



**BOARD OF DIRECTORS
REGULAR MEETING
Thursday, November 16, 2017 9:00 a.m.
Eastsound OPALCO Office**

TRAVEL



Via Island Air

378-2376

To:

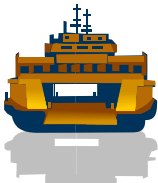
Leave FH 8:15 a.m.
Lopez 8:30 a.m.

Arrive ES 8:45 a.m.

Return:

Leave Eastsound 3:00 p.m.

Arrive Lopez 3:15 p.m.
FH 3:30 p.m.



Via Ferry:

To:

Leave FH 6:10 a.m.
Lopez 6:55 a.m.
Shaw 7:15 a.m.

Arrive Orcas 7:35 a.m.

Return:

Leave Orcas 3:10 p.m.
Leave Orcas 4:30 p.m.

Arrive Shaw 3:25 p.m.
Lopez 3:45 p.m.
FH 5:10 p.m.

Orcas Power & Light Cooperative
Board of Directors
Regular Board Meeting
Eastsound
376-3500
Thursday, November 16, 2017 9:00 a.m.

PAGES

WELCOME

- Video Recording Acknowledgement:
 - *Members attending the board meeting acknowledge that they may be recorded and the recording posted to OPALCO's website.*
- Guest(s): John Donner, CoBank; Dave Sabala
- Member Comment Period:
 - *Members are expected to conduct themselves with civility & decorum, consistent with Member Policy 17. If you would like answers to specific questions, please fill out the Q&A card for post meeting follow-up.*
- NRECA Credentialed Cooperative Director Awards (Brian and Jerry)

DISCUSSION ITEMS

- 3-6** ○ 2018 Budget
- 7-19** ○ Draft Tariff Revisions

ADJOURNMENT

-

Executive Session: Legal, personnel

MEMORANDUM

Date: November 9, 2018

To: Board of Directors

From: Foster Hildreth, General Manager

Re: 2018 Budget Presentation

Under separate cover, attached please find our 2018 Budget Presentation. Consistent with last year's projections, staff is recommending a 5% rate increase for the 2018 budget year only. Staff is recommending that our 2018 budget revenue increase from \$27.8M (projected 2017) to \$29.3M to meet our financial, operational and capital project commitments. The majority (63%) of the required \$1.4M increase includes \$900k for depreciation and interest expense (primarily submarine cable project) and \$50k in power cost. The projected figures for years 2019 thru 2022 are for reference only, as future years will be reviewed annually during our normal budgeting process.

The 2018 budget continues to align our operations to the mission statement of providing safe, reliable, cost effective, and environmentally sensitive utility services. This budget prepares OPALCO to meet the marks set out in our energy road map:

TODAY: Make the most of our available resources. Reduce members' total energy bills through electrification of transportation and heating while continuing to modernize the grid to meet future needs.

TOMORROW: Increase local resilience. Bring more local renewables on, leveraging our dynamic grid and building emergency back-up power for emergency services.

FUTURE: Give members more control. In the coming "transactive" energy world, members will dynamically buy and sell local power, make decisions about their power usage in response to real time price signals and integrate energy storage (EVs, batteries...) into the Co-op grid.

The Board held two rate work sessions in 2017, attended by co-op members, to explore budget implications of rates (June 16) and alternate rate scenarios (September 22). The consensus of the Board after the budget discussion in June was that there are few to no discretionary expenses to cut in the budget, and that the Board does not support budgetary cuts that would have a negative impact on safety or system reliability. In September, the Board compared residential rate structure components scenarios and tested them for equity and trade-offs across the co-op.

The 2018 Budget includes building our first Community Solar project (on Decatur Island); upgrades to lines and substations to integrate our new 69KV tap from BPA in order to reroute power through Blakely directly to Orcas, increasing capacity and resilience; ongoing underground cable replacement; and sewer remodel of our Eastsound headquarters.

This will be the Board's first reading of the rates, which will be brought back to the Board in December for their approval. A budget narrative is provided detailing the basis, assumptions and notable drivers.

Staff recommends Board make a motion to approve the 2018 budget as submitted.

