
ANNUAL

TACOMA POWER

2015

**FINANCIAL
REPORT**



Public Utility Board

BRYAN FLINT

Chair

MARK PATTERSON

Vice-Chair

MONIQUE TRUDNOWSKI

Secretary

WOODROW JONES

Member

KAREN LARKIN

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

TABLE OF CONTENTS

FINANCIAL DATA

INDEPENDENT AUDITOR'S REPORT	3 - 4
MANAGEMENT'S DISCUSSION AND ANALYSIS	5 - 13
STATEMENTS OF NET POSITION	16 - 17
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION	19
STATEMENTS OF CASH FLOWS	20 - 21
NOTES TO FINANCIAL STATEMENTS	22 - 45

REQUIRED SUPPLEMENTARY INFORMATION

PROPORTIONATE SHARE OF THE NET PENSION LIABILITY	48
SCHEDULE OF THE CITY OF TACOMA'S CONTRIBUTIONS	48

STATISTICAL DATA (UNAUDITED)

TEN-YEAR FINANCIAL REVIEW	50 - 51
TEN-YEAR POWER SUMMARY	52 - 53
GROSS GENERATION REPORT	55
DEBT SERVICE REQUIREMENTS	56
FUNDS AVAILABLE FOR DEBT SERVICE	57
RESOURCES	58
TAXES AND EMPLOYEE WELFARE CONTRIBUTIONS	59
2015 ELECTRIC RATES	60
GRAPHS	61 - 66

SUPERINTENDENT'S REPORT (UNAUDITED)	67 - 81
--	----------------

FINANCIAL DATA

This page has been left blank intentionally.

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, 2015 and 2014, 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, 2015 and 2014, 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.

Emphasis of Matter

Change in Accounting Principle

As discussed in Note 2 to the financial statements, effective January 1, 2015, the Division adopted requirements of Governmental Accounting Standards Board (GASB) Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*, and GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68*. The beginning net position has been adjusted for this change. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the accompanying management's discussion and analysis on pages 5 through 13, schedule of proportionate share of net pension liability on page 48 and schedule of the city of Tacoma's contributions employer contributions on page 48 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 50 through 66 and the superintendent's report presented on pages 67 through 81 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 1, 2016

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, 2015 and 2014. 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, 2015 and 2014, 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.

With the implementation of Governmental Accounting Standards Board (GASB) Statement No. 68, the Division's 2015 beginning net position has been adjusted to conform to the new reporting and accounting requirements (See Note 2 to the Financial Statements). The year of 2014 has not been restated due to the unavailability of the historic information from the plan.

Financial Highlights

- Tacoma Power reported a decrease in total net position of \$1.6 million (106.6%) in 2015, compared to an increase of \$23.7 million (3.0%) in 2014.
- Operating revenues decreased \$30.6 million (6.9%) in 2015. Operating revenues in 2014 increased \$26.8 million (6.5%).

- Utility Plant in Service increased \$43.2 million (2.4%) in 2015 and \$43.7 million (2.5%) in 2014.
- Construction work in progress increased \$33.2 million (60.5%) in 2015 and \$31.4 million (134.1%) in 2014.

Overview of Financial Statements

Tacoma Power reported net operating income of \$34.1, \$68.1 and \$61.9 million in 2015, 2014 and 2013 respectively. Operating revenues decreased \$30.6 million during 2015 and operating expenses increased \$3.4 million. For 2014, operating revenues increased \$26.8 million and operating expenses increased \$20.7 million compared to 2013. Tacoma Power reported a decrease in net position of \$1.6 million in 2015 compared to an increase of \$23.7 million in 2014 and \$19.9 million in 2013.

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

OPERATING RESULTS

(in thousands)

Category	2015	2014	2013	15/14 Increase (Decrease)	14/13 Increase (Decrease)
Operating Revenues	\$ 410,626	\$ 441,246	\$ 414,462	\$ (30,620)	\$ 26,784
Operating Expenses	376,576	373,173	352,519	3,403	20,654
Net Operating Income	34,050	68,073	61,943	(34,023)	6,130
Net Non-Operating Expenses	(20,036)	(25,138)	(24,941)	5,102	(197)
Capital Contributions	5,708	4,120	5,200	1,588	(1,080)
BABs and CREBs subsidies	3,676	3,668	3,640	8	28
Transfers Out	(24,969)	(26,999)	(25,970)	2,030	(1,029)
Change in Net Position (Net Income)	\$ (1,571)	\$ 23,724	\$ 19,872	\$ (25,295)	\$ 3,852

MEGAWATT-HOURS BILLED

(in thousands)

Type of Customer	2015	2014	2013	15/14 Increase (Decrease)	14/13 Increase (Decrease)
Residential	1,801	1,891	1,950	(90)	(59)
Commercial/General/Industrial	2,791	2,869	2,856	(78)	13
Wholesale	1,918	2,843	2,245	(925)	598
Total	6,510	7,603	7,051	(1,093)	552

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.

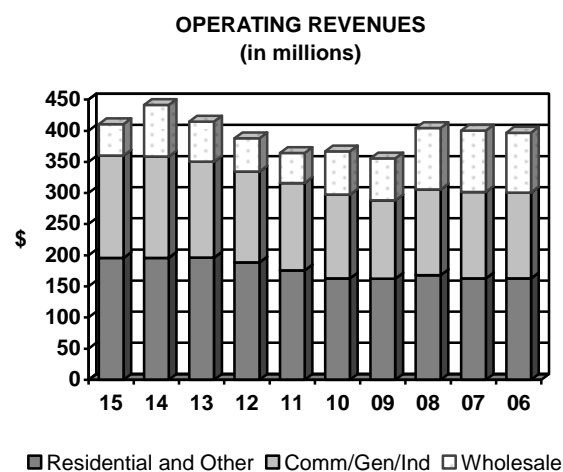
Statements of Net Position (in thousands)

<u>Description</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>15/14 Increase (Decrease)</u>	<u>14/13 Increase (Decrease)</u>
Net Utility and Non-Utility Plant	\$ 1,002,993	\$ 979,067	\$ 960,067	\$ 23,926	\$ 19,000
Current Assets, Other Assets and Special Funds	392,482	525,770	541,985	(133,288)	(16,215)
Total Assets	1,395,475	1,504,837	1,502,052	(109,362)	2,785
Deferred Outflows	10,977	8,026	15,941	2,951	(7,915)
Total Assets and Deferred Outflows	\$ 1,406,452	\$ 1,512,863	\$ 1,517,993	\$ (106,411)	\$ (5,130)
Net Position:					
Net Investment in Capital					
Assets	\$ 594,626	\$ 499,659	\$ 541,804	\$ 94,967	\$ (42,145)
Restricted	21,028	34,666	30,794	(13,638)	3,872
Unrestricted	210,279	288,478	226,481	(78,199)	61,997
Total Net Position	825,933	822,803	799,079	3,130	23,724
Long-Term Debt	441,928	530,581	564,961	(88,653)	(34,380)
Other Liabilities	86,555	111,479	105,953	(24,924)	5,526
Total Liabilities	528,483	642,060	670,914	(113,577)	(28,854)
Deferred Inflows	52,036	48,000	48,000	4,036	-
Total Net Position, Liabilities and Deferred Inflows	\$ 1,406,452	\$ 1,512,863	\$ 1,517,993	\$ (106,411)	\$ (5,130)

Revenues

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 and industrial revenues accounted for 44.8% and wholesale power revenues accounted for 13.8%.

2014 Compared to 2013

Operating revenues totaled \$441.2 million in 2014 compared to \$414.5 million in 2013, an increase of \$26.8 million (6.5%). Revenue from sales to residential and other customers decreased \$1.0 million. There was a 3.7% rate increase effective April 1, 2014 that was more than offset by a 60,000 decrease in MWh billed. Revenues from commercial, general, and industrial customers increased \$8.5 million primarily due to the rate increase effective April 1, 2014. The system average rate increase was 4.2%.

Telecommunications revenue increased \$0.9 million primarily due to a 10% rate increase in July 2014. Also, there was an increase in customer count for wholesale internet services.

Wholesale revenues in 2014 increased \$18.6 million as compared to 2013. Streamflows in 2014 were 130% of 2013 streamflows, resulting in higher generation and therefore higher sales.

In 2014 residential sales accounted for 38.3% of electric revenues, commercial and industrial revenues accounted for 40.9% and wholesale power revenues accounted for 20.8%.

Expenses

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.

2014 Compared to 2013

Total operating expenses increased \$20.7 million or 5.9% compared to 2013.

Purchased power decreased \$1.4 million (1.2%). Bonneville Power Administration (BPA) purchases decreased \$1.5 million. The Slice and Block portions of the BPA contract increased \$1.9 million and credits for the Energy Conservation Agreement (ECA) increased \$3.4 million. Purchases from Grand Coulee Project Hydroelectric Authority increased \$0.8 million due to a combination of increased volume and a small price increase. Other portfolio purchases decreased \$0.5 million due to increased generation as a result of higher streamflows.

Generation operations expense increased \$1.9 million (18.1%) primarily due to increased labor costs.

Distribution operations expense increased \$3.0 million (27.3%). The Transmission and Distribution section began contributing to the Fleet Replacement Fund for the first time this biennium in July, which accounts for \$2.6 million of the increase. The remainder is primarily increased labor costs, which include back wages due to a labor contract settlement.

Other operations expense increased \$1.6 million (12.5%). This is made up of a \$1.3 million increase in conservation and other customer assistance programs and an increase in other production expense of \$0.3 million. These increases included \$1.1 million in amortization of deferred conservation costs.

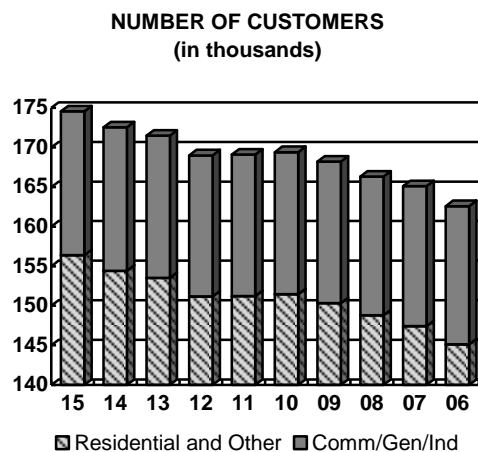
Maintenance expense increased \$5.6 million (20.2%). Generation maintenance increased \$2.5 million primarily due to an increase of \$0.9 million for painting of the penstocks at Cushman #2 and \$0.9 million for painting the spillway gate at Mayfield. Distribution maintenance increased \$3.3 million. The contributions to the Fleet Replacement Fund beginning in July make up \$1.2 million of this increase. The remainder is primarily due to increased labor costs and a decrease in time charged to capital projects. Transmission maintenance expense decreased \$0.2 million.

Administrative and general expenses increased \$6.0 million (11.5%) in 2014. Maintenance of general plant increased \$1.0 million, the credit for capitalized and general expense decreased \$0.8 million, and labor costs increased \$1.8 million.

Customer accounts expense increased \$2.2 million primarily due to an increase of \$1.5 million in customer records and collection expense and an increase of \$0.3 million in bad debt expense.

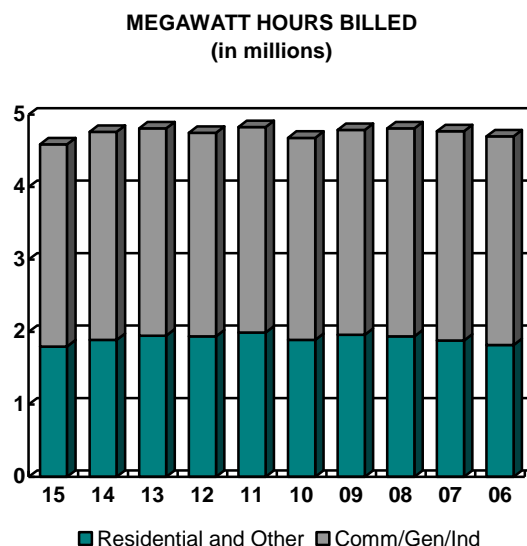
Customer Counts

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 2015 is 174,562 compared to 172,531 in 2014 and 171,506 in 2013.



Megawatt-hours Billed

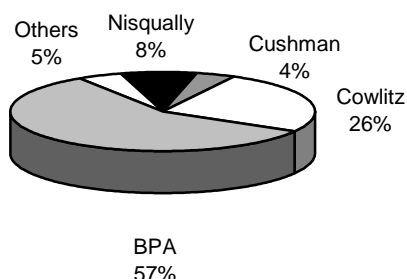
Megawatt-hours billed to residential and other customers decreased 4.8% in 2015, while commercial / general / industrial billings increased 2.8%. Wholesale power billed in 2015 was 1,917,685 megawatt-hours compared to 2,842,694 in 2014, a decrease of 925,009 megawatt-hours or 32.5%. During 2015 hydro generation decreased 703 megawatt-hours compared to the previous year. Streamflows into Tacoma Power's system were 97% of average in 2015 compared to 125% of average in 2014.



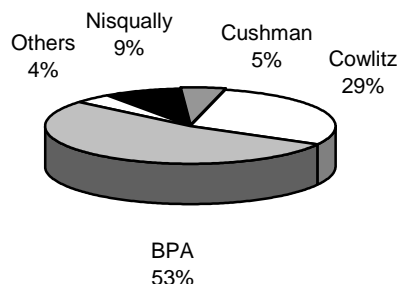
Sources of Power

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.

**Megawatt Hours Generated/
Purchased - 2015**



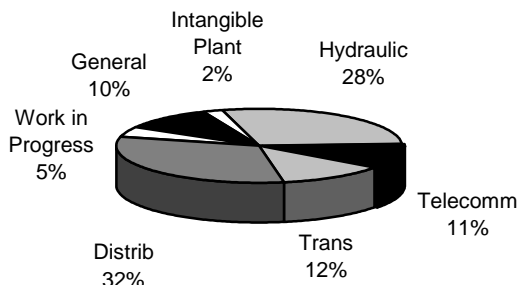
**Megawatt Hours Generated/
Purchased - 2014**



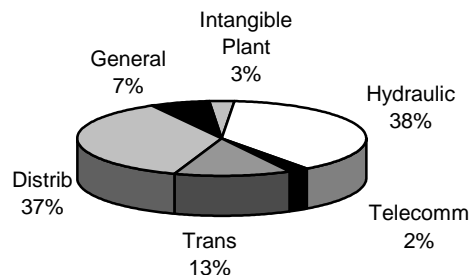
Utility Plant and Plant Additions

Tacoma Power has \$1.9 billion invested in its utility plant assets on a cost basis. The largest portion is for the combined distribution and transmission business unit, followed by its generation (hydroelectric) business unit. The following graphs show the allocation of plant additions and total investment in plant.

