



2017 EQUITY MANAGEMENT PLAN AND ELECTRIC RATE STUDY

Public Utility District No. 1 of Okanogan County, Washington



PREPARED BY:

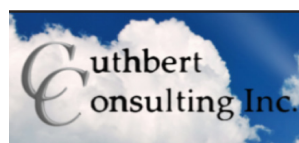


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Section 1

INTRODUCTION

Background

NewGen Strategies and Solutions, LLC (NewGen) and Cuthbert Consulting Inc. (CCI) were retained by the Public Utility District No. 1 of Okanogan County (the District) in August 2016 to assist District staff with the development of the 2017 Equity Management Plan (2017 EMP) and Rate Study Services (2017 Rate Study).

Previous equity management plans (EMP) were developed for the District in 2010, 2012, and 2013, and cost-of-service and rate design studies were prepared in 2008, 2010 and 2013. The 2010 EMP provided the District with a long-term financial planning model, and was used to prepare a cost-of-service study for the District detailing a series of rate increases to be implemented over the 2010 to 2012 time period. The EMP was updated in 2012 and 2013 (2013 EMP). The analyses indicated a likely need for the District to increase rates during calendar year 2013 and beyond. This information was used to prepare a new rate study in 2013 (2013 Rate Study) that recommended a series of rate increases to be implemented over the 2013 to 2015 time period.

The scope of work for the 2017 EMP centered on updating the prior EMP analyses in light of changes in the District's long-term planning needs and included evaluation of the District's financial outlook related to operating expenses, capital improvements, financing requirements, and rate increases, as well as other pertinent operating and financial information. The District faces a number of uncertainties in the coming years related to load growth, increased Bonneville Power Administration (BPA) rates, and possible capital improvement needs and resource development options. Given these uncertainties and the possible related need for rate increases, the 2017 EMP was prepared to update and refine prior projections of the District's electric system financial performance and to assist in understanding possible future rate levels, funding options, and overall long-term financial options available to the District. The final 2017 EMP only includes a rate increase for 2017. The District plans on updating the EMP on an annual basis to assess the need for adjustments to rates so that key financial targets can be met.

The results of the 2017 EMP were used as the basis to assess the need for and magnitude of rate changes anticipated to become effective September 1, 2017. The prior rate design analyses were then updated to reflect the 2017 EMP projections for use in the 2017 Rate Study.

Report Organization

This report is organized into four sections plus appendices. General information about the study is provided in Section 1. An overview of the 2017 EMP analysis is provided in Section 2. The rate design analysis follows in Section 3, and the summary and conclusions is provided in Section 4. Detailed analyses are provided in Appendices A and B, and a copy of Resolution No. 1639 is provided in Appendix C.



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EQUITY MANAGEMENT PLAN ANALYSIS

Introduction

When completed in 2013, the District's 2013 EMP indicated that the District needed a series of 9.5% rate increases in 2013, 2014, and 2015, followed by 2.0% rate increases in 2016 and 2017. These projected rate increases were attributed to decreases in wholesale revenues, the loss of revenues associated with an industrial customer, the need for additional funds to support various capital improvement projects totaling \$102 million over the study period, and the financing of \$35 million for Enloe Dam to begin operation in 2021.

Given the level of rate increases that were projected, the District's Board of Directors elected to authorize one rate adjustment of 9.5% to become effective in late 2013 per Resolution No. 1567. Consideration of additional rate increases would be considered in future years as part of the District's annual budget review process. Following the 2013 rate adjustment, the Board elected to authorize only one additional rate adjustment of 2.0% effective in 2015 and to reduce operating and capital improvement funding from the levels envisioned in the 2013 EMP.

Beginning in November 2016, a meeting with District management and staff was held to review the EMP and rate review processes and to consider the Board's prioritization of operating and capital spending options. In late 2016, NewGen prepared a preliminary update to the EMP for the District, which indicated a possible need for additional rate increases during calendar year 2017 and beyond. In early 2017, a draft 2017 EMP analysis was prepared using the District's estimated 2016 operating and financial data. The 2017 EMP was used to help the District evaluate its projected financial performance under various scenarios over a 10-year planning period from 2017 through 2026 (the Study Period).

As part of the development of the 2017 EMP, several factors were considered to be of significant importance in the District's financial planning efforts. These factors include the need to:

- Establish appropriate debt service coverage (DSC) and times interest earned ratio (TIER) requirements,
- Balance borrowing needs and rate-funded equity levels to fund the District's capital needs,
- Maintain a favorable equity ratio,
- Maintain appropriate cash reserve levels, and
- Evaluate future rate adjustment needs.

A principal goal defined by the District for the 2017 EMP was to examine the long-term retail rate impacts of several projected changes to the District's system, including various capital improvement options and the development of the Enloe Dam Hydroelectric Facility. The 2017 EMP was developed in the context of helping the District evaluate appropriate rate levels to meet the financial targets of the utility and to continue to provide reliable electric service given operational and financial changes.

Approach

The 2017 EMP process involved preparing a detailed financial-based spreadsheet model, which projects annual revenues and expenditures for the Study Period. An income statement, statement of cash flows, and balance sheet projections were developed in the model, as well as supporting schedules for plant investment, funding requirements and sources, existing and new debt service payments, and a general funds summary.

Preparing the 2017 EMP analysis involved discussions about operational and financial planning assumptions and variables amongst NewGen and CCI staff, District management and staff, and the District's Board of Commissioners. Based on the results of several draft analyses and input received, several key assumptions were made. Some of these key assumptions included a combination of variations in the level of capital funding during the Study Period and the possible development of Enloe Dam, assumed to be operational in 2021. A full discussion of the key assumptions used in the EMP is provided later in this section of the report.

Based on the above considerations, four 2017 EMP scenarios were developed. NewGen and CCI staff worked with District management to identify several capital spending options to be reviewed in the EMP process and used the EMP model to analyze the impact of these funding needs on the District's projected financial results. As a result, the four alternative options considered the following assumptions and options:

- **Scenario Option 1:** Increasing the District's capital improvements expenditures in 2018 through 2019 by \$7.5 million above the level needed for routine capital maintenance requirements over the 10-year period. Assumes \$7.5 million debt issuance would occur in 2017.
- **Scenario Option 2:** Increasing the District's capital improvements expenditures in 2018 through 2020 by \$10.0 million above the level needed for routine capital maintenance requirements over the 10-year period. Assumes \$10 million debt issuance would occur in 2017.
- **Scenario Option 3:** Issuing \$35.0 million in 2021 to fund Enloe Dam capital improvements above the level needed for routine capital maintenance requirements over the 10-year period.
- **Scenario Option 4:** Increasing the District's capital improvements expenditures in 2018 through 2019 by \$10.0 million and a \$35.0 million issuance in 2021 to fund Enloe Dam capital improvements above the level needed for routine capital maintenance requirements over the 10-year period. Assumes \$10 million debt issuance would occur in 2018.

These draft EMP scenario results were presented to the District's Board in an April 2017 workshop to obtain the Board's input and direction. After receiving input, it was determined that the fourth EMP option would be used for the rate setting process. This scenario was updated to reflect only a single 2.0% rate adjustment in September 2017, with additional rate adjustments to be considered in future reviews. These results are discussed in the next section of this report.

The 2017 EMP, like any financial plan, will need to be adjusted and updated periodically as conditions change and as each year's operating results become known. Given the significant uncertainty related to projected capital funding needs and industrial and wholesale revenue levels, it is recommended that the District review and update the EMP annually during the coming several years as part of its ongoing financial planning process.

Financial Goals

District financial goals are discussed below. The final 2017 EMP only includes a rate increase for 2017. The District plans on updating the EMP on an annual basis to assess the need for adjustments to rates so that key financial targets can be met.

- **DSC and TIER Levels:** The District has determined that minimum DSC and TIER target levels of 1.50 are necessary to meet lender requirements and to ensure the security of debt service payments.
- **Cash Levels:** The District has determined that minimum cash levels equivalent to approximately 60 days of operating expenses (i.e., operations, maintenance, and interest expenses) are necessary to maintain sufficient liquidity for cash transaction requirements and unforeseen events. In 2010, the District added a \$10,000,000 line of credit to help meet its short-term cash needs.
- **Equity Levels:** The District has determined that it is prudent to maintain a minimum long-term equity ratio goal of at least 50%. Although the District is not required to maintain a specific equity ratio, its lenders have expectations regarding equity levels consistent with strong financial performance, which the District wishes to maintain.
- **Funding of Capital Expenditures:** Moderate capital expenditures, including funding for the development of Enloe Dam, are projected during the Study Period in order for the District to provide efficient and reliable service. It is important for the District to maintain strong financial performance levels to assure its access to low cost capital to fund these capital expenditures and to keep its rates for electric service at reasonable levels in the future.
- **Rate Stability and Competitiveness:** In developing the 2017 EMP, the District worked diligently to balance the goal of stable and competitive rates for its customers with the goals of meeting its financial targets and continuing to provide reliable electric service for 2017. Draft EMP scenario results were presented to the District's Board in an April 2017 workshop to obtain the Board's input and direction. After receiving input, it was determined that the fourth EMP option would be used for the rate setting process. This scenario was updated to reflect only a single 2.0% rate adjustment in September 2017, with additional rate adjustments to be considered in future annual reviews.

Key Assumptions

Principal assumptions used in developing the 2017 EMP are as follows:

- **Load Forecast:** The District's projected customer sales and load requirements are based on a load forecast developed by District staff. Overall, retail sales are projected to increase 1.0% on an average annual basis during the Study Period. Wholesale sales are projected to fluctuate during the Study Period with decreases in 2017, 2018, and 2020 to lower than historical levels (a decrease in these years of 30 to 45% from the four-year average between 2013 to 2016). Overall, the wholesale sales are projected to increase by 6.8% on an average annual basis during the Study Period with more consistent levels following the addition of Enloe Dam in 2021.
- **Wholesale Revenues:** The wholesale revenues in 2017 are estimated to be less than half the historical level (based on the four-year average from 2013 to 2016). There are some fluctuations in the first few years related to the projected sales levels, but the revenues are projected to increase over the Study Period from approximately \$1.9 million in 2017 to \$6.6 million in 2026.
- **Enloe Dam Hydroelectric Facility:** The District is continuing to pursue the development of Enloe Dam with operation projected to begin in 2021. The projected power generated and operating

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costs for this project were obtained from Schedule D of the Final License Application to the Federal Energy Regulatory Commission dated August 2008.

- **Capital Improvement Expenditures:** The 10-year Capital Improvement Plan (CIP) projects capital improvement expenditures to equal approximately \$87.2 million (real dollars) during the period 2017 to 2026. These expenditures include the following items:
 - *Enloe Dam Hydroelectric Project* – \$35.0 million for a 5.0-MW hydroelectric facility projected to be operational in 2021.
 - *Transmission Line (Ophir to Okanogan)* – \$5.0 million
 - *Substation Improvements (Tonasket)* – \$4.0 million.
 - *Transformer Replacement (Ellisforde/Whitestone)* – \$1.0 million.
 - *Normal Replacements and Additions* – \$42.2 million.
- **Base Year Operating Results:** The District’s 2013–2015 audited financial reports and unaudited 2016 reports (for 12 months ending November 2016) were used to reflect actual and estimated expenditures. The 2017 final budget expenditures were the basis for the financial projections. Operating and maintenance expenses in 2018 and beyond are escalated from the 2017 budget over the projection period.

Overview of 2017 EMP Analysis

The following table provides an outline of the 2017 EMP analysis. The detailed results of the 2017 EMP is provided in Appendix A of this report.

Table 2-1
Okanogan County PUD
Outline of 2017 EMP Analysis

Table	Description
Table 1 – Summary of Results and Assumptions	Key results including average unit revenues, margins, equity ratio, year-end cash balances, and TIER and DSC ratio levels. Basic financial assumptions, capital credit retirement assumptions, days of working cash capital, debt terms, and annual depreciation assumptions.
Table 2 – Projected Revenues at Existing Rates	Projected energy sales by customer class; projected revenues from energy sales at rate levels by customer class that became effective in July 2015
Table 3 – Income Statement – Accrual Basis	Projected operating revenues and expenses; operating margins and total margins; unit revenues from energy sales
Table 4 – Pro forma Balance Sheet as of December 31	Projected year end assets, equities and liabilities; financial ratios
Table 5 – Statement of Operations – Cash Basis	Projected cash from operations; annual debt service payments; uses of cash margins; DSC
Table 6 – General Funds Summary	Projected general fund balances; sources and uses of general funds
Table 7 – Plant Investment and Depreciation Expense	Additions and replacements to utility plant; depreciation expense

Table 2-1
Okanogan County PUD
Outline of 2017 EMP Analysis

Table	Description
Table 8 – Long-term Debt and Debt Service	Long-term debt; new debt incurred; annual debt service payment obligations; funding requirements for capital additions
Table 9 – Energy Resources and Cost of Power	Total projected District energy requirements; projected energy resources; estimated cost of purchased power and power production
Table 10 – Projected Cost of Power Adjustment Revenues	Projected sales, power supply costs, existing power costs and cost of power adjustment revenues

Summary of 2017 EMP Scenario Option 4 Results

A summary of key financial indicators for the 2017 EMP projections is discussed below and presented in Table 2-2. Detailed results are presented in Appendix A.

Table 2-2
Okanogan County PUD
Summary of Results
2017 EMP Scenario Option 4

	Historical			Estimated 2016	Budget				Projected					
	2013	2014	2015		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Unit Revenue - Retail Sales (¢/kWh)	6.73	6.98	7.10	7.37	7.49	7.62	7.64	7.66	7.69	7.81	7.69	7.65	7.68	7.78
Increase over Previous Year	9.9%	3.7%	1.7%	3.8%	1.6%	1.7%	0.3%	0.3%	0.4%	1.6%	-1.5%	-0.5%	0.4%	1.3%
Base Retail Rate Change	9.5%	0.0%	2.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Equity to Total Assets	66.5%	68.6%	64.9%	67.2%	67.7%	63.8%	64.9%	65.7%	53.7%	54.2%	54.5%	55.0%	55.6%	56.2%
Includes Rate Stabilization Fund														
Change in Net Cash (\$000)	--	--	--	--	\$0	\$2,936	(\$5,664)	(\$1,752)	(\$4,502)	(\$3,713)	(\$2,635)	(\$2,430)	(\$2,462)	(\$2,522)
Total Cash (Year End) (\$000)	\$12,575	\$12,474	\$15,295	\$14,035	\$14,035	\$16,972	\$11,308	\$9,557	\$5,054	\$1,341	(\$1,294)	(\$3,724)	(\$6,187)	(\$8,708)
Debt Service Coverage Ratio	3.36	3.51	3.33	3.77	2.18	1.50	1.83	1.58	0.94	1.08	1.33	1.38	1.39	1.40
Operating TIER	5.10	6.56	4.85	5.68	(0.04)	0.46	1.33	0.70	0.61	0.66	0.71	0.76	0.73	0.68
Total TIER	5.85	7.34	7.21	9.96	1.68	0.38	1.31	0.74	0.20	0.31	0.41	0.51	0.52	0.52
Days of Working Capital on Hand	123	115	136	123	113	134	88	73	37	10	(9)	(26)	(43)	(59)
Rate Stabilization Fund Use/(Source)	\$0	\$0	\$0	\$0	\$2,401	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rate Stabilization Fund Balance	\$6,135	\$6,135	\$6,135	\$6,135	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734

The Board decided that the 2017 EMP should be reviewed and updated annually and does not include any rate adjustments after 2017. A 2.0% rate increase in 2017 was approved following review of the 2017 EMP.

The components and results of the 2017 EMP provide information on the financial and operational objectives defined previously. In particular, the analysis factors in a target DSC ratio and total TIER level of 1.50, which are both met in 2017. The DSC ratio continues to meet the target level until 2021, but the total TIER levels do not meet the target level starting in 2018. Additionally, working capital is maintained at a level exceeding 60 days of operating and maintenance expenditures until 2021. These financial metrics include use of the rate stabilization fund to help offset a revenue deficiency in 2017. The 2017 rate increase is primarily driven by the need to achieve adequate cash levels and to reach positive net income.

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Figure 2-1 displays the projected retail, wholesale, and other revenues for the District. Retail sales revenues under existing rates are projected to increase 0.9% on an average annual basis during the Study Period. Some fluctuations in wholesale revenues are projected, with the lowest projected levels occurring in 2017, 2018, and 2020. The District is projecting lower levels of wholesale revenues in the near-term as compared to levels seen in the past few years due to projected decreasing demands for the District's wholesale power sold on the market. However, increased levels of wholesale sales revenues are projected beginning in 2021 due to an increase in low-cost power available for wholesale sales from the Enloe Dam. Overall, wholesale revenues are projected to increase from \$1.8 million in 2017 to \$6.6 million by 2026. Overall, revenues are projected to increase from \$45,000 in 2017 to \$59,000 by 2026.

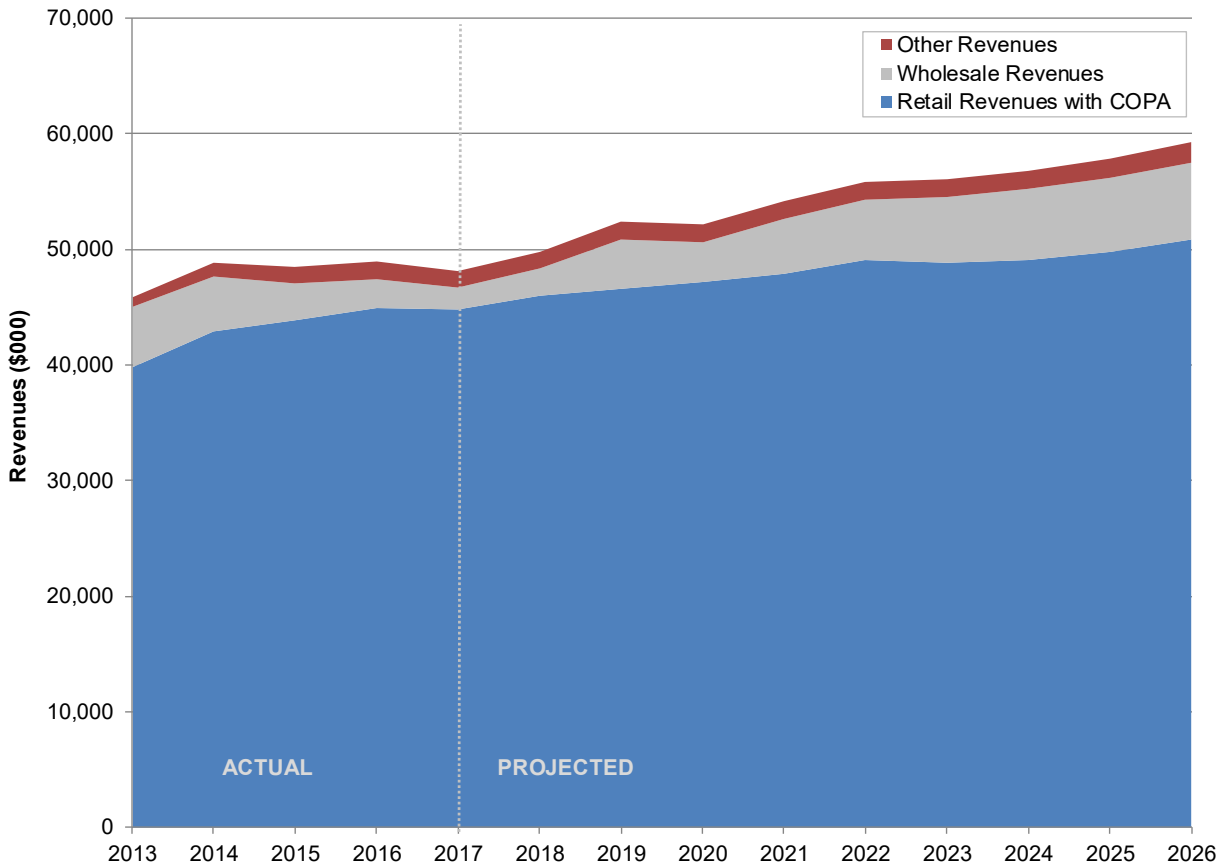


Figure 2-1: Projected Electric Revenues by Source

The District’s average retail rate revenues (presented on a nominal per kilowatt-hour (kWh) basis) are projected in 2026 to be approximately 7.78 cents per kWh as shown in Figure 2-2. This is an annual average rate of increase of 0.4% over the Study Period from an estimated average of 7.49 cents per kWh in 2017.