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 – The expansion of OPALCO's grid, built on our fiber backbone, over the last three years, provides a tremendous boost to public safety. Using the fiber and devices connected into our system throughout the islands, OPALCO can reroute power quickly to our members and puts data in the hands of crew members in the field to rapidly locate and resolve outages. First responders, including OPALCO linemen, can reach out for help in the field; members and tourists can get help in times of crisis and our County is connected to real-world services for education, economic development and quality of life.

✓ Reliability – With the new 69KV tap from BPA complete at the Decatur substation, the Blakely and Olga substations will be upgraded from 25KV to 69KV to quickly reroute power and increase capacity. We continue to budget for replacement of the old unjacketed 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. In 2018, we will complete the build out of our first large-scale community solar array. With this ~400KV array and connected Energy Storage System (0.5MW/20 MWh battery), OPALCO will have developed the first step toward a local power supply in case of emergency.

✓ Cost Effective – Our capital construction plan is designed to maximize system efficiency and make best use of member resources. The continual expansion of our grid and fiber-connected devices on our system, helps to 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 store local power generated by our Community Solar project. With equipment replacements scheduled for 2018, 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 successfully removed an old (1977) oil-filled submarine cable, boring under the seafloor to bypass sensitive shoreline areas and installing an additional conduit on the Lopez side to minimize the disruption for future projects. In 2018, we will construct 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. OPALCO is contributing to the County Comprehensive Plan review (2017-2018) to align our energy future policies and practices with this vision of stewardship and sustainability.

Load Forecast:

The Load Forecast is the heart of the budget and the most precarious aspect of our forecasting. The energy management team of PNGC (Pacific NW Generating Cooperative) assisted us with load forecasting for this budget. They bring valuable industry expertise and resources to our Co-op to help us navigate 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. We saw load increase in 2017 due to colder temperatures, marking the shift from an El Nino (warmer) weather pattern to the predicted La Nina (cooler) pattern. In 2018, the forecast is for a return to a neutral weather pattern with projected kilowatt hour purchases from BPA of 216M kWh. As a point of reference, OPALCO's load has ranged between 204M (2015) – 220M (2017) kWh.

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.

MEMORANDUM

November 9, 2017

TO: Board of Directors

FROM: Foster Hildreth

RE: Tariff Revisions

The tariffs have been edited to include the rate increases proposed with the 2018 budget and, if approved, will be effective with the January 2018 billing.

This is the first reading; no action is necessary. The tariffs will be presented in their final form at the December meeting.