2015 UTILITY PLANT

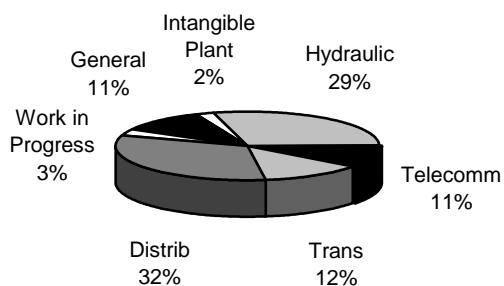


2015 PLANT ADDITIONS

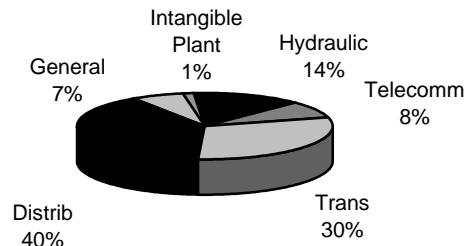


Additions to Hydraulic plant in 2015 were \$18.2 million, which included the Cushman fish hatcheries, Wynoochee modernization, and a hydro exciter replacement program. Distribution plant additions were \$17.3 million, which included addition and replacement programs for new services, pole replacements,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

2014 UTILITY PLANT



2014 PLANT ADDITIONS



Additions in 2014 to distribution plant were \$18.3 million, which included addition and replacement programs for new services, pole replacements, and distribution transformers. Transmission plant additions were \$13.8 million, which included the North Bay Crossing Rehabilitation, system reliability improvements, and the salmon hatchery station upgrade. Hydraulic plant additions were \$6.4 million, which included the Cushman License Implementation and accessory electrical equipment at Alder and Wynoochee.

The following table summarizes Tacoma Power's capital assets, net of accumulated depreciation, for the years ended December 31, 2015 through 2013.

Capital Assets, Net of Accumulated Depreciation
(in thousands)

<u>Net Utility Plant</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>15/14 Increase (Decrease)</u>	<u>14/13 Increase (Decrease)</u>
Intangible Plant	\$ 29,404	\$ 29,510	\$ 29,949	\$ (106)	\$ (439)
Hydraulic Plant	359,992	349,472	350,698	10,520	(1,226)
Transmission Facilities	118,765	122,213	117,981	(3,448)	4,232
Distribution Facilities	284,826	288,242	290,152	(3,416)	(1,910)
General Plant	78,190	81,443	85,198	(3,253)	(3,755)
Telecommunications Plant	43,682	53,216	62,500	(9,534)	(9,284)
Construction Work in Progress	87,952	54,789	23,407	33,163	31,382
Total Net Utility Plant	<u>\$ 1,002,811</u>	<u>\$ 978,885</u>	<u>\$ 959,885</u>	<u>\$ 23,926</u>	<u>\$ 19,000</u>

Additional information on Tacoma Power's capital assets can be found in Note 3 of the financial statements and also in the supplementary Statistical Data.

Debt Administration

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 \$50,250,000. 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.

At December 31, 2014 Tacoma Power had outstanding revenue bonds of \$540.1 million, a decrease of \$28.3 million compared to 2013. No new bonds were issued in 2014.

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 2015, principal and interest were covered 2.54 times compared to 2.26 times in 2014 and 2.34 times in 2013.

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

This page has been left blank intentionally.

This page has been left blank intentionally.

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

ASSETS AND DEFERRED OUTFLOWS	DECEMBER 31,	
	2015	2014
UTILITY PLANT		
In Service, at Original Cost	\$1,861,142,589	\$1,817,897,475
Less - Accumulated Depreciation	(946,283,353)	(893,801,525)
Total	914,859,236	924,095,950
Construction Work in Progress	87,951,638	54,789,325
Net Utility Plant	1,002,810,874	978,885,275
NON-UTILITY PROPERTY	182,051	182,051
SPECIAL FUNDS		
Construction Funds	41,412,285	51,136,534
Debt Service Funds	24,549,803	45,458,725
Special Bond Reserve Funds	4,984,302	17,003,212
Wynoochee Reserve Funds	2,534,915	2,520,923
Total Special Funds	73,481,305	116,119,394
CURRENT ASSETS		
Operating Funds Cash and Equity in		
Pooled Investments	193,804,373	287,949,952
Accounts Receivable	30,667,987	35,210,149
(Net of Allowance for Doubtful Accounts of \$1,080,447 in 2015 and \$1,079,721 in 2014)		
Accrued Unbilled Revenue	29,427,771	28,750,681
Materials and Supplies	6,318,431	5,544,073
Interfund Receivables	1,484,313	2,509,436
Prepayments and Other	5,757,216	5,209,061
Total Current Assets	267,460,091	365,173,352
OTHER ASSETS		
Regulatory Asset - Conservation		
(Net of Amortization of \$18,629,468 in 2015 and \$13,063,221 in 2014)		
	46,293,923	42,599,246
Net Pension Asset	3,823,476	-
Conservation Loans Receivable	1,423,037	1,877,469
Total Other Assets	51,540,436	44,476,715
Total Assets	1,395,474,757	1,504,836,787
DEFERRED OUTFLOWS OF RESOURCES		
Deferred Outflow for Pensions.....	9,077,586	-
Unamortized Loss on Refunding Bonds	1,899,931	8,026,229
Total Deferred Outflows	10,977,517	8,026,229
TOTAL ASSETS AND DEFERRED OUTFLOWS	<u>\$1,406,452,274</u>	<u>\$1,512,863,016</u>

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

NET POSITION, LIABILITIES AND DEFERRED INFLOWS	DECEMBER 31,	
	2015	2014
NET POSITION		
Net Investment in Capital Assets	\$594,626,313	\$499,658,478
Restricted for:		
Wynoochee Reserve Funds	2,534,915	2,520,923
Debt Service Funds	14,669,173	32,145,520
Net Pension Asset	3,823,476	-
Unrestricted	210,279,420	288,478,140
Total Net Position	<u>825,933,297</u>	<u>822,803,061</u>
LONG-TERM DEBT		
Revenue Bonds	391,678,130	530,580,510
Revolving Line of Credit	50,250,000	-
Total Long-Term Debt	<u>441,928,130</u>	<u>530,580,510</u>
CURRENT LIABILITIES		
Current Portion of Long-Term Debt	14,735,000	32,115,000
Taxes and Other Payables	20,356,768	18,321,909
Purchased Power Payable	12,013,478	11,560,184
Salaries, Wages and Compensated Absences Payable ..	2,487,419	5,598,198
Interest Payable	9,880,630	13,313,205
Customers' Deposits	3,108,808	2,897,268
Interfund Payables	1,324,441	2,970,410
Total Current Liabilities	<u>63,906,544</u>	<u>86,776,174</u>
LONG-TERM LIABILITIES		
Long Term Accrued Compensated Absences	9,522,650	9,434,785
Other Long Term Liabilities	13,125,264	15,268,486
Total Long Term Liabilities	<u>22,647,914</u>	<u>24,703,271</u>
Total Liabilities	<u>528,482,588</u>	<u>642,059,955</u>
DEFERRED INFLOWS OF RESOURCES		
Deferred Inflow for Pensions	4,036,389	-
Rate Stabilization	48,000,000	48,000,000
Total Deferred Inflows	<u>52,036,389</u>	<u>48,000,000</u>
TOTAL NET POSITION, LIABILITIES AND DEFERRED INFLOWS..	<u><u>\$1,406,452,274</u></u>	<u><u>\$1,512,863,016</u></u>

This page has been left blank intentionally.

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

	YEAR ENDED DECEMBER 31,	
	2015	2014
OPERATING REVENUES		
Sales of Electric Energy	\$366,263,055	\$397,175,394
Other Operating Revenue	17,106,442	16,920,147
Click! Network Operating Revenue	27,256,718	27,150,566
Total Operating Revenue	410,626,215	441,246,107
OPERATING EXPENSES		
Operations		
Purchased and Interchanged Power	126,315,151	121,395,343
Generation	14,197,116	12,273,808
Transmission	21,928,763	21,267,033
Distribution	10,163,887	13,806,687
Other	15,025,954	14,443,310
Maintenance	27,705,373	33,298,099
Telecommunications Expense	25,304,001	19,631,153
Administrative and General	58,560,459	58,625,611
Depreciation	57,381,578	59,156,228
Taxes	19,993,833	19,276,216
Total Operating Expenses	376,576,115	373,173,488
Net Operating Income	34,050,100	68,072,619
NON-OPERATING REVENUES (EXPENSES)		
Interest Income	1,796,071	3,780,834
Contribution to Family Need	(480,000)	(900,000)
Other	(1,923,329)	(728,908)
Interest on Long-Term Debt	(19,225,735)	(24,621,702)
Loss on Defeasance or Refunding of Debt and Amortization of Debt Premium	(202,938)	(2,668,319)
Total Non-Operating Expenses.....	(20,035,931)	(25,138,095)
Net Income Before Capital Contributions and Transfers	14,014,169	42,934,524
Capital Contributions		
Cash	5,183,295	4,024,873
Donated Fixed Assets	524,713	95,492
BABs and CREBs Interest Subsidies	3,675,836	3,667,927
Transfers		
City of Tacoma Gross Earnings Tax	(25,481,823)	(26,860,649)
Transfers to/(from) Other Funds	512,401	(137,766)
CHANGE IN NET POSITION	(1,571,409)	23,724,401
TOTAL NET POSITION - BEGINNING OF YEAR	822,803,061	799,078,660
ACCUMULATED ADJUSTMENT FOR CHANGE IN ACCOUNTING PRINCIPLE	4,701,645	
NET POSITION, BEGINNING OF YEAR, AS ADJUSTED	827,504,706	
TOTAL NET POSITION - END OF YEAR	\$825,933,297	\$822,803,061

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, 2015	December 31, 2014
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash from Customers	\$ 414,491,290	\$ 435,728,792
Cash Paid to Suppliers	(206,195,837)	(188,794,275)
Cash Paid to Employees	(106,153,040)	(107,884,909)
Taxes Paid	(19,876,260)	(19,840,137)
Conservation Loans	454,432	(569,620)
Net Cash from Operating Activities	82,720,585	118,639,851
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES		
Transfer Out for Gross Earnings Tax	(25,481,823)	(26,860,649)
Transfer to/from Other Funds	512,401	(137,766)
Transfer to Family Need Fund	(480,000)	(900,000)
Net Cash from Non-Capital Financing Activities.	(25,449,422)	(27,898,415)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Capital Expenditures	(77,374,831)	(76,056,034)
Proceeds from Issuance of Long-Term Debt	50,250,000	-
Debt Issuance Costs	(114,250)	-
Principal Payments on Long-Term Debt	(32,115,000)	(28,295,000)
Payments for Early Extinguishment of Debt	(122,135,000)	-
Interest Paid	(26,065,944)	(27,758,620)
BABs and CREBs Interest Subsidies	3,675,836	3,667,927
Contributions in Aid of Construction	5,183,295	4,024,873
Other Long-Term Liabilities	763,091	1,458,092
Net Cash from Capital and Related Financing Activities	(197,932,803)	(122,958,762)
CASH FLOWS FROM INVESTING ACTIVITIES		
Interest Received	1,796,071	3,780,834
Termination of Repurchase Agreement	-	8,761,250
Other Non-Op Revenues and Deductions	2,081,901	2,252,519
Net Cash from Investing Activities	3,877,972	14,794,603
Net Change in Cash and Equity in Pooled Investments	(136,783,668)	(17,422,723)
Cash and Equity in Pooled Investments at January 1..	404,069,346	421,492,069
Cash and Equity in Pooled Investments at December 31	\$267,285,678	\$404,069,346

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, 2015	December 31, 2014
Reconciliation of Net Operating Income to Net Cash Provided by Operating Activities:		
Net Operating Income	\$34,050,100	\$68,072,619
Adjustments to reconcile net operating income to net cash provided by operating activities:		
Depreciation	57,381,578	59,156,228
Amortization of Regulatory Assets	5,566,247	4,743,698
Pension (Credits) Expenses	(4,163,028)	-
Cash provided from changes in operating assets and liabilities:		
Accounts Receivable and Accrued Unbilled Revenue..	3,865,072	(5,517,318)
Conservation Loans Receivable	454,432	(569,621)
Interfund Receivables	1,025,123	(650,454)
Materials and Supplies, and Other	(1,322,513)	250,634
Taxes and Other Payables	(871,453)	(581,569)
Purchased Power Payable	453,294	(546,378)
Salaries and Wages	(3,120,542)	467,268
Accrued Compensated Absences	97,628	218,108
Customers' Deposits	211,540	116,199
Regulatory Asset - Conservation	(9,260,924)	(8,225,484)
Interfund Payables	(1,645,969)	1,705,921
Total Adjustments	48,670,485	50,567,232
Net Cash from Operating Activities	<u>\$82,720,585</u>	<u>\$118,639,851</u>
 Reconciliation of Cash and Equity in Pooled Investments to Balance Sheet:		
Cash and Equity in Pooled Investments in Special Funds	\$73,481,305	\$116,119,394
Cash and Equity in Pooled Investments in Operating Funds	193,804,373	287,949,952
Cash and Equity in Pooled Investments at December 31	<u>\$267,285,678</u>	<u>\$404,069,346</u>

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

**NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2015 AND 2014**

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 174,562 retail customers and has 953 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.

CHANGE IN ACCOUNTING PRINCIPLE - In fiscal year 2015, the Division implemented GASB Statement No. 68, Accounting and Financial Reporting for Pensions and GASB Statement No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68. The primary objective of GASB Statement No. 68 is to improve accounting and financial reporting by state and local governments for pensions. GASB Statement No. 68 establishes standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources, and expenses. For defined benefit pension plans, this statement identifies the methods and assumptions that should be used to project benefit payments, discount projected benefit payments to their actuarial present value and attribute that present value to periods of employee service. In addition, prior to implementing GASB Statement No. 68, employers participating in a cost-sharing plan recognized annual pension expense essentially equal to their contractually required contribution to the plan. Upon adoption of GASB Statement No. 68, employers participating in cost-sharing plans recognize their proportionate share of the collective pension amounts for all benefits provided through the plan based on an allocation methodology. GASB Statement No. 71 amends GASB Statement No. 68 regarding the deferred outflows of resources for governments whose current year pension contributions are reported subsequent to the measurement date. The collective financial impact resulting from the implementation of GASB Statements No. 68 and 71 is the adjustment of 2015 beginning balances by \$4,701,645 for the Division's portion of the net pension asset or liability and related deferrals incurred in prior years. See Note 9 for further details.

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.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

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 issued 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 a certificate of deposit with East West Bank.

The Division's equity in that portion of the City of Tacoma Investment Pool held in qualified public depositories at December 31, 2015 and 2014 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.

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 LGIP is authorized by RCW 43.250. The LGIP 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.

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.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

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 personal time off (PTO) 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. Based on historical information, 10% of compensated absences are considered short term.

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. The accrued liability is computed at 10%, which is considered the amount vested. Sick leave pay is recorded as an expense in the year earned.

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 6.0% 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”.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

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.