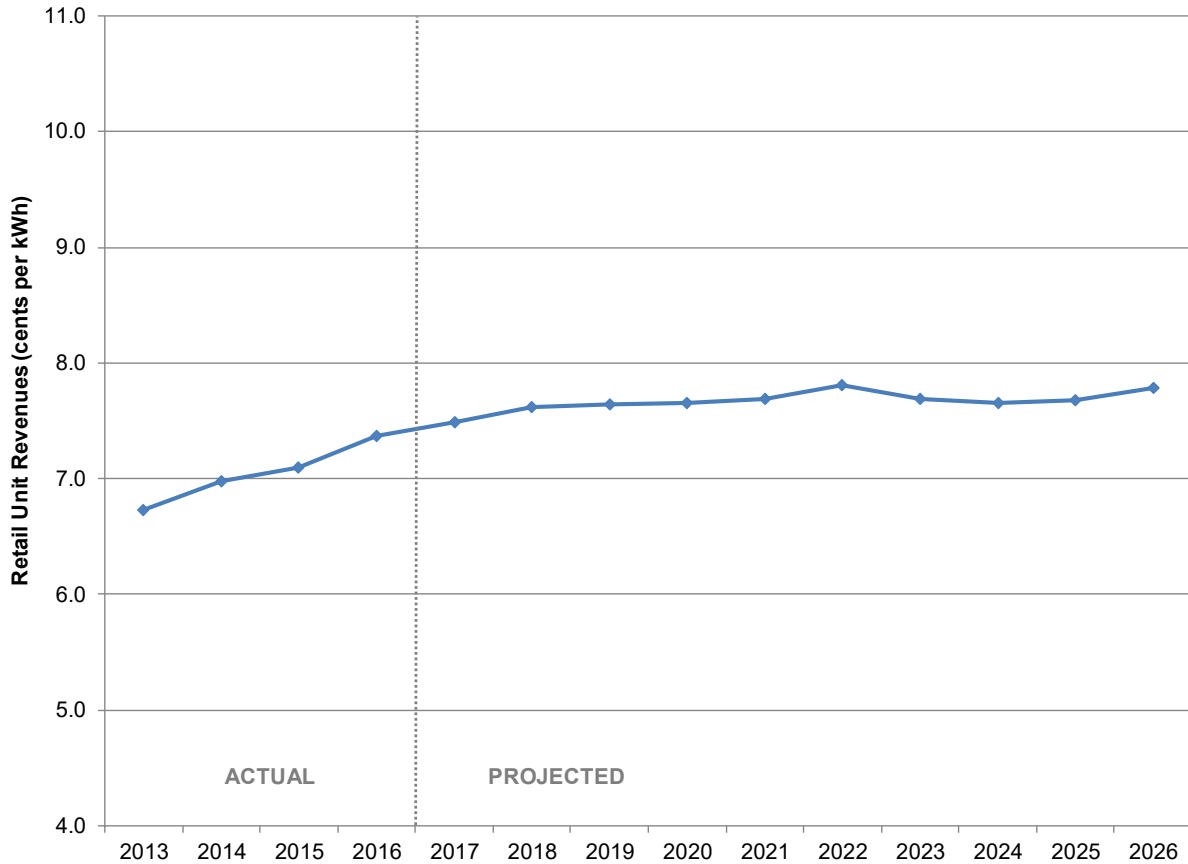


Figure 2-2: Average Retail Unit Revenues including COPA (cents per kWh)

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Total annual capital expenditures and sources of funding are shown in Figure 2-3. It is projected that approximately \$87.2 million (nominal dollars) of capital expenditures will occur between 2017 and 2026. The largest amount of these expenditures occurs during the 2017 to 2021 period, when approximately \$65 million of these expenditures are projected to be completed.

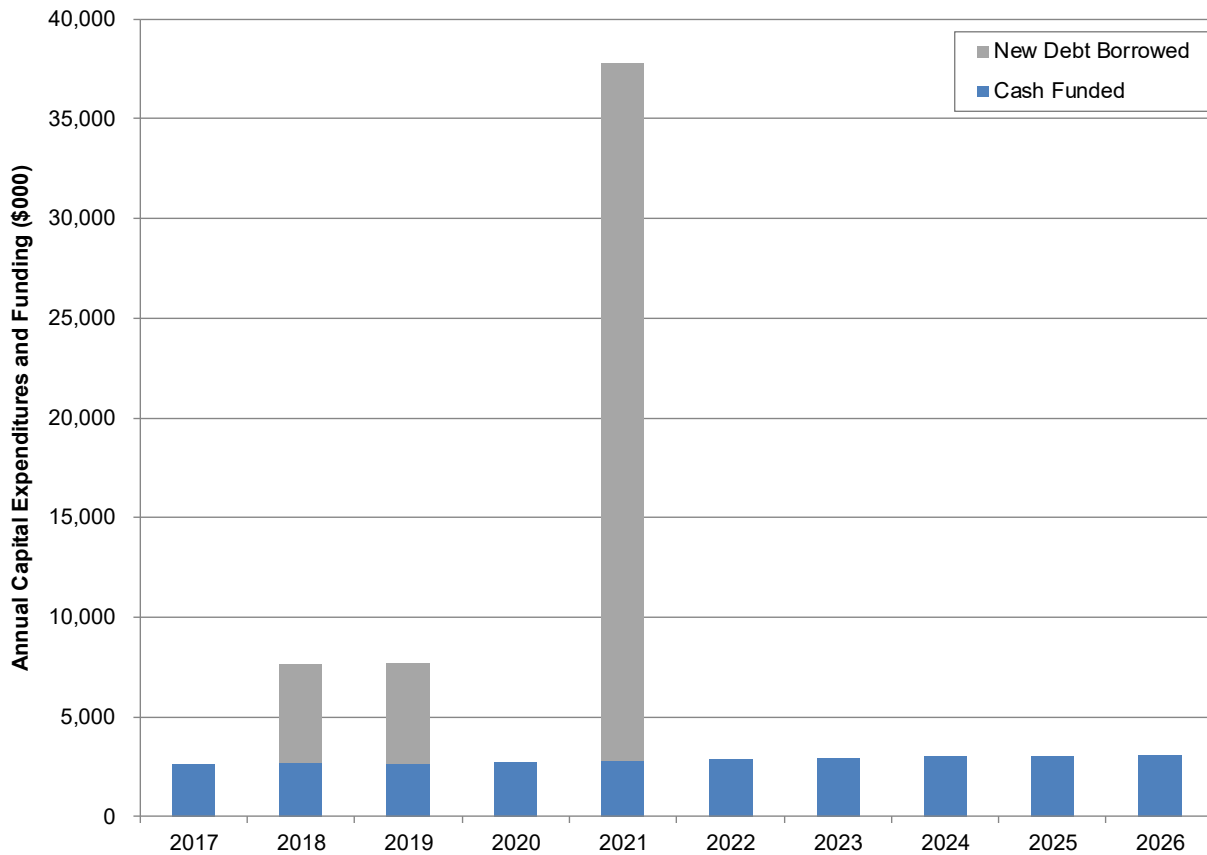


Figure 2-3: Annual Capital Expenditures and Funding (\$000)

Capital expenditures, excluding expenditures for typical annual improvements, are projected to be funded with debt issuances in 2018 and 2021. The sources and uses of the projected debt issuances are shown in Table 2-3. The funds from the 2018 debt issuance will be used to fund \$10 million in capital improvements during 2018 and 2019 for the projects shown in the table below. The debt issuance in 2021 will be used to fund the Enloe Dam construction.

**Table 2-3
Okanogan County PUD
Projected Capital Funding and Debt Issuances**

Debt Issuance Year	Capital Improvement Year	Amount (\$M)	Use of Funds
2018	2018	\$5.0	Ophir to Okanogan Transmission Line
2018	2019	4.0	Tonasket Substation Improvements
2018	2019	1.0	Ellisforde/Whitestone Transformer Replacement
		\$10.0	Total Additional Capital Improvements
2021	2021	\$35.0	Enloe Dam Construction

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The impacts of the projected debt issuances and uses of funds on the District's net assets (equity) and total assets are reflected in Figure 2-4.

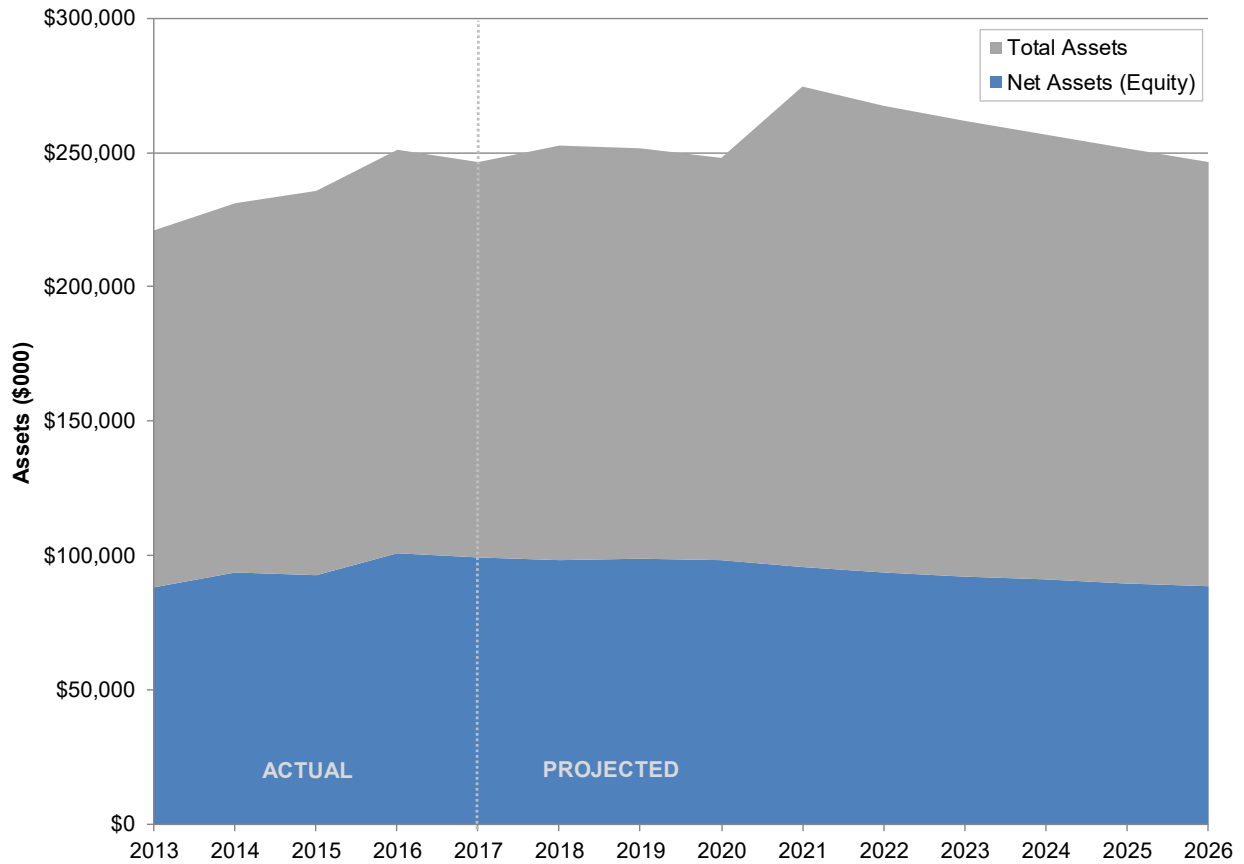


Figure 2-4: Net Assets and Total Assets

The 2017 EMP provides the District with information on how to balance its borrowing needs while maintaining a strong equity ratio. As shown in Figure 2-5, the ratio of equity to total assets is projected to be approximately 67.7% by the end of 2017 and decreasing to 56.2% by 2026. Key reasons for the equity ratio decreases shown in Figure 2-5 are (i) the debt issuances in 2018 and 2021 and (ii) the assumed lack of retail rate adjustments after 2017.

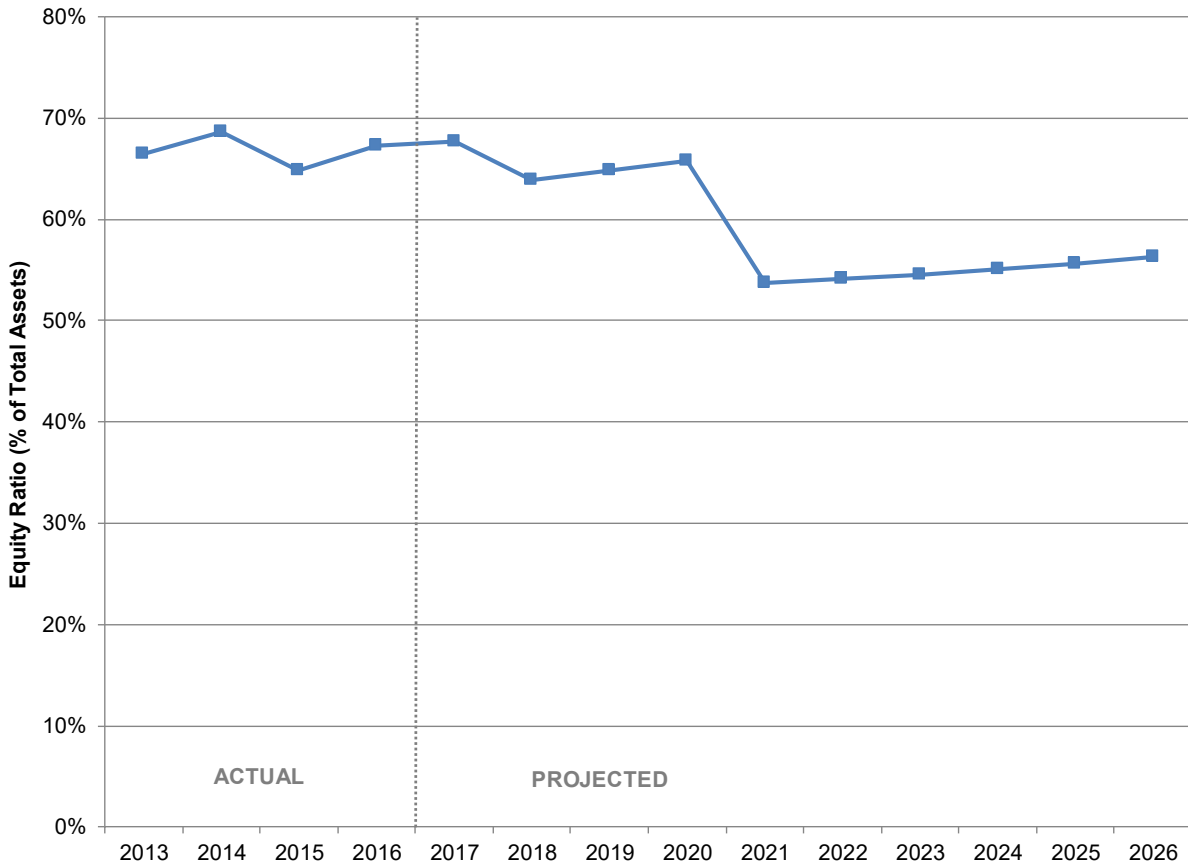


Figure 2-5: Equity Ratio (Percent of Total Assets)

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Projected DSC and total TIER levels are summarized in Figure 2-6. The DSC ratio indicates the District's ability to meet its debt obligations. The TIER is another indicator of financial performance, but the District's bond covenants only specify a minimum DSC ratio. The 2017 EMP factors in a target DSC ratio and total TIER level of 1.50. The results of the 2017 EMP show that both targets are met in 2017. The DSC ratio is projected to meet the target level from 2017 through 2020. The total TIER levels are not sufficient for the District to meet its financial goals over the Study Period after 2017. The District plans on updating the EMP on an annual basis to assess the need for adjustments to rates so that key financial targets can be met.

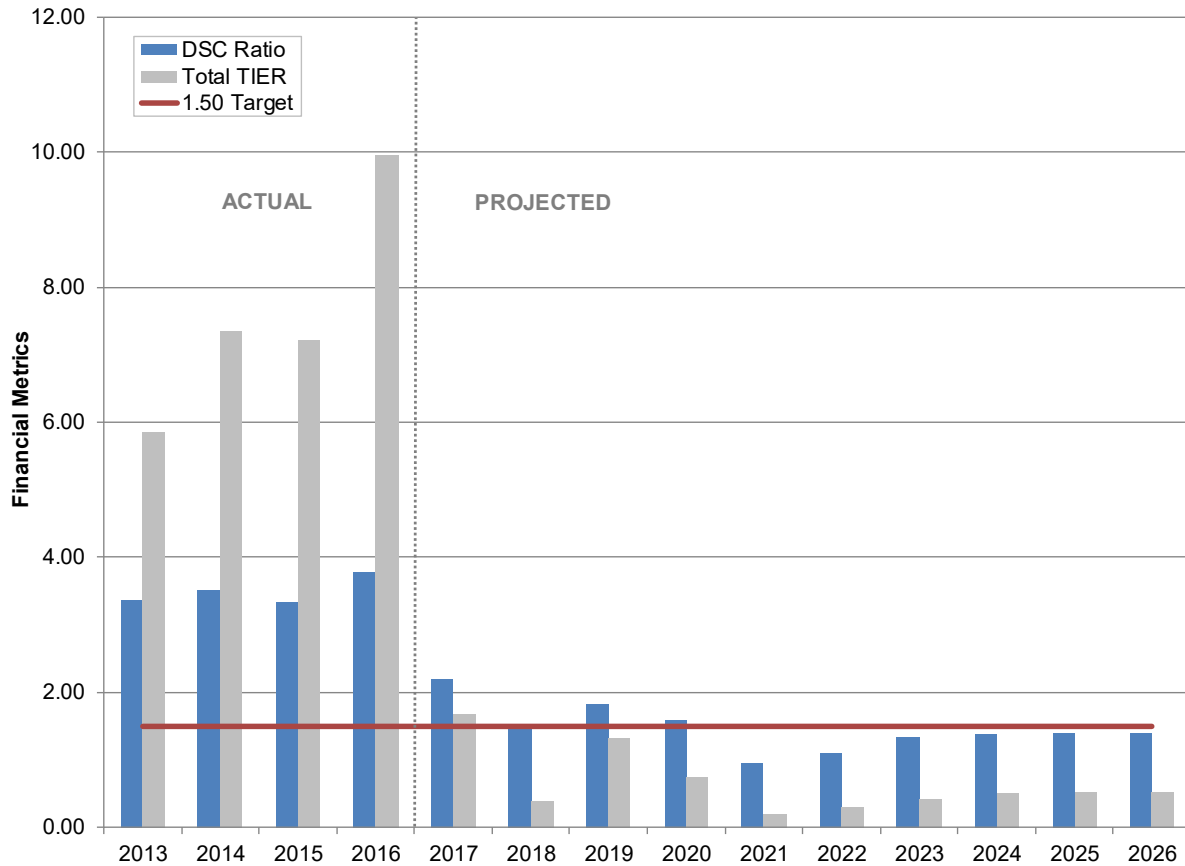


Figure 2-6: Projected DSC Ratio and Total TIER Levels

The District’s working capital reserves, expressed as days of operating and maintenance expenditures, are shown in Figure 2-7. Working capital reserves are projected to decline in 2021 below the 60-day target and are projected to continue below this level through 2026. These results indicate that despite higher levels of projected wholesale sales revenues from 2021 through 2026, the District’s existing retail rate revenues are not sufficient to sustain adequate working capital reserves. The District plans on updating the EMP on an annual basis to assess the need for adjustments to rates so that key financial targets can be met.

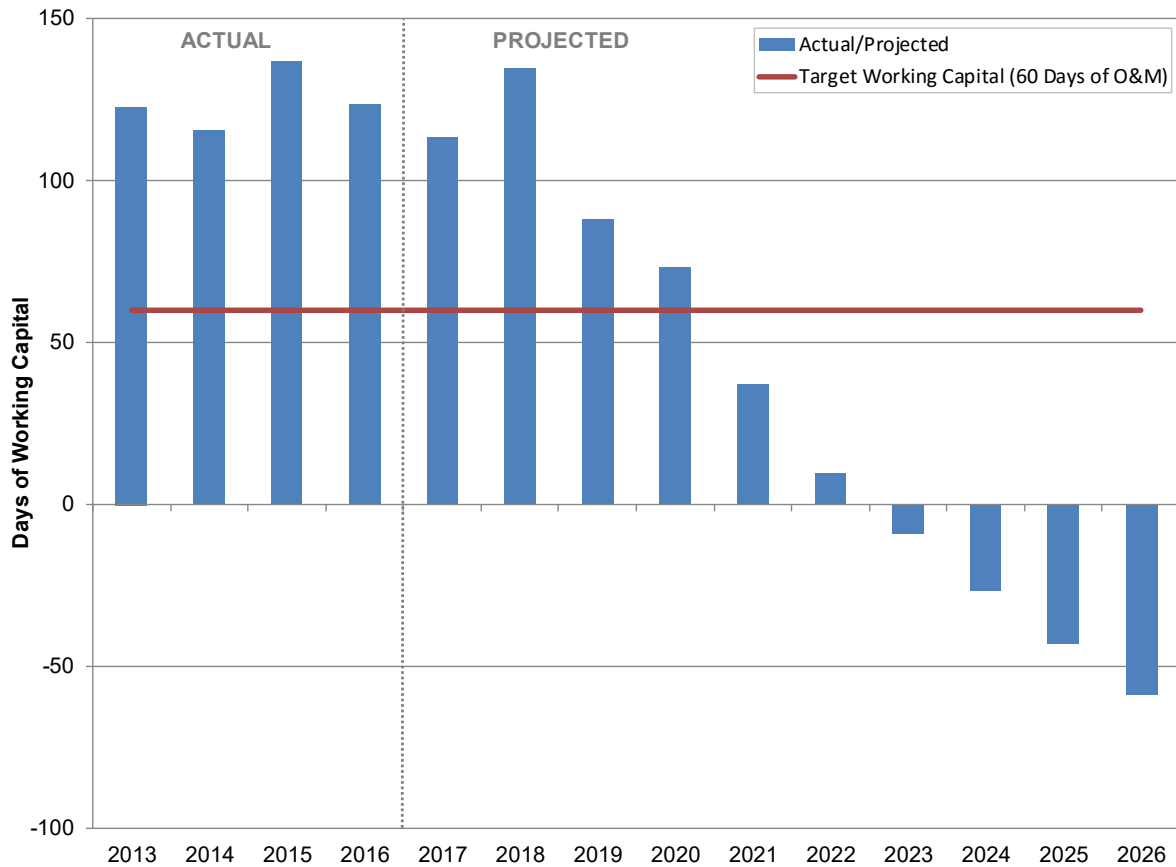


Figure 2-7: Working Capital Reserves (Days of O&M Expenditures)

Section 3

ELECTRIC SYSTEM RATE STUDY ANALYSIS

The District currently has seven major customer classes,¹ each with separate rates. The customer and rate classes are defined as follows:

- **Residential:** Service applicable to each individual customer/family residing in a single-family dwelling or multiple family building, and to a farm that processes only its own products.
- **Small General Service:** Electrical service to commercial, governmental, industrial, or other services not eligible under other rate schedules where measured demand is less than 50 kilowatts (kW) at least 10 months in the previous 12-month period.
- **Large General Service:** Service to any individual customer for which another specific rate schedule is not available with a connected load of 50 kW or greater. The schedule is based on continuous use and minimums will be billed for 12 consecutive months.
- **Primary Industrial:** Service applicable to any load with measured monthly demand of at least 1,000 kW and not more than a 10,000 kW average annual increase.
- **Irrigation:** Applicable to service for irrigation or drainage and incidental farm use. The schedule is based on continuous service for the irrigation season of April 1st through October 31st.
- **Frost Control:** Applicable to service to wind machines or pumps used only for frost protection.
- **Street Lighting:** Applicable to any publicly owned organization constituted by State law for lighting of streets, alleys, and thoroughfares.

