



## BOARD OF DIRECTORS REGULAR MEETING

**Thursday, March 21, 2019 8:30 a.m.**

**Friday Harbor Office**

### TRAVEL



**Via Island Air  
(378-2376)**

**To:**

|       |       |           |        |    |           |
|-------|-------|-----------|--------|----|-----------|
| Leave | Lopez | 7:45 a.m. | Arrive | FH | 8:00 a.m. |
|-------|-------|-----------|--------|----|-----------|

**Return:**

|       |    |           |        |       |           |
|-------|----|-----------|--------|-------|-----------|
| Leave | FH | 2:30 p.m. | Arrive | Lopez | 2:45 p.m. |
|-------|----|-----------|--------|-------|-----------|



**Via Ferry:**

**To:**

|       |       |           |        |    |           |
|-------|-------|-----------|--------|----|-----------|
| Leave | Shaw  | 7:00 a.m. | Arrive | FH | 8:10 a.m. |
|       | Orcas | 7:20 a.m. |        |    |           |
|       | Lopez | 7:10 a.m. |        |    | 7:40 a.m. |

**Return:**

|       |    |           |        |       |           |
|-------|----|-----------|--------|-------|-----------|
| Leave | FH | 2:05 p.m. | Arrive | Orcas | 2:55 p.m. |
|       |    | .         |        | Shaw  | 3:10 p.m. |
|       |    | .         |        | Lopez | 3:30 p.m. |

### **Sequence of Events**

- Board Meeting

**Orcas Power & Light Cooperative**  
**Board of Directors**  
**Regular Board Meeting**  
Friday Harbor  
**March 21, 2019 8:30 A.M.\***

*\*Time is approximate; meetings are scheduled around the ferry schedule; if all Board members are present, the meeting may begin earlier or later than advertised.*

**Pages**

**WELCOME GUESTS/MEMBERS**

*Member attending the board meeting acknowledge that they may be recorded, and the recording posted to OPALCO's website.*

- Member Comment Period
  - *Members are expected to conduct themselves with civility and decorum, consistent with Member Service Policy 17. If you would like answers to specific questions, please fill out Q&A card for post-meeting follow-up.*

**ACTION ITEMS**

- 3-17
- Consent Agenda
  - Bylaws: Timing of Board Officer Election
  - Decatur Energy Storage System
  - GM Annual Review

**DISCUSSION ITEMS**

- 18
- Election Update

**REPORTS**

- 19-26
- 2018 Year End Financials
  - General Manager
  - Rock Island Snapshot

**COMMUNICATION**

- 27-33
- PNGC Power Pulse
  - Climate Change Takes a Bite Out of Global Fisheries

**ADJOURNMENT**

Executive Session: Legal, personnel

## MEMORANDUM

March 15, 2019

TO: Board of Directors

FROM: Foster Hildreth

RE: Consent Agenda

All matters listed with the Consent Agenda are considered routine and will be enacted by one motion of the Board with no separate discussion. If separate discussion is desired, that item may be removed from the Consent Agenda and placed as an Action Item by request of a Board member. The minutes will reflect the approved consent agenda.

The Consent Agenda includes:

- **Minutes** of the previous meeting – attached. January 2019 minutes are also included which were inadvertently omitted for last month's board packet.
- **Approval of New Members** – attached {as required by Bylaws Article I Section 2 (d)}

### NEW MEMBERS – February 2019

**District 1** (San Juan, Pearl, Henry, Brown, Spieden)

1. Bamberg, Adam
2. Boland, Jessica K
3. Boman, Christie
4. Bulloch, Robert
5. Cole, Sara & John A
6. Devine, Kimberly
7. Haws, Brett
8. Keane, Tabatha
9. Koehne, Virgil & Renee
10. Labeau, Roxanne & Joseph
11. Loll, Chris
12. Movement Mortgage, LLC
13. Munkres, Eric & Monique
14. Pampanin, Rita
15. The Ballet and Movement School
16. Villegas, Dakota
17. Von Dassow, Yasmin & Michaelan

**District 2** (Orcas, Armitage, Blakely, Obstruction, Big Double, Little Double, Fawn)

18. Anderson, Jennifer
19. Brink Electric LLC
20. Hane, Jonathan & Sarah
21. Island Thyme LLC
22. Lawrence, David A
23. O'Conner, Debra
24. Ockerman, Taryn & Gregory
25. Przygoda, Gregory
26. Roy, Robert

**District 3** (Lopez, Center, Decatur, Center, Charles)

27. Estate of Linda Brainerd
28. Hodges, Nathan & Sage
29. MacDonald, Brady
30. McNicoll, Andrew & Laurie
31. Patino, Tara
32. Prater, Alex & Haymaker, Gaea
33. Rogers, John & Catherine
34. Ryan, Kristin
35. Sanford, Stephanie L
36. Wood, Irene G & Danny J

- **Capital Credit** payments to estates of deceased members and/or organizations no longer in business as shown below:

| <b>March</b> |                    |
|--------------|--------------------|
| Customer #   | Amount             |
| 35190        | \$ 386.20          |
| 14140        | 438.72             |
| 68395        | 169.91             |
| 21920        | 706.31             |
| 65699        | 613.29             |
| 29740        | 239.20             |
| 71881        | 118.34             |
| <b>Total</b> | <b>\$ 2,671.97</b> |

- **RUS 219s** *Inventory of Work Orders* of projects completed from the Construction Work Plan totaling \$215,622.38. These forms are submitted to RUS for approval of loan funds.

Inventory 201901 - \$215,622.38 for URD replacement and pole replacements

Staff requests a motion to approve the Consent Agenda.

**Orcas Power & Light Cooperative**  
**Minutes of the Board of Directors Meeting**  
**Thursday, January 17, 2019**

Acting President Jerry Whitfield called the meeting to order at 8:29 a.m. in the Eastsound OPALCO Conference Room. Board members present were Rick Christmas, Brian Silverstein, Mark Madsen, Jeff Struthers and Jerry Whitfield. Board member Peter Garlock attended via Zoom. Staff present were General Manager Foster Hildreth, Manager of Engineering and Operations Russell Guerry, Manager of Finance and Member Services Nancy Loomis, Head Accountant Travis Neal, Legal Counsel Joel Paisner and Public Relations Administrator Suzanne Olson (serving as recording secretary). Guests in attendance included Mike O'Connell, Dwight Lewis and Peter Guillozet.

**CONSENT AGENDA**

- **Motion** was made and seconded to approve the Consent Agenda, including December 20, 2018 minutes, new members as listed with the Board materials, capital credit payments totaling \$12,705.60 and RUS 219s totaling \$161,920.56. Motion carried by voice vote.

**NWPPA BOARD SEAT**

NWPPA is calling for the State of Washington General Manager seat on the the NWPPA open to a cooperative utility. Board discussed the merits and time requirements and supported Foster Hildreth to submit his name into the election process.

- **Motion** was made to approve Foster Hildreth to participate as a NWPPA Board Member, should he be elected in September. Motion carried by voice vote.

**LONG LIVE THE KINGS SALMON HATCHERY PRESENTATION**

Hatchery Manager Mike O'Connell gave a presentation on the Long Live the Kings salmon hatchery at Youngren's Pond and answered questions on salmon recovery efforts. In brief, the current push is to get more hatchery salmon into the Salish Sea to feed the whales. O'Connell believes it will take 2-3 years to see results.

**BOARD ROLES**

Attorney Joel Paisner led the Board through a verbal review of board roles, obligations and fiduciary responsibilities. Hot topics industry wide include capital credit accounting, member participation in governance (elections) and management of staff – in OPALCO's case the General Manager. Paisner gave the Board high marks for all areas and cited examples of the budget process, monthly board materials made available to the public and meeting and exceeding lender requirements (TIER, etc.). Discussion ensued on board self evaluation process, best practices from the co-op bar, and the OPALCO-Rock Island broadband success story.

**POLICY 1: QUALIFICATIONS OF BOARD CANDIDATES**

Staff presented revisions to Policy 1 for a first read – primarily replacing the "Nominations Committee" with the "Elections & Governance Committee" as the body that reviews candidate qualifications. The revised policy also clarifies managerial and operational control of the Co-op's subsidiary company. Discussion ensued on EGC vs petition nominations process, bylaw implications and clarifying language for how EGC districts are drawn. The Board requested staff improve the language that defines qualifications for board candidates and set clear criteria for the collective skill set that is preferable for the board as a whole. An objective of updating the policy is to ensure that candidates by petition (anyone who would run for a board seat) would be held to the same standard. Staff noted that the EGC are tasked with performing a comprehensive review of OPALCO's election policies this year, with an objective of final Board approval prior to the start of the 2020 election cycle. Board will revisit in February.

