but all years reflect lower secondary market prices.

(11) See "POWER SUPPLY RESOURCES AND COST OF POWER—Wholesale Energy Market Purchases and Sales."

(12) This amount is not reduced by the transfer in the financial statements to the Rate Stabilization Fund in the amounts of \$12,000,000 in 2012.

Source: Tacoma Power

Electric Rates

Tacoma Power is a municipal utility that establishes rates only to recover costs. Tacoma Power establishes rates with the goal of minimizing rate impacts to customers while maintaining the safety and reliability of the power system. Tacoma Power has been able to maintain low rates in comparison to State and national averages, while at the same time providing electric service revenues covering all operating and maintenance expenses, debt service and a portion of capital additions and improvements made to the Electric System. Rates are established by the Board and are subject to approval by the City Council.

Tacoma Power's rates and charges are free from the jurisdiction and control of the Washington Utilities and Transportation Commission and Federal Energy Regulatory Commission ("FERC"). Rates generally are set to provide revenues sufficient to pay a 3.8734% tax levied on Tacoma Power's gross revenues by the State and a 7.5% (8% for Click! Network) tax levied on Tacoma Power's gross revenues by the City, the latter of which is payable on a basis subordinate to debt service on Parity Bonds. See "SECURITY FOR THE 2017 BONDS—Flow of Funds."

Tacoma Power's services, including rates for those services, are designed to meet customer needs and provide the flexibility needed to respond to changing conditions in the electric utility industry. The rate setting policy provides that rates for new non-traditional energy-related services may be set at times other than the general rate-setting process. In 2000, Tacoma Power launched Evergreen Options, a green power program that offers customers the opportunity to support renewable power. In 2002, the State began requiring all but very small utilities in the State to offer green pricing programs for retail customers. Tacoma Power's Evergreen Options program complies with this law. The program is currently supplied by renewable energy credit purchases from Bonneville Environmental Foundation and 3Degrees. Starting late in 2017, revenue from the Evergreen Options voluntary program will also fund financial grants to nonprofit entities for the construction of local renewable energy projects.

Costs that Tacoma Power incurs to provide services are recovered primarily through the rates it charges to its customers. Services or rates designed to meet the needs of one group of customers are required to be accomplished without negative impacts to other Tacoma Power customers. Since 2012, Tacoma Power has had the rate and surcharge increases listed in the following table.

Rate Adjustments and Surcharges

Effective Date	Average Rate Adjustment
April 1, 2012	5.8%
April 1, 2013	4.2%
April 1, 2014	4.2%
April 1, 2015	3.0%
April 1, 2016	0.0%
April 1, 2017	5.9%
April 1, 2018 ⁽¹⁾	5.9%

(1) This average rate adjustment has been approved by the City Council and will become effective April 1, 2018.

Source: Tacoma Power

The average revenue per kWh sold and average monthly bills at selected consumption levels for typical residential, commercial and industrial customers of Tacoma Power, based on rates presently in effect, are shown below. In addition, both revenue and bill information representing a typical load factor for a Contract Industrial customer is presented.

**Tacoma Power
Typical Revenue and Monthly Bills
at Selected Usage Levels**

	Average Revenue (cents per kWh)	Monthly Bill
<u>Residential</u> ⁽¹⁾		
500 kWh per month	10.4¢	\$ 56
1,000 kWh per month	9.0	96
2,000 kWh per month	8.4	176
<u>Small General</u> ⁽²⁾		
7,500 kWh per month (30 kW)	8.1¢	\$ 617
12,300 kWh per month (49 kW)	8.0	997
<u>General</u> ⁽³⁾		
200,000 kWh per month (500 kW)	6.3¢	\$ 13,249
400,000 kWh per month (1,000 kW)	6.3	26,436
1,800,000 kWh per month (5,000 kW)	6.5	122,972
<u>High Voltage General</u> ⁽⁴⁾		
912,500 kWh per month (5,000 kW at 25% load factor)	6.4¢	\$ 63,283
11,497,500 kWh per month (21,000 kW at 75% load factor)	4.7	580,584
<u>Contract Industrial</u> ⁽⁵⁾		
26,280,000 kWh per month (40,000 kW at 90% load factor)	3.7¢	\$1,045,751

(1) Rates in the City based on 4.24 cents per kWh for energy, 3.44 cents per kWh for delivery, and a basic monthly charge of \$13.50 per customer (not including collectively metered apartments).

(2) Rates in the City based on 4.35 cents per kWh for energy, 3.46 cents per kWh for delivery, and a basic monthly charge of \$20.75 per customer (not including unmetered services).

(3) Rates based on 4.30 cents per kWh for energy, \$7.96 per kW for delivery and a basic monthly charge of \$56 per customer.

(4) Transmission level voltage rates based on 3.83 cents per kWh for energy, \$4.51 per kW for delivery and a basic monthly charge of \$850 per customer.

(5) Tacoma Power currently serves two large Contract Industrial customers under specific contracts established to meet those customers' needs. Contract Industrial rates are based on 3.07 cents per kWh for power supply energy, \$4.33 per kW for power supply demand, \$4.00 per kW for delivery and a basic monthly charge of \$1,870 per customer.

Source: Tacoma Power

A table comparing monthly electric bills (for selected customer classifications and usage levels) of major public and private utilities to those of Tacoma Power is shown below. The amounts shown are based on specific rate schedules for each utility.

	Comparative Monthly Electric Bills ⁽¹⁾ As of April 16, 2017						System Average Rates As of Year End 2016 System Average
	Residential		Small General ⁽²⁾		General ⁽²⁾		(cents/kWh)
	(1,000 kWh)	(2,000 kWh)	(10 kW, 2,000 kWh)	(10 kW, 2,000 kWh)	(150 kW, 50,000 kWh)	(150 kW, 50,000 kWh)	
	Summer Season	Winter Season	Summer Season	Winter Season	Summer Season	Winter Season	
Tacoma Power	\$ 90	\$167	\$177	\$177	\$3,398	\$3,398	6.93
Other Northwest Municipalities:							
City of Eugene, OR	109	210	235	235	4,292	4,292	8.22
City of Seattle, WA	118	238	194	194	4,054	4,054	8.58
Washington State Public Utility Districts:							
Clark Public Utilities	94	175	179	179	3,264	3,529	n/a
Cowlitz County	89	160	199	199	3,887	3,887	5.27
Grant County ⁽³⁾	66	114	122	122	2,074	2,074	4.01
Lewis County	87	144	165	165	2,886	2,886	n/a
Snohomish County	103	205	189	189	4,308	4,308	7.70
Private Companies: ⁽³⁾⁽⁴⁾							
Pacific Power ⁽⁵⁾	100	215	218	218	4,530	4,530	9.89
Portland General Electric	125	257	243	243	4,509	4,509	9.38
Puget Sound Energy	183	371	227	233	4,846	5,347	10.48
Avista Utilities ⁽⁵⁾	97	212	269	269	5,610	5,610	8.87

(1) Computed from the rate schedules provided by the utilities listed. There are some variations in rate schedules and rate classification of the various utilities.

(2) Assumes power delivered is three-phase where available. Delivery voltage varies.

(3) Includes an effective 6% tax levied by a city or town for comparison purposes only. Actual taxes for municipalities may vary.

(4) Residential bills include credits under BPA's Residential Exchange Program.

(5) Based on rates applicable in the State.

Source: Tacoma Power and individual utilities as applicable.

POWER SUPPLY RESOURCES AND COST OF POWER

Power Supply Overview

Tacoma Power's power supply portfolio is made up of generating facilities owned by Tacoma Power and power supply contracts with BPA, Columbia Basin Hydro Power ("CBHP") and Grant County Public Utility District No. 2 ("Grant PUD"). See the "2016 Tacoma Power Resources" table below. Tacoma Power generating facilities do not include natural gas or coal fired facilities.

Tacoma Power's owned hydroelectric resources provided approximately 42% of the utility's total energy supply in 2016. These resources provide a stable, low-cost base for Tacoma Power's portfolio. The reservoirs at the hydroelectric projects have significant storage capacity, which enables Tacoma Power to manage flow releases to maximize the value of hydroelectric generation. Tacoma Power participates in the wholesale market to match resources to its customer loads. For 2016, the cost at which Tacoma Power's own hydroelectric resources and purchased resources provided energy averaged approximately 1.01 cents per kWh. See the "2016 Tacoma Power Resources" table below.

Tacoma Power's largest long-term contract is with BPA, which provided 433 aMW in 2016 (approximately 51% of the total portfolio). In December 2008, Tacoma Power signed a new long-term contract with BPA beginning October 2011 and running through September 2028. The energy provided under this contract varies with river flows and can range from 400 aMW to 550 aMW per year (based on 80 years of historical inflow data). The cost of this energy can vary annually based upon the amount of energy received and as a result of BPA rate changes. If Tacoma Power's load forecast drops, the amount of purchases from BPA correspondingly declines. Other long-term contracts and short-term purchases provided the rest of Tacoma Power's supply resources in 2016.

The following map shows the locations of Tacoma Power's hydroelectric projects.

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Hydroelectric Project Location Map



Project Location Map



Integrated Resource Plan

Every two years Tacoma Power prepares or updates an Integrated Resource Plan (“IRP”). The IRP considers Tacoma Power’s current and projected balance of loads and resources based on a detailed assessment of demand forecasts; existing supply and transmission resources; market price forecasts; conservation and load management opportunities; and environmental considerations. The IRP identifies the generation resource portfolio that is designed to balance and minimize utility costs and risks. These risks include, for example, the regulatory risks imposed by the State’s renewable portfolio standard. See “CERTAIN FEDERAL AND STATE LAWS AND REGULATIONS AFFECTING TACOMA POWER—Washington State’s Renewable Portfolio and Conservation Standards.” Regular IRP updates allow Tacoma Power to account for changes in the electric power industry, shifting market conditions, the emergence of new technologies, new regulatory mandates and other factors that are likely to affect Tacoma Power’s resource strategies. The current IRP was created in 2015 and adopted by the Board in 2016. The 2015 IRP determined that Tacoma Power has sufficient supply resources to serve retail load through the following 10 years. Other than conservation, Tacoma Power does not expect to need to acquire new generation resources to serve its retail load in the foreseeable future.

Wholesale Energy Market Purchases and Sales

Tacoma Power sells power in the wholesale energy market when owned and contracted resources exceed load. Tacoma Power makes purchases from the wholesale energy market when required to meet load obligations. Due to its conservative planning assumptions, under most water conditions Tacoma Power expects to be a net seller into the wholesale electricity market. In 2016, a higher than normal year in terms of both precipitation and streamflows in the watersheds where Tacoma Power’s owned resources are located, Tacoma Power sold 2,731,083 MWh of surplus power. This compares to wholesale purchases in that same year of 263,105 MWh.

Tacoma Power’s wholesale market activities are limited to purchasing power to meet native loads, optimizing the value of Tacoma Power’s power supply portfolio, and selling energy during times of surplus, consistent with the utility’s forecast of reservoir water levels. Tacoma Power does not speculate in the wholesale power market. Actual revenues for any given year are a function of market prices, loads and water availability for generation, which are, in turn, dependent upon the weather.

Energy Risk Management

Tacoma Power continues to enhance its Energy Risk Management processes in order to achieve its strategic objectives in a changing wholesale energy market. Tacoma Power completed benchmarking current practices against Committee of Chief Risk Officers (“CCRO”) standards, confirming strengths and identifying opportunities to improve operational efficiency. Energy Risk Management staff are reviewing and updating the Energy Risk Management Policy and procedures to further meet CCRO standards and streamline processes. Additionally, staff is in the process of completing a new risk model to allow for better analysis and understanding of the risks associated are with various commercial strategies.

The on-going focus of the Energy Risk Management function is to oversee risk control processes, to reduce the variance in the value of the wholesale power portfolio, to improve portfolio risk analytics and to promote a risk-reducing hedging strategy. The Energy Risk Management Policy authorizes the use of instruments for hedging, requires that Tacoma Power actively manage and review counterparty credit risk, specifies trading authority guidelines and restrictions, and contains other controls and tools to manage risk. Tacoma Power uses hedging to manage loads and resources and does not engage in market speculation.

Resource Mix

Tacoma Power primarily acquires its power from hydroelectric resources. The resource mix varies slightly from year to year depending upon available water resources and equipment maintenance schedules. During 2016, energy was obtained from the sources identified in the following table.

2016 Tacoma Power Resources

	Available Energy (MWh)	Portion of Total	Cost (cents/kWh)
City-Owned Generation			
Hydroelectric Projects ⁽¹⁾⁽²⁾			
Nisqually	630,483	8.4%	0.906
Cushman	507,618	6.7	1.278
Cowlitz	1,989,438	26.5	0.990
Wynoochee ⁽³⁾	37,209	0.5	0.247
Hood Street	4,029	0.0	4.276
Subtotal	3,167,690	42.1	1.014
Portfolio Energy Purchases			
Grant PUD (Priest Rapids)	26,975	0.4	-0.300
BPA ⁽⁴⁾	3,807,370	50.6	2.990
CBHP ⁽⁵⁾	253,625	3.4	2.528
Portfolio Market Purchases	263,105	3.5	1.657
Subtotal Portfolio Purchases	4,351,075	57.9	2.862
Total All Energy Resources ⁽⁶⁾	7,518,765	100.0%	2.083
Portfolio Resource Summary			
City-Owned Generation Resources	3,167,690	42.1%	1.014
Portfolio Energy Purchases	4,351,075	57.9	2.862
Total Portfolio Resources	7,518,765	100.0%	2.083

(1) The Nisqually River Project consists of the Alder and LaGrande plants, the Cushman Hydroelectric Project consists of Cushman No. 1 and Cushman No. 2 and the Cowlitz River Project consists of the Mayfield and Mossyrock plants.

(2) Fully loaded costs including direct production operation and maintenance costs, an allocation of administration and general expenses, in-lieu-of taxes related to the projects, FERC fees, and are net of park revenues and BPA billing credits and excludes transmission.

(3) Wynoochee costs are offset by BPA's billing credits program. See "Tacoma Power-Owned Generating Resources-Wynoochee River Project."

(4) BPA's costs do not include transmission.

(5) Columbia Basin Hydro Power.

(6) Excludes Conservation Costs and Miscellaneous Power Costs. See the "Cost of Power—Cost of Power to Serve Tacoma Power's Retail Customers" table.

Source: Tacoma Power

2016 and 2017 Power Resources

In 2016 and 2017 to-date, Tacoma Power's resource portfolio included the same power resources as in prior years. In 2016, Tacoma Power's owned hydroelectric resources produced 3,167,690 MWh as a result of stream flows that were 113% of normal. The Slice component of the City's Power Sales Agreement with BPA provided Tacoma 3,807,370 MWh in 2016, as a result of stream flows that were 99% of normal. See "Long-Term Purchases of Power Supply—BPA Power Sales Contract" below. The January through July 2017 forecast is 126% of normal stream flows for Tacoma Power's owned hydroelectric resources and 135% of normal stream flows for BPA's system.

Power Resources

The table below shows Tacoma Power's resources to meet its power requirements from 2012 through 2016.

	2012	2013	2014	2015	2016
Energy Requirements					
Energy Sales ⁽¹⁾	7,903,059	7,046,017	7,589,975	6,520,491	7,376,222
System Losses ⁽²⁾	239,251	233,372	203,437	239,169	167,936
Total Energy Requirements	8,142,310	7,279,389	7,793,412	6,759,660	7,544,158
Peak Demand (kW) ⁽³⁾	922,917	980,000	1,011,846	872,039	881,140
Energy Resources:					
Owened:					
Alder	274,568	222,438	247,866	191,613	251,585
LaGrande	424,584	350,494	387,255	319,979	378,898
Cushman No. 1	108,798	97,143	132,172	107,411	185,318
Cushman No. 2	152,951	142,385	226,337	165,046	322,300
Mayfield	904,605	715,592	823,149	622,213	785,807
Mossyrock	1,418,377	1,077,383	1,288,537	1,007,917	1,203,631
Wynoochee	38,148	24,404	14,272	12,680	37,209
Hood Street	4,029	3,503	2,281	1,890	2,942
Subtotal Owened Resources	3,326,060	2,633,342	3,121,869	2,428,749	3,167,690
Energy Purchases:					
Grant PUD (Priest Rapids)	37,355	31,567	20,715	25,360	26,975
BPA	4,167,447	3,756,763	3,845,666	3,674,140	3,807,370
CBHP	255,564	254,570	272,846	258,679	253,625
Subtotal Energy Purchases	4,460,366	4,042,900	4,139,227	3,958,179	4,087,970
Total Energy Resources	7,786,426	6,676,242	7,261,096	6,386,928	7,255,660
Portfolio Market Purchases	262,626	519,190	444,264	293,059	263,105
Plus Interchange In (Out)	93,258	83,957	88,052	79,673	25,393
Net Energy Resources ⁽⁴⁾	8,142,310	7,279,389	7,793,412	6,759,660	7,544,158

(1) Includes sales of secondary energy, which varies from year-to-year based on availability of stream flows and market conditions.

(2) Excludes Tacoma Power's usage.

(3) Reflects sales to customers, Tacoma Power use and system losses. This table may differ from information presented in Tacoma Power's audited financial statements attached as Appendix D hereto, which illustrates the Tacoma Balancing Authority Area peak demand.

(4) Firm energy required to meet the load requirements of Tacoma Power.

Source: Tacoma Power

The table below shows a summary of the electric generating resources currently available to Tacoma Power during years with median and extremely low (critical) water inflows, including resources from electric generating facilities owned by Tacoma Power and resources available to Tacoma Power through long-term contractual arrangements.

Tacoma Power Resource Capability

Hydroelectric		Nameplate Capacity (kW)	87-year Median Annual Energy Production (MWh) ⁽¹⁾	Critical Period Average Annual Energy Capability (MWh) ⁽²⁾
Project	River			
Alder	Nisqually	50,000	237,921	136,633
LaGrande	Nisqually	64,000	361,130	219,684
Cushman No. 1	Skokomish	43,200	118,300	74,591
Cushman No. 2	Skokomish	81,000	183,281	100,632
Mayfield	Cowlitz	162,000	758,435	403,066
Mossyrock	Cowlitz	300,000	1,179,336	582,719
Wynoochee	Wynoochee	12,800	33,288	31,505
Hood Street ⁽³⁾	(reservoir)	0	3,106	3,106
Subtotal		713,000	2,874,797	1,551,936
Contractual Arrangements				
Share of Priest Rapids Project ⁽⁴⁾		5,400	21,450	21,526
Columbia Basin Hydro ⁽⁵⁾		--	236,836	236,836
BPA ⁽⁶⁾		356,000	3,864,870	3,297,288
Subtotal		361,400	4,123,156	3,555,650
Total		1,074,400	6,997,953	5,107,586

- (1) All project generation except Wynoochee and Hood Street is based on the median inflows for the period October 1929 through September 2015. Wynoochee median generation is based on the inflows for the period 1957 through 2012. Annual 16-year average Hood Street generation is shown.
- (2) Critical inflows are the lowest recorded annual inflows for Tacoma Power's system (Cowlitz, Nisqually, and Cushman) and Slice component of the City's Power Sales Agreement with BPA and are based on water year October 2000 through September 2001.
- (3) Tacoma Water Hood Street Reservoir has a generator installed which feeds from McMillin Reservoir. Tacoma Power does not realize capacity from this generator.
- (4) Tacoma Power's expected share of output based on the 76-year study period from January 1929 through December 2004. See "Long-Term Purchases of Power Supply—*Priest Rapids Hydroelectric Project*."
- (5) Output of five low-head hydroelectric plants located on irrigation canals in eastern Washington. These plants are available for operation during the March-through-October irrigation season each year.
- (6) Tacoma Power's Power Sales Agreement with BPA is comprised of approximately 50% Block and 50% Slice. The Block portion remains relatively static each year, slowly increasing as Tacoma Power's loads increase. The Block contract energy shown is for calendar year 2013. The Slice portion represents a percentage share of BPA's Federal hydroelectric system ("Federal System") output and varies with the hydro conditions. Slice median values represent the Slice share during median conditions for Tacoma Power's resource portfolio (the combination of Tacoma Power's system plus the Slice component of the City's Power Sales Agreement with BPA. Slice critical conditions are for the lowest conditions for Tacoma Power's resource portfolio and are based on wateryear from October 2000 through September 2001. Slice capacity is 356 megawatts ("MW") (assuming 2.97% of the Federal System capacity of 12,000 MW).

Source: Tacoma Power

Tacoma Power-Owned Generating Resources

Tacoma Power-owned generating resources include four hydroelectric projects: Nisqually, Cowlitz, Cushman and Wynoochee.

A 40-year FERC license was obtained for the Nisqually Project in 1997 and a new 35-year license was issued for the Cowlitz River Project in 2003. See "*Cowlitz River Project*." A 40-year license was issued for the Cushman Project

in 1998; however, Tacoma Power appealed the license. In January 2009 Tacoma Power entered into a multi-party settlement agreement and submitted it to FERC as the basis for an amendment to the 1998 license. On July 15, 2010, FERC issued an amended 50-year license for the Cushman Project that was back-dated to 1998 and will expire in 2048. See “*Cushman Hydroelectric Project*.”

Cowlitz River Project. The largest of Tacoma Power’s hydroelectric projects, the Cowlitz River Project, consists of two coordinated hydroelectric plants, Mayfield and Mossyrock. Both are located on the Cowlitz River in Lewis County on the western slope of the Cascade Mountains, approximately 48 miles south of Tacoma.

Mossyrock dam consists of a double curvature concrete arch dam structure, 365 feet high above riverbed and 1,648 feet in length, with a spillway section controlled by four tainter gates. The dam creates Riffe Lake, a reservoir with a nominal capacity of 1,685,100 acre-feet having 52 miles of shoreline. Water flows are conveyed to the Mossyrock powerhouse via three 20.5-foot diameter steel penstocks approximately 285 feet in length. The Mossyrock powerhouse contains two Francis turbine/generators with a total nameplate rating of 304 MW. One turbine/generator unit was rebuilt in 2008 and 2009 and the second unit was rebuilt in 2010. As designed, provision was made at Mossyrock for the future addition of a third turbine/generator unit. No current plans exist for the installation of this unit.

Mayfield dam, located approximately 13.5 miles downstream of the Mossyrock dam, was initially placed into operation with three generating units in 1963. A fourth unit was added in 1983. The dam includes a concrete arch and gravity dam, 200 feet high and 850 feet long, with a controlled spillway having five tainter gates. The dam creates a reservoir with a nominal capacity of 133,700 acre-feet having 33.5 miles of shoreline. Project water is conveyed to the Mayfield powerhouse via a 37-foot diameter power tunnel, 854 feet long, and four 18-foot diameter power penstocks. The Mayfield powerhouse contains four Francis turbine/generator units with a total nameplate rating of 162 MW.

The output of both plants is transmitted to Tacoma Power via 230 kV transmission lines owned and operated by BPA under the terms of a fixed price transmission contract with BPA that expires on December 31, 2021. Subject to certain conditions, Tacoma Power can renew the contract for an additional 30 years (to December 31, 2051). See “TRANSMISSION, DISTRIBUTION, AND TELECOMMUNICATIONS INFRASTRUCTURE—Wholesale Transmission Service—*Cowlitz Exchange*.”

FERC License. The original license for the Cowlitz River Project was issued by FERC in 1951. In 2003, a 35-year license was issued by FERC. Tacoma Power filed an application for a new license in 1999 and filed a comprehensive agreement among Tacoma Power, federal and state agencies, tribes and conservation groups in 2000. The new license is based on that agreement, which was the result of more than five years of study and negotiation, and describes fisheries, recreation, cultural resources, wildlife and water quality programs that Tacoma Power will provide. Numerous implementation plans required in the license have been developed, reviewed by agencies and approved by FERC and implemented.

Fisheries Issues. The Cowlitz River Project, on a tributary of the Columbia River, is affected by the 1998 listing of Lower Columbia River steelhead and the 1999 listing of Lower Columbia River Chinook and Columbia River Chum salmon, the 2005 listing of Lower Columbia River Coho salmon and potentially by the 2010 listing of Pacific eulachon/smelt under the Endangered Species Act (“ESA”). A program to reintroduce Chinook, Coho and steelhead is occurring in the Upper Cowlitz Basin above Lewis County Public Utility District’s Cowlitz Falls dam. This is a trap and haul program that transports the fish around the Cowlitz dams.

Key issues in the Cowlitz River Project license implementation include collection of downstream migrating juvenile salmon and development of a Fisheries and Habitat Management Plan (“FHMP”). The downstream juvenile fish collector was constructed and operational for fish migration in 2017. A performance goal of 95% collection efficiency or 75% with best available technology is included in the license for downstream collection. The implementation of the FHMP is being coordinated with resource agencies including strategies for restoring wild stocks, retaining a sport fishery and evaluating upstream passage triggers. Tacoma Power completed an ecological analysis of fish habitat in the basin in collaboration with regulatory agencies and relicensing stakeholders. As a part of relicensing, federal consultation has occurred under the ESA and a favorable biological opinion was issued for the project in 2004 and amended into the license in 2004.

Cushman Hydroelectric Project. The Cushman Hydroelectric Project consists of two separate concrete arch dams. Both dams are located on the North Fork of the Skokomish River in Mason County, Washington, approximately 36 miles northwest of the City. Cushman No. 1, whose construction created the Lake Cushman Reservoir, was completed in 1926 with an installed generating capacity of 36 MW. The dam is 1,111 feet long and 235 feet high. Cushman No. 1 was upgraded in 1987 and 1988, increasing the total project nameplate rating to 50 MW.

Cushman No. 2 was constructed in 1930 with two identical Francis generating units, each rated at 27 MW. In 1952, a third 27 MW Francis turbine/generator unit was added at Cushman No. 2, resulting in a total installed nameplate rating of 81 MW. The concrete arch dam is 460 feet long and 175 feet high. The powerhouse is connected to the dam via a power tunnel 17 feet in diameter and 2.5 miles long.

The North Fork powerhouse at the base of Cushman No. 2 dam was completed in 2013 with two Francis generating units each rated at 1.8 MW. This powerhouse is used to pass the required minimum flows into the North Fork Skokomish River, and includes an upstream adult fish collector and a fish handling system and tram to provide for both upstream and downstream transportation of fish.

Project power is transmitted to Tacoma Power via two Tacoma Power-owned 110 kV sub-transmission lines, known as the Potlatch lines. The Potlatch lines are each 43 miles long, span the Tacoma Narrows strait of Puget Sound, and terminate at Tacoma Power's Pearl Street Substation. When Tacoma Power installed the 6,200 foot span across the Tacoma Narrows in 1926, it was the longest electrical crossing in the world. The Tacoma Narrows transmission span replacement was completed in 2006. See "TRANSMISSION, DISTRIBUTION, AND TELECOMMUNICATIONS INFRASTRUCTURE."

FERC License. Cushman Nos. 1 and 2 are operated under a single FERC license. The Cushman Project's initial FERC license, issued in 1924, expired in 1974. In 1974, the City applied for a new long-term project license. The project operated under the terms of an automatically renewed annual license granted by FERC until a 40-year license was issued by FERC in 1998. Certain terms of this license were challenged by the Skokomish Tribe and certain environmental agencies. A Settlement Agreement ultimately was negotiated and submitted to FERC in 2009. In 2010, FERC issued an amended 50-year license for the Cushman Project, which will expire in 2048, and that includes terms of the Settlement Agreement.

Fisheries Issues. Four fish species listed as threatened under the ESA, Hood Canal Summer Chum salmon, Bull trout, Puget Sound Chinook salmon and Puget Sound steelhead, occur in waters influenced by the Cushman Project. In the project Settlement Agreement, Tacoma Power agreed to build both up and downstream fish passage and two small fish hatcheries. The fish facilities are constructed and operational as of 2016.

Nisqually River Project. The Nisqually River Project consists of two separate hydroelectric plants, Alder and LaGrande, located on the Nisqually River on the western slope of the Cascade Mountains, approximately 30 miles southeast of Tacoma. The Alder plant, constructed in 1945, includes a continuous concrete arch dam that is 285 feet high and 1,600 feet long, including a spillway section controlled by four tainter gates and a powerhouse containing two identical Francis turbine/generator units having a total installed nameplate rating of 50 MW. Alder dam creates a reservoir with a nominal capacity of 232,000 acre-feet having 28 miles of shoreline.

The LaGrande plant consists of a concrete gravity dam 192 feet high and 710 feet in length, which creates a small reservoir of 2,700 acre-feet and includes a gated spillway and powerhouse. Having been in operation since 1912, the LaGrande plant was not originally licensed, as it was constructed prior to the adoption of the Federal Water Power Act in 1920. The original plant included four identical Francis turbine/generator units with a total installed nameplate rating of 24 MW. The plant was upgraded in 1944 with the construction of a new dam and the addition of a Francis turbine/generator unit with a nameplate rating of 41 MW.

Project power is transmitted to Tacoma Power via two Tacoma Power-owned 110 kV sub-transmission lines, known as the LaGrande lines. The LaGrande lines compose both double circuit (56 circuit miles) and single circuit (11 circuit miles) design, with one line terminating at Mountain Substation and the other line terminating at Canyon Substation. Tacoma Power entered into an agreement with BPA to upgrade the capacity of a portion of these sub-transmission lines and to install a switching station that would enhance reliability for Tacoma Power customers in

that area. Construction of the Canyon Substation and the Mountain Substation was completed in 2011. See “TRANSMISSION, DISTRIBUTION, AND TELECOMMUNICATIONS INFRASTRUCTURE.”

The original license for the Nisqually River Project was issued by FERC in 1944. In 1997, Tacoma Power received a new 40-year license from FERC. The plans for all license requirements have been approved by FERC and the majority have been implemented.

Hydroelectric projects on the Nisqually River were built at a recognized historic natural barrier to fish migration. Puget Sound Chinook salmon and steelhead trout use the river below the dams, but upstream passage was not an issue for the relicensing of the Nisqually River Project. Tacoma Power also manages 3,500 acres of forestland, including a 7.5 mile-long corridor of protected habitat along the Nisqually River below the dams.

In 2003, the Nisqually River Project received the first of three consecutive annual awards for Outstanding Stewardship of America’s Rivers from the National Hydropower Association for environmental activities associated with the project. The project has been certified since 2003 by the Low Impact Hydropower Institute as a low impact hydroelectric project. The Nisqually River Project was the eighth facility in the nation to earn this certification.

Wynoochee River Project. The Wynoochee River Project consists of a concrete gravity dam, with earthen embankments, 175 feet high and 672 feet in length, which creates a reservoir of 70,000 acre-feet and includes two gated sluiceways, two gated spillways, and a powerhouse. The Wynoochee River Project supports a variety of purposes in addition to generation, including water supply, flood control, recreation, enhancement of fisheries and irrigation.

The powerhouse was constructed in 1993 and contains a single Kaplan turbine, which, with its associated generator, has a nameplate capacity of 12.8 MW. The project’s generation is transmitted to BPA’s grid over Grays Harbor County Public Utility District’s transmission system under a contractual arrangement that expires in September 2037, and the power then continues over BPA’s grid to Tacoma Power.

Tacoma Power entered into a billing credit agreement concerning the Wynoochee Project with BPA that extends until July 31, 2037. In 1993, all BPA wholesale customers who had firm power sales contracts were eligible to apply for billing credit for a qualified resource. With billing credits, BPA’s customers may obtain credits against the customer’s power bills, or cash, for developing and operating resources where the output of the resource will serve the customer’s load, thus reducing the customer’s purchase of BPA power. BPA benefits because its need to acquire new resources to meet load growth is reduced. The billing credit agreement facilitated Tacoma Power’s development of the Wynoochee Project and, therefore, reduced Tacoma Power’s BPA power purchases.

Hood Street Project. Tacoma Power owns a small generator installed at Tacoma Water’s Hood Street Reservoir. The project generates an average of 2,474 MWh annually and began operation in 1990.

Dam Safety

Tacoma Power's dam safety program requires an extensive inspection program with the inspections being performed by various groups. Once a day all of Tacoma Power's dams are inspected by project personnel with more in depth inspections occurring on a weekly and monthly basis. Additionally, approximately once per year each dam is inspected by engineers from FERC and every five years the dams are inspected by an independent engineering consultant following the requirements of the Code of Federal Regulations 18, Part 12, Subpart D ("Part 12D"). These independent consultants have specific engineering expertise and are preapproved by the FERC. The following table lists when the last annual FERC and Part 12D inspections were performed along with a column showing when the next Part 12D inspection report is scheduled for submittal:

FERC Project #	Project Name	Last Annual FERC Inspection	Last Part 12D Inspection Report	Next Part 12D Inspection Report
460	Cushman Hydroelectric Project	June 27, 2017	June 1, 2017	June 2022
1862	Nisqually Hydroelectric Project	February 18, 2016	June 2013	June 1, 2018
2016	Cowlitz River Project	July 11, 2017	December 2013	December 1, 2018
6842	Wynoochee Hydroelectric Project	May 2, 2017	December 2012	December 1, 2017

The FERC also requires that Tacoma Power maintains fully developed Emergency Action Plans ("EAPs") for each of Tacoma Power's hydro projects. These EAPs include the emergency contact information for the emergency management agencies ("EMAs") of the cities, counties, state and federal government located downstream of the projects that would be impacted by an uncontrolled release of the reservoir. The EAPs also contain inundation maps highlighting the impacts of a complete, nearly instantaneous failure of the dams for use by the EMAs in developing their evacuation plans. These EAPs are updated annually and are completely reissued every five years to the 45 outside agencies.

Tacoma Power has also recently taken additional actions at Mossyrock to lower the risk of having an uncontrolled release of the reservoir by proposing to keep Riffe Lake approximately 30-feet lower than the historic normal. This adjustment was necessary because of recent developments concerning the region's understanding of the seismic hazards and how these changes would adversely impact the spillway structure. By keeping the reservoir at a lower level, the risk of an uncontrolled release through the spillway structure is reduced. Tacoma Power is currently evaluating the latest seismicity ratings with FERC and developing plans to further mitigate this risk. It is anticipated that Riffe Lake will be kept at the lower operating level for several years while seismic analysis and mitigation options are developed.

Long-Term Purchases of Power Supply

BPA Purchases. The Bonneville Power Administration ("BPA") was created by the Bonneville Project Act of 1937, and is a revenue-financed federal agency under the United States Department of Energy (the "DOE"). BPA's central mission is to operate and maintain a reliable regional transmission grid and to market electricity at cost from federally owned and contracted facilities to Northwest utilities. BPA markets power from the Federal Columbia River Power System (the "Federal System") composed of 31 federal hydroelectric projects, one non-federal nuclear project, and several non-federally-owned hydroelectric and wind projects in the Pacific Northwest, and from various contractual rights. The federal projects are built and operated by the United States Bureau of Reclamation and the United States Army Corps of Engineers and are located primarily in the Columbia and Snake River Basins. The Federal System currently produces more than one-third of the region's energy requirements. BPA's transmission system includes over 15,000 circuit miles of transmission lines, provides about 75% of the Pacific Northwest's high-voltage bulk transmission capacity and serves as the main power grid for the Pacific Northwest.

BPA is required by law to meet certain energy requirements in the region and is authorized to acquire power resources and take other actions to enable it to carry out these purposes. This includes the requirement for Bonneville to provide power to preference customers, like Tacoma Power, so the utility can meet its total customer load and load growth, less its owned or purchased resources from non-federal generators. In doing so, BPA must give preference and priority to public body and cooperative utilities before offering to serve non-preference entities. Since 1937, BPA has always met its power marketing obligations to supply federal power to serve the firm power needs of its regional power customers. This currently includes more than 125 publicly-owned and cooperatively-

owned utilities (or “preference customers”) for resale to consumers in the Pacific Northwest. BPA also sells electric power to a small number of Federal agencies and has the authority, but not the obligation, to sell to Direct Service Industry customers. Its service area covers over 300,000 square miles.

BPA Power Sales Contract. Tacoma Power and other municipally-owned utilities and cooperatives are “public preference” customers of BPA pursuant to federal legislation, which requires BPA to give preference and priority to public agencies and cooperatives in the distribution and marketing of federal power. In 2008 Tacoma Power executed a Power Sales Agreement with BPA, effective October 1, 2011, through September 30, 2028 (the “BPA Agreement”). The contract is for a “Block-Slice” product. The Block component provides a set amount of energy delivered in flat monthly “blocks” based on Tacoma Power’s historical monthly load. The Slice component represents a percentage “slice” of the output of the Federal System. The monthly Block energy ranged from 142 aMW in August to 228 aMW in December of 2016. As a purchaser of the Slice product, Tacoma Power pays its percentage share of BPA’s actual operating costs. Tacoma Power’s Slice percentage is 2.97%, which is equivalent to approximately 210 aMW under critical water conditions. After the end of each fiscal year, BPA “trues up” the difference between its actual costs and the budget for the year through an adjustment charge or credit. The total amount of energy provided under the BPA Agreement varies with river flows. Based upon 80 years of historical river flows, Tacoma Power’s annual energy from BPA (Block plus Slice) can range from a minimum of 400 aMW to a maximum of 550 aMW.

The cost of power under the BPA Agreement is established through the BPA long-term rate methodology (the “Tiered Rates Methodology”) for determining power rates bi-annually during the term of those contracts. The base amount of firm power that Tacoma Power and other preference customers may purchase under BPA’s lowest cost rate (“Tier 1” rate) is limited to a pro-rata share of the estimated output of the Federal System in a critical water year. Retail utility requirements in excess of the base amount is the retail utility’s responsibility and can be satisfied under separate market-based contracts with BPA or other non-federal providers. Any purchases by preference customers from BPA above the base amount of power would be sold at a higher rate (“Tier 2” rate) reflecting the market cost to BPA of obtaining additional power to meet such incremental loads. Tier 1 power is limited to the output and capacity of the existing Federal System. BPA established for each preference customer a contractually defined level of access to power available at the Tier 1 rate.

Under Tacoma Power’s BPA Agreement, Tacoma Power will receive a minimum of approximately 400 aMW at Tier 1 rates, which corresponds to the sum of Tacoma Power’s Block component plus its Slice Component in a critical water year. Tacoma Power has a right to purchase energy from BPA at Tier 2 rates under a future power sales contract. The quantity of Tier 2 energy Tacoma Power could purchase would increase as electric system load grows. At this time Tacoma Power does not expect to purchase Tier 2 power from BPA to serve any future load growth at least through 2028.

Under the BPA Agreement, BPA has the right to require that Tacoma Power post collateral if BPA determines it is necessary to secure Tacoma Power’s payments under that Agreement. Conditions that would require Tacoma Power to post collateral under the BPA Agreement include a downgrade of Tacoma Power’s unenhanced senior debt to below investment grade, or any material changes to Tacoma Power’s financial condition that may adversely impact its ability to make payments under the BPA Agreement. The collateral required is an amount equal to twelve times the greatest monthly amount billed or forecasted to be billed to Tacoma Power by BPA under the BPA Agreement. BPA has not required Tacoma Power to post collateral and Tacoma Power does not expect to be required to post collateral in the future.

For a discussion of Tacoma Power’s transmission contracts with BPA, see “TRANSMISSION, DISTRIBUTION, AND TELECOMMUNICATIONS INFRASTRUCTURE.”

BPA Rates. BPA is required by federal law to recover all of its costs through the rates it charges its customers. The U.S. Treasury provides a portion of BPA’s capital funding, and BPA is required to make annual payments to the U.S. Treasury to repay such borrowings. BPA is committed to a rate design that builds and maintains financial reserves sufficient for the agency to achieve a 95% probability of making its U.S. Treasury payments in full and on time. The power sales contracts with preference customers contain Cost Recovery Adjustment Clauses (“CRAC”) that permit rates to be adjusted upward if BPA’s net reserves fall below a certain threshold. Under its current power contracts, BPA conducts a rate case every two years. The first rate case under the “Tiered Rates Methodology” was

conducted in 2010 with rates effective October 1, 2011. In 2016 Tacoma Power's average unit cost for BPA power was \$29.96/MWh. The current Block rate is \$30.68/MWh and the monthly Slice rate is \$2.06 million per month per percentage share of the Federal System. New BPA rates go into effect every October in odd years. In July 2017 BPA adopted a 5.4% average wholesale power rate increase and an average transmission rate decrease of 0.7% for fiscal years 2018 and 2019. These rate adjustments are scheduled to take effect on October 1, 2017.

There are any number of 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, BPA's other capital-related funding obligations, the number of customers, water conditions, fish and other environmental regulations, capital needs of the Federal System, and regional transmission issues.

Bonneville Residential Exchange Program. The Northwest Power Act of 1981 (the "Northwest Power Act") provides that a municipal or investor-owned utility may offer power to BPA, and BPA must purchase power from the utility, at the utility's average system cost. In exchange, BPA sells an equivalent amount of power to the utility for purchase by its residential and small farm customers at Bonneville's established Priority Firm ("PF") Exchange Rate. This is referred to as the "Residential Exchange Program." The PF Exchange Rate is established periodically by BPA as part of its rate case. Benefits are settled financially with no energy exchanged.

Over the years there have been numerous legal challenges to the Residential Exchange Program. In 2011, the parties reached a settlement agreement (the "2011 Settlement Agreement"), which provides an agreed basis and certainty for how the Residential Exchange Program is treated in BPA's rates through 2028.

Bonneville and Columbia River Treaty. The Columbia River Treaty (the "CRT") is an international treaty between Canada and the United States of America. Ratified in 1964, the CRT named two "entities" to implement the CRT — a "U.S. Entity" and a "Canadian Entity." The U.S. Entity, created by the President, consists of the Administrator of BPA (chair) and the Northwestern Division Engineer (member) of the U.S. Army Corps of Engineers. The Canadian Entity, appointed by the Canadian Federal Cabinet, is the British Columbia Hydro and Power Authority (B.C. Hydro). Canada and the United States each have the option to terminate many of the CRT provisions at any time on or after September 16, 2024 by providing a 10-year advance written notice.

The CRT called for the construction and operation of three large dams in the upper Columbia River basin in British Columbia, Canada, and gave the U.S. an option to build a fourth dam in Montana with a reservoir that extends into Canada. The operation of CRT dams was designed to provide flood control and hydropower benefits to both countries, which made other benefits possible. These benefits included dams that doubled the amount of Columbia River basin reservoir storage, which helped transform annual river and stream flows by storing the spring runoff for release during the fall and winter months, or even in subsequent years. This helped eliminate major flood damage for all but the most extreme events. The dams constructed in the Columbia River basin as a result of the CRT provided power generation, flood control, navigation and irrigation benefits.

The CRT flood control operations, which provide significant benefits to the United States, will expire in September 2024. Terms and conditions for ongoing flood control will need to be renegotiated, regardless of whether or not the CRT is terminated. In addition, U.S. operations of the Columbia River system for fisheries management have significantly reduced the original downstream power benefits provided under the CRT.

Leading up to 2014, the U.S. Entity engaged in a multi-year effort and collaborated and consulted with the region's sovereign states, federally recognized tribes, and a variety of stakeholders to evaluate the regional cost and benefits of the CRT after 2024. At the conclusion of this effort, the U.S. Entity issued a Regional Recommendation to the United States Department of State in December 2013. This recommendation identified potential modifications to the CRT post 2024, and outlined a general set of principles. The recommendation requested that the U.S. government make a decision by mid-2014 to proceed with a renegotiation of the CRT with Canada and also requested that the U.S. government complete that effort no later than 2015. To date, the U.S. Interagency Policy Committee has completed their review of the Regional Recommendation, but there is no word on when the U.S. State Department will make a final decision on next steps. The long-term resolution of the CRT post-2024 is unknown at this time.

Priest Rapids Hydroelectric Project. Tacoma Power purchases power from the Priest Rapids Hydroelectric Project under several long-term agreements with Grant PUD. The Priest Rapids Hydroelectric Project is composed of two

dams, Priest Rapids and Wanapum, located on the Columbia River with an installed capacity of 1,893 MW. The terms of the current agreements are for the remaining term of the new 44-year FERC license, from April 1, 2008, to March 31, 2052. The agreements provide that each power purchaser has the right to purchase its proportionate share of Priest Rapids generation in excess of the actual and prospective needs of Grant PUD for the same proportionate share of project costs. Tacoma Power's future purchase quantity and costs will be affected by Grant PUD loads, water conditions, and FERC license operating requirements. Tacoma Power is obligated to pay its share of the costs of the facility whether or not it receives any power.

Forecasted annual average generation available to Tacoma Power during the remaining term of the agreements is estimated to be approximately 2.5 aMW. Tacoma Power also receives a portion of the revenues from periodic auctions of 30% of the project power, which share totaled \$2.1 million in 2016.

Columbia Basin Hydro Power. The City and the City of Seattle have entered into power purchase agreements with three Columbia Basin Irrigation Districts (South, East and Quincy) for the acquisition of the output of five low-head hydroelectric projects that were constructed along irrigation canals in eastern Washington. Tacoma Power has five separate power purchase agreements for the output of these projects, each one lasting 40 years. The contracts were structured to assure that underlying debt service payments and operation and maintenance would be paid by purchasers plus additional incentive payments made only for delivered power. Power deliveries under the contracts began between 1982 and 1986 when the respective projects were placed in service, and will end on corresponding dates for each project between 2022 and 2026. These projects are operated by Columbia Basin Hydro Power ("CBHP") and utilize water released during the irrigation season and thus have no winter peak capability. The total installed capacity of all five projects is approximately 130 MW, with a total average annual energy production of approximately 480,000 MWh. Tacoma Power receives 50% of the actual output of the projects.

Conservation

Tacoma Power's 2015 IRP indicates that energy conservation is Tacoma Power's best and least-cost energy resource. As a result, Tacoma Power developed an expansive energy conservation program for residential, commercial and industrial customers. Tacoma Power is currently in the process of updating the 2015 IRP and is seeking public input on its services, power sources and future priorities. The table below summarizes conservation program costs over the most recent five years. The program costs include all direct costs of acquiring conservation.

Tacoma Power Conservation Program

	2012	2013	2014	2015	2016
Energy Savings (MWh) ⁽¹⁾	65,713	68,812	61,799	66,137	50,049 ⁽³⁾
Program Costs (\$000) ⁽²⁾	\$14,770	\$14,881	\$12,863	\$13,947	\$15,794

(1) The numbers represent first year energy savings resulting from conservation acquisitions. Energy conservation measures on average last 13 years and have a levelized cost of \$31/MWh.

(2) The numbers include capital incentives, operating costs, and marketing costs.

(3) Lower 2016 conservation savings are due, in part, to Tacoma Power's success at having largely exhausted the relatively easy, and lower-cost energy conservation opportunities and the reduce first-year RTF and BPA savings assumptions.

Source: Washington State Department of Commerce

The majority of conservation is acquired through:

- **Mass Market Programs.** These include residential lighting, fixtures, appliances, weatherization, and heating equipment. These determine "unit energy" (aka "deemed" savings assumptions set by Regional Technical Forum ("RTF"), a committee of the Northwest Power and Conservation Council that serves the States of Washington, Oregon, Idaho and Montana and BPA. The RTF is staffed by regional experts using publically available savings data. Its assumptions factor for a number of variables such as energy take back effects and the life of conservation measures. The RTF is broadly recognized as reliable by regional utility regulators, boards and other decision makers.

- *Site Specific Engineered Projects.* These are targeted for the more complex commercial and industrial programs. These projects require a rigorous measurement and verification protocol. Nameplate data from equipment manufacturers, energy usage, equipment run times, production and other data are recorded by engineers before and after installations.

Finally, Tacoma Power is committed to conservation programs that are cost-effective and achieve the expected results. The utility regularly evaluates the impact of conservation programs through econometric analyses of utility billing data to retrospectively assess actual energy savings.