All of these customer classes have a monthly basic charge and one or more energy charges with either uniform or inclining block rate structures (except Street Lighting). The Small and Large General Service and Industrial classes also have demand charges applicable to certain customers in these customer classes. The District's current rates are summarized in Table 3-1.

¹ In addition to the seven customer classes listed, the District has additional rate schedules for New Single Large Loads (Service Schedule Number 5) and Area Lighting (Service Schedule Number 10).

Table 3-1
Okanogan County PUD
Existing Rates Effective July 1, 2015

	Rates	Units
Residential Service Rates		
Basic Charge (1)	35.00	dollars per month
Energy Charge		
First 2,000 kWh	4.486	cents per kWh
Over 2,000 kWh	6.513	cents per kWh
Cost of Power Adjustment Charge (2)	0.560	cents per kWh
Small General Service Rates		
Basic Charge	40.00	dollars per month
Energy Charge	5.450	cents per kWh
Demand Charge	5.50	dollars per all kW, when kW is equal to or exceeds 50
Cost of Power Adjustment Charge (2)	0.560	cents per kWh
Large General Service Rates		
Basic Charge	20.00	dollars per month
Energy Charge	4.646	cents per kWh
Demand Charge	5.50	dollars per all kW above 50 kW
Minimum Demand Charge	275.00	dollars per month, includes first 50 kW
Cost of Power Adjustment Charge (2)	0.560	cents per kWh
Industrial Service Rates		
Basic Charge	80.00	dollars
Energy Charge	3.728	cents per kWh
Demand Charge	7.00	dollars per all kW above 1,000 kW per month
Minimum Demand Charge	7,000.00	dollars per month, includes the first 1,000 kW
Cost of Power Adjustment Charge (2)	0.560	cents per kWh
Irrigation Service Rates (3)		
Basic Charge	15.00	dollars
Seasonal Energy Charge	4.450	cents per kWh
Inter-Seasonal Energy Charge	7.004	cents per kWh
Demand Charge	4.00	dollars per kW
Cost of Power Adjustment Charge (2)	0.560	cents per kWh
Frost Control Service Rates (4)		
Basic Charge	120.00	dollars per year
Demand Charge	4.50	dollars per kW
Seasonal Energy Charge	3.324	cents per kWh
Inter-Seasonal Energy Charge	7.004	cents per kWh
Cost of Power Adjustment Charge (2)	0.560	cents per kWh
Street Lighting Service Rates (5)		
40W LED or Equivalent	7.20	dollars per month
70W LED or Equivalent	10.90	dollars per month
175W MVP or 100W HPS	8.57	dollars per month
400W MVP or 200W HPS	12.97	dollars per month

(1) Basic charge of \$10.00 will be assessed on a meter if the sole purpose of that meter is to measure the energy consumption of a well pump providing domestic water to a single family residence (WAC 17-505-090).

(2) Effective November 1, 2015.

(3) Effective April 1, 2016.

(4) Effective March 1, 2016.

(5) Effective April 1, 2017.

Objectives

The District identified the following objectives for the 2017 Rate Study:

- Provide the District's staff and Board with several rate design options that would provide approximately 2.0% additional revenue for the District on an annual basis consistent with the 2017 EMP results.
- Design alternative Small General Service and Large General Service rates that eliminate minimum demand charges and a demand ratchet rate element that cause large bill impacts to certain Small General Service customers with higher demand usage and Large General Service customers with highly variable demand levels.
- Develop a final rate design to be implemented approximately September 1, 2017 for the District's review and consideration.

The Rate Review Process

The results of the 2017 EMP analysis (discussed in Section 2) show that the District will need additional revenue and a rate increase in 2017 and in future years. During the rate review process, the District's Board elected to implement an across-the-board rate increase and therefore no cost-of-service analysis was needed. A number of alternative rate design options were developed and presented to the District for its review and consideration. The District's Board adopted a 2.0% rate increase in 2017 to become effective on September 1, 2017. The District will evaluate any necessary future rate increases on an annual basis. A draft of the proposed rates was presented to the District's Board on July 10, 2017. Based on input received at this meeting, the District's Board was presented with Resolution No. 1639 authorizing the adoption of the final rates developed in this study at a special meeting held on July 24, 2017. This resolution was approved following a staff presentation of the rate proposal and public comment. A copy of this resolution is provided in Appendix C of this report.

Rate Design

Overview

The purpose of the rate design analysis was to identify a new rate structure for the District that adequately recovers the test year revenue requirements of the electric system while meeting the policy objectives of the utility. Additionally, the District elected to establish implementation of new rates in this study to be effective on September 1, 2017.² As indicated previously the rate design modifications were established to result in approximately 2.0% additional revenue on an annual basis. Rate changes with Small General Service and Large General Service customer classes were revenue neutral.

² Irrigation customer class rates will be effective on April 1st for each year to correspond with the growing season. The Frost Control customer class will be effective on June 1st for each year to correspond with the annual billing cycle.

Policy and Rate Design Guidelines

As described previously, the District's Board and staff met several times to discuss various policy issues related to the study. The following paragraphs provide a summary of the basic policy and rate design guidelines that have been developed in consultation with the District's Board and management and have been used to develop the District's rate design.

Financial Integrity:	Rates must preserve the District's financial integrity to allow for future capital investments and to meet the financial targets of the utility.
Rate Stability:	Rate adjustments should, to the extent possible, promote stable rates for customers and avoid large changes in rates.
Simplification:	The rate structure should be simple and easily understood by customers.
Equity:	The rates should be equitable and, to the extent practicable, reflect the cost to provide service.
Reliability of Service:	The District's rates should provide adequate funding to support the District being able to continue to provide reliable service to its customers.
Efficiency/Conservation:	The rate structure should help encourage conservation and the efficient use of electricity.

Rate Development

In the development of the rate design, the District's customer class rates were reviewed and modified to increase revenue approximately 2.0% to be effective September 1, 2017. Specific changes in the District's rate design included the following:

- **Across-the-Board Rate Increase:** A rate design option sufficient to provide approximately a 2.0% annual revenue increase was provided by increasing all rate components for each customer class. This rate design is based on an across-the-board rate change to the existing rates for each customer class. The Street Lighting customer class rates were not increased due to the implementation of new light-emitting diode (LED) lights that suggest that a rate increase would not be needed.
- **Small and Large General Service Customer Classes:** Rate design options were evaluated that would eliminate considerable bill impacts on Small General Service customers with demand usage exceeding 50 kW and eliminate the minimum demand charge in the Large General Service customer class. This results in a revenue neutral change for these customer classes. Because of the differential in cost-of-service recovery levels for these two classes identified in the prior rate study, it was determined that this reduction in revenue would be best recovered from the Small General Service customer class.
- **Large General Service:**
 - **Eliminate Minimum Demand Charge:** The District proposed elimination of the minimum demand charge, so that the demand charge is applied to all usage in a month.
 - **Across-the-Board Rate Increase:** There were no other rate changes aside from the across-the-board rate increase to all rate components.
 - **Bill Impacts:** This proposed change reduces the bills for lower demand usage customers. Higher demand usage customers incur no changes.

■ **Small General Service:**

- **Demand Charge:** No changes to the demand charge except for the across-the-board rate increase. Propose to continue the demand charge to all usage at or above 50 kW, and not to automatically reclassify customers with demands above 50 kW for more than three months in the Large General Service class.
- **Demand Usage and Customer Classification:** For Small General Service customers exceeding demand usage of 50 kW, these customers will remain in this class unless the District determines after its annual review that the customer class assignment should be changed to the Large General Service.
- **Increase Energy Charge:** The energy charge was increased to offset the revenues lost from the minimum demand charge with the Large General Service customer class and eliminating changes in Small General Service customer classification for higher demand usage customers above 50 kW. This increase is in addition to the across-the-board 2.0% rate increase.

Proposed Rates

Several rate options were developed and reviewed with the District’s Board during the first half of 2017. Table 3-2 summarizes the existing and proposed rates for each customer class. The detailed rate design analysis for this option is provided in Appendix B. The proposed rate options reflect the District’s rate setting policies and rate design direction provided by the District’s staff and Board.

Table 3-2
Okanogan County PUD
Existing and Proposed Rates

	Existing Rates	Proposed Rate Increase ⁽¹⁾ (September 2017)
Schedule No. 2 – Residential		
Base Rates		
Basic Charge (\$/month)	\$35.00	\$36.00
Energy Charge (\$/kWh)		
<2,000 kWh	\$0.04486	\$0.04565
>2,000 kWh	\$0.06513	\$0.06648
Percent Change in Class Revenue		2.0%
Cost of Power Adjustment	\$0.00560	\$0.00560

(1) Proposed rates effective September 1, 2017.

Table 3-2
Okanogan County PUD
Existing and Proposed Rates (cont.)

	Existing Rates	Proposed Rate Change ⁽¹⁾ (September 2017)	Proposed Rate Increase ⁽¹⁾ (September 2017)
Schedule No. 3 – Small General Service			
Base Rates			
Basic Charge (\$/month)	\$40.00	\$40.00	\$41.00
Energy Charge (\$/kWh)	\$0.05450	\$0.05600	\$0.05715
Demand Charge (\$/kW/month equals or exceed 50kW)	\$5.50	\$5.50	\$5.70
Percent Change in Class Revenue		4.6%	2.0%
Percent Change in Total General Service Revenue		0.0%	2.0%
Cost of Power Adjustment	\$0.00560	\$0.00560	\$0.00560

(1) Proposed rates effective September 1, 2017.

	Existing Rates	Proposed Rate Change ⁽¹⁾ (September 2017)	Proposed Rate Increase ⁽¹⁾ (September 2017)
Schedule No. 3 – Large General Service			
Base Rates			
Basic Charge (\$/month)	\$20.00	\$20.00	\$21.00
Energy Charge (\$/kWh)	\$0.04646	\$0.04646	\$0.04725
Demand Charge (\$/kW/month above 50kW)	\$5.50	N/A	N/A
Demand Charge (\$/all kW/month)	N/A	\$5.50	\$5.70
Minimum Demand Charge (\$/month)	\$275.00	N/A	N/A
kW in Minimum Demand Charge	50	N/A	N/A
Power Factor Charge ⁽²⁾	97.0%	97.0%	97.0%
Percent Change in Class Revenue		-1.8%	2.0%
Percent Change in Total General Service Revenue		0.0%	2.0%
Cost of Power Adjustment	\$0.00560	\$0.00560	\$0.00560

(1) Proposed rates effective September 1, 2017.

(2) For every percentage a customer's power factor is below 97.0%, the demand charge will increase 1.0%.

Table 3-2
 Okanogan County PUD
 Existing and Proposed Rates (cont.)

	Existing Rates	Proposed Increase ⁽¹⁾ (September 2017)
Schedule No. 4 – Primary Industrial Service		
Base Rates		
Basic Charge (\$/month)	\$80.00	\$82.00
Energy Charge (\$/kWh)	\$0.03728	\$0.03800
Demand Charge (\$/billed kW/month)	\$7.00	\$7.20
Minimum Demand Charge (\$/month)	\$7,000	\$7,200
kW in Minimum Demand Charge	1,000	1,000
Power Factor Charge ⁽²⁾	97.0%	97.0%
Percent Change in Class Revenue		2.0%
Cost of Power Adjustment	\$0.00560	\$0.00560

(1) Proposed rates effective September 1, 2017.

(2) For every percentage a customer's power factor is below 97.0%, the demand charge will increase 1.0%.

	Existing Rates	Proposed Increase ⁽¹⁾ (April 2018)
Schedule No. 6 – Irrigation		
Base Rates ⁽²⁾		
Basic Charge (\$/month)	\$15.00	\$15.00
Demand Charge (\$/billed kW/month)	\$4.00	\$4.10
Seasonal Energy Charge	\$0.04450	\$0.04550
Inter-Seasonal Energy Charge	\$0.07004	\$0.07160
Percent Change in Class Revenue		2.0%
Cost of Power Adjustment	\$0.00560	\$0.00560

(1) Proposed rates effective April 1, 2018.

(2) Rate schedule is based on continuous service for the irrigation season of April 1st through October 31st.

Table 3-2
Okanogan County PUD
Existing and Proposed Rates (cont.)

	Existing Rates	Proposed Increase ⁽¹⁾ (June 2018)
Schedule No. 7 – Frost Control		
Base Rates ⁽²⁾		
Basic Charge (\$/month)	\$120.00	\$122.00
Demand Charge (\$/billed kW/month)	\$4.50	\$4.60
Seasonal Energy Charge	\$0.03324	\$0.03365
Inter-Seasonal Energy Charge	\$0.07004	\$0.07160
Percent Change in Class Revenue		2.0%
Cost of Power Adjustment	\$0.00560	\$0.00560

(1) Proposed rates effective June 1, 2018.

(2) Customers served under this customer class are billed annually in June.

At a special Board meeting held on July 24, 2017, Resolution No. 1639 was adopted by the Board authorizing the implementation of new rates as described above to be effective September 1, 2017. Table 3-3 summarizes the estimated revenues for TY 2017 under existing and the adopted rates for each customer class. In addition, the estimated change in TY 2017 revenues as compared to revenues under existing rates is summarized.

Table 3-3
Okanogan County PUD
Summary of Projected 2017 Revenues
Based on Existing and Adopted Rates

Customer Class	Revenue Under Existing Rates	Revenue Under Rate Changes to General Service Customer Classes	Percent Over (Under) Revenue at Existing Rates	Revenue Under Adopted Rates ⁽¹⁾	Percent Over (Under) Revenue at Existing Rates ⁽²⁾
Residential	\$22,539,626	\$ --	--	\$22,998,758	2.0%
Small General Service	4,657,277	4,873,026	4.6%	4,972,059	2.0%
Large General Service	11,514,134	11,301,378	-1.8%	11,530,342	2.0%
Industrial	1,006,772	--	--	1,026,907	2.0%
Irrigation	4,562,779	--	--	4,655,529	2.0%
Frost Control	66,030	--	--	67,359	2.0%
Street Lights	150,876	--	--	150,876	0.0%
Total	\$44,497,494	\$16,174,404		\$45,401,830	2.0%

(1) Assumes rates are effective for the full year. Refer to Appendix B for more detail.

(2) General Service Classes: reflect change from revenue under rate changes to General Service customer classes.

Section 4

SUMMARY AND CONCLUSIONS

Summary

As discussed previously, the results of the 2017 EMP analysis was selected as representing the District's preferred financial course of action in achieving its financial goals. Key 2017 EMP conclusions are as follows:

- Existing retail rates are not sufficient to meet the District's current and projected operating and capital costs and future rate increases are likely to be needed during the Study Period unless additional reduction in District expenditures can be achieved.
- The District's equity level is strong and provides a good basis upon which additional debt financing is possible.
- In order to meet the District's DSC and TIER levels in the current and future years, funds from the District's Rate Stabilization Fund will be required. In the 2017 EMP analysis, approximately \$2.4 million of the existing rate stabilization fund balance is used in order for the District to meet its financial targets in 2017.
- Unless the District's costs can be reduced from those projected in the 2017 EMP analysis, the District faces a need for additional rate increases after 2018.

The 2017 Rate Study included development of new rates to be effective September 1, 2017 that will increase the District's revenue by approximately \$900,000 per year. The rate design option was selected by the Board as representing the District's preferred plan for balancing customer impacts and collecting increased revenue necessary to maintain efficient and reliable service.

Conclusions

Key conclusions of the 2017 EMP and Rate Study are as follows:

- The District plans on updating the EMP on an annual basis to assess the need for adjustments to rates.
- Proposed rates were developed to be effective September 1, 2017.
- Proposed rate changes generally reflected across-the-board rate increases with the exception of the Schedule No. 8 Street Lighting customer class where the implementation of new LED lights suggested that a rate increase would not be needed.

On July 24, 2017, the Board approved as part of Resolution No. 1639 the following measures:

- Adoptions of the 2017 EMP analysis.
- Approved rate design adjustments representing an across-the-board 2.0% revenue increase effective September 1, 2017 as presented in rate design analysis.
- A decision on future rate increases after September 1, 2017 was deferred for consideration until a later date.

Section 4

- Continuation of the existing automatic cost of power adjustments (COPA) to reflect significant increase or decrease in the cost of power from contracted power sources within 30 days of the District incurring such increase or decrease, unless suspended by a Resolution of the Board of Commissioners.

A copy of the Board Resolution is provided in Appendix C of this report.

Appendix A
2017 EQUITY MANAGEMENT PLAN ANALYSIS

Okanogan County PUD
Final
2017 Equity Management Plan



NewGen
Strategies & Solutions, LLC

Okanogan County PUD
2017 Equity Management Plan
Table 1 - Summary of Results and Assumptions

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

Line SUMMARY OF RESULTS	Historical			Estimated 2016	Budget						Projected					Avg. Annual Rate Change 2017 - 2026
	2013	2014	2015		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		
1 Unit Revenue from Retail Sales (\$/kWh)	6.73	6.98	7.10	7.37	7.49	7.62	7.64	7.66	7.69	7.81	7.69	7.65	7.68	7.78		
2 Increase over Previous Year	9.9%	3.7%	1.7%	3.8%	1.6%	1.7%	0.3%	0.3%	0.4%	1.6%	-1.5%	-0.5%	0.4%	1.3%	0.4%	
3 Base Retail Rate Change	9.5%	0.0%	2.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
4 Equity to Total Assets	66.5%	68.6%	64.9%	67.2%	67.7%	63.8%	64.9%	65.7%	53.7%	54.2%	54.5%	55.0%	55.6%	56.2%		
5 Total Cash (Year End) (\$000) (1)	\$12,575	\$12,474	\$15,295	\$14,035	\$14,035	\$16,972	\$11,308	\$9,557	\$5,054	\$1,341	(\$1,294)	(\$3,724)	(\$6,187)	(\$8,708)		
6 Days of Working Capital on Hand (1)	123	115	136	123	113	134	88	73	37	10	(9)	(26)	(43)	(59)		
7 Debt Service Coverage Ratio (DSCR) (1)	3.36	3.51	3.33	3.77	2.18	1.50	1.83	1.58	0.94	1.08	1.33	1.38	1.39	1.40		
8 Operating TIER	5.10	6.56	4.85	5.68	(0.04)	0.46	1.33	0.70	0.61	0.66	0.71	0.76	0.73	0.68		
9 Total TIER (1)	5.85	7.34	7.21	9.96	1.68	0.38	1.31	0.74	0.20	0.31	0.41	0.51	0.52	0.52		
10 Rate Stabilization Fund Use/(Source)	\$0	\$0	\$0	\$0	\$2,401	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
11 Rate Stabilization Fund Balance	\$6,135	\$6,135	\$6,135	\$6,135	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734	\$3,734		
Line ASSUMPTIONS																
12 General Inflation (2)	2.00%															
13 Inflation for Other Operating Revenues (2)	2.00%															
14 Customer Service Inflation (2)	2.00%															
15 Borrowing Assumptions																
16 Interest Rate	4.0%															
17 Term (Years)	20															
18 2016 Effective Energy/Demand Rates (\$/kWh)																
19 Residential	0.04879															
20 General Service	0.06080															
21 Industrial	0.05183															
22 Irrigation	0.05682															
23 Frost Control	0.44019															
24 Street Lighting	0.10583															
25																
26 Capital Improvements (\$000) - 2015\$ (3)																
27 Average Capital Improvements																
28 Ophir to Okanogan Transmission Line		3,700			3,700										37,000	
29 Tonasket Substation Improvements		4,903			0										4,903	
30 Ellisforde/Whitestone Transformer Replacement		0			3,845										3,845	
31 Other Capital Additions - Enloe Dam		0			0										961	
32 Total		0			0				32,335						32,335	
33 Annual Retirements (% of Annual Additions) (3)	24.0%															
34 Financial Targets																
35 Target DSCR	1.50															
36 Target Operating TIER	n/a															
37 Target Total TIER	1.50															
38 Target Working Capital (Days of O&M)	60															

Notes:

- (1) Includes the Rate Stabilization Fund
- (2) Sources: Projected long term growth rate of GDP Price Index per October 2016 Blue Chip Economic Indicator report.
- (3) Source: 2011-2015 Capital Summary_NG.xlsx
Based on the average capital improvements from 2011 through 2015.