**2019 CALENDAR OF EVENTS**

Changes were made to the board meeting dates in March and August. Board requested staff create an online shared calendar of co-op events. The updated calendar includes the following changes:

- March 20: Board Work Session / RIC Quarterly Update (Eastsound)
- March 21: Regular Board Meeting (Friday Harbor)
- August 8: Board Work Session / RIC Quarterly Update (Eastsound)
- August 9: Regular Board Meeting (Eastsound)

**WSDOT FERRIES**

Staff presented a letter of support for current bills that would fund WSDOT Ferry projects and advocates for an electric ferry on the San Juan Islands route in the next appropriations cycle. Discussion ensued on regional meetings, WSF priorities and timelines, infrastructure required to support electric ferries in OPALCO's territory, and political advocacy. Board signed advocacy letter to Governor Inslee and requested staff continue their outreach with local and state legislators.

## **REPORTS**

### **General Manager**

The Board reviewed the GM report and discussion ensued. Board requested that OPALCO and RIC research implementation of a program coined “stop the bleed” in concert with the Fire Department campaign. Staff reported that bids for the energy storage battery project were higher than expected and staff is conducting a full analysis before moving forward. Hildreth pointed to the robust year-end kilowatt sales and discussion ensued on the role of wind as a wild card in forecasting for Heating Degree Days in the budget process and the wisdom of implementing the new true-up mechanism to the rate structure to keep revenue on track.

### **RIC Snapshot**

The Board reviewed the monthly snapshot.

## **ADJOURNMENT**

Meeting adjourned at 12:40 pm.

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Vince Dauciunas, President

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Brian Silverstein, Secretary-Treasurer

**Orcas Power & Light Cooperative**  
**Minutes of the Board of Directors Meeting**  
**Thursday, February 21, 2019**

President Vince Dauciunas called the meeting to order at 8:18 a.m. in the Lopez Firehall meeting room. Board members present were Brian Silverstein, Peter Garlock, Mark Madsen and Jeff Struthers. Rick Christmas and Jerry Whitfield attended via Zoom. Staff present were General Manager Foster Hildreth, Manager of Engineering and Operations Russell Guerry, Manager of Finance and Member Services Nancy Loomis, Attorney Joel Paisner, Public Relations Administrator Suzanne Olson and Executive Assistant Kelly Koral (serving as recording secretary). Consultant Jay Kimball was in attendance.

**Member/Guests**

Dwight Lewis  
Sandy Bishop  
Diana Hancock (member and Counsel to Dwight Lewis)  
John Oakley  
Scott Meyers  
Bob Porter  
Steve Ludwig  
Alan McKee  
Sandra McKee  
Richard Strachan  
3 unidentified members

President Vince Dauciunas stated the Executive Session would begin after the members/guests had the opportunity to address the Board during Member Comment Period.

Comments were made by the members addressing the disqualification of Dwight Lewis as a potential candidate by petition for the Board position. OPALCO corporate counsel presented his rationale for disqualification of Lewis as a Board candidate. Comment session of the meeting was closed at 8:45 a.m.

The Board went in to Executive Session at 8:50 a.m. to discuss the disqualification of Dwight Lewis in more detail. Concluded at 10:30 a.m.

**ELECTION**

Dauciunas addressed the members and guests. The Board reviewed and held discussion regarding Board qualifications section of the bylaws, Member Service Policy 9 – *Fair Treatment by OPALCO*. Three incumbent candidates recused themselves from voting. The Board agreed to support counsels decision to disqualify Dwight Lewis as a candidate in the upcoming election.

Joel Paisner discussed transparency of the issue and requested that Dwight Lewis sign a release to allow OPALCO to provide the materials reviewed by counsel to the public. Diana Hancock asked Joel Paisner to please send his request to her in writing.

Regular session reconvened at 10:40 a.m.

Madsen put forth the following **motion**:

The Elections and Governance Committee (EGC) to be tasked to review bylaw and policy to ensure consistency in OPALCO's election process for Directors. To take public input as part of the process and to bring recommendation to the Board for any modifications to the bylaws or policies.

Motion was seconded. Carried by voice vote.

**CONSENT AGENDA**

- **Motion** was made and seconded to approve Consent Agenda, including January 17, 2019 minutes, new members as listed with the Board materials, capital credit payments totaling \$41,662.23 and RUS 219s totaling \$2,104,956.63. Motion carried by voice vote.

## **POLICY 1**

Staff requested Board approve as written, clarifying oversight of RIC and substituting language regarding the nominations committee with the new EGC.

- **Motion** was made to approve revisions to Policy 1 as presented. Motion carried by voice vote.

## **YEAR IN REVIEW**

Hildreth presented a summary of the many accomplishments achieved during 2018 by both OPALCO and Rock Island. Staff noted OPALCO has requested the first advance on the RUS loan (RESP) to support member efficiency projects with on-bill financing. OPALCO is the first co-op in the nation to make such a request.

## **WRECA UPDATE**

Hildreth and Whitfield updated the Board about current issues in Olympia including clean energy, carbon reduction, the electrification of the ferries and net metering.

## **ROSARIO HYDRO**

Hildreth reviewed an email received from Russel Barsh expressing concerns about OPALCO's relationship to Rosario's hydro generation facility. Staff clarified that there is no power purchase agreement with Rosario and concerns were unfounded.

## **SPRING STREET SCHOOL REQUEST**

Hildreth presented a request from Spring Street School in Friday Harbor to decorate the equipment located in front of their school in coordination with the Friday Harbor Arts Council. Discussion ensued about operations, safety and concerns of about graffiti. Staff felt that concerns could be addressed. Board deferred to staff.

## **INVERTER – CALIFORNIA RULE 21 PHASE 3**

Board and staff discussed the implication of California Rule 21 phase 3 and its impact on OPALCO's policies. Standards are still in development and staff will be following the progression. This standard will have implications for our Decatur energy storage system.

## **GENERAL MANAGER'S REPORT**

WIP was down approximately \$2M from last month. The next reduction in WIP is the Blakey substation – some final tie outs to be done.

Total hours since lost time accident is 129,259 despite hazardous working conditions during recent storm events.

Rodney Peach from RUS was on Orcas for a field visit. Procedures were reviewed along with a visit to the Decatur substation. Staff presented accounting modules, work orders and loan project submittals for Mr. Peach's review to demonstrate consistency with the work efforts and documentation. Received great feedback from Mr. Peach: OPALCO's records and procedures are in excellent shape. He had the following observations:

- "Both substations look to be in great order along with the 219's for funding."
- "Your process for posting work orders has checks and balances to make sure RUS Projects are properly coded and posted to the appropriate accounts for reimbursement."
- "Any information that I have asked for has been provided and your team is in compliance with our regulations to the best of my knowledge."

The redundant feed to Eastsound is complete.

RUS – new grant we've applied for commercial energy audit. We received the funds we needed for our current construction activity through our CWP loan.

Member Services – The Energy Charge Adjustment (ECA) was invoked in the February billing and was a credit. Staff stated that the ECA is not a direct correlation with the weather and will vary from month to month based not only on sales but on magnitude of BPA. During the outage early February, our system peaked for the year at 66.4 megawatts.

Legislative Outreach – had to cancel a meeting in February due to snow. Staff met with Jake Fey and Jeff Morris.



During recent wind events, winds were clocked at up to 90 mph. More than 70 trees went down just in Moran State Park. No one was hurt during the repairs. OPALCO expressed gratitude to the County Public Works crew who were instrumental in helping to clear the work sites and roads.

**ADJOURNMENT**

Meeting adjournment at 11:45 a.m. and the Board went in to Executive Session.