Net Metering-Distributed Generation

Washington state law (chapter 80.60 RCW) allows the “net metering” of customer owned generation units of up to 100kW in size. This allowance ends once the cumulative generating capacity of all net metering systems equals 0.5% of the utility’s peak demand during 1996. In addition, to support certain types of customer-owned generation technologies (e.g., wind and solar) Washington state law provides production incentives of up to \$0.54/kWh and the federal government provides tax credits of up to 30% of the initial system cost. However, customers of Tacoma Power have been relatively slow to take up these technologies. To increase access to solar generation Tacoma Power constructed four 75kW community solar projects in 2016 and sold the output of those projects to Tacoma Power customers. The following table shows the number is installed systems and the production of electricity for 2012 through 2016.

**Production Cost to Serve Tacoma Power’s Retail Customers
(\$000 unless otherwise indicated)**

	2012	2013	2014	2015	2016
Customer Roof-Top Solar Systems	55	86	114	168	272
Customer Roof-Top Solar Production (kWhs)	176,722	281,187	405,605	615,261	984,418
Community Solar Systems	0	0	0	0	4
Community Solar Production (kWhs)	0	0	0	0	336,376

Source: Tacoma Power

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Cost of Power

The following table shows the production cost from resources Tacoma Power has used to meet its energy requirements for 2012 through 2016.

Production Cost to Serve Tacoma Power's Retail Customers (\$000 unless otherwise indicated)

	2012	2013	2014	2015	2016
Cost of Energy from:					
City-Owned Resources ⁽¹⁾					
Alder	\$ 1,818	\$ 1,548	\$ 1,720	\$ 2,165	\$ 2,430
LaGrande	2,167	2,210	2,618	2,277	3,283
Cushman No. 1	1,395	1,400	1,558	1,767	2,531
Cushman No. 2	3,580	2,330	3,593	2,935	3,956
Mayfield	5,971	5,850	7,035	7,508	8,039
Mossyrock	7,379	6,721	7,130	8,765	11,651
Wynoochee ⁽²⁾	(453)	(385)	244	883	92
Hood Street	45	33	157	295	126
Conservation (Net) ⁽³⁾	7,632	9,225	10,507	11,027	13,202
Subtotal Division-Owned Resources	\$ 29,534	\$ 28,932	\$ 34,562	\$ 37,622	\$ 45,310
Purchased Energy ⁽⁴⁾					
Priest Rapids	\$ (1,595)	\$ (2,205)	\$ (2,286)	\$ (660)	\$ (81)
BPA ⁽⁵⁾	104,626	105,729	104,270	112,366	113,824
CBHP	5,360	5,441	6,047	6,395	6,413
Subtotal Purchased Energy	\$ 108,391	\$ 108,965	\$ 108,031	\$ 118,101	\$ 120,156
Cost of Principal Resources	\$ 137,925	\$ 137,897	\$ 142,593	\$ 155,723	\$ 165,466
Average Cost of Principal Resources (cents/kWh) ⁽¹⁾	1.77	2.07	1.96	2.44	2.28
Other Power Costs					
Portfolio Market Purchases	\$ 2,963	\$ 12,785	\$ 12,225	\$ 6,755	\$ 4,360
Renewable Energy Certificates	999	1,275	1,132	1,459	2,307
Miscellaneous Power Costs ⁽⁶⁾	3,207	3,614	3,936	3,999	5,476
Subtotal Other Power Costs	\$ 7,169	\$ 17,674	17,293	12,213	12,143
Cost of Resources	\$ 145,094	\$ 155,571	\$ 159,886	\$ 167,936	\$ 177,609
Average Cost of Resources (cents/kWh) ⁽¹⁾	1.78	2.14	2.05	2.48	2.35
Less Revenues from Sales for Resale and Sales of Surplus Energy ⁽⁷⁾	\$ 53,532	\$ 64,210	\$ 82,797	\$ 50,380	\$ 54,507
Net Cost of Resources to Tacoma Power's Retail System	\$ 91,562	\$ 91,361	\$ 77,089	\$ 117,556	\$ 123,102
Average Net Cost of Resources to serve Tacoma Power's Retail System (cents/kWh) ⁽¹⁾	1.93	1.90	1.63	2.56	2.66

(1) Represents operating costs, excludes depreciation, debt service, capital expenditures, and transmission costs and overhead.

(2) Historical costs of the Wynoochee Project were offset by the trust fund until the fund was exhausted, and by BPA's Billing Credit Program.

(3) Capital Incentive funds used for purchasing energy conservation.

(4) Excludes transmission costs.

(5) Includes Residential Exchange Credits received from BPA starting in 2008.

(6) Miscellaneous costs associated with energy production and energy interchange.

(7) This amount is not reduced by the transfer in the Financial Statements to the Rate Stabilization Fund in the amount \$12,000,000 in 2012.

Source: Tacoma Power

CERTAIN FEDERAL AND STATE LAWS AND REGULATIONS AFFECTING TACOMA POWER

Washington State's Renewable Portfolio and Conservation Standards

In the fall of 2006, voters in the State approved Initiative Measure 937 ("Initiative 937"), codified as the Energy Independence Act, chapter 19.285 RCW, requiring electric utilities with over 25,000 customers in the State to accomplish all cost-effective conservation and, by 2020, use certain eligible renewable resources to serve at least 15% of their retail loads. Specifically, Initiative 937 requires such utilities to: (i) estimate the cost-effectiveness of conservation programs using methodologies consistent with the approach of the Northwest Power and Conservation Council ("NWPCC"); (ii) every two years, calculate and document 10-year conservation potential; (iii) produce detailed analyses of how energy will be conserved through end-user programs, production and distribution efficiencies, co-generation and/or distributed generation; (iv) use eligible renewable resources to serve 3%, 9% and 15% of the utility's retail loads by 2012, 2016 and 2020, respectively; and (v) report annual compliance with the law's requirements. Eligible renewable resource types include wind, solar energy, geothermal energy, landfill gas, wave, ocean or tidal power, gas from sewage treatment facilities, specific biodiesel fuels, biomass energy and incremental hydroelectric power (power produced as a result of efficiency improvements at existing hydroelectric facilities). Incremental hydropower is the only form of hydro-related energy designated as an approved renewable. The legislation imposes significant penalties for non-compliance—\$50 for every MWh the utility falls short of its conservation or renewable resource targets.

To satisfy the renewables target for a given compliance year, a qualifying utility may elect to serve an increasing percentage of its load with certain eligible renewable generation or Renewable Energy Credits ("RECs") ("target method"). A utility may also "bank" or "carryover" the RECs generated by the renewable resources in its portfolio the year prior to, the year of, and the year after, the compliance target year. For example, a utility can apply the RECs generated in 2015 by its renewable resource to the utility's 2016 compliance requirement.

Tacoma Power is required to obtain "eligible" renewable resources equal to at least 9% of its load through 2019 and 15% thereafter. The types of resources that qualify as eligible renewable include wind, solar, geothermal, RECs and Incremental Hydro; but all other hydroelectric resources are excluded.

Tacoma Power's 2015 IRP determined that the preferred approach to comply with the Initiative's renewable mandate was a combination of incremental hydro projects and the acquisition of RECs. Tacoma Power has entered into several long-term contracts to acquire approximately over 350,000 RECs annually through 2019. These contracts, coupled with several Tacoma Power-owned incremental hydro-generation projects, plus RECs provided through Tacoma Power's power contract with BPA have helped Tacoma Power to slightly exceed the current 9% renewable mandate. As allowed by the Energy Independence Act, Tacoma Power carries over excess RECs for use in the following compliance year. By 2020, Tacoma Power expects that it will need to acquire an additional 180,000 MWhs of renewable resources or RECs to meet the 15% renewable mandate.

In 2015, Tacoma Power assessed its conservation potential and established a biennial target of achieving 9.4 aMW of conservation savings for the 2016-2017 compliance biennium. During 2016, Tacoma Power actually acquired 5.5 aMW of conservation and projects it will exceed its biennial target by the end of 2017. Very early analysis of the 2018-2019 conservation potential suggests that Tacoma's target may drop as low as 6 aMWs. Tacoma Power has never failed to exceed its mandatory conservation targets.

In accordance with Initiative 937 reporting requirements, the City submits its annual filings with the Washington State Department of Commerce by June 1 each year. This report consists of: (i) total owned and acquired renewable resources as of January 1 of the target year; and (ii) the actual conservation achievements for the two-year period, compared to the adopted target.

Endangered Species Listings

Environmental stewardship is identified in Tacoma Power's mission statement as an important element of its responsibility. Tacoma Power implements intradepartmental programs to comply with existing regulations. Seven species of fish potentially affected by Tacoma Power facilities have been listed by National Marine Fisheries Service as threatened under the ESA. The ESA makes it illegal to harm a listed species. A species may be jeopardized or "taken" when actions occur that harm members of the species or elements of its essential habitat. Tacoma Power does not expect these listings to cause major changes to operations; however, the full outcome of the listings is impossible to predict. Both the federal government and private citizens can file legal actions to remedy or prevent perceived violations of the ESA. Section 10 of the ESA does allow permits to be issued for certain "take" actions that are being undertaken for the purposes of scientific research or to enhance survival of the species pursuant to an individually approved "Habitat Conservation Plan." Section 7 of the ESA provides for consultation by the federal agencies charged with implementing the ESA on projects obtaining federal funds or federal licenses and covers "indirect take" attributed to Tacoma Power facilities. For a discussion of the impact of these listings on Tacoma Power's projects, see "POWER SUPPLY RESOURCES AND COST OF POWER—Tacoma Power-Owned Generating Resources—Cowlitz River Project," "*Nisqually River Project*," and "*Cushman Hydroelectric Project*." Finally, Section 4(d) of the ESA allows certain categories of activities defined by federal rule to be conducted without "take" liability. In 2001, Tacoma Power obtained coverage under this provision for a wide variety of its utility maintenance activities by adopting and implementing the federally approved Regional Road Maintenance Endangered Species Act Program Guidelines.

Climate Change Legislation

Policy initiatives to address climate change have an uncertain future at the national and regional levels. The federal Clean Power Plan has been "stayed" by the U.S. Supreme Court and it is unknown whether additional carbon control measures will be pursued on the federal level. In the State, a 2016 citizen's initiative to implement a new carbon tax failed with 59% of voter cast against the initiative. Nevertheless, the State Governor's proposed budget for the 2017-2019 biennium included a carbon tax, which was not adopted by the legislature.

Tacoma Power's power supply portfolio is virtually carbon-free (88.6% hydroelectric, 6.1% nuclear and 1.3% wind in 2015). Tacoma Power's owned resources are exclusively hydro-generation facilities; similarly hydro-generation facilities produce nearly all the electricity Tacoma Power receives through the BPA and Grant PUD contracts, along with a small amount of nuclear. Because so little carbon is associated with the electricity that Tacoma Power delivers to retail customers, federal or state initiatives to reduce carbon emissions are expected to minimally impact Tacoma Power's resource costs. Moreover, Tacoma Power could benefit if, as is reasonable to expect, these initiatives lead to higher wholesale market prices and, in turn, higher utility revenues from sales of carbon-free surplus energy.

TRANSMISSION, DISTRIBUTION, AND TELECOMMUNICATIONS INFRASTRUCTURE

Transmission Access

FERC Order 890

FERC Order 890, first issued in 2006 and revised in 2007, affects the way transmission is planned by the electric utility industry. Its goal is to prevent discrimination by owners of transmission facilities against utilities and power producers desiring transmission service. Order 890 strengthens the open access transmission tariff ("OATT") standards, reduces opportunities for the exercise of market power, makes it easier to detect abuses, facilitates enforcement efforts and increases transparency in the areas of planning and transmission system use.

FERC Order 1000

In 2011, FERC issued Order 1000, which amended the transmission planning and cost allocation requirements established in Order 890. FERC issued Order 1000A in 2012, to include clarifications in response to petitions for rehearing filed on the original Order 1000. FERC subsequently issued Order 1000B, affirming its basic

determinations in Order 1000 and Order 1000A in response to petitions for rehearing filed on Order 1000A. Collectively, these Orders are referred to as “Order 1000.” With respect to transmission planning, Order 1000 (i) requires that each jurisdictional utility transmission provider participate in a regional transmission planning process that produces a regional transmission plan; (ii) requires that each jurisdictional utility transmission provider amend its OATT to describe procedures that provide for the consideration of transmission needs driven by public policy requirements in the local and regional transmission planning process; (iii) removes from FERC-approved tariffs and agreements a federal right of first refusal for certain new transmission facilities; and (iv) improves coordination between neighboring transmission planning regions for new interregional transmission facilities.

Order 1000 also requires each jurisdictional utility transmission provider to participate in a regional transmission planning process that has (i) a regional cost allocation method for the cost of new transmission facilities selected in a regional transmission plan for purposes of cost allocation; and (ii) an interregional cost allocation method for the cost of certain new transmission facilities that are located in two or more neighboring transmission planning regions and are jointly evaluated by the regions in the interregional transmission coordination procedures required by Order 1000. Each cost allocation method must satisfy six cost allocation principles specified by FERC.

Participation in regional transmission planning efforts is voluntary for non-jurisdictional utility transmission providers. Tacoma Power is not a jurisdictional utility but it is a “transmission provider” for purposes of Order 890 and Order 1000.

Regional Transmission

Regional Transmission Planning

BPA owns and operates a high voltage transmission system comprising approximately 75% of the bulk transmission capacity in the Pacific Northwest. Tacoma Power depends on BPA for the vast majority of its regional transmission needs. While Tacoma Power is not FERC jurisdictional, it is nonetheless interested in the development of a robust transmission network throughout the Pacific Northwest.

Tacoma Power is a member of ColumbiaGrid, a non-profit membership corporation formed in 2006 to improve the operational efficiency, reliability, and planned expansion of the Pacific Northwest transmission grid. ColumbiaGrid itself does not own transmission, however, the high-voltage transmission systems owned by the ColumbiaGrid members make up a substantial transmission network. It is one of four regional planning organizations within the Western Electricity Coordinating Council (“WECC”) Interconnection; the other three are the Northern Tier Transmission Group (“NTTG”), WestConnect, and the California ISO.

ColumbiaGrid provides grid expansion planning to its members based on a single-utility concept for the combined transmission grids of its planning parties. The goal of grid expansion planning is to determine reasonable solutions, or mitigations, of transmission grid issues pertaining to serving load and complying with reliability standards. The members look to ColumbiaGrid’s grid expansion planning process to coordinate and support the development of multi-party transmission projects within the ColumbiaGrid region.

ColumbiaGrid currently has eight members: Avista Corporation, BPA, Chelan County Public Utility District No. 1, Grant PUD, Puget Sound Energy, Seattle City Light, Snohomish County Public Utility District No. 1, and Tacoma Power.

Over the last year, discussions have taken place regarding the possibility of combining ColumbiaGrid and NTTG into a single regional planning organization. Although the various planning organizations are required to coordinate activities, such a merger could help to create an even more efficient planning organization as it would cover the large area of the WECC region now encompassed separately by ColumbiaGrid and NTTG.

Puget Sound Area Transmission Initiatives

Changing generation patterns and loads within the metropolitan Puget Sound area, regional transmission outages, and BPA’s obligation to return energy to Canada under the Columbia River Treaty, have occasionally created

transmission congestion which has impacted Tacoma Power. Coordinated actions to re-dispatch local generation and a memorandum of understanding citing investment and cost-sharing responsibilities was signed by BPA, Seattle City Light and Puget Sound Energy in December 2011. These actions have averted the need to drop customer load in the Puget Sound area. The City is not a party to this agreement.

Transmission Reliability

In March 2007, FERC issued Order 693, which addresses mandatory reliability standards for utilities. NERC was tasked with developing reliability standards for the electric industry and for ensuring those standards are met. All users, owners and operators of the bulk power system are required to identify functions they perform and register the information with the NERC or their regional reliability organization. In Tacoma Power's case, this is the WECC.

Tacoma Power's Internal Compliance Program ("ICP") has developed over the years and continues to evolve as the NERC's Reliability Standards continue to change. Tacoma Power actively monitors and participates in the balloting process for the NERC Reliability Standards. Tacoma Power is committed to a culture of compliance and strives for continuous improvement throughout its ICP. Tacoma Power's ICP outlines the roles and responsibilities for compliance, includes documented processes, and describes the steps taken to ensure compliance and the reliable operation of the Bulk Electric Power System as required by federal laws and regulations, and applicable NERC standards as approved by FERC.

Tacoma Power's Reliability & Compliance Office consists of five functional areas to carry out its responsibility to facilitate compliance with NERC Reliability Standards: 1) Operations and Planning, 2) Critical Infrastructure Protection, 3) Internal Controls, 4) Document and Records Management, and 5) Cyber Security Awareness and Training. A Governance Committee comprised of Tacoma Power senior managers, the Tacoma Power Superintendent, and a representative from the legal department provides oversight to Tacoma Power's Reliability & Compliance Program. This helps ensure a culture of compliance is reflective across the entire organization and there is engagement at all levels. The Utility Technology Services Manager is responsible for the Reliability & Compliance Program and is also designated the CIP Senior Manager for Tacoma Power reporting directly to the Tacoma Power Superintendent.

Tacoma Power utilizes internal auditors for on-going assessments. Tacoma Power also utilizes outside consultants in preparation for audits conducted by WECC. Tacoma Power audits its compliance with a large number of NERC Reliability Standards at least once every three years. The objective of the internal audits is to gather evidence to determine compliance with the Reliability Standards and identify where any potential risks may exist within the compliance program.

In 2016, WECC conducted a Reliability & Compliance Internal Controls Evaluation ("ICE") on Tacoma Power's Reliability & Compliance Program. This evaluation is used to assess whether the controls and measures Tacoma Power uses to ensure compliance with the NERC Reliability Standards are adequate. The results of the evaluation along with any findings identified during the WECC On-Site Audit are used to establish WECC's Compliance Oversight Plan ("COP") for Tacoma Power. WECC implemented Tacoma Power's COP in November of 2016 which has resulted in a significant reduction in the number of Reliability Standards and Requirements Tacoma Power will be required to self-certify on and the scope of future audits.

A significant revision to the CIP requirements (Version 5/6), and over 20 new or revised Operations and Procedures standards became effective on July 1, 2016. Tacoma Power personnel vetted each of these standards through the new Standard Change Organizational Review and Evaluation ("SCORE") process to ensure compliance. The SCORE process takes each new or revised standard and evaluates the impact (low, medium, or high) based on the risk and the resources necessary for implementation. This evaluation also assists in building a work schedule for completing any necessary work and assessing compliance prior to the enforcement date(s).

Tacoma Power-Owned Transmission

Tacoma Power owns, operates, and maintains a total of 351 circuit miles of transmission facilities: 44 circuit miles of high voltage (230 kV) facilities and 307 circuit miles of sub-transmission (115 kV) facilities, which are used to integrate generation, serve retail loads and provide wholesale transmission service. Key facilities include:

- Cowlitz Lines: 19 miles of 230 kV transmission integrate Tacoma Power's Mayfield and Mossyrock hydroelectric generation at the Cowlitz River Project into BPA's transmission grid. Tacoma Power takes delivery of this power at its Cowlitz and Northeast, Southwest, and Canyon Substations.
- Potlatch Lines: 43 miles of double circuit (86 circuit miles) 115 kV sub-transmission facilities integrate Tacoma Power's hydroelectric generation at the Cushman Project into Tacoma Power's 115 kV sub-transmission system.
- LaGrande Lines: 28 miles of double circuit (56 circuit miles) and 11 miles of single circuit 115 kV sub-transmission facilities integrate Tacoma Power's Alder and LaGrande hydroelectric generation at the Nisqually River Project into Tacoma Power's 115 kV sub-transmission system.
- Four major transmission substations, eight hydroelectric facility switchyards, six transmission switching substations and 23 load-service points to other utilities.
- Starwood Line: 2 miles of 115 kV Transmission interconnects Tacoma 115 kV sub-transmission system to Puget Sound Energy's 115 kV sub-transmission system.

Wholesale Transmission Service

Tacoma Power uses portions of its transmission system to provide wholesale transmission service to BPA for delivery of BPA power to nine municipally-owned Pierce County utilities and a portion of the Lewis County Public Utility District.

In 2000, Tacoma Power reaffirmed its policy to provide non-discriminatory access to its 230 kV and 115 kV system through the adoption by the Board of a new wholesale transmission tariff.

In 2012, Tacoma Power updated the terms and conditions of its transmission tariff to be more in alignment with the FERC *pro forma* Open Access Transmission Tariff. At this same time, the rates included in Tacoma Power's tariff were also updated. This tariff was approved and adopted by both the Board and the City Council. In September 2012, Tacoma Power and BPA executed a replacement one-year transmission service agreement for the continued provision of wholesale transmission service to BPA. Currently, the parties have in place under the tariff, a mixture of network integration transmission service agreements with a term through 2028, and point-to-point transmission service agreements that expire in 2018. The intent is to replace the point-to-point agreements with network agreements once all necessary arrangements are in place.

In August 2009, in response to a request for transmission service from Iberdrola Renewables (now known as Avangrid Renewables), Tacoma Power and Iberdrola Renewables entered into a 12-year service agreement pursuant to the Tacoma Power transmission tariff for the provision of wholesale transmission service over the Tacoma Power transmission system from the St. Paul Substation to the BPA transmission system. This service is needed for the delivery of power from WestRock's biomass generating unit.

Finally, Lewis County Public Utility District receives transmission service for delivery of its Cowlitz Falls generation over Tacoma Power's facilities to BPA. The agreement was entered into in 1993 (before the wholesale transmission tariff was developed), and has a term concurrent with Lewis County Public Utility District's FERC hydro licenses.

Third AC Intertie Capacity

In 1994, Tacoma Power entered into a long-term capacity ownership agreement with BPA to annually purchase 41 MWs of transmission on BPA's Third AC Intertie. The Third AC Intertie is an expansion of the existing California-Oregon Intertie, and links the Northwest power grid with the Southwest power grid. Tacoma Power has currently assigned the 41 MWs of capacity to a third party through September 30, 2021. Tacoma Power maintains contract ownership of the 41 MWs of capacity through the life of the facilities.

Point-to-Point Transmission Contract

Tacoma Power has a Service Agreement for Point-to-Point Transmission with BPA. It includes long-term service reservations to transmit the transfer of 801 MWs of power from BPA and Tacoma Power resources to Tacoma Power as well as transfer from Tacoma Power resources across the BPA transmission system. When the contracted transmission is not fully utilized due to reduced generation levels at Tacoma Power projects, the contract reservations can be redirected as permitted by the BPA Open Access Transmission Tariff and Transmission Business Practices to move power to and from other points of integration receipt and delivery on the BPA transmission system. The individual transmission contracts that comprise Tacoma Power's point-to-point agreement with BPA have varying expiration dates ranging from September 1, 2022 to September 10, 2037.

Cowlitz Exchange

In 1966, Tacoma Power entered into a long-term transmission exchange agreement with BPA. The contract specifies that BPA must make available at the City's point of delivery, currently Cowlitz Substation in Tacoma, power generated by the Cowlitz Project. In 2001, Tacoma Power exercised its contractual right to extend this agreement through December 31, 2021 and has an option to extend the contract for an additional 30 years. Terms and conditions under the contract extension remain unchanged. Only the cost factors used in determining payment amounts to BPA are to be adjusted to reflect the current direct operation and maintenance costs.

Retail Power Distribution

Tacoma Power owns, operates and maintains approximately 1,178 miles of overhead and 836 miles of underground distribution facilities to serve its customers. This includes both 12.5 kV and 13.8 kV distribution lines, which are fed from 49 distribution substations, and 12 dedicated-load substations.

System Planning

Tacoma Power achieves its commitment to reliable energy delivery through system planning and reliability centered maintenance programs in its transmission and distribution system business.

Annually, Tacoma Power assesses the sufficiency of its transmission network over a range of generation and load scenarios to assure reliability and sufficiency of transmission service commitments. Every two years Tacoma Power conducts a collaborative facilities planning process. Additionally, every six years Tacoma Power examines the need for changes to the transmission and distribution system over a 16-year period and publishes the results in its Transmission and Distribution Horizon Plan. Tacoma Power published its most recent Horizon Plan in December 2016. Tacoma Power implements technology enhancements, capacity additions, and renewal and replacement projects, following the strategic priorities established through these planning processes.

Asset Management

A formal Asset Management program was initiated in 2009 to evaluate and recommend the gradual replacement of aging system components including substation power transformers. An enhanced focus on asset management is currently underway with an increase in resources devoted to this effort. Tacoma Power has implemented several examples of reliability, renewal, or capacity projects. Transmission capacity is annually evaluated for reliability and capacity performance, with the results being optimized with incremental upgrades to the network. Distribution circuits are being improved to allow tighter regulation of the voltage and achieve the resulting energy conservation. Power quality improvements are in progress that will reduce momentary interruptions and reduce maintenance of interrupting equipment. The Feeder Sectionalizing program began in 1999 with the purpose of reducing restoration time and the number of impacted customers. The Underground Cable Replacement program began in 2003 to proactively replace direct-buried cable systems with conduit and cables to reduce outage impact and frequency. Other ongoing substation equipment replacement programs include high voltage oil circuit breakers, high voltage fuses, and battery systems. Additionally, Tacoma Power's Distribution Substation Modernization Project includes protective relay upgrades and communications to microprocessor-based substation devices, which will provide

valuable system information directly to the power system dispatchers through Tacoma Power's Supervisory Control and Data Acquisition and Energy Management System.

Construction and Maintenance

Tacoma Power has a number of established preventive and predictive maintenance programs and continues to develop more. For example, the substation predictive maintenance program can identify substation equipment requiring corrective action before a failure occurs through utilization of infrared, Doble testing, oil sample testing, and dissolved gas analysis. Tacoma Power owns and maintains approximately 49,000 power poles. The Pole Replacement program strategy is to test and treat 9% of the poles annually maintaining an 11-year cycle. Tacoma Power also performs tree trimming around its distribution and transmission lines, maintaining two and four year trimming cycles along with programs to replace dangerous trees with utility friendly trees.

Telecommunications Infrastructure

Approximately 1,500 miles of fiber and coaxial cable have been constructed by Tacoma Power in the cities of Tacoma, University Place, Fircrest, Lakewood and Fife, and portions of unincorporated Pierce County, providing Tacoma Power with a state-of-the-art telecommunication system with which supports transmission and distribution operations, advanced metering, and retail and wholesale commercial services. The network currently covers approximately 66% of the households in Tacoma Power's service territory.

The network consists of a hybrid fiber-optic coaxial ("HFC") system, which delivers two-way signals for cable TV, cable modem Internet services, and advanced metering. In addition, SONET ("Synchronous Optical Network") and Gigabit Ethernet technologies are used to support communications across Tacoma Power's transmission and distribution system and to carry out data transport services for commercial customers. The network was designed and constructed to meet high telecommunications standards, containing a redundant backbone and redundant service loops, which seek to ensure uninterrupted signal transport in the event of a network break. A network surveillance system allows Tacoma Power to monitor the system at all times.

Commercial Telecommunication Services. Launched in 1998 under the brand name Click! Network, Tacoma Power provides three commercial telecommunication services to customers of Tacoma Power: retail cable television, wholesale broadband transport and wholesale high-speed Internet over cable modem. Click! Network is one of several providers of telecommunications services in the Tacoma area.

Click! Network is accounted for as part of the Electric System. In 2016 Click! Network's annual revenues were approximately \$26.6 million, and annual operating expenses plus gross earnings taxes were approximately \$29.7 million.

Cable television is Click! Network's primary retail business. Click! currently has approximately a 15% share of a very competitive local cable television market. Cable TV products available to both residential and business customers include broadcast television, digital and high-definition channels, digital video recording capability, TiVo with access to over-the-top ("OTT") content such as Netflix, Hulu, YouTube and Pandora, TVEverywhere, and a wide variety of video-on-demand services. Video-on-demand services include local programming tied to schools, colleges, local governments and community organizations strengthening Click! Network's brand identity in the communities served.

Under wholesale Master Service Agreements, seven telecommunications carriers provide high capacity last mile data transport circuits to their customers utilizing Click! Network's telecommunications infrastructure. The seven telecommunications carriers provide SONET data services ranging from DS-1 lines to OC-48 lines and customized Metro Ethernet circuits to meet data transport and web access needs of large and small businesses in the Tacoma area.

Also under wholesale Master Service Agreements, two qualified locally based Internet Service Providers ("ISPs") provide high-speed Internet services via cable modems to their customers utilizing Click! Network's telecommunications infrastructure. The ISPs provide a variety of speed packages to meet the needs of the residential

and business consumers in the Tacoma area. As part of the contract, the two ISPs also provide customer service, cable modem installation, customer premise equipment and technical support services to their Internet customers.

Click! ended 2016 with 17,468 cable TV customers, 23,344 wholesale high-speed Internet service customers, and 173 wholesale broadband transport circuits.

Click! also continues to provide the City of Tacoma I-Net services to approximately 190 sites to keep the cost of telecommunications low for many governmental entities.

Click! Network implemented a 12.9% cable TV service rate increase effective March 1, 2017. An additional cable TV rate increase is planned for March 1, 2018. These cable TV rate increases are expected to generate approximately \$7.7 million in additional revenue. A major portion of additional revenue will be used to cover increases in programming costs.

CAPITAL IMPROVEMENT PROGRAM

Tacoma Power has funded its past capital improvement programs from contributions in aid of construction, proceeds of Parity Bonds and subordinate lien revenue bonds, and Revenues of the Electric System. The actual amounts spent during the past five years, together with the sources of funds used, are displayed in the table below.

**Historical Sources of Capital Improvement Funds
(\$000)**

Source of Funds	2012	2013	2014	2015	2016
Parity and Subordinate Lien Bond Proceeds	\$ 51,730	\$ 35,723	\$ 58,834	\$ 58,003	\$ 50,995
Contributions in Aid of Construction ⁽¹⁾	4,716	3,735	3,029	4,777	3,293
Cash Reserves	16,643	23,656	21,160	19,301	30,536
Total	<u>\$73,089</u>	<u>\$63,114</u>	<u>\$83,023</u>	<u>\$82,081</u>	<u>\$84,824</u>

(1) Customer contributions to fund capital projects.

Source: Tacoma Power

Tacoma Power has a long-term goal to finance an average of 50% of its normal capital requirements from net operating revenues with the balance from contributions in aid of construction received from customers and borrowed funds. However, due to varying water conditions, the amount of the capital improvement program, and periodic cash defeasance of outstanding Parity Bonds, the amount actually financed from net operating revenues varies from year to year. From 2012 to 2016, Tacoma Power financed an average of 66% of its capital improvements from borrowed funds. Tacoma Power's policy is to fund major projects with borrowed funds.

Tacoma Power has prepared a capital improvement program designed to meet its needs through 2021. The table below shows Tacoma Power's estimates of project expenditures and sources of funds.

Projected Capital Improvement Program					
(\$000)					
	2017	2018	2019	2020	2021
Project Expenditures					
Power Supply	\$23,562	\$23,562	\$21,112	\$21,113	\$11,665
Transmission and Distribution	29,695	29,696	33,629	33,630	33,809
Utilities Technology	15,976	15,976	11,231	11,231	8,881
Telecommunications	3,069	15,159	2,555	2,555	2,480
Conservation	10,925	10,925	10,675	10,675	9,975
General Plant	5,965	5,964	10,553	10,553	7,951
Total Project Expenditures	<u>\$89,192</u>	<u>\$101,282</u>	<u>\$89,755</u>	<u>\$89,757</u>	<u>\$74,761</u>
Sources of Funds					
Net Revenues	\$34,870	\$46,960	\$34,902	\$35,903	\$29,904
Parity and Subordinate Lien Bond Proceeds ⁽¹⁾	54,322	54,322	53,853	53,854	44,857
Total Sources of Funds	<u>\$89,192</u>	<u>\$101,282</u>	<u>\$89,755</u>	<u>\$89,757</u>	<u>\$74,761</u>

(1) Includes estimated 2017 Bond proceeds.

Source: Tacoma Power

FINANCIAL INFORMATION

Management Discussion of Historical Operating Results

The table below, entitled "Operating Results and Debt Service Coverage," presents a summary of Tacoma Power's revenues, expenses and income available for debt service and general utility purposes for the calendar years 2012 through 2016. Tacoma Power's customer base increased from 169,012 customers in 2012 to 176,784 customers in 2016. Energy sales to metered customers decreased during the period, from 4,748,287 MWh in 2012 to 4,571,159 MWh in 2016.

Tacoma Power's total operating revenues increased by \$30.7 million (7.9%) for the period 2012 through 2016. Bulk power sales are impacted by precipitation, weather patterns, and market conditions and can vary significantly on an annual basis. Revenues from these sales increased \$974 thousand from 2012 to 2016. In 2009, market prices declined significantly. In subsequent years, surplus water conditions helped mitigate low prices in the market.

While operating revenues increased \$30.7 million over the past five years, Tacoma Power's operating expenses also increased by \$45.4 million. Power supply costs increased by \$27.4 million between 2012 and 2016. In recent years, there have been increases in power supply costs due to rate changes with BPA and an investments in capital projects such as fish facility improvements and license implementation. Administrative and general expenses decreased \$13.0 million from 2012 to 2016. In 2015 Tacoma Power conducted a review of administration and general expenses and determined that a portion of costs that were assigned to administration and general expense should be reclassified to non-administrative groups.

Tacoma Power had the following number of days cash on hand: 308 in 2012, 303 in 2013, 325 in 2014, 208 in 2015 and 224 in 2016.

The table below presents a summary of Tacoma Power's revenues, expenses and income available for debt service and general utility purposes for the calendar years 2012 through 2016. Tacoma Power has been in compliance with its rate covenant for the period shown.

**Tacoma Power
Operating Results and Debt Service Coverage
2012-2016**

	2012	2013	2014	2015	2016
Operating Revenues					
Sales of Electricity to Metered Customers ⁽¹⁾	\$293,366,908	\$306,838,711	\$314,378,654	\$315,882,908	\$319,742,755
Revenues from Contractual Sales for Resale ⁽⁹⁾	53,532,081	64,210,259	82,796,740	50,380,147	54,506,535
Other Operating Revenue ⁽²⁾	40,983,752	43,413,115	44,070,713	44,363,160	44,365,098
Total Operating Revenue	\$387,882,741	\$414,462,085	\$441,246,107	\$410,626,215	\$418,614,388
Total MWh Sales to Metered Customers	4,748,287	4,806,761	4,781,826	4,719,955	4,571,159
Average Unit Price (cents/kWh)	6.18	6.38	6.60	6.88	6.99
Operating Expenses					
Power Supply Costs ⁽³⁾	\$136,993,876	\$146,154,382	\$149,386,488	\$156,909,442	\$164,420,402
Transmission	23,191,324	24,482,324	25,066,531	24,460,596	32,641,454
Distribution	30,499,896	25,247,343	31,524,323	22,939,410	35,415,371
Telecommunications	18,717,683	18,863,702	19,631,153	25,304,001	26,059,166
Customer/Consumer Services ⁽⁴⁾	18,342,402	18,906,687	22,430,934	23,609,956	27,585,681
Operating Taxes ⁽⁵⁾	17,494,729	19,562,858	19,276,216	19,993,833	19,727,313
Administrative & General ⁽⁶⁾	39,712,445	42,904,285	46,701,615	45,977,299	26,668,314
Operating Expenses ⁽⁷⁾	\$284,952,355	\$296,121,581	\$314,017,260	\$319,194,537	\$332,517,701
Other Income					
Current Fund Interest ⁽⁸⁾	\$ 5,792,255	\$ 1,891,270	\$ 3,758,359	\$ 1,782,079	\$ 2,382,116
Other Non-Operating Revenue (Expense)	6,560,486	2,487,882	2,039,019	1,272,507	4,759,405
Total Other Income	\$ 12,352,741	\$ 4,379,152	\$ 5,797,378	\$ 3,054,586	\$ 7,141,521
Revenue Available for Debt Service & General Utility Purposes ⁽⁹⁾	\$ 115,283,127	\$ 122,719,656	\$133,026,225	\$ 94,486,264	\$ 93,238,208
Net Debt Service on Bonds ⁽¹⁰⁾	\$ 56,532,001	\$ 52,407,971	\$ 58,741,411	\$ 37,155,035	\$ 31,755,810
Net Debt Service Coverage ⁽⁷⁾	2.04x	2.34x	2.26x	2.54x	2.94x
Income Available for General Utility Purposes	\$58,751,126	\$ 70,311,685	\$ 74,284,814	\$ 57,331,229	\$ 61,482,398
City Gross Earnings Tax (Subordinate to Debt Service)	\$24,615,790	\$ 25,441,619	\$ 26,860,649	\$25,481,823	\$ 30,460,098

(1) Includes unbilled revenues.

(2) Includes rentals and leases from electrical properties, wheeling and service fees, and telecommunications revenues.

(3) Includes electric power production costs as well as purchased power costs and interchange power costs. Excludes net conservation costs.

(4) Primarily customer service expense and conservation program cost fluctuations, which occur between years because of timing of BPA reimbursements and because of the process for handling advance grant offsets.

(5) Primarily Washington utility and business operations tax, but also includes some county in lieu of taxes as well as some school support and some fire protection district payments.

(6) Administrative and general expenses decreased \$19.3 million in 2016 mostly due to the results of a study that found that costs assigned to administrative and general expense should be reclassified to non-administrative groups, such as transmission and distribution.

(7) For purposes of the debt service calculation, depreciation and City gross earnings taxes are excluded from Tacoma Power's operating expenses, although these costs appear as operating expenses on Tacoma Power's audited financial statements attached as Appendix D.

(8) Includes interest earnings from current funds and customer and contractor deposits.

(9) These amounts are reduced by the transfer of \$12,000,000 to the Rate Stabilization Fund in 2012.

(10) January 1 payment included in the prior year. Net Debt Service based on accrued interest and principal payments in that year, consistent with City of Tacoma Annual Financial Statements.

Source: City of Tacoma

Debt Service Coverage

Tacoma Power is required by its Parity Bond covenants to maintain debt service coverage of 1.25 times actual Annual Debt Service. As shown above, debt service coverage over the past five years has exceeded the 1.25 times requirement.

The Board has adopted a policy of minimum debt service coverage of 1.50 assuming water conditions that have historically been exceeded 75% of the time (adverse water). See “Financial Policies” below. Over the period from 2012 to 2016, debt service coverage has ranged from a low of 2.04 times in 2012 to a high of 2.94 times in 2016 (see the table entitled “Tacoma Power Operating Results and Debt Service Coverage 2012-2016”).

Liquidity

Cash and Temporary Investments and Special Funds

As of December 31, 2016, Tacoma Power’s cash and equity in pooled investments totaled \$214.4 million, and special funds totaled \$43 million. Tacoma Power’s cash balances are a “deposit” with the City Treasurer’s Tacoma Investment Pool (“TIP”) for the purpose of maximizing interest earnings through pooled investment activities. Cash and equity in pooled investments in the TIP are reported at fair value and changes in unrealized gains and losses are recorded in the Statements of Revenues, Expenses and Changes in Net Position. Interest earned on such pooled investments is allocated daily to the participating funds based on each fund’s daily equity in the TIP. The TIP operates like a demand deposit account in that all City departments, including Tacoma Power, have fund balances which are their equity in the TIP. Accordingly, balances are considered to be cash equivalents. Special funds have been established in accordance with bond resolutions, agreements and laws. These funds consist of cash and investments in pooled investments with restrictions externally imposed and legally enforceable, established by the City Council. Generally, restricted assets include bond construction, reserve and debt service funds and customer deposits. Cash and equity in pooled investments and special funds for each of the years 2012 through 2016 are summarized in the table below.

Electric System Cash, Temporary Investments and Special Funds

<u>Year</u>	<u>Cash and Equity in Pooled Investments⁽¹⁾</u>	<u>Special Funds</u>
2012	\$261,384,910	\$120,626,987
2013	257,668,097	172,585,222
2014	287,949,952	116,119,394
2015	193,804,373	73,481,305
2016	214,474,287	43,107,806

(1) Balance includes the Rate Stabilization Fund, which totaled \$36.2 million in 2012, and \$48.0 million in 2013 through 2016. In 2012, Tacoma Power transferred \$100 million from cash and temporary investments to a Debt Management Reserve, which is treated as a special fund in 2012, 2013 and 2014.

Source: *City of Tacoma*

Investments

The City’s Investment Committee is composed of the Mayor, the Finance Director and the City Treasurer. The City Treasurer invests City funds, including Tacoma Power’s funds. Among the investments permitted by State law and the Investment Committee’s policy are banker’s acceptances of the top 50 world banks as published by American Banker, U.S. Treasury bills, certificates, notes and bonds, certain U.S. Government agency securities, commercial paper with the highest rating by at least two nationally recognized rating agencies, repurchase agreements with the market value of collateral exceeding the dollar amount of the repurchase agreement by 2% over the term of the agreement, reverse repurchase agreements, the State Local Investment Pool (described below), municipal securities, certificates of deposit, corporate notes and supranational agency bonds.

As of December 31, 2016, the City's cash and investments on a fair value basis, including Tacoma Power funds, totaled \$891 million, not including City pension funds. The portfolio was distributed in various types of investment instruments in the following percentages:

City Investments
(As of December 31, 2016)

Bank Interest-Bearing Accounts	0.47%
Local Government Investment Pool	10.23
U.S. Treasuries	17.42
Municipal Securities	7.29
Federal Home Loan Mortgage Assn (Freddie Mac)	16.12
Federal Farm Credit Bank (Farm Credit)	8.53
Federal Home Loan Bank (Home Loan)	26.49
Federal National Mortgage Assn (Fannie Mae)	13.45
Total	100.00%

Source: City of Tacoma

State Local Investment Pool. The State Treasurer's Office administers the Washington State Local Government Investment Pool (the "LGIP"), which invests between \$7 and \$11 billion on behalf of more than 530 cities, counties and special taxing districts. In its management of LGIP, the State Treasurer is required to adhere, at all times, to the principles appropriate for the prudent investment of public funds. These principles are, in order of priority, (i) the safety of principal; (ii) the assurance of sufficient liquidity to meet cash flow demands; and (iii) the attainment of the highest possible yield within the constraints of the first two goals. Historically, the LGIP has had sufficient liquidity to meet all cash flow demands.

The LGIP, authorized by chapter 43.250 RCW, is a voluntary pool which provides its participants the opportunity to benefit from the economies of scale inherent in pooling. It is also intended to offer participants increased safety of principal and the ability to achieve a higher investment yield than would otherwise be available to them. The pool is restricted to investments with maturities of one year or less, and the average life typically is less than 90 days. Investments permitted under the LGIP's guidelines include U.S. government and agency securities, bankers' acceptances, high quality commercial paper, repurchase and reverse repurchase agreements, motor vehicle fund warrants, and certificates of deposit issued by qualified Washington State depositories.

Authorized Investments. Chapter 39.59 RCW limits the investment by a city of its inactive funds or other funds in excess of current needs to the following authorized instruments: (i) bonds of the State or any local government in the State; (ii) general obligation bonds of any other state or local government thereof which have at the time of investment one of the three highest credit ratings of a nationally recognized rating agency; (iii) registered warrants of a local government in the same county as the local government making the investment; (iv) obligations of the U.S. government, its agencies and wholly owned corporations, or obligations issued or guaranteed by supranational institutions, provided, that at the time of investment, the United States government must be the largest shareholder of such institution; (v) obligations of the Federal Home Loan Bank, Fannie Mae and other government-sponsored enterprises; (vi) bankers' acceptances purchased on the secondary market; (vii) commercial paper, subject to state investment board policies; and (viii) corporate notes, subject to state investment board policies.

Financial Policies

Tacoma Power has formally adopted certain minimum thresholds as a guide to financial management and rate setting. These thresholds are included in the Electric Rate and Financial Policy and are periodically reviewed and approved by the Board and City Council after any modification. These thresholds include setting rates at levels to provide projected cash balances equivalent to at least 90 days of current budgeted expenditures inclusive of current revenue-funded capital expenditures and the gross earnings tax, assuming water conditions that have historically been exceeded 75% of the time (adverse water). In addition, Tacoma Power has a policy of setting retail rates to maintain a debt service coverage ratio of at least 1.50 times based on Net Revenues, including surplus power sales, under adverse water conditions and 1.80 times based on Net Revenues under average water conditions.

The Board and City Council approved an amended Electric Rate and Financial Policy in April 2015 to provide guidance in the use of long- and short-term debt to finance capital projects; provide clarification pertaining to the use of financial metrics; and provide additional requirements pertaining to the funding of the Rate Stabilization Fund.

The current Electric Rate and Financial Policy also specifies that rates will be based on cost-of-service within a customer class, restrictions on the term of debt, financing of approximately 50% of non-major capital projects with current revenue and financing of long term major projects primarily through debt. See “CAPITAL IMPROVEMENT PROGRAM.”

Budgetary Process

The Tacoma Power biennial operating and capital budgets are proposed by the Board and subject to approval by the City Council. Under the City Charter, the City Council has budgetary control at the fund level. Expenditures may not exceed budgeted appropriations at the fund level. Tacoma Power is a “fund” for accounting purposes. The City Manager and Director of Utilities, as appropriate, may authorize transfers within funds. The City Council, however, must approve any amendments that increase the total expenditures for a given fund.

Auditing

Accounting systems and budgetary controls are prescribed by the Office of the State Auditor in accordance with RCW 43.09.200 and RCW 43.09.230. State statutes require annual accounting audits for cities to be conducted by the Office of the State Auditor. The City complies with the systems and controls prescribed by the Office of the State Auditor and establishes procedures and records which are intended to assure the reliability of the City’s financial reporting.

The State Auditor is required by law to examine the affairs of cities at least once every two years. The City, including Tacoma Power and other City utilities, is audited annually. The examination includes, among other things, the financial condition and resources of the City, whether the relevant laws and Constitution of the State are being complied with, and the methods and accuracy of the accounts and reports of the City. Reports of the auditor’s examinations are required to be filed in the office of the State Auditor and in the finance department of the City.

The audited financial statements of Tacoma Power for fiscal years 2015 and 2016 prepared by the City of Tacoma Finance Office and audited by Moss Adams LLP are contained in Appendix D. Moss Adams LLP, Tacoma Power’s independent auditor, has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. Moss Adams LLP also has not performed any procedures related to this Official Statement.

Taxes Imposed on Tacoma Power

State law and the City Charter allow the City to impose a gross earnings tax not exceeding 8% upon the revenues of Tacoma Power, unless approved by a vote of the citizens. Voters of the City recently approved an increase in the gross earnings tax rate from 6% to 7.5% on all Tacoma Power revenues until 2025, excluding cable television revenues which are taxed at 8%. Payment of the gross earnings tax to the City is subordinate to the payments required to be made by Tacoma Power into any fund or funds previously or subsequently created for the payment of the principal of, and interest on, Tacoma Power’s electric revenue bonds. The City Charter provides that the tax on City-operated utilities shall not be disproportionate to the taxes the utility would pay if it were privately owned.

Tacoma Power also pays an excise tax imposed by the State, generally at the rate of 3.8734% of gross revenues, with certain exceptions. Tacoma Power further makes certain payments-in-lieu-of-taxes on property owned by Tacoma Power that is outside the City limits, and pays miscellaneous fees, licenses, and sales and use taxes to the State and other municipalities. Most of these taxes and payments (other than to the City) are Operating Expenses of the Electric System.

Retirement System

Substantially all employees of Tacoma Power are covered by a contributory retirement plan administered by the City's Employee Retirement System ("TERS"), an actuarially funded system administered by the City. The following information is provided on a City-wide basis. Additional information is available on the TERS website at www.cityoftacoma.org/retirement (which website is not incorporated herein by this reference).