Okanogan County PUD
2017 Equity Management Plan
Table 2 - Projected Revenues at Existing Rates

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

Line	Historical (1)			Estimated (1)	Projected										Avg. Annual Increase
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2017 - 2026
SALES (MWh)															
1 Residential	293,420	288,719	269,949	271,007	282,040	283,878	285,715	287,553	289,389	291,225	293,059	294,892	296,723	298,551	0.6%
2 General Service	211,564	216,537	223,376	223,505	226,858	230,261	233,715	237,220	240,779	244,390	248,056	251,777	255,554	259,387	1.5%
3 Industrial	23,518	39,843	44,235	42,795	17,070	17,458	17,853	18,255	18,665	19,082	19,507	19,939	20,380	20,828	2.2%
4 Irrigation	61,754	67,604	78,503	70,604	70,957	71,312	71,669	72,027	72,387	72,749	73,113	73,478	73,846	74,215	0.5%
5 Frost Control	566	327	660	109	109	110	111	111	112	112	113	113	114	114	0.5%
6 Street Lighting	1,364	1,360	1,369	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	1,364	0.0%
7 Total Retail Sales	592,185	614,391	618,092	609,385	598,399	604,383	610,427	616,531	622,696	628,923	635,213	641,565	647,980	654,460	1.0%
8 Sales for Resale	193,128	198,744	175,444	174,261	101,675	113,174	172,126	129,649	172,307	174,519	177,071	179,011	181,288	183,593	6.8%
9 Adjustment	0	0	0	-	-	-	-	-	-	-	-	-	-	-	n/a
10 Total Energy Sales	785,313	813,135	793,536	783,646	700,074	717,557	782,553	746,180	795,003	803,442	812,284	820,576	829,268	838,053	2.0%
CUSTOMER ACCOUNTS															
11 Residential	16,990	16,968	17,000	17,054	17,139	17,225	17,311	17,398	17,485	17,572	17,660	17,748	17,837	17,926	0.5%
12 General Service	2,389	2,412	2,446	2,487	2,499	2,524	2,550	2,575	2,601	2,627	2,653	2,680	2,707	2,734	1.0%
13 Industrial	3	3	3	3	2	2	2	2	2	2	2	2	2	2	0.0%
14 Irrigation	1,202	1,199	1,196	1,206	1,212	1,212	1,212	1,212	1,212	1,212	1,212	1,212	1,212	1,212	0.0%
15 Frost Control	141	141	143	144	145	146	148	149	151	152	154	155	157	158	1.0%
16 Street Lighting	21	21	21	21	21	21	21	21	21	21	21	21	21	21	0.0%
17 Total Customer Accounts	20,746	20,744	20,809	20,915	21,019	21,131	21,244	21,357	21,471	21,586	21,702	21,818	21,935	22,053	0.5%
MONTHLY USAGE PER CUSTOMER ACCOUNT (kWh)															
18 Residential	1,439	1,418	1,323	1,324	1,371	1,373	1,375	1,377	1,379	1,381	1,383	1,385	1,386	1,388	0.1%
19 General Service	7,380	7,481	7,610	7,489	7,564	7,601	7,639	7,677	7,715	7,753	7,791	7,830	7,868	7,907	0.5%
20 Industrial	653,273	1,106,759	1,228,752	1,188,755	707,716	723,798	740,175	756,854	773,838	791,133	808,745	826,678	844,938	863,531	2.2%
21 Irrigation	4,281	4,699	5,470	4,879	4,879	4,903	4,928	4,952	4,977	5,002	5,027	5,052	5,077	5,103	0.5%
22 Frost Control	334	193	384	63	63	63	62	62	62	61	61	61	61	60	-0.5%
23 Street Lighting	5,412	5,397	5,431	5,414	5,387	5,387	5,387	5,387	5,387	5,387	5,387	5,387	5,387	5,387	0.0%
EXISTING RATES - CUSTOMER CHARGE (\$/customer/month)															
24 Residential	\$22.50	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	
25 General Service	35.38	37.72	37.75	37.75	37.75	37.75	37.75	37.75	37.75	37.75	37.75	37.75	37.75	37.75	
26 Industrial	77.50	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	80.00	
27 Irrigation	13.50	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	
28 Frost Control	60.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	120.00	
29 Street Lighting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Okanogan County PUD
2017 Equity Management Plan
Table 2 - Projected Revenues at Existing Rates

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

Line	Historical (1)			Estimated (1)	Projected										Avg. Annual Increase 2017 - 2026
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
EXISTING RATES - AVERAGE ENERGY AND DEMAND RATE (\$/kWh) (2)															
30 Residential	\$0.05452	\$0.04611	\$0.04750	\$0.04879	\$0.04879	\$0.04879	\$0.04879	\$0.04879	\$0.04879	\$0.04879	\$0.04879	\$0.04879	\$0.04879	\$0.04879	\$0.04879
31 General Service	0.05816	0.05884	0.05969	0.06080	0.06080	0.06080	0.06080	0.06080	0.06080	0.06080	0.06080	0.06080	0.06080	0.06080	0.06080
32 Industrial	0.05466	0.05183	0.05113	0.05183	0.05327	0.05327	0.05327	0.05327	0.05327	0.05327	0.05327	0.05327	0.05327	0.05327	0.05327
33 Irrigation	0.04613	0.05585	0.05385	0.05682	0.05682	0.05682	0.05682	0.05682	0.05682	0.05682	0.05682	0.05682	0.05682	0.05682	0.05682
34 Frost Control	0.08590	0.07439	0.05307	0.44019	0.44019	0.44019	0.44019	0.44019	0.44019	0.44019	0.44019	0.44019	0.44019	0.44019	0.44019
35 Street Lighting	0.10030	0.10371	0.10420	0.10583	0.10583	0.10583	0.10583	0.10583	0.10583	0.10583	0.10583	0.10583	0.10583	0.10583	0.10583
EXISTING RATES - COPA (\$/kWh) (3)															
36 Residential	\$0.00253	\$0.00400	\$0.00427	\$0.00560	\$0.00560	\$0.00607	\$0.00632	\$0.00656	\$0.00696	\$0.00817	\$0.00705	\$0.00667	\$0.00701	\$0.00801	\$0.00801
37 General Service	\$0.00253	\$0.00400	\$0.00427	\$0.00560	\$0.00560	\$0.00607	\$0.00632	\$0.00656	\$0.00696	\$0.00817	\$0.00705	\$0.00667	\$0.00701	\$0.00801	\$0.00801
38 Industrial	\$0.00253	\$0.00400	\$0.00427	\$0.00560	\$0.00560	\$0.00607	\$0.00632	\$0.00656	\$0.00696	\$0.00817	\$0.00705	\$0.00667	\$0.00701	\$0.00801	\$0.00801
39 Irrigation	\$0.00253	\$0.00400	\$0.00427	\$0.00560	\$0.00560	\$0.00607	\$0.00632	\$0.00656	\$0.00696	\$0.00817	\$0.00705	\$0.00667	\$0.00701	\$0.00801	\$0.00801
40 Frost Control	\$0.00253	\$0.00400	\$0.00427	\$0.00560	\$0.00560	\$0.00607	\$0.00632	\$0.00656	\$0.00696	\$0.00817	\$0.00705	\$0.00667	\$0.00701	\$0.00801	\$0.00801
41 Street Lighting															
RETAIL REVENUES AT EXISTING RATES - EXCLUDES COPA															
42 Residential	\$20,584,811	\$20,440,113	\$19,961,680	\$20,407,287	\$20,960,204	\$21,085,874	\$21,211,718	\$21,337,723	\$21,463,875	\$21,590,159	\$21,716,562	\$21,843,067	\$21,969,659	\$22,096,323	0.6%
43 General Service	13,318,365	13,833,177	14,441,438	14,589,862	14,925,123	15,143,339	15,364,771	15,589,468	15,817,478	16,048,850	16,283,633	16,521,878	16,763,637	17,008,962	1.5%
44 Industrial	1,288,215	2,068,141	2,264,764	2,203,589	911,188	931,850	952,891	974,319	996,140	1,018,361	1,040,988	1,064,028	1,087,488	1,111,376	2.2%
45 Irrigation	2,962,394	3,901,337	4,352,715	4,075,741	4,159,398	4,179,558	4,199,820	4,220,182	4,240,647	4,261,214	4,281,884	4,302,657	4,323,534	4,344,515	0.5%
46 Frost Control	73,966	75,110	86,479	57,049	65,548	65,963	66,380	66,801	67,224	67,651	68,080	68,513	68,949	69,387	0.6%
47 Street Lighting	136,782	141,045	142,627	144,394	144,394	144,394	144,394	144,394	144,394	144,394	144,394	144,394	144,394	144,394	0.0%
48 Adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	n/a
49 Total Revenue from Retail Sales	\$38,364,534	\$40,458,923	\$41,249,704	\$41,477,921	\$41,165,854	\$41,550,977	\$41,939,974	\$42,332,888	\$42,729,758	\$43,130,628	\$43,535,540	\$43,944,536	\$44,357,661	\$44,774,957	0.9%
COPA REVENUES															
50 Residential	\$743,330	\$1,154,878	\$1,151,784	\$1,517,637	\$1,579,422	\$1,723,801	\$1,806,461	\$1,885,288	\$2,014,571	\$2,378,564	\$2,067,362	\$1,966,298	\$2,079,069	\$2,392,461	
51 General Service	535,963	866,148	953,073	1,251,630	1,270,404	1,398,222	1,477,682	1,555,293	1,676,170	1,996,045	1,749,892	1,678,815	1,790,609	2,078,620	
52 Industrial	59,579	159,373	188,736	239,653	95,593	106,011	112,877	119,688	129,935	155,852	137,610	132,954	142,798	166,910	
53 Irrigation	156,442	270,415	334,946	395,384	397,361	433,032	453,132	472,232	503,920	594,174	515,768	489,944	517,421	594,728	
54 Frost Control	1,433	1,309	2,814	610	613	668	699	728	777	917	796	756	798	917	
55 Street Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
56 Adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
57 Total COPA Revenues	\$1,496,747	\$2,452,124	\$2,631,353	\$3,404,914	\$3,343,394	\$3,661,733	\$3,850,850	\$4,033,230	\$4,325,374	\$5,125,553	\$4,471,427	\$4,268,767	\$4,530,695	\$5,233,637	
58 Total Revenue for Retail Sales + COPA	\$39,861,281	\$42,911,047	\$43,881,057	\$44,882,835	\$44,509,248	\$45,212,710	\$45,790,824	\$46,366,118	\$47,055,132	\$48,256,181	\$48,006,967	\$48,213,303	\$48,888,356	\$50,008,594	1.3%
59 Percent Change	12.0%	7.7%	2.3%	2.3%	-0.8%	1.6%	1.3%	1.3%	1.5%	2.6%	-0.5%	0.4%	1.4%	2.3%	
60 Unit Revenue at Existing Rates (cents/kWh)															
61 Retail Rates	6.73	6.98	7.10	7.37	7.44	7.48	7.50	7.52	7.56	7.67	7.56	7.51	7.54	7.64	

Note:

- (1) Source: Revenue Stats 2005 - 12312016 version m30 and m30b.xlsx
- (2) The existing COPA rate of \$0.00560 is assumed to be reset at the beginning of 2017 and is added to the base rates shown in 2016.
- (3) Refer to Table 10 - Projected COPA Revenues for detailed calculations.

Okanogan County PUD
 2017 Equity Management Plan
 Table 3 - Income Statement - Accrual Basis
 (\$000)

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

Line	Historical (1)			Estimated(1)	Budget (2)		Projected								
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
1	Operating Revenue														
2	Retail Rate Revenues at Existing Rates	\$38,365	\$40,459	\$41,250	\$41,478	\$41,166	\$41,551	\$41,940	\$42,333	\$42,730	\$43,131	\$43,536	\$43,945	\$44,358	\$44,775
	Future Base Rate Increases														
3		% of Base	Months												
4	Year	Sales Revenue	Effective												
5	2017	2.0%	4		282	831	839	847	855	863	871	879	887	896	
6	2018	0.0%	6			0	0	0	0	0	0	0	0	0	
7	2019	0.0%	6				0	0	0	0	0	0	0	0	
8	2020	0.0%	6					0	0	0	0	0	0	0	
9	2021	0.0%	6						0	0	0	0	0	0	
10	2022	0.0%	6							0	0	0	0	0	
11	2023	0.0%	6								0	0	0	0	
12	2024	0.0%	6									0	0	0	
13	2025	0.0%	6										0	0	
14	2026	0.0%	6											0	
15	Sales for Resale Revenue	\$5,132	\$4,680	\$3,190	\$2,568	\$1,877	\$2,256	\$4,228	\$3,400	\$4,744	\$5,188	\$5,632	\$6,093	\$6,355	\$6,629
16	COPA Revenues	1,497	2,452	2,631	3,405	3,343	3,662	3,851	4,033	4,325	5,126	4,471	4,269	4,531	5,234
17	Other Revenues (3)	910	1,283	1,371	1,493	1,421	1,450	1,479	1,509	1,539	1,570	1,601	1,633	1,666	1,699
18	Total Operating Revenues	\$45,904	\$48,874	\$48,442	\$48,943	\$48,089	\$49,750	\$52,336	\$52,122	\$54,193	\$55,877	\$56,112	\$56,818	\$57,797	\$59,232
19	Operating Expenses														
20	Production	\$77	\$78	\$169	\$93	\$123	\$125	\$128	\$131	\$134	\$137	\$140	\$143	\$146	\$149
21	Purchased Power	22,836	24,062	24,389	24,484	23,559	24,034	24,427	24,816	25,316	26,327	25,885	25,897	26,376	27,298
22	Power Costs - Enloe	0	0	0	0	0	0	0	0	1,016	1,026	1,037	1,047	1,058	
23	Other Power Supply	622	744	812	836	1,108	1,130	1,153	1,176	1,200	1,224	1,248	1,273	1,298	
24	Transmission	47	183	179	76	101	103	105	107	109	111	113	115	117	
25	Distribution	5,073	5,536	5,555	6,019	7,975	8,134	8,297	8,463	8,632	8,805	8,981	9,161	9,344	
26	Consumer Accounting	1,481	1,505	1,521	1,574	2,085	2,126	2,169	2,212	2,256	2,301	2,347	2,394	2,442	
27	Customer Service & Information	579	461	567	506	670	684	698	712	726	741	756	771	786	
28	Admin. & General	4,339	4,178	4,982	5,137	6,805	6,941	7,080	7,222	7,366	7,513	7,663	7,816	7,972	
29	Tax Expense	2,402	2,700	2,729	2,789	2,751	2,794	2,830	2,865	2,908	2,982	2,967	2,980	3,021	
30	Depreciation/Amortization	3,861	4,110	4,195	4,263	4,460	4,670	4,864	4,924	5,721	5,691	5,781	5,861	5,941	
31	Total Cost of Electric Service	\$41,317	\$43,556	\$45,098	\$45,776	\$49,636	\$50,741	\$51,751	\$52,628	\$55,384	\$56,858	\$56,918	\$57,458	\$58,501	
32	Net Operating Revenues	\$4,587	\$5,318	\$3,344	\$3,167	(\$1,546)	(\$991)	\$585	(\$507)	(\$1,191)	(\$981)	(\$806)	(\$639)	(\$703)	
33	Other Income (3)	1,137	498	1,605	2,945	477	486	496	506	516	526	537	548	559	
34	Interest Expense (4)	(1,120)	(957)	(869)	(676)	(1,484)	(1,825)	(1,755)	(1,669)	(3,067)	(2,909)	(2,772)	(2,668)	(2,443)	
35	Debt Issuance Expense and Discount	(85)	(85)	(85)	(85)	(85)	(85)	(85)	(85)	(80)	(35)	4	4	4	
36	Other Deductions	(85)	0	0	0	0	0	0	0	0	0	0	0	0	
37	Contributions in Aid of Construction (3)	990	1,295	1,397	708	1,250	1,275	1,301	1,327	1,354	1,381	1,409	1,437	1,466	
38	Use of Rate Stabilization Funds	0	0	0	0	2,401	0	0	0	0	0	0	0	0	
39	Net Income (Loss)	\$5,426	\$6,069	\$5,392	\$6,059	\$1,013	(\$1,139)	\$543	(\$427)	(\$2,469)	(\$2,018)	(\$1,628)	(\$1,318)	(\$1,232)	
40	Total Retail Energy Sales (MWh)	592,185	614,391	618,092	609,385	598,399	604,383	610,427	616,531	622,696	628,923	635,213	641,565	647,980	
41	Unit Revenue from Retail Sales (¢/kWh)	6.73	6.98	7.10	7.37	7.49	7.62	7.64	7.66	7.69	7.81	7.69	7.65	7.68	
42	Increase over Previous Year	9.9%	3.7%	1.7%	3.8%	1.6%	1.7%	0.3%	0.3%	0.4%	1.6%	-1.5%	-0.5%		
43	Necessary Retail Rate Change	9.5%	0.0%	2.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
44	Debt Service Payment	3,093	3,169	3,137	2,921	3,191	3,574	3,910	3,912	6,732	6,080	5,216	5,217		
45	DSC Ratio (5)	3.36	3.51	3.33	3.77	2.18	1.50	1.83	1.58	0.94	1.08	1.33	1.38		
46	Operating TIER (6)	5.10	6.56	4.85	5.68	(0.04)	0.46	1.33	0.70	0.61	0.66	0.71	0.76		
47	Total TIER (7)	5.85	7.34	7.21	9.96	1.68	0.38	1.31	0.74	0.20	0.31	0.41	0.51		
48	Working Capital (Days of O&M)	123	115	136	123	113	134	88	73	37	10	(9)	(26)		

Note:

- (1) Sources: 2013 - 2015 Financial and Statistical Reports and 2016 Financial and Statistical Report: 12-months ending November 2016.
- (2) 2017 Adopted Budget - December 19, 2016. Based on 2017 budget except for purchased power, tax expense and depreciation/amortization expense and are allocated based on 2016 expenses.
- (3) Based on 2017 budget and escalated with inflation.
- (4) The projected years reflect the gross interest expense (does not include AFUDC).
- (5) DSC Ratio: (Net Income (Loss) - Interest Expense + Depreciation/Amortization) / Debt Service Payment
- (6) Operating TIER: (Net Operating Revenues - Interest Expense) / (Interest Expense)
- (7) Total TIER: (Net Income (Loss) - Interest Expense) / (Interest Expense)

Okanogan County PUD
2017 Equity Management Plan
Table 4 - Pro-Forma Balance Sheet as of December 31
(\$000)

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

Line	Historical (1)			Estimated (2)	Projected										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
ASSETS AND OTHER DEBITS															
1	Total Utility Plant	\$153,746	\$164,603	\$175,206	\$185,567	\$188,487	\$195,267	\$202,107	\$205,217	\$234,977	\$238,207	\$241,507	\$244,867	\$248,297	\$251,787
2	Accum. Prov. for Deprec.	(59,810)	(66,055)	(70,858)	(73,377)	(76,907)	(79,427)	(82,131)	(86,075)	(82,386)	(87,057)	(91,798)	(96,599)	(101,460)	(106,371)
3	Net Utility Plant	\$93,937	\$98,549	\$104,347	\$112,191	\$111,581	\$115,841	\$119,977	\$119,143	\$152,592	\$151,151	\$149,710	\$148,269	\$146,838	\$145,417
4	Other Property & Investments														
5	Investments in Associated Companies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Electric Investment in Communications	1,611	1,413	1,205	1,005	1,005	1,005	1,005	1,005	1,005	1,005	1,005	1,005	1,005	1,005
7	Total Other Property & Investments	\$1,611	\$1,413	\$1,205	\$1,005	\$1,005	\$1,005	\$1,005	\$1,005	\$1,005	\$1,005	\$1,005	\$1,005	\$1,005	\$1,005
8	Current Assets														
9	Revenue Fund	\$6,181	\$9,551	\$12,830	\$12,739	\$12,739	\$12,739	\$12,739	\$12,739	\$12,739	\$12,739	\$12,739	\$12,739	\$12,739	\$12,739
10	Working Funds	20	20	20	20	20	20	20	20	20	20	20	20	20	20
11	Temporary Cash Investments	6,374	2,903	2,445	1,276	1,276	4,212	(1,452)	(3,203)	(7,706)	(11,419)	(14,054)	(16,484)	(18,946)	(21,468)
12	Accrued Utility Revenues	3,428	3,016	3,073	3,073	3,073	3,073	3,073	3,073	3,073	3,073	3,073	3,073	3,073	3,073
13	Other Current Assets	5,992	6,820	5,634	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057
14	Total Unrestricted Current Assets	\$21,995	\$22,310	\$24,002	\$22,166	\$22,166	\$25,102	\$19,438	\$17,687	\$13,184	\$9,471	\$6,836	\$4,406	\$1,944	(\$578)
15	Restricted Current Assets														
16	Bond Sinking Funds	\$289	\$288	\$288	\$2,606	\$2,606	\$2,606	\$2,606	\$2,606	\$2,606	\$2,606	\$2,606	\$2,606	\$2,606	\$2,606
17	Customer Deposits	600	600	600	600	600	600	600	600	600	600	600	600	600	600
18	Compensated Absences	1,400	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600
19	Debt Service Reserve Funds	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945	1,945
20	Bond Construction Funds	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	Other Special Funds (Rate Stab. Fund)	6,135	6,135	6,135	6,135	3,734	3,734	3,734	3,734	3,734	3,734	3,734	3,734	3,734	3,734
22	Total Restricted Current Assets	\$10,369	\$10,568	\$10,568	\$12,886	\$10,485	\$10,485	\$10,485	\$10,485	\$10,485	\$10,485	\$10,485	\$10,485	\$10,485	\$10,485
23	Deferred Debits														
24	Unamortized Debt Expense	\$351	\$333	\$314	\$295	\$276	\$257	\$238	\$220	\$201	\$182	\$172	\$162	\$151	\$141
25	Unamortized Loss on Reacquired Debt	620	545	470	402	321	246	171	96	25	0	0	0	0	0
26	Other Deferred Debits	3,798	3,253	1,146	265	265	265	265	265	265	265	265	265	265	265
27	Deferred Outflows - DRS Pension	0	0	880	880	880	880	880	880	880	880	880	880	880	880
28	Total Assets & Other Debits	\$132,681	\$136,970	\$142,933	\$150,089	\$146,978	\$154,081	\$152,459	\$149,780	\$178,637	\$173,439	\$169,353	\$165,472	\$161,568	\$157,615
EQUITIES AND LIABILITIES															
29	Net Assets														
30	Restricted for Capital Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
31	Restricted for Debt Service	2,082	2,085	2,091	4,551	4,551	4,551	4,551	4,551	4,551	4,551	4,551	4,551	4,551	4,551
32	Restricted for Contingencies	6,060	6,062	5,888	5,676	3,275	3,275	3,275	3,275	3,275	3,275	3,275	3,275	3,275	3,275
33	Appropriated Net Assets	10,368	10,239	1,790	(1,849)	(1,849)	(1,849)	(1,849)	(1,849)	(1,849)	(1,849)	(1,849)	(1,849)	(1,849)	(1,849)
34	Unappropriated Net Assets	58,130	63,970	71,393	80,931	81,943	80,799	81,342	80,914	78,446	76,428	74,800	73,482	72,550	71,084
35	Contributions in Aid of Construction	11,558	11,558	11,558	11,558	11,558	11,558	11,558	11,558	11,558	11,558	11,558	11,558	11,558	11,558
36	Total Net Assets	\$88,198	\$93,915	\$92,719	\$100,867	\$99,479	\$98,334	\$98,877	\$98,450	\$95,981	\$93,963	\$92,335	\$91,017	\$89,785	\$88,619
37	Non-Current Liabilities														
38	Long-Term Debt	\$34,795	\$33,105	\$31,350	\$31,350	\$27,894	\$35,739	\$33,496	\$29,831	\$61,660	\$59,216	\$56,667	\$54,010	\$51,237	\$48,356
39	Other Long Term Liabilities	338	329	8,521	8,513	8,498	8,494	8,485	8,476	8,467	8,458	8,443	8,429	8,415	8,400
40	Total Long-Term Liabilities	\$35,133	\$33,434	\$39,871	\$39,863	\$36,392	\$44,233	\$41,981	\$38,307	\$70,127	\$67,674	\$65,110	\$62,439	\$59,652	\$56,756
41	Current and Accrued Liabilities														
42	Warrants Outstanding	\$526	\$151	\$248	\$3,191	\$3,191	\$3,191	\$3,191	\$3,191	\$3,191	\$3,191	\$3,191	\$3,191	\$3,191	\$3,191
43	Accounts Payable	3,756	4,063	4,425	2,339	2,339	2,339	2,339	2,339	2,339	2,339	2,339	2,339	2,339	2,339
44	Taxes Accrued	1,107	1,209	1,216	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081	1,081
45	Miscellaneous	90	87	109	89	89	89	89	89	89	89	89	89	89	89
46	Other Regulatory Liabilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	Total Current and Accrued Liabilities	\$5,478	\$5,511	\$5,998	\$6,700	\$6,700	\$6,700	\$6,700	\$6,700	\$6,700	\$6,700	\$6,700	\$6,700	\$6,700	\$6,700
48	Current Liab. Payable from Restricted Assets														
49	Current Portion of Long Term Debt	\$1,645	\$1,690	\$1,755	\$0	\$1,749	\$2,155	\$2,243	\$3,665	\$3,171	\$2,444	\$2,549	\$2,657	\$2,773	\$2,881
50	Interest on Long Term Debt	152	147	142	0	0	0	0	0	0	0	0	0	0	0
51	Compensated Absences	1,535	1,713	1,807	1,999	1,999	1,999	1,999	1,999	1,999	1,999	1,999	1,999	1,999	1,999
52	Customer Deposits	540	560	640	660	660	660	660	660	660	660	660	660	660	660
53	Total Current Liab. Payable from Restricted Assets	\$3,872	\$4,110	\$4,344	\$2,659	\$4,408	\$4,814	\$4,902	\$6,324	\$5,830	\$5,103	\$5,208	\$5,316	\$5,432	\$5,540
54	Deferred Credits	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	Total Equities and Liabilities	\$132,681	\$136,970	\$142,933	\$150,089	\$146,978	\$154,081	\$152,460	\$149,781	\$178,638	\$173,440	\$169,354	\$165,472	\$161,569	\$157,616
FINANCIAL RATIOS															
56	Equity to Total Assets (3)	66.5%	68.6%	64.9%	67.2%	67.7%	63.8%	64.9%	65.7%	53.7%	54.2%	54.5%	55.0%	55.6%	56.2%
57	Working Capital (Days of O&M) (4)	123	115	136	123	113	134	88	73	37	10	(9)	(26)	(43)	(59)