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Vince Dauciunas, President

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Brian Silverstein, Secretary-Treasurer

03/14/2019 4:41:23 pm

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## RUS Form 219 Inventory Of Work Orders

Period: JAN 2019

System Designation: WA AH O9

Inventory: 201901

| Loan                 |      | Work Order          |                   | Bdgt<br>(3) | Gross Funds Required  |  | Deductions  |   | Contrib<br>In Aid Of<br>Constr and<br>Previous<br>Advances<br>(8) | Loan Funds<br>Subject<br>To Advance<br>By RUS<br>(9) |
|----------------------|------|---------------------|-------------------|-------------|---|--|---|---|---|--|
|                      |      |                     |                   |             | Cost Of<br>Construction:<br>New Constr<br>Or<br>Replacements<br>(4) | Cost Of<br>Removal:<br>New Constr<br>Or<br>Replacements<br>(5) | Salvage Relating To<br>New<br>Construction<br>Or<br>Replacements<br>(6) | Retirements<br>Without<br>Replacements<br>(7) |   |  |
| Project              | Year | Construction<br>(1) | Retirement<br>(2) |             |   |  |   |   |   |  |
| 606                  | 2018 | 2274                |                   | 1           | 215,251.55  | 0.00   | 0.00  | 0.00  | 0.00  | 199,657.10   |
|                      |      |                     |                   |             |   |  |   | AFUDC: 15,594.45                              |   |  |
|                      |      |                     |                   |             | 215,251.55  | 0.00   | 0.00  | 0.00  | 0.00  | 199,657.10   |
| 608                  | 2018 | 2399                | 2399              | 1           | 17,177.72   | 263.19   | 0.00  | 0.00  | 994.24  | 15,965.28  |
|                      |      |                     |                   |             |   |  |   | AFUDC: 481.39                                 |   |  |
|                      |      |                     |                   |             | 17,177.72   | 263.19   | 0.00  | 0.00  | 994.24  | 15,965.28  |
| <b>Grand Totals:</b> |      |                     |                   |             | \$ 232,429.27   | \$ 263.19  | \$ 0.00   | \$ 0.00                                       | \$ 994.24   | \$ 215,622.38  |

03/14/2019 4:41:23 pm

## RUS Form 219 Inventory Of Work Orders

Page: 5

Period: JAN 2019

System Designation: WA AH O9

Inventory : 201901

## Budget

| Loan          | Project | Amount     |
|---------------|---------|------------|
| 1             | 606     | 199,657.10 |
| 1             | 608     | 15,965.28  |
| <b>Total:</b> |         | 215,622.38 |

**BORROWER CERTIFICATION**

WE CERTIFY THAT THE COSTS OF CONSTRUCTION SHOWN ARE THE ACTUAL COSTS AND ARE REFLECTED IN THE GENERAL ACCOUNTING RECORDS. WE FURTHER CERTIFY THAT FUNDS REPRESENTED BY ADVANCES REQUESTED HAVE BEEN EXPENDED IN ACCORDANCE WITH THE PURPOSES ON THE LOAN, THE PROVISIONS OF THE LOAN CONTRACT AND MORTGAGE, RUS BULLETINS, AND THE CODE OF FEDERAL REGULATIONS RELATIVE TO THE ADVANCE OF FUNDS FOR WORK ORDER PURPOSES. WE CERTIFY THAT NO FUNDS ARE BEING REQUESTED FOR REIMBURSEMENT OF CONSTRUCTION WORK IN A CBRA AREA.

\_\_\_\_\_  
SIGNATURE (MANAGER)\_\_\_\_\_  
DATE\_\_\_\_\_  
SIGNATURE (BOARD APPROVAL)\_\_\_\_\_  
DATE**ENGINEERING CERTIFICATION**

I HEREBY CERTIFY THAT SUFFICIENT INSPECTION HAS BEEN MADE OF THE CONSTRUCTION REPORTED BY THIS INVENTORY TO GIVE ME REASONABLE ASSURANCE THAT THE CONSTRUCTION COMPLIES WITH APPLICABLE SPECIFICATIONS AND STANDARDS AND MEETS APPROPRIATE CODE REQUIREMENTS AS TO STRENGTH AND SAFETY. THIS CERTIFICATION IS IN ACCORDANCE WITH ACCEPTABLE ENGINEERING PRACTICE.

\_\_\_\_\_  
INSPECTION PERFORMED BY\_\_\_\_\_  
FIRM\_\_\_\_\_  
LICENSE NUMBER\_\_\_\_\_  
DATE\_\_\_\_\_  
SIGNATURE OF LICENSED ENGINEER

## MEMORANDUM

March 15, 2019

TO: Board of Directors  
FROM: Foster Hildreth  
RE: Bylaws: Board Officer Election

Legal counsel reviewed the current Bylaws and recommends the following changes/additions concerning the election of board officers by the sitting Board members:

### ARTICLE V – OFFICERS

#### Section 2. Election and Term of Office.

The officers shall be elected by ballot, annually by and from the Board of Directors at the first **regular** meeting of the Board of Directors held after **the** ~~each~~ annual meeting of the members. If the election of officers shall not be held at such meeting, such election shall be held as soon thereafter as conveniently may be. Each officer shall hold office until the first meeting of the Board of Directors following the next succeeding annual meeting of the members or until his successor shall have been duly elected and shall have qualified, subject to the provisions of these bylaws with respect to the removal of officers.

Staff recommends the Board make a motion to approve the Bylaw changes as stated above.

## MEMORANDUM

March 15, 2019

TO: Board of Directors  
FROM: Foster Hildreth  
RE: Decatur Energy Storage System

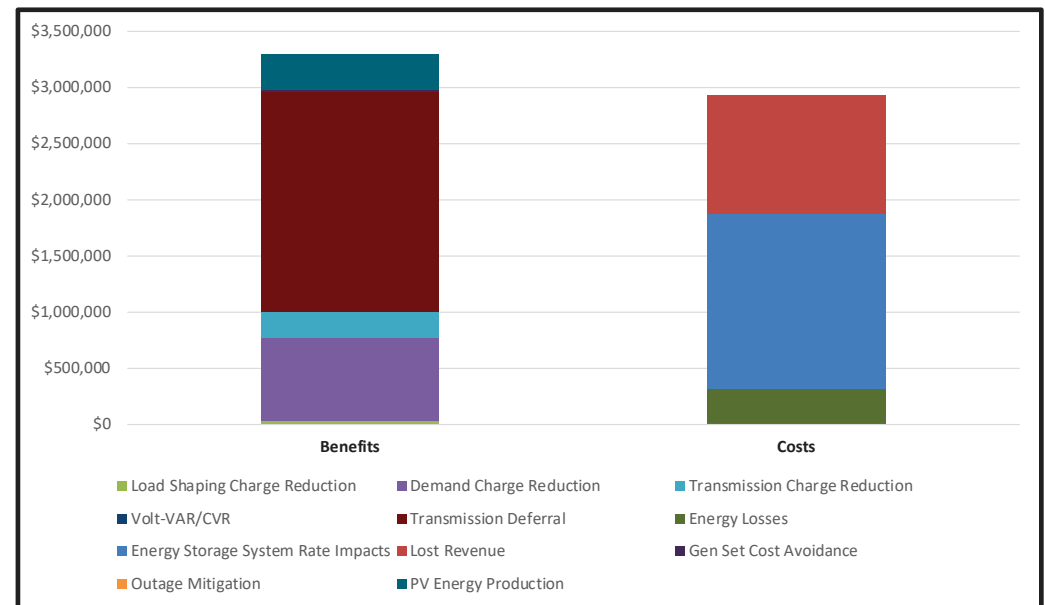
At the February Board meeting, the board requested staff to have PNNL update the financial analysis for Lithium Iron Phosphate (LiFePO). The present value analysis concludes that the LiFePO battery system proposed still reaches financial break-even thresholds required to move forward. Note that the purpose of these WA DOC Grid Modernization projects is to incorporate innovative technologies into operational grids to improve the performance efficiency and reliability of the grid. This analysis does not account for the WA DOC funds offsetting OPALCO project costs, which adds \$1M of additional benefit for the OPALCO members.

Attached you will find that original analysis based on a vanadium flow battery and the updated analysis with LiFePO. These results will be verified by PNNL upon commissioning of the system.

Staff requests the Board make a motion to approve staff awarding the Decatur BESS bid as presented in the February Executive Session.

