

MEMORANDUM

Date: November 11, 2016

To: Board of Directors

From: Foster Hildreth, General Manager

Re: 2017 Budget Presentation

Attached please find our 2017 Budget Presentation. Consistent with last year's projections, staff is recommending a 5% rate increase for the 2017 budget year only. The projected figures for years 2018 thru 2021 are for reference only, as future years will be reviewed annually during our normal budgeting process.

The 2017 budget continues to align our operations to the mission statement of providing safe, reliable, cost effective, and environmentally sensitive utility services. This budget prepares us for the future, making prudent use of member resources and making smart decisions today to position our Co-op for a sustainable and efficient tomorrow.

The 2017 Budget tackles some big projects, such as completing our submarine cable replacement project, ongoing underground cable replacement and the final stage of fiber build-out to complete the budgeted expansion of our electric distribution grid. As we all know, providing utility services to a 20-island community is challenging on both operational and financial fronts. A budget narrative is provided detailing the basis, assumptions and notable drivers.

Staff is recommending that our 2017 budget revenue increase from \$25.3M (projected 2016) to \$26.4M to meet our financial and operational commitments. This will be the Board's first reading of the rates, which will be brought back to the Board in December for their approval.

Staff will recommend a motion for Board approval of this budget at the November 2016 board meeting after review and discussion.



Orcas Power & Light Cooperative

2017 Budget



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BUDGET NARRATIVE

Mission:

OPALCO serves our members with safe, reliable, cost effective and environmentally sensitive utility services. Our mission drives our budget in the following ways:

Safety – In 2017, we will complete the build out of our fiber communications backbone, improving the reach and ease of communication and resilience of our grid. This translates to a greater safety net for our crews in the field who are now connected to our system and each other with personal devices. With more devices deployed on our grid, the system not only reroutes power quickly to our members. It puts data in the hands of crew members in the field to rapidly locate and resolve outages. This safety net extends to our members who rely on power, communications, and data to serve the needs of their families and businesses, and to reach emergency first responders when needed.

Reliability – As budgeted, we will replace 10% of theunjacketed underground cable (referred to as URD) system wide. This trend will continue with prioritization of replacement targeted at the areas with higher failure rates. With each URD project, where needed, we include fiber and increase the reach of our fiber network and therefore the reach of our monitoring and control system. We have major tie-line strengthening projects scheduled on San Juan Island to shift load from one substation to another, allowing us to more dynamically manage high load periods and outages. Working with BPA, we'll add a second pathway to reroute interisland power to Orcas in case of major outages.

Cost Effective – As our grid is enhanced with fiber and devices in the field, we contain costs by putting control of the system in the hands of crew members wherever they are. The days of sending linemen out in a storm, in a boat, on a dark night, are going away. With a matching grant from the WA DOC, we'll install a battery storage bank at the Decatur substation that will create cost savings through load shifting and peak shaving, as well as prepare us for our Community Solar project. With equipment replacements scheduled for 2017, greater efficiency and cost savings will contribute to our sustainability as a co-op. The higher cost of managing a remote, rural utility in our island environment is tempered through prudent use of technology best practices.

Environmentally Sensitive – OPALCO has significant infrastructure installed throughout our beautiful and sometimes fragile island environs. In 2017, we will remove an old submarine cable and install a new one. We will plan and begin to market our first large community solar project to give all co-op members access to renewable generation. Doing the right thing comes at a cost that is reflected in our cost of service and OPALCO is committed to good stewardship, working within the County's Critical Areas Ordinance, complying with all permitting requirements and keeping as low a profile as possible to maintain island character.

The Big Picture:

This year's budget represents major progress in preparing our rural cooperative to meet the future needs of our island communities. In 2017, we will complete the fiber build out of our automated distribution grid and the installation of the redundant submarine cable replacement in the Lopez to San Juan Island crossing. The budget includes funding to plan and market our first community solar project to bring renewable energy generation to any member who wants to participate and the installation of a battery storage facility at the head of our transmission system. Rock Island has paid off its loan to OPALCO and members have completed their portion (\$1M) of the start-up capital investment.

A new construction work plan (2017-2020) will address reliability and efficiency with URD and equipment replacement, overhead to underground conversions to improve safety and reliability - including completion of the new lines to Mt Constitution, which is a critical zone for both our electrical distribution system and communications grid. Greater redundancy through substation improvements and line changes will increase our ability to reroute power during outages, particularly for the Roche Harbor and Friday Harbor substations on San Juan Island.

Energy Savings spending was lower in 2016 due to a gap in BPA conservation funding and is expected to increase in 2017, driven by the Integrated Resource Plan. Members spent through the current biennium's EEI (rebate) funding in 2016 with exceptional participation in conservation measures. In 2017, Energy Savings will offer fuel switching incentives for heat pump and electric vehicle conversion and continue to pre-spend BPA rebates with reimbursement available in October of 2017 when the new biennium begins.

Based on the county-wide Low-Income Needs Assessment and Integrated Resource Plan, we have programs in place to address the unmet needs of our membership and help our island communities to thrive. The Energy Assistance Program that was established as a pilot project in last year's budget is funded in 2017 with room for growth in participation.

Load Forecast:

The Load Forecast is the heart of the budget and the most precarious aspect of our forecasting. Budgeted in 2017, we will have the additional energy management resources of PNGC (Pacific NW Generating Cooperative) to assist in load forecasting and navigation of the rapidly evolving energy market.

OPALCO's load peaks in the winter, in large part due to increased heating and lighting load. Weather drives heating load. Predicting the weather is fraught with uncertainty due to variations of temperature, wind and humidity and yet we depend on weather forecasting to meet our budgetary commitments.

While predicting the weather beyond a few days or weeks with any certainty is not possible, we can use trends to forecast likely scenarios. Weather drives how much energy co-op members consume, which drives how much revenue the Co-op generates to pay for expenses. Most of OPALCO's expenses are fixed costs. Most of OPALCO's revenue is highly variable and dependent on the weather.

To gauge what impact the weather may have on our Cooperative, we incorporate analysis from various sources which include BPA's climatologist, the National Oceanic and Atmospheric Administration (NOAA), the Office of the Washington State Climatologist, and other Northwest climatologists. We also consider local weather data, including air temperature, water temperature, wind speed, and precipitation, to name but a few.

After considering about a dozen scenarios, we then estimate our kWh load. With that information, we set rates accordingly – to generate the revenue to pay for the expenses. An accurate forecast is important: if it ends up being colder than we forecast, members are over-charged and we end up with more money than needed to cover co-op expenses; if weather was warmer than forecast, members are under-charged and we end up with less money than needed to cover co-op expenses.

Though there has been some growth in number of members, it is balanced by the combination of increased local renewable energy generation, warming weather and OPALCO’s very successful energy efficiency programs. Thus, since 2013 we have seen a decline in load, and a consequent decline in revenue.