Note:

(1) Sources: 2013 - 2015 Financial and Statistical Reports

(2) Sources: 2016 Financial and Statistical Report: 12-months ending November 2016

(3) Equity to Total Assets: Total Net Assets / Total Assets & Other Debits

(4) Working Capital (Days of O&M): ((Revenue Funds + Working Funds + Temporary Cash Investments) / (Income Statement Total Cost of Electric Service - Depreciation/Amortization Expense)) x 365 Days

Okanogan County PUD
2017 Equity Management Plan
Table 5 - Statement of Operations - Cash Basis
(\$000)

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

Line	Projected									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1 Total Net Operating Revenues	(\$1,546)	(\$991)	\$585	(\$507)	(\$1,191)	(\$981)	(\$806)	(\$639)	(\$703)	(\$792)
2 Add: Depreciation	4,460	4,670	4,864	4,924	5,721	5,691	5,781	5,861	5,941	6,021
3 Add: Other Income	477	486	496	506	516	526	537	548	559	570
4 Add: Use of Rate Stabilization Fund	2,401	0	0	0	0	0	0	0	0	0
5 Cash from Operations	\$5,791	\$4,165	\$5,945	\$4,923	\$5,046	\$5,236	\$5,512	\$5,770	\$5,797	\$5,799
6 Debt Service - Long Term										
7 Existing - Interest	\$1,484	\$1,425	\$1,355	\$1,282	\$1,342	\$1,244	\$1,170	\$1,131	\$1,089	\$1,045
8 Existing - Principal	1,707	1,749	1,819	1,894	2,110	1,555	765	805	845	890
9 New - Interest	0	400	400	387	1,725	1,665	1,602	1,537	1,469	1,398
10 New - Principal	0	0	336	349	1,555	1,616	1,679	1,744	1,812	1,883
11 Total Debt Service	\$3,191	\$3,574	\$3,910	\$3,912	\$6,732	\$6,080	\$5,216	\$5,217	\$5,215	\$5,216
12 Cash Margins After Debt Service	\$2,600	\$591	\$2,035	\$1,011	(\$1,686)	(\$844)	\$296	\$553	\$582	\$583
13 Cash from Investing Activities										
14 Total Additions and Replacements	(2,600)	(7,655)	(7,699)	(2,763)	(37,816)	(2,869)	(2,931)	(2,983)	(3,044)	(3,105)
15 Cash from Financing Activities										
16 Proceeds from Long Term Debt	0	10,000	0	0	35,000	0	0	0	0	0
17 Proceeds from Bond Construction Funds	0	0	0	0	0	0	0	0	0	0
18 Cash from Investing and Financing Activities	(2,600)	2,345	(7,699)	(2,763)	(2,816)	(2,869)	(2,931)	(2,983)	(3,044)	(3,105)
19 Net Cash	0	2,936	(5,664)	(1,752)	(4,502)	(3,713)	(2,635)	(2,430)	(2,462)	(2,522)
FINANCIAL RATIOS										
20 Debt Service Coverage	2.18	1.50	1.83	1.58	0.94	1.08	1.33	1.38	1.39	1.40

Okanogan County PUD
 2017 Equity Management Plan
 Table 6 - General Funds Summary
 (\$000)

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

Line	Projected (1)									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
SOURCES OF GENERAL FUNDS										
1 Net General Funds - Beg. of Year (2)	\$23,709	\$21,308	\$24,244	\$18,581	\$16,829	\$12,327	\$8,614	\$5,979	\$3,549	\$1,086
2 Cash Margins after Debt Service	2,600	591	2,035	1,011	(1,686)	(844)	296	553	582	583
3 Loan Proceeds	0	10,000	0	0	35,000	0	0	0	0	0
4 Adjustments to Balance Sheet	(2,401)	0	0	0	0	0	0	0	0	0
5 Total General Funds Available	\$23,908	\$31,899	\$26,280	\$19,592	\$50,143	\$11,483	\$8,910	\$6,532	\$4,130	\$1,669
USES OF GENERAL FUNDS										
6 Debt Funded Plant Investment	0	10,000	0	0	35,000	0	0	0	0	0
7 General Funded Plant Investment	2,600	(2,345)	7,699	2,763	2,816	2,869	2,931	2,983	3,044	3,105
8 Repayment of Short Term Debt	0	0	0	0	0	0	0	0	0	0
9 Total Uses of General Funds	\$2,600	\$7,655	\$7,699	\$2,763	\$37,816	\$2,869	\$2,931	\$2,983	\$3,044	\$3,105
10 Net General Funds - End of Year	\$21,308	\$24,244	\$18,581	\$16,829	\$12,327	\$8,614	\$5,979	\$3,549	\$1,086	(\$1,436)

Notes:

(1) Sources: 2016 Financial and Statistical Report: 12-Months Ending November 2016

	2016
(2) Components of general funds as of November 30 were:	
Sinking Funds	\$2,606
Debt Service Reserve Account	1,945
Rate Stabilization Fund	6,135
Employee Compensated Absences Fund (3)	1,600
Customer Deposit Fund	600
Revenue Fund Less Warrants Outstanding (3)	9,548
Temporary Cash Investments	1,276
Bond Construction Funds	0
Total	\$23,709
check	\$777

(3) Differences between balance sheet and fund balances reported in the November 2016 Financial and Statistical Report.

Okanogan County PUD
2017 Equity Management Plan
Table 7 - Plant Investment and Depreciation Expense
(\$000)

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

Line	Projected											
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		
UTILITY PLANT												
1	Total Utility Plant (Beg Yr) (1)	\$185,567	\$188,487	\$195,267	\$202,107	\$205,217	\$234,977	\$238,207	\$241,507	\$244,867	\$248,297	
2	Additions and Replacements - CIP Inflation Adjusted											
3	Average Capital Improvements (2)	3,850	3,930	4,000	4,090	4,170	4,250	4,340	4,420	4,510	4,600	
4	Ophir to Okanogan Transmission Line	0	5,000	0	0	0	0	0	0	0	0	
5	Tonasket Substation Improvements	0	0	4,000	0	0	0	0	0	0	0	
6	Ellisforde/Whitestone Transformer Replacement	0	0	1,000	0	0	0	0	0	0	0	
7	Other Capital Additions-Enloe	0	0	0	0	35,000	0	0	0	0	0	
8	Total Additions	\$3,850	\$8,930	\$9,000	\$4,090	\$39,170	\$4,250	\$4,340	\$4,420	\$4,510	\$4,600	
9	Less Retirements	930	2,150	2,160	980	9,410	1,020	1,040	1,060	1,080	1,110	
10	Total Utility Plant (End Yr)	\$188,487	\$195,267	\$202,107	\$205,217	\$234,977	\$238,207	\$241,507	\$244,867	\$248,297	\$251,787	
DEPRECIATION EXPENSE												
11	Average Capital Improvements	2.36%	90	180	280	380	470	570	680	780	890	1,000
12	Ophir to Okanogan Transmission Line	3.00%	0	150	150	150	150	150	150	150	150	150
13	Tonasket Substation Improvements	3.00%	0	0	120	120	120	120	120	120	120	120
14	Ellisforde/Whitestone Transformer Replacement	2.36%	0	0	24	24	24	24	24	24	24	24
15	Other Capital Additions-Enloe	2.36%	0	0	0	0	827	827	827	827	827	827
16	Existing Plant	2.36%	4,370	4,340	4,290	4,250	4,130	4,000	3,980	3,960	3,930	3,900
17	Total Depreciation Expense		\$4,460	\$4,670	\$4,864	\$4,924	\$5,721	\$5,691	\$5,781	\$5,861	\$5,941	\$6,021
18	Less Depreciation in Other Accounts		0	0	0	0	0	0	0	0	0	0
19	Net Depreciation Expense		\$4,460	\$4,670	\$4,864	\$4,924	\$5,721	\$5,691	\$5,781	\$5,861	\$5,941	\$6,021
20 2016 ESTIMATED DEPRECIATION RATE ON EXISTING PLANT (1)												
21	Total Utility Plant in Service (BOY)	175,206										
22	Total Utility Plant in Service (EOY)	185,567										
23	Depreciation Expense	4,263										
24	Estimated Average Depreciation Rate	2.36%										
25 ESTIMATED PLANT IN SERVICE - EXISTING PLANT												
26	Total Existing Plant in Service (BOY)	185,567	184,637	182,487	180,327	179,347	169,937	168,917	167,877	166,817	165,737	
27	Retirements	930	2,150	2,160	980	9,410	1,020	1,040	1,060	1,080	1,110	
28	Total Existing Plant in Service (EOY)	184,637	182,487	180,327	179,347	169,937	168,917	167,877	166,817	165,737	164,627	
29	Estimated Depreciation Expense on Existing Plant	4,370	4,340	4,290	4,250	4,130	4,000	3,980	3,960	3,930	3,900	

Notes:

- (1) Sources: 2016 Financial and Statistical Report: 12-months ending November 2016
- (2) Source: 2011-2015 Capital Summary_NG.xlsx
Based on the average capital improvements from 2011 through 2015.

Okanogan County PUD
2017 Equity Management Plan
Table 8 - Long-Term Debt and Debt Service
(\$000)

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

	Projected									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
EXISTING LONG TERM DEBT										
1 Balance (Beg Yr)	\$31,350	\$29,643	\$27,894	\$26,075	\$24,181	\$22,071	\$20,516	\$19,751	\$18,946	\$18,101
2 Principal Repayments	1,707	1,749	1,819	1,894	2,110	1,555	765	805	845	890
3 Balance (End Yr)	\$29,643	\$27,894	\$26,075	\$24,181	\$22,071	\$20,516	\$19,751	\$18,946	\$18,101	\$17,211
EXISTING DEBT INTEREST AND PRINCIPAL PAYMENTS (1)										
4 Interest										
5 2003 Bonds (2)	\$192	\$158	\$130	\$101	\$70	\$36	\$0	\$0	\$0	\$0
6 2010 Bonds (3)	1,292	1,266	1,224	1,181	1,272	1,208	1,170	1,131	1,089	1,045
7 Total Interest	\$1,484	\$1,425	\$1,355	\$1,282	\$1,342	\$1,244	\$1,170	\$1,131	\$1,089	\$1,045
8 Principal										
9 2003 Bonds (2)	\$685	\$700	\$730	\$760	\$790	\$825	\$0	\$0	\$0	\$0
10 2010 Bonds (3)	1,022	1,049	1,089	1,134	1,320	730	765	805	845	890
11 Total Principal	\$1,707	\$1,749	\$1,819	\$1,894	\$2,110	\$1,555	\$765	\$805	\$845	\$890
FUNDING REQUIREMENTS										
12 Capital Funding Requirements (4)	\$2,600	\$7,655	\$7,699	\$2,763	\$37,816	\$2,869	\$2,931	\$2,983	\$3,044	\$3,105
13 Refinancing Requirements	0	0	0	0	0	0	0	0	0	0
14 Total Funding Requirements	\$2,600	\$7,655	\$7,699	\$2,763	\$37,816	\$2,869	\$2,931	\$2,983	\$3,044	\$3,105
15 Loan Funds Advanced	0	10,000	0	0	35,000	0	0	0	0	0
16 Use of Unspent Bond Proceeds	0	0	0	0	0	0	0	0	0	0
17 General Funds Invested	\$2,600	(\$2,345)	\$7,699	\$2,763	\$2,816	\$2,869	\$2,931	\$2,983	\$3,044	\$3,105
NEW LONG TERM DEBT										
18 New Long Term Debt										
19 BOY Balance	\$0	\$0	\$10,000	\$9,664	\$9,315	\$42,760	\$41,144	\$39,465	\$37,721	\$35,909
20 Loan Funds Advanced	0	10,000	0	0	35,000	0	0	0	0	0
21 Interest Expense	0	400	400	387	1,725	1,665	1,602	1,537	1,469	1,398
22 Principal Payments	0	0	336	349	1,555	1,616	1,679	1,744	1,812	1,883
23 Total Debt Service	\$0	\$400	\$736	\$736	\$3,280	\$3,281	\$3,281	\$3,281	\$3,281	\$3,281
24 EOY Balance	\$0	\$10,000	\$9,664	\$9,315	\$42,760	\$41,144	\$39,465	\$37,721	\$35,909	\$34,026
TOTAL LONG TERM DEBT SERVICE										
25 Interest										
26 Existing Debt	\$1,484	\$1,425	\$1,355	\$1,282	\$1,342	\$1,244	\$1,170	\$1,131	\$1,089	\$1,045
27 New Long Term Debt	0	400	400	387	1,725	1,665	1,602	1,537	1,469	1,398
28 Total Interest	\$1,484	\$1,825	\$1,755	\$1,669	\$3,067	\$2,909	\$2,772	\$2,668	\$2,558	\$2,443
29 Principal										
30 Existing Debt	\$1,707	\$1,749	\$1,819	\$1,894	\$2,110	\$1,555	\$765	\$805	\$845	\$890
31 New Long Term Debt	0	0	336	349	1,555	1,616	1,679	1,744	1,812	1,883
32 Total Principal	\$1,707	\$1,749	\$2,155	\$2,243	\$3,665	\$3,171	\$2,444	\$2,549	\$2,657	\$2,773
33 Total Debt Service	\$3,191	\$3,574	\$3,910	\$3,912	\$6,732	\$6,080	\$5,216	\$5,217	\$5,215	\$5,216
34 Less Portion Allocated to Telecommunications (lines 39-51)	0	0	0	0	0	0	0	0	0	0
35 Total Electric System Debt Service	\$3,191	\$3,574	\$3,910	\$3,912	\$6,732	\$6,080	\$5,216	\$5,217	\$5,215	\$5,216
TOTAL LONG TERM DEBT										
34 Balance (Beg Yr)	\$31,350	\$29,643	\$37,894	\$35,739	\$33,496	\$64,831	\$61,660	\$59,216	\$56,667	\$54,010
35 Loan Funds Advanced	-	10,000	-	-	35,000	-	-	-	-	-
36 Less Principal Repayments	1,707	1,749	2,155	2,243	3,665	3,171	2,444	2,549	2,657	2,773
37 Balance (End Yr)	\$29,643	\$37,894	\$35,739	\$33,496	\$64,831	\$61,660	\$59,216	\$56,667	\$54,010	\$51,237
Current Portion of Long Term Debt - EOY										
35 Existing Debt	\$1,749	\$1,819	\$1,894	\$2,110	\$1,555	\$765	\$805	\$845	\$890	\$925
37 New Long Term Debt	0	336	349	1,555	1,616	1,679	1,744	1,812	1,883	1,956
38 Total Current Portion	\$1,749	\$2,155	\$2,243	\$3,665	\$3,171	\$2,444	\$2,549	\$2,657	\$2,773	\$2,881

Okanogan County PUD
 2017 Equity Management Plan
 Table 8 - Long-Term Debt and Debt Service
 (\$000)

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

	2017	2018	2019	2020	Projected					
					2021	2022	2023	2024	2025	2026
EXISTING DEBT INTEREST AND PRINCIPAL PAYMENTS EXCLUDING TELECOMMUNICATIONS DEBT (5)										
39 Interest										
40 2003 Bonds	192	158	130	101	70	36	0	0	0	0
41 2010 Bonds	1,447	1,419	1,372	1,323	1,272	1,208	1,170	1,131	1,089	1,045
42 Total Interest	1,639	1,577	1,502	1,424	1,342	1,244	1,170	1,131	1,089	1,045
43 2010 Bonds Interest w/o Telecommunications (6)	1,292	1,266	1,224	1,181	1,272	1,208	1,170	1,131	1,089	1,045
44 Principal										
45 2003 Bonds	685	700	730	760	790	825	0	0	0	0
46 2010 Bonds	1,145	1,175	1,220	1,270	1,320	730	765	805	845	890
47 Total Principal	1,830	1,875	1,950	2,030	2,110	1,555	765	805	845	890
48 2010 Bonds Principal w/o Telecommunications (6)	1,022	1,049	1,089	1,134	1,320	730	765	805	845	890
49 Total Debt Service	3,469	3,452	3,452	3,454	3,452	2,799	1,935	1,936	1,934	1,935
50 Allocated to Telecommunications	278	278	278	278	0	0	0	0	0	0
51 Total Electric Debt Service	3,191	3,174	3,174	3,176	3,452	2,799	1,935	1,936	1,934	1,935
52 Check	-	-	-	-	-	-	-	-	-	-

Notes

- (1) Source: DEBTSERVICE (2016 Refinancing 2003A).xlsx
- (2) Reflects the refinancing of the 2003A Bonds.
- (3) Excludes debt related to the telecommunications debt.
- (4) Excludes CIAC
- (5) Source: DEBTSERVICE (2016 Refinancing 2003A).xlsx
- (6) Excludes telecommunication debt. The amount excluded is in proportion to the annual interest or principal payment to the total annual debt service for the 2010 Bonds.