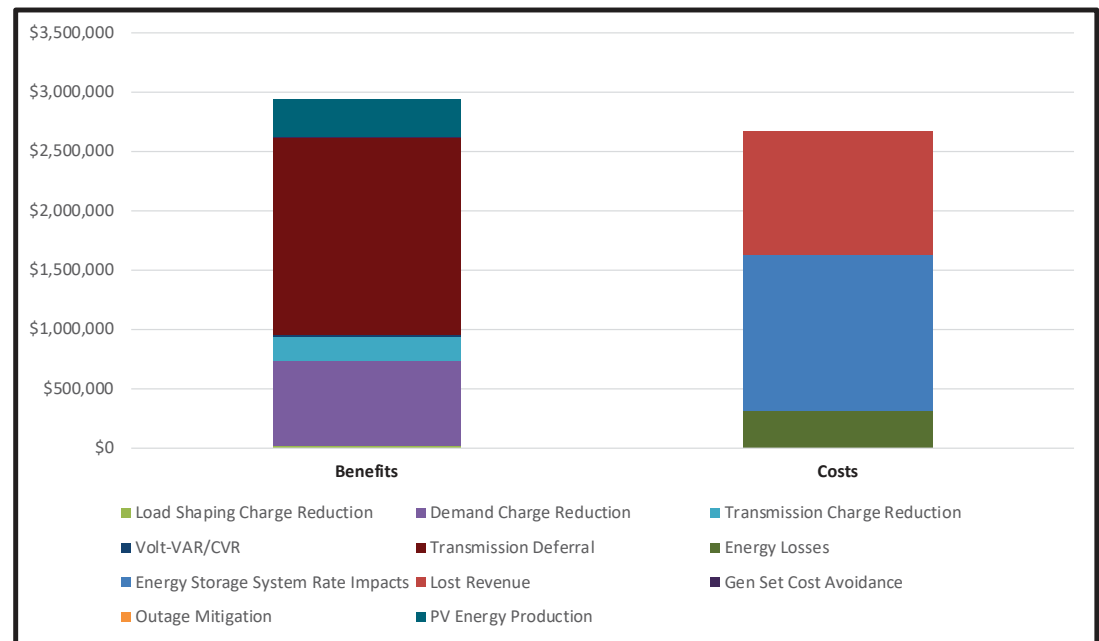
# Results based on Vanadium Flow Preliminary Proposal

| Element                            | Benefits           | Costs              |
|------------------------------------|--------------------|--------------------|
| Load Shaping Charge Reduction      | \$36,404           |                    |
| Demand Charge Reduction            | \$739,802          |                    |
| Transmission Charge Reduction      | \$227,331          |                    |
| Outage Mitigation                  | \$0                |                    |
| Volt-VAR/CVR                       | \$3,380            |                    |
| Transmission Deferral              | \$1,957,878        |                    |
| Gen Set Cost Avoidance             | \$19,706           |                    |
| PV Energy Production               | \$313,434          |                    |
| Lost Revenue                       |                    | \$1,048,046        |
| Energy Losses                      |                    | \$315,457          |
| Energy Storage System Rate Impacts |                    | \$1,567,144        |
| <b>TOTAL</b>                       | <b>\$3,297,936</b> | <b>\$2,930,647</b> |



# Results based on Lithium Iron Phosphate Proposal

| Element                            | Benefits           | Costs              |
|------------------------------------|--------------------|--------------------|
| Load Shaping Charge Reduction      | \$20,213           |                    |
| Demand Charge Reduction            | \$710,242          |                    |
| Transmission Charge Reduction      | \$213,255          |                    |
| Outage Mitigation                  | \$0                |                    |
| Volt-VAR/CVR                       | \$3,380            |                    |
| Transmission Deferral              | \$1,667,027        |                    |
| Gen Set Cost Avoidance             | \$19,706           |                    |
| PV Energy Production               | \$313,434          |                    |
| Lost Revenue                       |                    | \$1,048,046        |
| Energy Losses                      |                    | \$315,457          |
| Energy Storage System Rate Impacts |                    | \$1,309,851        |
| <b>TOTAL</b>                       | <b>\$2,947,259</b> | <b>\$2,673,355</b> |



## Conclusions

- \$290,000 reduction in transmission deferral benefits
- \$60,000 in OPALCO bill reductions associated with reduced load shaping, transmission and demand charges
- Benefits are reduced due to li-ion battery warranty that limit cycling to 365 annually; previous simulation exceeded the annual maximum cycling allowed under warranty



MEMORANDUM

March 15, 2019

TO: Board of Directors  
FROM: Vince Dauciunas  
RE: GM Annual Review

At the Board President's request, the Board will discuss the performance review of the General Manager in Executive Session.

## MEMORANDUM

March 15, 2019

TO: Board of Directors  
FROM: Foster Hildreth  
RE: Election Update

Candidate Forums were held on four islands during the week of March 4<sup>th</sup>. Attendance was as follows: Lopez ~20, San Juan ~8, Orcas ~4, and Shaw ~7 (excludes staff and their partners). Candidate Forums have been held by OPALCO for the past 3 years with an independent professional moderator.

The election is continuing on its timeline as planned. The petitioner from Lopez (District 3) who was disqualified to run for a board position initiated an unsuccessful legal action to halt the Board election process. The Court first denied the petitioner's request for an immediate restraining order against the election and then, a week later, denied their request for a preliminary injunction.

Voter materials went out to all members on March 11<sup>th</sup> and are also available online. The election closes at 10:00 am PDT on Wednesday, April 10<sup>th</sup>.

Travel Schedule for the annual meeting is posted online: <https://www.opalco.com/wp-content/uploads/2019/03/Travel-Schedule-FINAL.pdf>. Be sure to arrive at your ferry landing early to park, register for the meeting and pick up your lunch.

With this election, the successful candidates will serve staggered terms. In District 3, the candidate with the greatest number of votes will be awarded a three-year term; the other successful candidate will serve a two-year term. The District four position is a three-year term. As each district transitions to staggered terms, members will most often have a candidate from their district to consider in each election, which we hope will encourage greater member engagement in the election.

At the February board meeting, the Board directed staff to engage the EGC to review the elections process. Staff are compiling background information and plan to give the EGC a start work memo in April. Recommendations will be due back to the Board in August for presentation in September.

## MEMORANDUM

March 15, 2019

To: Board of Directors

From: Foster Hildreth, General Manager

Re: OPALCO 2018 Year End Unaudited Financial Report

Please see attached the full 2018 Year End Unaudited Financial Report. Included in the report package are the Statement of Revenues and Margins (along with a notable driver analysis), Balance Sheet, Statement of Cash Flows (GAAP), capital projects budget tracking and the Draft 2018 RUS Financial and Operating Report Electric Distribution.

In summary, overall 2018 finances tracked favorably to budget. A cold and windy December brought the trailing kWh sales and revenue back in line with annual budget amounts. Total operating revenue was \$22K or .08% higher than budgeted. This was complemented by purchased power being slightly below budget by \$136k or 1.5% (in part by demand costs being lower than budgeted). While most of the year was trending warmer, with lower sales than budgeted, operating costs were cut along the way to make up for the deficit. All combined resulted in an increased margin of \$209k.

For more detail, please note the following key points:

- Heating Degree Days (HDD) were down ~12% below budgeted levels (Actual of 1,190 vs. budget of 1,356). Although actual kWh sales were 5.7M kWh above budgeted (209M vs. budget of 203M) due in part by high winds in December.
- 2018 power purchases were above budget by 955K (.4%) while the cost of purchases was below budget by \$135k. This is mostly due to lower kWh consumption throughout first three quarters of the year which only caught up in December'18. Actual kWh purchases were 955k kWh above budget (218M vs. budget of 217M).
- 2018 operating expenses, excluding Power Purchases, were approximately \$325k under budgeted amounts. Please note, we were still able to maintain service levels, safety and the reliability in our system.
- TIER ended the year slightly higher at 2.67 vs. the budget of 2.61. OPALCO is well above the RUS covenant requirement of 1.25 measured as the average best two out of the three most recent years. As calculated per RUS loan covenant, OPALCO's current average for TIER is 3.17 (average of highest 2 of the last 3 years).
- RUS borrowings were accelerated during the year due to the warmer weather and lower revenue experienced. Outstanding debt balance at year-end is higher than budgeted due primarily to (1) the RUS Cushion of Credit (CoC) program was ended in December 2018 with the President's signing the Agriculture Improvement Act of 2018. The CoC was budgeted to be a ~\$2.9M offset to debt at YE and (2) \$2M of additional borrowing was approved by the board in November 2018 to offset (a) the increased capital spending that occurred at the end of Q4 2017 (submarine cable and Decatur tap) which used up 2018's allocation of borrowings (as reported since YE 2017), and (b) less revenue associated with lower kWh sales through the first 10 months of 2018 (weather).