The table below shows Heating Degree Days (HDD) and purchased kWh from 2011 through 2016, and forecasts for 2017. The 2017 **Budget Forecast** assumes a Heating Degree Day (HDD) and kWh load similar to 2016. This is conservative. **Nominal** and **BPA Forecasts** are higher. The **Nominal Forecast** is similar to 2015. The **BPA Forecast** is based on 20-year long-term averages, and doesn’t take near-term weather conditions such as El Niño into account. We have been in a strong El Niño warming pattern, and this winter is forecast to be 2 to 3 degrees Celsius warmer than normal (lower HDD and kWh usage). Typically, an El Niño cycle is followed by several years of La Niña cooling cycle. Hence the higher HDD and kWh forecast in 2017. The actual end of El Niño and onset of La Niña is uncertain. Though forecasts are for a moderate early 2017, climatologists are unable to say what late 2017 will bring. When the La Niña comes, the transition tends to be quick. This timing uncertainty explains the gap between the **Nominal** and **Budget Forecast**.

	2011	2012	2013	2014	2015	2016 Projected		2017 Budget Forecast	2017 Nominal	2017 BPA
HDD	1,552	1,331	1,620	1,281	1,054	996		994	1,126	1,450
Energy Purchased (kWh)	219,050,126	214,865,077	217,913,854	212,349,941	204,077,395	202,908,117		202,132,000	206,119,000	216,000,000

BUDGET ASSUMPTIONS

GENERAL:

1. General Inflation Rate:

The general annual inflation rate has been projected at 3% for years 2017 and 2018 and 4% for years 2019 through 2021.

2. 2017-21 Budget Basis:

The 2017-21 budgetary figures have been forecast with the use of actual activity from January through September 2016 and adjusted 4th quarter 2016 projections.

3. BPA Power Cost Projections:

- For the first nine months of 2017, we anticipate minimal increases from BPA for power costs. In October of 2017, the new BPA rate period (two-year cycle) begins and rate increases are estimated a range between 3-8%. The budget projects an overall 5% power cost increase starting October of 2017 for each two-year rate period. BPA formalizes their rate increase in July of 2017 for their fiscal year 2018-19. There is also concern with BPA's need to narrow deviation of expenses, meaning the Cost Recovery Adjustment Clause (CRAC) may be greater than prior years.
- In calculating power needs for 2017, the approach was to flatten increases in kWh and increase kWh projections by 1% for future years.

4. Labor:

- Staffing levels have stabilized at 51 full-time OPALCO employees in 2017 (see organization chart). We do not expect any additional FTEs through 2021. Please note 2016 staffing level was also budgeted at 51 FTE's and 2016 actual was 49 FTE's due to two vacancies which will be filled in 2017.
- The general wage increase is in accordance with the current Collective Bargaining Agreement, which is based on the estimated CPI index (2.3% in 2017).
- The benefit growth assumptions are in accordance with 2017 NRECA and LineCo rate projections based on the changes to the benefits package.

5. Capital Projects:

- The 2017 capital projects are based on the 2017 – 2020 RUS Construction Work Plan (CWP), which will be presented to the board at the December board meeting. The CWP is derived from outage analysis, system monitoring and system modeling based on load growth projections along with current system loading. The goals are to achieve voltage stability, greater system reliability and overall system efficiency.
- Distribution System:
 - New Services have been trending upward since the lows of the recession (2008-13). For 2017, \$291k is budgeted with an average of \$300k per year projected in future years. Please note: contributions in aid of construction (CIAC) offsets the expense.
 - Underground Residential Distribution (URD) replacement will continue based on the following criteria: age, cable type, neutral degradation and, most importantly, outage frequency and outage duration. There is approximately 150 miles ofunjacketed URD to replace system-wide over time. In 2017, 15 miles of URD is slated for replacement at a budgeted cost of \$1.942M. Staff expect an average annual spending of \$1.7M for the foreseeable future for replacement ofunjacketed URD. Staff will present mapping of known URD problem areas and projected spending at the November board meeting.
 - Conversions, Line Changes and Tie Lines - ~\$1.5M is budgeted in 2017 and 2018 for conversion to large conductors and converting overhead to underground in key areas. The biggest project is a conversion for the lines serving Mt. Constitution where dense tree cover has contributed to regular outage issues in a critical zone for our electrical and communication systems. Tie lines have already been constructed to Buck Mountain and the conversion will be completed in 2018. Another big project for these line items is line changes between the Roche Harbor and Friday Harbor substations, strengthening redundancy for easy rerouting of power.
 - Substation expense is business as usual in 2017 (\$126k) with increased spending projected for 2018 (\$2.15M) when we plan to install a battery bank storage system. This battery bank storage system is offset by the Washington Department of Commerce funds awarded for \$1M. See assumption below for further detail.
 - Sectionalizing Equipment shows an uptick in expense for the next four years as we replace aging switches and protective devices.
 - SCADA spending is business as usual in 2017 (\$89k) with security upgrades planned in 2018 (\$162k) as we segment our SCADA system away from our business networks.

- Grid Control Communications Infrastructure: In December of 2013, staff was task with building \$7.5M of communications infrastructure in addition to the existing fiber. The \$7.5M capital outlay has been \$1.7M in 2014, \$2.5M in 2015, \$2.4M 2016 (projected), and \$900K in 2017 (budget). In addition to completing the fiber build out in 2017, the budget includes additional wireless point to point connections for redundant links and adding propane generator back-ups for active sites (\$400k).
- Transmission System:
 - Line and Station Changes – We expect to complete construction expense for the submarine cable replacement project in 2017 with \$8.4M budgeted (also includes communication outreach expense for the project duration and ordinary expense for transmission pole replacement). Loan payment expense on the submarine cable project is projected at \$1.9M in 2018. Submarine cable spending was \$900k in 2015 and we expect \$6.4M in 2016. Transmission pole replacement is expected to average \$90K for the next four years.
 - Switching Stations – In 2017, BPA and OPALCO will begin preliminary construction of the transmission infrastructure at the Decatur Substation site allowing us to accept a new transmission tap on Decatur for feeding the Decatur, Blakely, and Olga Substation. This feed also provides a larger redundant feed for the Eastsound and Orcas Substation. We expect to complete this project by the end of 2018.
- Facilities – Increased spending budgeted for 2017 (\$300k) to replace the degraded plumbing and sewer systems in the Eastsound headquarters.
- Transportation – In addition to routine fleet expense, the 2017 budget includes an industry appropriate work boat for safe access to the submarine cable work and outer islands. Total budgeted is \$450k for 2017, dropping back into typical expense of ~\$340k projected for the next four years.
- Community Solar and Energy Storage Project (2017-2019)
 - Energy Storage System (ESS) – The 2017 budget includes \$1.2M to match a DOE grant of \$1M for a battery storage bank. We plan to use a single versatile 0.5MW/20 MWh ESS to provide four complementary functions that enhance grid reliability and operation, and community solar array performance, while increasing storage system “capacity factor” and saving money on our power bill from BPA:
 1. Community solar array conditioning: Conditioning of intermittent solar array output and store energy for later use.
 2. Peak shaving: Discharging battery system during normal system peaks and large outage restoration events to reduce peak charges while restoring the systems quicker.
 3. Load Shifting: Shifting system usage from peak intervals to off peak intervals.
 4. Substation battery backup during system outages: Use of this system to ensure switching capability during extended outages since Decatur Substation is planned to expand to in compass transmission switching for improved reliability and redundancy. This is a first step toward an emergency power supply during major mainland outages.