TERS is a cost-sharing, multiple-employer defined benefit pension retirement plan covering the majority of the City employees, employees of the Tacoma-Pierce County Health Department and certain employees of Pierce Transit and Law Enforcement Support Agency, three agencies that established membership in TERS when these agencies were still departments of the City. TERS membership from the City excludes uniformed law enforcement officers and fire fighters, as well as railroad employees, who are covered by retirement plans operated by other entities. The Board of Administration of TERS administers the plan, and benefit provisions are established in accordance with chapter 41.28 RCW and Chapter 1.30 of the Tacoma City Code. The Board of Administration of TERS consists of nine members, including the Mayor, City Manager, Finance Director, designee of the Director of Utilities, three elected employee representatives, one elected retired representative, and one City resident not employed by the City. Contribution rates are recommended by the Board of Administration and set by the City Council. As of December 31, 2016, there were 2,303 retirees and beneficiaries receiving benefits, 675 vested terminated employees and other terminated members entitled to future benefits, and 2,964 active members in TERS.

Tacoma Power is current in all payments to TERS. Further details about the plan are provided in Note 9 in Appendix D—"2015 AND 2016 AUDITED FINANCIAL STATEMENTS."

Contributions City-wide totaled \$43.7 million in 2016 (\$23.6 million in employer contributions and \$20.1 million in employee contributions) and totaled \$42.4 million in 2015 (\$22.7 million in employer contributions and \$19.7 million in employee contributions). Tacoma Power contributed \$9.3 million in 2016 (2.9% of Operating Expenses) and \$9.3 million in 2015 (2.5% of Operating Expenses). The contribution rate for Tacoma Power's covered payroll is currently set at 20% of gross wages for 2017 (10.80% paid by Tacoma Power and 9.20% paid by employees).

The most recent actuarial valuation of TERS was completed as of January 1, 2017 by Milliman (the "Milliman Report"). Assumptions include investment earnings of 7.00%, wage growth of 3.75% and price inflation of 2.75%. TERS 2016 market value investment return of 8.7% was greater than the 7.00% assumed investment return. For the three- year and five-year periods ending December 31, 2016 TERS earned returns of 5.5% and 9.1%, respectively, which exceeded both the policy benchmark over both periods and the actuarial rate of return over the five-year timeframe. According to the Milliman Report, TERS' funding ratios decreased slightly on an Actuarial Value of Assets ("AVA") basis to 96.2% after having increased over each of the previous four years. The projected amortization period of the Unfunded Actuarial Accrued Liability ("UAAL") increased from 21.3 years as of the 2016 Milliman Report to 31.6 years as of the 2017 Milliman Report. The Funding Ratio on an actuarial value basis decreased from 97.4% to 96.2%, since only one fourth of the gain from 2016 was recognized. However, the Funding Ratio based on the fair value of assets remained steady at 93.9% on both January 1, 2016 and January 1, 2017.

**TERS Valuations
(Millions of \$)**

Actuarial Valuation Date*	Actuarial Value of Assets	Accrued Liability (AAL)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	Percentage of Covered Payroll
01/01/2007	\$1,021.3	\$895.8	\$(125.5)	114.0%	\$175.0	(71.7)%
01/01/2009	1,097.3	1,002.3	(95.0)	109.5	197.4	(48.1)
01/01/2011	1,074.8	1,132.9	58.1	94.9	219.6	26.5
01/01/2012	1,068.3	1,185.5	117.2	90.1	219.4	53.4
01/01/2013	1,187.1	1,306.6	119.5	90.9	210.6	56.7
01/01/2014	1,297.0	1,400.0	103.0	92.6	213.8	48.2
01/01/2015	1,402.7	1,468.2	65.5	95.5	221.3	29.6
01/01/2016	1,501.7	1,542.2	40.5	97.4	227.4	17.8
01/01/2017	1,585.0	1,648.1	63.1	96.2	236.4	26.7

* Until 2011, valuations were performed every other year.

The Milliman Report provides the following information regarding long-term funding projections: The baseline projection demonstrates that if experience in all future years matches the actuarial assumptions, the Funding Ratio on an AVA basis is projected to decline. After a few years, the Funding Ratio falls beneath 95% and the current contribution rate of 20.00% is insufficient to amortize the UAAL. Contribution rates (currently at 20%) may need to be raised in the future as a result. The Milliman Report also provided an upside scenario projection based on the assumption that TERS' returns from 2017 through 2019 match the actual returns from 2003 to 2005. It is estimated under these circumstances that TERS would attain a Funding Ratio of 115.8% based on actuarial assets and 126.2% based on the fair value of assets at the end of the three-year period. However, a downside scenario projection from the Milliman Report showed that adverse investment experience similar to what TERS experienced in 2006 – 2008 could require contribution rates to increase as high as 33.7% (versus the current 20%) of covered payroll to amortize the UAAL over 25 years. Future experience is expected to at times be better or worse than the actuarial assumptions over different time periods and is likely to result in changes to TERS' funding status.

Although TERS operates over a long period of time, the measurement of TERS' funding status can vary from year-to-year due to annual investment returns. The following chart summarizes TERS' asset returns in recent years and compares the fair market value gains and losses to the AAL at the following valuation date. Investment returns that are greater than the actuarial assumption are gains; returns less than the actuarial assumption are losses. The AVA recognizes these fair value gains and losses in four equal increments starting at the end of the year in which they occur – this process is known as smoothing. Gains in good years are needed to offset losses in bad years.

TERS Asset Returns

Year	Fair Value % Return*	Fair Value Gain/ (Loss) compared to expected	End of Year Actuarial Accrued Liability (AAL)	Gain / (Loss) as a % of next AAL
2007	3.9%	\$ (42,200,000)	**	(4.2)%
2008	(32.0)	(451,000,000)	\$ 1,002,300,000	(45.0)
2009	27.3	147,700,000	**	13.0
2010	14.1	60,200,000	1,132,900,000	5.3
2011	1.3	(69,900,000)	1,185,500,000	(5.9)
2012	14.1	68,700,000	1,306,600,000	5.3
2013	15.8	100,000,000	1,400,000,000	7.1
2014	8.1	11,500,000	1,468,200,000	0.8
2015	(0.4)	(111,600,000)	1,542,200,000	(7.2)
2016	8.7	20,900,000	1,648,100,000	1.3

* The fair value returns shown above are net of investment expenses, but not administrative expenses. They are based on the TERS annual financial statements, but may have some variance from calculations performed by other parties due to different methodologies.

** Until 2011, valuations were performed every other year.

In 2012, the Board approved lowering the rate of return assumption from 7.75% to 7.5%, and in 2014, from 7.50% to 7.25%. In 2016, the Board lowered the rate of return assumption for 2017 and future years from 7.25% to 7.00% and wage growth and inflation assumptions were also lowered by 0.25% at that time; these changes were reflected in the 2017 Milliman Report, which as of the date of this Official Statement is available on the TERS website.

In addition to TERS, City employees participate in the federal social security program. The City withholds the employee contribution from City employee's wages.

Governmental Accounting Standards Board ("GASB") Statement Nos. 67/68 established accounting and financial reporting for pensions and became effective for fiscal years beginning after June 15, 2014. In 2016, the City reported a pension liability of \$86,584,348 and Tacoma Power's proportionate share was 39.47% of that liability, or \$34,177,293, which was based on total actual contributions for the year.

Other Post-Employment Benefits

The City allows retirees to participate in medical, dental and vision programs from the time retirement begins until they qualify for Federal funded programs. The City uses pay as you go funding, and upon retirement the retiree is responsible for paying a blended premium, which prior to retirement was paid by the City. The benefit is an implicit subsidy to the retiree. As of December 31, 2016, the City's net other post-employment benefits ("OPEB") obligation was \$82,741,128, of which \$10,890,990 was related to Tacoma Power. Further details about OPEB are provided in Note 10 in Appendix D—"2015 AND 2016 AUDITED FINANCIAL STATEMENTS."

Program of Insurance

The Department currently maintains a combination of commercial insurance policies and a self-insurance program. The insurance policies presently in effect include coverage on the Department's buildings and fleet vehicles as well as General Liability and Public Officials Liability. The current Property Insurance policies covering scheduled buildings, business personal property and vehicles while parked have deductibles for other than earthquake or flood of \$250,000 for buildings and vehicles. The Property Insurance policies provide a total limit of \$150,000,000 for covered loss other than from earthquake or flood. The limit for any one earthquake covering scheduled property is \$10,000,000 with a deductible of 5% of the value of the damaged property subject to a \$100,000 minimum. The limit for flood to scheduled property is \$50,000,000 for flood zones other than A & V and the deductible is \$100,000. There is a limit of \$15,000,000 for scheduled property in flood zones A & V with a deductible of \$250,000. The General Liability self-insured retention is \$1,500,000 and there is a \$200,000 deductible for Public Officials Liability. The General Liability and Public Officials Liability policies provide \$60 million of coverage. The City has an excess policy to cover extraordinary worker's compensation claims with Statutory Limits and with a \$1 million self-insured retention plus and additional \$250,000 of total loss each 12 month policy period. Faithful Performance and Employee Dishonesty Insurance covering all employees is provided in amounts up to \$1 million per occurrence (subject to a \$75,000 deductible per occurrence).

Tacoma Power hydroelectric generation, transmission and distribution, telecommunications and other similar systems and infrastructure are not covered by property insurance policies. Tacoma Power purchases specific flood insurance for two powerhouses.

Tacoma Power has established a self-insurance claim fund (the "Self-Insurance Fund") for payment of third party claims against Tacoma Power. As of December 31, 2016, assets in the Self Insurance Fund totaled \$7.6 million, which exceeds accrued and incurred but not reported liabilities. Tacoma Power's premium payments totaled \$900,000 in 2016 and 2015 respectively. The contribution is routinely reviewed to determine its adequacy. The Self-Insurance Fund is dedicated and requires a two-thirds vote of the City Council before it can be used for anything except insurance or casualty losses.

CERTAIN INVESTMENT CONSIDERATIONS

Prospective purchasers of the 2017 Bonds should consider the matters set forth below as well as other information contained in this Official Statement in evaluating an investment in the 2017 Bonds. This section does not purport to be a comprehensive list or description of all potential risks which, if realized, could adversely affect the payment or the value of the 2017 Bonds. The order of presentation of these factors below is not intended to create any implication as to the relative importance of any one risk factor over another.

Lack of Secondary Market

The Underwriters have advised the City that they intend initially to make markets in the 2017 Bonds; however, the Underwriters are not obligated to make such markets, such markets may be discontinued at any time without notice, and no assurance can be given that secondary markets therefor will develop.

Various Factors Affecting the Electric Utility Industry

The electric utility industry has been and continues to be affected by numerous factors that impact the business operations and financial condition of the electric utilities, including Tacoma Power. Such factors include, among others, (a) environmental, safety, licensing, and other regulatory requirements, including the imposition of renewable energy portfolio requirements and reliability standards, as well as carbon production greenhouse gas emission limitations, by federal and state governmental authorities; (b) new federal and state energy policies and legislation; (c) competition from other electric utilities, independent power producers and marketers, brokers and federal power marketing agencies; (d) the rapid growth of non-dispatchable and zero marginal cost resources (such as wind and solar) coupled with the limited availability of highly flexible resources (such as natural gas-powered turbines) (e) self-generation (such as cogeneration and biomass facilities and natural gas-fired turbines) and distributed generation (such as distributed photovoltaic installations, micro turbines and fuel cells) by industrial, commercial and residential customers, (f) new methods of, and technology and facilities for, producing and storing energy for electric use; (g) increases in operating costs and the cost and availability of capital; (h) the availability and relative costs of different fuels and hydrological conditions such as drought; (i) volatility of energy prices, including sudden and/or substantial increases or decreases in the price of energy in the wholesale energy markets; (j) voter initiatives and other state and local propositions; and (k) changes in the availability of and demand for power as a result of economic, demographic, weather and other factors. See “POWER SUPPLY RESOURCES AND COST OF POWER—Long-Term Purchases of Power Supply—*BPA Purchases*” and “CERTAIN FEDERAL AND STATE LAWS AND REGULATIONS AFFECTING TACOMA POWER—Climate Change Legislation,” above, and “TRANSMISSION, DISTRIBUTION, AND TELECOMMUNICATIONS INFRASTRUCTURE” below.

Significant, ongoing uncertainty relating to the above factors, particularly those involving political, regulatory, and technological issues, creates continuing difficulty for the industry with respect to long-term planning and decision making. Tacoma Power is unable to predict what impacts such factors will have on its business operations and financial condition, but such impact may be significant. This Official Statement includes a brief discussion of certain of these factors. Those discussions do 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.

Initiative and Referendum

Under the State Constitution, the voters of the State have the ability to initiate legislation and modify existing legislation through the powers of initiative and referendum, respectively. The initiative power in Washington may not be used to amend the State Constitution. 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. Any law approved in this manner by a majority of the voters may not be amended or repealed by the 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 Legislature. After two years, the law is subject to amendment or repeal by the Legislature in the same manner as other laws.

Local Measures. Under the City Charter, 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; provided that ordinances adopting annual budgets, or making appropriations are not subject to referendum as well as ordinances not subject to referendum under State law (including rate ordinances).

Limitations on Remedies

Any remedies available to the owners of the 2017 Bonds upon the occurrence of an Event of Default under the Bond Ordinance 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 Ordinance or to pay principal of or interest on the 2017 Bonds, there can be no assurance that available remedies will be adequate to fully protect the interests of the owners of the 2017 Bonds.

In addition to the limitations on remedies contained in the Bond Ordinance, the rights and obligations under the 2017 Bonds and the Bond Ordinance 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. The opinion to be delivered by Orrick, Herrington & Sutcliffe LLP, as Bond Counsel, concurrently with the issuance of the 2017 Bonds, will be subject to limitations regarding bankruptcy, insolvency, and other laws relating to or affecting creditors' rights. The various other legal opinions to be delivered concurrently with the issuance of the 2017 Bonds will be similarly qualified. A complete copy of the proposed form of opinion of Bond Counsel is set forth in Appendix C.

Municipal Bankruptcies

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"). Chapter 39.64 RCW, entitled the "Taxing District Relief Act," permits any "taxing district" (defined to include cities) to petition for relief under the Bankruptcy Code. Tacoma Power, being a division of the City, cannot file separately for bankruptcy protection. A creditor cannot bring an involuntary bankruptcy proceeding against a municipality, including the City. While an involuntary bankruptcy petition cannot be filed against the City, the City is authorized to file for bankruptcy under certain circumstances. Should the City file for bankruptcy, there could be adverse effects on the holders of the 2017 Bonds.

To the extent that the Revenues are determined to be "special revenues" under the Bankruptcy Code, then Revenues collected after the date of a bankruptcy filing should continue to secure the City's obligations under the Bond Ordinance. "Special revenues" are defined to include receipts derived from the ownership or operation of projects or systems that are primarily used to provide utility services. No assurance can be given that a court would hold that the Revenues are special revenues. If any of the Revenues are determined not to be special revenues, then any such amounts collected after the commencement of the bankruptcy case will likely not secure the City's obligations under the Bond Ordinance or the 2017 Bonds. The holders of the 2017 Bonds may not be able to assert a claim against any property of the City other than the Revenues, and if any or all of the Revenues no longer secure the Bond Ordinance and 2017 Bonds, then there may be limited, if any, funds from which the holders of the 2017 Bonds would be entitled to be paid.

The Bankruptcy Code provides that "special revenues" can be applied to necessary operating expenses of the project or system, before they are applied to other obligations. This rule applies regardless of the provisions of the transaction documents. It is not clear precisely which expenses would constitute necessary operating expenses and any definition in the transaction documents may not be applicable.

If the City is in bankruptcy, the parties (including the Bondowners' Trustee and the holders of the 2017 Bonds) may be prohibited from taking any action to collect any amount from the City or to enforce any obligation of the City, unless the permission of the bankruptcy court is obtained. The rate covenant may not be enforceable in bankruptcy by the holders of the 2017 Bonds.

The City is permitted to commingle the Revenues with its own funds for certain periods of time before turning over the Revenues to the Paying Agent. If the City goes into bankruptcy, the City may not be required to turn over to the

Bondowners' Trustee any Revenues that are in its possession at the time of the bankruptcy filing and have been commingled with other moneys. If the City has possession of Revenues (whether collected before or after commencement of the bankruptcy) and if the City does not voluntarily turn over such Revenues to the Bondowners' Trustee, it is not entirely clear what procedures the holders of the 2017 Bonds would have to follow to attempt to obtain possession of such Revenues, how much time it would take for such procedures to be completed, or whether such procedures would ultimately be successful.

The City may be able to borrow additional money that is secured by a lien on any of its property (including the Revenues), which lien could have priority over the lien of the Bond Ordinance, or to cause some of the Revenues to be released to it, free and clear of lien of the Bond Ordinance, in each case as long as the bankruptcy court determines that the rights of the Bondowners' Trustee and the holders of the 2017 Bonds will be adequately protected.

If the City is in bankruptcy it may be able, without the consent and over the objection of the holders of the 2017 Bonds, to alter the priority, interest rate, principal amount, payment terms, collateral, maturity dates, payment sources, covenants (including tax-related covenants), and other terms or provisions of the Bond Ordinance and the 2017 Bonds, as long as the bankruptcy court determines that the alterations are fair and equitable.

There may be delays in payments on the 2017 Bonds while the court considers any of these issues. There may be other possible effects of a bankruptcy of the City that could result in delays or reductions in payments on the 2017 Bonds, or result in losses to the holders of the 2017 Bonds. Regardless of any specific adverse determinations in a City bankruptcy proceeding, the fact of a City bankruptcy proceeding could have an adverse effect on the liquidity and value of the 2017 Bonds.

The legal opinion of Bond Counsel regarding the validity of the 2017 Bonds will be qualified by reference to bankruptcy, reorganization, insolvency, fraudulent conveyance, moratorium and other similar laws affecting the rights of creditors generally, and by general principles of equity. See Appendix C.

Seismic Risks

Tacoma Power is located in a seismically active region. The Puget Sound region has experienced a number of major earthquakes. There have been four major earthquakes in the last 50 years, the most recent in 2001. The 2001 earthquake reportedly caused more than \$2 billion in damage in the region, but caused minimal damage within Tacoma Power's service area and to owned facilities. The largest known earthquake in the region reportedly occurred in approximately 1700, and is estimated to have been of a magnitude 9.0 or greater. Such an earthquake could cause extensive and even catastrophic damage within Tacoma Power's service area, including owned facilities. Earthquakes of that magnitude are reportedly estimated to occur in the region every 400 to 600 years, according to the Pacific Northwest Seismic Network. Such an earthquake along the Washington coast or elsewhere in the Pacific could result in a major tsunami, which in turn could cause additional and extensive damage to areas within Tacoma Power's service area adjacent to Puget Sound. The 1700 earthquake is estimated to have caused a tsunami with a maximum wave height of approximately 100 feet.

Volcanic Risks

Mount Rainier at 14,410 feet is the highest peak in the Cascade Range, and is approximately 40 miles from the City. Mount Rainier is a dormant volcano having glacier ice that exceeds that of any other mountain in the conterminous United States. Mount Rainier thus poses a variety of geologic hazards, including the potential for future eruptions. The recorded history (about 200 years) of Mount Rainier includes one or two small eruptions, several small debris avalanches, and many small lahars (debris flows originating on a volcano consisting of water, ice, soils, and/or downed trees and other debris). A future major eruption could result in pyroclastic flows, ballistic projectiles, and lava flows closer to the mountain, and could result in very large lahars that could travel at high rates of speed as far as the City and into Commencement Bay (which the City borders). This has occurred once every 500 to 1,000 years. Such lahars could cause catastrophic damage to the City and/or to the Electric System's hydro-electric generating resources on the Nisqually and/or Cowlitz Rivers.

GENERAL AND ECONOMIC INFORMATION

Tacoma, the county seat of Pierce County (the “County”), is located in the west central part of Washington State near the southern tip of Puget Sound. It is the third largest city in the State with a 2016 estimated population of 206,100. The City is located 32 miles south of the City of Seattle and 28 miles northeast of the City of Olympia, the State capital. The historical population of the City and Pierce County is shown in the following table.

POPULATION CITY OF TACOMA AND PIERCE COUNTY

Year	Tacoma	Pierce County
2016	206,100	844,490
2015	202,300	830,120
2014	200,900	821,300
2013	200,400	814,500
2012	199,600	808,200

Source: Washington State Office of Financial Management estimates; U.S. Census for 2016 figure

Following are economic indicators for the City and Pierce County.

PIERCE COUNTY MAJOR EMPLOYERS

Employer	Type of Business	Number of Employees
Fort Lewis and McChord Bases	Military	57,120
Local Public School Districts (K-12)	Education	13,408
Multicare Health System	Health Services	8,247
Washington State Employees	Public Sector	6,844
Franciscan Health System	Health Services	6,099
Pierce County Government	Government/Public Offices	3,001
Fred Meyer	Retail	2,560
City of Tacoma (excluding Tacoma Public Utilities)	Government/Public Offices	2,138
State Farm Insurance Companies	Insurance	2,050
Emerald Queen Casino	Casino Gambling	2,026
The Boeing Company (Frederickson Site)	Aerospace	1,750
Safeway Stores	Retail	1,512
Tacoma Public Utilities	Public Utility	1,332
Wal-Mart	Retail	1,287
US Postal Service	Government/Public Offices	1,214
Costco	Wholesale	1,185
The Puyallup Tribe of Indians	Government	1,099

Source: Economic Development Board of Tacoma-Pierce County, 2016

PIERCE COUNTY NEW RESIDENTIAL BUILDING PERMIT VALUES

Year	Single-Family		Multi-Family	
	Total Permits	Total Value	Total Units	Total Value
2016	2,465	\$747,568,030	1,396	\$ 158,455,279
2015	2,253	657,539,404	644	73,771,325
2014	2,371	663,531,092	1,406	163,645,690
2013	2,369	636,063,255	493	51,383,258
2012	2,006	513,795,902	470	47,924,264

Source: U.S. Census Bureau

PIERCE COUNTY AND CITY OF TACOMA TAXABLE RETAIL SALES (\$000)

Year	Pierce County	City of Tacoma
2016	\$ 14,878,550	\$ 5,015,371
2015	13,846,294	4,641,369
2014	12,736,324	4,317,891
2013	12,189,183	4,280,290
2012	11,080,670	4,046,590

Source: Washington State Department of Revenue

PIERCE COUNTY, WASHINGTON STATE AND U.S. MEDIAN HOUSEHOLD INCOME

Year	Pierce County	Washington State	U.S.
2015 ⁽¹⁾	\$59,566	\$64,439	\$55,775
2014	59,998	60,153	53,718
2013	57,238	57,284	51,939
2012	57,162	56,444	51,759
2011	56,114	55,500	50,054

(1) Preliminary estimates.

Source: Washington State Office of Financial Management for County and State data; U.S. Census Bureau for U.S. data issued September 2016

PIERCE COUNTY AND STATE OF WASHINGTON TOTAL PERSONAL AND PER CAPITA INCOME

Year	Pierce County		State of Washington	
	Total Personal Income (\$000)	Per Capita Income	Total Personal Income (\$000)	Per Capita Income
2015 ⁽¹⁾	\$ 37,640,095	\$ 44,600	\$372,125,338	\$ 51,898
2014	35,916,045	43,212	355,676,661	50,357
2013	33,923,202	41,403	333,168,842	47,778
2012	32,941,576	40,569	326,408,854	47,324
2011	31,619,327	39,361	301,567,633	44,197

(1) Last available data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Employment within the County is described in the following table:

**TACOMA METROPOLITAN AREA (PIERCE COUNTY)
RESIDENT CIVILIAN LABOR FORCE AND EMPLOYMENT AND AVERAGE CIVILIAN
NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT**

<i>NAICS Industry Title</i>	<i>Annual Average</i>				
	2017⁽¹⁾	2016	2015	2014	2013
<u>Resident Labor Force</u>					
Employment	387,924	380,255	366,826	357,923	351,395
Unemployment	23,544	25,462	25,364	27,030	32,232
Total	411,468	405,717	392,189	384,953	383,627
Unemployment Percent Of Labor Force	5.7%	6.3%	6.5%	7.0%	8.4%
 Total Nonfarm	 310,880	 306,450	 296,408	 288,583	 279,900
Total Private	251,960	248,175	238,967	231,667	223,800
Goods Producing	38,740	38,925	37,400	36,258	35,250
Mining and Logging	100	250	300	300	300
Construction	21,840	21,533	19,908	18,642	17,733
Specialty Trade Contractors	14,320	13,625	12,717	11,883	11,125
Manufacturing	16,800	17,142	17,192	17,317	17,217
Services Providing	272,140	267,525	259,008	251,333	244,725
Trade, Transportation and Utilities	67,540	65,825	62,542	60,233	57,967
Wholesale Trade	12,120	12,408	12,917	12,550	11,958
Retail Trade	41,460	39,600	36,192	34,217	32,792
Food And Beverage Stores	5,660	5,783	5,958	5,725	5,917
General Merchandise Stores	8,720	8,867	8,750	8,508	8,275
Transportation and Utilities	13,960	13,817	13,433	13,467	13,217
Information	2,700	2,683	2,800	2,850	2,842
Financial Activities	14,320	13,850	13,808	13,542	12,958
Professional And Business Services	30,360	29,567	27,650	25,350	24,125
Admin, Support, Waste Mgmt & Remed	19,440	18,725	17,392	15,483	14,825
Administrative And Support Services	17,360	17,283	15,925	14,083	13,458
Education And Health Services	54,120	52,767	50,992	50,175	50,350
Ambulatory Health Care Services	16,100	15,883	15,192	14,675	14,508
Hospitals	12,260	11,925	11,300	11,292	11,500
Leisure And Hospitality	30,280	30,700	30,183	28,958	27,508
Food Services And Drinking Places	24,780	24,892	24,433	23,425	21,892
Other Services	13,900	13,858	13,592	13,308	12,875
Government	58,920	58,275	57,442	56,917	56,100
Federal Government	11,760	11,967	11,742	11,758	12,308
State Government	11,920	11,675	11,883	11,483	10,725
State Government Educational Services	4,400	3,817	3,800	3,925	3,892
Local Government	35,240	34,633	33,817	33,675	33,067
Local Government Educational Services	19,820	19,067	18,617	18,358	18,008

(1) Annual average through May 2017.

Source: Washington State Employment Security Department

LITIGATION

No Litigation Concerning the 2017 Bonds

There is no litigation pending or threatened in any court (local, state, or federal) to restrain or enjoin the issuance or delivery of the 2017 Bonds, or questioning the creation, organization, existence, or title to office of the officers of the Department, Tacoma Power or the City, the validity or enforceability of the Bond Ordinance, or the proceedings for the authorization, execution, sale, and delivery of the 2017 Bonds.

Other Litigation

Because of the nature of its activities, the City is subject to various pending and threatened legal actions which arise in the ordinary course of business. The City believes, based on the information presently known, the ultimate liability for any legal actions, individually or in the aggregate, taking into account established accruals for estimated liabilities, will not be material to the financial position of the City or the Electric System, but could be material to results of operations or cash flows for a particular annual period. No assurance can be given, however, as to the ultimate outcome with respect to any particular claim. Below is a summary of certain legal matters involving Tacoma Power.

Ted Coates, et al. v. Tacoma. On June 22, 2017, a lawsuit was filed with the City alleging Tacoma Power has been unlawfully subsidizing the capital, operation and maintenance expenses of its commercial telecommunications business line (Click! Network). The customers of Click! Network are a subset of Tacoma Power's electric utility customers. The claimants have requested an immediate cessation of all illegal subsidies and to return funds allegedly used to unlawfully subsidize Click! Network operations for the past three years for the benefit of the electric utility customers. Litigation is ongoing and trial is set for June 2018.

U.S. Oil & Refining Company ("U.S. Oil"). In May 2016, a claim was filed by U.S. Oil alleging the April 28, 2016, electrical outage that occurred at the Lincoln substation caused the claimant \$9.1 million in lost revenue and damages. The claim is currently under investigation.

Miscellaneous. Tacoma Power has received several other miscellaneous claims that either do not allege significant damage amounts or that the City Attorney's Office has determined should not materially impact the finances of Tacoma Power or the City.

Environmental Issues

A substantial number of federal, state and local laws and regulations regarding various types of waste management have been enacted. These laws and regulations are set forth in acts such as the Resource Conservation and Recovery Act and the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act, and the Washington State Model Toxics Control Act, which impose strict liability, regardless of time or location, on generators, transporters, storers and disposers of hazardous waste for cleanup costs or damages resulting from releases or contamination. Many normal activities in connection with the generation and transmission of electricity generate both non-hazardous and hazardous wastes. Tacoma Power has established a waste management plan to ensure compliance with environmental laws and regulations and is assessing its properties for potential liability from latent contamination resulting from disposal activities prior to implementation of the various regulations.

Tacoma Power has been a voluntary Potentially Responsible Party ("PRP") on several Environmental Protection Agency ("EPA") clean-up sites. Tacoma Power was a participant on eight sites that have been cleaned up or otherwise resolved with the EPA. Potential liability at all currently known existing sites has been negotiated and resolved.

Tacoma Power expects that State and Federal legislation may be enacted, and lawsuits could be filed, to address global warming issues, which could impact electric utilities.

TAX MATTERS

In the opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel to the City (“Bond Counsel”), based upon an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the 2017 Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the “Code”). Bond Counsel is of the further opinion that interest on the 2017 Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, taxes, although Bond Counsel observes that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. A complete copy of the proposed form of opinion of Bond Counsel is set forth in Appendix C hereto.

To the extent the issue price of any maturity of the 2017 Bonds is less than the amount to be paid at maturity of such 2017 Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2017 Bonds), the difference constitutes “original issue discount,” the accrual of which, to the extent properly allocable to each Beneficial Owner thereof, is treated as interest on the 2017 Bonds which is excluded from gross income for federal income tax purposes. For this purpose, the issue price of a particular maturity of the 2017 Bonds is the first price at which a substantial amount of such maturity of the 2017 Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the 2017 Bonds accrues daily over the term to maturity of such 2017 Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2017 Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2017 Bonds. Beneficial Owners of the 2017 Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2017 Bonds with original issue discount, including the treatment of Beneficial Owners who do not purchase such 2017 Bonds in the original offering to the public at the first price at which a substantial amount of such 2017 Bonds is sold to the public.

2017 Bonds purchased, whether at original issuance or otherwise, for an amount higher than their principal amount payable at maturity (or, in some cases, at their earlier call date) (“Premium 2017 Bonds”) will be treated as having amortizable bond premium. No deduction is allowable for the amortizable bond premium in the case of bonds, like the Premium 2017 Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, the amount of tax-exempt interest received, and a Beneficial Owner’s basis in a Premium 2017 Bond, will be reduced by the amount of amortizable bond premium properly allocable to such Beneficial Owner. Beneficial Owners of Premium 2017 Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2017 Bonds. The City has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the 2017 Bonds will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the 2017 Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2017 Bonds. The opinion of Bond Counsel assumes the accuracy of these representations and compliance with these covenants. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken), or events occurring (or not occurring), or any other matters coming to Bond Counsel’s attention after the date of issuance of the 2017 Bonds may adversely affect the value of, or the tax status of interest on, the 2017 Bonds. Accordingly, the opinion of Bond Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Bond Counsel is of the opinion that interest on the 2017 Bonds is excluded from gross income for federal income tax purposes, the ownership or disposition of, or the accrual or receipt of amounts treated as interest on, the 2017 Bonds may otherwise affect a Beneficial Owner’s federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the Beneficial Owner or the Beneficial Owner’s other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2017 Bonds to be subject, directly or indirectly, in whole or in part, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals or clarification of the Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the 2017 Bonds. Prospective purchasers of the 2017 Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulations or litigation, as to which Bond Counsel is expected to express no opinion.

The opinion of Bond Counsel is based on current legal authority, covers certain matters not directly addressed by such authorities, and represents Bond Counsel's judgment as to the proper treatment of the 2017 Bonds for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Bond Counsel cannot give and has not given any opinion or assurance about the future activities of the City, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. The City has covenanted, however, to comply with the requirements of the Code.

Bond Counsel's engagement with respect to the 2017 Bonds ends with the issuance of the 2017 Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the City or the Beneficial Owners regarding the tax-exempt status of the 2017 Bonds in the event of an audit examination by the IRS. Under current procedures, parties other than the City and its appointed counsel, including the Beneficial Owners, would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt bonds is difficult, obtaining an independent review of IRS positions with which the City legitimately disagrees, may not be practicable. Any action of the IRS, including but not limited to selection of the 2017 Bonds for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the 2017 Bonds, and may cause the City or the Beneficial Owners to incur significant expense.

DESCRIPTION OF RATINGS

Fitch Ratings and S&P have assigned ratings of "AA-" and "AA," respectively, to the 2017 Bonds. Ratings were applied for by the City and certain information was supplied by the City to the rating agencies to be considered in evaluating the 2017 Bonds. The ratings reflect only the views of the rating agencies and an explanation of the significance of the ratings may be obtained from the rating agencies. 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 would be likely to have an adverse effect on the market price of the 2017 Bonds. A securities rating is not a recommendation to buy, sell or hold securities and is subject to revision or withdrawal at any time. Neither the City nor the Underwriters have the obligation to contest any revision or withdrawal by the rating agencies of any such ratings.

UNDERWRITING

Goldman Sachs & Co. LLC and Citigroup Global Markets Inc., as underwriters of the 2017 Bonds (the "Underwriters") have agreed, subject to certain conditions, to purchase the 2017 Bonds from the City at an aggregate purchase price of \$80,242,313.14 (representing the aggregate principal amount of the 2017 Bonds, plus original issue premium of \$9,881,267.70 and less an Underwriters' discount of \$213,954.56). The Underwriters' obligations are subject to certain conditions precedent, and they will be obligated to purchase all 2017 Bonds, if any 2017 Bonds are purchased. The 2017 Bonds may be offered and sold to certain dealers at prices lower than the public offering prices, and the public offering prices may be changed, from time to time, by the Underwriters.

The information in the balance of this section "UNDERWRITING" has been provided by the Underwriters. The City cannot and does not make any representation as to the accuracy or completeness of such information.

The 2017 Bonds may be offered and sold to certain dealers at prices lower than the public offering prices, and the public offering prices may be changed, from time to time, by the Underwriters.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the Underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the City and to persons and entities with relationships with the City, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the issuer (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the issuer. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Citigroup Global Markets Inc., one of the Underwriters of the 2017 Bonds, has informed the City that it has entered into a retail distribution agreement with UBS Financial Services Inc. ("UBSFS"). Under this distribution agreement, Citigroup Global Markets Inc. may distribute municipal securities to retail investors through the financial advisor network of UBSFS. As part of this arrangement, Citigroup Global Markets Inc. may compensate UBSFS for its selling efforts with respect to the 2017 Bonds.

MUNICIPAL ADVISOR

Montague DeRose and Associates, LLC, Walnut Creek, California, has acted as financial advisor to Tacoma Power in connection with the issuance of the 2017 Bonds. The financial advisor has not audited, authenticated, or otherwise verified the information set forth in this Official Statement or the other information available from Tacoma Power with respect to the appropriateness, accuracy, and completeness of the disclosure of such information, and the financial advisor makes no guarantee, warranty, or other representation on any matter related to such information. Montague DeRose and Associates, LLC is an independent financial advisory and consulting organization and is not engaged in the business of underwriting, marketing, or trading of municipal securities or any other negotiable instruments.

APPROVAL OF LEGAL PROCEEDINGS

The validity of the 2017 Bonds and certain other legal matters are subject to the approving opinion of Orrick, Herrington & Sutcliffe LLP, Bond Counsel. Bond Counsel undertakes no responsibility for the accuracy, completeness or fairness of the Official Statement. A complete copy of the proposed form of Bond Counsel opinion is contained in Appendix C hereto. Orrick, Herrington & Sutcliffe LLP is also serving as Disclosure Counsel to the City in connection with the issuance of the 2017 Bonds.

Certain legal matters will be passed on for the Underwriters by Pacifica Law Group LLP, Seattle, Washington, Counsel to the Underwriters. Any opinion of such firm will be addressed solely to the Underwriters, will be limited in scope, and cannot be relied upon by investors.

POTENTIAL CONFLICTS OF INTEREST

Some or all of the fees of the Underwriters, Underwriters' Counsel, the financial advisor, and Bond Counsel are contingent upon the issuance and sale of the 2017 Bonds. From time to time, Bond Counsel serves as counsel to the Underwriters on matters unrelated to the issuance of the 2017 Bonds. Pacifica Law Group LLP is serving as counsel to the Underwriters and serves as bond counsel and outside counsel to the City on matters unrelated to the issuance of the 2017 Bonds.

CONTINUING DISCLOSURE UNDERTAKINGS

Basic Undertaking to Provide Annual Financial Information and Notice of Listed Events. To meet the requirements of paragraph (b)(5) of United States Securities and Exchange Commission (“SEC”) Rule 15c2-12 (“Rule 15c2-12”), as applicable to a participating underwriter for the 2017 Bonds, the City by the Bond Ordinance has agreed to undertake (the “Undertaking”) for the benefit of holders of the 2017 Bonds to provide or cause to be provided, either directly or through a designated agent, to the Municipal Securities Rulemaking Board (“MSRB”) in an electronic format as prescribed by the MSRB, accompanied by identifying information as prescribed by the MSRB: (a) annual financial information and operating data of the type included in this Official Statement as generally described below (“annual financial information”); and (b) 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 2017 Bonds: (i) principal and interest payment delinquencies; (ii) nonpayment related defaults, if material; (iii) unscheduled draws on debt service reserves reflecting financial difficulties; (iv) unscheduled draws on credit enhancements reflecting financial difficulties; (v) substitution of credit or liquidity providers, or their failure to perform; (vi) 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 2017 Bonds; (vii) modifications to rights of holders of the 2017 Bonds, if material; (viii) 2017 Bond calls (other than scheduled mandatory redemptions of Term Bonds), if material, and tender offers; (ix) defeasances; (x) release, substitution, or sale of property securing repayment of the 2017 Bonds, if material; (xi) rating changes; (xii) bankruptcy, insolvency, receivership or similar event of the City, as such “Bankruptcy Events” are defined in Rule 15c2-12; (xiii) the consummation of a merger, consolidation, or acquisition involving the Electric System or the sale of all or substantially all of the assets of the Electric System, 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 (xiv) appointment of a successor or additional trustee or the change of name of a trustee, if material.

The City also will provide 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) audited financial statements of the Electric System, prepared in accordance with generally accepted accounting principles applicable to government entities, with regulations prescribed by the Washington State Auditor pursuant to RCW 43.09.200 (or any successor statute) and substantially in accordance with the system prescribed by the Federal Energy Regulatory Commission, provided, that if the Electric System’s financial statements are not yet available, the City shall provide unaudited financial statements in substantially the same format, and audited statements when they become available; (ii) principal amount of outstanding Parity Bonds; (iii) debt service coverage for outstanding Parity Bonds; (iv) energy resources from Electric System-owned resources and purchases from Electric System power purchase contracts (substantially in the form of the table “Peak Demand, Energy Requirements and Resources” in this Official Statement); and (v) average number of customers, energy sales and revenue from energy sales for the major customer classes (substantially in the form of the table “Customers, Energy Sales and Revenues from Sales” in this Official Statement); and 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 ending December 31, 2017).

The annual financial information 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 SEC.

Amendment of Undertaking. The Undertaking is subject to amendment after the primary offering of the 2017 Bonds without the consent of any holder of any 2017 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.

Termination of Undertaking. The City's obligations under the Undertaking will terminate upon the legal defeasance of all of the 2017 Bonds. In addition, the City's obligations under the Undertaking will terminate if those provisions of Rule 15c2-12 which require the City to comply with the Undertaking become legally inapplicable in respect of the 2017 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. 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 will constitute an Event of Default in respect of the 2017 Bonds. The sole remedy of any Beneficial Owner of a 2017 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 Prior Undertakings. The City has previously entered into continuing disclosure undertakings in connection with various City financings under Rule 15c2-12 (the "Prior Undertakings"). The City has a number of occasions of noncompliance over the past five years with its Prior Undertakings, none of which involved Tacoma Power or the Department. These instances include failing to timely file (i) certain financial information for the year 2011 in connection with the City's Consolidated Local Improvement District ("CLID") No. 60 Bonds; (ii) information regarding the balance in the supplemental reserve fund as of December 31, 2013, 2014, and 2015 for the City's CLID No. 65 Bonds; (iii) notice of certain underlying ratings changes; and (iv) related notices of failure to file.

MISCELLANEOUS

Any statements in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended as such and are not a representation of fact. The execution and delivery of this Official Statement has been duly authorized by the City.

CITY OF TACOMA, WASHINGTON

By /s/ Chris Robinson
Superintendent/Chief Operating Officer,
Department of Public Utilities, Light Division

By /s/ Andrew Cherullo
Finance Director

APPENDIX A

SUMMARY OF THE PRINCIPAL PROVISIONS OF THE BOND ORDINANCE

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SUMMARY OF PRINCIPAL PROVISIONS OF THE BOND ORDINANCE

The following is a summary of certain provisions of the Bond Ordinance. Such summaries do not purport to be complete, and reference is made to the complete Bond Ordinance, a copy of which is on file and available for examination at the office of the City Clerk.

Certain Definitions

As used in the Bond Ordinance, the following words shall have the following meanings:

“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 Ordinance authorizing such Capital Appreciation Bonds; and (B) as of any date other than a Valuation Date, the sum of (1) the Accreted Value on the preceding Valuation Date and (2) 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 months, times (b) the difference between the Accreted Values for such Valuation Dates.

“Annual Debt Service” for any Fiscal Year means the amount equal to:

- A. the interest accruing during such Fiscal Year on all outstanding Parity Bonds, excluding interest to be paid from the proceeds of sale of Parity Bonds and less any federal credit for a portion of interest on Parity Bonds if permitted to be deducted as provided in the Bond Ordinance; and
- B. the principal of all outstanding Serial Bonds due in such Fiscal Year; and
- C. the Sinking Fund Requirement, if any, for such Fiscal Year.

For purposes of this definition, the principal and interest portions of the Accreted Value of Capital Appreciation Bonds and the Appreciated Value of Deferred Income 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 Ordinance authorizing such Capital Appreciation Bonds or Deferred Income Bonds. For the purpose of calculating the principal and interest on Option Bonds in any Fiscal Year, such Option Bonds shall be assumed to mature on the stated maturity date or mandatory redemption date thereof.

“Appreciated Value” means, with respect to any Deferred Income Bonds, (A)(1) as of any Valuation Date, the amount set forth for such date in any Parity Bond Ordinance authorizing such Deferred Income Bonds and (2) as of any date other than a Valuation Date, the sum of (a) the Appreciated Value on the preceding Valuation Date and (b) the product of (i) 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 Appreciated Value accrues during any semiannual period in equal daily amounts on the basis of a year of twelve 30-day months, times (ii) the difference between the Appreciated Values for such Valuation Dates, and (B) as of any date of computation on and after the Interest Commencement Date, the Appreciated Value on the Interest Commencement Date.

“Bond Counsel” means an attorney at law or a firm of attorneys, selected by the City, of nationally recognized standing in matters pertaining to the tax-exempt nature of interest on bonds issued by states and their political subdivisions, duly admitted to the practice of law before the highest court of any state of the United States of America.

“Bond Fund” means “Electric System Revenue Bond Fund” created by Ordinance No. 23514.

“Bondowners’ Trustee” means a trustee appointed pursuant to the Bond Ordinance.

“Bond Register” means the books or records maintained by the Bond Registrar for the purpose of identifying ownership of the Bonds.

“Bond Registrar” means the Fiscal Agent, or any successor bond registrar selected by the City.

“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 purposes of (i) receiving payment of the redemption price, if any, of a Capital Appreciation Bond that is redeemed prior to maturity, or (ii) computing the principal amount of Parity Bonds held by the holder of a Capital Appreciation Bond in giving to the City or the Paying Agent any notice, consent, request, or demand pursuant to the related Parity Bond Ordinance for any purpose whatsoever, the principal amount of a Capital Appreciation Bond shall be deemed to be its Accreted Value.

“Certified Public Accountant” means an independent certified public accountant (or firm of certified public accountants) selected by the City and having a favorable national reputation.

“City” means the City of Tacoma, Washington, a home-rule charter municipal corporation duly organized and existing under and by virtue of the constitution and laws of the State.

“City Payment” means any payment (designated as such by a Parity Bond Ordinance) required to be made by or on behalf of the City under a Derivative Product and which is determined according to a formula set forth in the Derivative Product.

“Code” means the Internal Revenue Code of 1986, as amended, together with corresponding and applicable final, temporary, or proposed regulations and revenue rulings issued or amended with respect thereto by the United States Treasury Department or the Internal Revenue Service, to the extent applicable to the Parity Bonds.

“Commission” means the Securities and Exchange Commission.

“Construction Fund” means the “City of Tacoma Electric System Construction Fund” created by Ordinance No. 23663 of the City.

“Contract Resource Obligation” means an obligation of the Electric System to pay the following costs, whether or not Power and Services are available to the Electric System in return for such payment:

- A. costs associated with generation, transmission or distribution facilities (including any common undivided interest therein) hereafter acquired, purchased or constructed by the City and declared by the City Council to be a separate utility system, which such costs shall include but are not limited to costs of normal operation and maintenance, renewals and replacements, additions and betterments and debt service on the bonds or other obligations of such separate electric utility system, or
- B. costs associated with the purchase of Power and Services under a contract.

“Council” means the City Council of the City as the same shall be duly and regularly constituted from time to time.

“Deferred Income Bonds” means any Parity Bonds issued under any Parity Bond Ordinance as to which accruing interest is not paid prior to the Interest Commencement Date specified in such ordinance and the Appreciated Value for such Parity Bonds is compounded semiannually on the Valuation Date for such Deferred Income Bonds.

“Derivative Payment Date” means any date specified in the Derivative Product on which a City Payment is due and payable under the Derivative Product.

“Derivative Product” means a written contract or agreement between the City and a third party (the “Reciprocal Payor”) that has or whose obligations are unconditionally guaranteed by a party that has (as of the date of the Derivative Product) at least an investment grade rating from a rating agency (who, if the City’s Parity Bonds are rated by Moody’s Investors Service, must have a rating of at least “A”), which provides that the City’s obligations

thereunder will be conditioned on the performance by the Reciprocal Payor of its obligations under the agreement, and

- A. under which the City is obligated to pay, on one or more scheduled and specified Derivative Payment Dates, the City Payments in exchange for the Reciprocal Payor's obligation to payor cause to be paid to the City, on scheduled and specified Derivative Payment Dates, the Reciprocal Payments;
- B. for which the City's obligations to make City Payments may be secured by a pledge of and lien on the Revenues on an equal and ratable basis with the Parity Bonds;
- C. under which Reciprocal Payments are to be made directly into the Bond Fund;
- D. for which the City Payments are either specified to be one or more fixed amounts or are determined as provided by the Derivative Product;
- E. for which the Reciprocal Payments are either specified to be one or more fixed amounts or are determined as set forth in the Derivative Product; and
- F. which provides, on either a current or forward basis, for an exchange of payments determined in accordance with a formula specified therein.