Okanogan County PUD
2017 Equity Management Plan
Table 9 - Energy Resources and Cost of Power

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

	Projected (1)										Avg. Annual Increase 2017 - 2026	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		
POWER SUPPLY (MWh)												
1	Purchased Power											
2	BPA Block	178,744	178,744	240,954	399,346	399,346	399,346	399,346	399,346	399,346	399,346	9.3%
3	BPA Slice	262,244	262,244	202,817	0	0	0	0	0	0	0	n/a
4	Transmission	487	487	487	487	487	487	487	487	487	487	0.0%
5	Wells	262,399	262,399	262,399	262,399	262,399	262,399	262,399	262,399	262,399	262,399	0.0%
6	Nine Canyon Wind	41,241	41,241	41,241	41,241	41,241	41,241	41,241	41,241	41,241	41,241	0.0%
7	Additional Wells	0	17,934	80,601	89,113	97,933	106,841	116,156	124,926	134,101	143,374	n/a
8	Other	0	0	0	0	0	0	0	0	0	0	n/a
9	Subtotal - Purchased Power	745,115	763,049	828,499	792,586	801,406	810,314	819,629	828,399	837,574	846,847	1.4%
10	New Resources											
11	Enloe Dam	0	0	0	0	40,467	40,467	40,467	40,467	40,467	40,467	n/a
12	Subtotal - New Resources	0	0	0	0	40,467	40,467	40,467	40,467	40,467	40,467	n/a
13	Generation Losses	0	0	0	0	0	0	0	0	0	0	n/a
14	Total Power Supply	745,115	763,049	828,499	792,586	841,873	850,781	860,096	868,866	878,041	887,314	2.0%
POWER REQUIREMENTS (MWh)												
15	Retail Energy Sales	598,399	604,383	610,427	616,531	622,696	628,923	635,213	641,565	647,980	654,460	1.0%
16	Sales for Resale	101,675	113,174	172,126	129,649	172,307	174,519	177,071	179,011	181,288	183,593	6.8%
17	Station Use	0	0	0	0	0	0	0	0	0	0	n/a
18	Dist./Trans. Line Losses	45,041	45,491	45,946	46,406	46,870	47,338	47,812	48,290	48,773	49,260	1.0%
19	Total	745,115	763,049	828,499	792,586	841,873	850,781	860,096	868,866	878,041	887,314	2.0%
LOSSES (MWh)												
20	As a Percent of Requirements	6.0%	6.0%	5.5%	5.9%	5.6%	5.6%	5.6%	5.6%	5.6%	5.6%	
POWER COSTS (\$000)												
21	Purchased Power		3.8%	-0.6%	-0.2%	1.2%	3.2%	1.2%	3.2%	1.2%	3.2%	
22	BPA Block	\$5,628	\$5,867	\$7,978	\$14,548	\$14,717	\$15,195	\$15,372	\$15,871	\$16,056	\$16,578	12.8%
23	BPA Slice	8,492	8,791	6,593	0	0	0	0	0	0	0	n/a
24	Transmission	2,479	2,505	2,559	2,720	2,799	3,036	3,135	3,433	3,479	3,615	4.3%
25	Wells	4,160	3,737	3,307	3,363	3,420	3,479	3,542	3,606	3,671	3,737	-1.2%
26	ADD'L Wells	0	255	1,016	1,142	1,276	1,417	1,568	1,717	1,876	2,042	n/a
27	Nine Canyon	2,652	2,731	2,827	2,895	2,955	3,051	2,120	1,122	1,146	1,178	-8.6%
28	Spin/Supp Res	148	148	148	148	148	148	148	148	148	148	0.0%
29	Total Purchased Power	\$23,559	\$24,034	\$24,427	\$24,816	\$25,316	\$26,327	\$25,885	\$25,897	\$26,376	\$27,298	1.6%
30	New Resources											
31	Enloe	0	0	0	0	1,016	1,026	1,037	1,047	1,058	1,068	n/a
32	Total New Resources	\$0	\$0	\$0	\$0	\$1,016	\$1,026	\$1,037	\$1,047	\$1,058	\$1,068	n/a
33	Total Power Costs	\$23,559	\$24,034	\$24,427	\$24,816	\$26,332	\$27,353	\$26,922	\$26,944	\$27,433	\$28,366	2.1%
UNIT POWER COSTS (cents/kWh)												
35	BPA Block	3.15	3.28	3.31	3.64	3.69	3.81	3.85	3.97	4.02	4.15	3.1%
36	BPA Slice	3.24	3.35	3.25	--	--	--	--	--	--	--	n/a
37	Transmission	3.76	3.89	3.86	4.32	4.38	4.56	4.63	4.83	4.89	5.05	3.3%
38	Wells	1.59	1.42	1.26	1.28	1.30	1.33	1.35	1.37	1.40	1.42	-1.2%
39	Nine Canyon Wind	6.43	6.62	6.85	7.02	7.17	7.40	5.14	2.72	2.78	2.86	-8.6%
40	Additional Wells	--	1.42	1.26	1.28	1.30	1.33	1.35	1.37	1.40	1.42	n/a
41	Other	--	--	--	--	--	--	--	--	--	--	n/a
42	Enloe Dam	--	--	--	--	2.51	2.54	2.56	2.59	2.61	2.64	n/a
43	Total	3.16	3.15	2.95	3.13	3.13	3.22	3.13	3.10	3.12	3.20	0.1%

Notes

(1) Source: 2016 EMP Rons items ADJUST 2-13-17-adj error in additional Wells.xlsx

Okanogan County PUD
2017 Equity Management Plan
Table 10 - Projected COPA Revenues

Option 4 - \$10M Debt Issuance in 2018 for Additional CIP in 2018-2019 and Enloe Dam Debt Financing

Line	Actual			Estimated	Projected									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
SALES (MWh)														
1 Residential	293,420	288,719	269,949	271,007	282,040	283,878	285,715	287,553	289,389	291,225	293,059	294,892	296,723	298,551
2 General Service	211,564	216,537	223,376	223,505	226,858	230,261	233,715	237,220	240,779	244,390	248,056	251,777	255,554	259,387
3 Industrial	23,518	39,843	44,235	42,795	17,070	17,458	17,853	18,255	18,665	19,082	19,507	19,939	20,380	20,828
4 Irrigation	61,754	67,604	78,503	70,604	70,957	71,312	71,669	72,027	72,387	72,749	73,113	73,478	73,846	74,215
5 Frost Control	566	327	660	109	109	110	111	111	112	112	113	113	114	114
6 Street Lighting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7 Total Retail Sales	590,821	613,031	616,723	608,020	597,035	603,019	609,062	615,167	621,332	627,559	633,848	640,200	646,616	653,096
8														
9 POWER SUPPLY COSTS (\$000)														
10 Total Power Costs (1)	\$22,836	\$24,062	\$24,389	\$24,484	\$23,559	\$24,034	\$24,427	\$24,816	\$25,316	\$26,327	\$25,885	\$25,897	\$26,376	\$27,298
11														
12 Existing Power Costs (\$/kWh)														
13 Power Costs in Base Rates	\$21,339	\$21,610	\$21,758	\$21,079	\$20,216									
14 Power Costs in Base Rates (\$/kWh)	\$0.03603	\$0.03517	\$0.03520	\$0.03459	\$0.03378									
15														
16 Power Costs in COPA (Estimated)	\$1,497	\$2,452	\$2,631	\$3,405	\$3,343									
17 Power Costs in COPA (\$/kWh) - Existing Rate	\$0.00253	\$0.00400	\$0.00427	\$0.00560	\$0.00560									
18														
19 Total Power Costs	\$22,836	\$24,062	\$24,389	\$24,484										
20 Total Power Costs (\$/kWh)	\$0.03857	\$0.03917	\$0.03947	\$0.04019										
21														
22 Calculation of COPA Charge														
23 Power Costs in Existing Base Rates (\$/kWh) (2)						\$0.03378	\$0.03378	\$0.03378	\$0.03378	\$0.03378	\$0.03378	\$0.03378	\$0.03378	\$0.03378
24 Power Costs Recovered in Base Rates (3)						\$20,372	\$20,576	\$20,783	\$20,991	\$21,201	\$21,414	\$21,628	\$21,845	\$22,064
25														
26 Power Costs Recovered in COPA (4)						\$3,662	\$3,851	\$4,033	\$4,325	\$5,126	\$4,471	\$4,269	\$4,531	\$5,234
27 Adjusted COPA Charge (\$/kWh) (5)						\$0.00607	\$0.00632	\$0.00656	\$0.00696	\$0.00817	\$0.00705	\$0.00667	\$0.00701	\$0.00801

Note:

- (1) Excludes Enloe Dam beginning in 2021.
- (2) Based on power costs in base rates in 2017.
- (3) Power costs recovered in base rates multiplied by the retail sales (excluding street lighting).
- (4) Total power costs less power costs recovered in base rates.
- (5) Power costs recovered in COPA divided by retail sales (excluding street lighting).

Existing COPA Rates:

COPA increased to \$0.0056/kWh effective 11/1/15.
COPA increased to \$0.0040/kWh effective 12/1/13.
COPA rate as of 11/21/13 was \$0.0024/kWh.

Appendix B
RATE DESIGN ANALYSIS

**Okanogan County PUD
2017 Electric System Rate Study
Existing and Proposed Rates**

Schedule No. 2 - Residential	Proposed Increase (1)	
	Existing Rates	September 2017
<u>Base Rates</u>		
Basic Charge (\$/month)	\$35.00	\$36.00
Energy Charge (\$/kWh)		
< 2,000 kWh	\$0.04486	\$0.04565
> 2,000 kWh	\$0.06513	\$0.06648
Percent Change in Class Revenue		2.0%
<u>Cost of Power Adjustment</u>	\$0.00560	\$0.00560

Notes

(1) Proposed rates effective September 1, 2017.

**Okanogan County PUD
2017 Electric System Rate Study
Existing and Proposed Rates**

	Existing Rates	Proposed Rate Change (1)	Proposed Rate Increase (1)
		September 2017	September 2017
Schedule No. 3 - Small General Service			
<u>Base Rates</u>			
Basic Charge (\$/month)	\$40.00	\$40.00	\$41.00
Energy Charge (\$/kWh)	\$0.05450	\$0.05600	\$0.05715
Demand Charge (\$/kW/month equals or exceed 50 kW)	\$5.50	\$5.50	\$5.70
Percent Change in Class Revenue		4.6%	2.0%
Percent Change in Total General Service Revenue		0.0%	2.0%
<u>Cost of Power Adjustment</u>	\$0.00560	\$0.00560	\$0.00560

Notes

(1) Proposed rates effective September 1, 2017.

**Okanogan County PUD
2017 Electric System Rate Study
Existing and Proposed Rates**

Schedule No. 3 - Large General Service	Existing	Proposed Rate Change (1)	Proposed Rate Increase (1)
	Rates	September 2017	September 2017
<u>Base Rates</u>			
Basic Charge (\$/month)	\$20.00	\$20.00	\$21.00
Energy Charge (\$/kWh)	\$0.04646	\$0.04646	\$0.04725
Demand Charge (\$/kW/month above 50 kW)	\$5.50	n/a	n/a
Demand Charge (\$/all kW/month)	n/a	\$5.50	\$5.70
Minimum Demand Charge (\$/month)	\$275.00	n/a	n/a
kW in Minimum Demand Charge	50	n/a	n/a
Power Factor Charge (2)	97.0%	97.0%	97.0%
Percent Change in Class Revenue		-1.8%	2.0%
Percent Change in Total General Service Revenue		0.0%	2.0%
<u>Cost of Power Adjustment</u>	\$0.00560	\$0.00560	\$0.00560

Notes

- (1) Proposed rates effective September 1, 2017.
- (2) For every percentage a customer's power factor is below 97 percent, the demand charge will increase 1.0 percent.

**Okanogan County PUD
2017 Electric System Rate Study
Existing and Proposed Rates**

	Existing Rates	Proposed Increase (1) September 2017
Schedule No. 4 - Primary Industrial Service		
<u>Base Rates</u>		
Basic Charge (\$/month)	\$80.00	\$82.00
Energy Charge (\$/kWh)	\$0.03728	\$0.03800
Demand Charge (\$/billed kW/month)	\$7.00	\$7.20
Minimum Demand Charge (\$/month)	\$7,000	\$7,200
kW in Minimum Demand Charge	1,000	1,000
Power Factor Charge (2)	97.0%	97.0%
Percent Change in Class Revenue		2.0%
<u>Cost of Power Adjustment</u>	\$0.00560	\$0.00560

Notes

- (1) Proposed rates effective September 1, 2017.
- (2) For every percentage a customer's power factor is below 97 percent, the demand charge will increase 1.0 percent.

**Okanogan County PUD
2017 Electric System Rate Study
Existing and Proposed Rates**

	Proposed Increase (1)	
Schedule No. 6 - Irrigation	Existing Rates	April 2018
<u>Base Rates (2)</u>		
Basic Charge (\$/month)	\$15.00	\$15.00
Demand Charge (\$/billed kW/month)	\$4.00	\$4.10
Seasonal Energy Charge	\$0.04450	\$0.04550
Inter-Seasonal Energy Charge	\$0.07004	\$0.07160
Percent Change in Class Revenue		2.0%
<u>Cost of Power Adjustment</u>	\$0.00560	\$0.00560

Notes

- (1) Proposed rates effective April 1, 2018.
- (2) Rate schedule is based on continuous service for the irrigation season of April 1 through October 31.

**Okanogan County PUD
2017 Electric System Rate Study
Existing and Proposed Rates**

	Proposed Increase (1)	
Schedule No. 7 - Frost Control	Existing Rates	June 2018
<u>Base Rates (2)</u>		
Basic Charge (\$/year)	\$120.00	\$122.00
Demand Charge (\$/billed kW)	\$4.50	\$4.60
Seasonal Energy Charge	\$0.03324	\$0.03365
Inter-Seasonal Energy Charge	\$0.07004	\$0.07160
Percent Change in Base Rate Revenue		2.0%
<u>Cost of Power Adjustment</u>	\$0.00560	\$0.00560

Notes

- (1) Proposed rates effective June 1, 2018.
- (2) Customers served under this customer class are billed annually in June.

**Okanogan County PUD
2017 Electric System Rate Study
Existing and Proposed Rates**

		Proposed Increase
	Existing	September
	Rates	2017
Schedule No. 8 - Street Lighting		
<u>Base Rates</u>		
Fixture Charge (\$/Fixture)		
8,000 Lumen (175 MVP or 100W HPS)	\$7.20	\$7.20
22,000 Lumen (400W MVP or 200W HPS)	10.90	10.90
Percent Change in Base Rate Revenue		0.0%

**Okanogan County PUD
2017 Bill Frequency Analysis**

Rate Adjustment Impact Assessment

District Customer Class Estimated Monthly Bills

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K)

Schedule No. 2 - Residential

Line No.	kWh per month	No. of Customers	% of Total	Cum. % of Total	Bill at Current Rates		Bill at TY 2017 Proposed		
					Cents per kWh	Amount	Change	Percent Change	
1	0	632	3.6%	3.6%	\$35.00		\$36.00	\$1.00	2.9%
2	100	1,064	6.1%	9.8%	40.05	40.05	41.13	1.08	2.7%
3	200	654	3.8%	13.6%	45.09	22.55	46.25	1.16	2.6%
4	300	633	3.7%	17.2%	50.14	16.71	51.38	1.24	2.5%
5	400	661	3.8%	21.0%	55.18	13.80	56.50	1.32	2.4%
6	500	729	4.2%	25.3%	60.23	12.05	61.63	1.40	2.3%
7	600	791	4.6%	29.8%	65.28	10.88	66.75	1.47	2.3%
8	700	838	4.8%	34.7%	70.32	10.05	71.88	1.55	2.2%
9	800	859	5.0%	39.6%	75.37	9.42	77.00	1.63	2.2%
10	900	831	4.8%	44.4%	80.41	8.93	82.13	1.71	2.1%
11	1,000	828	4.8%	49.2%	Avg. 85.46	8.55	87.25	1.79	2.1%
12	1,100	766	4.4%	53.6%	90.51	8.23	92.38	1.87	2.1%
13	1,200	721	4.2%	57.8%	95.55	7.96	97.50	1.95	2.0%
14	1,300	641	3.7%	61.5%	100.60	7.74	102.63	2.03	2.0%
15	1,400	602	3.5%	65.0%	105.64	7.55	107.75	2.11	2.0%
16	1,500	536	3.1%	68.1%	110.69	7.38	112.88	2.19	2.0%
17	1,600	491	2.8%	70.9%	115.74	7.23	118.00	2.26	2.0%
18	1,700	428	2.5%	73.4%	120.78	7.10	123.13	2.34	1.9%
19	1,800	402	2.3%	75.7%	125.83	6.99	128.25	2.42	1.9%
20	1,900	362	2.1%	77.8%	130.87	6.89	133.38	2.50	1.9%
21	2,000	333	1.9%	79.7%	135.92	6.80	138.50	2.58	1.9%
22	2,250	687	4.0%	83.7%	153.60	6.83	156.52	2.92	1.9%
23	2,500	558	3.2%	86.9%	171.29	6.85	174.54	3.26	1.9%
24	2,750	440	2.5%	89.4%	188.97	6.87	192.56	3.59	1.9%
25	3,000	374	2.2%	91.6%	206.65	6.89	210.58	3.93	1.9%
26	3,250	293	1.7%	93.3%	224.33	6.90	228.60	4.27	1.9%
27	3,500	231	1.3%	94.6%	242.02	6.91	246.62	4.61	1.9%
28	3,750	186	1.1%	95.7%	259.70	6.93	264.64	4.94	1.9%
29	4,000	151	0.9%	96.6%	277.38	6.93	282.66	5.28	1.9%
30	4,250	119	0.7%	97.2%	295.06	6.94	300.68	5.62	1.9%
31	4,500	98	0.6%	97.8%	312.75	6.95	318.70	5.96	1.9%
32	4,750	74	0.4%	98.2%	330.43	6.96	336.72	6.29	1.9%
33	5,000	60	0.3%	98.6%	348.11	6.96	354.74	6.63	1.9%
34	5,250	50	0.3%	98.9%	365.79	6.97	372.76	6.97	1.9%
35	5,500	38	0.2%	99.1%	383.48	6.97	390.78	7.31	1.9%
36	5,750	30	0.2%	99.3%	401.16	6.98	408.80	7.64	1.9%
37	6,000	25	0.1%	99.4%	418.84	6.98	426.82	7.98	1.9%
38	6,250	17	0.1%	99.5%	436.52	6.98	444.84	8.32	1.9%
39	6,500	14	0.1%	99.6%	454.21	6.99	462.86	8.66	1.9%
40	6,750	13	0.1%	99.7%	471.89	6.99	480.88	8.99	1.9%
41	6,751-8,000	31	0.2%	99.8%	560.30	7.00	570.98	10.68	1.9%
42	8,001-9,000	13	0.1%	99.9%	631.03	7.01	643.06	12.03	1.9%
43	9,001-10,000	8	0.0%	100.0%	701.76	7.02	715.14	13.38	1.9%
44	>10,000	8	0.0%	100.0%	701.76	7.02	715.14	13.38	1.9%
45		17,319							

Note: Based on 2016 billing data.

**Okanogan County PUD
2017 Bill Frequency Analysis**

Rate Adjustment Impact Assessment

District Customer Class Estimated Monthly Bills

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
Schedule No. 3A - Small General Service															
Line No.	kWh per month	No. of Customers	% of Total	Cum. % of Total	kW per Month	Load Factor		Bill at Current Rates	Cents per kWh	Bill with Proposed Rate Change	Amount Change	Percent Change	Bill with Proposed Rate Increase	Amount Change	Percent Change
1	0	152	6.80%	6.8%	0.0	28.6%		\$40.00		\$40.00	\$0.00	0.0%	\$41.00	\$1.00	2.5%
2	250	464	20.75%	27.5%	1.2	28.6%		55.03	22.01	55.40	0.38	0.7%	56.69	1.66	3.0%
3	500	213	9.54%	37.1%	2.4	28.6%		70.05	14.01	70.80	0.75	1.1%	72.38	2.33	3.3%
4	750	168	7.53%	44.6%	3.6	28.6%		85.08	11.34	86.20	1.13	1.3%	88.06	2.99	3.5%
5	1,000	144	6.42%	51.0%	4.8	28.6%	Avg.	100.10	10.01	101.60	1.50	1.5%	103.75	3.65	3.6%
6	1,500	228	10.20%	61.2%	7.2	28.6%		130.15	8.68	132.40	2.25	1.7%	135.13	4.97	3.8%
7	2,000	159	7.12%	68.4%	9.6	28.6%		160.20	8.01	163.20	3.00	1.9%	166.50	6.30	3.9%
8	2,500	115	5.15%	73.5%	12.0	28.6%		190.25	7.61	194.00	3.75	2.0%	197.88	7.63	4.0%
9	3,000	91	4.08%	77.6%	14.4	28.6%		220.30	7.34	224.80	4.50	2.0%	229.25	8.95	4.1%
10	3,500	72	3.23%	80.8%	16.8	28.6%		250.35	7.15	255.60	5.25	2.1%	260.63	10.28	4.1%
11	4,000	60	2.69%	83.5%	19.2	28.6%		280.40	7.01	286.40	6.00	2.1%	292.00	11.60	4.1%
12	4,500	49	2.18%	85.7%	21.6	28.6%		310.45	6.90	317.20	6.75	2.2%	323.38	12.93	4.2%
13	5,000	38	1.70%	87.4%	24.0	28.6%		340.50	6.81	348.00	7.50	2.2%	354.75	14.25	4.2%
14	5,500	32	1.42%	88.8%	26.4	28.6%		370.55	6.74	378.80	8.25	2.2%	386.13	15.58	4.2%
15	6,000	28	1.26%	90.1%	28.8	28.6%		400.60	6.68	409.60	9.00	2.2%	417.50	16.90	4.2%
16	6,500	27	1.23%	91.3%	31.2	28.6%		430.65	6.63	440.40	9.75	2.3%	448.88	18.23	4.2%
17	7,000	22	0.97%	92.3%	33.6	28.6%		460.70	6.58	471.20	10.50	2.3%	480.25	19.55	4.2%
18	7,500	21	0.94%	93.2%	36.0	28.6%		490.75	6.54	502.00	11.25	2.3%	511.63	20.88	4.3%
19	8,000	19	0.83%	94.0%	38.4	28.6%		520.80	6.51	532.80	12.00	2.3%	543.00	22.20	4.3%
20	8,500	17	0.75%	94.8%	40.8	28.6%		550.85	6.48	563.60	12.75	2.3%	574.38	23.53	4.3%
21	9,000	14	0.63%	95.4%	43.2	28.6%		580.90	6.45	594.40	13.50	2.3%	605.75	24.85	4.3%
22	9,500	13	0.58%	96.0%	45.6	28.6%		610.95	6.43	625.20	14.25	2.3%	637.13	26.18	4.3%
23	10,000	11	0.48%	96.5%	48.0	28.6%		641.00	6.41	656.00	15.00	2.3%	668.50	27.50	4.3%
24	11,000	16	0.70%	97.2%	52.8	28.6%		991.33	9.01	1,007.83	16.50	1.7%	1,032.03	40.70	4.1%
25	12,000	12	0.54%	97.7%	57.6	28.6%		1,077.81	8.98	1,095.81	18.00	1.7%	1,122.12	44.31	4.1%
26	13,000	12	0.53%	98.2%	62.4	28.6%		1,164.30	8.96	1,183.80	19.50	1.7%	1,212.22	47.92	4.1%
27	14,000	8	0.35%	98.6%	67.2	28.6%		1,250.78	8.93	1,271.78	21.00	1.7%	1,302.31	51.53	4.1%
28	15,000	6	0.25%	98.8%	72.0	28.6%		1,337.26	8.92	1,359.76	22.50	1.7%	1,392.41	55.14	4.1%
29	16,000	5	0.21%	99.0%	76.8	28.6%		1,423.75	8.90	1,447.75	24.00	1.7%	1,482.50	58.75	4.1%
30	17,000	4	0.18%	99.2%	81.6	28.6%		1,510.23	8.88	1,535.73	25.50	1.7%	1,572.59	62.36	4.1%
31	18,000	3	0.12%	99.3%	86.3	28.6%		1,596.72	8.87	1,623.72	27.00	1.7%	1,662.69	65.97	4.1%
32	19,000	3	0.12%	99.5%	91.1	28.6%		1,683.20	8.86	1,711.70	28.50	1.7%	1,752.78	69.58	4.1%
33	20,000	2	0.10%	99.6%	95.9	28.6%		1,769.69	8.85	1,799.69	30.00	1.7%	1,842.87	73.19	4.1%
34	21,000	2	0.07%	99.6%	100.7	28.6%		1,856.17	8.84	1,887.67	31.50	1.7%	1,932.97	76.80	4.1%
35	22,000	2	0.07%	99.7%	105.5	28.6%		1,942.65	8.83	1,975.65	33.00	1.7%	2,023.06	80.41	4.1%
36	23,000	1	0.05%	99.8%	110.3	28.6%		2,029.14	8.82	2,063.64	34.50	1.7%	2,113.16	84.02	4.1%
37	24,000	1	0.02%	99.8%	115.1	28.6%		2,115.62	8.82	2,151.62	36.00	1.7%	2,203.25	87.63	4.1%
38	25,000	0	0.01%	99.8%	119.9	28.6%		2,202.11	8.81	2,239.61	37.50	1.7%	2,293.34	91.24	4.1%
39	26,000	0	0.01%	99.8%	124.7	28.6%		2,288.59	8.80	2,327.59	39.00	1.7%	2,383.44	94.85	4.1%
40	27,000	0	0.00%	99.8%	129.5	28.6%		2,375.08	8.80	2,415.58	40.50	1.7%	2,473.53	98.45	4.1%
41	28,000	0	0.02%	99.8%	134.3	28.6%		2,461.56	8.79	2,503.56	42.00	1.7%	2,563.62	102.06	4.1%
42	29,000	0	0.00%	99.8%	139.1	28.6%		2,548.04	8.79	2,591.54	43.50	1.7%	2,653.72	105.67	4.1%
43	30,000	4	0.18%	100.0%	143.9	28.6%		2,634.53	8.78	2,679.53	45.00	1.7%	2,743.81	109.28	4.1%
		2,235													

Note: Based on 2016 billing data.