- Community Solar – A community solar project is planned to be paired with the ESS project. This project is expected to be less than approximately 200 kW and utilize the interconnection to our system and the ESS. Funds for planning and marketing the project for member participation are included in the 2017 budget with construction costs in 2018.

6. Energy Savings:

- Energy Savings spending was lower in 2016 due to a gap in BPA conservation funding. Members spent through the current biennium's EEI (rebate) funding in 2016 with exceptional participation in conservation measures.
- BPA Rebates will continue in 2017 as we pre-spend the BPA funds that will be available again in October 2017 when the new EEI biennium period begins. Staff will continue to pursue additional rebate funding through grants and un-used BPA Conservation Allotments from other utilities.
- As outlined in the IRP, OPALCO will encourage fuel switching with self-funded incentives for heat pump and Electric Vehicle (EV) conversions. These conversions bring new load (kWh usage) and revenue; the incentives are funded from a five-year projection of a portion of the new revenues. In addition, OPALCO will offer free home charging stations to encourage EV conversion and home charging (kWh usage).
- Energy Savings staff will continue to support the education and outreach efforts of the Conservation District.
- Staff will continue to support voluntarily funded programs such as MORE while building broad support for and participation in the Community Solar Project planned for 2018. In 2017, Energy Savings funds are budgeted for marketing Community Solar to members.

7. Capital Credits

- Capital credit pay out cash planning is based on a 25 year pay back cycle (1992 capital credits in 2017). Note that the assumption is to pay the second half of 1990 and 100% of 1991 in December of 2016.

8. Energy Assistance Program:

- The 2017 Budget includes a continuation of \$90k for low-income bill credits, which range from \$20 (single person household) to \$50 (six or more person household) and not to exceed the total bill amount. The Energy Assistance Program is funded as a line item on all member bills (approximately \$0.50 on the average residential bill). Approximately 170 members participated in 2016; accelerated participation is expected in 2017 with outreach budgeted.

OVERALL SUMMARIZATION:

1. Rates:

Staff recommends a rate increase of 5% for 2017. The recommended rate increase applies to only energy usage charges for all rates except the pump rate where all increases will be applied facility and energy usage charges.

2. Margins:

Per Staff recommendation, projected margins are as follows: \$2.7M in 2016 (projected), \$2.0M in 2017 (budget), \$1.6M in 2018 (forecast), \$1.9M in 2019 (forecast), \$2.4M in 2020 (forecast), and \$3.0M in 2021 (forecast).

3. TIER:

Per Staff recommendation, TIER is as follows: 2.99 in 2016 (projected), 2.36 in 2017 (budget), 1.94 in 2018 (forecast), 2.15 in 2019 (forecast), 2.47 in 2020 (forecast), and 2.91 in 2021 (forecast).

4. Equity % of Total Capitalization (OPALCO):

Per Staff recommendation, Equity % of Total Capitalization is as follows: 48.3% in 2016 (projected), 42.9% in 2017 (budget), 41.0% in 2018 (forecast), 42.0% in 2019 (forecast), 43.8% in 2020 (forecast), and 46.4% in 2021 (forecast).

5. Debt:

OPALCO is expected to borrow \$11M RUS in 2017, \$4M RUS in 2018, \$0 RUS in years 2019 through 2021. All OPALCO RUS borrowing will be used to supplement the funding of capital projects. We anticipate using our approved RUS (FFB) loan funds and have estimated interest rates between 2.25% and 4% for 2017 through 2021.

6. Rate Detail:

- The chart below details the impact on average residential members Energy Assistance Program and PAL recipients. An average residential member (12,055 meters) would see a bill increase of about \$6.36 including the Energy Assistance Program line item.

	Average Residential User		Average EAP Recipients	Average PAL Recipients
Number of Services (Meter Points)	12055		170	345
Average Months of Usage	12		12	12
Average Usage (kWh) per month	949		764	938
Average Monthly Bill using Existing Rate (2016)	125.67		109.08	124.68
Average Monthly Bill using Recommended Rate (2017)	132.03		114.19	130.97
Percentage Increase	5.1%		4.7%	5.0%

Notes: 1) Data period from November 2015 to October 2016.
2) PAL and EAP accounts based on those in database who received assistance during data period.

ORCAS POWER & LIGHT COOPERATIVE

2017 RATE STRUCTURE

*Approved by the Board 12/15/16 and
inserted in to this budget report*

Residential	2016 Rates	2017 (increase applied to energy (kWh) only)
Facility Rate (\$/Service/Month)	\$40.54	\$40.54
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0005
Energy Rates (\$/kWh)		
Summer Block 1 (< 1,500 kWh)	\$0.0892	\$0.0959
Summer Block 2 (1,500 kWh to 3000 kWh)	\$0.1011	\$0.1087
Summer Block 3 (> 3,000 kWh)	\$0.1200	\$0.1289
Winter Block 1 (< 3,000 kWh)	\$0.0892	\$0.0959
Winter Block 2 (3,000 kWh to 5,000 kWh)	\$0.1011	\$0.1087
Winter Block 3 (> 5,000 kWh)	\$0.1200	\$0.1289

Residential TOU	2016 Rates	2017 (increase applied to energy (kWh) only)
Facility Rate (\$/Service/Month)	\$45.99	\$45.99
Demand Rate (\$/Service/Month)		
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0005
Energy Rates (\$/kWh)		
TOU Period 1 (6 AM - Noon)	\$0.1513	\$0.1609
TOU Period 2 (Noon - 6 PM)	\$0.0935	\$0.0995
TOU Period 3 (6 PM - 8 PM)	\$0.1513	\$0.1609
TOU Period 3 (8 PM - 6 AM)	\$0.0410	\$0.0436

Small Commercial (<20 kW)	2016 Rates	2017 (increase applied to energy (kWh) only)
Facility Rate (\$/Service/Month)	\$57.65	\$57.65
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0005
Energy Rates (\$/kWh)		
Block 1 (< 5,000 kWh)	\$0.0904	\$0.0976
Block 2 (> 5,000 kWh)	\$0.1009	\$0.1090
Demand Rates (\$/kW)		
First 20 kW (Flat Rate)	\$5.25	\$5.66