"Electric System" means the electric utility properties, rights and assets, real and personal, tangible and intangible, now owned and operated by the City and used or useful in the generation, transmission, distribution and sale of electric energy and the business incidental thereto, and all properties, rights and assets, real and personal, tangible and intangible, hereafter constructed or acquired by the City as additions, betterments, improvements or extensions to said electric utility properties, rights and assets, but shall not include any generation, transmission and distribution facilities that may hereafter be purchased, constructed or otherwise acquired by the City and declared by the City Council to be a separate utility system not financed from the Revenues (except as a Contract Resource Obligation (i) included in Operating Expenses of the Electric System upon compliance with the Bond Ordinance or (ii) on a basis junior and inferior to the lien on Revenues pledged to secure the Bonds), the revenue of which separate utility system may be pledged to the payment of revenue obligations issued to purchase, construct, condemn or otherwise acquire or expand such separate utility system. The Council may, by ordinance, elect to combine with and include as a part of the Electric System any other separate utility system of the City, provided that full provision for the payment of any outstanding indebtedness of such separate system shall first be made in the manner substantially similar to that set forth in the Bond Ordinance.

"Engineer" means an independent licensed professional engineer (or firm of licensed professional engineers) selected by the City and having a favorable national reputation for skill and experience with electric systems of comparable size and character to the Electric System in such of the following as are relevant to the purposes for which they are retained: (a) engineering and operations and (b) the design of rates.

"Event of Default" means those events described as Events of Default in the Bond Ordinance.

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

"Fiscal Year" means the Fiscal Year used by the City at any time. At the time of the adoption of the Bond Ordinance, the Fiscal Year is the 12-month period beginning January 1 of each year.

"Future Parity Bonds" means any electric revenue bonds of the City issued after the date of issuance of the 2017 Bonds that will have a lien upon the Net Revenues of the Electric System for the payment of the principal thereof and interest thereon equal to the lien upon the Net Revenues of the Electric System for the payment of the principal of and interest on the Outstanding Parity Bonds and the 2017 Bonds.

"Government Obligations" means those government obligations defined by RCW 39.53.010(9) as it now reads or hereafter may be amended or replaced.

“Interest Commencement Date” means, with respect to any particular Deferred Income Bonds, the date specified in any Parity Bond Ordinance authorizing such Bonds (which date must be prior to the maturity date for such Bonds) after which interest accruing on such Bonds shall be payable semiannually, with the first such payment date being the applicable interest payment date immediately succeeding such Interest Commencement Date.

“Maximum Interest Rate” means, with respect to any particular Variable Interest Rate Bond, a numerical rate of interest, which shall be set forth in any Parity Bond Ordinance authorizing such Bond that shall be the maximum rate of interest such Bond may at any time bear.

“Minimum Interest Rate” means, with respect to any particular Variable Interest Rate Bond, a numerical rate of interest which may include a zero interest rate and may (but need not) be set forth in any Parity Bond Ordinance authorizing such Bond, that shall be the minimum rate of interest such Bond may at any time bear.

“Net Revenues” means, for any period, the excess of Revenues over Operating Expenses for such period, excluding from the computation of Revenues (a) any profit or loss derived from the sale or other disposition, not in the ordinary course of business, of investments or fixed or capital assets of the Electric System, or resulting from the early extinguishment of debt; (b) insurance and condemnation proceeds; (c) income from investment of money on hand in any construction fund and other investment income restricted to a particular purpose inconsistent with its use for the payment of debt service; and (d) any other extraordinary, non-recurring income or contribution.

“Operating Expenses” means all the City’s expenses for operation and maintenance of the Electric System, including all operation and maintenance expenses included in the Uniform System of Accounts and shall include, without limiting the generality of the foregoing, (A) all costs of purchased Power and Services required under contracts existing as of the date of passage of the Bond Ordinance to be taken by the City for the account of the Electric System, and otherwise all costs of purchased Power and Services to the extent, but only to the extent, that the City is not obligated to make payment therefor unless the City is receiving Power and Services in return for such payment and (B) costs of Contract Resource Obligations upon satisfaction of the requirements established by the Bond Ordinance. Operating Expenses shall include payments to the City for services rendered to the electric utility by other departments or offices of the City but shall not include any extraordinary, non-recurring expenses, any costs or expenses for new construction, interest, amortization, any allowance for depreciation or any taxes payable to the City (or payments in lieu of taxes) upon the properties or earnings of the Electric System or the earnings of any separate electric utility system derived from payments by the Electric System.

“Option Bonds” means Parity Bonds that the owner or holder thereof may at its option demand payment of the principal and accrued interest thereof or the purchase of such Parity Bonds by or on behalf of the City in advance of the otherwise scheduled dates for the payment of principal and interest thereon.

“Outstanding Parity Bonds” means the outstanding 2010 Bonds and 2013 Bonds.

“Parity Bonds” means the Outstanding Parity Bonds, the 2017 Bonds and any Future Parity Bonds. “Parity Bonds” may include bonds, notes, warrants, certificates of indebtedness or any other evidence of indebtedness issued pursuant to the Parity Conditions.

“Parity Bond Ordinance” means any ordinance authorizing the issuance of Parity Bonds.

“Parity Conditions” means the conditions for issuing Future Parity Bonds set forth in the Bond Ordinance.

“Paying Agent” means the Fiscal Agent or any bank or banks designated as Paying Agent by the City in accordance with applicable laws of the State now or hereafter in effect.

“Permitted Investments” means investments that are now or may hereafter be permitted to the City by the laws of the State.

“Power and Services” means energy, capacity, reserves and services, excluding the purchase of ownership of generating capability.

“Qualified Insurance” means any non-cancelable 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), and if such Qualified Insurance is being used to fund the Reserve Account, which insurance company or companies as of the time of issuance of such policy or surety bond, are currently rated in one of the two highest rating categories by both Moody’s and S&P or their comparably recognized business successors.

“Qualified Letter of Credit” means any irrevocable letter of credit issued by a financial institution for the account of the City on behalf of the owners of the 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, and if such Qualified Insurance is being used to fund the Reserve Account, is currently rated in one of the two highest rating categories by either Moody’s or S&P or their comparably recognized business successors.

“Rate Stabilization Fund” means the “Cumulative Reserve Fund for Supplemental Purchase of Electric Energy,” created by Ordinance No. 21862 of the City, as now or hereafter amended, and renamed the Rate Stabilization Fund.

“Rating Agencies” means Moody’s, S&P or another nationally recognized rating agency rating municipal bonds.

“Reciprocal Payment” means any payment (designated as such by a Parity Bond Ordinance) to be made to, or for the benefit of, the City under a Derivative Product by the Reciprocal Payor.

“Reciprocal Payor” means a party to a Derivative Product that is obligated to make one or more Reciprocal Payments thereunder.

“Reserve Account Requirement” means with respect to the 2017 Bonds, zero, and with respect to the Outstanding Parity Bonds an amount equal to the lesser of maximum Annual Debt Service in any Fiscal Year following the date of computation or 125% of average Annual Debt Service and with respect to a series of Future Parity Bonds, an amount set forth in the Parity Bond Ordinance authorizing such bonds. A Parity Bond Ordinance authorizing Future Parity Bonds may establish a separate Reserve Account for such Future Parity Bonds or provide that such Future Parity Bonds be secured by a common Reserve Account. In calculating the Reserve Account Requirement, in the case of Variable Rate Interest Bonds the interest rate calculated thereon shall be calculated on the assumption that such Bonds will bear interest during such period at the Maximum Interest Rate for such bonds; provided that, if on such date of calculation the interest rate on such bonds shall then be fixed for a specified period, the interest rate used for such specified period for the purposes of the foregoing calculation shall be such actual interest rate.

“Revenue Fund” means the “City of Tacoma Electric System Revenue Fund,” continued and redesignated by Ordinance No. 23514.

“Revenues” means all income (including investment income), receipts and revenues received by the City through the ownership and operation of the Electric System, including any income derived by the City through the ownership and operation of any facilities that may hereafter be purchased, constructed, or otherwise acquired and operated by the City as a separate utility system, which income is available after meeting all requirements of the obligations of such separate system and is paid into the Revenue Fund. “Revenues” shall not include investment income restricted to a particular purpose inconsistent with its use for the payment of debt service, including investment income derived pursuant to a plan of debt refunding.

“Serial Bonds” means Bonds other than Term Bonds.

“Sinking Fund Requirement” means, for any Fiscal Year, the amount required on account of Term Bonds to be deposited into the Bond Retirement Account in such Fiscal Year as established by the ordinance or resolution of the City authorizing the issuance of such Term Bonds.

“State” means the State of Washington.

“Supplemental Ordinance” means any ordinance amending, modifying or supplementing the provisions of the Bond Ordinance or any Parity Bond Ordinance.

“Term Bonds” means Parity Bonds of any principal maturity which are subject to mandatory redemption or for which mandatory sinking fund payments are required.

“Uniform System of Accounts” means the Federal Energy Regulatory Commission (or its successor in function) Uniform System of Accounts prescribed for Class A and Class B Public Utilities and Licenses, as the same may be modified, amended, or supplemented from time to time.

“Valuation Date” means (i) with respect to any Capital Appreciation Bonds the date or dates set forth in any Parity Bond Ordinance authorizing such bonds on which specific Accreted Values are assigned to the Capital Appreciation Bonds, and (ii) with respect to any Deferred Income Bonds the date or dates prior to the Interest Commencement Date set forth in any Parity Bond Ordinance authorizing such bonds on which specific Appreciated Values are assigned to the Deferred Income Bonds.

“Variable Interest Rate” means a variable interest rate or rates to be borne by a series of Parity Bonds or any one or more maturities within a series of Parity Bonds. The method of computing such variable interest rate shall be specified in the Parity Bond Ordinance authorizing such series of Parity Bonds and shall be based on (i) a percentage or percentages or other function of an objectively determinable interest rate or rates (e.g., a prime lending rate) or a function of such objectively determinable interest rate or rates which may be in effect from time to time or at a particular time or times; provided that, such variable interest rate shall be subject to a Maximum Interest Rate and may be subject to a Minimum Interest Rate, and that there may be an initial rate specified in each case as provided in such Parity Bond Ordinance; or (ii) a stated interest rate that may be changed from time to time as provided in the Parity Bond Ordinance authorizing such bonds, provided that, such interest rate shall be subject to a Maximum Interest Rate. Such Parity Bond Ordinance shall also 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” for any period of time, means Parity Bonds which during such period bear a Variable Interest Rate, provided that bonds the interest rate on which shall have been fixed for the remainder of the term thereof shall no longer be Variable Interest Rate Bonds.

Refunding or Defeasance

In the event that the City, in order to effect the payment, retirement, or redemption of any Parity Bond, sets aside in the Bond Fund or in another special account, held in trust by a trustee, cash or non-callable Government Obligations, as such obligations are now or hereafter defined in chapter 39.53 RCW, or any combination of cash and/or non-callable Government Obligations, in amounts and maturities which, together with the known earned income therefrom, are sufficient to redeem or pay and retire such Parity Bond in accordance with its terms and to pay when due the interest and redemption premium, if any, thereon, and such cash and/or non-callable Government Obligations are irrevocably set aside and pledged for such purpose, then no further payments need be made into the Bond Fund for the payment of the principal of and interest on such Parity Bond. The owner of a Parity Bond so provided for shall cease to be entitled to any lien, benefit, or security of the applicable Parity Bond Ordinance except the right to receive payment of principal, premium, if any, and interest from such special account, and such Parity Bond shall be deemed to be not outstanding under the applicable Parity Bond Ordinance.

The escrow agent shall give written notice of defeasance to the owners of all Parity Bonds so provided for within 30 days of the closing date and to the MSRB in accordance with the Bond Ordinance.

Bond Fund

The “Electric System Revenue Bond Fund” shall be used solely for the purposes of paying the principal of, premium, if any, and interest on Parity Bonds and retiring Parity Bonds prior to maturity in the manner provided in the Bond Ordinance or in any Parity Bond Ordinance. Money set aside from time to time with the Paying Agent for

such payment shall be held in trust for the owners of the Parity Bonds in respect of which the same shall have been so set aside. Until so set aside, all money in the Bond Fund shall be held in trust for the benefit of the owners of all Parity Bonds at the time outstanding equally and ratably. The Bond Fund shall contain four accounts: Interest Account, the Principal Account, the Bond Retirement Account and the Reserve Account. At the option of the City, separate accounts may be created in the Bond Fund for the purpose of paying or securing the payment of principal, premium, if any, and interest on any Parity Bonds.

Debt Service Accounts. The City has obligated and bound itself irrevocably to set aside and pay into the Bond Fund out of the Net Revenues certain fixed amounts, without regard to any fixed proportion of such Net Revenues, sufficient (together with other available funds on hand and paid into the Bond Fund) to pay the principal of, premium, if any, and interest on all Parity Bonds from time to time outstanding as the same respectively become due and payable, either at their maturity or in accordance with any Sinking Fund Requirement established for the retirement of Term Bonds.

The fixed amounts to be paid into the Bond Fund, to the extent that such payments are not made from bond proceeds or from other money, that may legally be available therefor, shall be as follows and in the following order of priority: (A) No later than the date on which an installment of interest falls due on any Parity Bonds, the City shall pay into the Interest Account in the Bond Fund (together with such other money as is on hand and available in such account) an amount equal to the installment of interest then falling due on all outstanding Parity Bonds; (B) No later than the date upon which an installment of principal on Parity Bonds that are Serial Bonds falls due, the City shall pay into the Principal Account in the Bond Fund an amount (together with such other money as is on hand and available in such account) equal to the installment of principal then falling due on all outstanding Parity Bonds that are Serial Bonds; and (C) No later than the date upon which a sinking fund installment on Term Bonds falls due, the City shall pay into the Bond Retirement Account in the Bond Fund an amount (together with such other money as is on hand and available in such account) equal to the Sinking Fund Requirement for such date.

The City shall apply all the money paid into the Bond Retirement Account to the redemption of Term Bonds prior to or on the next ensuing Sinking Fund Requirement due date (or may so apply such money prior to such Sinking Fund Requirement due date) pursuant to the terms of the applicable Parity Bond Ordinance. The City may also apply the money paid into the Bond Retirement Account for the purpose of retiring Term Bonds by the purchase of such Bonds at a purchase price (including any brokerage charge) not in excess of the principal amount thereof, in which event the principal amount of such bonds so purchased shall be credited against any Sinking Fund Requirement chosen by the City. If as of any January 1 the principal amount of Term Bonds retired by purchase or redemption exceeds the cumulative amount required to have been redeemed by sinking fund installments on or before such January 1, then such excess may be credited against the Sinking Fund Requirement for Term Bonds for the following Fiscal Year.

Any such purchase of Term Bonds by the City may be made with or without tenders of bonds in such manner as the City shall, in its discretion, deem to be in its best interest.

Money in the Bond Fund shall be transmitted to the Paying Agent in amounts sufficient to meet the maturing installments of principal of, premium, if any, and interest on the Parity Bonds when due. All money remaining in the Bond Fund after provision for the payment in full of the principal of, premium, if any, and interest on all outstanding Parity Bonds shall be returned to the Revenue Fund.

In making the payments and credits to the Principal Account, Interest Account, Bond Retirement Account and Reserve Account required by the Bond Ordinance, to the extent that such payments are made from bond proceeds, from money in any capitalized interest account, or from other money that may legally be available, such payments are not required to be made from the Revenue Fund.

Notwithstanding any provision of the Bond Ordinance requiring the deposit of any earnings or other money in the Bond Fund, any such earnings that are subject to any rebate or other payment requirement pursuant to applicable provisions of the Code may be withdrawn from the Bond Fund for deposit into a separate fund or account created for that purpose. Any amounts required at any time to be withdrawn from the Reserve Account or other accounts in the Bond Fund in order to preserve the tax-exempt or tax-advantaged status of Parity Bonds shall be withdrawn and deposited in the General Account in the Revenue Fund.

Reserve Account. In the event of the issuance of any Future Parity Bonds, the ordinance authorizing the issuance of such Future Parity Bonds shall provide for further and additional approximately equal monthly payments into the Bond Fund for credit to the Reserve Account from the money in the Revenue Fund in such amounts and at such times, so that by no later than five years from the date of issuance of such Future Parity Bonds or by the final maturity for such series of Future Parity Bonds, whichever occurs first, there will be credited to the Reserve Account an amount equal to the Reserve Account Requirement; provided, however, that the proceedings authorizing the issuance of Future Parity Bonds may provide for payments into the Bond Fund for credit to the Reserve Account from the proceeds of such Future Parity Bonds or from any other money lawfully available therefor, in which event, in providing for deposits and credits required by the foregoing provisions of this paragraph, allowance shall be made for any such amounts so paid into such Account.

For the purpose of determining the amount credited to the Reserve Account, obligations in which money in the Reserve Account shall have been invested shall be valued at the market value thereof. The term "market value" shall mean, in the case of securities that are not then currently redeemable at the option of the holder, the current bid quotation for such securities, as reported in any nationally circulated financial journal, and the current redemption value in the case of securities that are then redeemable at the option of the holder. For obligations that mature within six months, the market value shall be the par value thereof. The valuation of the amount in the Reserve Account shall be made by the City as of the close of business on each December 31 (or on the next preceding business day if December 31 does not fall on a business day) and may be made on each June 30 (or on the next preceding business day if June 30 does not fall on a business day).

If the valuation of the amount in the Reserve Account is less than the Reserve Account Requirement the City shall immediately transfer from the General Account an amount necessary to make the valuation of the amount in the Reserve Account equal to 100% of the Reserve Account Requirement. If the amounts available in the General Account for such transfer are insufficient to make the valuation of the amount in the Reserve Account equal to 100% of the Reserve Account Requirement, the City shall then transfer to the Reserve Account on or before the 25th day of each of the six succeeding calendar months no less than one-sixth of the amount necessary to make the valuation of the amount in the Reserve Account equal to 100% of the Reserve Account Requirement.

In making the payments and credits to the Reserve Account required by the Bond Ordinance, to the extent that the City has obtained Qualified Insurance or a Qualified Letter of Credit for specific amounts required to be paid out of the Reserve Account, such amounts so covered by Qualified Insurance or a Qualified Letter of Credit shall be credited against the amounts required to be maintained in the Reserve Account by the Bond Ordinance to the extent that such payments and credits to be made are insured by an insurance company, or guaranteed by a letter of credit from a financial institution. Such Qualified Letter of Credit or Qualified Insurance shall not be cancelable on fewer than five years' notice. In the event of any cancellation, the Reserve Account shall be funded in accordance with the Bond Ordinance, as if the Parity Bonds that remain outstanding had been issued on the date of such notice of cancellation.

If there is a deficiency in the Interest Account, Principal Account or Bond Retirement Account, in the Bond Fund, the City shall promptly make up such deficiency from the Reserve Account by the withdrawal of cash and by the sale or redemption of obligations held in the Reserve Account, if necessary, in such amounts as will provide cash in the Reserve Account sufficient to make up any such deficiency, and if a deficiency still exists immediately prior to an interest payment date, the City shall then draw from any Qualified Letter of Credit, Qualified Insurance, or other equivalent credit facility, in sufficient amount to make up the deficiency. Such draw shall be made at such times and under such conditions as the agreement for such Qualified Letter of Credit or such Qualified Insurance shall provide. The City covenants and agrees that any deficiency created in the Reserve Account by reason of any withdrawal therefrom for payment into such Interest, Principal, and Bond Retirement Account shall be made up from money in the Revenue Fund first available after providing for the required payments into such Interest, Principal, and Bond Retirement Accounts and after providing for payments under a reimbursement agreement entered into by the City pursuant to the Bond Ordinance.

Investment of Funds

Money held for the credit of the Revenue Fund, Construction Fund, Rate Stabilization Fund and the Interest Account, Principal Account and Bond Retirement Account in the Bond Fund shall, to the fullest extent practicable,

be invested at the direction of the City solely in, and obligations deposited in such accounts shall consist of Permitted Investments which shall mature on or prior to the respective dates when the money held for the credit of such Accounts will be required for the purposes intended. Money in the Reserve Account in the Bond Fund not required for immediate disbursement for the purposes for which such Account is created shall, to the fullest extent practicable and reasonable, be invested and reinvested at the direction of the City solely in, and obligations deposited in the Reserve Account shall consist of, Permitted Investments maturing or subject to redemption at the option of the owner within 10 years from the date of such investment (but maturing prior to the final maturity date of the Parity Bonds then outstanding). Except to the extent there are deficiencies in any account in the Bond Fund, all income received from the investment of money in any account in the Bond Fund, shall be from time to time deposited in the Revenue Fund, or credited against the monthly amount required to be deposited in such account.

Future Parity Bonds

Issuance of Future Parity Bonds. Future Parity Bonds may be issued payable from the Bond Fund on a parity with the Outstanding Parity Bonds, the 2017 Bonds and any Future Parity Bonds previously issued and secured by an equal charge and lien on Net Revenues, for any lawful purpose of the City related to the Electric System; provided that, (i) except as to Future Parity Bonds issued as described below, at the time of the issuance of such Future Parity Bonds, there is no deficiency in the Bond Fund, and no Event of Default has occurred and is continuing, and (ii) the requirements of the applicable provisions of this section are complied with.

Coverage Requirements for Issuance. Future Parity Bonds may be issued for any lawful purpose of the City related to the Electric System, including, but not limited to, acquiring, extensions of, acquiring necessary equipment for, or making necessary renewals, replacements, or repairs and capital improvements to the Electric System, if there shall be on file with the City Clerk either:

- (i) a certificate of an appropriate financial officer of the City stating that Net Revenues in any 12 consecutive months out of the most recent 24 months preceding the authentication and delivery of the Future Parity Bonds then proposed to be issued, as determined from the financial statements of the Electric System prepared by the Department of Public Utilities, were not less than 125% of maximum Annual Debt Service in any future Fiscal Year on all outstanding Parity Bonds and the bonds then proposed to be issued (provided that (i) in the event that any adjustment in the rates, fees and charges collected by the City for the services of the Electric System shall be effective at any time on or prior to the date of authentication and delivery of the Future Parity Bonds then proposed to be issued, such officer shall reflect in the certificate the Net Revenues he or she estimates would have been collected in such 12-month period if such new rates, fees, and charges had been in effect for the entire 12-month period and (ii) with respect to any Variable Interest Rate Bonds outstanding on the date such certificate is delivered, such officer shall estimate the debt service on such Bonds as described below, or
- (ii) a certificate of the Engineer stating that the average annual Net Revenues for the Fiscal Years in the period specified in the next sentence, as such Net Revenues are estimated by the Engineer in accordance with the Bond Ordinance, shall be at least equal to 125% of maximum Annual Debt Service in any future Fiscal Year, as estimated by the Engineer as described below. The period for the determination of average annual Net Revenues shall be the period beginning with the first Fiscal Year following the earlier of (i) the date to which interest has been capitalized or (ii) the date of initial operation of the facilities to be financed by such Future Parity Bonds and ending with the fifth Fiscal Year after such date.

Refunding Bonds. Future Parity Bonds may also be issued from time to time for the purpose of providing funds, with any other available funds, for retiring at or prior to their maturity or maturities any or all of the outstanding Parity Bonds of any series or any reimbursement obligation made pursuant to the Bond Ordinance, including the payment of any redemption premium thereon, and, if deemed necessary by the City, for paying the interest to accrue thereon to the date fixed for their retirement and any expenses incident to the issuance of such Future Parity Bonds. Future Parity Bonds issued under this subsection shall not be delivered unless the proceeds (excluding any accrued interest but including any premium) of such Future Parity Bonds, together with any other money that has been made available for such purposes, and the principal of and the interest on the investment of such proceeds or any such money, shall be sufficient to pay the principal of and the redemption premium, if any, on the bonds to be refunded

and the interest which will become due and payable on or prior to the date of their payment or redemption, and the expenses incident to the issuance of such Future Parity Bonds.

If such Future Parity Bonds are to be issued under this subsection, there shall be filed with the City Clerk a certificate signed by an appropriate financial officer of the City, showing that the maximum Annual Debt Service in any Fiscal Year thereafter shall not be increased by more than \$5,000 by reason of the issuance of the Future Parity Bonds, or there shall be filed with the City Clerk either of the certificates required above.

Reliance on Financial Statements. In rendering any certificate under this section, the Engineer may rely upon, and such certificate shall have attached thereto, financial statements of the Electric System, certified by an appropriate financial officer of the City, showing income and expenses for the period upon which the same are based and a balance sheet as of the end of such period, or similar certified statements by a Certified Public Accountant.

Estimates of Net Revenues and Annual Debt Service

- A. In estimating Net Revenues for each of the Fiscal Years covered by any certificate required to be delivered by it as described above, the Engineer may base its estimate upon such factors as it shall consider reasonable.
- B. In estimating the Annual Debt Service for each of the Fiscal Years covered by any certificate required to be delivered by it as described above, the Engineer shall include the Annual Debt Service on all Parity Bonds estimated to be outstanding during each such Fiscal Year. With respect to (a) any Parity Bonds which are not outstanding on the date such certificate is delivered but which are projected to be issued during the period covered by such certificate to complete construction of the facilities being financed by the Future Parity Bonds then being issued, and (b) any Variable Interest Rate Bonds outstanding on the date such certificate is delivered, the Engineer shall estimate the debt service on such bonds upon such assumptions as the Engineer shall consider reasonable and set forth in such certificate, including assumptions with respect to the interest rate or rates to be borne by such bonds and the amounts and due dates of the principal installments for such bonds; provided, however, that the interest rate or rates assumed to be borne by any Variable Interest Rate Bonds shall not be less than the interest rate borne by such Variable Interest Rate Bonds at the time that the Engineer delivers such certificate.

Refunding of all Parity Bonds; Junior Lien Obligations. Nothing contained in the Bond Ordinance shall prevent the City from refunding at one time all of the Parity Bonds then outstanding. Nothing contained in the Bond Ordinance shall prevent the City from issuing obligations payable from a lien on the Net Revenues that is junior and inferior to the Parity Bonds.

Reimbursement Obligations. In the event that the City elects to meet the requirements with respect to the Reserve Account as to any issue of Parity Bonds through the use of a Qualified Letter of Credit, Qualified Insurance, or other equivalent credit enhancement device, the City may contract with the entity providing such Qualified Letter of Credit, Qualified Insurance, or other equivalent credit enhancement device that the City's reimbursement obligation, if any, to such entity ranks on a parity of lien with the Parity Bonds.

In the event that the City elects additionally to secure any issue of Option Bonds through the use of a Qualified Letter of Credit, Qualified Insurance, or other equivalent credit enhancement device, the City may contract with the entity providing such Qualified Letter of Credit, Qualified Insurance, or other equivalent credit enhancement device that the City's reimbursement obligation, if any, to such entity ranks on a parity of lien with the Parity Bonds; provided that the payments due under such reimbursement agreement are such that if such reimbursement obligation were a series of Future Parity Bonds, such bonds could be issued in compliance with the provisions regarding Future Parity Bonds.

Contract Resource Obligations

Separate Systems. The Bond Ordinance authorizes the City to create, acquire, construct, finance, own and operate one or more electric utility systems for the purpose of generating, transmitting or distributing electric power and energy. The Council may declare any such system to be a separate utility system not financed from Revenues (except as a Contract Resource Obligation (i) included in Operating Expenses of the Electric System upon compliance with the Bond Ordinance or (ii) on a basis junior and inferior to the lien on Revenues pledged to secure Parity Bonds). The revenue of such separate utility system may be pledged to the payment of revenue obligations issued to purchase, construct, condemn, or otherwise acquire or expand such separate utility system.

The costs associated with any such separate utility system may, upon declaration of the City Council, constitute a Contract Resource Obligation and, upon compliance with the following subsection, may be included in the Electric System's Operating Expenses; provided, however, no Contract Resource Obligation constituting the costs of a separate utility system for the retail distribution of electric power and energy may be included in the Electric System's Operating Expenses.

Designation of Contract Resource Obligations. A Contract Resource Obligation may be included in the Electric System's Operating Expenses if the following requirements are met at the time the Contract Resource Obligation is incurred:

- A. No Event of Default has occurred and is continuing.
- B. There shall be on file with the City Clerk a certificate of the Engineer stating that the average annual Net Revenues for the Fiscal Years in the period specified in the next sentence, as such Net Revenues are estimated by the Engineer in accordance with the provisions in connection with Future Parity Bonds, shall be at least equal to 125% of maximum Annual Debt Service in any future Fiscal Year, as estimated by the Engineer in accordance with such provisions. The period for the determination of average annual Net Revenues shall be the period beginning with the first Fiscal Year following the earlier of (i) the date to which interest is capitalized or (ii) the date of initial operation of the facilities to be financed and ending with the fifth full Fiscal Year after such date.
- C. There shall be on file with the City Clerk an opinion of the Engineer to the effect stated in subparagraph (i) below if the Contract Resource Obligation is to be utilized to supply power and energy or to the effect stated in subparagraph (ii) below if the Contract Resource Obligation is to be utilized to supply transmission capability:
 - (i) (a) The additional source of power and energy from such Contract Resource Obligation is sound from a power supply planning standpoint and is technically and economically feasible in accordance with prudent utility practice; and (b) the estimated cost of such Contract Resource Obligation is reasonable.
 - (ii)(a) The transmission capability to be acquired pursuant to the Contract Resource Obligation will be necessary within a reasonable time after the estimated date of commercial operation of the transmission facilities; and (b) the estimated cost of such Contract Resource Obligation is reasonable.

Bond Covenants

Rate Covenant. The City shall establish, maintain and collect rates and charges for services, facilities and commodities sold, furnished or supplied through the facilities of the Electric System that shall be fair and adequate to provide Revenues sufficient for the punctual payment of the principal of, premium, if any, and interest on the Parity Bonds for which the payment has not otherwise been provided, for all payments which the City is obligated to make into the Bond Fund, and for the proper operation and maintenance of the Electric System, including payment of all Contract Resource Obligations included in the Electric System's Operating Expenses, and all necessary repairs, replacements and renewals thereof, including the payment of all taxes, assessments or other governmental charges lawfully imposed on the Electric System or the Revenues therefrom, or payments in lieu thereof, and the

payment of all other amounts that the City may now or hereafter become obligated to pay from the Revenues by law or contract.

Debt Service Coverage. The City shall also establish, maintain and collect rates and charges which shall be adequate to provide, in each Fiscal Year, Net Revenues in an amount equal to at least 1.25 times the actual Annual Debt Service for such year. Solely for purposes of calculating the coverage requirement, there shall be added to Revenues in any Fiscal Year any amount withdrawn from the Rate Stabilization Fund in such Fiscal Year and deposited in the Revenue Fund, and there shall be subtracted from Revenues in any Fiscal Year any amount withdrawn from the General Account in the Revenue Fund and deposited in the Rate Stabilization Fund.

The calculation of the coverage requirement set forth above, and in connection with the issuance of Future Parity Bonds, and the City's compliance therewith, may be made solely with reference to the Bond Ordinance without regard to future changes in generally accepted accounting principles. If the City has changed one or more of the accounting principles used in the preparation of its financial statements, because of a change in generally accepted accounting principles or otherwise, then an event of default relating to the coverage requirement shall not be considered an Event of Default if the coverage requirement ratio would have been complied with had the City continued to use those accounting principles employed at the date of the most recent audited financial statements prior to the date of the Bond Ordinance.

Restrictions on Contracting of Obligations Secured by Revenues. Except as otherwise provided in the Bond Ordinance (regarding Contract Resource Obligations), the City will not hereafter create any other special fund or funds for the payment of revenue bonds, warrants or other revenue obligations, or issue any bonds, warrants or other obligations or create any additional indebtedness that will (a) rank prior to the lien on the Revenues or properties of the Electric System created in the Bond Ordinance to secure the payment of the principal and interest on the Parity Bonds or (b) rank on a parity with the lien on the Revenues or properties of the Electric System for the payments into the Bond Fund, except as provided under the Bond Ordinance in connection with the issuance of Future Parity Bonds or with respect to a reimbursement obligation made pursuant to the Bond Ordinance in connection with such Future Parity Bonds and ranking on a parity of lien with the Parity Bonds.

The City may issue bonds, notes, warrants, or other obligations payable from and secured by a lien on the Revenues of the Electric System that is subordinate to the lien on such Revenues securing the Parity Bonds and may create a special fund for payment of such subordinate obligations.

Maintenance and Operation. The City shall at all times maintain, preserve, and keep, or cause to be maintained, preserved, and kept, the properties of the Electric System and all additions and betterments thereto and extensions thereof and every part and parcel thereof, in good repair, working order and condition, and will from time to time make, or cause to be made, all necessary and proper repairs, renewals, replacements, extensions and betterments thereto so that at all times the business carried on in connection therewith shall be properly and advantageously conducted. The City will at all times operate such properties and the business in connection therewith or cause such properties and business to be operated in an efficient manner and at a reasonable cost.

Disposal of Properties of Electric System. The City shall not sell, mortgage, lease or otherwise dispose of the properties of the Electric System except as may be provided by law and subject to such additional restrictions as are provided below.

The City will not sell or otherwise dispose of the Electric System, in its entirety unless simultaneously with such sale or other disposition, provision is made for the payment, redemption or other retirement of all Parity Bonds then outstanding. The City will not sell or otherwise dispose of any part of the Electric System with a book value in excess of 5% of the value of the net utility plant of the Electric System unless 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: (i) an amount that will be in the same proportion to the net principal amount of Parity Bonds then outstanding (defined as the total principal amount of such Bonds outstanding less the amount of cash and investments in the Principal Account and Bond Retirement Account in the Bond Fund) that the revenues attributable to the part of the Electric System sold or disposed of for the 12 preceding months bears to the total revenues for such period; or (ii) an amount that 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 Electric System sold or disposed of bears to the book value of the entire Electric

System immediately prior to such sale or disposition. No sale of any part of the Electric System, valued in excess of 10% of the book value of the physical assets of the Electric System shall be made unless in the opinion of an Engineer, based on financial statements of the Electric System for the most recent Fiscal Year available, such sale would prevent the City from meeting the requirements of the rate covenants in the Bond Ordinance.

The City may sell or otherwise dispose of any part of the Electric System which shall have become unserviceable, inadequate, obsolete or unfit to be used in the operation of the Electric System, or no longer necessary, material to or useful in such operation.

The proceeds of sale of any part of the Electric System shall be deposited in the Revenue Fund.

Insurance. The City will either self-insure in such manner and to such extent as the City shall determine to be necessary and appropriate or, as needed, and to the extent insurance coverage is available at reasonable cost with responsible insurers, keep or cause to be kept, the Electric System and the operation thereof insured, with policies payable to the City, against the risks of direct physical loss, damage to or destruction of the Electric System, or any part thereof, and against accidents, casualties or negligence, including liability insurance and employer's liability, at least to the extent that similar insurance is usually carried by utilities operating like properties.

In the event of any loss or damage, the City will promptly repair or replace the damaged portion of the insured property and apply the proceeds of any insurance policy for that purpose; or in the event the City should determine not to repair or reconstruct such damaged portion of the properties of the Electric System, the proceeds of such insurance shall be paid into the Reserve Account to the extent that such transfer shall be necessary to make up any deficiency in said Reserve Account and the balance, if any, shall at the option of the City, be used either for repairs, renewals, replacements, or capital additions to the Electric System or for the purchase, payment, or redemption of Parity Bonds.

Condemnation. In the event of any loss or damage to the properties of the Electric System by reason of condemnation, the City will (i) with respect to each such loss, promptly replace, repair and reconstruct to the extent necessary to the proper conduct of the operations of the Electric System the condemned portion thereof and shall apply the proceeds of any condemnation award for that purpose to the extent required therefor, and (ii) if the City shall not use the entire proceeds of such condemnation award to repair, replace or reconstruct such lost or damaged property, such award not so used shall be paid into the Revenue Fund.

Books of Account. The City will keep proper books of account in accordance with the rules and regulations prescribed by the State Auditor's office of the State, or other State department or agency succeeding to such duties of the State Auditor's office, and if no such rules or regulations are prescribed, then in substantial accordance with the uniform system of accounts prescribed by the Federal Energy Regulatory Commission or other federal agency having jurisdiction over electric public utility companies owning and operating properties similar to the Electric System, whether or not the City is at the time required by law to use such system of accounts. The City shall cause its books of account to be audited annually by the State Auditor's office or other State department or agency as may be authorized and directed by law to make such audits, or if such an audit shall not be made for 12 months after the close of any Fiscal Year of the City, by Certified Public Accountants. In keeping said books of account, the City shall accrue depreciation monthly thereon on its depreciable properties in accordance with the accounting practice prescribed by the public departments or agencies above. The City will furnish to any owner of Parity Bonds upon a written request therefor copies of the balance sheet and statement of income and retained earnings showing in reasonable detail the financial condition of the Electric System as of the close of each Fiscal Year, and the income and expenses of such year, including the amounts paid into the Revenue Fund, the Bond Fund, and in any and all special funds created or continued pursuant to the provisions of the Bond Ordinance, and the amounts expended for maintenance, renewals, replacements, and gross capital additions to the Electric System.

No Free Service. The City shall not furnish or supply or permit the furnishing or supplying of any commodity, service or facility furnished by or in connection with the operation of the Electric System free of charge to any person, firm or corporation, public or private, and the City will maintain and enforce reasonable procedures for the payment of all accounts owing to the City and delinquent, by discontinuing service or by filing suits, actions or proceedings, or by both discontinuance of service and filing suit.

Additions and Improvements. The City shall not expend any money in the Revenue Fund or the proceeds of Parity Bonds or other obligations for any renewals, replacements, extensions, betterments and improvements to the Electric System that are not economically sound and that will not properly and advantageously contribute to the conduct of the business of the Electric System in an efficient and economical manner or that are not mandated by law or regulation. The foregoing shall not preclude the City from paying any legal or contractual obligations.

Punctual Payment of Bond Principal and Interest. The City shall duly and punctually pay or cause to be paid, but only from Revenues and other money pledged therefor, the principal of, premium, if any, and interest on every Parity Bond on the dates and at the places and in the manner provided in such Parity Bonds, and will faithfully do and perform and fully observe and keep any and all covenants, undertakings, stipulations and provisions contained in the Parity Bonds and in the Bond Ordinance.

Payment of Taxes, Assessments and Other Claims. The City shall from time to time pay and discharge, or cause to be paid and discharged, when the same shall become due, all taxes, assessments and other governmental charges, or payments in lieu thereof, lawfully imposed upon the Electric System or the Revenues, and all claims for labor and materials and supplies that, if not paid, might become a lien or charge upon the Electric System or upon the Revenues (prior to the lien thereon for the payment of the Parity Bonds), or that might in any way impair the security of the Parity Bonds, except taxes, assessments, charges or claims that the City shall in good faith contest by proper legal proceedings.

Compliance with Licenses. The City shall at all times comply with the terms and conditions of any permits or licenses for the Electric System, or any property or facilities constituting a part thereof, issued by any federal or state governmental agency or body having jurisdiction thereof and with the power to issue orders with respect thereto and enforce the same, and with any federal or state law or regulation applicable to the construction, operation, maintenance and repair of the Electric System. The City shall use its best efforts to obtain renewals of such permits or licenses or obtain new permits or licenses unless such renewals or new permits or licenses are not, in the judgment of the Board, in the best interests of the City.

Protection of Security. The City shall at all times, to the extent permitted by law, defend, preserve and protect the pledge of the Revenues and the rights of the owners of the Parity Bonds under the Bond Ordinance against all claims and demands of all persons whatsoever.

Tax Covenants. The City covenants that it shall not take any action, or fail to take any action, if any such action or failure to take action would adversely affect the exclusion from gross income of the interest on any Parity Bonds the interest on which is tax-exempt under Section 103 of the Code (the "Tax-Exempt Bonds"). The City shall not directly or indirectly use or permit the use of any proceeds of the Tax-Exempt Bonds in such a manner as would adversely affect the exclusion of interest on any Tax-Exempt Bonds from gross income under Section 103 of the Code. The City shall not directly or indirectly use or permit the use of any proceeds of any Tax-Exempt Bonds, or of any facilities financed thereby, or other funds of the City, or take or omit to take any action, that would cause any Tax-Exempt Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code. To that end, the City shall comply with all requirements of Section 148 of the Code and all regulations of the United States Department of the Treasury promulgated thereunder to the extent such requirements are, at the time, in effect and applicable to the Tax-Exempt Bonds.

Further Assurances. The City shall at any and all times, insofar as it may be authorized to do so by law, pass, make, do, execute, acknowledge and deliver all and every such further resolutions, acts, assignments, instruments and assurances as may be necessary or desirable for the better assuring, granting, pledging, assigning and confirming any and all of the rights, revenues, funds and other property granted, pledged or assigned by the Bond Ordinance to pay or secure the payment of the Parity Bonds, in the manner and to the extent provided in the Bond Ordinance.

Derivative Products

A City Payment under a Derivative Product may be on a parity with the Parity Bonds if the Derivative Product satisfies the requirements for additional Parity Bonds described in the Bond Ordinance, taking into consideration regularly scheduled City Payments and regularly scheduled Reciprocal Payments under the Derivative Product.

The following shall be conditions precedent to the use of any Derivative Product on a parity with any Parity Bonds under the Bond Ordinance:

- A. Opinion of Bond Counsel. The City shall obtain an opinion of Bond Counsel on the due authorization and execution of such Derivative Product, the validity and enforceability thereof and opining that the action proposed to be taken is authorized or permitted by the Bond Ordinance or the applicable provisions of any Parity Bond Ordinance and will not adversely affect the excludability for federal income tax purposes of the interest on any tax-exempt outstanding Parity Bonds.
- B. Supplemental Ordinance to Govern Derivative Products. Prior to entering into a Derivative Product, the City must adopt a Supplemental Ordinance which shall:
 - (i) set forth the manner in which the City Payments and Reciprocal Payments are to be calculated and a schedule of Derivative Payment Dates;
 - (ii) establish general provisions for the rights of providers of Derivative Products; and
 - (iii) set forth such other matters as the City deems necessary or desirable in connection with the management of Derivative Products as are not clearly inconsistent with the provisions of the Bond Ordinance.

If the City enters into a Derivative Product on a parity with the Parity Bonds, City Payments shall be made from the Interest Account and Annual Debt Service shall include any regularly scheduled City Payments adjusted by any regularly scheduled Reciprocal Payments during a Fiscal Year. Unscheduled payments, such as termination payments, may not be entered into on a parity with the Parity Bonds.

Nothing in the Bond Ordinance precludes the City from entering into Derivative Products with a claim on the Revenues junior to that of the Parity Bonds. Furthermore, nothing in the Bond Ordinance precludes the City from entering into obligations on a parity with the Parity Bonds in connection with the use of derivative products or similar instruments if the City obtains an opinion of Bond Counsel that the obligations or products the City is issuing or entering into are consistent with the provisions of the Bond Ordinance for the issuance of Future Parity Bonds.

Defaults and Remedies

The following shall constitute “Events of Default” under the Bond Ordinance:

- 1. If default shall be made in the due and punctual payment of the principal of and premium, if any, on any of the Parity Bonds, either at maturity or by proceedings for redemption or otherwise;
- 2. If default shall be made in the due and punctual payment of any installment of interest on any Parity Bond;
- 3. If the City shall fail to purchase or redeem Term Bonds in an aggregate principal amount at least equal to the Sinking Fund Requirement for the applicable Fiscal Year; or
- 4. If the City shall default in the observance and performance of any other of the covenants, conditions and agreements on the part of the City contained in the Bond Ordinance or any covenants, conditions, or agreements contained in any ordinance of the City authorizing Future Parity Bonds and such default or defaults shall have continued for a period of 90 days after the City shall have received from the Bondowners’ Trustee or from the owners of not less than 20% in principal amount of the Parity Bonds outstanding a written notice specifying and demanding the cure of such default; provided if the default in the observance and performance of any of the covenants, conditions and agreements is one that cannot be completely remedied within 90 days after written notice, it shall not be an Event of Default as long as the City has taken active steps within the 90 days after written notice to remedy the default and is diligently pursuing such remedy.

Suits at Law or in Equity

The Bondowners' Trustee may upon the happening of an Event of Default, and during the continuance thereof, take such steps and institute such suits, actions, or other proceedings in its own name, or as trustee, all as it may deem appropriate for the protection and enforcement of the rights of bondowners to collect any amounts due and owing the City, or to obtain other appropriate relief, and may enforce the specific performance of any covenant, agreement or condition contained in the Bond Ordinance, or in any of the Parity Bonds.

Any action, suit, or other proceeding instituted by the Bondowners' Trustee under the Bond Ordinance shall be brought in its name as trustee for the bondowners and all such rights of action upon or under any of the Parity Bonds or the provisions of the Bond Ordinance may be enforced by the Bondowners' Trustee without the possession of any of the Parity Bonds, and without the production of the same at any trial or proceedings relative thereto except where otherwise required by law, and the respective holders of the Parity Bonds, by taking and holding the same, shall be conclusively deemed irrevocably to appoint the Bondowners' Trustee the true and lawful trustee of the respective owners of the Parity Bonds, with authority to institute any such action, suit, or proceeding; to receive as trustee and deposit in trust any sums becoming distributable on account of the Parity Bonds; to execute any paper or documents for the receipt of such money, and to do all acts with respect thereto that the bond owner himself might have done in person. Nothing contained in the Bond Ordinance shall be deemed to authorize or empower the Bondowners' Trustee to consent to accept or adopt, on behalf of any holder of the Parity Bonds, any plan or reorganization or adjustment affecting the Parity Bonds of the City or any right of any holder thereof, or to authorize or empower the Bondowners' Trustee to vote the claims of the holders thereof in any receivership, insolvency, liquidation, bankruptcy, reorganization, or other proceeding to which the City shall be a party.

Suits by Individual Bondowners

No owner of any one or more of the Parity Bond shall have any right to institute any action, suit or proceeding at law or in equity for the enforcement of same, unless an Event of Default shall have happened and is continuing, and unless the Bondowners' Trustee shall have failed or refused to act. In the event the Bondowners' Trustee has failed or refused to act, or with the consent of the Bondowners' Trustee, any remedy authorized in the Bond Ordinance to be exercised by the Bondowners' Trustee may be exercised individually by any a bond owner in his own name and on his own behalf or for the benefit of all bondowners; provided, however, that nothing in the Bond Ordinance or in any Parity Bonds shall affect or impair the obligation of the City, which is absolute and unconditional, to pay from Net Revenues the principal of and interest on the Parity Bonds to the respective holders thereof at the respective due dates therein specified, or affect or impair the right of action, which is absolute and unconditional, of such holders to enforce such payment.

Amendments to Bond Ordinance

Amendments without Consent of Bondowners. The City may adopt without the consent of the owners of any Parity Bonds an ordinance or ordinances or any Supplemental Ordinance for any one or more of the following purposes: (a) to provide for the issuance of Future Parity Bonds and to prescribe the terms and conditions pursuant to which such bonds may be issued, paid or redeemed; (b) to add additional covenants and agreements of the City for the purpose of further securing the payment of Parity Bonds provided such additional covenants and agreements are not contrary to or inconsistent with the covenants and agreements of the City contained in the Bond Ordinance or any Supplemental Ordinance; (c) to prescribe further limitations and restrictions upon the City's ability to issue bonds and incur indebtedness payable from the Revenues, provided that such further limitations and restrictions are not contrary to or inconsistent with those heretofore in effect; (d) to surrender any right, power or privilege reserved to or conferred upon the City by the terms of the Bond Ordinance; (e) to confirm as further assurance any pledge under, and the subjection to any lien, claim or pledge created or to be created by, the provisions of the Bond Ordinance of the Revenues or of any other money, securities or funds; (f) to cure any ambiguity or defect or inconsistent provision of the Bond Ordinance or any Supplemental Ordinance or to insert such provisions clarifying matters or questions arising under the Bond Ordinance or any Supplemental Ordinance as are necessary or desirable in the event any such modifications are not contrary to or inconsistent with the Bond Ordinance or any Parity Bond Ordinance as theretofore in effect; and (g) to add such provisions as the City Council, with advice of Bond Counsel, deems necessary to preserve the tax-exempt status of the Parity Bonds.