## GENERAL MANAGER'S REPORT

### March 2019

#### **DASHBOARDS**

Please review the dashboards at <https://www.opalco.com/dashboards>. Note that all the dashboards are within board approved strategic parameters.

#### **ENGINEERING, OPERATIONS, AND INFORMATION TECHNOLOGIES**

##### **WIP**

As of March 14, there are 365 work orders open totaling \$6.78M. Operations has completed construction on 109 work orders, totaling \$2.67M.

##### **Safety**

John Spain, from CREA, conducted NESC Overhead Clearance training. This is a review of all NESC clearance updates and review of safety around overhead lines. The total hours without a loss time accident: 135,773 hours

##### **Grid Modernization Projects**

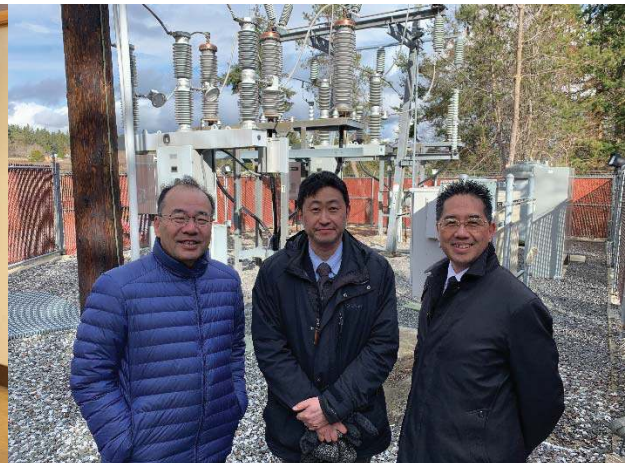
- 1) **Decatur Battery Energy Storage System (ESS) – WA DOC CEF2 Grid Modernization (~\$1M Grant)**  
Board approval requested at this meeting.
- 2) **Lopez Microgrid – WA DOC CEF3 Grid Modernization (Grant \$ Amount TBD)**  
WA DOC has awarded this grant to OPALCO. OPALCO staff and WA DOC will begin negotiating the grant contract in April 2019.

##### **Redundant Feed to Eastsound Village – COMPLETE**

Thank you and congratulations to our crews and engineering staff for completion of this series of projects.

##### **Sumitomo Visit**

On March 7<sup>th</sup>, Sumitomo representatives from CA, NY and Japan visited our Friday Harbor office. The project wrap-up included touring our submarine cable terminal on San Juan.



## **FINANCE**

### **2019 Budget Tracking**

Both kWh purchases and sales were high in February as we incurred our highest peak demand of 66.4 MW in the last decade or more. Staff anticipates the power bill from BPA reflecting those charges will be the highest we've seen in recent history. With the ECA in place, we are tracking within an acceptable range of budget through the first two months.

| <b>Income Statement Summary</b><br>(in thousands) | <b>YTD Feb 2019</b> |               |                 |
|---|---------------------|---------------|-----------------|
|   | <b>Budget</b>       | <b>Actual</b> | <b>Variance</b> |
| Operating Revenue                                 | \$ 6,471            | \$ 6,291      | \$ (180)        |
| Cost of Power                                     | 2,021               | 2,133         | 111             |
| Net Margin  | \$ 4,450            | \$ 4,159      | \$ (292)        |
| HDD   | 355                 | 584           | 229             |
| kWh Purchases                                     | 44,496              | 53,070        | 8,574           |
| kWh Sales   | 41,604              | 47,316        | 5,712           |

Note: Operating Revenue includes ECA from Jan and Feb billing.

### **Monthly ECA**

The ECA was implemented in 2019 and the tariff appeared on bills for the first time during the February billing period, reflecting January usage. A credit was applied to members February bills for a total credit of ~\$329K. Due to the high cost of power and variability in BPA bills (including demand charges, etc.) noted above, the ECA will fluctuate from month to month. Colder weather does not always result in a credit, there are a number of variables.

The calculated amount for the March ECA is a surcharge for \$0.006797 per kWh. This equates to \$6.80 per 1,000 kWh, or ~\$12.40 on an average member bill.

In February, staff discovered an ECA calculation error related to unbilled revenue, which resulted in a larger amount credited to members' bills. The over-credit totaling less than \$100K (~3% of total revenue for February), will be corrected in the March ECA billing. Staff has implemented controls to ensure correct ECA billing going forward.

### **2018 Year-End Audit**

Staff is currently preparing information to be provided to Moss Adams, who will be conducting the onsite fieldwork portion of the consolidated year-end 2018 audit the week of April 1<sup>st</sup> – 5<sup>th</sup>. Note the audit is on a consolidated basis (OPALCO and Island Network LLC).

### **USDA Grant Awarded to OPALCO - \$100K to Support Commercial Energy Audits**

Staff received notification from the USDA-RD that OPALCO's application for an Energy Audit Grant via the Rural Energy for America Program was successful in the 2019 competition and will be funded. The grant is for \$100,000 and does not require a match by OPALCO. Our partners on this grant project, Sustainable Connections, committed to match the funding with an additional \$27K for a total funding of \$127K. The funds will be used to support the cost of commercial energy audit work in the County. This is a timely complement to our Switch-it-Up Program efforts that are kicking off in 2019. Staff will be working with Sustainable Connections and Spark NW to roll out the program.

## **MEMBER SERVICES**

### **Energy Assistance**

During February 2019, 332 members received ~\$11.5k from the Energy Assist program, compared to 314 members receiving ~\$9.3k worth of assistance in February 2018. In February 2019, there were 39 members that received ~\$11.7k in PAL awards, in line with 38 members and ~\$7.2k in February 2018.

### **Energy Savings**

Members applied for 21 rebates and received \$16.8k in incentives in February 2019, which includes 9 rebates for beneficial electrification projects totaling ~\$10.5k.

### **Community Solar**

During the February billing cycle, the Decatur Community Solar array produced 10,000 kWh, and 2 kWh per solar unit was credited to member participants. A total of ~\$1,348 was distributed to 272 accounts, including an additional \$138 for the PAL and Energy Assist programs. Production reports are below expectations, just under half of the production forecast for this timeframe. Removing the shading in SE corner of the array should help bolster winter production, and staff is waiting on the County to move forward.

## **COMMUNICATIONS**

### **Election**

Voter materials were distributed to members on March 11<sup>th</sup> and ballots are due online or by mail by 10am PT on 4/10/19. Information on how to vote is clearly stated on the voter materials each member receives and is available online: <https://www.opalco.com/election-process-for-directors/how-to-vote/>.



### **Annual Meeting**

The theme for OPALCO's annual meeting on Saturday, April 13<sup>th</sup> is Safety. The meeting will be held on the interisland ferry with lunch served to members at ferry landings as they register. Three Ponies Photography (Elizabeth Guerry) will be our event photographer again. Travel schedule: <https://www.opalco.com/wp-content/uploads/2019/03/Travel-Schedule-FINAL.pdf>.

### **Switch it Up!**

Staff have materials and website ready for the launch of Switch it Up! and are doing some beta testing to prepare for the April 13<sup>th</sup> announcement to members. Check out the savings calculator and on-bill finance information on our new webpage: [www.opalco.com/switch-it-up](http://www.opalco.com/switch-it-up). While the



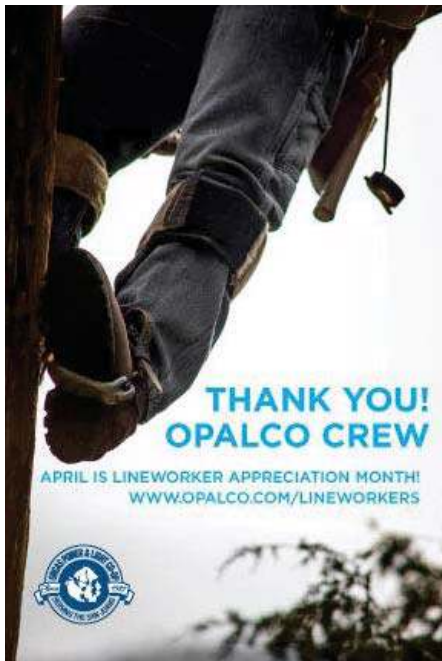
webpage is public and members could happen upon it now, we'll be promoting the campaign and pushing the materials out following the annual meeting. A Facebook Live event is scheduled for Thursday, April 18th @ 11:00am.