Large Commercial (> 20kW)	2016 Rates	2017 (increase applied to energy (kWh) only)
Facility Rate (\$/Service/Month)	\$57.65	\$57.65
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0005
Energy Rates (\$/kWh)		
Block 1 (< 5,000 kWh)	\$0.0820	\$0.0864
Block 2 (5,000-150,000 kWh)	\$0.0907	\$0.0957
Block 3 (>150,000 kWh)	\$0.1211	\$0.1277
Demand Rates (\$/kW)		
Block 1 (< 300 kW)	\$3.31	\$3.49
Block 2 (> 300 kW)	\$4.97	\$5.24

Pumps	2016 Rates	2017: 5% increase to all components
Facility Rate (\$/Service/Month)	\$36.12	\$37.93
Energy Assistance Program (\$/kWh)	\$0.0005	\$0.0005
Energy Rates (\$/kWh)		
0 - 370 kWh	\$0.0960	\$0.1008
370-5,000 kwh	\$0.0833	\$0.0875
Over 5,000 kWh	\$0.0935	\$0.0982
Demand Rates (\$/kW)		
First 20 kW (Flat Rate)	\$1.00	\$1.05
Over 20 kW	\$3.31	\$3.48

ORCAS POWER AND LIGHT COOPERATIVE

STATEMENT OF OPERATIONS

	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.
	Audited	Audited	Audited	Approved	Projected	Proposed	% Change	Forecast	Forecast	Forecast	Forecast
	Year End	Year End	Year End	Budget	Year End	Budget	(F - E)	12/31/2018	12/31/2019	12/31/2020	12/31/2021
	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2016	12/31/2017					
1 OPERATING REVENUES											
2 kWh Sales	206,560,734	198,231,749	191,169,018	187,272,362	190,622,548	189,105,732		190,996,989	192,907,159	194,836,431	196,784,995
3 % Rate Increase				5%		5%		6%	6%	5%	5%
4 % Revenue Increase	5%	3%	12%	1%	3%	5%		7%	7%	6%	6%
5 Residential	\$ 15,598,797	\$ 15,913,325	\$ 17,694,706	\$ 18,018,001	\$ 18,084,448	\$ 18,910,272	5%	\$ 20,177,923	\$ 21,530,633	\$ 22,763,290	\$ 24,066,578
6 Commercial	5,467,588	5,694,901	6,356,143	6,591,872	6,553,294	6,851,153	5%	7,308,371	7,796,268	8,240,864	8,710,935
6 Other	364,892	420,798	531,069	223,282	630,065	648,189	3%	676,009	705,697	732,749	761,352
7 Total operating revenue	21,431,278	22,029,025	24,581,918	24,833,155	25,267,806	26,409,613	5%	28,162,303	30,032,598	31,736,903	33,538,865
7											
8 OPERATING EXPENSES											
9 Cost of power	7,514,128	8,037,428	7,787,142	7,624,980	7,862,852	8,402,223	7%	8,931,486	9,297,382	9,637,125	9,864,637
10 Transmission	70,117	92,874	179,264	53,560	140,173	177,500	27%	183,660	192,797	202,433	212,629
11 Distribution - operations	2,968,003	2,961,250	3,391,150	3,420,263	3,235,145	3,514,721	9%	3,687,219	3,913,628	4,136,797	4,381,228
12 Distribution - maintenance	1,669,524	1,778,516	1,713,924	1,702,147	1,854,448	1,851,312	0%	1,929,035	2,048,253	2,157,023	2,272,562
13 Consumer accounts	853,211	898,198	893,766	930,975	963,270	1,045,340	9%	1,098,689	1,167,827	1,234,922	1,306,534
14											
15 General and administration											
16 Administration G&A	2,718,889	2,822,439	2,950,777	3,058,886	2,930,413	3,110,220	6%	3,253,597	3,388,552	3,559,654	3,751,812
17 Energy services G&A	462,966	373,323	658,939	410,376	146,577	491,931	236%	511,911	537,927	561,258	595,980
18 Subsidiary Charges	-	-	29,100	-	34,920	69,720	100%	69,720	69,720	69,720	69,720
19 Total general and administration	3,181,855	3,195,763	3,638,816	3,469,263	3,111,910	3,671,871	18%	3,835,228	3,996,199	4,190,633	4,417,511
20											
21 Depreciation and amortization	2,719,560	2,975,650	3,308,154	3,673,019	3,516,601	3,801,831	8%	4,467,061	4,777,216	5,007,962	5,250,245
22 Taxes	930,482	961,815	1,046,626	1,028,086	1,153,464	1,220,252	6%	1,285,844	1,355,143	1,431,060	1,511,317
23											
24 Total operating expenses	19,906,881	20,901,493	21,958,841	21,902,293	21,837,862	23,685,050	8%	25,418,222	26,748,445	27,997,955	29,216,664
25											
26 Operating margins before fixed charges	1,524,397	1,127,532	2,623,077	2,930,863	3,429,945	2,724,563	-21%	2,744,081	3,284,153	3,738,948	4,322,201
27											
28 FIXED CHARGES											
29 Interest on long-term debt	786,193	908,934	1,047,248	1,360,588	1,100,506	1,019,178	-7%	1,482,669	1,613,904	1,573,625	1,525,124
30 Other Interest	-	-	-	-	-	-		-	-	-	-
31											
32 Total fixed charges	786,193	908,934	1,047,248	1,360,588	1,100,506	1,019,178	-7%	1,482,669	1,613,904	1,573,625	1,525,124
33											
34 Operating margins after fixed charges	738,204	218,598	1,575,829	1,570,274	2,329,439	1,705,385	-27%	1,261,413	1,670,249	2,165,323	2,797,077
35											
36 PATRONAGE CAPITAL CREDITS	38,048	67,853	83,608	56,051	79,323	79,323	0%	81,702	84,153	87,519	91,020
37											
38 Net operating margins	776,252	286,451	1,659,437	1,626,325	2,408,761	1,784,707	-26%	1,343,115	1,754,402	2,252,842	2,888,097
39											
40 NON-OPERATING MARGINS											
41 Interest income	33,261	32,130	127,804	332,289	217,357	112,357	-48%	113,442	84,559	61,092	42,688
42 Other income	46,893	23,458	71,081	20,381	112,311	113,036	1%	113,781	114,550	115,605	116,702
43 Fiber Optics Division	115,111	(220,088)	-	-	-	-		-	-	-	-
44											
45 Net non-operating margins	195,265	(164,500)	198,886	352,670	329,669	225,393	-32%	227,223	199,108	176,697	159,390
46											
47 NET MARGINS	\$ 971,518	\$ 121,951	\$ 1,858,322	\$ 1,978,996	\$ 2,738,430	\$ 2,010,100	-27%	\$ 1,570,338	\$ 1,953,510	\$ 2,429,540	\$ 3,047,487
48											
49 OPALCO TIER	2.24	1.13	2.51	2.20	2.99	2.36	-21%	1.94	2.15	2.47	2.91
50 OPALCO Equity % of Total Cap	69.5%	61.3%	53.3%	45.6%	48.3%	42.9%	-11%	41.0%	42.0%	43.8%	46.4%