Amendments with Consent of Bondowners. With the consent of the owners of not less than 51% in aggregate principal amount of the Parity Bonds at the time outstanding, the Council may pass an ordinance or ordinances supplemental to the Bond Ordinance or to any Future Parity Bond Ordinance for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Bond Ordinance or of any Future Parity Bond Ordinance, but no such Supplemental Ordinance shall: (a) extend the fixed maturity of any Parity Bonds or the time of payment of interest thereon from the established due date, or reduce the rate of interest thereon or the amount of the principal thereof, or reduce any premium payable on the redemption thereof, or accelerate any redemption provision, without the written consent of the owner of each Parity Bond so affected; (b) reduce the aforesaid percentage of bondowners required to approve any such Supplemental Ordinance, without the written consent of the owners of all of the Parity Bonds then outstanding; (c) give to any Parity Bond any preference over any other Parity Bond; or (d) authorize the creation of any pledge prior to or, except as provided in the Bond Ordinance for the issuance of Future Parity Bonds, on a parity with the pledge afforded by the Bond Ordinance, without the consent of the owner of each such Parity Bond affected thereby. It shall not be necessary for bondowners to approve the particular form of any proposed Supplemental Ordinance, but it shall be sufficient if such consent shall approve the substance thereof.

Consent of Bond Owners and Opinions. Each Supplemental Ordinance enacted pursuant to the provisions above shall take effect only when and as provided in this section. A copy of such Supplemental Ordinance (or brief summary thereof or reference thereto in form approved by the Bondowners' Trustee), together with a request to Parity Bond owners for their consent thereto in form satisfactory to the Bondowners' Trustee, shall be sent by the Bondowners' Trustee to the Parity Bond owners, at the expense of the City, by first class mail, postage prepaid; provided, that a failure to mail such request shall not affect the validity of the Supplemental Ordinance when consented to as provided below. Such Supplemental Ordinance shall not be effective unless and until there shall have been filed with the Bondowners' Trustee the written consents of Parity Bond owners of the percentage of Bonds specified above. Any such consent shall be binding upon the Parity Bond owner giving such consent and upon any subsequent owner of such Parity Bonds and of any Parity Bonds issued in exchange therefor or in lieu thereof (whether or not such subsequent Parity Bond owner has notice thereof), unless such consent is revoked in writing by the Parity Bond owner giving such consent or a subsequent owner of such Parity Bonds by filing such revocation with the Bondowners' Trustee prior to the date the Bondowners' Trustee receives the required percentage of consents.

Bondowners' Trustee

Duties and Responsibilities. Prior to the occurrence of an Event of Default of which it has or is deemed to have notice under the Bond Ordinance, and after the curing or waiver of any Event of Default that may have occurred: (i) the Bondowners' Trustee undertakes to perform such duties and only such duties as are specifically set forth in the Bond Ordinance, and no implied covenants or obligations shall be read into the Bond Ordinance against the Bondowners' Trustee; and (ii) in the absence of bad faith on its part, the Bondowners' Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Bondowners' Trustee that conform to the requirements of the Bond Ordinance; but the Bondowners' Trustee is under a duty to examine such certificates and opinions to determine whether they conform to the requirements of the Bond Ordinance.

In case an Event of Default of which the Bondowners' Trustee has or is deemed to have notice has occurred and is continuing, the Bondowners' Trustee shall exercise such of the rights and powers vested in it by the Bond Ordinance, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use in the conduct of such person's own affairs.

No provision of the Bond Ordinance shall be construed to relieve the Bondowners' Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that: (i) this subsection shall not be construed to limit the effect of the first paragraph of this section; (ii) the Bondowners' Trustee is not liable for any error of judgment made in good faith by an authorized officer of the Bondowners' Trustee, unless it is proven that the Bondowners' Trustee was negligent in ascertaining the pertinent facts; (iii) the Bondowners' Trustee is not liable with respect to any action it takes or omits to be taken by it in good faith in accordance with the direction of the Parity Bond owners under any provision of the Bond Ordinance relating to the time, method and place of conducting any proceeding for any remedy available to the Bondowners' Trustee, or exercising any trust or power

conferred upon the Bondowners' Trustee under the Bond Ordinance; and (iv) no provision of the Bond Ordinance shall require the Bondowners' Trustee to expend or risk its own funds or otherwise incur any liability in the performance of any of its duties under the Bond Ordinance, or in the exercise of any of its rights or powers, if it has reasonable grounds for believing that the repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

Qualifications of the Bondowners' Trustee. There shall at all times be a Bondowners' Trustee under the Bond Ordinance which shall be a corporation or banking association organized and doing business under the laws of the United States of America or of any state, authorized under such laws to exercise corporate trust powers, which has a combined capital and surplus of at least \$100,000,000, or is an affiliate of a corporation or banking association meeting such capital and surplus requirement which guarantees the obligations and liabilities of the proposed Bondowners' Trustee, and which is subject to supervision or examination by federal or state banking authority. If such corporation or banking association publishes reports of condition at least annually, pursuant to law or the requirements of any supervising or examining authority above referred to, then for purposes of this section, the combined capital and surplus of such corporation or banking association shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time the Bondowners' Trustee shall cease to be eligible in accordance with the provisions of this section, it shall resign promptly in the manner and with the effect specified in the Bond Ordinance.

Resignation or Removal of the Bondowners' Trustee; Appointment of Successor Bondowners' Trustee. No resignation or removal of the Bondowners' Trustee and no appointment of a successor Bondowners' Trustee pursuant to the Bond Ordinance shall become effective until the acceptance of appointment by the successor Bondowners' Trustee under the Bond Ordinance.

The Bondowners' Trustee may resign at any time by giving written notice to the City. Upon receiving such notice of resignation, the City shall promptly appoint a successor Bondowners' Trustee by an instrument in writing. If an instrument of acceptance has not been delivered to the resigning Bondowners' Trustee within 30 days after the giving of such notice of resignation, the resigning Bondowners' Trustee or any owner of a Parity Bond then Outstanding may petition a court of competent jurisdiction for the appointment of a successor Bondowners' Trustee.

Prior to the occurrence and continuance of an Event of Default, or after the curing or waiver of any such Event of Default, the City or the owners of a majority in aggregate principal amount of the Outstanding Parity Bonds may remove the Bondowners' Trustee and shall appoint a successor Bondowners' Trustee. In the event there shall have occurred and be continuing an Event of Default, the owners of a majority in aggregate principal amount of the Outstanding Parity Bonds may remove the Bondowners' Trustee and shall appoint a successor Bondowners' Trustee. In each instance such removal and appointment shall be accomplished by an instrument or concurrent instruments in writing signed by the City or such Parity Bond owners, as the case may be, and delivered to the Bondowners' Trustee, the City and owners of the Parity Bonds.

If at any time: (i) the Bondowners' Trustee shall cease to be eligible and qualified under the Bond Ordinance and shall fail or refuse to resign after written request to do so by the City or the owner of any Parity Bond, or (ii) the Bondowners' Trustee shall become incapable of acting or shall be adjudged insolvent, or a receiver of the Bondowners' Trustee or its property shall be appointed, or any public officer shall take charge or control of the Bondowners' Trustee, its property or affairs for the purpose of rehabilitation, conservation or liquidation, then in either such case (A) the City may remove the Bondowners' Trustee and appoint a successor Bondowners' Trustee in accordance with the provisions of the Bond Ordinance; or (B) any owner of a Parity Bond then Outstanding may, on behalf of the owners of all Outstanding Parity Bonds, petition a court of competent jurisdiction for removal of the Bondowners' Trustee and appointment of a successor Bondowners' Trustee.

The City shall give written notice of each resignation or removal of the Bondowners' Trustee and each appointment of a successor Bondowners' Trustee to each owner of Parity Bonds then Outstanding as listed in the Bond Register. Each such notice shall include the name and address of the applicable corporate trust office of the successor Bondowners' Trustee.

Acceptance of Appointment by Successor Bondowners' Trustee. Every successor Bondowners' Trustee appointed under the Bond Ordinance shall execute, acknowledge and deliver to the City and the predecessor Bondowners'

Trustee an instrument accepting its appointment. The resignation or removal of the retiring Bondowners' Trustee shall thereupon become effective, and the successor Bondowners' Trustee shall, without further act, deed or conveyance, become vested with all the estates, properties, rights, powers and duties of the predecessor Bondowners' Trustee. Upon the request of the City or the successor Bondowners' Trustee, the predecessor Bondowners' Trustee shall execute and deliver an instrument transferring to the successor Bondowners' Trustee all the estates, properties, rights, powers and duties of the predecessor Bondowners' Trustee under the Bond Ordinance, shall duly assign, transfer, deliver and pay over to the successor Bondowners' Trustee all money and other property then held under the Bond Ordinance, subject, however, to the lien provided for in the Bond Ordinance, and shall deliver to the successor Bondowners' Trustee, all records maintained by the predecessor Bondowners' Trustee with respect to the Funds and the Parity Bonds and such records shall be proper books of record and accounts containing complete and correct entries. The successor Bondowners' Trustee shall promptly give written notice of its appointment to the owners of all Parity Bonds Outstanding in the manner prescribed in the Bond Ordinance, unless such notice has previously been given.

No successor Bondowners' Trustee shall accept appointment as provided in this section unless, as of the date of such acceptance, it is eligible and qualified under the provisions of the Bond Ordinance.

Merger, Succession or Consolidation of Bondowners' Trustee. Any corporation or association: (i) into which the Bondowners' Trustee is merged or with which it is consolidated; (ii) resulting from any merger or consolidation to which the Bondowners' Trustee is a party; or (iii) succeeding to all or substantially all of the corporate trust business of the Bondowners' Trustee, shall be the successor Bondowners' Trustee without the execution or filing of any document or the taking of any further action. Any such successor must nevertheless be eligible and qualified under the provisions of the Bond Ordinance.

Notices to Bond Owners; Waiver. Where the Bond Ordinance provides for notice to Parity Bond owners of any event, such notice shall be sufficiently given (unless otherwise expressly provided in the Bond Ordinance) if in writing and mailed, first-class postage prepaid, to each Parity Bond owner affected by each event, at such Parity Bond owner's address as it appears on the Bond Register, not later than the latest date, and not earlier than the earliest date, prescribed for the first giving of such notice. In any case where notice to Parity Bond owners is given by mail, neither the failure to mail such notice nor any defect in any notice so mailed to any particular Parity Bond owner shall affect the sufficiency of such notice with respect to other Parity Bond owners. Where the Bond Ordinance provides for notice in any manner, such notice may be waived in writing by the person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Parity Bond owners shall be filed with the Bondowners' Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

With respect to book-entry bonds, where the Bond Ordinance provides for notice to the Parity Bond owners of the existence of, or during the continuance of, any Event of Default, or at any time upon the written request of the City, the Bondowners' Trustee, at the expense of the City, shall: (i) establish a record date for determination of the persons entitled to receive such notice; (ii) request a securities position listing from the securities depository showing the participants holding positions in the book-entry bonds affected by such notice as of the record date for such notice; (iii) mail, first class postage prepaid, copies of the notice as provided above to each participant identified in the securities position listing as holding a position in the book-entry bonds as of the record date for the notice, to each nationally recognized municipal securities information repository and state information depository for the State, if any, and to any person identified to the Bondowners' Trustee as a non-objecting Beneficial Owner pursuant to the immediately following clause; (iv) request that the participant retransmit the notice to all persons for which it served as nominee on the record date, including non-objecting Beneficial Owners, or retransmit the notice to objecting Beneficial Owners and provide a listing of non-objecting Beneficial Owners for whom the participant served as nominee on the record date to the Bondowners' Trustee, (v) provide on behalf of the City and not as its agent, an undertaking of the City to pay to any participant or other nominee (other than the securities depository) the reasonable costs of transmitting the notice to persons for whom the participant acts as nominee; and (vi) provide as many copies of the notice as may be requested by any nominee owner of the Parity Bonds. Any default in performance of the duties required by this subsection shall not affect the sufficiency of notice to the Parity Bond owners given in accordance with the provisions of the Bond Ordinance, or the validity of any action taken under the Bond Ordinance in reliance on such notice to Parity Bond owners.

Where the Bond Ordinance provides for notice to the Parity Bond owners of any event, the form of the notice shall prominently include a title block, separate from the body of the notice, which shall include the following information: (i) the complete title of the Parity Bonds; (ii) the CUSIP number of each affected Parity Bond; (iii) the record date for the notice; and (iv) a summary of the notice.

Any notice required or permitted by the Bond Ordinance to be given to the securities depository shall be given to it in the manner provided by this section for giving notice to Parity Bond owners, and also shall be given in the format requested by the securities depository to such address as may be specified by the securities depository in writing to the Bondowners' Trustee.

APPENDIX B

BOOK-ENTRY SYSTEM

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BOOK-ENTRY SYSTEM

The following information has been provided by the Depository Trust Company, New York, New York ("DTC"). The City makes no representation regarding the accuracy or completeness thereof, or for the absence of material changes in such information subsequent to the date hereof. Beneficial Owners (as hereinafter defined) should therefore confirm the following with DTC or the Participants (as hereinafter defined).

1. The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the securities (the "Securities"). The Securities will be issued as fully-registered securities 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 Security certificate will be issued for [each issue of] the Securities, [each] in the aggregate principal amount of such issue, and will be deposited with DTC. [If, however, the aggregate principal amount of [any] issue exceeds \$500 million, one certificate will be issued with respect to each \$500 million of principal amount, and an additional certificate will be issued with respect to any remaining principal amount of such issue.]
2. 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 3.5 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 book-entry 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 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.
3. Purchases of Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the Securities on DTC's records. The ownership interest of each actual purchaser of each Security ("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 Securities 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 Securities, except in the event that use of the book-entry system for the Securities is discontinued.
4. To facilitate subsequent transfers, all Securities 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 Securities 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 Securities; DTC's records reflect only the identity of the Direct Participants to whose accounts such Securities 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.

5. 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. Beneficial Owners of Securities may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Securities, such as redemptions, tenders, defaults, and proposed amendments to the Security documents. For example, Beneficial Owners of Securities may wish to ascertain that the nominee holding the Securities for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.
6. Redemption notices shall be sent to DTC. If less than all of the Securities within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.
7. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Securities unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to Issuer 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 Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).
8. Redemption proceeds, distributions, and dividend payments on the Securities 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 Issuer or Agent, 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, Agent, or Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of Issuer or Agent, 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 Direct and Indirect Participants.
9. A Beneficial Owner shall give notice to elect to have its Securities purchased or tendered, through its Participant, to [Tender/Remarketing] Agent, and shall effect delivery of such Securities by causing the Direct Participant to transfer the Participant's interest in the Securities, on DTC's records, to [Tender/Remarketing] Agent. The requirement for physical delivery of Securities in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Securities are transferred by Direct Participants on DTC's records and followed by a book-entry credit of tendered Securities to [Tender/Remarketing] Agent's DTC account.
10. DTC may discontinue providing its services as depository with respect to the Securities at any time by giving reasonable notice to Issuer or Agent. Under such circumstances, in the event that a successor depository is not obtained, Security certificates are required to be printed and delivered.
11. Issuer may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Security certificates will be printed and delivered to DTC.
12. The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that Issuer believes to be reliable, but Issuer takes no responsibility for the accuracy thereof.

APPENDIX C

FORM OF OPINION OF BOND COUNSEL

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September __, 2017

City of Tacoma, Washington

Re: City of Tacoma
Electric System Revenue Bonds, Series 2017
(Final Opinion)

Ladies and Gentlemen:

We have acted as bond counsel to the City of Tacoma, Washington (the “Issuer”) in connection with the issuance of \$70,575,000 aggregate principal amount of City of Tacoma Electric System Revenue Bonds, Series 2017 (the “Bonds”), issued pursuant to Ordinance No. 28146, passed by the City Council on April 30, 2013 (the “Master Bond Ordinance”), as supplemented and amended, including by Ordinance No. 28444, passed by the City Council on August 1, 2017 (the “Supplemental Ordinance” and together with the Master Bond Ordinance, as heretofore supplemented and amended, the “Bond Ordinance”). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Bond Ordinance.

In such connection, we have reviewed the Bond Ordinance, the Tax Certificate, dated the date hereof (the “Tax Certificate”), executed and delivered by the Issuer, an opinion of counsel to the Issuer, certificates of the Issuer, U.S. Bank National Association, as bond registrar, and others, and such other documents, opinions and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after the date hereof. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the date hereof. Accordingly, this letter speaks only as of its date and is not intended to, and may not, be relied upon or otherwise used in connection with any such actions, events or matters. We disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures presented to us (whether as originals or as copies) and the due and legal execution and delivery thereof by, and validity against, any parties other than the Issuer. We have assumed, without undertaking to verify, the accuracy of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinions, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Bond Ordinance and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the Bonds to be included in gross income for federal income tax purposes. We call attention to the fact that the rights and obligations under the Bonds, the Bond Ordinance and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership, reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors’ rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against municipal corporations in the State of Washington. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute a penalty), right of set-off,

City of Tacoma, Washington
September __, 2017
Page 2

arbitration, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents, nor do we express any opinion with respect to the state or quality of title to or interest in any of the assets described in or as subject to the lien of the Bond Ordinance or the accuracy or sufficiency of the description contained therein of, or the remedies available to enforce liens on, any such assets. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Official Statement or other offering material relating to the Bonds and express no opinion with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The Bonds constitute the valid and binding limited obligations of the Issuer.
2. The Bond Ordinance has been duly enacted by, and constitutes the valid and binding obligation of, the Issuer. The Bond Ordinance creates a valid pledge, to secure the payment of the principal of, premium, if any, and interest on the Bonds, of the proceeds of the sale of the Bonds to the extent held in funds established by the Master Bond Ordinance, the Net Revenues of the Electric System, and the money and investments, if any, credited to the Revenue Fund and the Bond Fund, and the income therefrom, subject to the provisions of the Master Bond Ordinance restricting or permitting the application thereof for the purposes and on the terms and conditions set forth in the Master Bond Ordinance.
3. Interest on the Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986. Interest on the Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although we observe that it is included in adjusted current earnings when calculating corporate alternative minimum taxable income. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the Bonds.

Faithfully yours,

ORRICK, HERRINGTON & SUTCLIFFE LLP

per

APPENDIX D

2015 AND 2016 AUDITED FINANCIAL STATEMENTS

ANNUAL

TACOMA POWER

2016

**FINANCIAL
REPORT**



Public Utility Board

MARK PATTERSON

Chair

MONIQUE TRUDNOWSKI

Vice-Chair

WOODROW JONES

Secretary

KAREN LARKIN

Member

BRYAN FLINT

Member

WILLIAM A. GAINES

Director of Utilities/CEO

CHRIS ROBINSON

Power Superintendent/COO

ANDREW CHERULLO

Finance Director

DEPARTMENT OF PUBLIC UTILITIES

CITY OF TACOMA

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES

TACOMA POWER

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FINANCIAL DATA

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REPORT OF INDEPENDENT AUDITORS

The Chair and Members of the Public Utility Board
City of Tacoma, Washington Department of Public Utilities, Power Division
Tacoma, Washington

Report on the Financial Statements

We have audited the accompanying financial statements of City of Tacoma, Washington Department of Public Utilities, Power Division (the Division), which comprise the statements of net position as of December 31, 2016 and 2015, and the related statements of revenue, expenses, and changes in net position, and cash flows for the years then ended, and the related notes to the financial statements.

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.

Auditor's 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 audit 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 auditor's 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 entity'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 entity'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.

REPORT OF INDEPENDENT AUDITORS (continued)

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Division as of December 31, 2016 and 2015, and the results of its operations and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the accompanying management's discussion and analysis on pages 5 through 13, schedule of proportionate share of net pension liability, and schedule of the city of Tacoma's contributions employer contributions on page 46 be presented to supplement the basic 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 taken as a whole. The statistical data presented on pages 47 through 64, and the superintendent's report presented on pages 65 through 82 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 basic financial statements, and, accordingly, we express no opinion on it.



Tacoma, Washington
April 19, 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following discussion and analysis of Tacoma Power's financial performance provides an overview of the financial activities for the years ended December 31, 2016 and 2015. This discussion and analysis is designed to assist the reader in focusing on the significant financial issues, provide an overview of the Utility's financial activities, and identify changes in the Utility's financial position. We encourage readers to consider the information presented here in conjunction with the financial statements and notes taken as a whole.

The management of the Finance Department of the City of Tacoma is responsible for preparing the accompanying financial statements and for their integrity. The statements were prepared in accordance with generally accepted accounting principles (GAAP) in the United States of America applied on a consistent basis and include amounts that are based on management's best estimates and judgment.

The basic financial statements, presented on a comparative basis for the years ended December 31, 2016 and 2015, include the Statements of Net Position, Statements of Revenues, Expenses and Changes in Net Position and Statements of Cash Flows. The Statements of Net Position present information on all of the Utility's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference being reported as net position. 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 provide information on cash receipts and disbursements during the year and report changes in cash resulting from operating, non-capital financing, capital and related financing, and investing activities.

The Notes to Financial Statements provide additional disclosures that are essential to a full understanding of the data provided in the financial statements. They are an integral part of the Utility's presentation of financial position, results of operations and changes in cash flows.

The Division adopted GASB Statement No. 72, *Fair Value Measurement and Application*, during fiscal year 2016. The statement provides guidance for determining fair value to certain investments and disclosures related to all fair value measurements, and requires accounting for investments at fair value (See note 3).

Financial Highlights

- Tacoma Power reported a decrease in total net position of \$3.9 million (150.6%) in 2016, compared to a decrease of \$1.6 million (106.6%) in 2015.
- Operating revenues increased \$8.0 million (1.9%) in 2016. Operating revenues in 2015 decreased \$30.6 million (6.9%).

- Utility Plant in Service increased \$143.1 million (7.7%) in 2016 and \$43.2 million (2.4%) in 2015.
- Construction work in progress decreased \$61.5 million (70.0%) in 2016 and increased \$33.2 million (60.5%) in 2015.

Overview of Financial Statements

Tacoma Power reported net operating income of \$30.4, \$34.1 and \$68.1 million in 2016, 2015 and 2014 respectively. Operating revenues increased \$8.0 million during 2016 and operating expenses increased \$11.6 million. For 2015, operating revenues decreased \$30.6 million and operating expenses increased \$3.4 million compared to 2014. Tacoma Power reported a decrease in net position of \$3.9 million in 2016 compared to a decrease of \$1.6 million in 2015 and an increase of \$23.7 million in 2014.

The following tables highlight Tacoma Power's past three years' operating results and megawatt-hours billed.

OPERATING RESULTS

(in thousands)

Category	2016	2015	2014	16/15 Increase (Decrease)	15/14 Increase (Decrease)
Operating Revenues	\$ 418,614	\$ 410,626	\$ 441,246	\$ 7,988	\$ (30,620)
Operating Expenses	388,220	376,576	373,173	11,644	3,403
Net Operating Income	30,394	34,050	68,073	(3,656)	(34,023)
Net Non-Operating Expenses	(12,716)	(20,036)	(25,138)	7,320	5,102
Capital Contributions	5,162	5,708	4,120	(546)	1,588
BABs and CREBs subsidies	3,684	3,676	3,668	8	8
Transfers Out	(30,462)	(24,969)	(26,999)	(5,493)	2,030
Change in Net Position (Net Income)	\$ (3,938)	\$ (1,571)	\$ 23,724	\$ (2,367)	\$ (25,295)

MEGAWATT-HOURS BILLED

(in thousands)

Type of Customer	2016	2015	2014	16/15 Increase (Decrease)	15/14 Increase (Decrease)
Residential	1,856	1,801	1,891	55	(90)
Commercial/General/Industrial	2,715	2,791	2,869	(76)	(78)
Wholesale	2,731	1,918	2,843	813	(925)
Total	7,302	6,510	7,603	792	(1093)

Net Position

Net position may serve over time as a useful indicator of an entity's financial position. The following analysis highlights net position for the last three years.

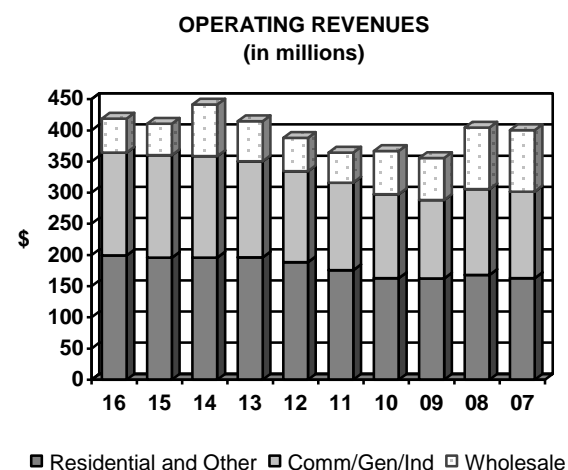
Statements of Net Position (in thousands)

<u>Description</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>16/15 Increase (Decrease)</u>	<u>15/14 Increase (Decrease)</u>
Net Utility and Non-Utility Plant	\$ 1,033,591	\$ 1,002,993	\$ 979,067	\$ 30,598	\$ 23,926
Current Assets, Other Assets and Special Funds	384,884	392,482	525,770	(7,598)	(133,288)
Total Assets	1,418,475	1,395,475	1,504,837	23,000	(109,362)
Deferred Outflows	39,469	10,977	8,026	28,492	2,951
Total Assets and Deferred Outflows	\$ 1,457,944	\$ 1,406,452	\$ 1,512,863	\$ 51,492	\$ (106,411)
Net Position:					
Net Investment in Capital					
Assets	\$ 581,629	\$ 594,626	\$ 499,659	\$ (12,997)	\$ 94,967
Restricted	15,225	21,028	34,666	(5,803)	(13,638)
Unrestricted	225,142	210,279	288,478	14,863	(78,199)
Total Net Position	821,996	825,933	822,803	(3,937)	3,130
Long-Term Debt	457,602	441,928	530,581	15,674	(88,653)
Other Liabilities	128,058	86,555	111,479	41,503	(24,924)
Total Liabilities	585,660	528,483	642,060	57,177	(113,577)
Deferred Inflows	50,288	52,036	48,000	(1,748)	4,036
Total Net Position, Liabilities and Deferred Inflows	\$ 1,457,944	\$ 1,406,452	\$ 1,512,863	\$ 51,492	\$ (106,411)

Revenues

2016 Compared to 2015

Operating revenues totaled \$418.6 million in 2016 compared to \$410.6 million in 2015, an increase of \$8.0 million (1.9%). Revenues from residential customers increased \$4.9 million (3.3%). Wholesale revenues increased \$4.1 million (8.2%) as compared to 2015. The majority of the increase was due to higher volume. Streamflows were up 116% over 2015, and were 113% of average for 2016. Generation was up 27%, while purchases were down, which left more to sell.



In 2016 residential sales accounted for 41.4% of electric revenues, commercial, general and industrial revenues accounted for 44.0% and wholesale power revenues accounted for 14.6%.

2015 Compared to 2014

Operating revenues totaled \$410.6 million in 2015 compared to \$441.2 million in 2014, a decrease of \$30.6 million (6.9%). Revenues from general customers increased \$1.3 million (1.2%). There was a rate increase of 3.8% effective 2015, which was partially offset by a decrease of 62,000 MWh billed. Wholesale revenues in 2015 decreased \$32.4 million as compared to 2014. Streamflows in 2015 were 79% of 2014 streamflows, resulting in lower generation and therefore lower sales.

In 2015 residential sales accounted for 41.4% of electric revenues, commercial, general, and industrial revenues accounted for 44.8% and wholesale power revenues accounted for 13.8%.

Expenses

2016 Compared to 2015

Total operating expenses increased \$11.6 million or 3.1% compared to 2015.

GASB 68, *Accounting and Financial Reporting for Pensions*, resulted in an increase in expense of \$10.0 million in 2016. This expense was allocated across the Power sections as follows: Admin & General \$2.9 million, Distribution \$2.9 million, Maintenance \$1.4 million, Generation \$1.0 million, Telecommunications \$0.8 million, Other \$0.7 million, and Transmission \$0.4 million.

Purchased power increased \$0.5 million (0.4%). The increase was primarily due to increased contract costs and renewable energy credits purchased offset by increased credits and decreased purchased power.

Transmission expense increased \$6.1 million (28.0%) and distribution expense increased \$10.3 million (101.5%). In 2015 Tacoma Power conducted a review of expenses and determined that a large amount of costs that were assigned to administration and general expense should be reclassified to non-administrative groups. The increases in transmission and distribution expenses are primarily due to reclassifying these expenses effective January 1, 2016.

Generation expense increased \$5.1 million (35.7%), maintenance expense increased \$4.6 million (16.7%) and other production expenses increased \$3.7 million (24.3%) primarily due to the reclassification of expenses previously mentioned.

Administration and general expenses decreased \$17.5 million (29.9%) primarily due to the reclassification of expenses previously mentioned.

2015 Compared to 2014

Total operating expenses increased \$3.4 million or 0.9% compared to 2014.

Purchased power increased \$4.9 million (4.1%). Bonneville Power Administration (BPA) purchases increased \$8.1 million. The Slice and Block portions of the BPA contract increased \$3.1 million and credits for the Energy Conservation Agreement (ECA) decreased \$5.0 million. Purchases from Priest Rapids increased \$1.6 million. Part of the contract includes a credit for a portion of the proceeds of sale of the output from the project. Credits were less in 2015 than in 2014. Purchases from Grand Coulee Project Hydroelectric Authority increased \$0.3 million due increased operating costs that were passed on to Tacoma Power. Other portfolio purchases decreased \$5.5 million primarily due to lower volume. Temperatures for most of the year were higher than normal and streamflows were lower.

Telecommunications expense increased \$5.7 million primarily due to an updated cost allocation between Power and Click! Previously, allocated costs were approximately 75% Click! and 25% Power. The cost allocation has been updated to reflect shared costs of approximately 94% to Click! and 6% to Power. This change was effective January 1, 2015.

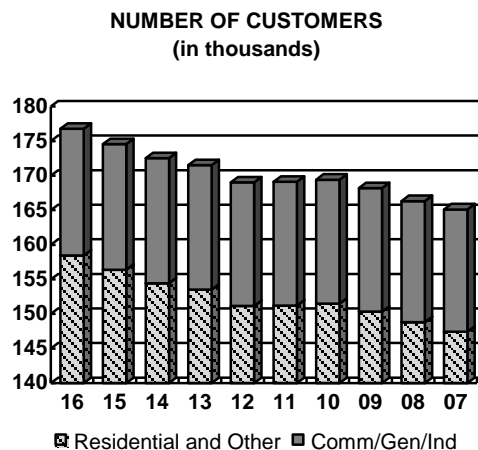
Maintenance expense decreased \$5.6 million (16.8%). Generation maintenance increased \$0.5 million primarily due to a mechanical overhaul at Wynoochee. Distribution maintenance decreased \$2.6 million and Transmission maintenance expense decreased \$3.5 million. This is mostly due to the updated cost allocation between Power and Click.

Distribution operations expense decreased \$3.6 million (26.4%) primarily due to the updated cost allocation between Power and Click! and the implementation of GASB 68, resulting in a \$1.3 million decrease in pension expense.

Generation operations expense increased \$1.9 million (15.7%). Natural Resources costs increased \$1.3 million due to testing and operations of new fish related facilities and to hiring new personnel. Contributions to the Fleet Replacement Fund increased \$0.7 million.

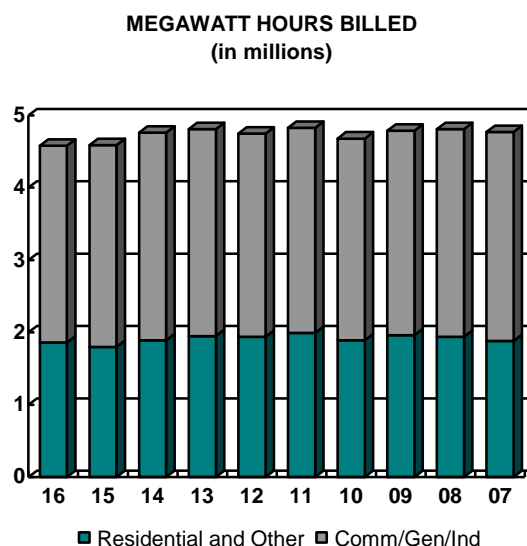
Customer Counts

Tacoma Power's overall customer growth during the past 10 years has been relatively steady averaging between less than 1% and 3% per year. The customer count for 2016 is 176,784 compared to 174,562 in 2015 and 172,531 in 2014.



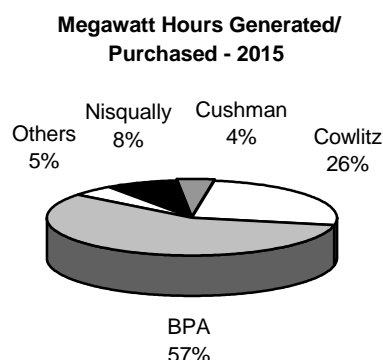
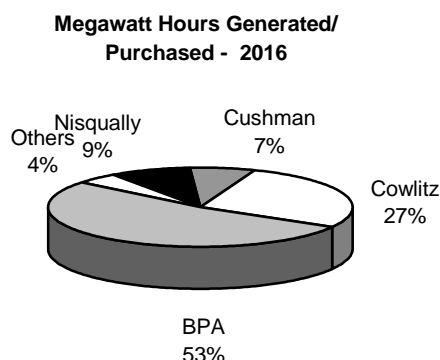
Megawatt-hours Billed

Megawatt-hours billed to residential and other customers increased 3.3% in 2016, while commercial / general / industrial billings decreased 2.5%. Wholesale power billed in 2016 was 2,731,076 megawatt-hours compared to 1,917,685 in 2015, an increase of 813,391 megawatt-hours or 42.4%. During 2016 hydro generation increased 735,503 megawatt-hours compared to the previous year. Streamflows into Tacoma Power's system were 113% of average in 2016 compared to 97% of average in 2015.



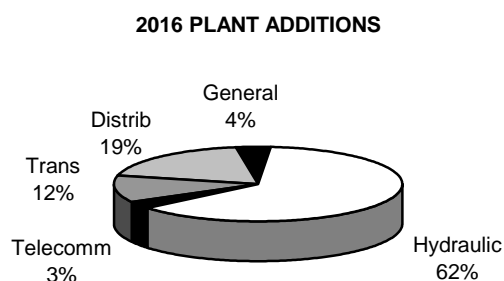
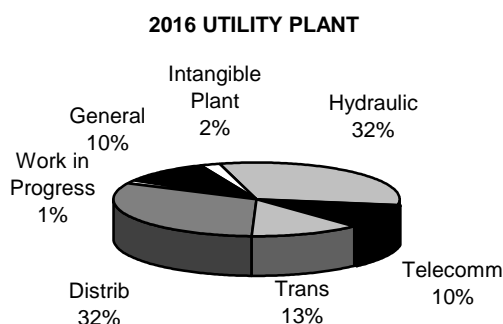
Sources of Power

Tacoma Power's total resources for power supply to serve its retail and wholesale customers for the last two years are shown in the following graphs.

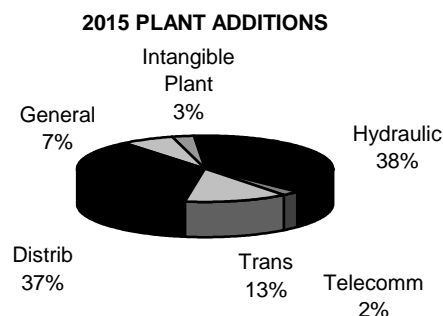
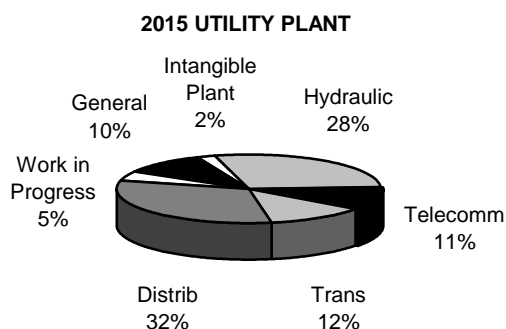


Utility Plant and Plant Additions

Tacoma Power has \$2.0 billion invested in its utility plant assets on a cost basis. The largest portion is for the generation (hydroelectric) business unit followed by the combined distribution and transmission business unit. The following graphs show the allocation of plant additions and total investment in plant.



Additions to Hydraulic plant in 2016 were \$89.2 million, which included the Cowlitz Falls Downstream Fish Passage and the Cushman License Implementation. Distribution plant additions were \$27.2 million, which included addition and replacement programs for new services, pole replacements, and road related additions and replacements. Transmission plant additions were \$16.5 million, which included system reliability improvements and substation additions and replacements.



Additions to Hydraulic plant in 2015 were \$18.2 million, which included the Cushman fish hatcheries, Wynoochee modernization, and a hydro exciter replacement program. Distribution plant additions were \$17.3 million, which included addition and replacement programs for new services, pole replacements, and road related additions and replacements. Transmission plant additions were \$6.1 million, which included system reliability improvements and substation additions and replacements.

The following table summarizes Tacoma Power's capital assets, net of accumulated depreciation, for the years ended December 31, 2016 through 2014.

Capital Assets, Net of Accumulated Depreciation
(in thousands)

<u>Net Utility Plant</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>16/15 Increase (Decrease)</u>	<u>15/14 Increase (Decrease)</u>
Intangible Plant	\$ 32,030	\$ 29,404	\$ 29,510	\$ 2,626	\$ (106)
Hydraulic Plant	441,163	359,992	349,472	81,171	10,520
Transmission Facilities	125,357	118,765	122,213	6,592	(3,448)
Distribution Facilities	290,766	284,826	288,242	5,940	(3,416)
General Plant	77,081	78,190	81,443	(1,109)	(3,253)
Telecommunications Plant	40,600	43,682	53,216	(3,082)	(9,534)
Construction Work in Progress	26,412	87,952	54,789	(61,540)	33,163
Total Net Utility Plant	<u>\$ 1,033,409</u>	<u>\$ 1,002,811</u>	<u>\$ 978,885</u>	<u>\$ 30,598</u>	<u>\$ 23,926</u>

Additional information on Tacoma Power's capital assets can be found in Note 4 of the financial statements and also in the supplementary Statistical Data.

Debt Administration

At December 31, 2016 Tacoma Power had outstanding revenue bonds of \$371.1 million, a decrease of \$14.7 million compared to 2015. No new revenue bonds were issued in 2016. On March 10, 2016 and August 16, 2016 Tacoma Power took draws of \$15 million respectively on the line of credit agreement with Wells Fargo bringing the total drawn to \$80.3 million. No draws have been taken on the 3-year line of credit agreement with Key Bank.

At December 31, 2015 Tacoma Power had outstanding revenue bonds of \$385.8 million, a decrease of \$154.3 million compared to 2014. In July 2015, Tacoma Power called \$122.1 million of Series 2005 B Electric System Revenue Bonds. No new revenue bonds were issued in 2015. On May 15, 2015 Tacoma Power entered into a 3-year line of credit agreement with Wells Fargo in the amount of \$100 million, of which draws were taken in the amount of \$50.3 million.

Also, on May 1, 2015 Tacoma Power entered into a 3-year line of credit agreement with Key Bank in the amount of \$50 million, of which no draws were taken.

All bonds are rated Aa3 by Moody's Investors Service, AA by Standard and Poor's and AA- by Fitch, Inc.

Additional information on Tacoma Power's long-term debt can be found in Note 5 of the financial statements.

Debt Service Coverage

Tacoma Power is required by its bond covenants to maintain a debt service coverage ratio of 1.25. In 2016, principal and interest were covered 2.94 times compared to 2.54 times in 2015 and 2.26 times in 2014.

Summary

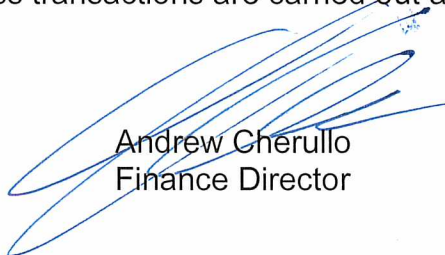
The management of the Finance Department of the City of Tacoma is responsible for preparing the accompanying financial statements and for their integrity. We prepared the financial statements according to GAAP in the United States of America, and they fairly portray Tacoma Power's financial position and operating results. The Notes to Financial Statements are an integral part of the basic financial statements and provide additional financial information.

The financial statements have been audited by Moss Adams LLP. We have made available to them all pertinent information necessary to complete the audit.

Management considers and takes appropriate action on audit recommendations. Management has established and maintains a system of controls which includes organizational, administrative and accounting processes. These controls provide reasonable assurance that records and reports are complete and reliable, that assets are used appropriately and that business transactions are carried out as authorized.



William A. Gaines
Director of Utilities/CEO



Andrew Cherullo
Finance Director

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CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER
STATEMENTS OF NET POSITION

ASSETS AND DEFERRED OUTFLOWS	DECEMBER 31,	
	2016	2015
UTILITY PLANT		
In Service, at Original Cost	\$2,004,204,782	\$1,861,142,589
Less - Accumulated Depreciation	(997,207,625)	(946,283,353)
Total	1,006,997,157	914,859,236
Construction Work in Progress	26,411,907	87,951,638
Net Utility Plant	1,033,409,064	1,002,810,874
NON-UTILITY PROPERTY	182,051	182,051
SPECIAL FUNDS		
Construction Funds	13,387,867	41,412,285
Debt Service Funds	22,180,111	24,549,803
Special Bond Reserve Funds	4,981,885	4,984,302
Wynoochee Reserve Funds	2,557,943	2,534,915
Total Special Funds	43,107,806	73,481,305
CURRENT ASSETS		
Operating Funds Cash and Equity in		
Pooled Investments	214,474,287	193,804,373
Accounts Receivable	30,021,427	30,667,987
(Net of Allowance for Doubtful Accounts of \$2,174,162 in 2016 and \$1,080,447 in 2015)		
Accrued Unbilled Revenue	28,587,295	29,427,771
Materials and Supplies	7,468,481	6,318,431
Interfund Receivables	2,226,220	1,484,313
Prepayments and Other	6,384,609	5,757,216
Total Current Assets	289,162,319	267,460,091
OTHER ASSETS		
Regulatory Asset - Conservation		
(Net of Amortization of \$25,121,809 in 2016 and \$18,629,468 in 2015)	50,071,005	46,293,923
Net Pension Asset	-	3,823,476
Conservation Loans Receivable	2,542,470	1,423,037
Total Other Assets	52,613,475	51,540,436
Total Assets	1,418,474,715	1,395,474,757
DEFERRED OUTFLOWS OF RESOURCES		
Deferred Outflow for Pensions.....	39,469,454	9,077,586
Unamortized Loss on Refunding Bonds	-	1,899,931
Total Deferred Outflows	39,469,454	10,977,517
TOTAL ASSETS AND DEFERRED OUTFLOWS.....	\$1,457,944,169	\$1,406,452,274

The accompanying notes are an integral part of these financial statements.

NET POSITION, LIABILITIES AND DEFERRED INFLOWS	DECEMBER 31,	
	2016	2015
NET POSITION		
Net Investment in Capital Assets	\$581,629,142	\$594,626,313
Restricted for:		
Wynoochee Reserve Funds	2,557,943	2,534,915
Debt Service Funds	12,667,207	14,669,173
Net Pension Asset	-	3,823,476
Unrestricted	225,141,401	210,279,420
Total Net Position	<u>821,995,693</u>	<u>825,933,297</u>
LONG-TERM DEBT		
Revenue Bonds	377,351,726	391,678,130
Revolving Line of Credit	80,250,000	50,250,000
Total Long-Term Debt	<u>457,601,726</u>	<u>441,928,130</u>
CURRENT LIABILITIES		
Current Portion of Long-Term Debt	12,730,000	14,735,000
Taxes and Other Payables	27,457,682	20,356,768
Purchased Power Payable	12,639,142	12,013,478
Salaries, Wages and Compensated Absences Payable ..	2,912,713	2,487,419
Interest Payable	9,512,905	9,880,630
Customers' Deposits	2,772,395	3,108,808
Interfund Payables	2,140,909	1,324,441
Total Current Liabilities	<u>70,165,746</u>	<u>63,906,544</u>
LONG-TERM LIABILITIES		
Long Term Accrued Compensated Absences	9,681,941	9,522,650
Net Pension Liability	34,177,293	-
Other Long Term Liabilities	14,033,787	13,125,264
Total Long Term Liabilities	<u>57,893,021</u>	<u>22,647,914</u>
Total Liabilities	<u>585,660,493</u>	<u>528,482,588</u>
DEFERRED INFLOWS OF RESOURCES		
Deferred Inflow for Pensions	2,287,983	4,036,389
Rate Stabilization	48,000,000	48,000,000
Total Deferred Inflows	<u>50,287,983</u>	<u>52,036,389</u>
TOTAL NET POSITION, LIABILITIES AND DEFERRED INFLOWS..	<u><u>\$1,457,944,169</u></u>	<u><u>\$1,406,452,274</u></u>

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CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	YEAR ENDED DECEMBER 31,	
	2016	2015
OPERATING REVENUES		
Sales of Electric Energy	\$374,249,290	\$366,263,055
Other Operating Revenue	17,690,192	17,106,442
Click! Network Operating Revenue	26,674,906	27,256,718
Total Operating Revenue	418,614,388	410,626,215
OPERATING EXPENSES		
Operations		
Purchased and Interchanged Power	126,835,928	126,315,151
Generation	19,270,201	14,197,116
Transmission	28,075,318	21,928,763
Distribution	20,477,257	10,163,887
Other	18,677,827	15,025,954
Maintenance	32,342,896	27,705,373
Telecommunications Expense	26,059,166	25,304,001
Administrative and General	41,051,795	58,560,459
Depreciation	55,702,297	57,381,578
Taxes	19,727,313	19,993,833
Total Operating Expenses	388,219,998	376,576,115
Net Operating Income	30,394,390	34,050,100
NON-OPERATING REVENUES (EXPENSES)		
Interest Income	2,405,144	1,796,071
Contribution to Family Need	(480,000)	(480,000)
Other	1,555,659	(1,923,329)
Interest on Long-Term Debt (Net of AFUDC).....	(15,893,207)	(19,225,735)
Loss on Defeasance or Refunding of Debt and		
Amortization of Debt Premium	(303,527)	(202,938)
Total Non-Operating Expenses.....	(12,715,931)	(20,035,931)
Net Income Before Capital Contributions		
and Transfers	17,678,459	14,014,169
Capital Contributions		
Cash	4,741,136	5,183,295
Donated Fixed Assets	421,334	524,713
BABs and CREBs Interest Subsidies	3,683,746	3,675,836
Transfers		
City of Tacoma Gross Earnings Tax	(30,460,098)	(25,481,823)
Transfers to/(from) Other Funds	(2,181)	512,401
CHANGE IN NET POSITION	(3,937,604)	(1,571,409)
TOTAL NET POSITION - BEGINNING OF YEAR	825,933,297	822,803,061
ACCUMULATED ADJUSTMENT FOR CHANGE IN		
ACCOUNTING PRINCIPLE	-	4,701,645
NET POSITION, BEGINNING OF YEAR, AS ADJUSTED	825,933,297	827,504,706
TOTAL NET POSITION - END OF YEAR	\$821,995,693	\$825,933,297

The accompanying notes are an integral part of these financial statements.