ORCAS POWER AND LIGHT COOPERATIVE

RECOMMENDED RATE STRUCTURE

	A.	B.	C.	D.	E.	F.	G.
1 Residential		Present Rates	Recommended 5% Increase to All Components	All Facility	All kWh	Rate Increase delayed to March ² 6.5% Increase to All Components	Rate increase delayed to April ² 7.5% Increase to All Components
2 Facility Rate (\$/Service/Month)		\$40.54	\$42.57	\$48.32	\$40.54	\$43.18	\$43.58
4 Energy Assistance Program (\$/kWh)		\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005
5 Energy Rates (\$/kWh)							
6 Summer Block 1 (< 1,500 kWh)		\$0.0959	\$0.1007 (< 2,000 kWh)	\$0.0959	\$0.1032	\$0.1022	\$0.1031
7 Summer Block 2 (1,500 kWh to 3000 kWh)		\$0.1087	\$0.1141 (2,000 to 3,000 kWh)	\$0.1011	\$0.1170	\$0.1158	\$0.1169
8 Summer Block 3 (> 3,000 kWh)		\$0.1289	\$0.1353	\$0.1200	\$0.1387	\$0.1373	\$0.1386
9 Winter Block 1 (< 3,000 kWh)		\$0.0959	\$0.1007 (< 4,000 kWh)	\$0.0959	\$0.1032	\$0.1022	\$0.1031
10 Winter Block 2 (3,000 kWh to 5,000 kWh)		\$0.1087	\$0.1141 (4,000 to 5,000 kWh)	\$0.1011	\$0.1170	\$0.1158	\$0.1169
11 Winter Block 3 (> 5,000 kWh)		\$0.1289	\$0.1353	\$0.1200	\$0.1387	\$0.1373	\$0.1386
12 Residential TOU		Present Rates	Recommended 5% Increase to All Components	All Facility	All kWh	6.5% Increase to All Components	7.5% Increase to All Components
14 Facility Rate (\$/Service/Month)		\$45.99	\$48.29	\$59.06	\$45.99	\$48.98	\$49.44
15 Demand Rate (\$/Service/Month)							
16 Energy Assistance Program (\$/kWh)		\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005
17 Energy Rates (\$/kWh)							
18 TOU Period 1 (6 AM - Noon)		\$0.1609	\$0.1690	\$0.1609	\$0.1707	\$0.1714	\$0.1730
19 TOU Period 2 (Noon - 6 PM)		\$0.0995	\$0.1045	\$0.0995	\$0.1056	\$0.1060	\$0.1070
20 TOU Period 3 (6 PM - 8 PM)		\$0.1609	\$0.1690	\$0.1609	\$0.1707	\$0.1714	\$0.1730
21 TOU Period 3 (8 PM - 6 AM)		\$0.0436	\$0.0458	\$0.0436	\$0.0463	\$0.0465	\$0.0469
23 Small Commercial (<20 kW)		Present Rates	Recommended 5% Increase to All Components	All Facility	All kWh	6.5% Increase to All Components	7.5% Increase to All Components
24 Facility Rate (\$/Service/Month)		\$57.65	\$60.53	\$65.75	\$57.65	\$61.40	\$61.97
25 Energy Assistance Program (\$/kWh)		\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005
26 Energy Rates (\$/kWh)							
27 Block 1 (< 5,000 kWh)		\$0.0976	\$0.1025	\$0.0976	\$0.1053	\$0.1040	\$0.1050
28 Block 2 (> 5,000 kWh)		\$0.1090	\$0.1145	\$0.1090	\$0.1176	\$0.1161	\$0.1172
29 Demand Rates (\$/kW)							
30 First 20 kW (Flat Rate)		\$5.66	\$5.94	\$5.66	\$6.02	\$5.70	\$6.08
32 Large Commercial (> 20kW)		Present Rates	Recommended 5% Increase to All Components	All Facility	All kWh	6.5% Increase to All Components	7.5% Increase to All Components
33 Facility Rate (\$/Service/Month)		\$57.65	\$60.53	\$113.49	\$57.65	\$61.40	\$61.97
34 Energy Assistance Program (\$/kWh)		\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005
35 Energy Rates (\$/kWh)							
36 Block 1 (< 5,000 kWh)		\$0.0864	\$0.0907	\$0.0864	\$0.0910	\$0.1138	\$0.1148
37 Block 2 (5,000-150,000 kWh)		\$0.0957	\$0.1005	\$0.0957	\$0.1008	\$0.1260	\$0.1272
38 Block 3 (>150,000 kWh)		\$0.1277	\$0.1341	\$0.1277	\$0.1345	\$0.1681	\$0.1697
39 Demand Rates (\$/kW)							
40 Block 1 (< 300 kW)		\$3.49	\$3.66	\$3.49	\$3.67	\$3.72	\$3.75
41 Block 2 (> 300 kW)		\$5.24	\$5.50	\$5.24	\$5.52	\$5.58	\$5.63
43 Pumps		Present Rates	Recommended 5% Increase to All Components	All Facility	All kWh	6.5% Increase to All Components	7.5% Increase to All Components
44 Facility Rate (\$/Service/Month)		\$37.93	\$39.83	\$40.90	\$37.93	\$40.39	\$40.77
45 Energy Assistance Program (\$/kWh)		\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005	\$0.0005
46 Energy Rates (\$/kWh)							
47 0 - 370 kWh		\$0.1008	\$0.1059	\$0.1008	\$0.1155	\$0.1074	\$0.1064
48 370-5,000 kWh		\$0.0875	\$0.0919	\$0.0875	\$0.1002	\$0.0932	\$0.0941
49 Over 5,000 kWh		\$0.0982	\$0.1031	\$0.0982	\$0.1124	\$0.1046	\$0.1056
50 Demand Rates (\$/kW)							
51 First 20 kW (Flat Rate)		\$1.05	\$1.10	\$1.05	\$1.14	\$1.12	\$1.13
52 Over 20 kW		\$3.48	\$3.65	\$3.48	\$3.89	\$3.71	\$3.74