ORCAS POWER AND LIGHT COOPERATIVE

STATEMENT OF OPERATIONS 2017 BUDGET
DETAILED BREAKOUT OF NOTABLE DRIVERS

		A.	B.	C.	D.
		Projected	Budget	Budget	
		Year End	Year End	Change	
		12/31/2016	12/31/2017	(B - A)	Comments: Budget To Actual (Column C.)
1	I OPERATING REVENUES	25,267,806	26,409,613	1,141,807	Proposed Rate Increase of 5%
2					
3					
4	II OPERATING EXPENSES	21,837,862	23,685,050	1,847,188	Overall increase in operating expenses
5					
6	Cost of Power - Line 12	7,862,852	8,402,223	539,371	Increase in expense - Estimated 7% overall increase in power costs (includes 3 months of both new BPA rate period increase and PNGC power management)
7					
8	Transmission - Line 13 Detail Breakout:	140,173	177,500	37,327	Increase in expense
9	Maintenance - Transmission Equipment			30,000	Gasket failure on transmission switch
10	Multiple Accounts			7,327	Increase among multiple general ledger accounts (7 accounts)
11				37,327	
12					
13	Distribution - Operations - Line 14 Detail Breakout:	3,235,145	3,514,721	279,576	Increase in expense
14	Operation Supervision and Engineering			26,359	General wage increase and benefit growth assumptions
15	Station Expenses			54,349	Includes \$100k for Olga substation transformer oil testing, replacing, and disposal
16	Meter Expenses			72,822	Fill vacant Meter Tech position
17	Misc. Distribution Expenses			101,984	Fully staffed Engineering department
18	Misc. Engineering - Planning			(30,074)	Construction Work Plan submittal to RUS by Dec 2016
19	Misc. Exp - Education Expense			5,898	2 Apprentice positions in training
20	Multiple Accounts			48,238	Increase among multiple general ledger accounts (16 accounts)
21				279,576	
22	Subtotal Distribution - Operations				
23	Distribution - Maintenance - Line 15 Detail Breakout:	1,854,448	1,851,312	(3,136)	Decrease in expense
24					
25	Consumer accounts - Line 16 Detail Breakout:	963,270	1,045,340	82,070	Increase in expense
26	Customer Records and Collections			83,071	Fully staffed Eastsound and Friday Harbor office
27	Multiple Accounts			(1,001)	Decrease among multiple general ledger accounts (2 accounts)
28				82,070	
29	Subtotal Consumer Accounts				
30	Total General and Administrative (G&A):	3,111,910	3,671,871	559,961	Increase in expense
31					
32	Administration G&A - Line 19 Detail Breakout:	2,930,413	3,110,220	179,807	Increase in expense
33	Informational Instruction/Advertising Expense			38,696	Community solar outreach
34	Administrative /General Salary			48,259	General inflation factor (three departments)
35	Director's Fee & Expenses			(7,561)	Decrease in participation in director benefits
36	Misc. Gen Expenses/Dues			16,570	Participation in political portion of power resource group
37	Misc. BOD Contingency - Industry Groups			20,467	Increase in Board participation
38	Misc. Gen Exp/Manager			40,934	Increase in GM travel expenses (PNGC) and employee appreciation
39	Multiple Accounts			22,442	Increase among multiple general ledger accounts (16 accounts)
40				179,807	
41	Subtotal Administration G&A				
42	Energy Services G&A - Line 20	146,577	491,931	345,354	Increase in expense
43	General Overhead Expenses			30,230	General wage increase and benefit growth assumptions
44	Education and Outreach			93,430	Increase in outreach projects (including community solar)
45	County Fair			18,000	Participate in San Juan County Fair
46	Renewable Energy Programs			25,109	Community solar: pre-sales, engineering, policy/contract development, legal, outside consultant
47	BPA Commercial Lighting/Programs/Custom Projects			(23,622)	No commercial projects planned for 2017
48	BPA Rebates			96,420	Increase in BPA rebate programs available for 2017 (new rate period begins)
49	BPA EEI Funding			24,736	Less EEI Funding available in BPAs fiscal year '18/'19 rate period
50	Other Residential Rebates			30,360	Increased fuel switching revenues allows for self funding of rebates (20 heat pumps)

ORCAS POWER AND LIGHT COOPERATIVE

STATEMENT OF OPERATIONS 2017 BUDGET
DETAILED BREAKOUT OF NOTABLE DRIVERS

		A.	B.	C.	D.
		Projected	Budget	Budget	
		Year End	Year End	Change	
		12/31/2016	12/31/2017	(B - A)	Comments: Budget To Actual (Column C.)
51	Energy Conversation			15,000	Increased fuel switching revenues (30 EV charging stations)
52	BPA Low Income Programs			30,000	Joint effort with Opportunity Council to improve low income energy efficiency
53	Multiple Accounts			5,691	Increase among multiple general ledger accounts (4 accounts)
54				<u>345,354</u>	
55					
56	Subsidiary Charges G&A - Line 21	34,920	69,720	<u>34,800</u>	Increase in expense - Increase in network management services (off set by Other Income on line 79)
57					
58	Total General and Administrative (G&A)	3,111,910	3,671,871	<u>559,961</u>	Overall increase in expense
59					
60	Deprec. & Amort. - Line 24	3,516,601	3,801,831	<u>285,230</u>	Increase in expense - based on capital project plan
61					
62	Taxes - Line 25	1,153,464	1,220,252	<u>66,788</u>	Increase in expense - based on increase in revenue
63					
64	TOTAL OPERATING EXPENSES	<u>21,837,863</u>	<u>23,685,050</u>	<u>1,847,188</u>	Overall increase in expense
65					
66					
67	III FIXED CHARGES - Interest Expense - Line 35	1,100,506	1,019,178	<u>(81,328)</u>	Decrease in expense
68					
69	IV PATRONAGE CAPITAL CREDITS - Line 39	<u>79,323</u>	<u>79,323</u>	<u>-</u>	No increase
70					
71					
72	TOTAL NET OPERATING MARGINS	<u>2,408,761</u>	<u>1,784,707</u>	<u>(624,053)</u>	Decrease in margin
73					
74					
75	V NON-OPERATING MARGINS	<u>329,669</u>	<u>225,393</u>	<u>(104,276)</u>	Decrease in margin
76					
77	Interest and Dividend Income - Line 44	217,357	112,357	<u>(105,000)</u>	Decrease in income - offset with interest expense above
78					
79	Other Income - Line 45	112,311	113,036	<u>725</u>	Increase in income
80					
81					
82	TOTAL OPALCO NET MARGIN DETAIL BREAKOUT	<u>2,738,430</u>	<u>2,010,100</u>	<u>(728,329)</u>	Decrease in margin