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

STATEMENTS OF CASH FLOWS

	YEAR TO DATE	
	December 31, 2016	December 31, 2015
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash from Customers	\$ 420,101,423	\$ 414,491,290
Cash Paid to Suppliers	(193,431,153)	(206,195,837)
Cash Paid to Employees	(111,575,956)	(106,153,040)
Taxes Paid	(19,155,309)	(19,876,260)
Conservation Loans	(1,119,433)	454,432
Net Cash from Operating Activities	94,819,572	82,720,585
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES		
Transfer Out for Gross Earnings Tax	(30,460,098)	(25,481,823)
Transfer to/from Other Funds	(2,181)	512,401
Transfer to Family Need Fund	(480,000)	(480,000)
Net Cash from Non-Capital Financing Activities..	(30,942,279)	(25,449,422)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Capital Expenditures	(82,126,418)	(77,374,831)
Proceeds from Issuance of Long-Term Debt	30,000,000	50,250,000
Debt Issuance Costs	-	(114,250)
Principal Payments on Long-Term Debt	(14,735,000)	(32,115,000)
Payments for Early Extinguishment of Debt	-	(122,135,000)
Interest Paid	(20,013,668)	(26,065,944)
BABs and CREBs Interest Subsidies	3,683,746	3,675,836
Contributions in Aid of Construction	4,741,136	5,183,295
Other Long-Term Liabilities	908,523	763,091
Net Cash from Capital and Related Financing Activities	(77,541,681)	(197,932,803)
CASH FLOWS FROM INVESTING ACTIVITIES		
Interest Received	2,405,144	1,796,071
Other Non-Op Revenues and Deductions	1,555,659	2,081,901
Net Cash from Investing Activities	3,960,803	3,877,972
Net Change in Cash and Equity in Pooled Investments	(9,703,585)	(136,783,668)
Cash and Equity in Pooled Investments at January 1..	267,285,678	404,069,346
Cash and Equity in Pooled Investments at December 31	<u>\$257,582,093</u>	<u>\$267,285,678</u>

The accompanying notes are an integral part of these financial statements.

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

STATEMENTS OF CASH FLOWS

	December 31, 2016	December 31, 2015
Reconciliation of Net Operating Income to Net Cash Provided by Operating Activities:		
Net Operating Income	\$30,394,390	\$34,050,100
Adjustments to reconcile net operating income to net cash provided by operating activities:		
Depreciation	55,702,297	57,381,578
Amortization of Regulatory Assets	6,492,341	5,566,247
Pension (Credits) Expenses	5,860,495	(4,163,028)
Cash provided from changes in operating assets and liabilities:		
Accounts Receivable and Accrued Unbilled Revenue..	1,487,036	3,865,072
Conservation Loans Receivable	(1,119,433)	454,432
Interfund Receivables	(741,907)	1,025,123
Materials and Supplies, and Other	(1,777,443)	(1,322,513)
Taxes and Other Payables	7,100,914	(871,453)
Purchased Power Payable	625,664	453,294
Salaries, Wages and Compensated Absences Payable..	425,294	(3,120,542)
Long Term Accrued Compensated Absences	159,291	97,628
Customers' Deposits	(336,413)	211,540
Regulatory Asset - Conservation	(10,269,422)	(9,260,924)
Interfund Payables	816,468	(1,645,969)
Total Adjustments	64,425,182	48,670,485
Net Cash from Operating Activities	<u>\$94,819,572</u>	<u>\$82,720,585</u>
 Reconciliation of Cash and Equity in Pooled Investments to Balance Sheet:		
Cash and Equity in Pooled Investments in Special Funds	\$43,107,806	\$73,481,305
Cash and Equity in Pooled Investments in Operating Funds	214,474,287	193,804,373
Cash and Equity in Pooled Investments at December 31	<u>\$257,582,093</u>	<u>\$267,285,678</u>

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**CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER**

**NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2016 AND 2015**

NOTE 1 OPERATIONS

OPERATIONS OF TACOMA POWER - The Light Division, doing business as Tacoma Power (Tacoma Power or the Division), is a division of the City of Tacoma, Washington (the City), Department of Public Utilities (the Department) and is included as an enterprise fund in the Comprehensive Annual Financial Report (CAFR) of the City. The Department consists of Tacoma Power, Tacoma Water and Tacoma Rail and is governed by a five-member Public Utility Board (the Board) appointed by the City Council. Certain matters relating to utility operations, such as system expansion, issuance of bonds and setting of utility rates and charges, are initiated and executed by the Board, but also require formal City Council approval. Tacoma Power owns and operates the City's electrical generation and distribution facilities and telecommunication infrastructure. Tacoma Power serves approximately of 176,784 retail customers and has 838 employees. Tacoma Power is organized into six business units: Generation, Power Management, Transmission and Distribution, Rates, Planning and Analysis, Click! Network, and Utility Technology Services.

GENERATION operates four hydroelectric generating projects (Cowlitz, Cushman, Nisqually and Wynoochee) and the associated recreational facilities, fish hatcheries and other project lands.

POWER MANAGEMENT manages the power supply portfolio, markets bulk and ancillary power supply services, schedules and dispatches division-owned generation and contract power supplies and performs power trading and risk management activities. Revenues and the cost of electric power purchases vary from year to year depending on the electric wholesale power market, which is affected by several factors including the availability of water for hydroelectric generation, marginal fuel prices and the demand for power in other areas of the country.

TRANSMISSION AND DISTRIBUTION plans, constructs, operates and maintains the transmission and distribution systems including substations, the underground network system, supervisory control and data acquisition (SCADA) systems, revenue metering facilities and all overhead transmission and distribution systems. Electricity use by retail customers varies from year to year primarily because of weather conditions, customer growth, the economy in Tacoma Power's service area, conservation efforts, appliance efficiency and other technology.

RATES, PLANNING AND ANALYSIS plans for and manages the retail rate process, financial planning, analysis and modeling, budget strategies, the capital program and risk management.

CLICK! NETWORK plans, constructs, operates and maintains a hybrid fiber coaxial (HFC) telecommunications network that supports the operation of Tacoma Power's electrical transmission and distribution system, provides retail cable TV and wholesale high-speed Internet services to residential and business customers, and data transport services to retail customers.

UTILITY TECHNOLOGY SERVICES (UTS) maintains communication networks, operational and informational technology systems, and related equipment and infrastructure to optimize utility operations and improve reliability and service quality. This includes a Project Management Office that establishes and leads Tacoma Public Utilities Information Systems project governance process and implements project portfolio management tools. UTS is responsible for all matters related to Tacoma Power's compliance with North American Electric Reliability Corporation (NERC) Reliability Standards, maintains overall responsibility for the NERC Reliability Standards and manages Tacoma Power's Internal Reliability and Compliance Project.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF ACCOUNTING AND PRESENTATION - The financial statements of the Division are prepared under the accrual basis of accounting in accordance with generally accepted accounting principles (GAAP) issued by the Governmental Accounting Standards Board (GASB) applicable to governmental entities that use proprietary fund accounting. The financial statements use a flow of economic resources measurement focus to determine financial position and the change in financial position. The accounting principles used are similar to those applicable to businesses in the private sector and are maintained on the accrual basis of accounting. Revenues are recognized when earned, and costs and expenses are recognized when incurred.

The Division follows the provisions set forth in regulatory accounting guidance. In general, regulatory accounting permits an entity with cost-based rates to defer certain costs or income that would otherwise be recognized when incurred to the extent that the rate-regulated entity is recovering or expects to recover such amounts in rates charged to its customers.

The Division accounts are maintained substantially in accordance with the uniform system of accounts prescribed by the Federal Energy Regulatory Commission and the Division of Audits of the State Auditor's Office.

CASH, SPECIAL FUNDS AND EQUITY IN POOLED INVESTMENTS - The Division's fund cash balances are a "deposit" with the City Treasurer's Tacoma Investment Pool (TIP) for the purpose of maximizing interest earnings through pooled investment activities. Cash and equity in pooled investments in the TIP are reported at fair value and changes in unrealized gains and losses are recorded in the Statements of Revenues, Expenses and Changes in Net Position. Interest earned on such pooled investments is allocated daily to the participating funds based on each fund's daily equity in the TIP.

The TIP operates like a demand deposit account in that all City departments, including the Division, have fund balances which are their equity in the TIP. Accordingly, balances are considered to be cash equivalents.

The City of Tacoma Investment Policy permits legal investments as authorized by state law including Certificates of Deposit with qualified public depositories (as defined in Chapter 39.58 of the Revised Code of Washington (RCW)), obligations of the U.S. Treasury, Government Sponsored Agencies and Instrumentalities, bonds issued by Washington State and its Local Governments with an A or better rating, general obligation bonds issue by any State or Local Government with an A or better rating, Bankers' Acceptances, Commercial Paper, Repurchase and Reverse Repurchase agreements, and the Washington State Local Government Investment Pool (LGIP). Daily liquidity requirement to meet the City's daily obligations is maintained by investing a portion of the City's Investment Pool in the LGIP and in certificates of deposit with East West Bank and Opus Bank.

The Division's equity in that portion of the City of Tacoma Investment Pool held in qualified public depositories at December 31, 2016 and 2015 is entirely covered by the Federal Deposit Insurance Corporation (FDIC) and the Washington State Public Deposit Protection Commission (WSPDPC).

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, longer term investments have greater exposure to changes in market interest rates. The City of Tacoma investment policy allows for authorized investments up to 60 months to maturity. One way the City manages its exposure to interest rate risk is by timing cash flows from maturities so that portions of the portfolio are maturing over time to provide cash flow and liquidity needed for operations.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Credit risk is generally the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Repurchase agreements and commercial paper are protected by the FDIC insurance up to \$250,000.

All deposits not covered by the FDIC are covered by the WSPDPC. The WSPDPC is a statutory authority established under RCW 39.58. It constitutes a fully insured or fully collateralized pool. The WA State Treasures LGIP is authorized by RCW 43.250. The LGIP is operated like a 2A7 fund and is collateralized by short-term legal investments.

SPECIAL FUNDS - In accordance with bond resolutions, agreements and laws, separate restricted funds have been established. These funds consist of cash and investments in pooled investments with restrictions externally imposed and legally enforceable, established by the City Council. Generally, restricted assets include bond construction, reserve and debt service funds and customer deposits.

RECEIVABLES AND UNBILLED REVENUES - Accounts receivable consist of amounts owed by private individuals and organizations for goods delivered or services rendered in the regular course of business operations. Receivables are shown net of allowances for doubtful accounts. The Division accrues an estimated amount for services that have been provided but not billed as of December 31st.

ALLOWANCE FOR DOUBTFUL ACCOUNTS - A reserve has been established for uncollectible accounts receivable based on historical write-off trends and knowledge of specific circumstances that indicate collection of an account may be unlikely. Generally accounts receivable are considered past due after 30 days.

INTERFUND TRANSACTIONS - Unsettled transactions between funds at year end are recorded as due to or due from other funds.

MATERIALS AND SUPPLIES - Materials and supplies consist primarily of items for maintenance and construction of Division assets and are valued at the lower of average cost or fair market value.

BOND PREMIUM AND LOSS ON REFUNDING - Bond premiums are amortized over the life of the bonds using a straight-line basis. Losses on refunding are amortized on a straight-line basis over the applicable bond period.

REGULATORY ASSET CONSERVATION - The Division has deferred conservation costs to be charged to future periods matching the time when the revenues and expenses are included in rates. Conservation assets represent installation of savings measures at the properties of its customers. The deferred balance is reduced as costs are recovered and are amortized as other operating expense on the statements of revenues, expenses and changes in net position.

UTILITY PLANT AND DEPRECIATION - Utility plant is stated at original cost, which includes both direct costs of construction or acquisition and indirect costs. The cost of maintenance and repairs is charged to expense as incurred, while the cost of replacements and betterments is capitalized. Assets are capitalized when costs exceed \$5,000 and the useful life exceeds one year.

Depreciation is recorded using a straight-line composite method based on FERC recommended economic asset lives from 2 to 62 years for related operating assets placed in service at the beginning of the year. The original cost of property together with removal cost, less salvage, is charged to accumulated depreciation at such time as property is retired and removed from service.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

The economic lives for plant in service are as follows:

Intangible Plant	2-37 years
Hydraulic Production Plant	62 years
Transmission Plant	29 years
Distribution Plant	27 years
Regional Transmission	5-27 years
General Plant	19 years
Telecommunications Plant	5-19 years

CONSTRUCTION WORK IN PROGRESS – Capitalizable costs incurred on projects which are not in service or ready for use are held in construction in progress. When the asset is ready for service, related costs are transferred to capital assets. Upon determining that a project will be abandoned, the related costs are charged to expense.

ASSET VALUATION - The Division periodically reviews the carrying amount of its long-lived assets for impairment. An asset is considered impaired when estimated future cash flows are less than the carrying amount of the asset. In the event the carrying amount of such asset is not deemed recoverable, the asset is adjusted to its estimated fair value. Fair value is generally determined based on discounted future cash flows.

ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION (AFUDC) - AFUDC represents the cost of borrowed funds used for the construction of utility plant, net of interest earned on unspent construction funds. Capitalized AFUDC is shown as part of the cost of utility plant and as a reduction of interest income and expense.

INTANGIBLE ASSETS - In accordance with GASB No. 51, "Accounting and Financial Reporting for Intangible Assets", land use rights such as easements and right-of-ways are recorded as intangible assets.

CAPITAL CONTRIBUTIONS - In accordance with GASB No. 33, "Accounting and Financial Reporting for Nonexchange Transactions", capital grants and capital contributions are recorded as capital contributions.

COMPENSATED ABSENCES - The City has two different policies for compensated absences. The City's original policy allows employees to accrue vacation based on the number of years worked with a maximum accrual equal to the amount earned in a two-year period. These employees also accrue one day of sick leave per month without any ceiling on the maximum accrued. The City implemented a new policy in 1998 allowing employees to earn PTO (personal time off) without distinction between vacation and sick leave. Employees who worked for the City prior to the change could choose to stay with the original policy or opt to convert to the new policy. The amount of PTO earned is based on years of service. The maximum accrual for PTO is 960 hours, and upon termination, employees are entitled to compensation for unused PTO at 100%. Vacation pay and PTO are recorded as a liability and expense in the year earned.

Employees in the original policy accumulate sick leave at the rate of one day per month with no maximum accumulation specified. Employees receive 25% of the value at retirement or 10% upon termination for any other reason. In the event of death, beneficiaries receive 25% of the value. Sick leave pay is recorded as a liability and an expense in the year earned.

The accrued liability is computed at 100% vacation and PTO while sick leave is accrued at 10%, which is considered the amount vested or 25% if the employee meets retirement criteria. Based on historical information, 10% of compensated absences are considered short term.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

RATE STABILIZATION ACCOUNT - The Division has established a rate stabilization account to reduce significant year-to-year variations in rates. Amounts deposited into the account are excluded from the statement of revenues, expenses and changes in net position in accordance with regulated operations. Revenue will be recognized in subsequent periods when it is withdrawn in accordance with rate decisions.

OPERATING REVENUE - Service rates are authorized by the Tacoma City Council. Revenues are recognized as earned and include an estimate of revenue earned but not billed to customers as of year-end. Utility revenues are derived primarily from the sale and transmission of electricity. Utility revenue from power sales and power transmission is recognized when power is delivered to and received by the customer.

NON-OPERATING REVENUES AND EXPENSES – These are items that do not qualify as operating defined above.

TAXES – The City charges the Division a Gross Earnings Tax at the rate of 7.5% on electrical revenues and broadband revenues and 8.0% on cable television revenues. On Tacoma cable television revenues only, the City also charges the Division a franchise fee of 5.0% and a Public, Educational and Government access television (P.E.G.) fee of 1.0%. In addition, the Division pays a 3.8734% public utility tax to the State on a certain portion of revenues identified as utility revenues. The Division also pays business and occupation tax to the State at the rate of 1.5% on certain other non-utility revenues including cable television revenues, as well as 0.484% for Wholesaling and Broadcasting and 0.471% for Retailing. The Division is exempt from payment of federal income tax.

NET POSITION – The Statement of Net Position reports all financial and capital resources. The difference between assets and liabilities is net position. There are three components of net position: net investment in capital assets, restricted and unrestricted.

Net investment in capital assets consists of capital assets, less accumulated depreciation, reduced by the outstanding balances of any bonds, loans or other borrowings, less outstanding construction funds, that are attributable to the acquisition, construction, or improvements of those assets.

Net position components are restricted when constraints placed on net position use are either (1) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or (2) imposed by law through constitutional provisions or enabling legislation.

Unrestricted net position components are those that are not “net investment in capital assets” or “restricted”.

ARBITRAGE REBATE REQUIREMENT – The Division is subject to the Internal Revenue Code (“IRC”), Section 148(f), related to its tax-exempt revenue bonds. The IRC requires that earnings on gross proceeds of any revenue bonds that are in excess of the amount prescribed will be surrendered to the Internal Revenue Service. As such, the Division would record such a rebate as a liability. The Division had no liability in the current or prior year.

SHARED SERVICES – The Division receives certain services from other departments and agencies of the City, including those normally considered to be general and administrative. The Division is charged for services received from other City departments and agencies.

USE OF ESTIMATES - The preparation of the financial statements in conformity with GAAP in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. The Division used estimates in determining reported unbilled revenues, allowance for doubtful accounts, accrued compensated absences, depreciation, Other Post Employment Benefits (OPEB), pension, self-insurance liabilities and other contingencies. Actual results may differ from these estimates.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

FAMILY NEED - The Family Need program is Tacoma Power's low income bill assistance program. Contributions are received from customers, employees and Tacoma Power. The Family Need program is administered by the Metropolitan Development Council and Pierce County Community Services which identify and certify the eligibility of Tacoma Power customers for the program.

SIGNIFICANT RISKS AND UNCERTAINTIES - The Division is subject to certain business risks that could have a material impact on future operations and financial performance.

These risks include, but are not limited to, water conditions, weather and natural disaster-related disruptions, collective bargaining labor disputes, fish and other endangered species act issues, Environmental Protection Agency regulations, federal government regulations or orders concerning the operation, maintenance and/or licensing of facilities.

NOTE 3 INVESTMENTS MEASURED AT FAIR VALUE

The City measures and records its investments within the fair value hierarchy established by generally accepted accounting principles.

The Hierarchy is based on the valuation inputs used to measure the fair value of the asset, where fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. These guidelines recognize a three-tiered fair value hierarchy, as follows:

- Level 1 - Level 1 inputs are quoted (adjusted) prices in active markets for identical assets or liabilities that the government can access at the measurement data. Observable markets include exchange markets, dealer markets, brokered markets and principal-to-principal markets.
- Level 2 - Level 2 inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These inputs are sourced from pricing vendors using models that are market-based and corroborated by observable market data including: quoted prices; nominal yield spreads; benchmark yield curves; and other corroborated inputs.
- Level 3 - Level 3 inputs are unobservable inputs for the asset or liability and should only be used when relevant Level 1 or Level 2 inputs are unavailable.

The fair value evaluations are provided by Interactive Data. Interactive Data utilizes evaluated pricing models that vary by asset class and incorporate available trade, bid and other market information and for structured securities, cash flow and, when available, loan performance data. Because many fixed income securities do not trade on a daily basis, Interactive Data's evaluated pricing applications apply available information as applicable through processes such as benchmark curves, benchmarking of like securities, sector groupings, and matrix pricing, to prepare evaluations. In addition, Interactive Data uses model processes, such as the Option Adjusted Spread model to assess interest rate impact and development payment scenarios. Their models and processes take into account market convention. For each asset class, a team of evaluators gathers information from market sources and integrates relevant credit information, perceived market movements and sector news into the evaluated pricing applications and models.

Source: Interactive Data "Summary of Inputs by Asset Class Fixed Income Evaluations, Fair Value Information Service and Valuations of Certain Other Instruments" dated January 2016.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Cash and cash equivalents include highly liquid investments including short-term investment funds. Cash and cash equivalents are valued at cost and, therefore, excluded from the fair value schedule.

Data regarding the City's investments, valued and categorized according to the above outlined levels, is below:

	As of 12/31/2016	Level 1	Level 2	Level 3
Debt Securities				
U.S. Treasury Securities	\$ 146,824,628	\$ -	\$ 146,824,628	\$ -
U.S. Agency Securities	544,579,831	-	544,579,831	-
Municipal Bonds	61,450,051	-	61,450,051	-
Total	<u>\$ 752,854,510</u>	<u>\$ -</u>	<u>\$ 752,854,510</u>	<u>\$ -</u>

	As of 12/31/2015	Level 1	Level 2	Level 3
Debt Securities				
U.S. Treasury Securities	\$ 108,647,159	\$ -	\$ 108,647,159	\$ -
U.S. Agency Securities	541,730,184	-	541,730,184	-
Municipal Bonds	119,200,942	-	119,200,942	-
Total	<u>\$ 769,578,285</u>	<u>\$ -</u>	<u>\$ 769,578,285</u>	<u>\$ -</u>

Tacoma Power's share of the City investments shown in the table above is 33.84% and 33.19% for 2016 and 2015.

NOTE 4 UTILITY PLANT - A summary of the balances and changes in utility plant for 2016 and 2015 follows:

	Balance December 31, 2015	Additions	Retirements	Transfers & Adjustments	Balance December 31, 2016
Intangible Plant	\$ 41,682,352	\$ 3,797,958	\$ (48,212)	\$ -	\$ 45,432,098
Hydraulic Production					
Plant	554,637,653	89,259,998	-	-	643,897,651
Transmission Plant	219,918,041	9,721,911	(259,570)	-	229,380,382
Distribution Plant	618,397,975	27,229,473	(3,189,896)	-	642,437,552
Regional Transmission	18,147,561	6,776,297	-	-	24,923,858
General Plant	200,160,423	5,391,442	-	-	205,551,865
Telecommunications					
Plant	<u>208,198,584</u>	<u>4,382,792</u>	<u>-</u>	<u>-</u>	<u>212,581,376</u>
Total Utility Plant in Service	1,861,142,589	146,559,871	(3,497,678)	-	2,004,204,782
Less Accumulated Depreciation	<u>946,283,353</u>	<u>55,702,297</u>	<u>(3,449,466)</u>	<u>(1,328,559)</u>	<u>997,207,625</u>
	914,859,236	90,857,574	(48,212)	1,328,559	1,006,997,157
Construction Work In Progress	<u>87,951,638</u>	<u>85,011,567</u>	<u>-</u>	<u>(146,551,298)</u>	<u>26,411,907</u>
Net Utility Plant	<u>\$ 1,002,810,874</u>	<u>\$ 175,869,141</u>	<u>\$ (48,212)</u>	<u>\$ (145,222,739)</u>	<u>\$ 1,033,409,064</u>

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

	Balance December 31, 2014	Additions	Retirements	Transfers & Adjustments	Balance December 31, 2015
Intangible Plant	\$ 40,584,864	\$ 1,287,650	\$ (190,162)	\$ -	\$ 41,682,352
Hydraulic Production Plant	536,424,903	18,212,750	-	-	554,637,653
Transmission Plant	215,039,287	5,495,463	(616,709)	-	219,918,041
Distribution Plant	604,029,355	17,270,360	(2,901,740)	-	618,397,975
Regional Transmission	17,537,662	609,899	-	-	18,147,561
General Plant	197,036,437	3,204,314	-	(80,328)	200,160,423
Telecommunications Plant	207,244,967	953,617	-	-	208,198,584
Total Utility Plant in Service	1,817,897,475	47,034,053	(3,708,611)	(80,328)	1,861,142,589
Less Accumulated Depreciation	893,801,525	57,381,578	(3,518,449)	(1,381,301)	946,283,353
	924,095,950	(10,347,525)	(190,162)	1,300,973	914,859,236
Construction Work In Progress	54,789,325	80,107,465	-	(46,945,152)	87,951,638
Net Utility Plant	<u>\$ 978,885,275</u>	<u>\$ 69,759,940</u>	<u>\$ (190,162)</u>	<u>\$ (45,644,179)</u>	<u>\$ 1,002,810,874</u>

Total Utility Plant in Service includes non-depreciable assets of \$75,780,466 for 2016 and \$75,310,858 for 2015.

The total amount of interest cost incurred and capitalized is \$3,752,735 for 2016 and \$3,407,633 for 2015.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

NOTE 5 LONG-TERM DEBT – Tacoma Power’s long-term debt is primarily for capital improvements. Long-term liability activity for the years ended December 31, 2016 and December 31, 2015 was as follows:

	Balance December 31, 2015	Additions	Reductions	Balance December 31, 2016	Due Within One Year
Revenue Bonds	\$ 385,800,000	\$ -	\$ (14,735,000)	\$ 371,065,000	\$ 12,730,000
Plus: Unamortized					
Premium	20,613,130	-	(1,596,404)	19,016,726	-
Net Revenue Bonds	406,413,130	-	(16,331,404)	390,081,726	12,730,000
Line of Credit	50,250,000	30,000,000	-	80,250,000	-
Total Long-Term					
Debt	<u>\$ 456,663,130</u>	<u>\$ 30,000,000</u>	<u>\$ (16,331,404)</u>	<u>\$ 470,331,726</u>	<u>\$ 12,730,000</u>

	Balance December 31, 2014	Additions	Reductions	Balance December 31, 2015	Due Within One Year
Revenue Bonds	\$ 540,050,000	\$ -	\$ (154,250,000)	\$ 385,800,000	\$ 14,735,000
Plus: Unamortized					
Premium	22,645,510	-	(2,032,380)	20,613,130	-
Net Revenue Bonds	562,695,510	-	(156,282,380)	406,413,130	14,735,000
Line of Credit	-	50,250,000	-	50,250,000	-
Total Long-Term					
Debt	<u>\$ 562,695,510</u>	<u>\$ 50,250,000</u>	<u>\$ (156,282,380)</u>	<u>\$ 456,663,130</u>	<u>\$ 14,735,000</u>

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Tacoma Power's long-term debt at December 31 consists of the following payable from revenues of Tacoma Power:

	<u>2016</u>	<u>2015</u>
2005A Revenue Bonds, with interest rates ranging from 3.5% to 4.3%, due in yearly installments of \$115,000 to \$13,275,000 paid in full in 2016. Original Issue: \$93,480,000	\$ -	\$ 130,000
2010B Revenue Bonds, with interest rates ranging from 5.791% to 5.966%, with a Build America Bond (BAB) rebate ranging from 32.45% to 32.62% of interest, due in yearly installments of \$27,310,000 to \$31,630,000 from 2031 to 2035. Original Issue: \$147,070,000 Current Portion: \$0	147,070,000	147,070,000
2010C Revenue Bonds, with an interest rate of 5.641%, with Clean Renewal Energy Bond rebate at 67% of interest, due in one payment of \$24,185,000 in 2027. Original Issue: \$24,185,000 Current Portion: \$0	24,185,000	24,185,000
2013A Refunding Bonds, with interest rates ranging from 4.0% to 5.0%, due in yearly installments of \$10,095,000 to \$29,165,000 through 2042. Original Issue: \$181,610,000 Current Portion: \$12,730,000	164,190,000	178,795,000
2013B Refunding Bonds, with interest rates ranging from 3.05% to 5.0%, due in yearly installments of \$3,795,000 to \$5,155,000 from 2022 through 2030. Original Issue: \$35,620,000 Current Portion: \$0	35,620,000	35,620,000
	<hr/> 371,065,000	<hr/> 385,800,000
Unamortized premium	19,016,726	20,613,130
Current Portion	<u>(12,730,000)</u>	<u>(14,735,000)</u>
Long-term Portion of Revenue Bond Debt	377,351,726	391,678,130
Revolving Line of Credit	<u>80,250,000</u>	<u>50,250,000</u>
Total Long Term Debt	<u><u>\$ 457,601,726</u></u>	<u><u>\$ 441,928,130</u></u>

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

In 2015, Tacoma Power entered into a \$100 million line-of-credit agreement with Wells Fargo for working capital. The line matures in May 2018, and each advance will bear interest at the London Interbank Offered Rate (LIBOR) of 1.64344% at December 31, 2016. Each advance is secured by Revenues as set forth in the Note Ordinance. The balance outstanding is \$80.3 million as of December 31, 2016.

Scheduled principal maturities on the bonds and interest payments are as follows:

	Principal	Interest
2017	\$ 12,730,000	\$ 18,707,560
2018	11,575,000	18,157,810
2019	10,095,000	17,698,935
2020	29,165,000	16,792,435
2021	11,970,000	15,839,060
2022-2026	20,885,000	75,475,070
2027-2031	66,230,000	66,152,269
2032-2036	130,750,000	37,344,302
2037-2041	63,355,000	9,659,100
2042	14,310,000	286,200
	\$ 371,065,000	\$ 276,112,740

Tacoma Power's revenue bonds are secured by the net revenue of Tacoma Power and all cash and investments held in the bond and construction funds. The bonds are also subject to certain financial and non-financial covenants. The Division was in compliance with all loan covenants at December 31, 2016.

As of December 31, 2016, the following outstanding bonds were considered defeased:

<u>Issue</u>	<u>Amount</u>
1964 Light & Power Bonds	\$ 1,235,000
1965 Light & Power Bonds	3,360,000
1967 Light & Power Bonds - Series A & B	2,825,000
1969 Light & Power Bonds	2,260,000
1979 Light & Power Bonds	5,475,000
2005 Electric System Revenue Bonds - Series A	230,000
2005 Electric System Revenue Bonds - Series B	27,460,000
2007 Electric System Revenue Refunding Bonds	14,540,000
	\$ 57,385,000

These refunded bonds constitute a contingent liability of Tacoma Power only to the extent that cash and investments presently in the control of the refunding trustees are not sufficient to meet debt service requirements, and are therefore excluded from the financial statements because the likelihood of additional funding requirements is considered remote.

NOTE 6 PURCHASED POWER – Tacoma Power purchased electric power and energy from BPA under a long-term contract that expires on September 30, 2028. The contract consists of a base rate per kWh and certain cost-recovery adjustment clauses can be invoked under particular circumstances.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

On December 1, 2008, the Board authorized the execution of a twenty-year Slice/Block Power Sales and Creditworthiness Agreement with BPA. The agreement allows Tacoma Power to purchase a Slice/Block power product from BPA which began October 1, 2011 and continues through September 30, 2028. In broad terms, the agreement requires Tacoma Power to purchase a firm amount (Block) and proportionate share (Slice) of power based on a number of criteria and calculations. This is a take or pay arrangement which allows Tacoma Power to remarket excess capacity. The related Creditworthiness Agreement provides for BPA to conduct a credit review of Tacoma Power. To determine if a letter of credit or cash deposit would be required, BPA completed this review and determined that as long as Tacoma Power's credit rating remains above BBB-, no Letter of Credit or cash deposit will be required.

The power received under this contract averaged approximately 433,427 and 419,422 kilowatts per hour for 2016 and 2015, respectively. Charges for the BPA purchased power were approximately \$114 million and \$112 million for 2016 and 2015, respectively, and are based on the total amount of energy delivered and the monthly peak power demand.

Tacoma Power entered into an Energy Conservation Agreement (ECA) with BPA in 2009. Under this agreement, funds are collected in wholesale power rates to support regional energy efficiency programs. As utilities implement conservation programs and activities, BPA reimburses these funds per program specifications. For the years 2016 and 2015, Tacoma Power recovered \$7,076,890 and \$763,356 respectively through the ECA.

Under fixed contracts with other power suppliers, Tacoma Power has agreed to purchase portions of the output of certain generating facilities. Although Tacoma Power has no investment in such facilities, these contracts require Tacoma Power to pay minimum amounts (which are based at least in part on the debt service requirements of the supplier) whether or not the facility is operating. The cost of power obtained under the contracts, including payments made when a facility is not operating, is included in operations expense in the Statements of Revenues, Expenses and Changes in Net Position.

Information for the year ended December 31, 2016 pertaining to these contracts is summarized as follows:

Tacoma Power's Current Share of	Grand Coulee Project Hydro Authority	Grant County PUD - Priest Rapids Project
Energy Output	253,625 mWh	26,975 mWh
Megawatt Capacity	-	5 mW
Operating Costs	\$ 2,227,828	\$80,802
Incentive Payments	\$ 3,538,658	-
R & R Repayment	\$ 399,836	-
Contract Expiration Date	5/9/2024	4/1/2052

On April 17, 2008, the FERC issued a new license to the Public Utility District No. 2 of Grant County (Grant PUD) for the continued operation of the Priest Rapids Hydroelectric Project which consists of the Priest Rapids Development and the Wanapum Development. The original license for the Priest Rapids Project was issued on November 4, 1955 and expired on October 31, 2005. Since then, the Project had operated under annual licenses. The renewed license issued by FERC allows Grant PUD a 44-year license for the continued operation of the Project. The term of Tacoma Power's contract with Grant PUD is for the term of the FERC license. Tacoma Power's purchase quantity and costs are tied to the actual costs of the Project.

Total expenses under the above contracts for the years 2016 and 2015 were \$6,412,705 and \$6,395,201, respectively, for Grand Coulee Project Hydro Authority, however, proceeds under the contract exceeded expenses in 2016 and 2015 for Grant County PUD - Priest Rapids resulting in a gain of \$80,802 and \$659,731, respectively.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

In addition, Tacoma Power is required to pay its proportionate share of the variable operating expenses of these projects.

Other Power Transactions - Other power transactions include purchases under short-term agreements and interchanges of secondary power between utilities in response to seasonal resource and demand variations. Fluctuations in annual precipitation levels and other weather conditions materially affect the energy output from Tacoma Power's hydroelectric facilities. Accordingly, the net interchange of secondary power in and out may vary significantly from year to year. Tacoma Power's trading activities are limited to purchasing power to meet native loads, optimizing the value of Tacoma Power's power supply portfolio and selling energy during times of surplus.

Tacoma Power records applicable energy contracts using accrual accounting and recognizes the revenue or expense at the time of contract performance, settlement or termination. As of December 31, 2016 Tacoma Power had forward sales contracts totaling \$28.7 million dollars extending out to September 2018 with a fair market value of \$28.7 million. These contracts meet the normal purchase normal sales scope exception for derivative reporting under GASB 53.

Tacoma Power's net power purchases or sales and interchanged activities are reflected in the Statements of Revenues, Expenses and Changes in Net Position.

A breakdown of the net interchange in kilowatt-hours is as follows:

<u>Interchange Summary</u>	<u>2016</u> (in kWh)	<u>2015</u> (in kWh)
Secondary Sales	(2,731,083,000)	(1,917,685,000)
Portfolio Purchases	263,105,000	293,059,000
Miscellaneous Exchanges	(1,533,000)	(1,441,000)
Other	<u>26,228,000</u>	<u>54,924,000</u>
Net Interchange	<u>(2,443,283,000)</u>	<u>(1,571,144,000)</u>

NOTE 7 FLEET SERVICES FUND - The Department of Public Utilities has established a Fleet Services Fund to perform scheduled maintenance, repair and replacement of Department vehicles and related equipment.

Tacoma Power pays the Fleet Services Fund for its use of the vehicles and equipment to cover fleet operating expenses. Payments made by Tacoma Power in 2016 and 2015 were \$6,733,591 and \$7,212,082, respectively.

Fleet Services' management makes an annual assessment of the capital replacement reserve balance for appropriate funding levels. It is the Fund's policy to maintain the Fund's maximum balance at a level that will provide adequate purchasing power for a three-year cycle. The solvency of the Replacement Fund allowed Fleet Services to return a portion of interest earned on fund investments for the year to their customers. In 2016 and 2015, Fleet Services returned 75% of the interest earned to Tacoma Power's replacement fund. The amount of the refund was \$106,192 and \$107,916 for 2016 and 2015, respectively, which was used to offset the corresponding year's fleet expenses.

NOTE 8 SELF-INSURANCE FUND - The Department of Public Utilities maintains a self-insurance program and insurance policies. The Department has established a Self-Insurance Fund to insure Tacoma Power and other divisions within the Department for certain losses arising from personal and property damage claims by third parties. The major risks to Tacoma Power are flooding, wind damage, chemical spills and earthquakes. Mitigating controls and emergency and business resumption plans are in place. To the extent damage or claims exceed insured values, rates may be impacted.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Tacoma Power is required to make payments to the Self-Insurance Fund to cover claims incurred by Tacoma Power and administrative expenses of the Fund. Tacoma Power's premium payments totaled \$900,000 in both 2016 and 2015 respectively. Assets in the Self-Insurance Fund total \$7.6 million which exceeds accrued and incurred but not reported liabilities. Equity in the Self-Insurance Fund is transferred to the appropriate operating divisions in accordance with GASB 10. Management believes Tacoma Power's investment in the Self-Insurance Fund is more than adequate to settle all its known or estimated claims.

The City purchased a \$15 million Fiduciary Liability Policy with a \$100,000 deductible that provides for wrongful acts arising out of the administration of the City's employee benefit programs and a Crime policy with a \$1 million limit and \$75,000 deductible for employee dishonesty and for fraudulent or dishonest act by employees against the City for loss of money, securities and property.

Other insurance policies presently in effect include coverage on the Department's buildings and fleet vehicles as well as general liability and public official's liability. The current insurance policies covering the buildings and fleet vehicles have deductibles or self-insured retentions of \$250,000 for buildings and property within buildings and \$10,000 per vehicle. There is a self-insured retention of \$1.5 million for general liability. The public official liability policy has a \$200,000 deductible. The Department's total liability limit is \$60 million any one occurrence and \$60 million annual aggregate.

The general government general liability and public official liability policies provide \$20 million of excess coverage with a \$3 million retention. The City has a policy to cover extraordinary worker's compensation claims with a statutory limit and a self-insured retention of \$1 million per occurrence and an additional \$250,000 for each 12 month policy period.

NOTE 9 TACOMA EMPLOYEES' RETIREMENT SYSTEM FUND (TERS)

The Tacoma Employees' Retirement System (TERS or System), a pension trust fund of the City of Tacoma, issues a publicly available CAFR that includes financial statements and required supplementary information may be obtained by writing to:

Tacoma Employee's Retirement System
3628 South 35th Street
Tacoma, WA 98409

Or the TERS CAFR may be downloaded from the TERS website at www.cityoftacoma.org/retirement.

Administration of The System - The "Tacoma Employees' Retirement System" is a cost-sharing, multiple-employer, defined benefit retirement plan covering substantially all employees of the City of Tacoma, with the exception of police officers, firefighters, and Tacoma Rail employees who are covered by state and federal retirement plans. Employees of the Tacoma-Pierce County Health Department, as well as, certain employees of the Pierce Transit and Law Enforcement Support Agency who established membership in the System when these agencies were still City of Tacoma departments, are also members. The Board of Administration of the Tacoma Employees' Retirement System administers the plan and derives its authority in accordance with Chapter 41.28 RCW and Chapter 1.30 of the Tacoma City Code.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

At the direction of the City Council, the System is administered by the Board of Administration (the Board) consisting of nine regular members and one alternate member. The members of the Board are: the Mayor, who serves as Chair; the Director of Finance; the City Manager (or designee); the Public Utilities Director (or designee); three elected employee representatives; one elected retired representative; and one City resident (not employed by the City) elected by the other eight members. The nine Board members appoint a TERS member, either active or retired, as an alternate Board member. The Board is required by the Tacoma Municipal Code to make annual reports to the City Council on the financial condition of the System. The Board, subject to City Council approval, appoints the Director who is responsible for managing the daily operations of the System.

The breakdown of membership as of December 31, 2015 is as follows:

Retirees and beneficiaries currently receiving benefits	2,234
Terminated vested and other terminated participants	644
Active members:	
City of Tacoma	2,654
South Sound 911	4
Pierce Transit	7
Tacoma-Pierce County Health Department	262
Total active members	<u>2,927</u>
Total membership	<u><u>5,805</u></u>

Membership - Substantially all employees of the City of Tacoma are members of the System, with the exception of police officers, firefighter, and Tacoma Rail employees, who are covered by state or federal retirement plans. Other members include employees of the Tacoma-Pierce County Health Department, and certain employees of the Pierce Transit and the South Sound 911 (formerly known as Law Enforcement Support Agency) who established membership in the System when these agencies were still City of Tacoma departments.

Benefits - There are two formulas to calculate the retirement benefits. The benefit paid will be issued on the formula which provides the higher benefit. The most commonly applied formula, "service retirement", is a product of the member's average monthly salary for the highest, consecutive 24-month period, the number of years of membership credit, and a percentage factor (2% maximum) that is based on the member's age and years of service. The other formula is an annuity based on member contributions. There are several options available for the retiree to provide for their beneficiaries. The System also provides death, disability and deferred retirement. Additionally, the System provides cost of living adjustment (COLA) increases up to 2.125% as of July 1st of each year; the actual COLA granted is dependent on the Consumer Price Index (Seattle Area – all items) over the preceding calendar year.

Any active member who has not retired, and has five or more years of service as a member may purchase up to five additional years of service at the time of retirement. Total service including service purchased cannot exceed 30 years.

The System participates in the portability of public retirement benefits in Washington State public retirement. As provided under Chapter 4154 of the RCW, this allows a member to use all years of service with qualified Washington systems to determine retirement eligibility and percentage factor for benefits under the System.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Contributions - The participating employers are responsible for funding the System at a level sufficient to pay obligations and ensure the actuarial and financial soundness of the System. Contribution rates for the employer and the employee are recommended by the Board of Administration and final approval rests with the Tacoma City Council.

Currently, the required contribution rate for employees is 9.20% of their regular gross pay; the employer contributes 10.80%, for a combined total of 20.00% which is sufficient to amortize the Unfunded Actuarial Accrued Liability (UAAL) of the System if future experience follows all actuarial assumptions. Changes to the contribution rate are subject to Sections 1.30.340 and 1.30.360 of the Tacoma Municipal Code.

Significant Assumptions - The following actuarial methods were used in the funding valuation.

Measurement Date	December 31, 2015
Valuation Date	January 1, 2016
Actuarial Cost Method	Entry Age Normal
	Funding is based on statutory contributions rate.
	This amount is compared to a 30-year amortization for the purposes of calculating the Actuarially Determined Contribution.
	The amortization method for the ADC is as follows:
Amortization Method	<ul style="list-style-type: none">• Level percent• Open periods• 30 year amortization period at 01/01/2016• 4% amortization growth rate
Asset Valuation Method	4 year smoothing period; Corridor - None
Inflation	3%
Salary Increases	4% general wage increase assumption
Investment Rate of Return	7.25%
Cost of Living Adjustment	2.13%
Retirement Age	Varies by age, gender, eligibility
Turnover	Varies by age, gender, eligibility
Mortality	RP-2000 mortality for healthy and disabled annuitants, with age adjustments

Benefit and Assumption Changes - The comparability of the data from year to year can be affected by changes in actuarial assumptions, benefit provisions, accounting policies, and other factors. Between January 1, 2015 and January 1, 2016 no assumptions were changed.

Target Allocations - The long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting volatility and correlation. The capital market assumptions are per Milliman's (the System's actuary) investment consulting practice as of December 31, 2015. The target asset allocation is based on TERS Investment Policy Statement dated February 2014.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Asset Class	Target Allocation	Arithmetic Real Rate of Return
Investment Grade Fixed Income	15.0%	2.00%
US Inflation-Indexed Bonds	5.0%	1.41%
High Yield Bonds	9.0%	4.22%
Emerging Market Debt	5.0%	5.06%
Global Equity	41.5%	5.72%
Public Real Estate	2.0%	6.07%
Private Real Estate	2.5%	3.60%
Private Equity	10.0%	9.29%
Master Limited Partnerships	4.0%	3.98%
Timber	2.0%	3.73%
Infrastructure	2.0%	5.14%
Agriculture	2.0%	4.30%
Assumed Inflation - Mean		3.00%
Assumed Inflation - Standard Deviation		1.89%
Portfolio Arithmetic Real Mean Return		4.94%
Portfolio Median Nominal Geometric Return		7.06%
Portfolio Standard Deviation		11.84%
Long-Term Expected Rate of Return, net of investment expenses		7.25%

Sensitivity Analysis - The following presents the net pension liability (asset) of the System, calculated using the discount rate of 7.25%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.25%) or 1 percentage point higher (8.25%) than the current rate

	1% Decrease 6.25%	Current Discount Rate 7.25%	1% Increase 8.25%
Net pension liability (asset)	\$ 105,989,573	\$ 34,177,293	\$ (26,296,701)

As of December 31, 2015, the deferred inflows and outflows of resources are as follows:

	Deferred Inflows of Resources	Deferred Outflows of Resources
Difference Between Expected and Actual Experience	\$ (2,287,552)	\$ -
Net Difference Between Projected and Actual Earnings	-	30,122,690
Changes in Employer Proportion	(431)	24,760
Contributions Made Subsequent to the Measurement Date	-	9,322,004
Total	\$ (2,287,983)	\$ 39,469,454

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

The net amount of deferred inflows and outflows, other than contributions made subsequent to the measurement date, will be recognized as pension expense in each of the next four years.

Amounts will be recognized in pension expense as follows:

2016	\$	6,736,673
2017		6,736,673
2018		6,736,672
2019		7,739,529
2020		(90,080)
	\$	<u>27,859,467</u>

The proportionate share of the Power Division is 39.47% of total System's pension liability. The proportionate share was based on the actual contributions for the year.

NOTE 10 OTHER POST EMPLOYMENT BENEFITS (OPEB)

Plan Description - The City charges some early retirees not yet eligible for Medicare a health premium based on the claims experience of active employees and retirees rather than based on the claims experience of retirees only. This difference is a benefit to the retirees, since health claims costs generally increase with age. GAAP requires that the portion of age-adjusted expected retiree health claims costs that exceed the premium charged to retirees be recognized as a liability for accounting purposes. The actuarial methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and are subject to continual revision as results are compared to past expectation and new estimates are made about the future.

Funding Policy - The City uses pay as you go funding; contributions to a separate trust are not required.

Annual OPEB Cost and Net OPEB Obligation - The Present Value of Benefits (PVB) is the present value of projected benefits discounted at the valuation interest rate (3.75%).

The Actuarial Accrued Liability (AAL) is the portion of the present value of benefits attributed to past service only. The portion attributed to future employee service is excluded. For inactive employees, the AAL is equal to the present value of benefits. For active employees, the actuarial present value of the projected benefits of each individual is allocated as a level percentage of expected salary for each year of employment between entry age (defined as age at hire) and assumed exit (until maximum retirement age). The portion attributed to service between entry age and the valuation date is the actuarial accrued liability.

The Normal Cost is that portion of the City provided benefit attributable to employee service in the current year.

The Annual Required Contribution (ARC) is the amount the City is required to report as an expense for the year. The ARC is equal to the Normal Cost plus an amount to amortize the UAAL on a closed basis of 30 years, beginning January 1, 2007. The amortization period for 2016 is 21 years.

The ARC represents an accounting expense, but the City is not required to contribute the ARC to a separate trust. If the City does not set aside funds equal to the ARC (less current year benefit payments) each year, then the ARC (less benefit payments) will accumulate as a non-current liability (Net OPEB Obligation) on the statements of net position. The City has a Net OPEB Obligation as of December 31, 2016 as the City has not set aside funds for OPEB.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Excise Tax For High Cost or “Cadillac” Health Plans in 2018 and Beyond– An excise tax for high cost health coverage or “Cadillac” health plans was included in the Affordable Care Act (ACA) passed into law in March 2010. The provision levies a 40% tax on the value of health plan costs that exceed certain thresholds for single coverage or family coverage. The 2018 annual thresholds are \$10,200 for single coverage and \$27,500 for a family plan. If, between 2010 and 2018, the cost of health care insurance rises more than 55%, the threshold for the excise tax will be adjusted.

The City believes that the current provisions of ACA should be reflected in the projection of benefits and therefore, the value of the excise tax is included in the valuation. It is assumed that there will be no changes to the current law and that there will be no changes in plan design to help mitigate the impact of the tax.