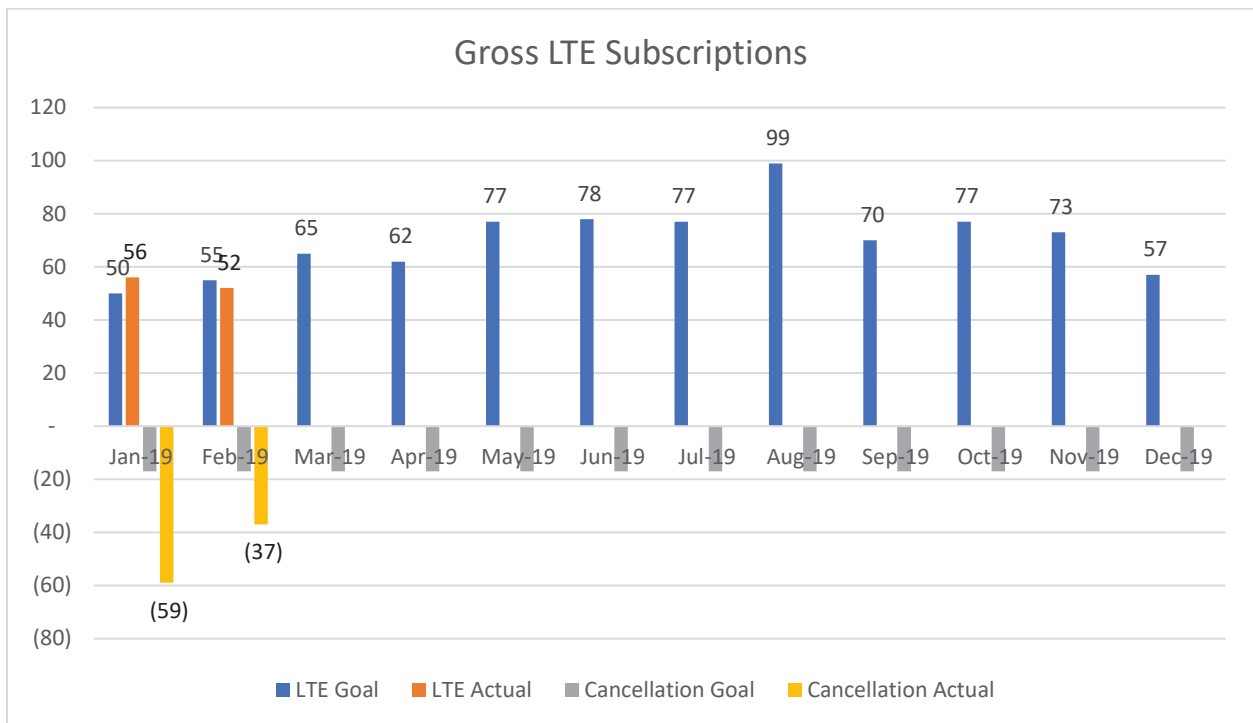
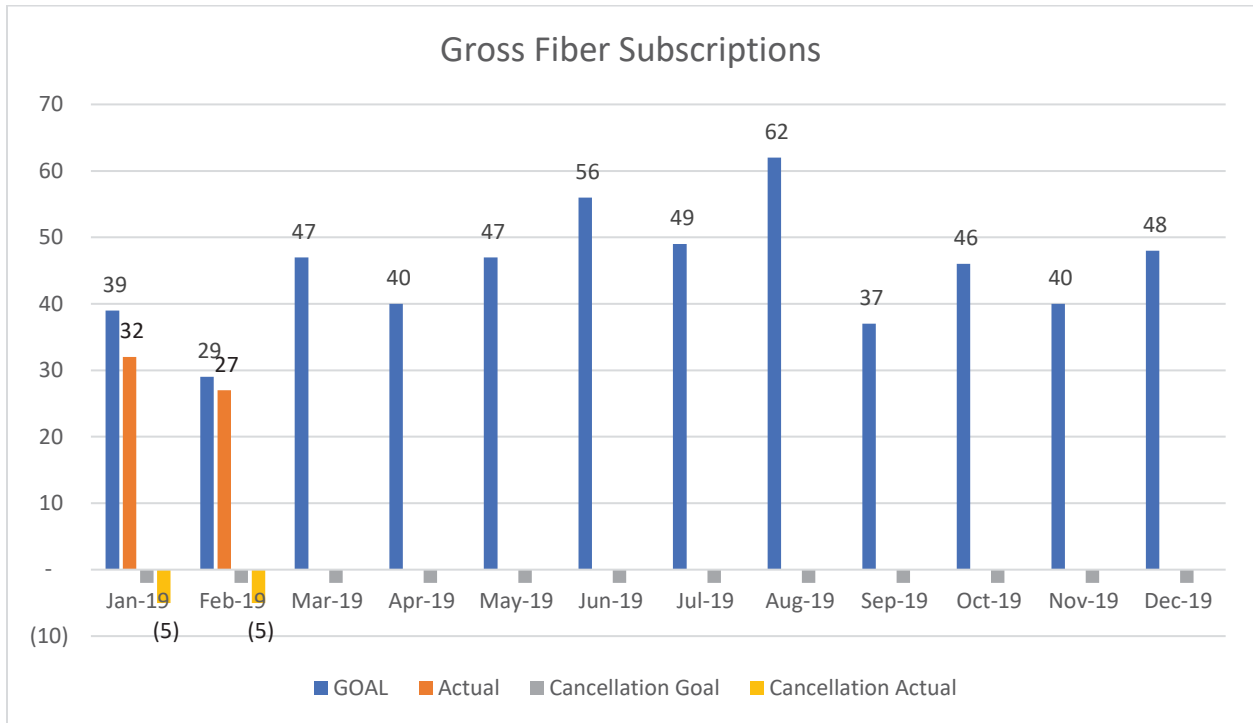
Streamside Renewables install a DHP in Eastsound

### **April is Lineworker Appreciation Month**

OPALCO has proclaimed April as Lineworker Appreciation Month. While various agencies and organizations have claimed different dates to recognize these heroes, OPALCO is claiming the whole month. We'll be launching a new webpage on April 1<sup>st</sup>: [www.opalco.com/lineworkers](http://www.opalco.com/lineworkers) - and please join us sharing your stories of gratitude about OPALCO lineworkers on your own Facebook pages by using #OPALCOLineworkers. We will be collecting these stories and messages of gratitude, sharing them on social media and our website – and making sure our lineworkers know how much their dedicated and skillful hard work is valued. Broad outreach is planned and the three new apprentice linemen will be on the boat for the annual meeting to meet the members.