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.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

NOTE 3 UTILITY PLANT - A summary of the balances and changes in utility plant for 2015 and 2014 follows:

	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	(5,130,255)	230,505	946,283,353
	924,095,950	(10,347,525)	1,421,644	(310,833)	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>\$ 1,421,644</u>	<u>\$ (47,255,985)</u>	<u>\$ 1,002,810,874</u>

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

	Balance December 31, 2013	Additions	Retirements	Transfers & Adjustments	Balance December 31, 2014
Intangible Plant	\$ 39,932,284	\$ 652,709	\$ (129)	\$ -	\$ 40,584,864
Hydraulic Production					
Plant	530,076,778	6,440,105	(91,980)	-	536,424,903
Transmission Plant	203,001,100	12,613,236	(575,049)	-	215,039,287
Distribution Plant	586,974,920	18,262,758	(1,208,323)	-	604,029,355
Regional Transmission	16,320,490	1,217,172	-	-	17,537,662
General Plant	194,039,551	2,996,886	-	-	197,036,437
Telecommunications					
Plant	203,842,399	3,727,992	(11,320)	(314,104)	207,244,967
Total Utility Plant in					
Service	1,774,187,522	45,910,858	(1,886,801)	(314,104)	1,817,897,475
Less Accumulated					
Depreciation	837,709,188	59,156,228	(1,794,691)	(1,269,200)	893,801,525
	936,478,334	(13,245,370)	(92,110)	955,096	924,095,950
Construction Work In					
Progress	23,406,935	76,979,144	-	(45,596,754)	54,789,325
Net Utility Plant	<u>\$ 959,885,269</u>	<u>\$ 63,733,774</u>	<u>\$ (92,110)</u>	<u>\$ (44,641,658)</u>	<u>\$ 978,885,275</u>

Total Utility Plant in Service includes non-depreciable assets of \$75,310,858 for 2015 and \$74,763,487 for 2014.

The total amount of interest cost incurred and capitalized is \$3,407,633 for 2015 and \$2,004,709 for 2014.

NOTE 4 SPECIAL FUNDS - Cash and equity in pooled investments and investments included in Tacoma Power's Special Funds consist of:

Cash and Equity in Pooled Investments	2015	2014
Construction Funds	\$ 41,412,285	\$ 51,136,534
Debt Service Funds	24,549,803	45,458,725
Wynoochee Reserve	2,534,915	2,520,923
Special Bond Reserve	4,984,302	17,003,212
Total	<u>\$ 73,481,305</u>	<u>\$ 116,119,394</u>

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, 2015 and December 31, 2014 was as follows:

	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>

	Balance December 31, 2013	Additions	Reductions	Balance December 31, 2014	Due Within One Year
Revenue Bonds	\$ 568,345,000	-	\$ (28,295,000)	\$ 540,050,000	\$ 32,115,000
Plus: Unamortized					
Premium	24,910,765	-	(2,265,255)	22,645,510	-
Total Long-Term					
Debt	<u>\$ 593,255,765</u>	<u>\$ -</u>	<u>\$ (30,560,255)</u>	<u>\$ 562,695,510</u>	<u>\$ 32,115,000</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>2015</u>	<u>2014</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 through 2016.		
Original Issue: \$93,480,000	\$ 130,000	\$ 130,000
Current Portion: \$130,000		
2005B Refunding Bonds, with interest rates ranging from 3.5% to 5.0%.		
Original Issue: \$156,425,000	-	122,135,000
Current Portion: \$0		
2007 Refunding Bonds, with interest rates ranging from 4.0% to 5.0%, due in yearly installments of \$10,485,000 to \$23,300,000 through 2015.		
Original Issue: \$81,130,000	-	21,300,000
Current Portion: \$0		
2010A Revenue Bonds, with interest rates ranging from 2.0% to 5.0%, due in yearly installments of \$8,000,000 from 2014 to 2015.		
Original Issue: \$16,000,000	-	8,000,000
Current Portion: \$0		
2010B Revenue Bonds, with interest rates ranging from 5.791% to 5.966%, with a Build America Bond (BAB) rebate at 35% of interest, due in yearly installments of \$27,310,000 to \$31,630,000 from 2031 to 2035.		
Original Issue: \$147,070,000	147,070,000	147,070,000
Current Portion: \$0		
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	24,185,000	24,185,000
Current Portion: \$0		

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

2013A Refunding Bonds, with interest rates ranging from 4.0% to 5.0%, due in yearly installments of \$2,815,000 to \$29,165,000 through 2042.

Original Issue: \$181,610,000	178,795,000	181,610,000
Current Portion: \$14,605,000		

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 through 2030.

Original Issue: \$35,620,000	35,620,000	35,620,000
Current Portion: \$0		

	385,800,000	540,050,000
Unamortized premium	20,613,130	22,645,510
Unamortized discount	-	-
Current Portion	(14,735,000)	(32,115,000)
Long-term Portion of Revenue Bond Debt	391,678,130	530,580,510
Revolving Line of Credit	50,250,000	-
Total Long Term Debt	\$ 441,928,130	\$ 530,580,510

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). Each advance is secured by Revenues as set forth in the Note Ordinance. The balance outstanding is \$50.3 million as of December 31, 2015.

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

	Principal	Interest
2016	\$ 14,735,000	\$ 19,393,535
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
2021-2025	28,330,000	76,555,149
2026-2030	43,445,000	68,326,826
2031-2035	147,070,000	46,310,876
2036-2040	60,590,000	12,429,450
2041-2042	28,065,000	1,133,700
	\$ 385,800,000	\$ 295,506,276

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.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

As of December 31, 2015, 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
	<u>\$ 57,385,000</u>

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.

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 419,422 and 439,003 kilowatts per hour for 2015 and 2014, respectively. Charges for the BPA purchased power were approximately \$112 million and \$104 million for 2015 and 2014, respectively, and are based on the total amount of energy delivered and the monthly peak power demand.

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.

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 2015 and 2014, Tacoma Power recovered \$763,356 and \$5,742,731 respectively through the ECA.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Information for the year ended December 31, 2015 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	258,679 mWh	25,360 mWh
Megawatt Capacity	-	5mW
Operating Costs	\$ 2,188,084	\$659,731
Incentive Payments	\$ 3,880,558	-
R & R Repayment	\$ 326,559	-
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 2015 and 2014 were \$6,395,201 and \$6,047,270, respectively, for Grand Coulee Project Hydro Authority, however, proceeds under the contract exceeded expenses in 2015 and 2014 for Grant County PUD - Priest Rapids resulting in a gain of \$659,731 and \$2,078,279, respectively.

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, 2015 Tacoma Power had forward sales contracts totaling \$22.6 million dollars extending out to September 2017 with a fair market value of \$17.2 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.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

A breakdown of the net interchange in kilowatt-hours is as follows:

<u>Interchange Summary</u>	<u>2015</u> (in kWh)	<u>2014</u> (in kWh)
Secondary Sales	(1,917,685,000)	(2,842,694,000)
Portfolio Purchases	293,059,000	444,264,000
Miscellaneous Exchanges	(1,441,000)	(4,200,000)
Other	54,924,000	57,127,000
Net Interchange	<u>(1,571,144,000)</u>	<u>(2,345,503,000)</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 2015 and 2014 were \$7,212,082 and \$7,475,002, 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 2015 and 2014, Fleet Services returned 75% of the interest earned to Tacoma Power's replacement fund. The amount of the refund was \$107,916 and \$91,750 for 2015 and 2014, 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 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 and \$810,000 in 2015 and 2014 respectively. Assets in the Self-Insurance Fund total \$6.9 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.

The 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 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.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

The general government general liability and public official liability policies provide \$15 million of excess coverage with \$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), 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.

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 Retirement 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, 2014 is as follows:

Retirees and beneficiaries currently receiving benefits	2,167
Terminated vested and other terminated participants	627
Active members:	
City of Tacoma	2,622
South Sound 911	4
Pierce Transit	6
Tacoma-Pierce County Health Department	252
Total active members	<u>2,884</u>
Total membership	<u><u>5,678</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.

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.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

Significant Assumptions - The following actuarial methods were used in the funding valuation.

Measurement Date	December 31, 2014
Valuation Date	January 1, 2015
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 01/01/2015• 4% amortization grown 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, 2014 and January 1, 2015 no assumptions were changed.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

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 June 30, 2014. The target asset allocation is based on TERS Investment Policy Statement dated February 2014.

Asset Class	Target Allocation	Long-term Expected
		Arithmetic Real Rate of Return
Investment grade fixed income	15.0%	2.03%
US inflation-indexed bonds	5.0	1.41
High yield bonds	9.0	4.49
Emerging market debt	5.0	5.05
Global equity	41.5	6.02
Public real estate	2.0	6.38
Private real estate	2.5	3.72
Private equity	10.0	9.02
Master limited partnerships	4.0	4.46
Timber	2.0	3.84
Infrastructure	2.0	5.88
Agriculture	2.0	4.38
Assumed inflation - mean		3.00
Assumed inflation - standard deviation		1.85
Portfolio arithmetic real mean return		5.11
Portfolio median nominal geometric return		7.21
Portfolio standard deviation		12.02
Long-term expected rate of return, net of investment expenses		7.25

Sensitivity Analysis - The following presents the net pension liability 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)	\$ 65,783,976	\$ (3,823,476)	\$ (62,408,975)

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

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	\$ (1,450,314)	\$ -
Changes in proportionate share	-	24,245
Net difference between projected and actual earnings	(2,586,075)	-
Contributions made subsequent to the measurement date	-	9,053,341
Total	(4,036,389)	9,077,586

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. Contributions made subsequent to the measurement date will offset net pension liability in the following year.

Amounts will be recognized in pension expense as follows:

Year-ended December 31,	
2016	(1,255,023)
2017	(1,255,023)
2018	(1,255,023)
2019	(247,075)

The proportionate share of the Power Division is 39.8%. 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 2015 is 22 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, 2015 as the City has not set aside funds for OPEB.

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, 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.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

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	\$ -	\$ -
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

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

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

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, 2015.

	City	Division
Determination of Annual Required Contribution:		
Normal Cost at Year-end	\$ 3,832,131	\$ 858,656
Amortization of UALL	13,134,833	398,368
Annual Required Contribution (ARC)	\$ 16,966,964	\$ 1,257,024
Determination of NET OPEB Obligation:		
Annual Required Contribution (ARC)	\$ 16,966,964	\$ 1,257,024
Interest on prior year Net OPEB Obligation	2,480,183	344,936
Adjustments to ARC	(3,492,760)	(407,624)
Annual OPEB Cost	15,954,387	1,194,337
Actual benefits paid	8,963,089	324,146
Increase in Net OPEB Obligation	6,991,298	870,191
Net OPEB Obligation - beginning of year	66,138,204	9,198,300
Net OPEB Obligation - end of year	\$ 73,129,502	\$ 10,068,491

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
12/31/2013	\$ 19,528,767	\$ 2,103,280	\$ 9,887,334	\$ 577,629	\$ 56,110,801	\$ 7,806,683
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

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 Unfunded Actuarial Accrued Liability (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 22 years.

TACOMA POWER NOTES TO FINANCIAL STATEMENTS (continued)

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:	22 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%
---	-------

Demographic Assumptions.....	Eligibility: Disability - Five years of service are required for non-service connected disability.
------------------------------	---

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, 2015, the remaining financial requirement was approximately \$102.6 million. The remaining financial requirement for Capital Improvement Programs relating to prior biennium is approximately \$10.7 million.

General Legal Matters - Tacoma Public Utilities 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.

This page has been left blank intentionally.

REQUIRED SUPPLEMENTARY INFORMATION

Proportionate Share of the Net Pension Liability Last 10 Years*

	Fiscal Year Ended December 31st,	
	2015	2014-2006
Employer's proportion of the net pension liability(asset) as a percentage	39.80%	N/A
Employer's proportion share of net pension liability(asset)	(\$3,823,476)	N/A
Employer's covered payroll	\$93,063,240	N/A
Employer's proportionate share of net pension liability (asset) as a percentage of its covered employee payroll	-4.11%	N/A
Plan fiduciary net position as a percentage the total pension liability	100.71%	N/A

**The amounts presented for each fiscal year were determined as of the calendar year-end that occurred within the fiscal year.*

Schedule of Contributions Last 10 Fiscal Years

	Fiscal Year Ended December 31st,	
	2015	2014-2006
Contractually required employer contribution	\$9,053,341	N/A
Contributions in relation to the contractually required employer contribution	(9,053,341)	N/A
Employer contribution deficiency (excess)	-	N/A
Employer's covered employee payroll	\$93,063,240	N/A
Employer contribution as a percentage of covered-employee payroll	9.73%	N/A

STATISTICAL DATA (Unaudited)

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

TEN-YEAR FINANCIAL REVIEW

STATEMENTS OF NET POSITION	2015	2014	2013	2012
ASSETS				
Utility Plant - Net	\$1,002,810,874	\$978,885,275	\$959,885,269	\$954,141,423
Special and Other Assets	125,203,792	160,778,160	213,192,582	154,745,677
Current Assets	267,460,091	365,173,352	328,974,357	333,694,736
Deferred Charges	-	-	-	-
Total Assets	1,395,474,757	1,504,836,787	1,502,052,208	1,442,581,836
Deferred Outflows	10,977,517	8,026,229	15,941,231	7,848,910
TOTAL ASSETS AND DEFERRED OUTFLOWS	1,406,452,274	1,512,863,016	1,517,993,439	1,450,430,746
NET POSITION	825,933,297	822,803,061	799,078,660	779,206,485
LIABILITIES				
Long-Term Debt	441,928,130	530,580,510	564,960,765	518,251,959
Current Liabilities	63,906,544	86,776,174	82,905,132	84,070,814
Long-Term Liabilities	22,647,914	24,703,271	23,048,882	20,901,488
Total Liabilities	528,482,588	642,059,955	670,914,779	623,224,261
Deferred Inflows	52,036,389	48,000,000	48,000,000	48,000,000
TOTAL NET POSITION, LIABILITIES, AND DEFERRED INFLOWS	\$1,406,452,274	\$1,512,863,016	\$1,517,993,439	\$1,450,430,746
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION				
OPERATING REVENUES				
Residential	\$149,195,092	\$150,972,050	\$149,662,791	\$141,236,063
Commercial	26,956,059	26,594,512	25,110,481	23,499,735
General	116,053,999	114,718,365	109,046,936	103,586,233
Contract Industrial	21,356,911	21,150,771	19,804,613	18,870,807
Bulk Power	50,380,147	82,796,740	64,210,259	53,532,081
Unbilled	677,091	(666,187)	1,651,808	4,615,802
Other	1,643,756	1,609,143	1,562,082	1,558,268
Total Electric Revenues	366,263,055	397,175,394	371,048,970	346,898,989
Other Operating Revenue	44,363,160	44,070,713	43,413,115	40,983,752
Total Operating Revenues	410,626,215	441,246,107	414,462,085	387,882,741
OPERATING EXPENSES				
Operation and Maintenance	299,200,704	294,741,044	276,558,723	267,457,626
Taxes	19,993,833	19,276,216	19,562,858	17,494,729
Depreciation	57,381,578	59,156,228	56,397,306	57,842,109
Loss on Asset Impairment	-	-	-	-
Total Operating Expenses	376,576,115	373,173,488	352,518,887	342,794,464
NET-OPERATING INCOME	34,050,100	68,072,619	61,943,198	45,088,277
NON-OPERATING REVENUES (EXPENSES)				
Other Income and Expense (Net)	(1,923,329)	(728,908)	(252,363)	3,055,848
Interest Earned on Investments	1,796,071	3,780,834	1,899,829	5,835,775
Interest Charges (Net)	(19,428,673)	(27,290,021)	(25,688,219)	(22,859,967)
Contributions to Family Need ..	(480,000)	(900,000)	(900,000)	(450,000)
Gain on Sale of Utility Plant .	-	-	-	-
Net Income Before Contributions, Transfers & Extraordinary Items	14,014,169	42,934,524	37,002,445	30,669,933
Total Capital Contributions	9,383,844	7,788,292	8,839,960	9,480,111
Transfers Out	(24,969,422)	(26,998,415)	(25,970,230)	(23,888,066)
CHANGE IN NET POSITION	(\$1,571,409)	\$23,724,401	\$19,872,175	\$16,261,978

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.