ORCAS POWER AND LIGHT COOPERATIVE

RATE SENSITIVITY

Proposed 2017 Budget Figures; Future Years for Reference Only

	A.	B.	C.	D.	E.	F.	
	Proposed Budget 12/31/2017	Forecast 12/31/2018	Forecast 12/31/2019	Forecast 12/31/2020	Forecast 12/31/2021	Total	Comment
0. BASE LINE: 0% increase (Not Financially Viable)							
% Rate Increase	0.0%	0.0%	0.0%	0.0%	0.0%		Baseline only to see the implication of no rate increase.
Incremental Debt	\$ 11,500,000	\$ 6,500,000	\$ 4,500,000	\$ 5,300,000	\$ 6,300,000	\$ 34,100,000	
Margin	\$ 763,454	\$ (1,129,450)	\$ (2,437,917)	\$ (3,485,750)	\$ (4,487,517)	\$ (10,777,179)	
Equity % of Total Capital	42.1%	38.3%	36.1%	33.2%	29.8%		
TIER	1.52	0.32	(0.44)	(1.12)	(1.81)		
Incremental Cash flow	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
1. OPTION: DRIVE REVENUE TIER of 1.25							
% Rate Increase	-2.0%	8.3%	4.8%	3.6%	3.2%		Not financially viable, little to no equity growth & volitle rate fluctuations.
Incremental Debt	\$ 12,000,000	\$ 5,000,000	\$ 1,700,000	\$ 1,300,000	\$ 1,300,000	\$ 21,300,000	
Margin	\$ 369,736	\$ 417,206	\$ 424,576	\$ 411,824	\$ 399,697	\$ 2,023,040	
Equity % of Total Capital	41.8%	39.1%	39.1%	39.5%	40.6%		
TIER	1.25	1.25	1.25	1.25	1.25		
Incremental Cash flow	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2. OPTION: DRIVE REVENUE TIER of 2							
% Rate Increase	2.3%	8.5%	4.7%	3.2%	3.0%		Management strives to reach financial targets with a minimum "2" TIER level. Achieving a TIER of exactly "2" produces volatile rate fluctuations.
Incremental Debt	\$ 11,000,000	\$ 4,000,000	\$ 500,000	\$ -	\$ -	\$ 15,500,000	
Margin	\$ 1,478,944	\$ 1,668,940	\$ 1,698,305	\$ 1,647,298	\$ 1,598,788	\$ 8,092,275	
Equity % of Total Capital	42.6%	40.7%	41.6%	42.8%	44.6%		
TIER	2.00	2.00	2.00	2.00	2.00		
Incremental Cash flow	\$ 54,000	\$ 136,000	\$ -	\$ -	\$ -	\$ 190,000	
3. OPTION: 5,5,5,5,5							
% Rate Increase	5.0%	5.0%	5.0%	5.0%	5.0%		TIER is lower than desired in 2018 forward to achieve adequate equity ramping in future years as OPALCO plans for future capital projects (next submarine cable replacement scheduled in 2030)
Incremental Debt	\$ 11,000,000	\$ 4,200,000	\$ 800,000	\$ -	\$ -	\$ 16,000,000	
Margin	\$ 2,010,100	\$ 1,309,132	\$ 1,398,657	\$ 1,842,894	\$ 2,427,226	\$ 8,988,009	
Equity % of Total Capital	42.9%	40.8%	41.5%	42.9%	45.2%		
TIER	2.36	1.78	1.82	2.12	2.52		
Incremental Cash flow	\$ 585,000	\$ -	\$ -	\$ 83,000	\$ 708,000	\$ 1,376,000	
4. OPTION: 5,6,6,5,5 - Staff Recommendation							
% Rate Increase	5.0%	6.0%	6.0%	5.0%	5.0%		Recommended rate increase as this profile allows for rate stability and adequate equity increases in future years. Please note we will be revisiting these rate increases annually.
Incremental Debt	\$ 11,000,000	\$ 4,000,000	\$ -	\$ -	\$ -	\$ 15,000,000	
Margin	\$ 2,010,100	\$ 1,570,338	\$ 1,953,510	\$ 2,429,540	\$ 3,047,487	\$ 11,010,975	
Equity % of Total Capital	42.9%	41.0%	42.0%	43.8%	46.4%		
TIER	2.36	1.94	2.15	2.47	2.91		
Incremental Cash flow	\$ 585,000	\$ 37,000	\$ -	\$ 670,000	\$ 1,328,000	\$ 2,620,000	

ORCAS POWER AND LIGHT COOPERATIVE

STATEMENT OF CASH FLOW

NON GAAP

	A. Projected Year End 12/31/2016	B. Proposed Budget 12/31/2017	C. Forecast 12/31/2018	D. Forecast 12/31/2019	E. Forecast 12/31/2020	F. Forecast 12/31/2021
1 % Rate Increase		5%	5%	6%	6%	5%
2 OPERATING ACTIVITIES:						
3 Margins	\$ 2,738,000	\$ 2,010,000	\$ 1,570,000	\$ 1,954,000	\$ 2,430,000	\$ 3,047,000
4 Plus Depreciation/Amortization	<u>3,517,000</u>	<u>3,802,000</u>	<u>4,467,000</u>	<u>4,777,000</u>	<u>5,008,000</u>	<u>5,250,000</u>
5 Cash Flow Operations	6,255,000	5,812,000	6,037,000	6,731,000	7,438,000	8,297,000
6						
7 PLANT INVESTMENT (NET)						
8 Plant Investment (including material inventory)	<u>(14,684,000)</u>	<u>(14,570,000)</u>	<u>(7,207,000)</u>	<u>(4,310,000)</u>	<u>(4,665,000)</u>	<u>(4,325,000)</u>
9 Cash Flow From Operations and Plant Investment:	(8,429,000)	(8,758,000)	(1,170,000)	2,421,000	2,773,000	3,972,000
10						
11 CASH FLOWS FROM PATRONAGE CAPITAL	<u>(1,258,000)</u>	<u>(535,000)</u>	<u>(1,226,000)</u>	<u>(1,129,000)</u>	<u>(540,000)</u>	<u>(1,169,000)</u>
12 Cash Flow Before Borrowings	(9,687,000)	(9,293,000)	(2,396,000)	1,292,000	2,233,000	2,803,000
13						
14 NET BORROWINGS	6,439,000	9,878,000	2,433,000	(1,524,000)	(1,563,000)	(1,475,000)
15 RIC repayment of start-up loan	7,677,000		-	-	-	-
16 Cash Increase (decrease) After Net Borrowings	<u>4,429,000</u>	<u>585,000</u>	<u>37,000</u>	<u>(232,000)</u>	<u>670,000</u>	<u>1,328,000</u>
17						
18						
19						
20 OUTSTANDING DEBT BALANCE	<u>(41,601,000)</u>	<u>(51,480,000)</u>	<u>(53,913,000)</u>	<u>(52,389,000)</u>	<u>(50,826,000)</u>	<u>(49,351,000)</u>
21						
22 EQUITY BALANCE	<u>38,887,000</u>	<u>38,660,000</u>	<u>37,467,000</u>	<u>37,935,000</u>	<u>39,544,000</u>	<u>42,705,000</u>
23						
24 NET UTILITY PLANT	<u>73,864,000</u>	<u>85,504,000</u>	<u>91,169,000</u>	<u>92,535,000</u>	<u>93,657,000</u>	<u>94,339,000</u>