GASB Statement No. 45 indicates that the projection of benefits should include all benefits to be provided to retirees in accordance with the current “substantive” plan. The substantive plan refers to the plan terms as understood by the employer and plan members at the time of the valuation. For this reason, the City believes that the current provisions of PPACA should be reflected in the projection of benefits and therefore, the value of the excise tax is included in this valuation. It is assumed that there will be no changes to the current law and that there will be no changes in plan design to help mitigate the impact of the tax.

Summary of Changes – As of the January 1, 2015 valuation the total AAL was \$208,814,312, for the City, 20% lower than expected primarily due to clarification in spouse benefits, medical costs, demographic experience and a change to the assumption for future medical trends.

The following table is a summary of valuation results with a comparison to the results from the last valuation.

	January 1, 2013	January 1, 2015
Active employees	3,335	3,404
Terminated vested employees	394	442
Retired employees & dependents	846	744
Total	<u>4,575</u>	<u>4,590</u>
Annual Benefit Payments	\$ 9,887,335	\$ 8,963,089
Discount rate	3.75%	3.75%
Present Value of Benefits (PVB)	\$ 326,742,538	\$ 262,184,195
Actuarial Accrued Liability (AAL)	\$ 251,839,846	\$ 208,814,312
Assets	<u>\$ -</u>	<u>\$ -</u>
Unfunded Actuarial Accrued Liability (UAAL)	<u>\$ 251,839,846</u>	<u>\$ 208,814,312</u>
Normal Cost	\$ 5,484,587	\$ 3,832,131
Annual Required Contribution (ARC)	\$ 20,058,760	\$ 16,966,964

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

The following table shows the total value of the benefits provided, the member paid premiums and the City paid benefits as of January 1, 2015.

Value of Subsidy at 3.75% Interest Rate	Total Value of Benefits	Member Paid Premiums	City Paid Benefits
Present Value of Benefits (PVB)	\$ 420,832,932	\$ 158,648,737	\$ 262,184,195
Actuarial Accrued Liability (AAL)	\$ 291,228,295	\$ 82,413,983	\$ 208,814,312
Normal Cost	\$ 9,501,758	\$ 5,669,627	\$ 3,832,131
Annual Benefit Payments	\$ 12,325,369	\$ 3,362,280	\$ 8,963,089

The following table shows the calculation of the Annual Required Contribution and Net OPEB Obligation for the City and for Tacoma Power as of December 31, 2016.

	City	Division
Determination of Annual Required Contribution:		
Normal Cost at Year-end	\$ 3,803,090	\$ 858,656
Amortization of UALL	15,665,117	398,368
Annual Required Contribution (ARC)	<u>\$ 19,468,207</u>	<u>\$ 1,257,024</u>
Determination of NET OPEB Obligation:		
Annual Required Contribution (ARC)	\$ 19,468,207	\$ 1,257,024
Interest on prior year Net OPEB Obligation	2,666,468	377,568
Adjustments to ARC	<u>(3,983,647)</u>	<u>(468,000)</u>
Annual OPEB Cost	18,151,028	1,166,592
Actual benefits paid	<u>(8,539,402)</u>	<u>(344,092)</u>
Increase in Net OPEB Obligation	9,611,626	822,500
Net OPEB Obligation - beginning of year	<u>73,129,502</u>	<u>10,068,490</u>
Net OPEB Obligation - end of year	<u>\$ 82,741,128</u>	<u>\$ 10,890,990</u>

The Division has included the liability in the other long term liabilities on the Statement of Net Position.

Funded Status and Funding Progress -

The following table shows the annual OPEB costs and net OPEB obligation for three years. This table is based upon a 3.75% interest rate.

	Annual OPEB Cost		Benefits Paid		Net OPEB Obligation	
Year Ended	City	Division	City	Division	City	Division
12/31/2014	\$ 19,319,944	\$ 2,084,511	\$ 9,292,539	\$ 692,894	\$ 66,138,206	\$ 9,198,300
12/31/2015	\$ 15,954,387	\$ 1,194,337	\$ 8,963,089	\$ 324,146	\$ 73,129,502	\$ 10,068,491
12/31/2016	\$ 18,151,028	\$ 1,166,592	\$ 8,539,402	\$ 344,092	\$ 82,741,128	\$ 10,890,990

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Actuarial Methods and Assumptions - The actuarial cost method used for determining the benefit obligations is the Entry Age Normal Cost Method. Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of expected salary for each year of employment between entry age (defined as age at hire) and assumed exit (until maximum retirement age).

The portion of actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the UAAL. In determining the Annual Required Contribution, the UAAL is amortized as a level percentage of expected payrolls for non-LEOFF 1 groups. For LEOFF 1, the UAAL is amortized as a level dollar amount. The amortization period was 30 years in 2007 and is now 21 years.

Actuarial Methods and Significant Actuarial Assumptions:

Valuation Date:	January 1, 2015
Census Date:	January 1, 2015
Actuarial Cost Method:	Entry Age
Amortization Method:	Combination of level percentage and level dollar amount, see note above.
Remaining Amortization Period:	21 years, closed
Demographic Assumptions:	Demographic assumptions regarding retirement, disability, and turnover are based upon pension valuations for the various pension plans.

Actuarial Assumptions:

Discount Rate:	3.75% for pay-as-you-go funding
Medical Cost Trend:	2015 6.9%
	2016 6.6%
	2017 5.9%
	2020 5.5%
	2030 5.9%
	2040 5.7%
	The medical cost rate is assumed to continue grading downward until achieving the ultimate rate of 4.8% in 2071 and beyond. The first year trend reflects assumed increases based on ACA fees. These trend rates assume that, over time, deductibles and out-of-pocket maximums will be periodically increased as medical trends increase. The trends above do not reflect the increases in costs due to the excise tax.

Economic Assumptions – Discount Rate (Liabilities):	3.75%
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Demographic Assumptions:.....	Eligibility: Disability - Five years of service are required for non-service connected disability.
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- Retirement - TERS members are eligible for retiree medical benefits after becoming eligible for service retirement pension benefits (either reduced or full pension benefits):
- Age 55 with 10 years of service
 - Age 40 with 20 years of service

NOTE 11 COMMITMENTS AND CONTINGENCIES

Capital Improvements - The financial requirement for Tacoma Power's 2015/2016 biennial Capital Improvement Program is approximately \$182.7 million. At December 31, 2016, the remaining financial requirement was approximately \$12 million. The remaining financial requirement for Capital Improvement Programs relating to prior biennium is approximately \$932,445.

General Legal Matters - Tacoma Power Division has received several other miscellaneous claims that either do not allege significant amounts or that the Legal Department has determined do not pose a risk to liability to the utilities.

REQUIRED SUPPLEMENTARY INFORMATION

Proportionate Share of the Net Pension Liability Last 10 Years*

	Fiscal Year Ended December 31st,	
	2016	2015
Employer's proportion of the net pension liability (asset) as a percentage	39.47%	39.80%
Employer's proportion share of net pension liability (asset)	\$34,177,293	(\$3,823,476)
Employer's covered payroll	\$20,220,795	\$93,063,240
Employer's proportionate share of net pension liability (asset) as a percentage of its covered employee payroll	169.02%	-4.11%
Plan fiduciary net position as a percentage the total pension liability	93.94%	100.71%

Schedule of Contributions Last 10 Fiscal Years

	Fiscal Year Ended December 31st,	
	2016	2015
Contractually required employer contribution	\$9,322,005	\$9,053,341
Contributions in relation to the contractually required employer contribution	(9,322,005)	(9,053,341)
Employer contribution deficiency (excess)	-	-
Employer's covered employee payroll	\$91,704,363	\$93,063,240
Employer contribution as a percentage of covered-employee payroll	10.17%	9.73%

*Fiscal year 2015 was the first year of implementation; therefore, only two years are shown.

STATISTICAL DATA (Unaudited)

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

TEN-YEAR FINANCIAL REVIEW

STATEMENTS OF NET POSITION	2016	2015	2014	2013
ASSETS				
Utility Plant - Net	\$1,033,409,064	\$1,002,810,874	\$978,885,275	\$959,885,269
Special and Other Assets	95,903,332	125,203,792	160,778,160	213,192,582
Current Assets	289,162,319	267,460,091	365,173,352	328,974,357
Deferred Charges	-	-	-	-
Total Assets	1,418,474,715	1,395,474,757	1,504,836,787	1,502,052,208
Deferred Outflows	39,469,454	10,977,517	8,026,229	15,941,231
TOTAL ASSETS AND DEFERRED OUTFLOWS	1,457,944,169	1,406,452,274	1,512,863,016	1,517,993,439
NET POSITION	821,995,693	825,933,297	822,803,061	799,078,660
LIABILITIES				
Long-Term Debt	457,601,726	441,928,130	530,580,510	564,960,765
Current Liabilities	70,165,746	63,906,544	86,776,174	82,905,132
Long-Term Liabilities	57,893,021	22,647,914	24,703,271	23,048,882
Total Liabilities	585,660,493	528,482,588	642,059,955	670,914,779
Deferred Inflows	50,287,983	52,036,389	48,000,000	48,000,000
TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS	\$1,457,944,169	\$1,406,452,274	\$1,512,863,016	\$1,517,993,439
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION				
OPERATING REVENUES				
Residential	\$154,091,270	\$149,195,092	\$150,972,050	\$149,662,791
Commercial	27,703,400	26,956,059	26,594,512	25,110,481
General	115,600,650	116,053,999	114,718,365	109,046,936
Contract Industrial	21,462,712	21,356,911	21,150,771	19,804,613
Bulk Power	54,506,535	50,380,147	82,796,740	64,210,259
Unbilled	(840,477)	677,091	(666,187)	1,651,808
Other	1,725,200	1,643,756	1,609,143	1,562,082
Total Electric Revenues	374,249,290	366,263,055	397,175,394	371,048,970
Other Operating Revenue	44,365,098	44,363,160	44,070,713	43,413,115
Total Operating Revenues	418,614,388	410,626,215	441,246,107	414,462,085
OPERATING EXPENSES				
Operation and Maintenance	312,790,388	299,200,704	294,741,044	276,558,723
Taxes	19,727,313	19,993,833	19,276,216	19,562,858
Depreciation	55,702,297	57,381,578	59,156,228	56,397,306
Loss on Asset Impairment	-	-	-	-
Total Operating Expenses	388,219,998	376,576,115	373,173,488	352,518,887
NET OPERATING INCOME	30,394,390	34,050,100	68,072,619	61,943,198
NON-OPERATING REVENUES (EXPENSES)				
Other Income and Expense (Net)	1,555,659	(1,923,329)	(728,908)	(252,363)
Interest Earned on Investments	2,405,144	1,796,071	3,780,834	1,899,829
Interest Charges (Net)	(16,196,734)	(19,428,673)	(27,290,021)	(25,688,219)
Contributions to Family Need ..	(480,000)	(480,000)	(900,000)	(900,000)
Gain on Sale of Utility Plant ..	-	-	-	-
Net Income Before Contributions, Transfers & Extraordinary Items	17,678,459	14,014,169	42,934,524	37,002,445
Total Capital Contributions	8,846,216	9,383,844	7,788,292	8,839,960
Transfers Out	(30,462,279)	(24,969,422)	(26,998,415)	(25,970,230)
CHANGE IN NET POSITION	(\$3,937,604)	(\$1,571,409)	\$23,724,401	\$19,872,175

In accordance with Governmental Accounting Standards Board Statement No.65 both 2012 and 2011 were restated for comparative purposes. Years prior to 2011 are shown as originally reported.

2012	2011	2010	2009	2008	2007
\$954,141,423	\$944,969,878	\$933,796,881	\$900,879,652	\$855,373,200	\$794,683,393
154,745,677	196,860,001	223,057,734	104,606,844	122,629,299	157,462,325
333,694,736	313,457,995	279,967,672	288,083,393	312,006,708	272,409,296
-	-	17,651,421	7,304,736	1,990,596	2,356,842
1,442,581,836	1,455,287,874	1,454,473,708	1,300,874,625	1,291,999,803	1,226,911,856
7,848,910	8,213,239	-	-	-	-
1,450,430,746	1,463,501,113	1,454,473,708	1,300,874,625	1,291,999,803	1,226,911,856
779,206,485	762,944,507	744,735,781	735,593,799	695,305,259	621,817,950
518,251,959	563,718,608	582,930,840	459,202,498	490,528,958	517,834,315
84,070,814	82,861,816	95,884,868	83,385,715	100,219,839	81,446,692
20,901,488	17,976,182	30,922,219	22,692,613	5,945,747	5,812,899
623,224,261	664,556,606	709,737,927	565,280,826	596,694,544	605,093,906
48,000,000	36,000,000	-	-	-	-
\$1,450,430,746	\$1,463,501,113	\$1,454,473,708	\$1,300,874,625	\$1,291,999,803	\$1,226,911,856
\$141,236,063	\$136,944,688	\$127,908,143	\$125,807,518	\$131,188,854	\$127,539,844
23,499,735	22,324,063	21,147,156	21,005,151	22,138,244	22,486,943
103,586,233	99,958,156	96,579,940	90,782,730	100,142,959	101,628,965
18,870,807	18,341,067	16,898,845	14,101,372	15,430,080	15,078,247
53,532,081	48,118,090	69,518,730	67,338,457	98,545,139	98,276,853
4,615,802	369,424	(3,564,337)	(411,080)	1,576,914	49,376
1,558,268	1,373,168	1,472,125	1,190,013	1,387,629	1,359,098
346,898,989	327,428,656	329,960,602	319,814,161	370,409,819	366,419,326
40,983,752	36,895,939	36,892,658	35,691,490	33,998,632	33,739,569
387,882,741	364,324,595	366,853,260	355,505,651	404,408,451	400,158,895
267,457,626	247,409,057	259,366,287	220,849,709	246,856,188	237,383,019
17,494,729	16,970,015	15,553,041	15,187,859	16,075,356	15,558,011
57,842,109	56,555,538	55,717,463	53,049,558	48,377,708	43,705,705
-	-	-	-	-	-
342,794,464	320,934,610	330,636,791	289,087,126	311,309,252	296,646,735
45,088,277	43,389,985	36,216,469	66,418,525	93,099,199	103,512,160
3,055,848	1,226,132	2,202,089	1,322,007	3,255,797	1,754,339
5,835,775	8,444,683	7,786,710	8,721,608	12,539,619	14,127,012
(22,859,967)	(21,917,623)	(22,773,604)	(22,804,261)	(22,420,879)	(22,680,647)
(450,000)	(450,000)	(900,000)	(1,229,676)	(450,000)	(450,000)
-	-	-	-	2,923,465	1,467,378
30,669,933	30,693,177	22,531,664	52,428,203	88,947,201	97,730,242
9,480,111	14,222,934	10,224,518	9,844,736	10,219,425	12,046,164
(23,888,066)	(23,913,077)	(23,614,200)	(21,984,399)	(25,679,317)	(25,258,949)
\$16,261,978	\$21,003,034	\$9,141,982	\$40,288,540	\$73,487,309	\$84,517,457

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

TEN-YEAR POWER SUMMARY

	2016	2015	2014	2013
MWh Available				
Generated				
Nisqually	630,483	511,592	635,121	572,932
Cushman	507,618	272,457	358,509	239,528
Cowlitz	1,989,438	1,630,130	2,111,686	1,792,975
Wynoochee	37,209	12,680	14,272	24,404
Hood Street	2,942	1,889	2,281	3,503
Grant Net Actual	-	-	(2,018)	(3,279)
Tacoma's Share of Priest Rapids	26,975	25,360	22,733	34,846
Tacoma's Share of GCPHA	253,625	258,679	272,846	254,570
Total Generated	3,448,290	2,712,787	3,415,430	2,919,479
Purchased	3,807,370	3,674,140	3,845,666	3,756,763
Interchange - Net	(2,438,369)	(1,569,981)	(2,339,277)	(1,665,811)
Losses - Net	(8,870)	10,340	14,057	7,398
Total System Load	4,808,421	4,827,286	4,935,876	5,017,829
MWh Billed				
Residential and Other.....	1,855,706	1,801,114	1,890,970	1,950,829
Commercial/General/Industrial....	2,771,822	2,786,233	2,838,967	2,855,932
Total Firm MWh Billed	4,627,528	4,587,347	4,729,936	4,806,761
MWh Available Over MWh Billed				
(Causes: Timing differences, internal use, and losses other than those reflected above.)	180,894	239,939	175,940	211,068
Percent of Power Generated	71.71%	56.20%	69.20%	58.18%
Average Load Factor	60.02%	62.71%	55.31%	54.18%
Average Number of Billings	176,784	174,562	172,531	171,506
Maximum Hourly Energy Load				
MWh	913	877	1,016	980
Date	12/17/16	12/31/15	2/6/14	12/9/13
Time	0900 hr	0900 hr	800 hr	800 hr
Maximum Daily Energy Load				
MWh	19,641	18,675	21,686	21,172
Date	12/17/16	12/31/15	2/6/14	12/09/13
Minimum Hourly Energy Load				
MWh	351	354	348	349
Date	7/5/16	6/21/15	7/6/14	9/8/13
Time	0400 hr	0600 hr	0600 hr	0500 hr
Minimum Daily Energy Load				
MWh	10,110	10,262	10,221	10,379
Date	9/4/16	5/24/15	7/5/14	7/4/13
Average Hourly Energy Load	548	550	562	572

2012	2011	2010	2009	2008	2007
699,104	663,345	586,433	553,062	530,839	515,585
261,735	410,723	393,563	246,898	208,604	381,193
2,322,875	2,157,106	1,725,424	1,677,554	1,736,328	1,590,719
38,149	35,692	36,320	25,298	25,368	35,518
4,029	3,313	4,133	3,243	4,217	3,914
(3,285)	-	-	-	-	-
37,355	34,417	30,705	-	-	-
255,564	237,794	240,845	-	-	-
3,615,526	3,542,390	3,017,423	2,506,055	2,505,356	2,526,929
4,167,263	3,799,037	4,132,049	4,235,019	4,252,681	4,401,097
(2,814,479)	(2,266,720)	(1,993,911)	(1,729,701)	(1,677,704)	(1,918,581)
20,718	(8,112)	10,599	4,210	10,132	12,433
4,989,028	5,066,595	5,166,160	5,015,583	5,090,465	5,021,878
1,935,518	1,997,714	1,925,549	1,994,692	1,979,930	1,922,289
2,812,769	2,838,424	2,794,406	2,829,425	2,866,480	2,889,520
4,748,287	4,836,138	4,719,955	4,824,117	4,846,410	4,811,809
240,741	230,457	446,205	191,466	243,639	210,069
72.47%	69.92%	58.41%	49.97%	49.22%	50.32%
61.47%	58.86%	52.82%	51.69%	56.68%	59.27%
169,012	169,123	169,413	168,207	166,307	165,122
924	931	992	1,062	1,018	960
1/16/12	1/3/11	11/23/10	12/10/09	12/15/08	1/12/07
1800 hr	0800 hr	1800 hr	800 hr	1900 hr	900 hr
19,100	18,788	20,591	21,103	21,237	20,312
1/16/12	1/11/11	11/23/10	12/9/09	12/15/08	1/12/07
340	310	303	295	349	355
9/19/12	7/5/11	9/3/10	7/5/09	7/6/08	9/16/07
0400 hr	0400 hr	0300 hr	0700 hr	0700 hr	0500 hr
10,160	9,171	9,041	9,036	10,235	10,348
9/2/12	7/3/11	9/5/10	8/15/09	8/31/08	9/2/07
566	548	524	549	577	569

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CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

GROSS GENERATION REPORT - December 31, 2016 AND December 31, 2015

	YEAR ENDED		2016 OVER (UNDER) 2015	PERCENT CHANGE
	Dec 31 2016	Dec 31 2015		
KWH GENERATED, PURCHASED AND INTERCHANGED - Gross				
Generated - LaGrande	378,898,000	319,979,000	58,919,000	18.4%
Generated - Alder	251,585,000	191,613,000	59,972,000	31.3%
TOTAL NISQUALLY	630,483,000	511,592,000	118,891,000	23.2%
Generated - Cushman No. 1	185,318,000	107,411,000	77,907,000	72.5%
Generated - Cushman No. 2	322,300,000	165,046,000	157,254,000	95.3%
TOTAL CUSHMAN	507,618,000	272,457,000	235,161,000	86.3%
Generated - Mossyrock	1,203,631,000	1,007,917,000	195,714,000	19.4%
Generated - Mayfield	785,807,000	622,213,000	163,594,000	26.3%
TOTAL COWLITZ	1,989,438,000	1,630,130,000	359,308,000	22.0%
Generated - Wynoochee	37,209,000	12,680,000	24,529,000	193.4%
Generated - Hood Street	2,942,400	1,889,500	1,052,900	55.7%
Tacoma's Share of Priest Rapids	26,975,000	25,360,000	1,615,000	6.4%
Tacoma's Share of GCPHA	253,625,000	258,679,000	(5,054,000)	-2.0%
TOTAL KWH GENERATED - TACOMA SYSTEM	3,448,290,400	2,712,787,500	735,502,900	27.1%
Purchased Power				
BPA Slice Contract	2,265,823,000	2,080,213,000	185,610,000	8.9%
BPA Block Contract	1,541,547,000	1,593,927,000	(52,380,000)	-3.3%
Interchange Net	(2,438,369,000)	(1,569,981,000)	(868,388,000)	55.3%
TOTAL KWH GENERATED, PURCHASED AND INTERCHANGED ..	4,817,291,400	4,816,946,500	344,900	0.0%
Losses	41,976,966	32,070,742	9,906,224	30.9%
Baldi Replacement	1,864,094	2,645,869	(781,775)	-29.5%
Ketron	262,023	269,163	(7,140)	-2.7%
NT PC Mutuals Schedules.....	(28,498,000)	(28,075,000)	(423,000)	1.5%
PC Mutual Inadvertent	(24,475,004)	3,429,073	(27,904,077)	-813.7%
TACOMA SYSTEM FIRM LOAD	4,808,421,479	4,827,286,347	(18,864,868)	-0.4%
PIERCE COUNTY MUTUAL LOAD	1,435,535,000	1,422,462,000	13,073,000	0.9%
KWH BILLED				
Residential Sales	1,817,931,140	1,764,596,523	53,334,617	3.0%
Commercial Sales	316,085,742	309,650,083	6,435,659	2.1%
General	1,947,062,423	1,969,382,254	(22,319,831)	-1.1%
Contract Industrial	508,673,780	507,200,696	1,473,084	0.3%
Public Street and Highway Lighting	31,555,485	30,545,257	1,010,228	3.3%
Sales to Other Electric Utilities	6,219,000	5,972,400	246,600	4.1%
TOTAL FIRM	4,627,527,570	4,587,347,213	40,180,357	0.9%
Bulk Power Sales	2,731,076,000	1,917,685,000	813,391,000	42.4%
TOTAL KWH BILLED	7,358,603,570	6,505,032,213	853,571,357	13.1%

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

DEBT SERVICE REQUIREMENTS
DECEMBER 31, 2016

<u>YEAR</u>	<u>PRINCIPAL</u>	<u>INTEREST</u>	<u>TOTAL</u>
2017	11,575,000	18,389,310	29,964,310
2018	10,095,000	17,926,310	28,021,310
2019	29,165,000	17,471,560	46,636,560
2020	11,970,000	16,113,310	28,083,310
2021	3,795,000	15,564,810	19,359,810
2022	3,985,000	15,375,060	19,360,060
2023	4,185,000	15,175,810	19,360,810
2024	4,395,000	14,966,560	19,361,560
2025	4,525,000	14,832,512	19,357,512
2026	24,185,000	14,685,450	38,870,450
2027	4,675,000	13,321,174	17,996,174
2028	4,905,000	13,087,424	17,992,424
2029	5,155,000	12,842,174	17,997,174
2030	27,310,000	12,584,424	39,894,424
2031	28,335,000	11,002,902	39,337,902
2032	29,335,000	9,347,016	38,682,016
2033	30,460,000	7,596,889	38,056,889
2034	31,630,000	5,779,646	37,409,646
2035	10,990,000	3,892,600	14,882,600
2036	11,535,000	3,343,100	14,878,100
2037	12,115,000	2,766,350	14,881,350
2038	12,720,000	2,160,600	14,880,600
2039	13,230,000	1,651,800	14,881,800
2040	13,755,000	1,122,600	14,877,600
2041	14,310,000	572,400	14,882,400
	<u>\$358,335,000</u>	<u>\$261,571,791</u>	<u>\$619,906,791</u>

The amounts above reflect debt service requirements, and do not include the portion funded in the current year for \$12,730,000.

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

FUNDS AVAILABLE FOR DEBT SERVICE

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Total Income	\$425,755,909	\$413,680,801	\$447,043,485	\$418,841,237	\$400,235,482
Less: Operating Exp	<u>332,517,701</u>	<u>319,194,537</u>	<u>314,017,260</u>	<u>296,121,581</u>	<u>284,952,355</u>
Income Available for Debt Service	<u>\$93,238,208</u>	<u>\$94,486,264</u>	<u>\$133,026,225</u>	<u>\$122,719,656</u>	<u>\$115,283,127</u>
Bond Redemption	\$12,730,000	\$14,735,000	\$32,115,000	\$28,295,000	\$28,785,000
Bond Interest	<u>19,025,810</u>	<u>22,420,035</u>	<u>26,626,411</u>	<u>24,112,971</u>	<u>27,747,001</u>
Debt Service Payable on All Debt	\$31,755,810	\$37,155,035	\$58,741,411	\$52,407,971	\$56,532,001
Times Debt Service Covered	2.94	2.54	2.26	2.34	2.04

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

RESOURCES
AS OF DECEMBER 31, 2016

GENERATING FACILITIES	GENERATING UNITS	AGGREGATE NAME PLATE RATING (kW)	APPROX. RATED 4-YR. AVERAGE ANNUAL OUTPUT (1,000 kWh)
Hydro:			
Alder	2	50,000	228,355
LaGrande	5	64,000	358,733
Cushman No. 1	2	43,200	130,506
Cushman No. 2	3	81,000	214,011
Mayfield	4	162,000	736,654
Mossyrock	2	300,000	1,144,311
Wynoochee	1	12,800	22,141
Total Hydro		713,000	2,834,711

Tacoma Power and the City of Seattle Light Department have entered into a 40-year purchase power contract with three Eastern Washington irrigation districts that have combined to develop the Grand Coulee Project Hydroelectric Authority. Tacoma Power and the City of Seattle Light Department share equally the output of the project which has a combined capacity of 128,700 kW and an annual energy capability of about 476,000,000 kWh.

CUSTOMERS BY CLASS	AVERAGE NUMBER BILLINGS	AVERAGE HOURLY ENERGY (kW)
Residential	157,540	1.312
Incidental	15,688	2.300
General	2,642	106.376
Public Streets and Highways	914	3.941
Total System	176,784	2.988

Circuit Miles of Transmission Lines

115 kV	307
230 kV	44

Circuit Miles of Distribution Lines

Overhead	1,178
Underground	836

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

TAXES AND EMPLOYEE WELFARE CONTRIBUTIONS
FOR THE YEAR 2016

FEDERAL

Power Social Security (FICA)	\$6,792,585	
Total		\$6,792,585

STATE OF WASHINGTON

Retail Sales and Use Taxes	3,753,474	
Power Utilities and Business Operations Tax	13,070,478	
Power State Employment Security	101,804	
Total		16,925,756

COUNTY

Lewis County - In Lieu of Taxes	1,529,863	
Mason County - In Lieu of Taxes	184,297	
Pierce County School Support - Eatonville	7,000	
White Pass School Support	122,293	
Mossyrock School Support	106,222	
Morton School Support	2,985	
Lewis County Fire Protection District	10,794	
Pierce County Fire Protection District	56,965	
Pierce County Drainage District	17,484	
Thurston County	938	
Total		2,038,841

MUNICIPALITIES

City of Tacoma Power Gross Earnings Tax	28,412,707	
Click!Network Gross Earnings Tax/Franchise Fees	3,304,400	
City of Fife Power Franchise Fee	1,206,459	
City of University Place Power Franchise Fee	1,080,368	
City of Lakewood Power Franchise Fee	824,727	
City of Fircrest Power Franchise Fee	244,641	
City of Steilacoom Power Franchise Fee	4,790	
Total		35,078,092
TOTAL TAXES		<u>\$60,835,274</u>

Taxes as a % of Operating Revenues of \$418,614,388		14.53%
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EMPLOYEE WELFARE CONTRIBUTIONS

Power Industrial Insurance and Medical Aid.....	\$2,035,370	
Power City of Tacoma Pension Fund	9,282,983	
Power Medical/Life Insurance	17,386,237	
TOTAL EMPLOYEE WELFARE CONTRIBUTIONS		<u>\$28,704,590</u>

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

2016 ELECTRIC RATES
(Based on 2015 rate schedules)

RATE PER MONTH

Schedule A-1 - Residential Service

Customer Charge	\$10.50 per month
Customer Charge (for collectively metered apartments)	\$8.50 per month
Energy (all energy measured in kilowatt-hours)	\$0.039710 per kWh
Delivery (all energy delivered in kilowatt-hours) .	\$0.034435 per kWh

Schedule A-2 - Low-Income/Elderly/Handicapped Residential Service

Seventy percent (70%) of the monthly bill as
calculated under Section 12.06.160 of the official
Code of the City of Tacoma, known as RESIDENTIAL SERVICE -
SCHEDULE A-1.

Schedule B - Small General Service

Customer Charge	\$19.00 per month
Customer Charge (for unmetered services)	\$14.75 per month
Energy (all energy measured in kilowatt-hours)	\$0.042507 per kWh
Delivery (all energy delivered in kilowatt-hours) ..	\$0.034587 per kWh

Schedule G - General Service

Customer Charge	\$50.00 per month
Energy (all energy measured in kilowatt-hours)	\$0.041192 per kWh
Delivery (all kilowatts of Billing Demand delivered)	\$7.50 per kW

Schedule HVG - High Voltage General Service

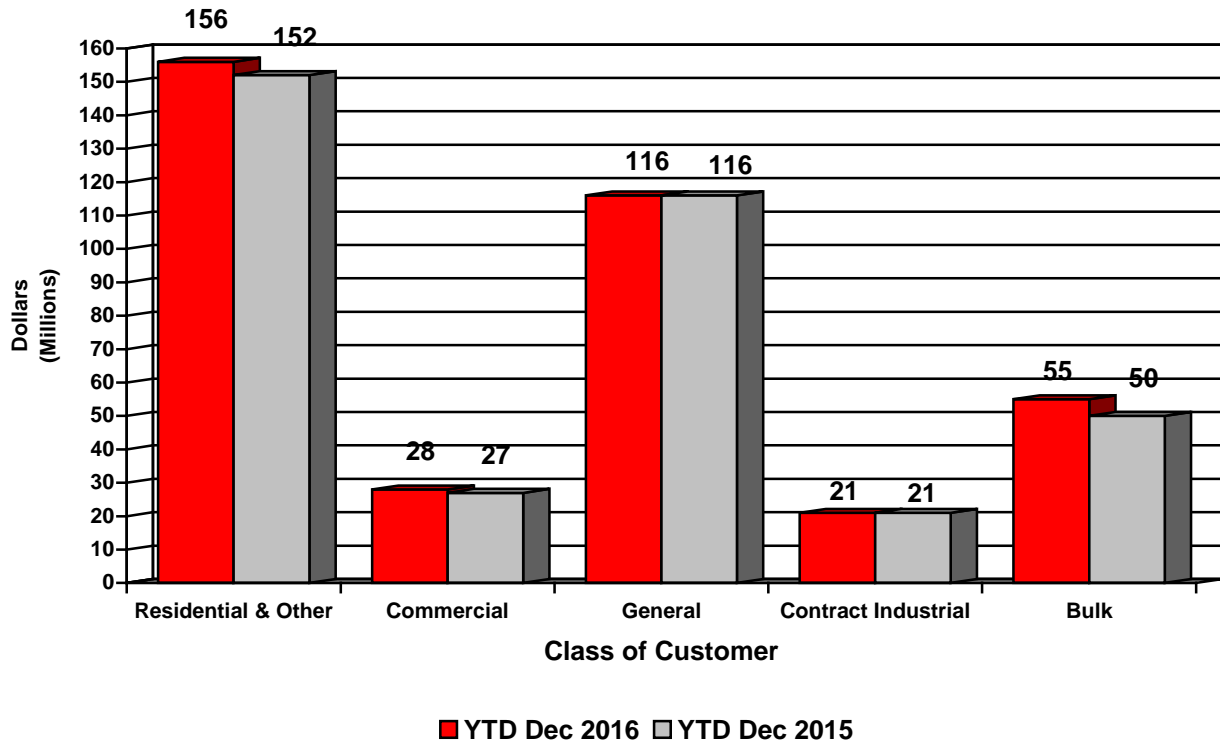
Customer Charge	\$210.00 per month
Energy (all energy measured in kilowatt-hours)	\$0.035175 per kWh
Delivery (all kilowatts of Billing Demand delivered)	\$4.00 per kW

Other schedules also now in effect are:

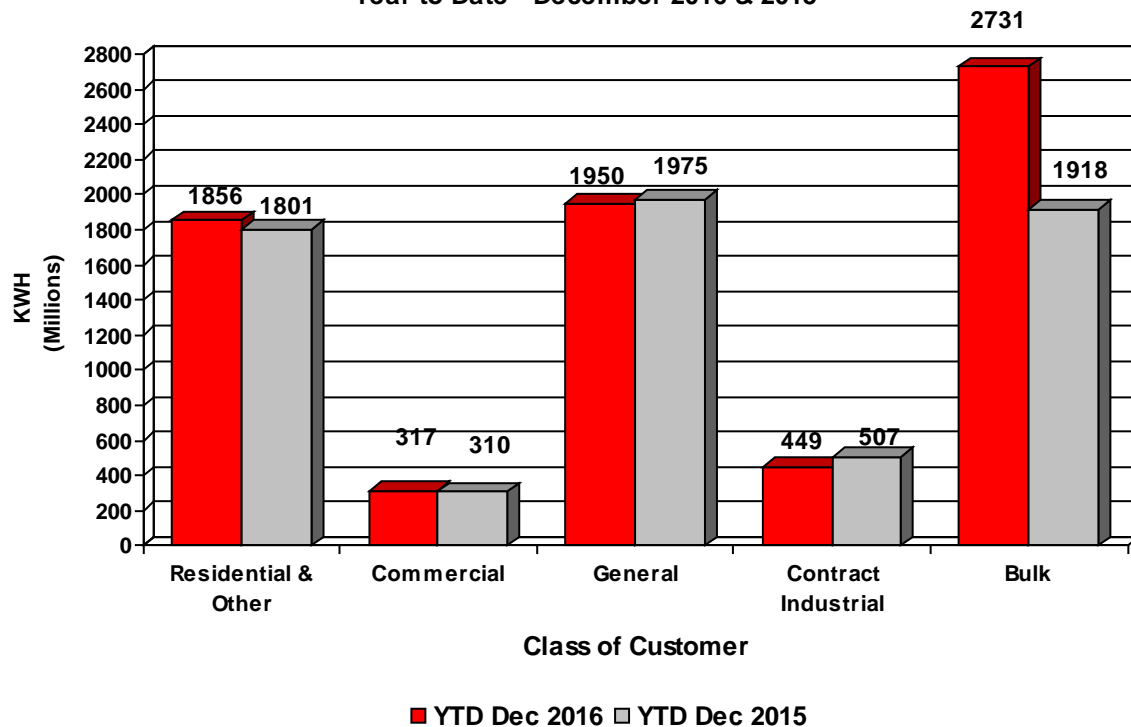
- CP - Contract Industrial Service (major industrial power use -
written contract required)
- H-1 - Street Lighting and Traffic Signal Service
- H-2 - Private Off-Street Lighting Service

Electric rates were established by Ordinance No. 28285 passed March 17, 2015
and became effective April 1, 2015.

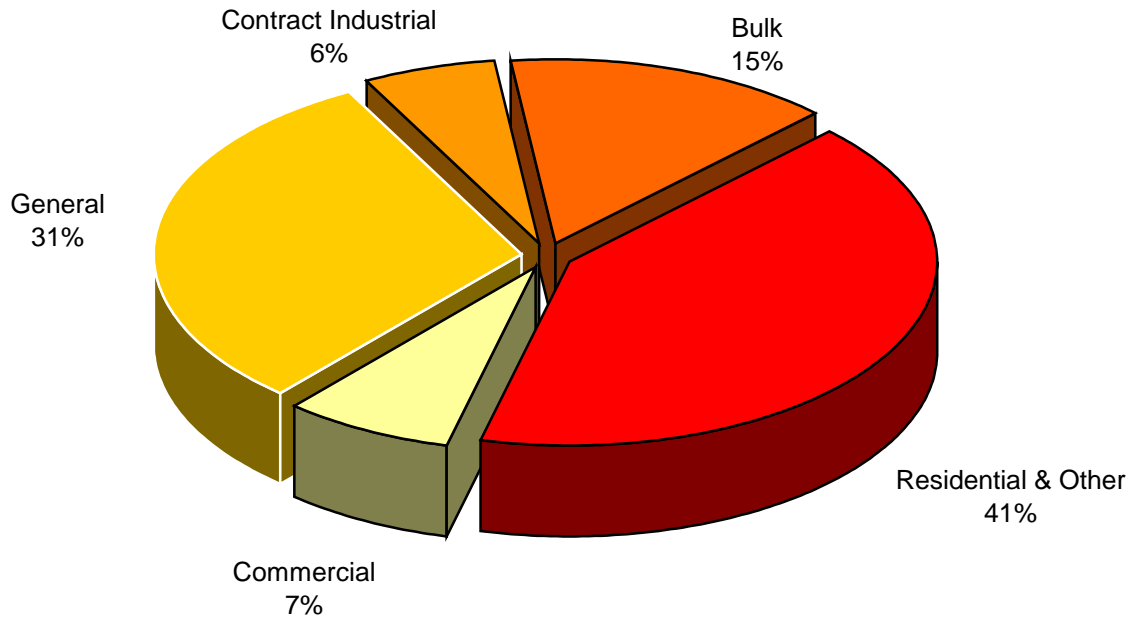
SALES OF ELECTRIC ENERGY
Year to Date - December 2016 & 2015



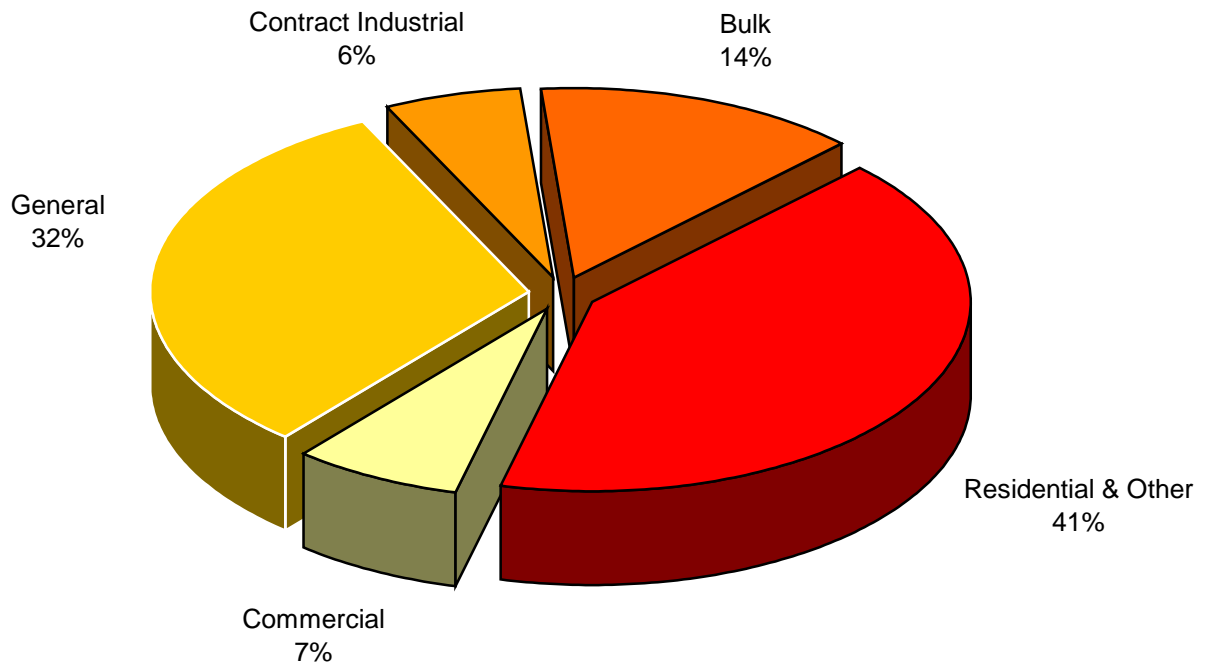
TOTAL POWER BILLED
Year to Date - December 2016 & 2015



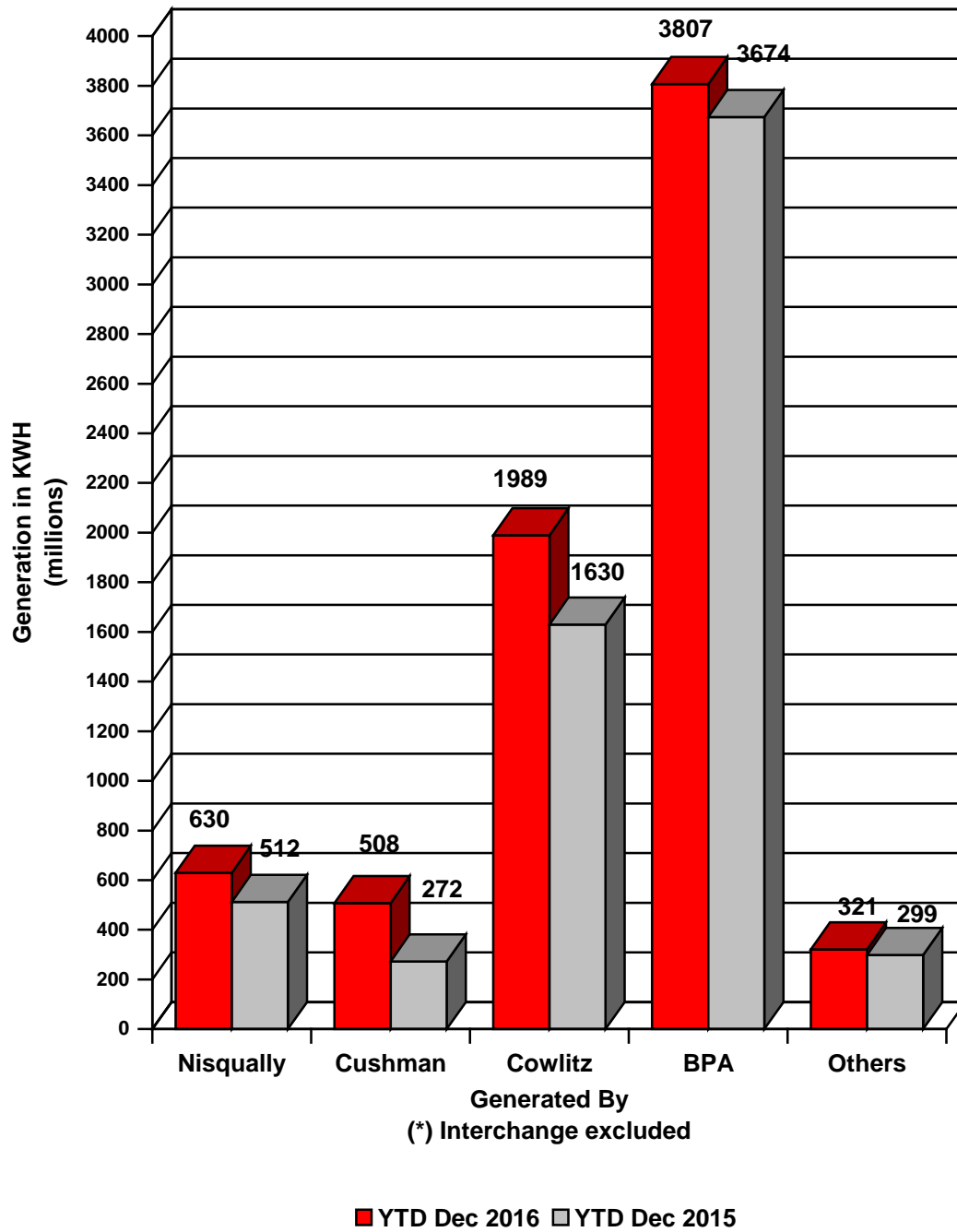
SALES OF ELECTRIC ENERGY
Year to Date - Dec 2016 (\$374,249,290)



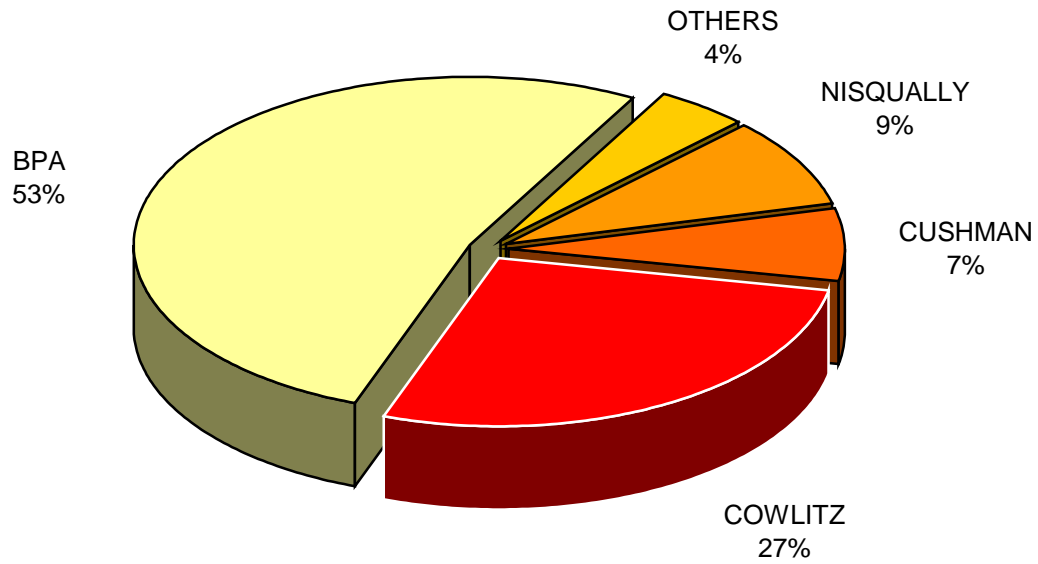
SALES OF ELECTRIC ENERGY
Year to Date - Dec 2015 (\$366,263,055)



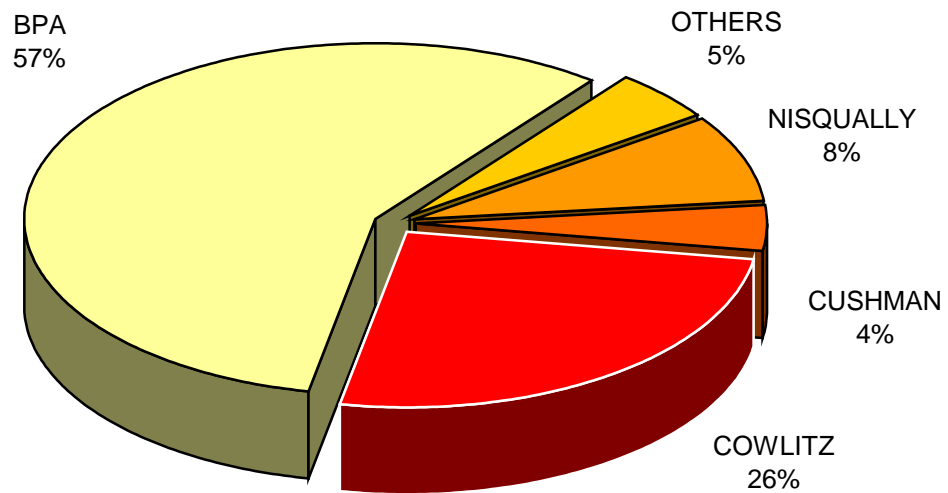
POWER SOURCES (*)
Year to Date December 2016 & 2015