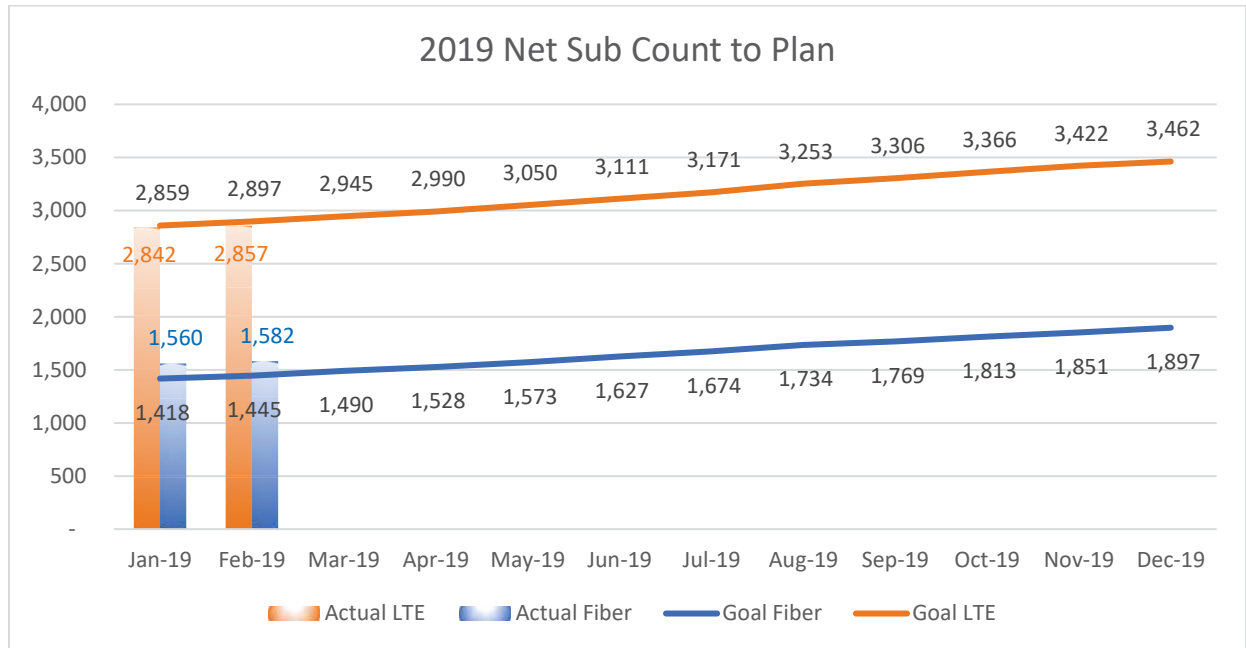


## Gross Subscribers TD 2019



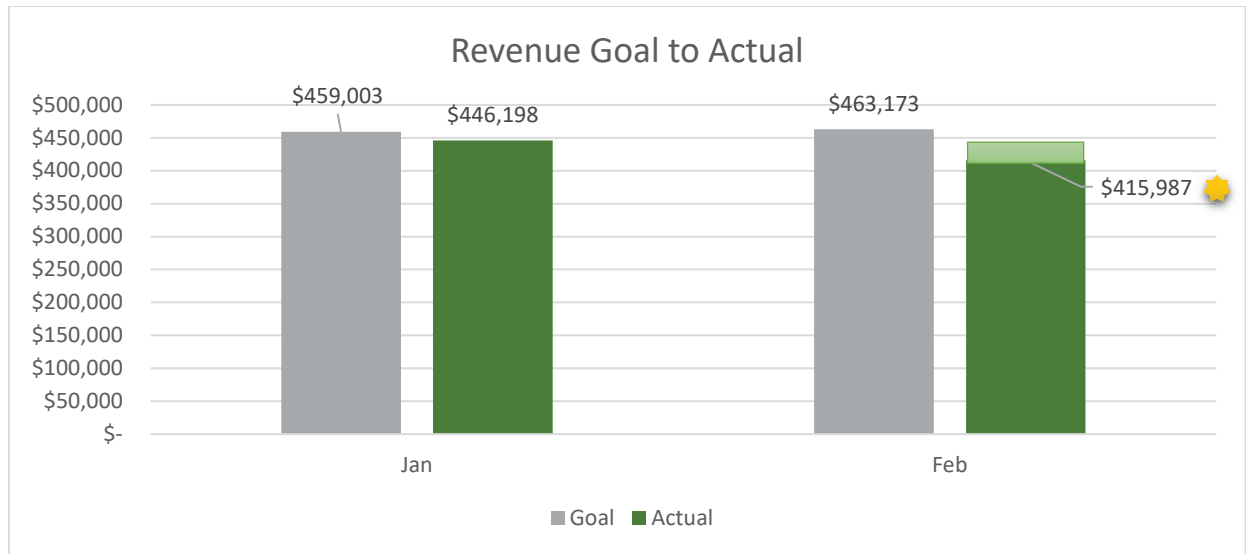


## Net Subscribers TD 2019



**5,003 Customers receive internet through Rock Island.**

## Revenues TD



☀ Please note that because of billing cycles and the short month of February, there is a significant increase to the deferred revenue amount collected in February. Finance estimates that approx. \$32,000 in February revenue sits in deferred revenue and will be realized in March. Because of this, a more realistic revenue number for Feb is roughly \$448,000, however \$415,987 will be booked in February.

Rock Island is on schedule to launch the dense UGA onboarding effort in late March and early April. With more than 800 fiber connections in the sales pipeline for the year we have what we need to make our fiber goals. A new LTE site was commissioned on Decatur that serves south Lopez, Decatur and Center Islands.

# PNGC Power Pulse

February 2019

## Inside This Issue

- 1 Legislative Activity
- 2 Employee Spotlight: Jeff Kugel
- 3 PNGC Peak
- 3 Mid-C Pricing
- 3 BPA Happenings
- 4 Upcoming PNGC Events

## Legislative Activity

Significant energy and climate-related legislation is currently being considered by the Oregon and Washington State Legislatures. PNGC is working to keep member interests at the forefront of these wide-ranging policy discussions.

While the approaches are different—Washington State is considering a command and control approach that mandates a 100% carbon neutral goal by 2030, while Oregon is looking at a market-based regulatory mechanism known as cap and trade—the proposals, if agreed upon, will shape the future of energy production and consumption in the Pacific Northwest. When it comes to state carbon emissions the stated policy goal of states like Washington and Oregon is to transition to “clean, affordable, and reliable energy.”

“It’s so important to be a part of these discussions now,” said Ashley Slater, PNGC Power’s Vice President of Government Affairs and Policy. “We want to help shape these policy decisions as they’re being formed, rather than react to decisions once they’re already made.” Ashley went on to talk about the importance of the cooperative family, striving to coordinate policy positioning with key cooperative statewide managers and individual member cooperative lobbyists. “We want to effectively leverage our collective voice with legislators, to protect our shared interests, so that we can influence how these policies could affect our cooperatives back home,” Ashley said.

PNGC is specifically looking to support and originate policy solutions that will ensure that these carbon proposals don’t unfairly impact PNGC due to its unique Joint Operating Entity (“JOE”) status. We want to support and originate policy solutions that recognize the carbon free attributes of the federal hydropower system. And we want to support and originate policy solutions that provide compliance flexibility and minimize the economic impact on PNGC’s member cooperatives.



As legislative proposals progress through Oregon and Washington, PNGC will continue to track and report on the ongoing developments. PNGC will also work with its Washington and Oregon-based Board members to help illustrate for state legislators our positions and insight into these issues.

## Employee Spotlight: Jeff Kugel

Jeff Kugel is PNGC Power's Senior Power Analyst, and he's been brightening the halls of the office with his special brand of humor and positivity for 5 and half years.

Jeff was first hired at PNGC as a Resource Analyst, and he came with a background in the energy world. Prior to PNGC, Jeff worked on hydro project rehabilitations as a mechanical engineer at MWH (a consulting engineering company), and as an analyst on the Pacificorp trading floor. Jeff got his Bachelor of Science in Mechanical Engineering from Oregon State. "Go Beavs!"

In his time here, Jeff has worked on analysis projects like the Coffin Butte acquisition, load forecasting, potential resource acquisitions, and Demand Response analysis. Since 2014 Jeff has been transitioning to the wholesale trading world, working with and gaining expertise on the Mid-Columbia electric and gas markets. Jeff's also responsible for delivering PNGC's power, and prescheduling deliveries with our counterparties.

"I always knew I wanted to work in the energy field, and I had a bit of a winding route to land here at PNGC," Jeff recalls. He remembers loving hydropower since he saw the old Kaplan Runner outside of the Bonneville Dam Visitor Center when he was a kid. "I feel I have almost come full circle here at PNGC, delivering that power to our members."

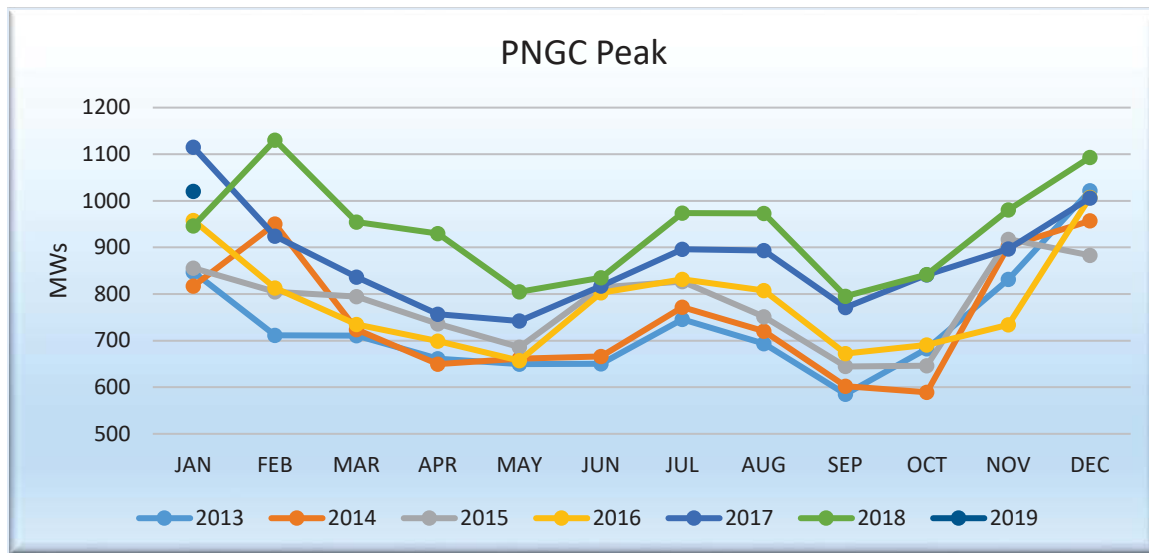
Jeff and his wife Corinne have two young sons, Clayton and Andy. When he isn't busy corralling two young boys, Jeff is an accomplished fine woodworker. He's built his kitchen table, a built in eating nook, various woodworking projects around the house, and now he's tackling chair building.