2011	2010	2009	2008	2007	2006
\$944,969,878	\$933,796,881	\$900,879,652	\$855,373,200	\$794,683,393	\$758,535,021
196,860,001	223,057,734	104,606,844	122,629,299	157,462,325	179,710,161
313,457,995	279,967,672	288,083,393	312,006,708	272,409,296	232,063,577
-	17,651,421	7,304,736	1,990,596	2,356,842	2,700,968
1,455,287,874	1,454,473,708	1,300,874,625	1,291,999,803	1,226,911,856	1,173,009,727
8,213,239	-	-	-	-	-
1,463,501,113	1,454,473,708	1,300,874,625	1,291,999,803	1,226,911,856	1,173,009,727
762,944,507	744,735,781	735,593,799	695,305,259	621,817,950	537,300,493
563,718,608	582,930,840	459,202,498	490,528,958	517,834,315	543,899,543
82,861,816	95,884,868	83,385,715	100,219,839	81,446,692	84,266,940
17,976,182	30,922,219	22,692,613	5,945,747	5,812,899	7,542,751
664,556,606	709,737,927	565,280,826	596,694,544	605,093,906	635,709,234
36,000,000	-	-	-	-	-
\$1,463,501,113	\$1,454,473,708	\$1,300,874,625	\$1,291,999,803	\$1,226,911,856	\$1,173,009,727
\$136,944,688	\$127,908,143	\$125,807,518	\$131,188,854	\$127,539,844	\$123,346,749
22,324,063	21,147,156	21,005,151	22,138,244	22,486,943	22,308,885
99,958,156	96,579,940	90,782,730	100,142,959	101,628,965	100,502,599
18,341,067	16,898,845	14,101,372	15,430,080	15,078,247	15,217,161
48,118,090	69,518,730	67,338,457	98,545,139	98,276,853	96,142,405
369,424	(3,564,337)	(411,080)	1,576,914	49,376	4,936,042
1,373,168	1,472,125	1,190,013	1,387,629	1,359,098	1,363,733
327,428,656	329,960,602	319,814,161	370,409,819	366,419,326	363,817,574
36,895,939	36,892,658	35,691,490	33,998,632	33,739,569	33,054,503
364,324,595	366,853,260	355,505,651	404,408,451	400,158,895	396,872,077
247,409,057	259,366,287	220,849,709	246,856,188	237,383,019	241,897,380
16,970,015	15,553,041	15,187,859	16,075,356	15,558,011	15,233,370
56,555,538	55,717,463	53,049,558	48,377,708	43,705,705	42,600,065
-	-	-	-	-	-
320,934,610	330,636,791	289,087,126	311,309,252	296,646,735	299,730,815
43,389,985	36,216,469	66,418,525	93,099,199	103,512,160	97,141,262
1,226,132	2,202,089	1,322,007	3,255,797	1,754,339	2,842,960
8,444,683	7,786,710	8,721,608	12,539,619	14,127,012	9,745,123
(21,917,623)	(22,773,604)	(22,804,261)	(22,420,879)	(22,680,647)	(23,374,134)
(450,000)	(900,000)	(1,229,676)	(450,000)	(450,000)	(450,000)
-	-	-	2,923,465	1,467,378	-
30,693,177	22,531,664	52,428,203	88,947,201	97,730,242	85,905,211
14,222,934	10,224,518	9,844,736	10,219,425	12,046,164	7,345,821
(23,913,077)	(23,614,200)	(21,984,399)	(25,679,317)	(25,258,949)	(24,556,968)
\$21,003,034	\$9,141,982	\$40,288,540	\$73,487,309	\$84,517,457	\$68,694,064

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

TEN-YEAR POWER SUMMARY

	2015	2014	2013	2012
MWh Available				
Generated				
Nisqually	511,592	635,121	572,932	699,104
Cushman	272,457	358,509	239,528	261,735
Cowlitz	1,630,130	2,111,686	1,792,975	2,322,875
Wynoochee	12,680	14,272	24,404	38,149
Hood Street	1,889	2,281	3,503	4,029
Grant Net Actual	-	(2,018)	(3,279)	(3,285)
Tacoma's Share of Priest Rapids	25,360	22,733	34,846	37,355
Tacoma's Share of GCPHA	258,679	272,846	254,570	255,564
Total Generated	2,712,787	3,415,430	2,919,479	3,615,526
Purchased	3,674,140	3,845,666	3,756,763	4,167,263
Interchange - Net	(1,569,981)	(2,339,277)	(1,665,811)	(2,814,479)
Losses - Net	10,340	14,057	7,398	20,718
Total System Load	4,827,286	4,935,876	5,017,829	4,989,028
MWh Billed				
Residential and Other.....	1,801,184	1,890,970	1,950,829	1,935,518
Commercial/General/Industrial....	2,791,421	2,868,966	2,855,932	2,812,769
Total Firm MWh Billed	4,592,605	4,759,936	4,806,761	4,748,287
MWh Available Over MWh Billed				
(Causes: Timing differences, internal use, and losses other than those reflected above.)	234,681	175,940	211,068	240,741
Percent of Power Generated	56.20%	69.20%	58.18%	72.47%
Average Load Factor	62.49%	55.31%	54.18%	61.47%
Average Number of Billings	174,562	172,531	171,506	169,012
Maximum Hourly Energy Load				
MWh	877	1,016	980	924
Date	12/31/15	2/6/14	12/9/13	1/16/12
Time	0900 hr	800 hr	800 hr	1800 hr
Maximum Daily Energy Load				
MWh	18,675	21,686	21,172	19,100
Date	12/31/15	2/6/14	12/09/13	1/16/12
Minimum Hourly Energy Load				
MWh	354	348	349	340
Date	6/21/15	7/6/14	9/8/13	9/19/12
Time	0600 hr	0600 hr	0500 hr	0400 hr
Minimum Daily Energy Load				
MWh	10,262	10,221	10,379	10,160
Date	5/24/15	7/5/14	7/4/13	9/2/12
Average Hourly Energy Load	548	562	572	566

2011	2010	2009	2008	2007	2006
663,345	586,433	553,062	530,839	515,585	583,204
410,723	393,563	246,898	208,604	381,193	421,285
2,157,106	1,725,424	1,677,554	1,736,328	1,590,719	1,914,320
35,692	36,320	25,298	25,368	35,518	33,469
3,313	4,133	3,243	4,217	3,914	2,354
-	-	-	-	-	-
34,417	30,705	-	-	-	-
237,794	240,845	-	-	-	-
3,542,390	3,017,423	2,506,055	2,505,356	2,526,929	2,954,632
3,799,037	4,132,049	4,235,019	4,252,681	4,401,097	4,125,464
(2,266,720)	(1,993,911)	(1,729,701)	(1,677,704)	(1,918,581)	(2,135,324)
(8,112)	10,599	4,210	10,132	12,433	17,834
5,066,595	5,166,160	5,015,583	5,090,465	5,021,878	4,962,606
1,997,714	1,925,549	1,994,692	1,979,698	1,922,289	1,859,313
2,838,424	2,794,406	2,829,425	2,867,128	2,889,520	2,877,573
4,836,138	4,719,955	4,824,117	4,846,826	4,811,809	4,736,886
230,457	446,205	191,466	243,639	210,069	225,720
69.92%	58.41%	49.97%	49.22%	50.32%	59.54%
58.86%	52.82%	51.69%	56.68%	59.27%	58.12%
169,123	169,413	168,207	166,307	165,122	162,589
931	992	1,062	1,018	960	967
1/3/11	11/23/10	12/10/09	12/15/08	1/12/07	11/28/06
0800 hr	1800 hr	800 hr	1900 hr	900 hr	1800 hr
18,788	20,591	21,103	21,237	20,312	20,421
1/11/11	11/23/10	12/9/09	12/15/08	1/12/07	11/29/06
310	303	295	349	355	285
7/5/11	9/3/10	7/5/09	7/6/08	9/16/07	12/15/06
0400 hr	0300 hr	0700 hr	0700 hr	0500 hr	0200 hr
9,171	9,041	9,036	10,235	10,348	10,254
7/3/11	9/5/10	8/15/09	8/31/08	9/2/07	7/4/06
548	524	549	577	569	562

This page has been left blank intentionally.

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

GROSS GENERATION REPORT - December 31, 2015 AND December 31, 2014

	YEAR ENDED		2015 OVER	PERCENT CHANGE
	Dec 31 2015	Dec 31 2014	(UNDER) 2014	
KWH GENERATED, PURCHASED AND INTERCHANGED - Gross				
Generated - LaGrande	319,979,000	387,254,493	(67,275,493)	-17.4%
Generated - Alder	191,613,000	247,866,000	(56,253,000)	-22.7%
TOTAL NISQUALLY	511,592,000	635,120,493	(123,528,493)	-19.4%
Generated - Cushman No. 1	107,411,000	132,172,000	(24,761,000)	-18.7%
Generated - Cushman No. 2	165,046,000	226,337,000	(61,291,000)	-27.1%
TOTAL CUSHMAN	272,457,000	358,509,000	(86,052,000)	-24.0%
Generated - Mossyrock	1,007,917,000	1,288,537,000	(280,620,000)	-21.8%
Generated - Mayfield	622,213,000	823,149,000	(200,936,000)	-24.4%
TOTAL COWLITZ	1,630,130,000	2,111,686,000	(481,556,000)	-22.8%
Generated - Wynoochee	12,680,000	14,272,000	(1,592,000)	-11.2%
Generated - Hood Street	1,889,500	2,281,200	(391,700)	-17.2%
Grant Net Actual	-	(2,018,000)	2,018,000	0.0%
Tacoma's Share of Priest Rapids	25,360,000	22,733,000	2,627,000	11.6%
Tacoma's Share of GCPHA	258,679,000	272,846,000	(14,167,000)	-5.2%
TOTAL KWH GENERATED - TACOMA SYSTEM	2,712,787,500	3,415,429,693	(702,642,193)	-20.6%
Purchased Power				
BPA Slice Contract	2,080,213,000	2,294,017,000	(213,804,000)	-9.3%
BPA Block Contract	1,593,927,000	1,551,649,000	42,278,000	2.7%
Interchange Net	(1,569,981,000)	(2,339,277,000)	769,296,000	32.9%
TOTAL KWH GENERATED, PURCHASED AND INTERCHANGED ..	4,816,946,500	4,921,818,693	(104,872,193)	-2.1%
Losses	32,070,742	37,771,542	(5,700,800)	-15.1%
Baldi Replacement	2,645,869	4,801,213	(2,155,344)	-44.9%
Ketron	269,163	287,130	(17,967)	-6.3%
NT PC Mutuals Schedules.....	(28,075,000)	(33,957,000)	5,882,000	17.3%
PC Mutual Inadvertent	3,429,073	5,153,960	(1,724,887)	-33.5%
TACOMA SYSTEM FIRM LOAD	4,827,286,347	4,935,875,538	(108,589,191)	-2.2%
PIERCE COUNTY MUTUAL LOAD	1,422,462,000	1,446,659,000	(24,197,000)	-1.7%
KWH BILLED				
Residential Sales	1,764,596,526	1,854,169,859	(89,573,333)	-4.8%
Commercial Sales	309,653,453	315,887,552	(6,234,099)	-2.0%
General	1,974,566,657	2,036,435,525	(61,868,868)	-3.0%
Contract Industrial	507,200,696	516,643,533	(9,442,837)	-1.8%
Public Street and Highway Lighting	30,545,258	30,497,050	48,208	0.2%
Sales to Other Electric Utilities	6,042,600	6,302,700	(260,100)	-4.1%
TOTAL FIRM	4,592,605,190	4,759,936,219	(167,331,029)	-3.5%
Bulk Power Sales	1,917,685,000	2,842,694,000	(925,009,000)	-32.5%
TOTAL KWH BILLED	6,510,290,190	7,602,630,219	(1,092,340,029)	-14.4%

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

DEBT SERVICE REQUIREMENTS
DECEMBER 31, 2015

<u>YEAR</u>	<u>PRINCIPAL</u>	<u>INTEREST</u>	<u>TOTAL</u>
2016	12,730,000	19,025,810	31,755,810
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
	<hr/>	<hr/>	<hr/>
	\$371,065,000	\$280,597,601	\$651,662,601
	<hr/>	<hr/>	<hr/>

The amounts above reflect debt service requirements, and do not include the portion funded in the current year for \$14,735,000.