**Okanogan County PUD
2017 Bill Frequency Analysis**

Rate Adjustment Impact Assessment

District Customer Class Estimated Monthly Bills

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
Schedule No. 3B - Large General Service															
Line No.	kWh per month	No. of Customers	% of Total	Cum. % of Total	kW per Month	Load Factor	Bill at Current Rates	Cents per kWh	Bill with Proposed Rate Change	Amount Change	Percent Change	Bill with Proposed Rate Increase	Amount Change	Percent Change	
1	0	5	1.7%	1.75%	0.0	46.3%	\$295.00		\$20.00	-\$275.00	-93.2%	\$21.00	-\$274.00	-92.9%	
2	1,000	10	3.5%	5.28%	3.0	46.3%	347.06	34.71	88.33	-258.73	-74.6%	90.71	-256.35	-73.9%	
3	2,000	7	2.7%	7.98%	5.9	46.3%	399.12	19.96	156.65	-242.47	-60.8%	160.42	-238.70	-59.8%	
4	3,000	7	2.6%	10.62%	8.9	46.3%	451.18	15.04	224.98	-226.20	-50.1%	230.12	-221.06	-49.0%	
5	4,000	8	2.8%	13.41%	11.8	46.3%	503.24	12.58	293.31	-209.93	-41.7%	299.83	-203.41	-40.4%	
6	5,000	9	3.3%	16.66%	14.8	46.3%	555.30	11.11	361.63	-193.67	-34.9%	369.54	-185.76	-33.5%	
7	6,000	9	3.3%	20.01%	17.7	46.3%	607.36	10.12	429.96	-177.40	-29.2%	439.25	-168.11	-27.7%	
8	7,000	7	2.4%	22.40%	20.7	46.3%	659.42	9.42	498.29	-161.13	-24.4%	508.96	-150.46	-22.8%	
9	8,000	6	2.2%	24.64%	23.7	46.3%	711.48	8.89	566.61	-144.87	-20.4%	578.67	-132.81	-18.7%	
10	9,000	7	2.4%	27.06%	26.6	46.3%	763.54	8.48	634.94	-128.60	-16.8%	648.37	-115.17	-15.1%	
11	10,000	7	2.6%	29.67%	29.6	46.3%	815.60	8.16	703.27	-112.33	-13.8%	718.08	-97.52	-12.0%	
12	15,000	29	10.5%	40.20%	44.4	46.3%	1,075.90	7.17	1,044.90	-31.00	-2.9%	1,066.62	-9.28	-0.9%	
13	20,000	21	7.9%	48.08%	59.2	46.3% Avg.	1,386.53	6.93	1,386.53	0.00	0.0%	1,415.17	28.63	2.1%	
14	25,000	17	6.4%	54.50%	73.9	46.3%	1,728.17	6.91	1,728.17	0.00	0.0%	1,763.71	35.54	2.1%	
15	30,000	16	5.8%	60.29%	88.7	46.3%	2,069.80	6.90	2,069.80	0.00	0.0%	2,112.25	42.45	2.1%	
16	35,000	12	4.3%	64.56%	103.5	46.3%	2,411.44	6.89	2,411.44	0.00	0.0%	2,460.79	49.35	2.0%	
17	40,000	9	3.2%	67.75%	118.3	46.3%	2,753.07	6.88	2,753.07	0.00	0.0%	2,809.33	56.26	2.0%	
18	45,000	9	3.5%	71.22%	133.1	46.3%	3,094.70	6.88	3,094.70	0.00	0.0%	3,157.87	63.17	2.0%	
19	50,000	7	2.5%	73.73%	147.9	46.3%	3,436.34	6.87	3,436.34	0.00	0.0%	3,506.41	70.08	2.0%	
20	55,000	6	2.3%	76.00%	162.7	46.3%	3,777.97	6.87	3,777.97	0.00	0.0%	3,854.95	76.98	2.0%	
21	60,000	6	2.1%	78.09%	177.5	46.3%	4,119.60	6.87	4,119.60	0.00	0.0%	4,203.50	83.89	2.0%	
22	65,000	5	1.8%	79.87%	192.2	46.3%	4,461.24	6.86	4,461.24	0.00	0.0%	4,552.04	90.80	2.0%	
23	70,000	4	1.6%	81.44%	207.0	46.3%	4,802.87	6.86	4,802.87	0.00	0.0%	4,900.58	97.71	2.0%	
24	75,000	3	1.0%	82.42%	221.8	46.3%	5,144.51	6.86	5,144.51	0.00	0.0%	5,249.12	104.61	2.0%	
25	80,000	3	1.0%	83.43%	236.6	46.3%	5,486.14	6.86	5,486.14	0.00	0.0%	5,597.66	111.52	2.0%	
26	85,000	3	1.0%	84.44%	251.4	46.3%	5,827.77	6.86	5,827.77	0.00	0.0%	5,946.20	118.43	2.0%	
27	90,000	3	0.9%	85.36%	266.2	46.3%	6,169.41	6.85	6,169.41	0.00	0.0%	6,294.74	125.34	2.0%	
28	95,000	3	1.2%	86.56%	281.0	46.3%	6,511.04	6.85	6,511.04	0.00	0.0%	6,643.28	132.24	2.0%	
29	100,000	3	1.0%	87.54%	295.8	46.3%	6,852.67	6.85	6,852.67	0.00	0.0%	6,991.83	139.15	2.0%	
30	125,000	10	3.5%	91.07%	369.7	46.3%	8,560.84	6.85	8,560.84	0.00	0.0%	8,734.53	173.69	2.0%	
31	150,000	5	2.0%	93.03%	443.6	46.3%	10,269.01	6.85	10,269.01	0.00	0.0%	10,477.24	208.23	2.0%	
32	175,000	5	1.8%	94.85%	517.6	46.3%	11,977.18	6.84	11,977.18	0.00	0.0%	12,219.94	242.77	2.0%	
33	200,000	2	0.8%	95.64%	591.5	46.3%	13,685.35	6.84	13,685.35	0.00	0.0%	13,962.65	277.30	2.0%	
34	225,000	2	0.8%	96.41%	665.5	46.3%	15,393.52	6.84	15,393.52	0.00	0.0%	15,705.36	311.84	2.0%	
35	250,000	2	0.6%	96.96%	739.4	46.3%	17,101.68	6.84	17,101.68	0.00	0.0%	17,448.06	346.38	2.0%	
36	275,000	2	0.6%	97.51%	813.3	46.3%	18,809.85	6.84	18,809.85	0.00	0.0%	19,190.77	380.92	2.0%	
37	300,000	1	0.4%	97.94%	887.3	46.3%	20,518.02	6.84	20,518.02	0.00	0.0%	20,933.48	415.46	2.0%	
38	325,000	1	0.2%	98.13%	961.2	46.3%	22,226.19	6.84	22,226.19	0.00	0.0%	22,676.18	449.99	2.0%	
39	350,000	1	0.4%	98.56%	1,035.2	46.3%	23,934.36	6.84	23,934.36	0.00	0.0%	24,418.89	484.53	2.0%	
40	375,000	1	0.5%	99.08%	1,109.1	46.3%	25,642.53	6.84	25,642.53	0.00	0.0%	26,161.60	519.07	2.0%	
41	400,000	2	0.6%	99.69%	1,183.0	46.3%	27,350.69	6.84	27,350.69	0.00	0.0%	27,904.30	553.61	2.0%	
42	425,000	1	0.3%	100.00%	1,257.0	46.3%	29,058.86	6.84	29,058.86	0.00	0.0%	29,647.01	588.15	2.0%	

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Note: Based on 2016 billing data.

**Okanogan County PUD
2017 Bill Frequency Analysis**

Rate Adjustment Impact Assessment

District Customer Class Estimated Monthly Bills

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J)

Schedule No. 4 - Primary Industrial Service

Line No.	kWh per month	No. of Customers	kW per Month	Load Factor	Bill at Current Rates		Bill at TY 2017 Proposed		
					Cents per kWh	Amount	Change	Percent Change	
1	25,000	0	68	50.0%	\$8,152	32.61	\$8,372	\$220	2.7%
2	50,000	0	137	50.0%	9,224	18.45	9,462	238	2.6%
3	75,000	0	205	50.0%	10,296	13.73	10,552	256	2.5%
4	100,000	0	274	50.0%	11,368	11.37	11,642	274	2.4%
5	125,000	0	342	50.0%	12,440	9.95	12,732	292	2.3%
6	150,000	0	411	50.0%	13,512	9.01	13,822	310	2.3%
7	175,000	0	479	50.0%	14,584	8.33	14,912	328	2.2%
8	200,000	0	548	50.0%	15,656	7.83	16,002	346	2.2%
9	225,000	0	616	50.0%	16,728	7.43	17,092	364	2.2%
10	250,000	0	685	50.0%	17,800	7.12	18,182	382	2.1%
11	275,000	0	753	50.0%	18,872	6.86	19,272	400	2.1%
12	300,000	0	822	50.0%	19,944	6.65	20,362	418	2.1%
13	325,000	0	890	50.0%	21,016	6.47	21,452	436	2.1%
14	350,000	1	1,189	40.3%	23,411	6.69	23,903	492	2.1%
15	375,000	0	1,027	50.0%	23,352	6.23	23,829	477	2.0%
16	400,000	0	1,096	50.0%	24,903	6.23	25,412	509	2.0%
17	425,000	0	1,164	50.0%	26,455	6.22	26,996	541	2.0%
18	450,000	0	1,233	50.0%	28,006	6.22	28,579	573	2.0%
19	475,000	0	1,301	50.0%	29,558	6.22	30,162	604	2.0%
20	500,000	0	1,370	50.0%	31,109	6.22	31,745	636	2.0%
21	550,000	0	1,507	50.0%	34,212	6.22	34,911	699	2.0%
22	600,000	0	1,644	50.0%	37,315	6.22	38,078	763	2.0%
23	650,000	0	1,781	50.0%	40,418	6.22	41,244	826	2.0%
24	700,000	0	1,918	50.0%	43,521	6.22	44,410	890	2.0%
25	750,000	0	2,055	50.0%	46,624	6.22	47,577	953	2.0%
26	800,000	0	2,192	50.0%	49,726	6.22	50,743	1,016	2.0%
27	850,000	1	1,722	50.0%	48,582	5.72	49,540	958	2.0%
28	900,000	0	2,466	50.0%	55,932	6.21	57,075	1,143	2.0%
29	950,000	0	2,603	50.0%	59,035	6.21	60,242	1,207	2.0%
30	1,000,000	0	2,740	50.0%	62,138	6.21	63,408	1,270	2.0%
31	1,100,000	0	3,014	50.0%	68,344	6.21	69,741	1,397	2.0%
32	1,200,000	0	3,288	50.0%	74,550	6.21	76,073	1,524	2.0%
33	1,300,000	0	3,562	50.0%	80,756	6.21	82,406	1,650	2.0%
34	1,400,000	0	3,836	50.0%	86,961	6.21	88,738	1,777	2.0%
35	1,500,000	0	4,110	50.0%	93,167	6.21	95,071	1,904	2.0%
36	1,750,000	0	4,795	50.0%	108,682	6.21	110,903	2,221	2.0%
37	2,000,000	0	5,479	50.0%	124,196	6.21	126,734	2,538	2.0%
38	2,250,000	0	6,164	50.0%	139,711	6.21	142,566	2,855	2.0%
39	2,500,000	0	6,849	50.0%	155,225	6.21	158,397	3,172	2.0%
40	2,750,000	0	7,534	50.0%	170,740	6.21	174,229	3,489	2.0%
41	3,000,000	0	1,776	50.0%	141,150	4.70	143,667	2,517	1.8%

Note: Schedule No. 4 only serves two customers. Other usage levels are shown for reference. This analysis does not include the customer served under the "New Single Large Load" customer class.

**Okanogan County PUD
2017 Bill Frequency Analysis**

Rate Adjustment Impact Assessment

District Customer Class Estimated Monthly Bills

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M)

Schedule No. 6 - Irrigation

Line No.	kWh per month	No. of Customers	% of Total	Cum. % of Total	kW per Month	Load Factor	Bill at Current Rates	Cents per kWh	Bill at TY 2017 Proposed	Amount Change	Percent Change
1	0	270	22.0%	22.0%	0	38.2%	\$15.00		\$15.00	\$0.00	0.0%
2	500	227	18.6%	40.6%	2	38.2%	47.22	9.44	47.90	0.68	1.4%
3	1,000	89	7.3%	47.8%	4	38.2%	79.44	7.94	80.80	1.36	1.7%
4	1,500	70	5.7%	53.5%	5	38.2%	Avg. 111.67	7.44	113.70	2.04	1.8%
5	2,000	58	4.7%	58.2%	7	38.2%	143.89	7.19	146.61	2.72	1.9%
6	2,500	45	3.6%	61.8%	9	38.2%	176.11	7.04	179.51	3.40	1.9%
7	3,000	40	3.3%	65.1%	11	38.2%	208.33	6.94	212.41	4.08	2.0%
8	3,500	37	3.0%	68.2%	13	38.2%	240.55	6.87	245.31	4.76	2.0%
9	4,000	30	2.5%	70.6%	14	38.2%	272.78	6.82	278.21	5.43	2.0%
10	4,500	26	2.1%	72.7%	16	38.2%	305.00	6.78	311.11	6.11	2.0%
11	5,000	23	1.9%	74.6%	18	38.2%	337.22	6.74	344.01	6.79	2.0%
12	5,500	21	1.7%	76.3%	20	38.2%	369.44	6.72	376.91	7.47	2.0%
13	6,000	21	1.7%	78.0%	22	38.2%	401.66	6.69	409.82	8.15	2.0%
14	6,500	17	1.4%	79.4%	23	38.2%	433.89	6.68	442.72	8.83	2.0%
15	7,000	16	1.3%	80.7%	25	38.2%	466.11	6.66	475.62	9.51	2.0%
16	7,500	15	1.2%	82.0%	27	38.2%	498.33	6.64	508.52	10.19	2.0%
17	8,000	11	0.9%	82.9%	29	38.2%	530.55	6.63	541.42	10.87	2.0%
18	8,500	12	1.0%	83.8%	30	38.2%	562.77	6.62	574.32	11.55	2.1%
19	9,000	11	0.9%	84.7%	32	38.2%	595.00	6.61	607.22	12.23	2.1%
20	9,500	7	0.6%	85.3%	34	38.2%	627.22	6.60	640.13	12.91	2.1%
21	10,000	11	0.9%	86.2%	36	38.2%	659.44	6.59	673.03	13.59	2.1%
22	25,000	111	9.1%	95.3%	90	38.2%	1,626.10	6.50	1,660.07	33.97	2.1%
23	40,000	22	1.8%	97.0%	143	38.2%	2,592.76	6.48	2,647.11	54.34	2.1%
24	55,000	9	0.7%	97.7%	197	38.2%	3,559.43	6.47	3,634.15	74.72	2.1%
25	70,000	6	0.5%	98.3%	251	38.2%	4,526.09	6.47	4,621.19	95.10	2.1%
26	85,000	3	0.2%	98.5%	305	38.2%	5,492.75	6.46	5,608.23	115.48	2.1%
27	100,000	3	0.2%	98.7%	359	38.2%	6,459.41	6.46	6,595.27	135.86	2.1%
28	115,000	1	0.1%	98.8%	412	38.2%	7,426.07	6.46	7,582.31	156.24	2.1%
29	130,000	2	0.2%	99.0%	466	38.2%	8,392.73	6.46	8,569.35	176.62	2.1%
30	145,000	2	0.1%	99.2%	520	38.2%	9,359.40	6.45	9,556.39	197.00	2.1%
31	160,000	1	0.0%	99.2%	574	38.2%	10,326.06	6.45	10,543.43	217.38	2.1%
32	175,000	1	0.0%	99.3%	628	38.2%	11,292.72	6.45	11,530.48	237.76	2.1%
33	190,000	1	0.0%	99.3%	681	38.2%	12,259.38	6.45	12,517.52	258.13	2.1%
34	205,000	1	0.0%	99.3%	735	38.2%	13,226.04	6.45	13,504.56	278.51	2.1%
35	220,000	1	0.0%	99.4%	789	38.2%	14,192.71	6.45	14,491.60	298.89	2.1%
36	235,000	0	0.0%	99.4%	843	38.2%	15,159.37	6.45	15,478.64	319.27	2.1%
37	>250,000	7	0.6%	100.0%	897	38.2%	16,126.03	6.86	16,465.68	339.65	2.1%
		1,225									

Note: Based on 2016 billing data.

**Okanogan County PUD
2017 Bill Frequency Analysis**

Rate Adjustment Impact Assessment

District Customer Class Estimated Annual Bills

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L)

Schedule No. 7 - Frost Control

Line No.	Annual kWh	No. of Customers	% of Total	Cum. % of Total	Annual kW per Customer	Bill at Current Rates	Cents per kWh	Bill at TY 2017 Proposed	Amount Change	Percent Change
1	0	24	15.9%	15.9%	0.0	\$120.00		\$122.00	\$2.00	1.7%
2	100	27	17.9%	33.8%	20.8	217.58	217.58	221.71	4.12	1.9%
3	200	15	9.9%	43.7%	64.9	419.79	209.89	428.36	8.57	2.0%
4	300	7	4.6%	48.3%	107.1	613.49	204.50	626.32	12.83	2.1%
5	400	13	8.6%	57.0%	99.0 Avg.	581.11	145.28	593.17	12.07	2.1%
6	500	10	6.6%	63.6%	71.2	460.00	92.00	469.33	9.33	2.0%
7	750	11	7.3%	70.9%	82.3	519.33	69.24	529.87	10.53	2.0%
8	1,000	9	6.0%	76.8%	100.2	609.58	60.96	622.01	12.43	2.0%
9	1,500	17	11.3%	88.1%	119.2	714.86	47.66	729.40	14.54	2.0%
10	2,000	7	4.6%	92.7%	72.3	522.84	26.14	532.88	10.05	1.9%
11	2,500	1	0.7%	93.4%	75.2	555.41	22.22	565.95	10.54	1.9%
12	3,000	3	2.0%	95.4%	124.2	795.50	26.52	811.15	15.65	2.0%
13	3,500	2	1.3%	96.7%	47.3	468.81	13.39	476.98	8.17	1.7%
14	4,000	1	0.7%	97.4%	78.0	626.18	15.65	637.62	11.44	1.8%
15	4,500	0	0.0%	97.4%	0.0	294.78	6.55	298.63	3.84	1.3%
16	5,000	1	0.7%	98.0%	159.6	1,032.18	20.64	1,052.18	20.00	1.9%
17	5,500	0	0.0%	98.0%	0.0	333.62	6.07	337.88	4.26	1.3%
18	6,000	1	0.7%	98.7%	169.4	1,115.52	18.59	1,136.92	21.40	1.9%
19	6,500	1	0.7%	99.3%	6.5	401.85	6.18	407.16	5.32	1.3%
20	7,000	0	0.0%	99.3%	0.0	391.88	5.60	396.75	4.87	1.2%
21	7,500	0	0.0%	99.3%	0.0	411.30	5.48	416.38	5.08	1.2%
22	8,000	0	0.0%	99.3%	0.0	430.72	5.38	436.00	5.28	1.2%
23	8,500	1	0.7%	100.0%	18.3	532.63	6.27	539.94	7.32	1.4%
24	9,000	0	0.0%	100.0%	0.0	469.56	5.22	475.25	5.69	1.2%
25	9,500	0	0.0%	100.0%	0.0	488.98	5.15	494.88	5.90	1.2%
26	>10,001	0	0.0%	100.0%	0.0	508.44	5.08	514.54	6.10	1.2%

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Note: Customers served under this rate schedule are billed once annually in June. This analysis shows the estimated annual bill.