1) Any per energy charge (\$ per kWh) above \$0.1025 may induce fuel switching to fossil fuels.
 2) Assumes Block changes from Recommended Residential Scenario (Column C) to all rate periods in year

**ORCAS POWER AND LIGHT COOPERATIVE
TARIFF LCS –17**

LARGE COMMERCIAL SERVICE

~~TWENTIETH~~ **TWENTY-FIRST** REVISION – REPLACING ~~NINETEENTH~~ **TWENTIETH** REVISION

AVAILABILITY

Available to all non-residential members using more than 20 kW in any one or more of the preceding twelve (12) months, subject to the General Provisions hereunder.

TYPE OF SERVICE

Single-phase or three phase, 60 cycles, at available secondary voltage, equipment subject to automatic load management controls.

APPLICATION

General Service for heating, lighting, etc., for marinas for commercial use, and non-residential members.

FACILITY CHARGE ~~\$57.65~~ **\$60.53**

ENERGY ASSISTANCE PROGRAM \$0.0005 per kWh

ENERGY CHARGE Block 1 ($\leq 5,000$ kWh) @ ~~\$0.0864~~ **\$0.0907** per kWh
Block 2 ($> 5,000 - 150,000$ kWh) @ ~~\$0.0957~~ **\$0.1005** per kWh
Block 3 ($> 150,000$ kWh) @ ~~\$0.1277~~ **\$0.1341** per kWh

DEMAND CHARGE Block 1 (≤ 300 kW) ~~\$3.49~~ **\$3.66** per kW
Block 2 (> 300 kW) ~~\$5.24~~ **\$5.50** per kW

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be ~~\$57.65~~ **\$60.53** per month or prorated if service is provided for less than a full month.

DETERMINATION OF BILLING DEMAND

The billing demand shall be the maximum kilowatt demand established by the member for any period of fifteen (15) consecutive minutes during the month for which the bill is rendered as indicated or recorded by a demand meter and adjusted for power factor as provided below.

POWER FACTOR ADJUSTMENT

Demand charges may be adjusted to correct for average power factors lower than 95%. Such adjustments will be made by increasing the measured demand 1% for each 1% by which the average power factor is less than 95% lagging.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

1. Member agrees to allow the cooperative, at its discretion, to install automatic load management controls.
2. Except for bed and breakfast establishments, service under this rate shall not be provided to locations with occupied residential facilities unless such facilities are insignificant with respect to the business operations at the location.
3. Bed and breakfast establishments will be served under this rate tariff if the owner or manager does not live in a building served by this meter.
4. The rated capacity of any motor served under this tariff shall be as follows:
 - Motors up to 2 HP can operate at 115 volts.
 - Motors larger than 2 HP (single phase) are subject to requirements in Member Service Policy 3-Technical Provisions.
5. No single resistive 3-phase loads (examples: ovens, heaters, kilns) of over 45kW shall come on line simultaneously.
6. Non-resistive loads such as arc welders, fluorescent or mercury lamps, and induction heating furnaces are causes of harmonic distortion and may require corrective measures.
7. See Member Service Policy 3-*Technical Provisions* for additional requirements.

_____ Effective Date January 2017 **2018** Billing Period
Foster Hildreth, General Manager

ORCAS POWER AND LIGHT COOPERATIVE

TARIFF LR –16 18

LINE RETENTION

SEVENTEENTH **EIGHTEENTH** REVISION – REPLACING SIXTEENTH **SEVENTEENTH** REVISION

AVAILABILITY

Available for individual residential, marina, and general service accounts where the primary and transformer only serve one member and the removal of the equipment will not affect the service to other members, and/or no service has been taken for a period of twelve (12) months.

TYPE OF SERVICE

Single-phase, 7200 GrdY primary or 120/240 secondary voltage.

APPLICATION

Payment of the line retention rate will ensure that the facilities remain in place for future use.