ORCAS POWER AND LIGHT COOPERATIVE

CAPITAL PROJECTS BUDGET

			A.	B.	C.	D.	E.	F.	G.	H.	I.	J.
			Actual	Actual	Actual	Budget	Projected	Proposed				
			12/31/2013	12/31/2014	12/31/2015	2016	Year End	Budget	Forecast	Forecast	Forecast	Forecast
							2016	2017	2018	2019	2020	2021
1	DISTRIBUTION											
2	100	New Services	\$ 125,675	\$ 256,450	\$ 221,770	\$ 170,000	\$ 282,148	\$ 291,000	\$ 300,000	\$ 309,000	\$ 319,000	\$ 329,000
3	200	New Tie Lines	319,404	341,347	147,776	-	16,001	200,000				
4	300	Conversions and Line Changes	692,238	1,194,755	528,776	975,000	594,967	1,335,000	1,592,000	875,000	510,000	\$ 643,000
5	400	New Substations, switching station, metering point, etc.	-	-	-	-	-	-				
6	500	Substation, Switching Station, Metering Point Changes	123,386	23,034	145	-	2,443	126,000	2,150,000	450,000	350,000	
7	600	Miscellaneous Distribution Equipment										
8	601	Transformers & Meters	372,396	575,840	627,342	500,000	499,490	525,000	541,000	558,000	576,000	594,000
9	602	Sets of Service Wires to increase Capacity	-	-	-	-	-	-				
10	603	Sectionalizing Equipment	68,473	401,127	101,557	255,000	2,618	100,000	700,000	100,000	220,000	75,000
11	604	Regulators	156,491	131,410	15,911	325,000	8,439		75,000	75,000	80,000	
12	605	Capacitors	-	-	-	-	-	-				
13	606	Ordinary Replacements	236,490	179,366	170,439	275,000	278,519	119,000	123,000	127,000	131,000	135,000
14	608	Underground Dist. Cable Replacement	924,947	3,202,174	2,127,270	2,285,000	2,843,911	1,942,000	1,211,000	1,732,000	2,161,000	2,226,000
15	700	Other Distribution Items										
16	701	Engineering Fees	-	-	-	-	-	-				
17	704	LMS & SCADA	52,327	1,805	32,715	45,000	86,026	89,000	162,000	84,000	44,000	23,000
18	705	AMR (not including meters)	-	-	-	-	-	-	200,000			
19	706	Communications										
20	706.0	Island Network	322,418	349,692	-	-	-	-				
21	706.1	Fiber/Microwave Infrastructure ⁽¹⁾	474,460	1,747,051	2,528,428	2,400,000	2,418,139	1,290,000	300,000	15,000	16,000	17,000
22	TRANSMISSION											
23	800	New Tie Line	-	-	-	-	-	-				
24	900	New Substations, switching station, metering point, etc.	-	11,321	443	600,000	250,427	650,000	500,000			
25	1000	Line and Station Changes	365,876	257,537	900,338	3,025,000	6,338,884	8,408,000	1,886,000	89,000	92,000	95,000
26	1100	Other Transmission	-	-	-	-	-	-				
27	GENERATION											
28	1200	Generation	-	-	-	-	-	-				
29	OTHER											
30	1300	Facilities	249,280	62,112	409,976	124,000	156,229	300,000	60,000	63,000	67,000	71,000
31	1400	Acquisitions	-	-	-							
32	1500	All Other										
33	1501	Transportation/Equipment/Tools/Radios	448,241	426,919	335,842	463,000	563,860	450,000	315,000	331,000	348,000	366,000
34	1502	Office Equipment/Furniture/Etc.	4,601	7,938	70,727	30,000	26,866	20,000	21,000	22,000	23,000	24,000
35	1503	Computer/Servers/Software	358,351	212,073	283,254	262,000	251,684	298,000	313,000	329,000	346,000	364,000
36	1504	Community Solar (member funded) ⁽²⁾			-	300,000	-		500,000	500,000		
37	1600	Minor Projects	549,042	212,306	94,343	90,000	247,694	100,000	103,000	107,000	111,000	115,000
38	RUS CWP SUBTOTAL		5,844,096	9,594,257	8,597,052	12,124,000	14,868,344	16,243,000	11,052,000	5,766,000	5,394,000	5,077,000
39	CONTRIBUTION IN AID OF CONSTRUCTION (CIAC)											
40		New Services	(583,883)	(272,300)	(181,922)	(318,000)	(373,294)	(291,000)	(300,000)	(309,000)	(319,000)	(329,000)
41		Meters and Transformers		(137,843)	(176,241)		(253,486)	(209,000)	(216,000)	(223,000)	(230,000)	(237,000)
42		Joint Projects		(184,657)	(329,145)		(120,107)	(298,000)	(223,000)	(174,000)	(180,000)	(186,000)
43		Island Network Department		(305,819)								
44		WA DOC Grant Funding							(1,000,000)			
45		Community Solar Member Contributions				(300,000)		(250,000)	(500,000)	(250,000)		
46	RUS CWP NET TOTAL		5,260,213	8,693,638	7,909,744	11,506,000	14,121,458	15,195,000	8,813,000	4,810,000	4,665,000	4,325,000

Notes:

- 1 Totals in Fiber/Microwave Infrastructure (706.1) equal \$7.5M from 2014 though budgeted 2017 with further expenditures to create redundant wireless links from San Juan to other islands in 2017.
- 2 Community solar program is expected to begin via member contributions in 2017 through 2019 while construction is expected to commence in 2018 based on the amount of these contributions.