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

FUNDS AVAILABLE FOR DEBT SERVICE

	2015	2014	2013	2012	2011
Total Income	\$413,680,801	\$447,043,485	\$418,841,237	\$400,235,482	\$377,429,728
Less: Operating Exp	319,194,537	314,017,260	296,121,581	284,952,355	264,379,072
Income Available for Debt Service	<u>\$94,486,264</u>	<u>\$133,026,225</u>	<u>\$122,719,656</u>	<u>\$115,283,127</u>	<u>\$113,050,656</u>
Bond Redemption	\$14,735,000	\$32,115,000	\$28,295,000	\$28,785,000	\$27,290,000
Bond Interest	<u>22,420,035</u>	<u>26,626,411</u>	<u>24,112,971</u>	<u>27,747,001</u>	<u>29,184,001</u>
Debt Service Payable on All Debt	\$37,155,035	\$58,741,411	\$52,407,971	\$56,532,001	\$56,474,001
Times Debt Service Covered	2.54	2.26	2.34	2.04	2.00

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

RESOURCES
AS OF DECEMBER 31, 2015

GENERATING FACILITIES	GENERATING UNITS	AGGREGATE NAME PLATE RATING (kW)	APPROX. RATED 4-YR. AVERAGE ANNUAL OUTPUT (1,000 kWh)
Hydro:			
Alder	2	50,000	234,121
LaGrande	5	64,000	370,578
Cushman No. 1	2	43,200	87,206
Cushman No. 2	3	81,000	157,271
Mayfield	4	162,000	766,390
Mossyrock	2	300,000	1,198,054
Wynoochee	1	12,800	22,376
Total Hydro		713,000	2,835,996

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	155,498	1.290
Incidental	15,488	2.282
General	2,678	107.820
Public Streets and Highways	898	3.883
Total System	174,562	3.000
Circuit Miles of Transmission Lines		
115 kV		307
230 kV		44
Circuit Miles of Distribution Lines		
Overhead		1,180
Underground		834

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

TAXES AND EMPLOYEE WELFARE CONTRIBUTIONS
FOR THE YEAR 2015

FEDERAL

Power Social Security (FICA)	\$6,801,032	
Total		\$6,801,032

STATE OF WASHINGTON

Retail Sales and Use Taxes	3,492,504	
Power Utilities and Business Operations Tax	13,335,678	
Power State Employment Security	102,171	
Total		16,930,353

COUNTY

Lewis County - In Lieu of Taxes	1,499,866	
Mason County - In Lieu of Taxes	200,027	
Pierce County School Support - Eatonville	7,000	
White Pass School Support	132,330	
Mossyrock School Support	115,061	
Morton School Support	3,233	
Mason County Fire Protection District	656	
Lewis County Fire Protection District	10,794	
Pierce County Fire Protection District	18,362	
Pierce County Drainage District	16,762	
Thurston County	1,274	
Total		2,005,365

MUNICIPALITIES

City of Tacoma Power Gross Earnings Tax	23,477,567	
Click!Network Gross Earnings Tax/Franchise Fees	3,282,730	
City of Fife Power Franchise Fee	1,186,971	
City of University Place Power Franchise Fee	1,118,680	
City of Lakewood Power Franchise Fee	854,207	
City of Fircrest Power Franchise Fee	210,390	
City of Steilacoom Power Franchise Fee	4,068	
Total		30,134,613
TOTAL TAXES		<u>\$55,871,363</u>

Taxes as a % of Operating Revenues of \$410,626,215	13.61%
---	--------

EMPLOYEE WELFARE CONTRIBUTIONS

Power Industrial Insurance and Medical Aid.....	\$2,091,096	
Power City of Tacoma Pension Fund	9,264,984	
Power Medical/Life Insurance	17,143,644	
TOTAL EMPLOYEE WELFARE CONTRIBUTIONS		<u>\$28,499,724</u>

CITY OF TACOMA, WASHINGTON
DEPARTMENT OF PUBLIC UTILITIES
TACOMA POWER

2015 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

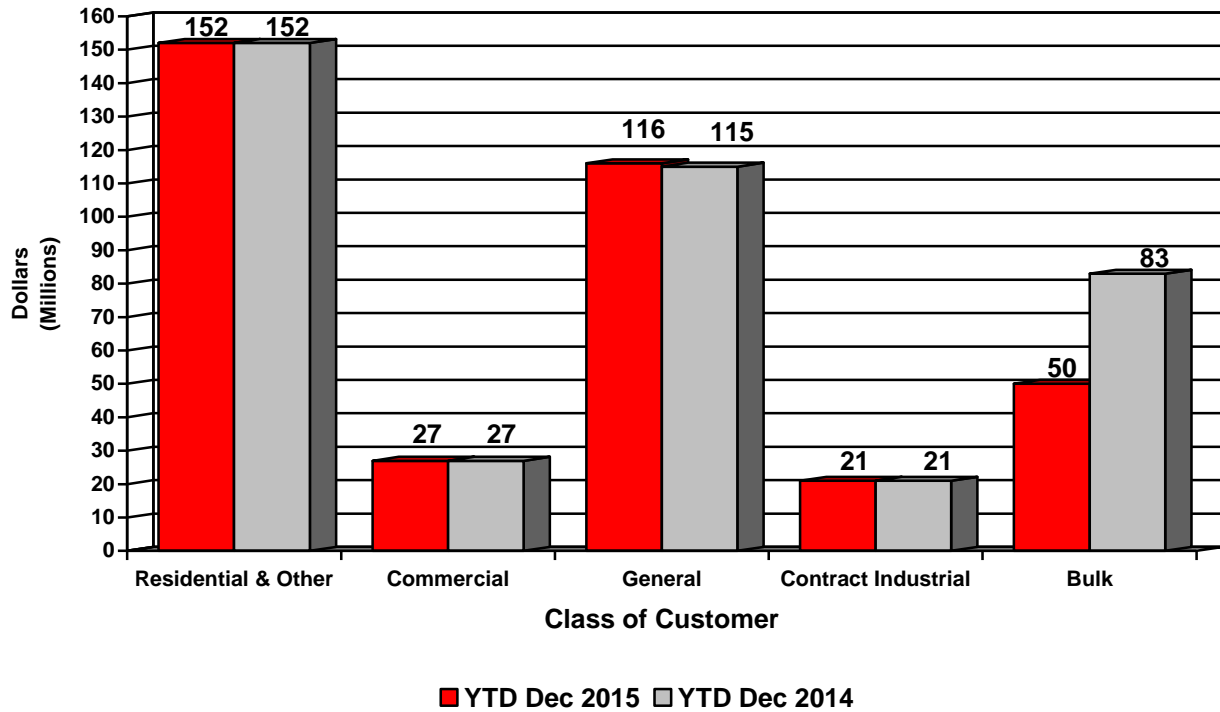
Customer Charge	\$210.00 per month
Energy (all energy measured in kilowatt-hours)	\$0.035175 per kWh
Delivery (all kilowatts of Billing Demand delivered)	\$4.00 per kW

Other schedules also now in effect are:

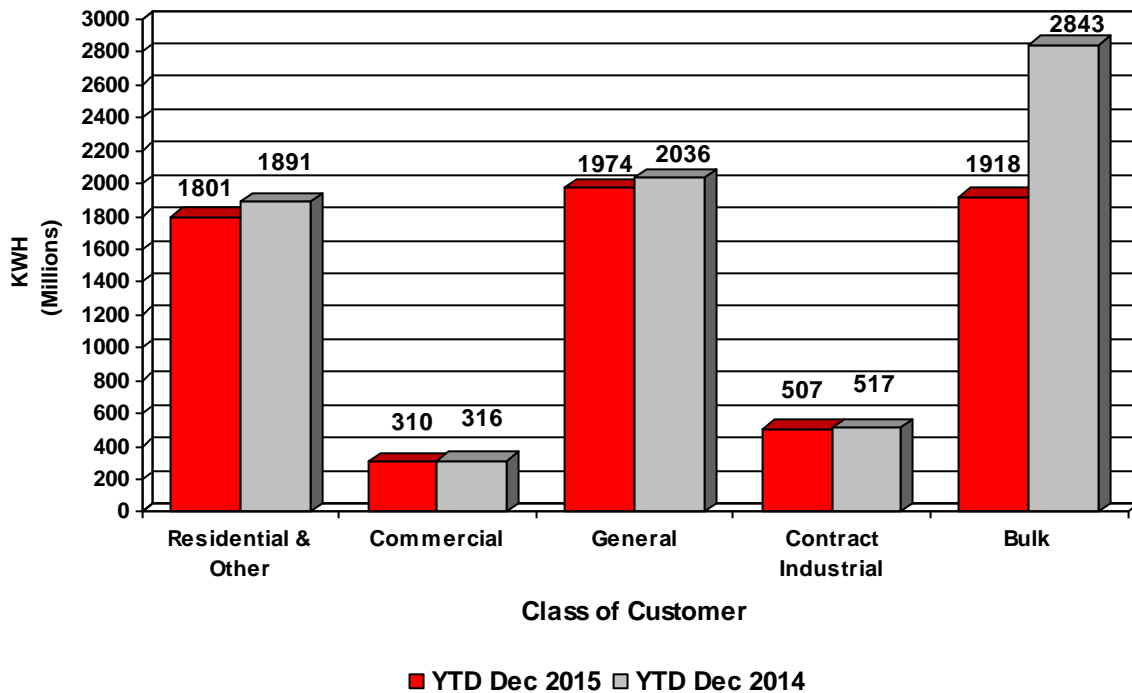
- CP - Contract Industrial Service (major industrial power use -
written contract required)
- H-1 - Street Lighting and Traffic Signal Service
- H-2 - Private Off-Street Lighting Service

Electric rates were established by Ordinance No. 28285 passed March 17, 2015
and became effective April 1, 2015.

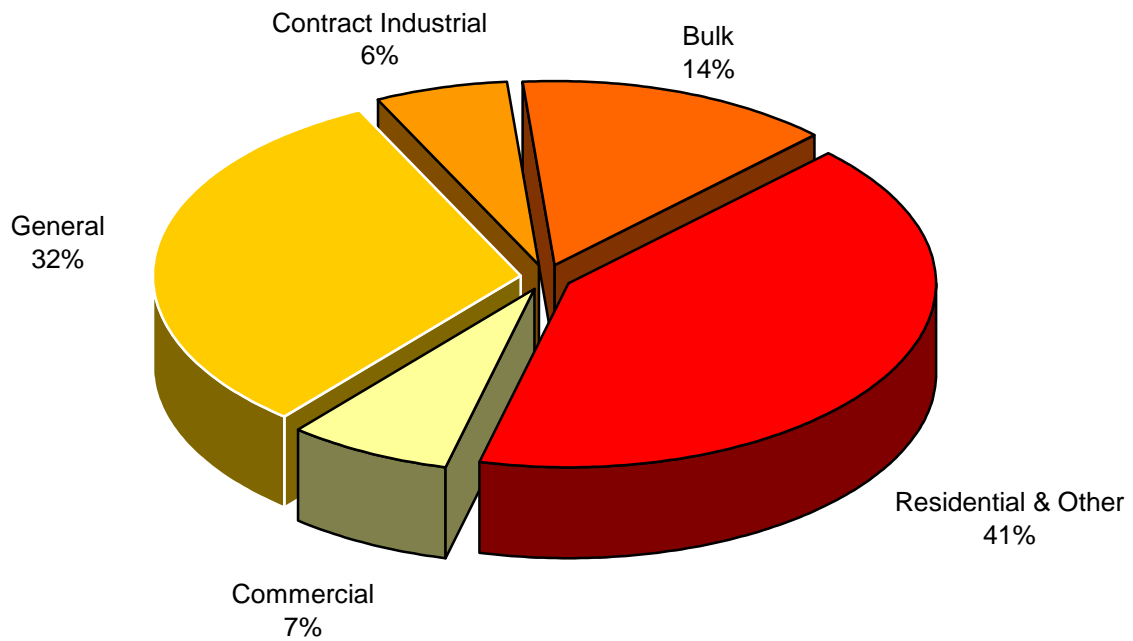
SALES OF ELECTRIC ENERGY
Year to Date - December 2015 & 2014



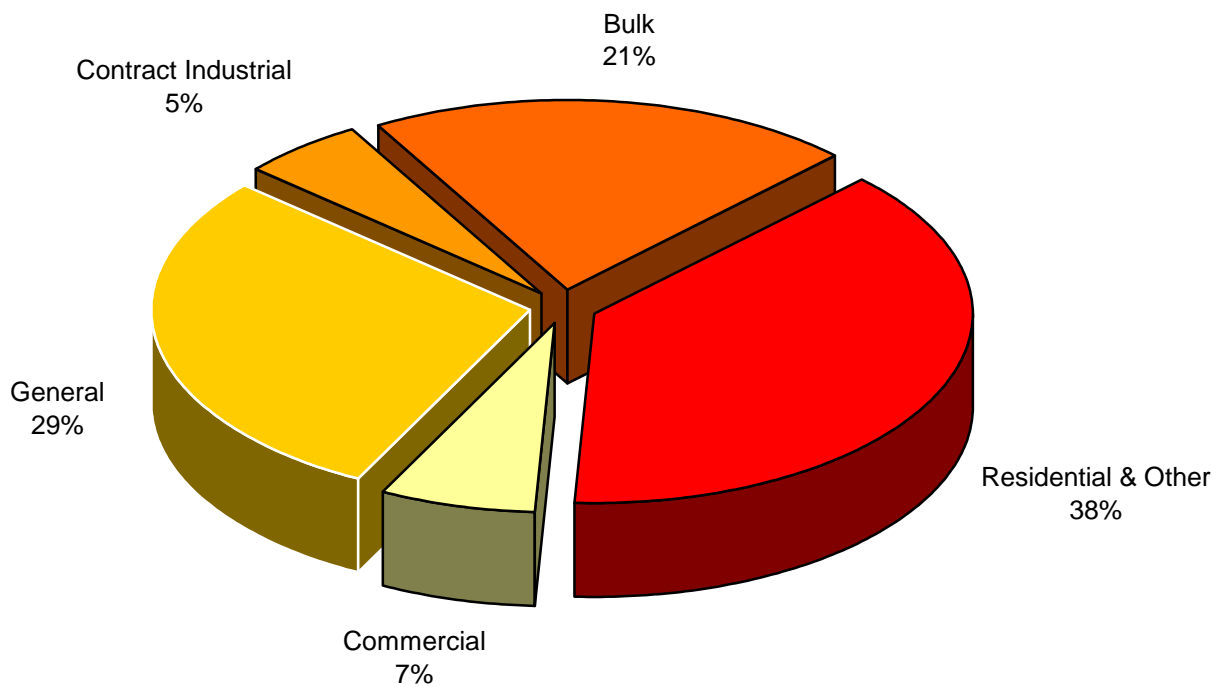
TOTAL POWER BILLED
Year to Date - December 2015 & 2014



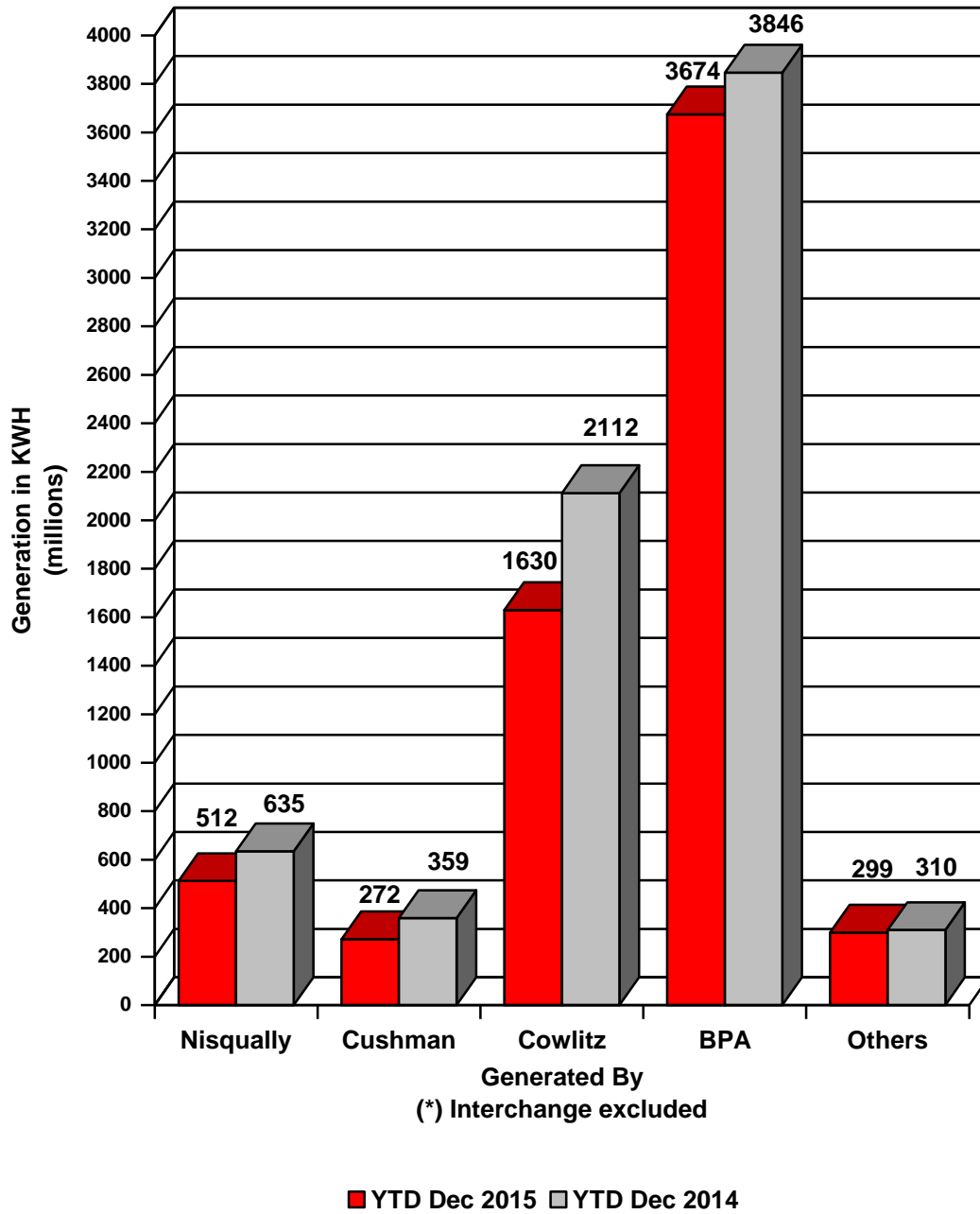
SALES OF ELECTRIC ENERGY
Year to Date - December 2015 (\$366,263,055)