Okanogan County PUD
2017 Electric Rate Study
Revenue Adequacy Analysis
Rate Design

Line	2017 Billing Determinants	Existing Rates		Revised Billing Determinants	Proposed GS Rate Change			Existing/Proposed Rate Revenues			Proposed Rate Increase		
		Jan - Dec			Sept - Dec			Jan -Aug, Sep - Dec			Jan - Dec		
		Rates	Revenue		Rates	Revenue	% Change	Rates	Revenue	% Change	Rates	Revenue	% Change
Schedule No. 2 - Residential													
1	Basic Charge \$ per month	205,671	\$35.00 \$7,198,493						\$7,267,050	1.0%	\$36.00	\$7,404,165	2.9%
2	Energy charge												
3	0-2,000 kWh \$ per kWh	227,308,168	0.04486 10,197,044						10,256,902	0.6%	0.04565	10,376,618	1.8%
4	> 2,000 kWh \$ per kWh	54,731,548	0.06513 3,564,666						3,589,295	0.7%	0.06648	3,638,553	2.1%
5	Subtotal	282,039,716	\$20,960,204						\$21,113,248	0.7%		\$21,419,336	2.2%
6	COPA	282,039,716	0.00560 1,579,422						1,579,422	0.0%	0.00560	1,579,422	0.0%
7	Total revenue		\$22,539,626						\$22,692,670	0.7%		\$22,998,758	2.0%
8	Revenue adjustment factor		0.0%										
9	Total revenue		\$22,539,626										
10													
Schedule No. 3 - Small General Service													
12	Basic Charge \$ per month	25,809	\$40.00 \$1,032,360	25,963	\$40.00	\$1,038,528	0.6%		\$1,040,963	0.8%	\$41.00	\$1,064,491	3.1%
13	Energy Charge - All Usage												
14	All Usage \$ per kWh	59,707,107	0.05450 3,254,037	60,887,162	0.05600	3,409,681	4.8%		3,306,779	1.6%	0.05715	3,479,701	6.9%
15		59,707,107											
16	Demand Charge > 50 kW \$ per kW-mo	6,640	5.50 36,520	15,245	5.50	83,849	129.6%		36,963	1.2%	5.70	86,898	137.9%
17	Subtotal		\$4,322,917			\$4,532,058	4.8%		\$4,384,704	1.4%		\$4,631,091	7.1%
18	COPA	59,707,107	0.00560 334,360	60,887,162	0.00560	340,968	2.0%		334,360	0.0%	0.00560	340,968	0.0%
19	Total revenue		\$4,657,277			\$4,873,026	4.6%		\$4,719,064	1.3%		\$4,972,059	6.8%
20	Revenue adjustment factor		0.0%										
21	Total EMP revenue		\$4,657,956										2.0%
22													
Schedule No. 3 - General Service (Large Power)													
24	Basic Charge \$ per month	4,184	\$20.00 \$83,680	3,980	\$20.00	\$79,602	-4.9%		\$85,075	1.7%	\$21.00	\$83,582	-0.1%
25	Energy Charge \$ per kWh	167,150,809	0.04646 7,765,827	165,970,754	0.04646	7,711,001	-0.7%		7,809,843	0.6%	0.04725	7,842,118	1.0%
26	Demand Charge All kW \$ per kW-mo	452,056	5.50 2,486,308										
27	Demand Charge All kW \$ per kW-mo	475,156	5.50	469,334	5.50	2,581,339	0.0382216		2,645,038	-3.1%	5.70	2,675,206	-2.0%
28	Minimum Demand Charge \$ per Month	881	275.00 242,275		0.00	0	-100.0%		161,517		0.00	0	
29	Subtotal		\$10,578,090			\$10,371,942	-1.9%		\$10,701,472	1.2%		\$10,600,906	0.2%
30	COPA	167,150,809	0.00560 936,045	165,970,754	0.00560	929,436	-0.7%		936,045	0.0%	0.00560	929,436	-0.7%
31	Total revenue		\$11,514,134			\$11,301,378	-1.8%		\$11,637,517	1.1%		\$11,530,342	0.1%
32	Revenue adjustment factor		0.0%										
33	Total EMP revenue		\$11,514,133										2.0%
34													
35	Total General Service Revenues		\$16,171,411			\$16,174,404	0.0%		\$16,356,581	1.1%		\$16,502,400	2.0%
36													
Schedule No. 4 - Primary Industrial Service													
38	Basic Charge \$ per month	24	\$80.00 \$1,920						\$1,936	0.8%	\$82.00	\$1,968	2.5%
39	Energy Charge \$ per kWh	17,070,118	0.03728 636,374						640,471	0.6%	0.03800	648,665	1.9%
40	Demand Charge \$ per kW	38,984	7.00 272,885						275,484	1.0%	7.20	280,682	2.9%
41	Minimum Demand Charge \$ per month	0	7,000 0						0		7,200	0	
42	Subtotal		\$911,179						\$917,891	0.7%		\$931,314	2.2%
43	COPA	17,070,118	0.00560 95,593						95,593	0.0%	0.00560	95,593	0.0%
44	CIPV Credit		0						0			0	
45	Total with CIPV Credit		\$1,006,772						\$1,013,483	0.7%		\$1,026,907	2.0%
46	Revenue adjustment factor		0.0%										
47	Total EMP revenue		\$1,006,781										
48													
49	Partial Year Rate Increase - Base Rates												
50	Revenue requirement												
51	Percent Base rate change												
52													

**Okanogan County PUD
2017 Electric Rate Study
Revenue Adequacy Analysis
Rate Design**

Line	2017 Billing Determinants	Existing Rates		Revised Billing Determinants	Proposed GS Rate Change			Existing/Proposed Rate Revenues			Proposed Rate Increase		
		Jan - Dec			Sept - Dec			Jan -Aug, Sep - Dec			Jan - Dec		
		Rates	Revenue		Rates	Revenue	% Change	Rates	Revenue	% Change	Rates	Revenue	% Change
53	Schedule No. 6 - Irrigation												
54													
55	Basic Charge	\$ per month	8,484	\$15.00	\$127,260			\$127,260	0.0%	\$15.00	\$127,260	0.0%	
56	Demand Charge	\$ per kW	202,156	4.00	808,624			815,363	0.8%	4.10	828,840	2.5%	
57	Seasonal Energy Charge	\$ per kWh	68,140,943	0.04450	3,032,272			3,054,986	0.7%	0.04550	3,100,413	2.2%	
58	Inter-Seasonal Energy Charge	\$ per kWh	2,816,417	0.07004	197,262			198,726	0.7%	0.07160	201,655	2.2%	
59	Subtotal				\$4,165,418			\$4,196,335	0.7%		\$4,258,168	2.2%	
60	COPA		70,957,360	0.00560	397,361			397,361	0.0%	0.00560	397,361	0.0%	
61	Total revenue				\$4,562,779			\$4,593,696	0.7%		\$4,655,529	2.0%	
62	Revenue adjustment factor				-0.1%								
63	Total EMP revenue				\$4,556,759								
64													
65	Schedule No. 7 - Frost Control												
66	Basic Charge	\$ per year	145	\$120.00	\$17,400			\$17,497	0.6%	\$122.00	\$17,690	1.7%	
67	Demand Charge	\$ per kW	9,669	4.50	43,511			43,833	0.7%	4.60	44,477	2.2%	
68	Seasonal Energy Charge	\$ per kWh	85,862	0.03324	2,854			2,866	0.4%	0.03365	2,889	1.2%	
69	Inter-Seasonal Energy Charge	\$ per kWh	23,596	0.07004	1,653			1,665	0.7%	0.07160	1,689	2.2%	
70	Subtotal				\$65,417			\$65,860	0.7%		\$66,746	2.0%	
71	COPA		109,458	0.00560	613			613	0.0%	0.00560	613	0.0%	
72	Total revenue				\$66,030			\$66,473	0.7%		\$67,359	2.0%	
73	Revenue adjustment factor				0.2%								
74	Total EMP revenue				\$66,161								
75													
76	Schedule No. 8 - Street Lighting												
77	Fixture Charge												
78	3500 Lumen	\$/month/light	0	\$7.20	\$0			\$0		\$7.20	\$0		
79	6500 Lumen	\$/month/light	0	10.90	0			0		10.90	0		
80	8000 Lumen	\$/month/light	8,856	7.20	63,763			63,763	0.0%	7.20	63,763	0.0%	
81	22000 Lumen	\$/month/light	7,992	10.90	87,113			87,113	0.0%	10.90	87,113	0.0%	
82	Total revenue				\$150,876			\$150,876	0.0%		\$150,876	0.0%	
83	Revenue adjustment factor				-4.3%								
84	Total EMP revenue				\$144,394								
85													
86	Total												
87	Total revenues under applicable rates				\$44,497,494			\$44,873,779			\$45,401,830		
88	EMP Forecasted Revenue				\$44,509,248			\$44,814,408					
89	Difference				0.0%			0.1%					
90	Percent overall rate change							0.85%			2.0%		

Appendix C
PUBLIC UTILITY DISTRICT NO. 1 OF OKANOGAN COUNTY RESOLUTION

RESOLUTION NO. 1639

**A RESOLUTION of the Public Utility District No. 1 of Okanogan County
Revising the District's Electric Service Rate Schedules**

WHEREAS, District Resolution No. 1608 and subsequent amendments have set forth the General Policy Provisions and Electric Rate Schedules of the District; and

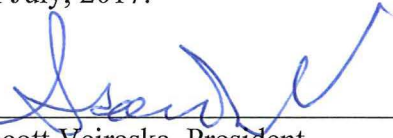
WHEREAS, District Resolution No. 1623 adopted the latest amendments to the General Policy Provisions and Electric Rate Schedules of the District; and

WHEREAS, District management has determined it is in the best interest of its ratepayers to remove minimum demand charges for the General Service customers; and

WHEREAS, the current Equity Management Plan indicates a two percent (2%) annual rate increase is necessary to meet short-term and long-term financial goals and to maintain the District's strong financial condition;

NOW, THEREFORE, BE IT RESOLVED that the Board of Commissioners adopts and approves the rates and effective dates, as set forth in the District's Service Schedules attached hereto and made part of this Resolution.

PASSED AND APPROVED this 24th day of July, 2017.



Scott Vejraska, President

Steve Houston, Vice President

ATTEST:



Jerry Asmussen, Secretary

APPROVED as to form:



Heidi E. Smith, General Counsel

P.U.D. NO. 1 OF OKANOGAN COUNTY

SERVICE SCHEDULE NO. 2

RESIDENTIAL SERVICE

Applicable: To each individual customer/family residing in a single family dwelling or multiple family building, and to a farm which processes only its own products. The single meter on a farm may serve buildings used only for the single farm. The maximum service provided under this schedule is 600 amperes.

The schedule is based on continuous use and minimums will be billed for twelve consecutive months.

Monthly Rates:

September 1, 2017

Basic Charge (Note 1)	\$36.00
Energy Charge	
First 2,000 kWh (\$/kWh)	\$.04565
Over 2,000 kWh (\$/kWh)	\$.06648

Cost of Power Adjustment (COPA): Rates will be automatically adjusted to reflect any increase or decrease in the cost of power from contracted power sources within thirty (30) days of the District incurring such increase or decrease, unless suspended by a Resolution of the Board of Commissioners. The last time the COPA was set at zero was in November of 2011.

General Provisions: Service under this schedule is subject to the General Provisions in accordance with Resolution No. 1608 of the District.

Effective Date: Effective for all energy usage, basic charges and minimums billed on or after the above referenced dates.

Notes:

- 1) Basic Charge of \$10/month will be assessed on a meter if the sole purpose of that meter is to measure the energy consumption of a well/pump providing domestic water to a single family residence (WAC 17-505-090).

*Revised 10/30/01 - Resolution No. 1225
Revised 05/04/10 - Resolution No. 1506
Revised 10/01/10 - Resolution No. 1514
Revised 07/30/13 - Resolution No. 1567
Revised 06/22/15 - Resolution No. 1607
Revised 07/24/17 - Resolution No. 1639*

P.U.D. NO. 1 OF OKANOGAN COUNTY

SERVICE SCHEDULE NO. 3a

SMALL GENERAL SERVICE

Applicable: Electrical service to commercial, governmental, industrial, or other services not eligible under other rate schedules where measured demand is less than 50 kW at least ten months in the previous twelve month period, to be reviewed annually.

The schedule is based on continuous use and minimums will be billed for twelve consecutive months.

Monthly Rates:

	<u>September 1, 2017</u>
Basic Charge	\$41.00
Energy Charge	
All Energy (\$/kWh)	\$.05715
Demand Charge	\$5.70
(\$/all kW/month when kW equals or exceeds 50)	

Demand: If the connected load is determined to be equal to or greater than 50 kW then a rate schedule change may be necessary.

Cost of Power Adjustment (COPA): Rates will be automatically adjusted to reflect any increase or decrease in the cost of power from contracted power sources within thirty (30) days of the District incurring such increase or decrease, unless suspended by a Resolution of the Board of Commissioners. The last time the COPA was set at zero was in November of 2011.

General Provisions: Service under this schedule is subject to the General Provisions in accordance with Resolution No. 1608 of the District.

Effective Date: Effective for all energy usage, basic charges and minimums billed on or after the above referenced dates.

*Revised 10/30/01 – Resolution No. 1225
Revised 05/04/10 – Resolution No. 1506
Revised 12/01/10 – Resolution No. 1517
Revised 07/30/13 – Resolution No. 1567
Revised 06/22/15 – Resolution No. 1607
Revised 07/24/17 – Resolution No. 1639*

P.U.D. NO. 1 OF OKANOGAN COUNTY

SERVICE SCHEDULE NO. 3b

LARGE GENERAL SERVICE

Applicable: Service to any one individual customer for which another specific rate schedule is not available with a connected load of 50 kW or greater.

The schedule is based on continuous use and minimums will be billed for twelve consecutive months.

Monthly Rates:

	<u>September 1, 2017</u>
Basic Charge	\$21.00
Energy Charge All Energy (\$/kWh)	\$.04725
Demand Charge (\$/all kW/month)	\$5.70

Demand: At the option of the District, billing demand shall be as indicated by a demand meter, as determined by a test, or on the basis of connected load. The method of determining demand may be changed from one to another at any time.

Power Factor: The consumer agrees to maintain unity power factor as nearly as practicable. The demand charge, before adjustment for power factor, will be increased 1% more for each 1% by which the average power factor is less than .97 lagging. The threshold for power factor adjustment may change at any time the power factor requirements of the District's wholesale power supplier's change.

Cost of Power Adjustment (COPA): Rates will be automatically adjusted to reflect any increase or decrease in the cost of power from contracted power sources within thirty (30) days of the District incurring such increase or decrease, unless suspended by a Resolution of the Board of Commissioners. The last time the COPA was set at zero was in November of 2011.

General Provisions: Service under this schedule is subject to the General Provisions in accordance with Resolution No. 1608 of the District.

Effective Date: Effective for all energy usage, basic charges and minimums billed on or after the above referenced dates.

*Revised 10/30/01 – Resolution No. 1225
Revised 05/04/10 – Resolution No. 1506
Revised 07/30/13 – Resolution No. 1567
Revised 06/22/15 – Resolution No. 1607
Revised 07/24/17 – Resolution No. 1639*

P.U.D. NO. 1 OF OKANOGAN COUNTY

SERVICE SCHEDULE NO. 4

INDUSTRIAL SERVICE

Service Character: Three phase, 60 cycle, primary distribution voltage available or approved by the District. Transformation and all distribution system inside the customer's plant to be supplied by the customer.

Applicable: For any load with measured monthly demand of at least 1,000 kW and not more than 10,000 kW average annual increase.

Monthly Rates:

	<u>September 1, 2017</u>
Basic Charge	\$82.00
Energy Charge	
All Energy (\$/kWh)	\$.03800
Demand Charge (\$/all kW/month)	\$7.20
Minimum Demand Charge	\$7,200.00
kW in Minimum Demand Charge	1,000

Demand: The billing demand shall be the maximum kW load used by the customer during the month for which the bill is being rendered, as indicated by the demand meter.

Power Factor: The consumer agrees to maintain unity power factor as nearly as practicable. The demand charge, before adjustment for power factor, will be increased 1% more for each 1% by which the average power factor is less than .97 lagging. The threshold for power factor adjustment may change at any time the power factor requirements of the District's wholesale power supplier's change.

Cost of Power Adjustment (COPA): Rates will be automatically adjusted to reflect any increase or decrease in the cost of power from contracted power sources within thirty (30) days of the District incurring such increase or decrease, unless suspended by a Resolution of the Board of Commissioners. The last time the COPA was set at zero was in November of 2011.

General Provisions: Service under this schedule is subject to the General Provisions in accordance with Resolution No. 1608 of the District.

Effective Date: Effective for all energy usage, basic charges and minimums billed on or after the above referenced dates.

*Revised 10/30/01 – Resolution No. 1225
Revised 05/04/10 – Resolution No. 1506
Revised 07/30/13 – Resolution No. 1567
Revised 06/22/15 – Resolution No. 1607
Revised 07/24/17 – Resolution No. 1639*

P.U.D. NO. 1 OF OKANOGAN COUNTY

SERVICE SCHEDULE NO. 6

IRRIGATION SERVICE

Applicable: Electrical service for irrigation, drainage and incidental farm use. Schedule is based on continuous service for the irrigation season of April 1 through October 31.

Rates:

	<u>April 1, 2018</u>
Basic Charge (\$/month)	\$15.00
Seasonal Energy Charge All Energy (\$/kWh)	\$.04550
Inter-Seasonal Energy Charge All Energy (\$/kWh)	\$.07160
Demand Charge All kW (\$/month)	\$4.10

Minimum Seasonal Charge: In order to ensure adequate fixed cost recovery from large irrigation customers, there will be a minimum seasonal charge for service installations of 500 horsepower, or greater. The charge will be calculated using a demand estimate based on the higher of the service's highest demand reading during the current irrigation season, or 75 percent of the horsepower rating of the service, times the current demand rate times 7 months.

Cost of Power Adjustment (COPA): Rates will be automatically adjusted to reflect any increase or decrease in the cost of power from contracted power sources within thirty (30) days of the District incurring such increase or decrease, unless suspended by a Resolution of the Board of Commissioners. The last time the COPA was set at zero was in November of 2011.

General Provisions: Service under this schedule is subject to the General Provisions in accordance with Resolution No. 1608 of the District.

Effective Date: Effective for all energy usage, basic charges and minimums billed on or after the above referenced dates.

*Revised 05/04/10 – Resolution No. 1506
Revised 02/22/11 – Resolution No. 1523
Revised 03/06/12 – Resolution No. 1538
Revised 07/30/13 – Resolution No. 1567
Revised 06/22/15 – Resolution No. 1607
Revised 07/24/17 – Resolution No. 1639*

P.U.D. NO. 1 OF OKANOGAN COUNTY

SERVICE SCHEDULE NO. 7

FROST CONTROL SERVICE

Applicable: Electrical service to wind machines or pumps used only for frost protection. Schedule is based on continuous service for the frost control season of March 1 through May 31.

Rates:

	<u>March 1, 2018</u>
Basic Charge (\$/year)	\$122.00
Seasonal Energy Charge All Energy (\$/kWh)	\$.03365
Inter-Seasonal Energy Charge All Energy (\$/kWh)	\$.07160
Demand Charge All kW (\$/month)	\$4.60

Billing: With the exception of inter-seasonal usage, bills shall be rendered annually on approximately June 15 of each year. In the event the current year's billing is not paid in full by September 1, the account will be disconnected. Prior to reconnecting the service, the District will require payment in full of the delinquent billing and all associated late, disconnection, and reconnection charges. In addition, a security deposit equivalent to the following year's annual facilities charge will be required. A 1% per month service charge is assessed on balances that are over thirty (30) days in arrears.

Service: For service to be supplied under this schedule the customer must agree to and pay the following:

- 1) Prepay all District costs of initial service installation. Customer would pay the depreciated cost of any existing unused facilities.
- 2) All costs to replace the initial system due to damage, obsolescence, added load, depreciation, etc., must be paid before service will be allowed the following year. All such work must be performed by District crews.
- 3) All facilities required to serve customers under this rate schedule shall remain the property of the District.

Service Restrictions: Service to new wind machines will only be provided if adequate capacity is available in the existing backbone system. The Engineering Department must be contacted before new services are allowed. If requested by the customer, backbone system improvement costs can be included in item 1) above.

Cost of Power Adjustment (COPA): Rates will be automatically adjusted to reflect any increase or decrease in the cost of power from contracted power sources within thirty (30) days of the District

incurring such increase or decrease, unless suspended by a Resolution of the Board of Commissioners. The last time the COPA was set at zero was in November of 2011.

General Provisions: Service under this schedule is subject to the General Provisions in accordance with Resolution No. 1608 of the District.

Effective Date: Effective for all energy usage, basic charges and minimums billed on or after the above referenced dates.

*Revised 04/10/01 – Resolution No. 1209
Revised 10/30/01 – Resolution No. 1225
Revised 05/04/10 – Resolution No. 1506
Revised 07/30/13 – Resolution No. 1567
Revised 06/22/15 – Resolution No. 1607
Revised 07/24/17 – Resolution No. 1639*