ORCAS POWER AND LIGHT COOPERATIVE

CAPITAL PROJECTS BUDGET
NOTABLE DRIVERS

				A.	B.	C.	D.
RUS CWP DESCRIPTION				Projected Year End 2016	Proposed Budget 2017	Budget Change (B-A)	Comments
1	DISTRIBUTION			\$ 7,032,700	\$ 6,017,000	\$ (1,962,676)	
2							
3	100	New Services		282,148	291,000	8,852	
4							
5	200	New Tie Lines		16,001	200,000	183,999	Mullis Road tie line to increase reliability for both the Gravel Pit and Friday Harbor substations.
6							
7	300	Conversions and Line Changes		594,967	1,335,000	740,033	
8		San Juan Valley Road Conversion			300,000		Increase load capacity and transfer ability from Gravel Pit and Friday Harbor substations to Roche Harbor substation
9		Mt. Constitution Conversion - Phase 2			325,000		Remove overhead electric lines to reduce risk of fire and improve reliability
10		San Juan Valley Reconductor			300,000		Increase load capacity and transfer ability from Gravel Pit and Friday Harbor substations to Roche Harbor substation
11		Prune Alley Street Conversion			250,000		Work with San Juan County while improving the reliability
12		Multiple Projects			160,000		
13					1,335,000		
14							
15	500	Substation, Switching Station, Metering Point Changes		2,443	126,000	123,557	
16		Shaw Substation Disconnect Switch			40,000		Replace aging switches prior to insulation breakdown
17		Eastsound Substation Insulator Replacement			30,000		Replace aging insulation prior to breakdown
18		LTC Controller Replacements			56,000		Upgrade Load Tap Changer (LTC) controllers for better reliability and remote operation
19					126,000		
20							
21	600	Miscellaneous Distribution Equipment		3,632,976	2,686,000	(946,976)	
22							
23	601	Transformers & Meters		499,490	525,000	25,510	
24		Transformer and Meter Purchases			350,000		
25		Replacement of transclosures			175,000		
26					525,000		
27							
28	603	Sectionalizing Equipment		2,618	100,000	97,382	Mud Bay VFI
29							
30	604	Regulators		8,439	-	(8,439)	
31							
32	606	Ordinary Replacements		278,519	119,000	(159,519)	Reduction due to transfer of Transmission Pole Replacement to 1000 Code
33							
34	608	Underground Dist. Cable Replacement		2,843,911	1,942,000	(901,911)	Partially offset by Conversions and Line Changes (300) above.
35		Hunter Bay URD Replacement			194,000		
36		Indian Beach URD Replacement			100,000		
37		Old Homestead URD Replacement			126,000		
38		Pleasant Valley URD Replacement			105,000		
39		Prohaska Road URD Replacement			120,000		
40		Trailer Park URD Replacement			117,000		
41		Multiple Projects			1,180,000		21 smaller projects under \$100k per project, totaling 10.2 miles.
42					1,942,000		
43							
44	700	Other Distribution Items					
45							
46	704	LMS & SCADA		86,026	89,000	2,974	
47							
48							
49	706	Communications					
50							
51	706.1	Fiber/Microwave Infrastructure (1)		2,418,139	1,290,000	(1,128,139)	
52		Backbone Completion			810,000		Projects completing the \$7.5M construction project (Funding starting in 2014)

ORCAS POWER AND LIGHT COOPERATIVE

CAPITAL PROJECTS BUDGET
 NOTABLE DRIVERS

				A. Projected Year End 2016	B. Proposed Budget 2017	C. Budget Change (B-A)	D.
RUS CWP DESCRIPTION							Comments
53			Microwave Backup Links		100,000		Redundant paths
54			Backup Generation		300,000		Generator for critical communications active sites (30)
55			Multiple Projects		80,000		Tie in of new submarine cable project
56					1,290,000		
57							
58			TRANSMISSION	6,589,311	\$ 9,058,000	2,468,689	
59							
60	900		New Substations, switching station, metering point, etc.	250,427	\$ 650,000	399,573	Begin Decatur switchyard construction including BPA tap
61							
62	1000		Line and Station Changes	6,338,884	8,408,000	2,069,116	
63			Lopez to San Juan 69 kV Sectionalizing		250,000		
64			69 kV Submarine Cable Replacement		7,200,000		Contract payments for cable purchase and installation
65			69 kV Submarine Cable Replacement		425,000		Cable termination and connections
66			Shaw to Orcas 69 kV Sectionalizing		250,000		Reconfiguration and structural improvements to the Shaw North Terminal Station
67			Ordinary Pole Replacement		83,000		See note above (Code 606)
68			Tucker Road Transmission Relocation		200,000		Relocation of transmission line on Tucker Road based on Town of Friday Harbor road project
69					8,408,000		
70			OTHER				
71	1300		Facilities	156,229	300,000	143,771	
72			Eastsound headquarters bathroom		200,000		Remediation of septic/sewer line degradation
73			Eastsound headquarters improvements		72,000		Improvements to coincide with bathroom projects
74			Friday Harbor material yard improvements		28,000		
75					300,000		
76							
77	1500		All Other	842,410	\$ 768,000	(74,410)	
78							
79		1501	Transportation/Equipment/Tools/Radios	563,860	450,000	(113,860)	
80							
81		1502	Office Equipment/Furniture/Etc.	26,866	20,000	(6,866)	
82							
83		1503	Computer/Servers/Software	251,684	298,000	46,316	
84							
85	1600		Minor Projects	247,694	100,000	(147,694)	Projected joint projects and overhead conversions
86							
87			RUS CWP SUBTOTAL	14,868,344	16,243,000	1,374,656	
88							
89			CONTRIBUTION IN AID OF CONSTRUCTION (CIAC)	(746,886)	(1,048,000)	(301,114)	
90			New Services	(373,294)	(291,000)	82,294	Historical trend of new services less abnormal services
91			Meters and Transformers	(253,486)	(209,000)	44,486	Historical trend of new service transformers and meters less abnormal services
92			Joint Projects	(120,107)	(298,000)	(177,893)	Anticipated joint projects with CenturyLink
93			Community Solar Member Contributions (2)	-	(250,000)	(250,000)	Anticipated contributions from members toward community solar in 2018
94							
95			RUS CWP NET TOTAL	14,121,458	15,195,000	1,073,542	
96							
97			Notes:				
98			1 Totals in Fiber/Microwave Infrastructure (706.1) equal \$7.5M from 2014 though budgeted 2017 with further expenditures to create redundant wireless links from San Juan to other islands in 2017.				
99			2 Community solar program is expected to begin via member contributions in 2017 through 2019 while construction is expected to commence in 2018 based on the amount of these contributions.				

ORCAS POWER AND LIGHT COOPERATIVE

2017 - 2021 BUDGETED STAFFING LEVELS

	A.	B.	C.	D.
		ACTUAL	APPROVED BUDGET	APPROVED
	DEPARTMENT	# EMPLOYEES	# EMPLOYEES	# EMPLOYEES
		2016	2016	2017 - 2021
1	Operations ¹	21.5	22.5	22.5
2	Engineering ¹	9.5	9.5	9.5
3	General Management	4	5	5
4	Technical Services	2	2	2
5	Member Services ²	6.5	6.5	6.5
6	Administration	4	4	4
7	Energy Savings ²	1.5	1.5	1.5
8	Total	49	51	51

Notes:

1 Engineering & Operations Manager split between departments

2 Member & Energy Services Manager split between departments

OPALCO ORGANIZATIONAL CHART— 2017 Budget