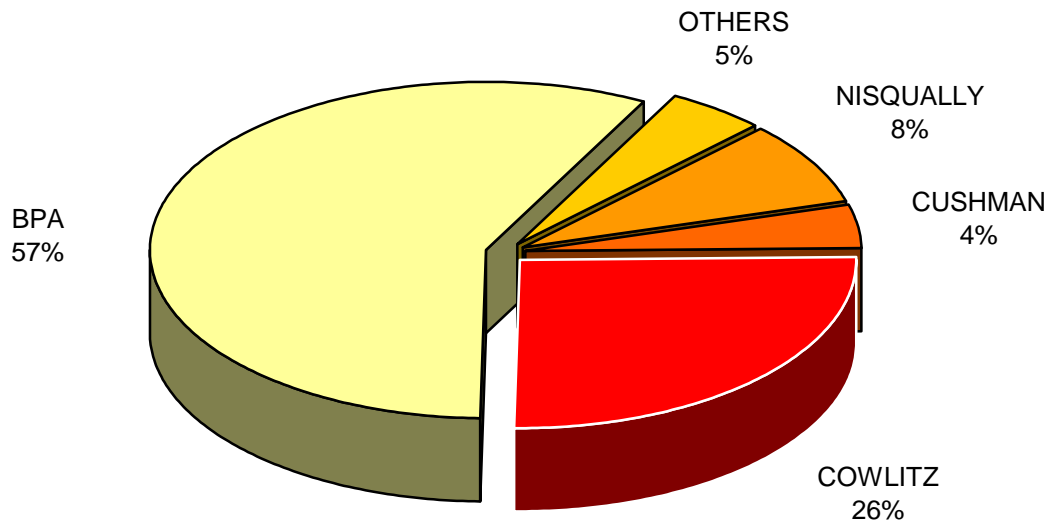
SALES OF ELECTRIC ENERGY
Year to Date - December 2014 (\$397,175,394)



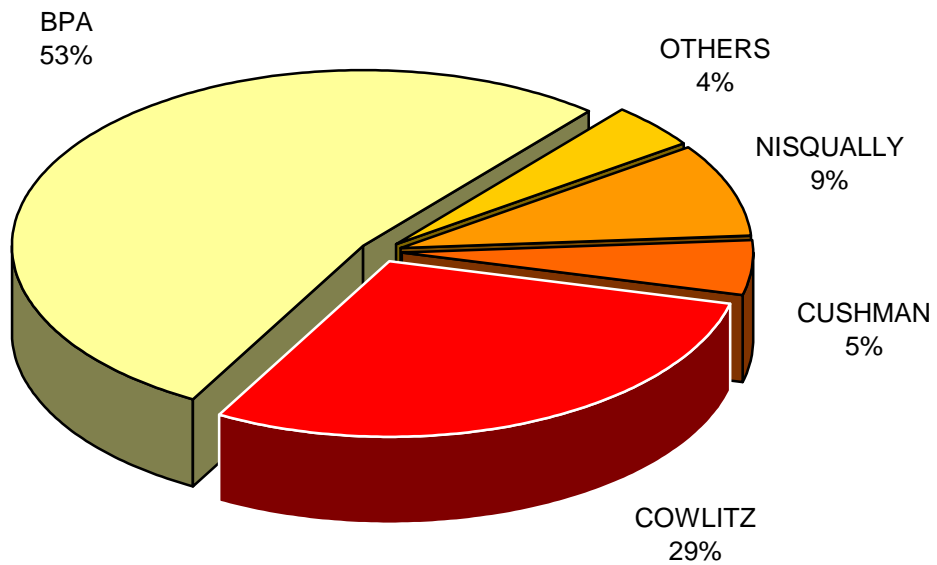
POWER SOURCES (*)
Year to Date December 2015 & 2014



POWER SOURCES (*)
Year to Date - December 2015

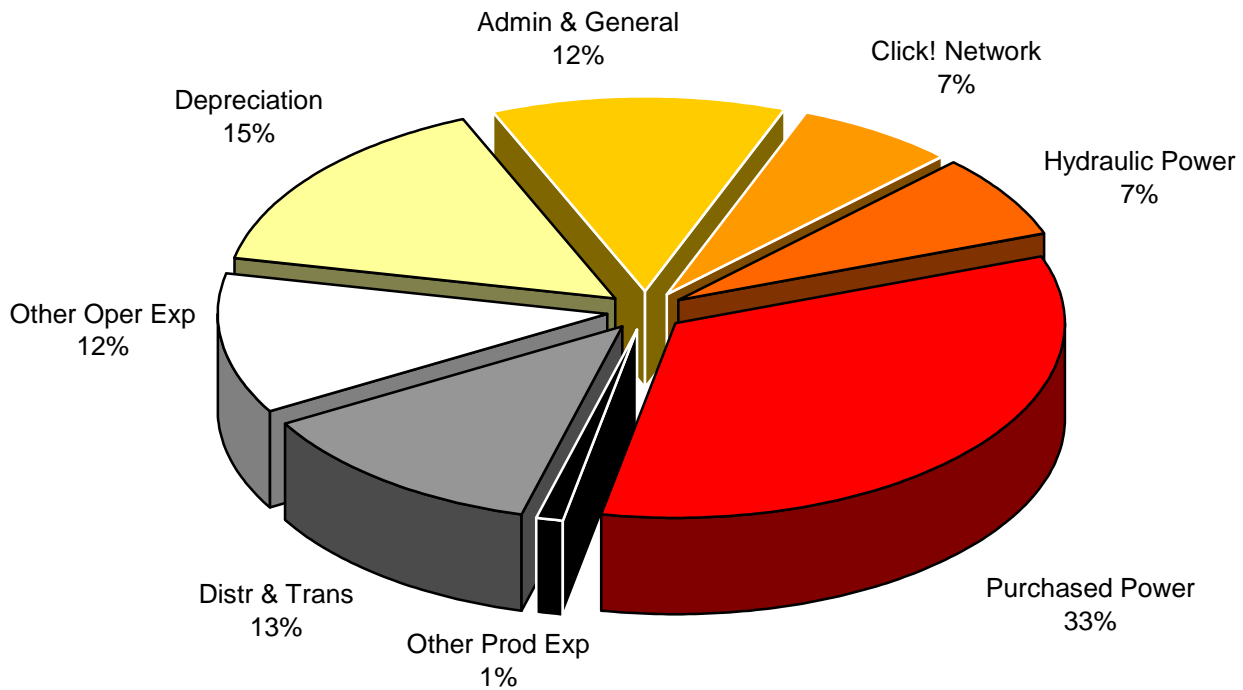


POWER SOURCES (*)
Year to Date - December 2014

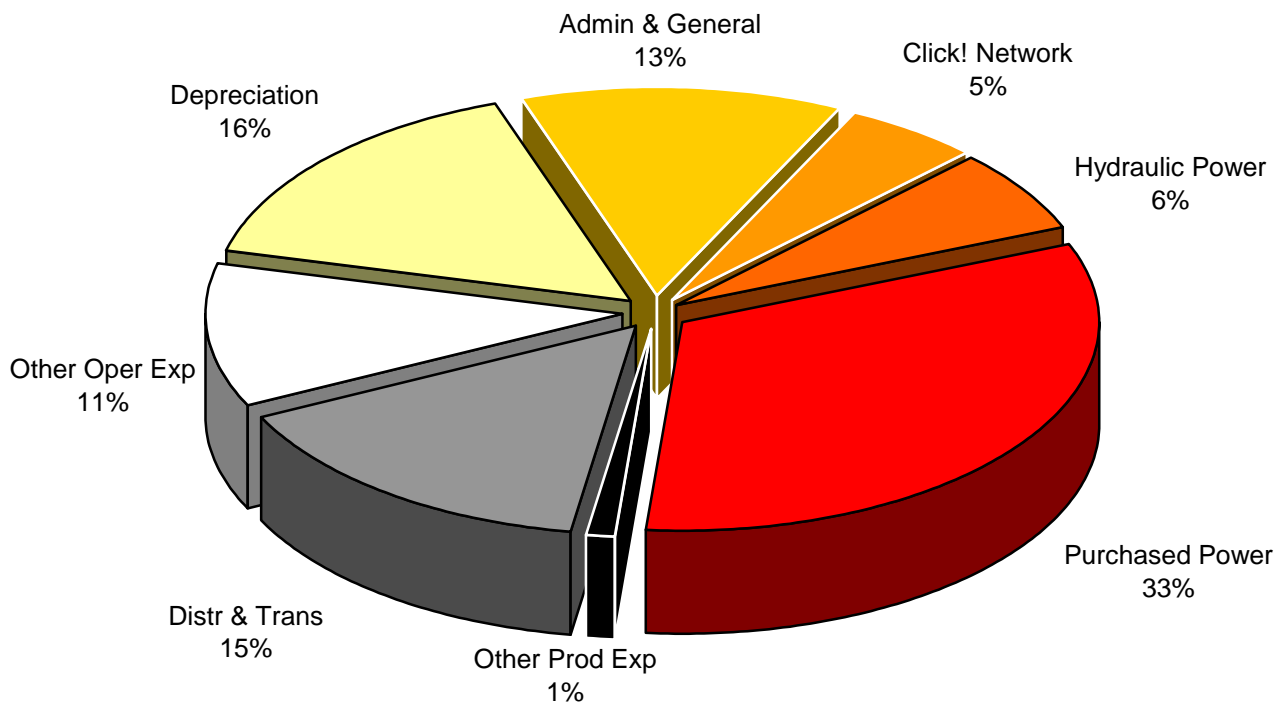


(*) Interchange excluded

TOTAL OPERATING EXPENSES *
Year to Date - December 2015 (\$376,576,115)

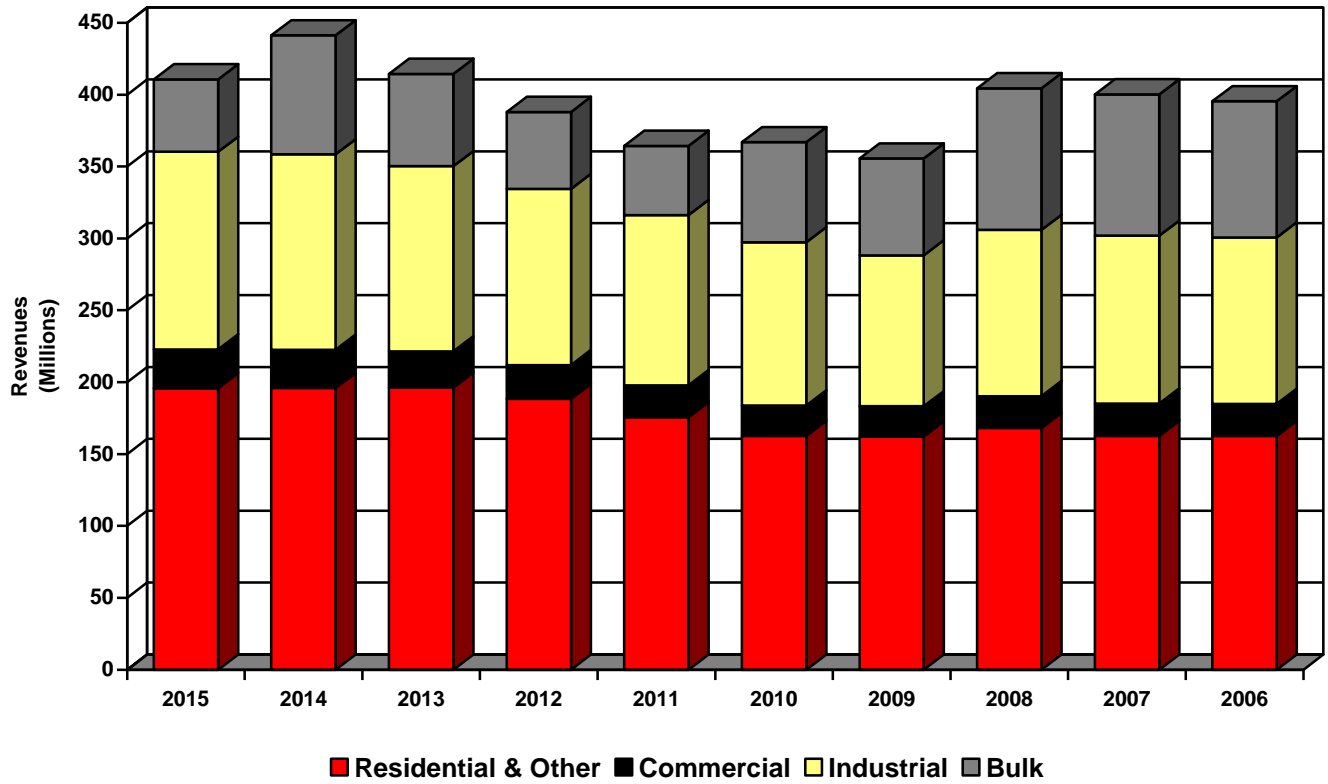


TOTAL OPERATING EXPENSES *
Year to Date - December 2014 (\$373,173,488)