POWER SOURCES (*)
Year to Date - December 2016

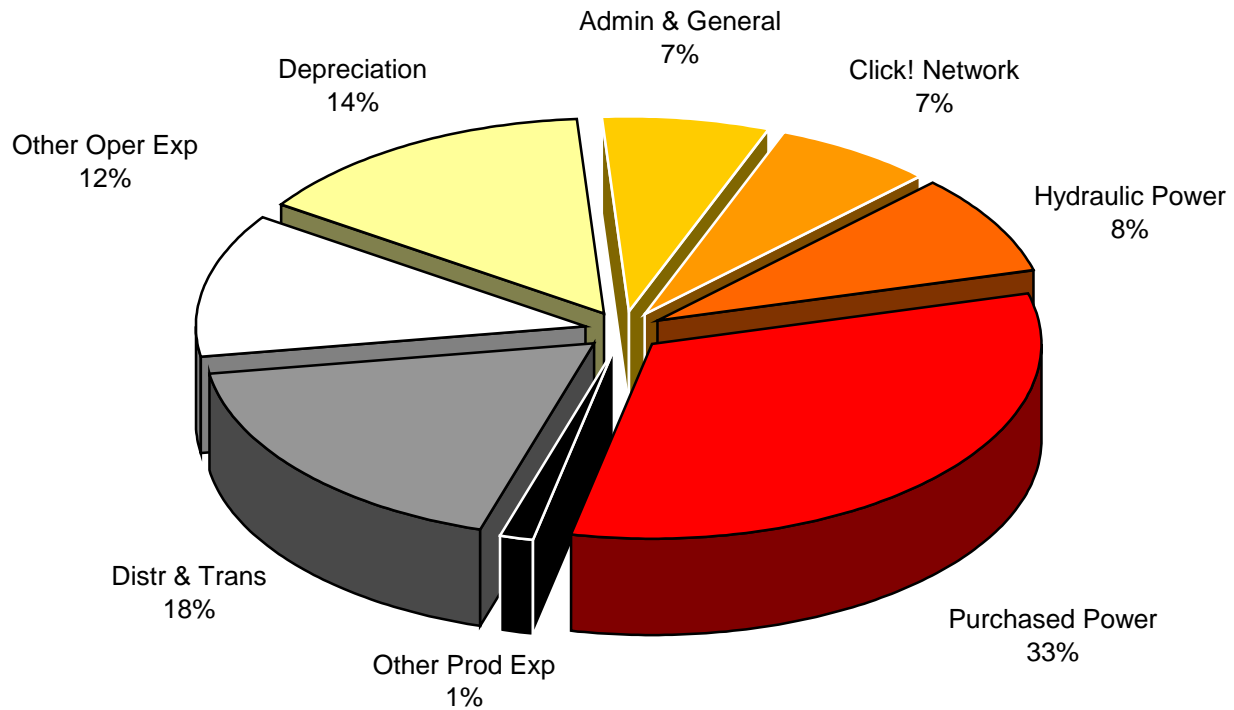


POWER SOURCES (*)
Year to Date - December 2015

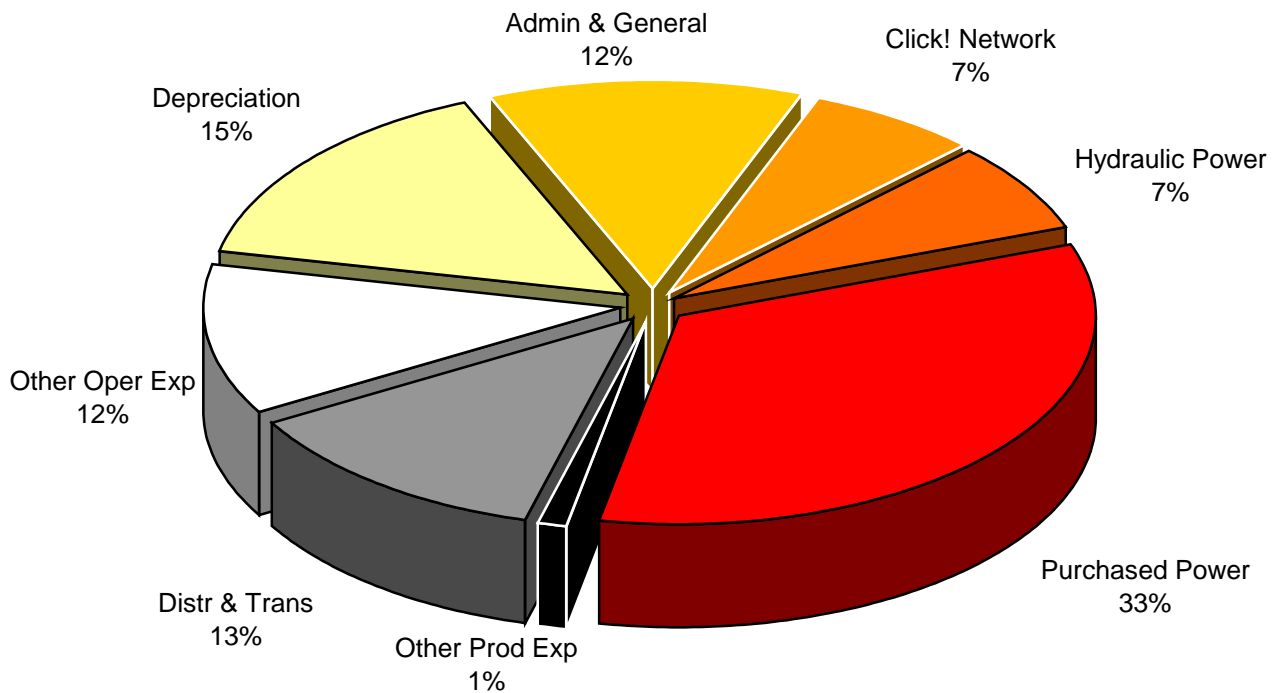


(*) Interchange excluded

TOTAL OPERATING EXPENSES *
Year to Date - Dec 2016 (\$388,219,998)

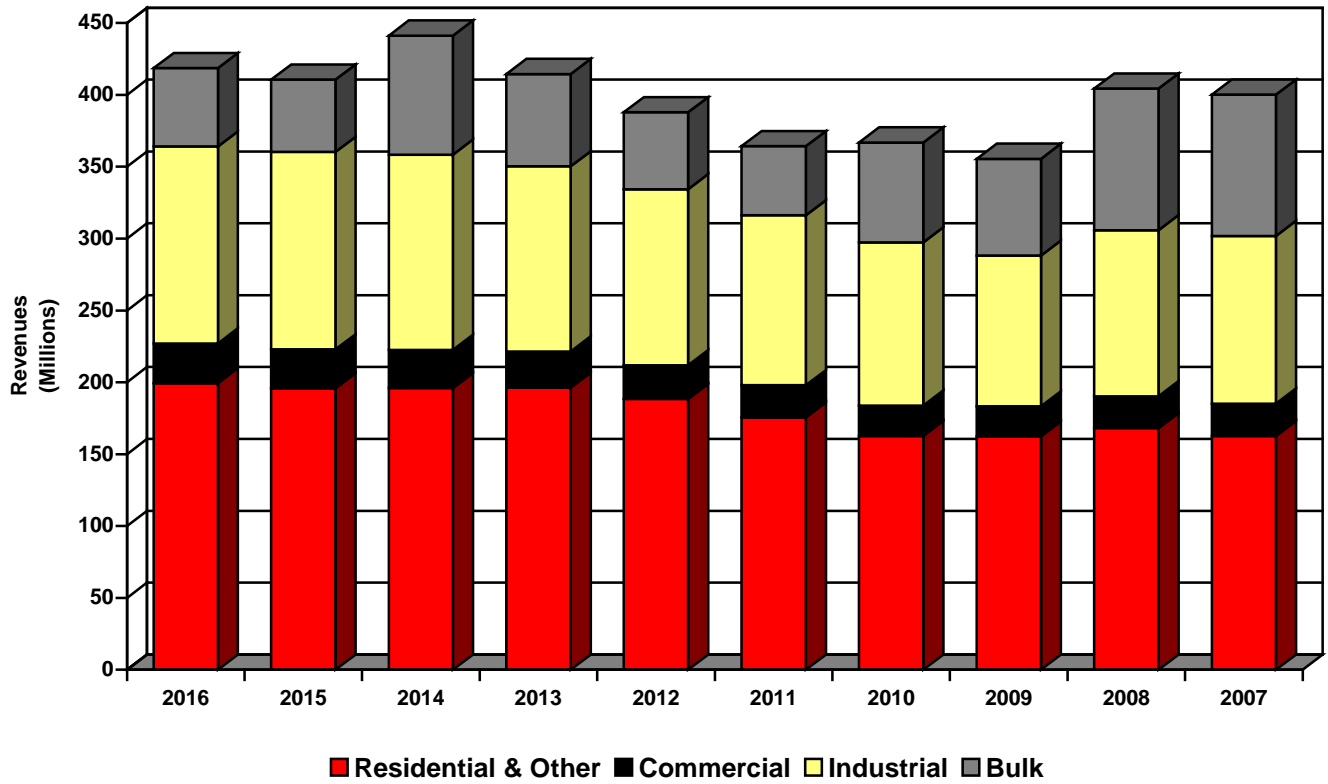


TOTAL OPERATING EXPENSES *
Year to Date - Dec 2015 (\$376,576,115)

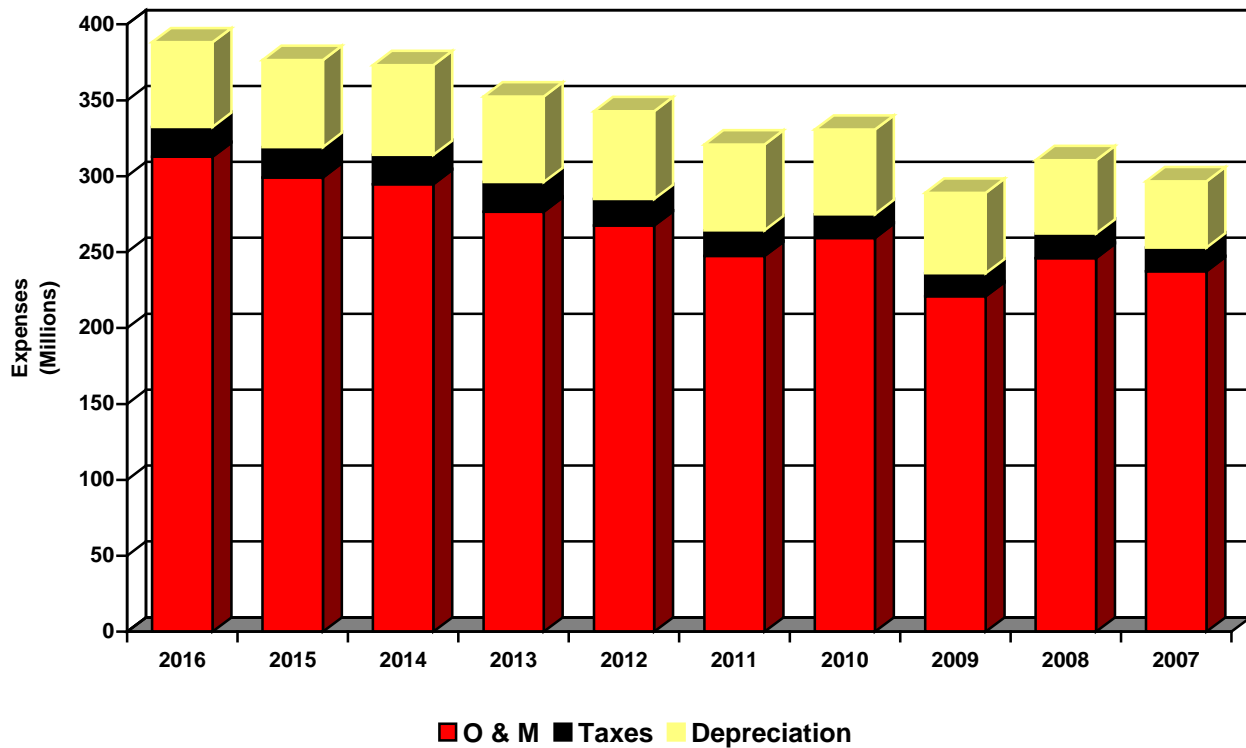


* City Gross Earnings Taxes are not included in Total Operating Expenses.

TEN-YEAR SUMMARY OF OPERATING REVENUES



TEN-YEAR SUMMARY OF OPERATING EXPENSES



2016 SUPERINTENDENT'S REPORT TACOMA POWER

CLICK!

Financial Status

Click! Network commercial revenues declined from \$27.3 million in 2015 to \$26.7 million in 2016. The retail cable TV customer base dropped 4.6 percent ending the year with 17,468 active customers, and the Internet cable modem customers served by the three wholesale Internet Service Providers (ISPs) - Advanced Stream, Net-Venture, Inc., and Rainier Connect, grew by .4 percent ending the year with 23,344 active customers. Click! provided 173 broadband transport circuits to Click!'s wholesale service providers allowing them to provide an array of telecommunication services to many businesses in the service area. Additionally, Click! continued to provide the City of Tacoma I-Net services to approximately 190 sites, keeping the cost of telecommunications low for many government entities, and also provided support for just over 15,000 gateway power meter connections.

Cable TV Rate Adjustments

Because a final policymaker decision regarding Click! Network's long term business plan remained outstanding in 2016, no cable television rate increases were implemented. Although Cable television prices continue to remain under market, the postponement of rate adjustments contributed to the decline in revenues.

Channel Additions

During 2016, Click! Network migrated 10 networks from optional service levels to its Broadcast package and migrated Big Ten Network and Sprout from its Sports & Family package to its Click! ON Digital package. Three networks discontinued operations in 2016, Pivot, UWTV, and MundoMax, but TV Tacoma HD was added, bringing the total to 376 video and 65 audio channels. Click! also added a variety of national and local video on demand content for a total offering of over 12,000 hours of content to make the product more competitive. Additionally, Click! added new networks to its Watch TV Everywhere service. Click!'s cable TV customers can now enjoy watching Click! video content from 84 networks on any of their mobile devices with an internet connection.

Website Improvements

Click! Network launched a new website in June 2016. Improvements included streamlined navigation, responsiveness to mobile device screen sizes, enhanced TV listings, and an online shopping cart. Click! cable television products, along with ISP internet packages, are now prominently displayed, enabling the potential customer to select services and submit a self-service order online.

Customer Satisfaction Survey

Customer Satisfaction survey cards were mailed to all new cable TV customers and to all customers who had a service related issue. Click! customer service and technicians representatives received ratings averaging 3.7 and 3.8 respectively on a scale of 1 – 4. In addition, a Customer Satisfaction Survey conducted on Click! Network's behalf by Washington State University's Social & Economic Sciences Research Center (SESRC) showed a mean average overall customer satisfaction score of 8.08 on a 1-10 scale. The results revealed that customers are very satisfied with the services provided by Click! and in particular, recognized the quality of service provided by our Sales and Service Representatives and Service Technicians.

New Tools

Click! purchased the CPAT Flex Digital Leakage Monitoring System to address concerns about interference from cable leakage in the aeronautical and LTE bands. The CPAT Flex Digital Leakage Monitoring System automates the signal leakage detection process freeing up technicians for other tasks. Since the tool is continuously monitoring the network, signal leakage is quickly detected and repaired.

Click! also purchased the CheetahXD software to replace the former Cheetah Lite version. The CheetahXD software helps Click! network technicians manage the HFC network by providing end-to-end visibility across the HFC operations environment, and enables NOC personnel to proactively isolate network problems, trace root causes, assess potential impacts, and prioritize truck rolls by pinpointing fault and performance issues in real-time. With CheetahXD software, HFC network assurance is simplified, operational costs are reduced, and network performance is improved resulting in enhanced customer satisfaction.

Spectrum Reclamation

In 2015, Click! fully converted its system from analog to digital and freed up nineteen (19) 6 MHz channel slots. Since then, 6 of those freed up channels have been added to the bank of downstream Internet channels to meet the growth in customers and Internet usage. Therefore leaving 13 channels available for use.

Network Bandwidth

During 2016, Click! added NETFLIX cache servers to the local network. The addition of these cache servers has reduced bandwidth utilization by as much as 30%. Click! added an additional 10 Gig connection at Downtown South and Downtown North for a total of 30 Gig potential capacity at each location. The Core routers are being upgraded from the Cisco 7600 platform to the Cisco ASR 9912 platform. This will provide the necessary 10 gig ports and throughput to support current and future network growth. The Cable Modem Termination Systems (CMTS) are also being upgraded. The existing Cisco uBR 10000 series CMTSs are going to be replaced with new Cisco cBR-8 CMTSs. The first set of Cisco cBR-8 CMTSs were purchased during 2016. These will support DOCSIS 3.1 Gigabit services and provide higher port and bandwidth capacity for meeting bandwidth demands and subscriber growth.

Asset Management Program

During 2016, Click! continued to build its asset list and has developed its registries for the Router, HFC Distribution, and Headend Equipment asset classes, and is prepared to participate in the Tacoma Power's Strategic Asset Management program. Click! also developed a Network Maturity Model, to more effectively manage its asset lifecycles and plan future capital expenditures.

Safety and Work Practices

In 2016, Click! continued to make improvements to its safety management practices. Improvements included: (i) Focusing on reviewing past performance; (ii) improvements in the oversight of injured worker claims; and (iii) increased review of leading indicators such as near misses and non-medical injury reports. Additional training was provided on Home Safety and how the employees and their families can be impacted by the activities we engage in outside of our work life. Safety posters and bulletin board messages were utilized to promote safety awareness. Each business unit held monthly safety meetings and the Click! Safety Committee met quarterly to improve safety related communications.

GENERATION

Hydroelectric Projects

Tacoma Power's hydro plants were available 99.83 percent of the time in 2016 except for scheduled maintenance outages.

Cowlitz

Construction is wrapping up on the Cowlitz Falls North Shore Collector for collection of downstream migrating smolts from the upper Cowlitz River. The collector, located at Lewis County Public Utility District Cowlitz Falls Dam, will improve natural fish runs in the Cowlitz River and help Tacoma Power meet its Federal Energy Regulatory Commission (FERC) license obligations. The \$35 million construction project is scheduled for final commissioning and operation in April, 2017. The 70 ton head gate for unit 51 was removed for the first time in 48 years and rehabilitated.

Cushman

Construction on both of the new Cushman fish hatcheries were completed and began operation in 2016. One Cushman unit was modified to allow for synchronous condensing operation which will allow Power Management to supply and sell capacity without consuming water. The 20-year-old exciters for all three generators at Cushman 2 were replaced. Construction of recreation improvements in the Staircase area were completed and opened to the public during 2016.

Nisqually

The 20-year-old exciters were replaced on four units at LaGrande and one governor was upgraded.

Regulatory Compliance and Dam Safety

All dam safety and license compliance requirements were met and submitted to the Federal Energy Regulatory Commission on time. All NERC compliance obligations were met and the 2016 audit resulted in no findings. Several studies were concluded or nearly concluded relating to seismic upgrades to parts of our plants including the Mayfield penstock slope and the spillways at both Mayfield and Mossyrock. Potential seismic loading was recently increased on these projects which will cause us to have to rework some previous studies and explore new alternatives.

Parks

Tacoma Power's parks served over 300,000 customers in 2016. Tacoma Power's park customers continue to compliment the cleanliness, admire the beauty and maintenance, and praise the friendly and helpful staff. Nearly 99 percent of the customers rate the employees as helpful in the 2300 surveys that were completed. A few of the many positive customer comments received include: "The staff is so friendly, gave a warm reception, very welcoming, helpful, warm, kind, congenial, cordial, courteous, amenable and generous!." "Great family camping spot! Well-kept and lots of fun things to do."

Facilities

Chief Imo retired as the Facilities Manager and was replaced by Terry Coggins in 2016. Construction was nearly completed on the 4th floor remodel which will combine Finance and Purchasing functions on the 4th floor and free up space on the Main floor for other pressing facility needs.

POWER MANAGEMENT

2016 was a productive year for Power Management. Highlights (with more detail following) include:

1. Power Management had overall responsibility for developing Tacoma's first community solar projects. The projects were fully subscribed, constructed ahead of schedule and under budget, and received a warm reception from the community.
2. We developed, marketed and executed numerous non-energy products and services in 2016 to mitigate weak wholesale market prices. The effort resulted in \$2.4 million in additional net benefit for our customers.
3. We exceeded the conservation target in 2016 with low resource acquisition costs.
4. Power Management led efforts to create a way to convert City of Tacoma street lights to LED technology without the City borrowing funds.
5. We participated in regional efforts to investigate and influence regional wholesale markets and to investigate the potential benefits of transportation electrification.

6. We renewed contracts with two large industrial customers that required significant negotiation and accommodation in key elements of the agreements.

Conservation Resources Management (CRM)

Tacoma Power acquires energy conservation as a resource to defer its need for future, more costly supply-side resources. Conservation in 2016 cost less than \$21/MWh while other resources we might use to meet future load cost significantly more. CRM completed over 1,000 residential projects and over 200 commercial projects. Conservation also provides a positive touch point for thousands of customers with its popular programs that provide homeowners and businesses technical assistance as well as financial incentives to reduce the cost of their energy efficiency improvements. Additionally, CRM held 30 community events and 33 retailer events to promote efficient retail products.

For the 2016-2017 compliance biennium, Tacoma Power has a target of 9.4 aMW. As the first year of the biennium draws to a close, Conservation Resources Management (CRM) projects a year-end savings of 5.7 aMW and biennial savings of about 10 aMW. Savings in excess of the target would be eligible for use against our targets in the following two biennia subject to stipulations in RCW 19.285.040(c)(i), a Tacoma Power-led amendment to the Energy Independence Act.

In addition to working to meet its conservation goals, CRM developed new programs and tools throughout 2016 to better prepare for the future. CRM has implemented a new central database to house customer, program, and financial transaction information and automate time consuming tasks. Database development projects like this often come in over budget and delayed but this project was completed on time and within budget.

CRM has launched a new community solar program which allows customers to benefit from lucrative State incentives even if they don't own their home or otherwise are not able to install solar energy themselves. The solar array is housed atop the TPU warehouse roof.

Another major project involving CRM was to create a rate whereby the City of Tacoma can convert most of its streetlights to LED fixtures without increasing its budget. CRM will manage the RFP process and oversee installation of the LED streetlights.

CRM also continues to promote the success of its "trade allies" who install energy efficiency measures under its programs. A new database portal will allow trade allies to view information regarding projects with their shared customers.

Energy Resource Planning

Tacoma Power's purchases a significant amount of power and transmission from the Bonneville Power Administration (BPA) at an annual cost of approximately \$120 million and \$18 million respectively. The Planning Unit actively participated in BPA's pre-BP-18 Wholesale Power and Transmission rate case workshops. We vigorously supported a revision to the way BPA allocated transmission costs among NT and PTP customers. However, BPA did not accept our recommendation. Pursuant to the BPA Power contract, on May 1 Tacoma Power had a one-time opportunity to change from a "slice" to a "block" customer. The Planning Unit assessed both products and found remaining a "slice" customer was most beneficial to the utility.

The Planning Unit participated with four other utilities in a study to illustrative of the value of transportation electrification to the region and individual utilities. The study identified electric vehicle adoption rates, wholesale electric prices, fuel prices, generation capacity prices, distribution system costs, and electric vehicle and charger costs as important factors to the economics of transportation electrification. The study suggests significant regional benefits from transportation electrification; however, utility impacts ranged from negative to positive depending on utility specific circumstances.

The Planning Unit worked with other parts of Tacoma Power to complete a report on potential near term strategies to interact with organized wholesale markets. The study considered functional staffing requirements, computer software and equipment costs for three level of CAISO interaction: participate as a Market Entity, pseudo-tie a unit, and bidding in an external resource.

The Planning Unit completed two contracts to acquire an estimated 200,000 RECs per year (unit contingent) for the post-2020 compliance period. Tacoma Power has now secured about 650,000 of the projected 750,000 renewable MWHs/RECs needed to comply with state mandates

The Planning Unit assessed replacing most of the current old metal-halide/sodium vapor street lights in the city of Tacoma with LED lights. The study found positive net benefits. This unit led a cross-utility team to develop a new street light ordinance to allow the instillation of the LED lights. The Tacoma City Council will consider the ordinance in 2017.

The Planning Unit participated in a number of state regulation and policy development efforts including Clean Air Rule (Ecology), amendments to the Energy Independence Act implementing rules (Commerce), fuel mix disclosure requirements (Commerce), and IRP requirements (Rep. Morris).

The Planning Unit worked with Tacoma Power's two CP customers to renew the contracts under which they receive service. The Tacoma Public Utility Board approved the contracts at their September 21, public meeting.

The Planning Unit worked with RPA to assess how potential changes to rates might affect different segments of customers (particularly low income customers) and how any negative impacts might be mitigated. This assessment was well received by internal audiences and at PPC.

The Planning Unit initiated the biennial service area energy conservation potential assessment. The study was about half complete by the end of the year. Presently it indicates about 35 aMW of achievable economic conservation potential over a 10-year period. As part of this work, the Planning Unit established the BPA Block contract power rate as the new avoided cost for the conservation cost-effectiveness test.

Resource Operations and Trading

Wholesale transactions in 2016 were characterized by strong sales volumes and lower wholesale prices compared to the prior year. Net wholesale power sales were 2.5 million MWh, exceeding the budget estimates of 1.2 million MWh. Annual revenue was \$50.1 million compared to budget estimates of \$53.3 million.

In the first quarter of 2016, flows into Tacoma Power's reservoirs were well above normal. These high inflows were due in part to warm temperatures and in part to high precipitation, especially at the Cushman hydroelectric project. The warm temperatures are typical of the strong El Niño conditions that were present in the first part of 2016.

Snowpack in Tacoma's basins was also above normal into the early spring. However, the weather turned much warmer and drier with record high temperatures in April. The result was a rapid spring melt and a much lower than expected runoff. As a consequence, the storage reservoirs at the Cowlitz and Nisqually hydroelectric projects did not reach the normal summertime operating levels. Tacoma was able to make extraordinary efforts to refill Lake Cushman by early June.

To mitigate the impact of the below normal spring and summer flows, Tacoma worked with State, Federal and Tribal Natural Resource Agencies to reduce required flows at the Nisqually hydroelectric project in order to preserve water in storage and protect the downstream environment.

In October, Tacoma's projects received above average precipitation, and record-setting inflows. The high flows continued into November, and allowed Tacoma's reservoirs to recover after the dry spring and summer. In December, after almost an entire year of above-normal temperatures, conditions shifted towards a weak La Nina, and temperatures were well below normal for the month.

Overall for calendar year 2016, stream flows into Tacoma's Cowlitz, Nisqually, and Cushman hydroelectric projects were above their historic levels at 110 percent, 101 percent, and 136 percent, respectively. Flows into the Federal Columbia River Power System, which affect Tacoma's Slice-of-the-System BPA contract, were 99 percent of normal.

In 2016, Tacoma continued to find innovative ways to monetize the flexibility of its power resource portfolio by participating in emerging markets for various ancillary energy products.

Tacoma continued selling energy as a designated Asset Controlling Supplier (ACS), one of only three in the Pacific Northwest. With this designation, any sales made from Tacoma's resource portfolio are deemed "low carbon" and can be sold at a premium. In 2016, ACS sales resulted in additional revenue of almost \$1.5 million.

Tacoma continued to analyze the capabilities of the resource portfolio to determine whether capacity and reserve products could be reliably supplied and to quantify the associated opportunity cost. We responded to several Request for Offers (RFOs) for Imbalance Capacity Products and were awarded two of the RFOs. Sale of these products plus sales made in the Day-Ahead and Real-Time markets provided additional revenue of approximately \$1 million.

Power Management worked together with T&D and Generation to analyze, develop and implement a new Frequency Reserve product. In December, we were awarded a RFO and began delivering this new product which will provide approximately \$200,000 of additional revenue.

RATES, PLANNING, AND ANALYSIS

Retail Rates

Tacoma Power completed a comprehensive update and review of its cost-of-service study working with its rate consultant, Black & Veatch. Staff also completed a rigorous study of impacts of various residential rate designs on Tacoma Power customers. Initial customer class rate adjustments were presented to the Public Utility Board on 12/14/2016.

Energy Risk Management

Tacoma Power staff completed the first generation cash-flow-at-risk model. The model will enable better analysis of risks related to hedging decisions and provide new reports to Tacoma Power executives.

Staff hired a consultant to benchmark wholesale risk management practices against industry standards. The study helped staff to develop a roadmap and begin implementation of new business processes for enhancing credit reporting and risk controls.

Finance

Facing a \$48.6 million reduction in wholesale and retail revenue, Tacoma Power focused on minimizing expense increases in the Operations & Maintenance, Personnel, and Capital budgets. Over 34 unfilled positions were repurposed during the budget process to align with the strategic needs of the utility.

Additionally, the initial Capital budget was reduced by \$29 million through a new review and development process. These cost reductions allowed the utility to hold rate increases to 5.9% each year despite the reduction in wholesale and retail revenue.

In addition, Tacoma Power's credit ratings were confirmed by S&P in 2016 as part of their regular monitoring and review cycle for the utility. Tacoma Power's existing credit ratings of Aa3/AA/AA- by Moody's, Standard & Poor's, and Fitch, respectively, continue to allow Tacoma Power access to low interest rates for future borrowing needs.

Strategy

Tacoma Power completed development of a new Strategic Plan in October 2016. The plan was developed using feedback from customers, employees, and stakeholders throughout the City of Tacoma. It focuses around the strategic principle of Community Value First and can be summarized into four primary focus areas: Employees, Customers, Finances, and Environmental Stewardship. In order to make progress on the plan, strategic initiatives have been developed and will be managed under a comprehensive strategy management program.

TRANSMISSION AND DISTRIBUTION (T&D)

System Reliability

The reliability performance of the transmission and distribution system is based on a six-year average, from January 1, 2011 through December 31, 2016. The average number of customers (ACO) without service per outage was 81 customers. The average outage duration for each customer served (SAIDI) was 58 outage minutes per customer. The average frequency of sustained interruption per customer (SAIFI) was 0.55 interruption averages per customer.

Rolling Average	6-Year	SAIDI	SAIFI	ACO
01/1/11-12/31/16		58.35	0.5509	81.06
2016 Performance Target		≤ 75	≤ 0.95	≤ 150

Three major weather events occurred again in 2016, significantly more than our normal of 0-1 storms/year. These events were on March 1 (wind gusts to 45 mph SW), March 13 (wind gusts to 44 mph S), and October 15 (wind gusts to 53 mph S). Tacoma applies Institute of Electrical and Electronics Engineers (IEEE) approved criteria to establish exclusion criteria for major storm events and continues to include major event data from qualifying events in its normal outage metrics, when widespread impacts are not realized.

The Tacoma native peak load was 906 MW on Thursday, December 8, 2016. The transmission peak occurred on Saturday, December 16, 2016, at 1,257 MW with a Tacoma Native load of 905 MW.

System Planning and Operations

In December, the T&D Horizon Plan update was completed. The plan was last updated in 2011. The Horizon Plan provides additions, expansions, upgrades, replacements, rehabilitation, and improvements to Tacoma Power's electrical infrastructure to mitigate identified future deficiencies. Staff identified 37 projects outlined in the Horizon Plan as those best to support an effective and productive electrical system, through the most economical means. These projects have been disbursed over eight biennial budgets (2017-2018 through 2031-2032) in an attempt to levelize future expenditures.

The average capital expenditure for the next 16 years is approximately \$50,830,000 per biennium, with a total cost of \$406,659,680. Both the average expenditure per biennium and the total cost are about 17% less than the amounts included in the last Horizon Plan.

On October 29, 2016, System Operations began operating with version 6.5 of the Outage Management System (OMS). The upgrade was one of many corrective actions proposed in the TPU sponsored study conducted by Utility Integration Solutions (UISOL) in 2014. The upgrade has provided System Operations with additional user functionality and resulted in a more efficient means of providing outage information to Tacoma Power customers.

In December, Tacoma Power began operating as a member of Area Control Error Diversity Interchange (ADI). Joining ADI was a recommendation of the Market Assessment and Coordination Committee (MC) Phase-3 membership. Tacoma Power is the twelfth Balancing Authority (BA) to join the group and it is anticipated that one more BA, Chelan County PUD, will join in 2017. ADI members share control error, which results in fewer generator dispatch signals and less wear on generator components.

On December 1, 2016, Tacoma Power began a one-year membership in the Northwest Power Pool (NWPP) Frequency Response Sharing Group (FRSG). The group will allow Tacoma Power to pool compliance risk similar to the NWPP Contingency Reserve Sharing Group. Membership to the FRSG has provided additional support to Tacoma Power's decision to sell 2 MW of frequency response. The sale of this newly created market product has enabled Tacoma to receive additional wholesale revenue.

Transmission Service

Tacoma Power has the following transmission service agreements in place with the Bonneville Power Administration (BPA) for delivery of power to the Pierce County Mutuels (PCM). These agreements are pursuant to Tacoma Power's Open Access Transmission Tariff (OATT).

PCM	Service Type	Agreement Term
Alder	Network	Oct 1, 2013 – Oct 1, 2028
Lewis	Network	Oct 1, 2013 – Oct 1, 2028
Lakeview	Network	Oct 1, 2014 – Oct 1, 2028
PenLight	Network	Oct 1, 2014 – Oct 1, 2028
Eatonville and Ohop	Point-To-Point	Oct 1, 2015 – Oct 1, 2018
Elmhurst and Parkland	Point-To-Point	Oct 1, 2015 – Oct 1, 2018
Milton	Point-To-Point	Oct 1, 2015 – Oct 1, 2018
Steilacoom	Point-To-Point	Oct 1, 2015 – Oct 1, 2018

The Point-To-Point agreements will be converted to network service once the arrangements are in place to allow for remote load shedding of PCM load when necessary to mitigate overloaded transmission lines. A technical team, which includes Chad Edinger and Aaron Anderson from Tacoma Power, has been meeting regularly with PCM personnel to develop a workable plan for the load shedding. Although progress has been somewhat slower than hoped, the meetings have been positive. The intention is to implement load shedding before the existing agreements expire in 2018 to allow for the transition to Network service through October 2028.

In addition to the BPA agreements, Tacoma Power provides transmission service to Avangrid Renewables (previously known as Iberdrola Renewables) and Lewis County PUD. Avandgrid's contract for 45 MW of Point-To-Point service is for the off-system delivery of power from the WestRock biomass generation project. The agreement term is from August 1, 2009 through July 31, 2021. Lewis County PUD takes service under a pre-OATT agreement. The service is for 70 MW of transmission service to deliver Cowlitz Falls generation over Tacoma Power's facilities to BPA's system. The agreement term is concurrent with Lewis County's Federal Energy Regulatory Commission (FERC) licenses for the hydro project.

The estimated annual revenues received from each of the entities are:

BPA	\$7,000,000
Avangrid	670,000
Lewis County PUD	189,000
TOTAL	\$7,859,000

Asset Management

The T&D Asset Management (AM) program optimizes data for programs such as Pole Replacement, Underground Cable Replacement, Pad and Polemount Transformers, #6 Copper Replacement, Padmount Switchgear, High Voltage (HV) Insulator and Power Transformer Replacement capital projects. With data collected, budgeting champions for these projects were able to calibrate their requested funds while optimizing risk levels to the transmission and distribution system.

Due to a higher than anticipated failure rate, T&D AM has gathered and processed asset class registries for live front padmount switchgear, HV insulators, and fused disconnects and has begun coordinated and targeted replacement. Due to high consequence of failure, and utilizing AM best practices, both HV brown porcelain insulators and 3-phase #6 copper conductors are high priority replacement items. In addition, a six-year maintenance plan was implemented for 12.5kV distribution switches to increase operability and mitigate failures.

Through the Pole Test-and-Treat program, 4,459 poles were tested with 4,312 of those poles eligible for treatment. Poles replaced under the Pole Replacement program totaled 0.76% of plant at 664 for 2016.

Utilizing consequence of failure modeling, the Cable Replacement program saw 0.69% of plant replaced in 2016, which totaled 58,397 feet of underground high voltage cable.

System Improvements

East F Substation has been rehabilitated and constructed in a new, modern configuration addressing reliability improvement and load growth. Due to safety concerns and coordination with systems that had to remain energized to carry load temporarily, Tacoma Power personnel performed all construction. The new East F Substation was energized and placed in service in November 2016.

The Potlatch Switching Station site was selected near Union, WA, within Tacoma Power-owned property along the Potlatch transmission lines. This new switching station, which is scheduled to be completed by July 2017, addresses transmission system reliability and new regulatory requirements.

The Pearl Cushman Upgrade project relaying was replaced at Pearl, Cedar, and Hilltop Substations to support rebuilding and replacing the transmission towers on North 21st Street. This project is under way and anticipated to be completed by 2018.

The Henderson Bay Tower Replacement project is 60% designed, and expected to be constructed in 2018.

A new 15 MVA Mobile Substation was added to Tacoma Power's fleet. This will improve our emergency response time to restore power.

The LaGrande Substation transformer, which serves the Nisqually Hydroelectric Project, was replaced. This included removal of the last 115 kV fuses in Tacoma Power's system.

T&D and Generation personnel coordinated with BPA to implement a generator runback and remedial action scheme at the Cowlitz Project to permit full generation output while mitigating overload conditions on the Chehalis-Mayfield 1 230kV line. In coordination with BPA, relaying was replaced on the Mossyrock-Chehalis 230kV line to modernized aging equipment.

Electrical Services

Transmission & Distribution's Electrical Services workgroup provided 216 service connections requiring construction work performed, on average, within 3.9 days and 1,491 service connections, without construction work performed, on average, within 1.7 days. T&D issued 11,876 electrical permits and performed 21,000 electrical inspections for total permit revenue of \$1,750,195.

Electrical Services completed design, agreements, and work orders for \$1,444,000 in Residential Projects and \$1,328,000 in Commercial Projects.

An Automatic Call Distribution (ACD) for the Electrical Permitting group was adopted this year. Utility Staff Support assisted 4,095 walk-in customers in the lobby and supported 23,487 customer phone calls.

Economic Development was promoted thru involvement on collaborative teams for over 20 large potential developments and pre-application meetings for over 100 smaller developments. Economic Development initiatives progressed this year culminating in four drafted policies and procedures to urge economic development.

Safety and Work Practices

This was a year filled with safety rule changes and work practice improvements as we incorporated the new state and federal electrical safety rules updates into common practice. T&D had previously field-tested and selected products to ensure adherence with these revised rules including wood-pole fall protection, bucket-truck fall protection and arc-resistant face protection. The safety rule change with the greatest impact was the use of 100% fall protection while climbing wooden poles. To facilitate this change all wood-pole climbers were issued new fall protection systems and retrained in their proper use. The change to the 100% requirement has been embraced by the Line Section employees and should help prevent falls in the future.

T&D Safety worked with the Tacoma Police Department to provide High-Voltage Safety Training to all uniformed department personnel.

Employee Resources/Development

T&D completed the thirteenth year of its engineering intern program. T&D hosts four engineering students, for 12-13 weeks each summer. The interns are recruited from local universities including University of Idaho, Washington State University, University of Washington, and Seattle University, with approximately 50% of current T&D engineers coming from the program. T&D continues its recruitment/outreach efforts and attends events targeted to increase diversity in our applicant pools. This includes working with the military and veteran populations and fostering partnerships with schools to ensure we have a pipeline of qualified applicants to fill jobs expected to become vacant through retirements in the next few years.

T&D Training and Development managed three apprenticeship programs, and provided training and work experiences to 37 apprentices and trainees in four areas: line (20); substation (12); advanced meter/relay technician (1); and system dispatcher (4).

UTILITY TECHNOLOGY SERVICES

Utility Technology Strategy & Planning

In 2016, UTS developed a comprehensive business case for a combined Water and Power deployment of Advanced Metering Infrastructure across the service area.

This effort required significant engagement with internal and external stakeholders, senior management, vendors, and other utilities in an effort to determine a direction on AMI for TPU. Over the past 10 years Tacoma Power and Tacoma Water have implemented several advanced metering technologies to meet specific business needs for residential, commercial and industrial metering installations. All of the technologies previously implemented have reached the end of their useful life and are or soon will no longer be supported. In addition, customers are beginning to expect greater products and services which are enabled by AMI. The business case development activities included:

- Identification of AMI technology options available today to Power and Water Utilities
- Recommending the best AMI technology solution to meet TPU's AMI business requirements
- Performing a detailed costs and benefits analysis for each AMI for budget planning
- Formalizing and documenting the agreed upon quantifiable and qualitative benefits for TPU
- Conducting presentations for and gaining approval from Executive Leadership and the Utility Board

This effort also established a roadmap for TPU's AMI implementation and defined a program governance model to support a combined Power and Water deployment.

UTS actively supported the Community Solar Project by providing the data communication infrastructure, and network connectivity needed for Tacoma Power to monitor and report on the amount of power generated by this new renewable energy resource. New business processes were developed to sell Community Solar units via a new web application that enabled the collection of payments from customers. This project was a collaborative effort among Power Management - Conservation, IT/EASD, Treasury, and UTS staff.

Employee Engagement

A labor management agreement addressing the support of operational and business technology systems was completed in 2016. The goal of this agreement was to improve service delivery by promoting workforce efficiencies through utilization of shared resources and improved employee knowledge and certification. As a result, UTS began to partition the private cloud computing infrastructure enabling the deployment and support of additional applications and systems from different Tacoma Power operating units and TPU Stakeholders.

Operational Efficiency

Western Electricity Coordinating Council (WECC) visited Tacoma Power in July of 2016 to conduct a Reliability & Compliance Internal Controls Evaluation (ICE).

This evaluation was used to assess whether the controls and measures Tacoma Power uses to ensure compliance with the North American Electric Reliability Corporation (NERC) Reliability Standards are adequate. The results of the evaluation along with any findings identified during the WECC On-Site Audit conducted early 2016 were then used to establish WECC's Compliance Oversight Plan (COP) for Tacoma Power. Moving forward, WECC will use the COP to determine their audit approach for Tacoma Power and the number of Reliability Standards and Requirements Tacoma Power will be required to Self-Certify on an annual basis. The outcome has already greatly reduced our workload and produced a positive outcome for Tacoma Power.

Manual data gathering and manipulation to generate TPU Fleet operational and financial reports were streamlined through a new interface between SAP and the pool car kiosk systems. This project eliminated manual activities and enabled operational efficiencies to be achieved.

Tacoma Power's Outage Management System and Customer Services' iNovah applications were upgraded to bring the applications, operating systems, and databases current for continued vendor support, increasing reliability and reducing security risks.

After a well-received pilot, the GIS team replaced the internet-enabled tool used by field staff with a new tool that provides for a better user interface, increased functionality and reliability.

Desktop Support deployed approximately 350 computers throughout TPU in 2016 using the newly adopted standards and specifications for desktops and/or laptops. In addition, the Computer Support Technicians (CSTs) sanitized over 200 computers infected by new vulnerabilities. The increase in vulnerabilities led to stronger Cyber Security Controls being applied to new computer deployments across TPU.

Technology Advancements

In 2016, UTS partnered and collaborated with key stakeholders across TPU and the City of Tacoma Information Technology Department to deliver a newly re-designed utility bill for our customers. This effort also implemented a new bill design and production solution that addressed end of life issues with the legacy platform and provide greater flexibility to future changes with the invoice and other customer facing documents. This effort was several years in the making and culminated with the delivery of a successful project that met both customer needs and internal technical support requirements.

The Lobby Queueing system was successfully implemented with new functionality that enables better reporting and real time situational awareness of customer traffic and wait times. This new technology has improved the customers experience while paying their utility bills and provided better tools to Customer Service Representatives, Supervisors and Managers.

The operational private cloud computing infrastructure deployed in 2011 to support Tacoma Power's Energy Trading and Risk Management applications was upgraded in 2016. The project significantly increased the computing capacity and included the implementation of the next generation of storage capability to increase reliability, flexibility, and performance.

In 2016, UTS completed a two year process which led to vendor selection and awarding a contract for a new Energy Management System (EMS). During the last year a rigorous evaluation process involving a Selection Advisory Committee comprised of eighteen (18) subject matter experts from UTS and other Tacoma Power workgroups reviewed and scored vendor responses to over 3,000 system requirements. Vendor finalists were then invited to present their solutions to the Selection Advisory Committee who also conducted site visits to other utilities to learn from their EMS upgrades. The new EMS is expected to come on-line in 2018 and will provide for a modern more-flexible platform supporting enhanced security along with more effective and efficient compliance with NERC CIP and other reliability standards.

A unified backup and recovery solution was deployed allowing TPU to consolidate and centrally manage the performance of system backup and recovery operations that support various operational and industrial control systems.

Prior to this implementation these operations had to be managed individually by the application owners. The new solution utilizes technology to enhance performance improve security and system reliability.

The Communications Tower located within the Pearl Substation was deemed to be structurally insufficient. In partnership with Generation, UTS identified opportunities to reduce loading on the tower and make temporary upgrades to further reduce tower loading until the replacement of the existing tower could occur. Immediate planning began and the replacement project kicked off in the third quarter of 2016. Installation of the new tower and removal of the old is scheduled for some time in first quarter of 2017.

Security

UTS established a Cyber Security group comprised of a five (5) member team to begin developing and enhancing information security operations across all of TPU. This group began by utilizing a nationally recognized cyber security framework and approach to conducting security evaluations on TPU's Industrial Control System Environments. The evaluations have identified several areas where TPU can improve its security resilience.

A new security system was designed and installed at the South Service Center to improve physical security and provide enhanced video surveillance throughout the facility.

Regulatory

Tacoma Power's 2016 Western Electricity Coordinating Council (WECC) audit occurred in March. This audit was the culmination of several hundred hours of work and successful collaborations between the Reliability & Compliance (R&C) Office and Subject Matter Experts (SME) across Tacoma Power who support the Critical Infrastructure Protection (CIP) and Operations & Planning (O&P) NERC Reliability Standards. During the audit, WECC commented that Tacoma Power has a strong culture of compliance and a solid compliance program in place. WECC stated they will point to Tacoma Power's Program as the standard for the industry.

July 1, 2016 was the effective date for a significant revision to the NERC Critical Infrastructure Protection Standards (Version 5 to Version 6), and over 20 new or revised Operation & Planning NERC Reliability Standards. Tacoma Power personnel vetted each of these standards through the new Standard Change Organizational Review and Evaluation (SCORE) process to ensure compliance. The SCORE process takes each new or revised standard and evaluates the impact (low, medium, or high) based on the risk and the resources necessary for implementation. This evaluation also assists in building a work schedule for completing any necessary work and assessing compliance prior to the enforcement date(s).

A cross-functional committee (comprised of subject matter experts from Generation, Transmission & Distribution, and Utility Technology Services) developed a plan for meeting the new CIP Low Impact requirements that become enforceable in 2017 and 2018. The planning included identifying the scope of work and resources required for each facility (people, budget, etc.).

In 2016, over 150 compliance documents went through an annual review and approval and a Cybersecurity Tabletop Exercise was conducted involving responders across Tacoma Power and the City of Tacoma Information Technology Department.

Chris Robinson
Power Superintendent



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