Clockwise: Corinne, Jeff, Clayton, and Andy.

## PNGC Peak

The graph below shows PNGC Peak for the past 5 years



## Mid-C Pricing

The graph below shows Mid-C Pricing for the month of January 2019



## BPA Happenings

- March 1 BP-20 Rate Case Participant Comment Period Ends
- March 11 Financial Reserves Workshop
- March 19 Proposed TC-20 Settlement Update

## Upcoming PNGC Events

|             |  |
|-------------|--|
| March 5     | PNGC Board Meeting                               |
| March 19    | Raft River Annual Meeting                        |
| March 20-21 | EE Collaborative quarterly meeting at PNGC Power |
| March 30    | Lincoln Electric Annual Meeting                  |



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### *About PNGC Power:*

*PNGC Power is a Portland-based electric generation and transmission (G & T) cooperative owned by 15 Northwest electric distribution cooperative utilities with service territory in seven western states (Oregon, Washington, Idaho, Montana, Utah, Nevada and Wyoming). The company creates value for its member systems by providing power supply, transmission, and other management services. PNGC Power is an aggregator of geographically diverse loads in the region.*



ENVIRONMENT

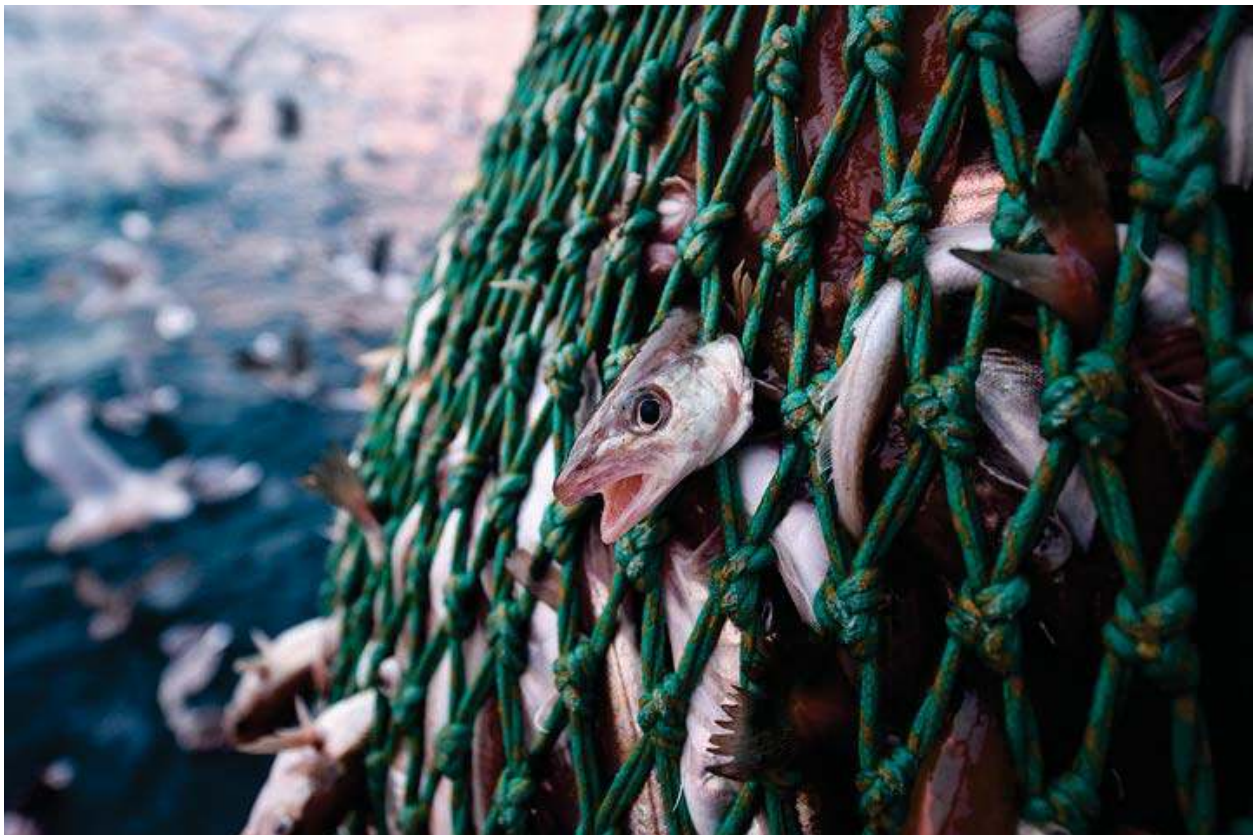
02/28/2019 03:39 pm ET **Updated** Mar 01, 2019

# Climate Change Takes A Bite Out Of Global Fisheries, Study Finds

New research shows fish populations have declined by as much as 35 percent in some areas due to ocean warming.



By [Chris D'Angelo](#)



JEFF J MITCHELL VIA GETTY IMAGES Trawler fishing in the North Sea on Dec. 5, 2018, in Shetland, Scotland.

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Warming of the world's oceans has already had significant impacts on a number of fisheries around the globe, triggering population losses as high as 35 percent in some regions.

That's the finding of a first-of-its-kind study, published Thursday in the peer-reviewed journal *Science*, that used historical fish stock data and temperature maps to measure the effect of warming waters on 235 populations of fish and shellfish between 1930 and 2010. The team of six researchers estimates that ocean warming over that period led to an estimated 4.1 percent decline in the amount of fish that can be sustainably caught, from 35.2 million metric tons in the 1930s to 33.8 million metric tons in the 2000s.

"We were really surprised to see that warming has had a really important impact already," Chris Free, the study's lead author and a post-doctoral ecologist at the University of California, Santa Barbara, told HuffPost.

Nineteen fish populations experienced negative population growth rates due to climate-induced ocean warming, whereas nine actually benefitted from the changing conditions. The populations studied represent more than 120 species and roughly a third of the reported global catch.

Areas hardest hit by rising ocean temperatures include the North Sea, located northeast of the United Kingdom, as well as the East China Sea and the Sea of Japan. Estimated losses in those areas ranged between 15 and 35 percent.

"The North Sea supports really important commercial fisheries. And those East Asian ecosystems are home to some of the fastest-growing human populations and populations that depend heavily on seafood," Free said. "These impacts are really a big deal."

Overfishing has only exacerbated the problem, making fish populations less resilient to climate change, according to the findings. Furthermore, the study notes that "climate change will likely hinder efforts to rebuild overfished populations."

Free called overfishing a "one-two punch" for heat-stressed fisheries. Eliminating overfishing and accounting for climate change in fisheries



management decisions will be key to building resilience in a world where people are increasingly relying on fish as a source of food, he said.

Approximately a third of the world's oceans are overfished, according to the United Nations.

The new study, led by scientists at Rutgers University, is the first to quantify the historical impact of ocean warming on global fish populations, according to Free, who earned his doctorate from the school.

The average global temperature on Earth has risen by about 0.8 degrees Celsius, or 1.4 degrees Fahrenheit, since 1880. A dire United Nations report released last October warned that if humans continue to pump greenhouse gases into the atmosphere at the current rate, global warming will likely hit the 1.5 degrees Celsius mark sometime between 2030 and 2052, leading to an estimated \$54 trillion in damages. And an analysis early this year found that oceans are warming up to 40 percent faster than previously thought, as The New York Time reported.

Many of the species that have so far benefitted could soon be in trouble, warned Olaf Jensen, a study co-author and associate professor in Rutgers' Department of Marine and Coastal Sciences.

"Fish populations can only tolerate so much warming," he said in a statement.

***CORRECTION:*** A previous version of this story misstated the location of the North Sea as northwest of England.