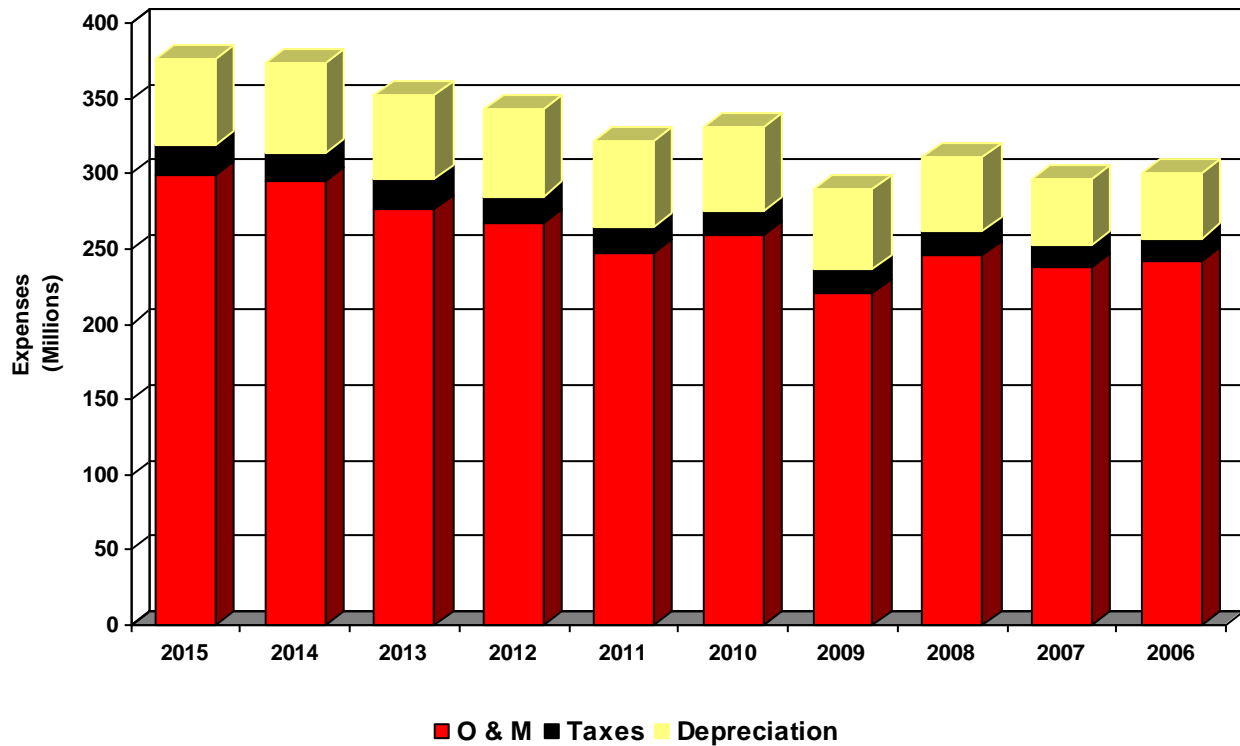


* City Gross Earnings Taxes are not included in Total Operating Expenses.

TEN-YEAR SUMMARY OF OPERATING REVENUES



TEN-YEAR SUMMARY OF OPERATING EXPENSES



2015 SUPERINTENDENT'S REPORT TACOMA POWER

GENERATION

Hydroelectric Projects

Tacoma Power's hydro plants were available 99.74 percent of the time in 2015 except for scheduled maintenance outages.

Cowlitz

Construction began 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 completion near the end of 2016. The 47 year old Cowlitz Salmon Hatchery ground water wells complex was modernized with new pump stations and automated controls. The 70 ton head gate for unit 52 was removed for the first time in 47 years and rehabilitated. The Cowlitz crews removed all 20 wicket gate arms and replaced all of the seals to maintain the low water leakage during annual maintenance for Unit 52.

Cushman

The Cushman Downstream Floating Fish Collector was commissioned in early 2015 and was successfully operated in the spring and into the early summer. Construction on both of the new Cushman fish hatcheries were nearly completed by the end of 2015 and will begin 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 governors for both generators at Cushman 1 were upgraded. Construction of recreation improvements in the Staircase area was nearly completed during 2015.

Wynoochee

The original 1994 automation and control systems for the powerhouse and dam were replaced. An extensive overhaul was performed on the generator to address failing support structures, bearings, electrical systems and significant oil leaks. The generator exciter was replaced.

Nisqually

The 20-year-old exciters for both units at Alder were 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 in preparation for the 2016 audit. 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,. These projects will be entering in to the design phase during 2016.

Parks

Tacoma Power's parks served over 300,000 customers in 2015. 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: "“Friendly, courteous staff. Please recruit the same quality of talented and engaging park staff, they're great.” “Every time we have stayed at this campground I'm always impressed at the upkeep and cleanliness. You have very friendly and helpful park staff. We love this park.”

Facilities

Completed the remodel of the TPU Lobby that accomplishes the goals of consolidating service locations, improving customer service, and providing a more secure Administrative Complex.

RATES, PLANNING, AND ANALYSIS

Retail Rates

Tacoma Power adjusted its retail electric rates with an overall rate increase of 3 percent effective April 1, 2015. This adjustment was approved by the Tacoma City Council on March 17, 2015. Work has commenced on the retail rate change process for 2017/2018.

Energy Risk Management

Tacoma Power staff has made progress on developing a self-build cash-flow-at-risk model. Staff has developed and is working to implement new business processes for enhancing credit reporting and risk controls. Tacoma Power hired a consultant in December 2015 to benchmark our wholesale commodity risk management practices against industry standards.

Finance

Tacoma Power completed implementation of the financing plan developed during the 2015/2016 biennial budget process, including:

- Use of \$122 million of financial reserves to call Tacoma Power's outstanding 2005B Bonds, reducing debt service over the next several years
- Updates to its financial and rate policies
- Secured increased liquidity support in a bank line
- Executed an interim financing agreement to fund capital improvements in advance of a long-term bond issue.

These efforts were completed during 2015 and form the basis of a long-range plan to maintain Tacoma Power's financial strength and minimize the impact of future rate increases. In addition, Tacoma Power's credit ratings were confirmed by Moody's and Fitch in 2015 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 engaged Traversa Consulting to assist in the development of a new Strategic Plan for the utility. Each Power Section has taken an active role in developing a new plan and it is expected to be complete in 2016. The strategic direction and objectives will form the foundation for 2017/2018 biennial budget development.

CLICK!

Financial Status

Click! Network commercial revenues grew from \$27.1 million in 2014 to \$27.3 million in 2015. The retail cable TV customer base dropped 6 percent ending the year with 18,276 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 7 percent ending the year with 23,274 active customers. Click! provided 200 broadband transport circuits to Click! 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 CityNet services to approximately 190 sites keeping the cost of telecommunications low for many government entities, and also provided support for over 16,000 gateway power meter connections.

During 2015, Click! Network launched 7 new digital channels – these included OWN HD, ShortsHD, OutsideTV, and PixL, along with local station multicast networks Laff, ThisTV and Decades, bringing the total to 383 video and 64 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 attract new and retain the existing customer base. Additionally, Click! added new services to its TV Everywhere service. Click!'s cable TV customers can now enjoy watching Click! video content from over 80 networks on their mobile devices with an internet connection.

Click! Network proposed a 17 percent cable television rate increase to become effective in July 2015 to recover increases in programming license fee costs, however, the City Council tabled the proposal until a future time. Cable television prices continue to be competitive and provide value to Tacoma customers.

Customer Satisfaction survey cards were mailed to all new cable TV customers and to all customers who had a service related issue. Click! technicians and customer service

representatives received ratings ranging from 3.5 – 3.9 on a scale of 1 – 4. The results showed that customers are very satisfied with the service provided by Click! and in particular, recognized the quality of service provided by our Sales and Service Representatives and Service Technicians.

In January 2012, the ISPs made a commitment to grow their Internet business by 1,500 net new customers each fiscal year through the end of July 2016. The ISPs remained on track with their commitment by adding over 1,600 new internet customers in 2015. Click! continued to negotiate new long-term wholesale contracts with the ISPs, however, final agreement on terms and conditions has not been reached at this time.

In 2015, two ISPs, Net-Venture, Inc. and Rainier Connect, entered into a joint operating agreement where Rainier Connect now assumes management and support of Net-Venture's internet customers.

Operational Efficiencies

Metro Ethernet Forum (MEF) Certification. The certification of the Metro Ethernet network began in mid-2013 and was completed in early 2015. The MEF certification program is the telecommunication industry's hallmark for Carrier Ethernet excellence. The three parts of the MEF certification program include equipment, services and professionals. The certification signifies that the equipment utilized by Click! is highly reliable and fully compliant with high performance standards; that the buyers of Click!'s services can be assured of quality service and network performance; and that Click! employs professionals with proven knowledge and skills to deliver and support the product.

Spectrum Reclamation. Click! Network converted the remaining analog Broadcast channels to digital transmission in May of 2015. Customers were notified through multiple tactics in the months leading up to the project conclusion and minimal customer disruption was experienced. Digital to analog converters were provided to customers still using analog television sets. Over 100 MHz of spectrum was reclaimed as a result of this project which will be utilized to expand the network's internet speeds.

Amplifier Housing Replacement Project. Click! began experiencing signal quality issues in 2014 due to failing amplifiers. In order to improve reliability, customer service and reduce service interruptions Click! technicians replaced the remaining 224 field amplifiers housing that power video, internet service and Gateway meters that were not replaced during the main project in 2014. This project was very labor intensive and required coordination with internal and external customers. The project finished on time and on budget and provided further immediate reliability improvements.

Network Bandwidth. A second 10 gigabit per second connection to Click!'s middle mile internet carrier was added, doubling the data throughput capabilities of the network. Capacity was added within the network throughout the year in response to the growing consumer demands for data. The CMTS' (cable modem termination system) in each of the four hub sites were upgraded to decrease the density of homes passed by each and

prevent data contention to maintain an excellent internet usage experience by consumers.

Asset Management Program

Click! participates in Tacoma Power's Asset Management Program and has developed programs to collect data and measure health indices for Network Amplifiers, Power Supplies, and Network Switches and Routers classes of assets. This program enables more effectively capital expenditures planning and budgeting.

Safety and Work Practices

In 2015, Click! continued to improve its safety management practices. Improvements included: (i) Focus 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. 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. However, Click!'s standing record of 254 days without time loss from a work related injury was not surpassed.

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, 2010 through December 31, 2015. The average number of customers (ACO) without service per outage was 84 customers. The average outage duration for each customer served (SAIDI) was 62 outage minutes per customer. The average frequency of sustained interruption per customer (SAIFI) was 0.57 interruption averages per customer.

Rolling 6-Year Average	SAIDI	SAIFI	ACO
01/1/10-12/31/15	62.29	0.5737	83.98
2015 Performance Target	≤ 75	≤ 0.95	≤ 150

Three major weather events occurred again in 2015, which aside from 2014, is significantly more than our normal of 0-1 storms/year. These events were on August 29 (wind gusts to 48 mph SSW), November 17 (wind gusts to 50 mph SSW), and December 9 (wind gusts to 44 mph SSW.) Tacoma applies 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 only 860 MW, about 10% below normal. The transmission peak occurred on 11/30/15 at 1171 MW (15% below 2014's system peak.)

The vegetation management program contributed to the high reliability of our system by trimming and managing trees and vegetation of over 700 miles of lines. High summer and fall temperatures resulted in increased vegetation growth, which was controlled through the program.

Transmission Service

Four Point-To-Point Transmission Service Agreements with Bonneville Power Administration (BPA) were approved by the Public Utility Board in September 2015. The contracts are for delivery of power to six of the Pierce County Mutuals (Eatonville & Ohop, Elmhurst & Parkland, Milton, and Steilacoom). The term of the agreements is three years, from October 2015 through October 2018. The intent is to allow additional time for load shedding equipment to be installed and operational before transitioning to Network Integration Transmission Service. The total revenue received from BPA for the provision of transmission and ancillary services continues to be in the range of just over \$7 million per year.

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, HV Insulator and Power Transformer Replacement capital projects. With the data provided, budgeting champions for these projects were able to calibrate their requested funds while optimizing risk levels to the transmission and distribution system.

T&D gathered and processed asset registries for live front padmount switchgear, high voltage insulators, and fused disconnects due to receiving failure information from field staff. This information helped develop replacement strategies and budget requests to help mitigate future system failures. In addition, AM helped develop registry and consequence of failure data to support the development of the three-phase #6 copper replacement strategy due to continued failure of the conductor.

T&D AM completed an entire lifecycle review of pole & padmount transformers, recommending continued refurbishment of padmount transformers but discontinuing refurbishment of less expensive polemount transformers. Other recommendations included systematic replacement of transformers with 2 ppm PCB's, investing in a covered racking system for transformers, and surplus of old, unused transformers that are no longer useful or cost efficient.

T&D AM is continuing to utilize and validate Overhead system audit information to report the most accurate data in our overhead system. Validation of street and rental light information, joint use information, as well as other critical area information, is ongoing.

Through the pole test and treat program, 5,330 poles were tested with 5,025 of those poles eligible for treatment. Poles replaced under the pole replacement program totaled 620 for 2015.

Through the cable replacement program, 23,343 feet of underground cable was injected and 38,116 feet was replaced.

System Improvements

In 2015, a reliability assessment was completed for 2014 outages and detailed in the Annual Outage Report. A NERC-required transmission assessment was completed over a 10-year horizon to establish the sufficiency and margins for transmission capacity and performance. The Annual Outage report and System Assessment provide guidance for the development of the 2017/2018 Biennial budget and the economic analysis for the proposed projects.

Transmission e-tagging commenced, at BPA's request, for scheduling Mayfield and Mossyrock generation. BPA started their process of requesting Tacoma transmission capacity for Cowlitz Falls flow in the last week of the year. Work is underway to restore capacity on BPA's transmission line to Mayfield, due to new rules about pre-contingency operating limits. A remedial action scheme will be installed and interact with Mossyrock generation to ensure line flows remain within ratings.

The highest impact reliability improvement of 2015 was the completion of the Southwest 115 kV bus reconfiguration. This improvement removed a single failure point that could otherwise have resulted in thousands of customer outages. A distribution substation transformer was replaced at Custer substation. Line engineering completed the 3 year effort on evaluating transmission line field conditions as required by the NERC alert. As expected in our conservation assessment, 3 distribution substations have enhanced voltage regulator controls to save customer's energy with optimal voltage service. A transmission line and adjacent distribution circuits in the University Place area has been shifted to accommodate road projects. Timing was important in preparation for hosting major golf events in the summer of 2015 and 2016. Within our service area, the first pole mounted transmission switch to be operated as an automation sectionalizing device was installed. Engineering initiated various phases of property acquisition, design and equipment purchases for four high impact projects. This included rebuilding East F substation (an additional feature will be the supply of distribution circuits into the downtown area), rebuilding and replacing the transmission towers in N 21st street (an additional feature will be the decommissioning of Cushman substation) and two critical projects on the Potlach transmission lines, the creation of a ring bus near the Cushman project and the replacement of the 95 year old Henderson Bay Line Crossing near Purdy.

Electrical Services

Transmission & Distribution's Electrical Services work group provided 186 service connections requiring construction work performed on average within 5.5 days and 2,474 service connections without construction work performed on average within 1.8 days. T&D issued 12,568 electrical permits and performed 22,944 electrical inspections for total revenue of \$1,623,300.