FACILITY CHARGE ~~\$22.26~~ **\$23.37**

ENERGY CHARGE

No energy may be used under this rate.

MINIMUM MONTHLY CHARGE

The monthly charge, under the above rate, shall be ~~\$22.26~~ **\$23.37** per month or prorated if service is provided for less than a full month.

GENERAL PROVISIONS FOR MEMBERS ON LINE RETENTION

1. The above rate is not available where energy is being used or where a meter is installed.
2. OPALCO normally retires and/or removes facilities that have not been used for twelve (12) months. Payment of the line retention rate will ensure that the facilities remain in place for future use. If OPALCO removes any equipment and the member wants it reinstalled, the member shall be required to apply for a new service or line extension in accordance with the current member service policy.
3. Members who have discontinued service for a period of twelve (12) months or have made a formal request for service and have not connected to the system after a period of twelve (12) months are subject to the line retention rate, provided that OPALCO has determined that the facilities are causing ongoing expenses, such as line losses or line maintenance to the system.

_____ Effective Date: January 2016 **2018** Billing Period
Foster Hildreth, General Manager

ORCAS POWER AND LIGHT COOPERATIVE
TARIFF P- 17 18
PUMP SERVICE

~~TWENTIETH~~ **TWENTY-FIRST** REVISION – REPLACING ~~NINETEENTH~~ **TWENTIETH** REVISION

AVAILABILITY

Available to all members, subject to the General Provisions hereunder.

TYPE OF SERVICE

Single-phase, 60 cycles, at available secondary voltage, equipment subject to automatic load management controls.

APPLICATION

Service for pumping water for domestic use and/or irrigation.

FACILITY CHARGE ~~\$37.93~~ **\$39.83**

ENERGY ASSISTANCE PROGRAM \$0.0005 per kWh

ENERGY CHARGE 0-370 kWh @ ~~\$0.1008~~ **\$0.1059** per kWh
371-5,000 kWh @ ~~\$0.0875~~ **\$0.0919** per kWh
Over 5,000 kWh @ ~~\$0.0982~~ **\$0.1031** per kWh

DEMAND CHARGE First 20 kW (flat rate) ~~\$4.05~~ **\$1.10**
Over 20 kW ~~\$3.48~~ **\$3.65** per kW

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be ~~\$37.93~~ **\$39.83** per month or prorated if service is provided for less than a full month.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

1. All pumps served under this tariff shall be metered separately.
2. The rated capacity of any motor served under this tariff shall be as follows:
 - Motors up to 2 HP can operate at 115 volts.
 - Motors larger than 2 HP shall operate at 230 volts and are subject to requirements in Member Service Policy 3-Technical Provisions.
3. See Member Service Policy 3-Technical Provisions for additional requirements.

Effective Date: January 2017 **2018** Billing Period

Foster Hildreth, General Manager

**ORCAS POWER AND LIGHT COOPERATIVE
TARIFF POL – 16 18
PRIVATE OUTDOOR LIGHTING**

~~NINETEENTH TWENTIETH REVISION – REPLACING EIGHTEENTH NINETEENTH REVISION~~

AVAILABILITY

New service under this tariff is not available after March 1, 1998. Those members receiving service under this tariff prior to March 1, 1998 may continue to do so.

TYPE OF SERVICE

OPALCO will own, maintain and operate suitable fixtures on brackets, with refractors and controls, and supply energy for sodium vapor lamps at locations agreed upon with the member, the service distance not to exceed 150 feet/2 wire, or 300 feet/3 wire.

APPLICATION

Non-metered or metered street, yard or security lighting service.

BILLING CHARGE * ~~\$2.43~~ **\$2.55** per month

FIXTURE CHARGE ~~\$10.37~~ **\$10.89** per month

ENERGY CHARGE ** 100 Watts ~~\$4.17~~ **\$4.38** per month
200 Watts ~~\$8.47~~ **\$8.89** per month

* Applies only when not included on a bill for other energy usage.

** Applies only when energy is not metered.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by Bonneville Power Administration.