Safety and Work Practices

In 2015, T&D implemented a number of safety improvements including changes to the Arc Resistant (AR) clothing program with selection of a new clothing supplier and an increase in the clothing offerings available to workers. Breathable AR rainwear was field tested, selected and obtained for high voltage employees in jobs where climbing of structures or poles is required. Injury prevention awareness training was provided focusing on injury prevention and exercises employees can use to reduce recovery time when injuries occur. T&D participated in the Labor & Industries Rule Making Process for updates to the WAC 296-45 Electrical Worker's Safety Rules. Implementation of the revised rules will be in mid-2016. T&D field tested and selected products to ensure adherence with these revised rules including wood pole fall protection, bucket truck fall protection and AR face protection.

Employee Resources/Development

T&D completed the eleventh year of its engineering intern program. T&D hosts four engineering students for 12-13 weeks each summer from local universities including University of Idaho, Washington State University, University of Washington and Seattle University, with approximately 50 percent 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 also attended 16 recruitment events and hosted a successful all-day JBLM site visit for approximately 30 transitioning soldiers. We managed three apprenticeship programs and provided training and work experiences to 38 apprentices and trainees in six areas: meter (1); line (21); substation (8); advanced meter/relay technician (3); system dispatcher (4); and senior substation operator (1). In addition to managing programs, T&D also conducted a recognition event to honor eight Transmission & Distribution employees who graduated from their respective apprenticeships/advanced training programs. T&D's Excellence Recognition Program received 348 nominations and recognized 334 T&D employees in 2015.

POWER MANAGEMENT

Conservation Resources Management (CRM)

Tacoma Power acquires energy conservation as a resource to defer its need for future, more costly generation resources. Conservation also provides a positive touch point for thousands of customers with its popular programs that provide homeowners and businesses with technical assistance and financial incentives to reduce their cost of energy efficiency improvements. Washington's Energy Independence Act (EIA) also requires the utility to achieve all available cost effective conservation.

For the 2014-2015 compliance biennium, Tacoma Power had a target of 8.1 aMW. As the second year of that biennium draws to a close, Conservation Resources Management (CRM) projects year-end savings of over 13aMW. The 5 aMW 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 EIA.

In addition to working to meet its conservation goals, CRM made several changes in 2015 to better prepare for the future. First, CRM focused on working more closely with trade allies, essentially deputizing them to represent Tacoma Power's programs. To that end, we appointed an employee to create process improvements for them and communicate with them. Second, CRM is completing phase one of an effort to develop a new program database to replace our aging and disparate legacy system of databases and spreadsheets. Phase two will follow in 2016. Third, CRM is working with Legal and other departments to simplify the processes we require customers and trade allies to follow. For the majority of commercial customers, a simple application will replace a formal contract, which is expected to significantly improve customer satisfaction and reduce costs.

Energy Resource Planning

Tacoma Power 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. According to commitments under BPA's Power Sales Agreements and the Tiered Rates Methodology BPA is required to establish new power and transmission rates every two years. Power Management was an active participant in BPA's BP-16 Wholesale Power and Transmission rate cases. Pursuant to the BPA Administrator's final decisions issued in July 2015 Tacoma Power's BPA power and transmission costs increased by 5.9% and 3.1% effective October 1, 2015 for the two-year rate period.

Power Management completed a biannual service area energy conservation potential assessment. The study identified 78.7 aMW of achievable economic conservation potential over a 20-year period. After considering these results in the 2015 IRP's resource acquisition model, Power Management recommend a 10-year conservation potential of 46.8 aMW and a 2-year conservation target of 9.4 aMW. Tacoma's Public Utility Board adopted these conservation objectives at their November 18 meeting.

The Public Utility Board adopted the 2015 Integrated Resource Plan at their December 16 public meeting. This adoption culminated ten months of analytical work and cooperation with public stakeholders. Continuing to acquire all cost-effective conservation is Tacoma's preferred resource strategy. The 2015 Integrated Resource Plan will be filed with the Washington State Department of Commerce in accordance with RCW 19.280 early in 2016.

Tacoma Power led a study of the energy savings of hybrid ductless heat pump/electric resistance heating systems. Our partners included Snohomish County PUD, Cowlitz County PUD, BPA and Habitat for Humanity. The study found that hybrid ductless heat

pump/electric resistance heating systems to be more cost effective than all-electric resistance heating in new construction homes. Based on these findings, Power Management submitted a proposal to the Washington State Energy Code Council to require installation of a ductless heat pump in the largest room of newly constructed electric resistance heated homes. The State Building Code Council adopted our proposal and forwarded it to the State Legislature for consideration in the 2016 session.

In June, the Washington State Auditor's Office (SAO) began an audit of Tacoma Power's compliance with our 2014 renewable resource mandate. In December, the SAO concluded their work and reported that Tacoma was fully compliant.

During 2015 Power Management participated broadly in the NWPP's MC Initiative's Phase 4, with the objective to develop and implement deliverables that would achieve immediate, tangible benefits for Tacoma Power, for other consumer-owned utilities, and for the region as a whole. For the first three quarters of the year staff participated in multiple policy and technical work teams covering issues such as market design, market rules and oversight, governance and funding, resource sufficiency standards, transmission issues, California ISO seams issues, and technical market implementation plans. In the fourth quarter, with the withdrawal of PGE and Idaho Power from the MC effort, and after full consideration of additional potential Northwest market solutions, the decision was made by the MC Executive Committee to no longer pursue a Northwest within-hour market. Throughout this year Power Management prepared weekly written updates and held weekly intra-utility meetings in an effort to keep all utility staff aware of the evolving status of this initiative.

Resource Operations & Trading

Wholesale transactions in 2015 were characterized by strong sale volumes and deteriorating wholesale prices. The quantity of wholesale power sales (net of purchases) was 1.6 million MWh, exceeding the budget estimates of 1.2 million MWh. However, due to the steady decline of wholesale power prices, annual revenue was only \$43.6 million compared to budget estimates of \$56.1 million.

Hydrologically 2015 will be remembered as having the lowest springtime runoff on record for western Washington. The combined springtime inflows for Tacoma Power's resources (Cowlitz, Cushman, and Nisqually), were only 41% of normal, and were 16% lower than the previous low on record. Snowpack was less than 20% of normal with many sites throughout the region recording zero snowpack for the year.

During the winter of 2015, Power Management's resource operations team closely monitored hydrologic conditions and were among the first to recognize that springtime runoff could be the lowest on record. In light of these developing conditions, this team took proactive steps to develop a plan to impound wintertime precipitation and fill storage reservoirs well above normal levels. These plans were implemented through careful coordination with the U.S. Army Corps of Engineers and State and Federal

Natural Resource Agencies. As a result, Tacoma Power was able to refill its storage reservoirs by early summer. This stored water was then used to augment downstream flows during the summer and autumn months to protect downstream fish and wildlife and minimize the potential environmental impacts of the drought. Due to their commitment and strong analytical capabilities, Power Management's resource operations team were able to successfully manage the lowest runoff on record with no downstream impacts to the environment.

Beginning at the end of October, hydrologic conditions changed dramatically with a succession of storms hitting western Washington. Stream flows during November and December were some of the highest on record, punctuated by a large flood event in early December. As a result, storage reservoirs were well above the normal operating levels by the end of the year.

Overall for calendar year 2015, stream flows into Tacoma's Cowlitz, Nisqually, and Cushman hydroelectric projects were slightly below their historic levels at 99 percent, 93 percent, and 90 percent, respectively. Flows into the Federal Columbia River Power System which affect Tacoma's Slice-of-the-System BPA contract were 84 percent of normal.

In 2015, 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 expanded the sales of low-carbon products and became one of only three Asset Controlling Suppliers (ACS) in the Pacific Northwest. Due to this designation, any sales made from the resource portfolio are deemed "low carbon" and can be sold at a premium. In 2015, this resulted in additional revenue of almost \$200,000.

Our ability to sell capacity and reserves products was also carefully analyzed to determine whether these products could be reliably supplied and to quantify the associated opportunity cost. Tacoma responded to six Request for Offers (RFOs) for Imbalance Capacity Products and was the successful bid on three of the RFOs. Sale of these products are estimated to provide additional revenue of approximately \$500,000.

UTILITY TECHNOLOGY SERVICES

Utility Technology Strategy & Planning

2015 involved continued socialization of the UT Strategic Plan as a catalyst to 15/16 technology project planning. As part of continuous development, the Utility Technology Maturity Model was updated with 6 new disciplines and maturity characteristics to reflect internal assessments and Gartner benchmarking efforts on UTS capabilities. Key strategic technology projects/initiatives sponsored in 2015 that have direct line of sight to the strategic plan include selection of the Services Oriented Architecture (SOA) platform, implementation of the first of 3 phases of the customer outage reporting portal,

development of the EMS replacement RFP, and initial development of a TPU wide AMI strategy and business case. The organization's technology awareness and representation of TPU's technology interests were further developed in 2015 through active participation in select industry a forum, including the WEI and LPPC CIO leadership forums, UW Tacoma's Institute of Technology Industry Advisory Board, and select utility technology vendor conferences.

Employee Engagement

UTS continued its focus to increase employee engagement in 2015. A team of representatives from each UTS workgroup met and reviewed all of the employee feedback. The group was able to identify common concerns across UTS and created a white paper which documented the process and methodology the team used in their analysis. They categorized and displayed the information in a tabular format representing common themes. UTS continues to focus on these areas.

Operational Efficiency

Over the past year the business processes associated with contract administration were redesigned to enable better tracking, review and approval of technology contracts. UTS has realized greater visibility, financial tracking and adequate lead time for contract renewals.

To support the effort to meet NERC CIP version 5 requirements, the Microsoft Windows servers and workstations used within the Energy Management System were replaced with standardized hardware and software. The replacement effort reduced the number of system security configuration profiles and improved the efficiency of systems maintenance. As part of the effort the core network switching infrastructure and firewalls were also updated along with the legacy Energy Management System network cabling within the Energy Control Center.

In 2015 the UTS Service Desk implemented a customer survey and established performance metrics to begin measuring UTS's level of service and customer satisfaction. In 2015 UTS increased its overall customer satisfaction from 45% to 93% and has increased its first level of user support and ticket resolution from 17% to an average of 45%. This has reduced response time and internal costs associated with service delivery. The Service Desk has also established a formal planned and unplanned outage communication process. All Technology outages are communicated via the Service Desk in a standardized format so customers and technology providers can receive clear consistent messaging from one source.

Technology Advancements

A Home Agent pilot program was deployed in 2015 allowing Customer Service Representatives to work remotely from home and access SAP and the TPU Telephony system while receiving customer calls. A business case is being currently being developed to identify potential benefits of this program expanding to the other CSRs.

A TPU-wide computer replacement policy was developed and reviewed by TPU stakeholders. This policy will enable UTS to standardize on hardware, system configuration and lifecycle management for desktop and laptop computing devices. The policy is scheduled for presentation and approval by the Utility Technology Governance Board in early 2016.

Mobile Dispatch for field crews was further enhanced with improved Geographic Information System viewing capabilities for Tacoma Power locators and the addition of new functionality now enabling underground vault inspections in T&D to be captured real time in SAP through wireless technology.

UTS developed a customer facing outage map and published it to the MyTPU external website and delivered it to utility customers prior to the 2015 storm season. This solution provides customers with multiple points of data, including outage start time, estimated time of power restoration, the number of customers affected, and the status and cause of each outage.

In August of 2015 UTS signed a contract with CGI to upgrade the existing Outage Management System (OMS). The design phase of the project is well underway and the projected go-live is scheduled for November, 2016.

A Conservation Database Modernization (CDM) project was completed in 2015 which included the Bright Rebates program and the Residential HVAC and Weatherization Rebates program for Tacoma Power.

For the multi-year Energy Management System (EMS) Replacement project, we signed a contract with Accenture to assist TPU in developing our system requirements and creating an RFP. The RFP was published and we completed the Request for Qualification (RFQ). A vendor will be selected in 2016 with system implementation targeted for Q4 of 2018.

TPU went live with the first phase of the Business Process Exception Management (BPEM) project in May, 2015 and the second phase in August, 2015. The project streamlined how Customer Service handles meter reading, billing and invoicing exceptions, with a goal of improving the meter-to-invoice process.

Security

Physical security requirements at the Cushman Project as well as vulnerabilities identified as part of the Aurora NERC Alert were addressed. Installation and commissioning of a new network was completed in fourth quarter of 2015. This new network provides a high capacity and reliable foundation for future security system designs and installations.

The establishment of a new UTS Cybersecurity work group began with the hiring of a Cybersecurity engineer and the deployment of several key security systems. The new systems were deployed within a new Cybersecurity LAN which provides a centralized

location for the deployment and management of security systems used to protect TPU operational networks.

The first systems deployed were a new security information and event monitoring system

and an Intrusion Detection System (IDS) to inspect all network traffic entering and leaving the operational networks enabling better monitoring and alerting on signs of possible compromise.

System Reliability Enhancements

UTS staff worked diligently to ensure TPU's IVR was operating efficiently and at full, available capacity. These efforts enabled the IVR to process over 347,000 calls in 2015 totaling nearly 12,000 hours that TPU customers were interacting with the Utility without tying up a customer service representative.

Staff also worked closely with Generation's Production Engineering in the Wynoochee plant control modernizing and assisted in designing, installing, and implementing the plant control network, corporate and telephones at the new Cushman Northfork Hatchery. The team also helped design and implement the new plant control network for the Cowlitz Salmon Well control modernization project. For Tacoma Rail, the team assisted in replacing their phone line recording device to meet their operational requirements.

Several End of Life (EOL) and upgrade projects were completed in 2015. Windows 2003 Operating System (OS) was upgraded to 2008; computers and laptops running Windows XP were all upgraded to Windows 7, with a few exceptions.

SpiceWorks, the interim service desk ticketing system, was streamlined and upgraded to the latest version. Automatic Vehicle Location (AVL) devices facing end of life were replaced with Verizon MiFi devices. The new devices have enhanced connectivity utilized by field crews.

Regulatory

In 2015, Tacoma Power focused on transitioning to Critical Infrastructure Protection (CIP) standards version 5, completing routine annual compliance program requirements, and preparing for the 2016 WECC audit.

A Cyber Security tabletop exercise was conducted which focused on combating physical and cyberattacks. The exercise was effective in training incident responders on all aspects of Tacoma Power's Cybersecurity Incident Response and Recovery Plans. Response was further tested with the participation in the 2015 Grid-X 3 cybersecurity exercise that was conducted on a national level.

Tacoma Power's Cyber Security Awareness program was further reinforced through on-going publications of the monthly Compliance Chronicles newsletters, and completing

annual reviews of Tacoma Power's Operations & Planning (O&P) and Critical Infrastructure Protection documents supporting the NERC Reliability Standards.

Tacoma Power participated in a WECC Inherent Risk Assessment (IRA), which enabled WECC to evaluate and assess any risk to the Bulk Electric System and appropriately size Tacoma Power's 2016 WECC On-Site audit scope. Tacoma Power also conducted mock audits of CIP and Operations & Planning (O&P) requirements.

Chris Robinson
Power Superintendent/COO



The City of Tacoma does not discriminate on the basis of disability in any of its programs, activities, or services. To request this information in an alternative format or to request a reasonable accommodation, please contact the City Clerk's Office at (253) 591-5505. TTY or speech to speech users please dial 711 to connect to Washington Relay Services.