GENERAL PROVISIONS

1. All lamp replacements and other maintenance will be provided by OPALCO, except that lamps and fixtures broken by vandalism will be charged to the member.
2. The member shall notify OPALCO if a lamp does not operate. OPALCO agrees to repair lamps as soon as possible, but, in any event, within five (5) working days.
3. A timing device and/or photo electric cell may be installed by OPALCO in order to limit the time interval that the lamp is turned on each night.
4. During the periods of energy shortage, lamps may be disconnected by request of either the cooperative or member, with no charge to member. The member will not be charged for the period the light has been disconnected.

Effective Date: January 2016 **2018** Billing Period

Foster Hildreth, General Manager

**ORCAS POWER AND LIGHT COOPERATIVE
TARIFF R – 17 **18**
RESIDENTIAL SERVICE**

NINETEENTH EIGHTEENTH REVISION – REPLACING **EIGHTEENTH** SEVENTEENTH REVISION

AVAILABILITY

Available to all small farm and home members, subject to the General Provisions hereunder.

TYPE OF SERVICE

Single-phase, 60 cycles, at available secondary voltage, equipment subject to automatic load management controls.

APPLICATION

Service for home and farm uses, such as cooking, lighting, heating, private docks not used for commercial purposes, etc. Residences qualifying as “cottage industries” by San Juan County shall be served under this tariff.

FACILITY CHARGE \$40.54 **42.57**

ENERGY ASSISTANCE CHARGE \$0.0005 per kWh

ENERGY CHARGE

	Summer		Winter	
Block 1	<1,500 2,000 kWh	\$.0959 .1007 per kWh	<3,000 4,000 kWh	\$.0959 .1007 per kWh
Block 2	1,501 2,001 – 3,000 kWh	\$.1087 .1141 per kWh	3,001 4,001 - 5,000 kWh	\$.1087 .1141 per kWh
Block 3	3,001 – 5,000 kWh	\$.1289 .1353 per kWh	>5,000 kWh	\$.1289 .1353 per kWh

DEMAND CHARGE \$0.00

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be \$40.54 **\$42.57** per month or prorated if service is provided for less than a full month.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

1. Member agrees to allow the cooperative, at its discretion, to install automatic load management controls.

2. The rated capacity of any motor served under this tariff shall be as follows:
 - Motors up to 2 HP can operate at 115 volts.
 - Motors larger than 2 HP shall operate at 230 volts and are subject to requirements in Member Service Policy 3-Technical Provisions.
3. No single resistive loads (examples: ovens, heaters, kilns) over 15 kW shall come on line simultaneously.
4. Non-resistive loads such as arc welders, fluorescent or mercury lamps, and induction heating furnaces are causes of harmonic distortion and may require corrective measures.
5. See Member Service Policy 3 *Technical Provisions* for additional requirements.
6. Bed and breakfast establishments will be served under this rate if the owner or manager lives in a building served by this meter.
7. Summer Block is defined as May billing cycle through September billing cycle; Winter Block is defined as October billing cycle through April billing cycle.

Foster Hildreth, General Manager

Effective Date: January 2017 2018 Billing Period

ORCAS POWER AND LIGHT COOPERATIVE

TARIFF SCS – 17 **18**

SMALL COMMERCIAL SERVICE

EIGHTEENTH **NINETEENTH** REVISION – REPLACING SEVENTEENTH **EIGHTEENTH** REVISION

AVAILABILITY

Available to all non-residential members using less than 20 kW in all of the preceding twelve (12) months, subject to the General Provisions hereunder.

TYPE OF SERVICE

Single-phase or three phase, 60 cycles, at available secondary voltage, equipment subject to automatic load management controls.

APPLICATION

General Service for heating, lighting, etc., for marinas for commercial use, and non-residential members.

FACILITY CHARGE ~~\$57.65~~ **\$60.53**

ENERGY ASSISTANCE PROGRAM \$0.0005 per kWh

ENERGY CHARGE Block 1 (< 5,000 kWh) @ ~~\$0.0976~~ **\$0.1025** per kWh
Block 2 (>-5,000 kWh) @ ~~\$0.1090~~ **\$0.1145** per kWh

DEMAND CHARGE ~~\$5.66~~ **\$5.94** per month

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be ~~\$57.65~~ **\$60.53** per month or prorated if service is provided for less than a full month.

DETERMINATION OF BILLING DEMAND

The billing demand shall be the maximum kilowatt demand established by the member for any period of fifteen (15) consecutive minutes during the month for which the bill is rendered as indicated or recorded by a demand meter and adjusted for power factor as provided below.

POWER FACTOR ADJUSTMENT

Demand charges may be adjusted to correct for average power factors lower than 95%. Such adjustments will be made by increasing the measured demand 1% for each 1% by which the average power factor is less than 95% lagging.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

1. Member agrees to allow the cooperative, at its discretion, to install automatic load management controls.
2. Except for bed and breakfast establishments, service under this rate shall not be provided to locations with occupied residential facilities unless such facilities are insignificant with respect to the business operations at the location.
3. Bed and breakfast establishments will be served under this rate tariff if the owner or manager does not live in a building served by this meter.
4. The rated capacity of any motor served under this tariff shall be as follows:
 - Motors up to 2 HP can operate at 115 volts.
 - Motors larger than 2 HP (single phase) are subject to requirements in Member Service Policy 3-Technical Provisions.
5. No single resistive 3-phase loads (examples: ovens, heaters, kilns) of over 45kW shall come on line simultaneously.
6. Non-resistive loads such as arc welders, fluorescent or mercury lamps, and induction heating furnaces are causes of harmonic distortion and may require corrective measures.
7. See Member Service Policy 3-*Technical Provisions* for additional requirements.

<p>_____</p> <p>Foster Hildreth, General Manager</p>	<p>Effective Date <u>January 2017 2018</u> Billing Period</p>
--	--

**ORCAS POWER AND LIGHT COOPERATIVE
TARIFF TOU- 17 18
RESIDENTIAL TIME OF USE RATE**

(Formerly known as "ESR-08 Energy Saving Rate)

~~NINETEENTH~~ **TWENTIETH** REVISION – REPLACING ~~EIGHTEENTH~~ **NINETEENTH** REVISION

AVAILABILITY

Available to all small farm and home members, subject to the General Provisions hereunder.

TYPE OF SERVICE

Single-phase, 60 cycles, at available secondary voltage. Equipment subject to automatic load management controls.

APPLICATION

Service for small farms, homes, pools, greenhouses and other non-essential loads. Limited to single phase loads.

FACILITY CHARGE: \$45.99 **\$48.29**

ENERGY ASSISTANCE PROGRAM \$0.0005 per kWh

ENERGY CHARGE:

Period	Time	Cost per kWh
1	6:00 am – Noon	\$0.1609 \$0.1690
2	Noon – 6:00 pm	\$0.0995 \$0.1045
3	6:00 pm – 8:00 pm	\$0.1609 \$0.1690
4	8:00 pm – 6:00 am	\$0.0436 \$0.0458

DEMAND CHARGE: \$0.00

MINIMUM MONTHLY CHARGE

The minimum monthly charge, under the above rate, shall be ~~\$45.99~~ **\$48.29** per month or prorated if service is provided for less than a full month.

WHOLESALE POWER COST ADJUSTMENT

A surcharge or credit may be applied to each billing for service under this tariff to reflect increases or decreases in the wholesale cost of power based on the rates charged by the Bonneville Power Administration.

GENERAL PROVISIONS

1. Member agrees to allow the cooperative, at its discretion, to install automatic load management controls.

2. The rated capacity of any motor served under this tariff shall be as follows:
 - Motors up to 2 HP can operate at 115 volts.
 - Motors larger than 2 HP shall operate at 230 volts and are subject to requirements in Member Service Policy 3-Technical Provisions.
3. No single resistive loads (examples: ovens, heaters, kilns) over 15 kW shall come on line simultaneously.
4. Non-resistive loads such as arc welders, fluorescent or mercury lamps, and induction heating furnaces are causes of harmonic distortion and may require corrective measures.
5. Loads served under this tariff shall not be capable of being switched to another meter served under a different tariff.
6. See Member Services Policy 3 *Technical Provisions* for additional requirements.

Foster Hildreth, General Manager

Effective Date: January 2017 2018 Billing Period