



BOARD OF DIRECTORS REGULAR MEETING

Thursday, June 27, 2019 8:30 a.m.

Friday Harbor OPALCO Office

TRAVEL

Via Island Air (378-2376)

To:

Leave	Lopez	7:30 a.m.	Arrive	FH	7:45 a.m.
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Return:

Leave	FH	2:00 p.m.	Arrive	Lopez	2:15 p.m.
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Via Ferry:

To:

Leave	Orcas	6:55 a.m.	Arrive	FH	8:15 a.m.
	Shaw	7:10 a.m.			

Return:

Leave	FH	2:15 p.m.	Arrive	Orcas	3:05 p.m.
				Shaw	3:20 p.m.

Sequence of Events

- Board Meeting

Orcas Power & Light Cooperative
Board of Directors
Regular Board Meeting
Friday Harbor OPALCO Office
June 27, 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.*

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.*
- Kent Lopez, General Manager WRECA
- Rainshadow Solar

ACTION ITEMS

- Consent Agenda
- Update to Strategic Documents

DISCUSSION ITEMS

- Washington State Clean Transformation Act (SB5116) – Kent Lopez
- Solar and Storage in San Juan County – Rainshadow Solar
- Board and Member Informational Topics and Quick Facts

REPORTS

- General Manager
- Rock Island Snapshot

COMMUNICATION

- PNGC Power Pulse

EXECUTIVE SESSION

Legal, Personnel, and Competitive

ADJOURNMENT

MEMORANDUM

June 21, 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.
- **Approval of New Members** – attached {as required by Bylaws Article I Section 2 (d)}

NEW MEMBERS – May 2019

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

1. Fleming, Jo & Bernard
2. Frink, Kenny
3. Inntentional, LLC
4. Koenig, Jennifer
5. Lawson, Charles & Zoie
6. Lipschutz, Bryan & Cheryl
7. Little, Giles
8. Mellinger, Andrea
9. Mundie, Craig
10. O'Connor, Mark
11. Strum, Matthew
12. Van Rooyen, Jacques & Rebekah
13. Watts, Kevin

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

14. Bainbridge, Dan & Ryan
15. Carley, Dayne
16. Corbin, Jennifer
17. Eder, Kay
18. Elsen, Matthew

19. Evans, Kevin & Hsu, Christine
20. Finley, Sharon & Wally
21. Hairston, Michael
22. Harbaugh, Candice
23. Houghton Family LLC
24. Munsey, Madison
25. Peoples, Sean & Cleverley, Jenefer
26. Shannon, Susan
27. Wachter, Mary

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

28. Adamski, Lawrence & Andrea
29. Boesen, Lars
30. Calamaras, John Paul
31. Hagge, Justin & Summer
32. Wampler, Patricia

District 4 (Shaw, Crane, Canoe, Bell)

33. Coren, Samuel

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

June	
Customer #	Amount
104010	\$ 179.94
11001	448.95
2765	310.03
Total	\$ 938.92

- **RUS 219s** *Inventory of Work Orders* of projects completed from the Construction Work Plan totaling \$1,878,453.76. These forms are submitted to RUS for approval of loan funds.

Inventory 201904 - \$605,296.83 for URD replacement, OH to UG Conversion (Removal of OH on Mt. Constitution and installation on Buck Mountain in rocky terrain in concert with our URD replace schedule. This was due to the fire hazard, unreliable OH and UG circuits.)

Inventory 201905 - \$1,273,156.93 for URD replacement, transformer replacement, and the upgrade of the Blakely Island substation

Staff requests a motion to approve the Consent Agenda.

Orcas Power & Light Cooperative

Minutes of the Board of Directors Meeting Thursday, May 16, 2019

President Vince Dauciunas called the meeting to order at 8:25 a.m. in the OPALCO Eastsound conference room. Board members present were Vince Dauciunas, Mark Madsen, Jerry Whitfield, Jeffrey Struthers, Rick Christmas, Peter Garlock and Brian Silverstein. 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, Head Accountant Travis Neal, Public Relations Administrator Suzanne Olson, Consultant Jay Kimball, EVP RIC Alan Smith, CFO RIC Chris Schmidt and Executive Assistant Kelly Koral (serving as recording secretary).

Member/Guests

Roger Gray – PNGC

Olga Darlington – Moss Adams

Dwight Lewis - Member

CONSENT AGENDA

- **Motion** was made and seconded to approve Consent Agenda, including April 25, 2019 minutes, new members as listed with the Board materials, capital credit payments totaling \$5,195.58 and RUS 219s totaling \$428,775.04. Motion carried by voice vote.

MEMBER COMMENTS

A member in attendance was given an opportunity to address the Board.

Bylaw Revision

- **Motion** was made and seconded to approve the revision to **Section 2. Energy Member Initiated Amendments** to require at least 10% of the Energy Members to propose, in writing to make, alter, amend or repeal a bylaw or to adopt new bylaws. Motion carried by voice vote.

Member Service Policy 14

- **Motion** was made and seconded to approve the **Member Service Policy 14 – Interconnection of Member Generators and Storage** revisions. Motion carried by voice vote.

2019 Q1 Financial Statements

The 2019 1st Q financial statements were reviewed and discussed with the Board and it was agreed that the 1st Q 2019 results were on track with the 2019 budget.

Transmission Redundancy

9:50 a.m. The Board went in to Executive Session to review the transmission system redundancy currently in place and options OPALCO has for our BPA sources, substations, and other critical loads.

2018 Financial Statement Audit Report

The Board continued the Executive Session to review the audit details. Olga Darlington, Partner, with Moss Adams LLP presented the review of the 2018 audit for both Orcas Power & Light Cooperative and its subsidiary Rock Island Communications. Regular session resumed at 10:10 a.m.

- **Motion** was made and seconded to accept the *Report of Independent Auditors and Consolidated Financial Statements for December 31, 2018 and 2017*, as audited by Moss Adams, LLP. Carried by voice vote. The Board requested a 2019 increase to the Moss Adams audit scope for a detailed accounting software security assessment of Rock Island.

POWER RESOURCE DISCUSSION

Roger Gray, CEO of PNGC spoke about the benefits of partnership with fellow utilities, the changing utility industry, future power supply, power contracts, the effects of SB 5116 (Clean Energy Bill) and possible outcomes for OPALCO and other affected Coops.

GENERAL MANGER

Hildreth reviewed the General Manager's Report and Rock Island Snapshot

ADJOURNMENT

Meeting was adjourned at 11:20 a.m.

Vince Dauciunas, President

Brian Silverstein, Secretary-Treasurer

05/21/2019 10:50:58 am

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RUS Form 219 Inventory Of Work Orders

Period: APR 2019

System Designation: WA AH O9

Inventory: 201904

Loan		Work Order		Bdgt (3)	Gross Funds Required		Deductions		Contrib In Aid Of Constr and Previous Advances (8)	Loan Funds Subject To Advance By RUS (9)
					Cost Of Construction: New Constr Or Replacements (4)	Cost Of Removal: New Constr Or Replacements (5)	Salvage Relating To New Construction Or Replacements (6)	Retirements Without Replacements (7)		
Project	Year	Construction (1)	Retirement (2)							
324	2018	2316		1	15,916.35	0.00	0.00	0.00	0.00	15,629.22
								AFUDC: 287.13		
324	2018	2443	2443	1	455,250.27	2,131.14	15,512.83	0.00	54,709.51	369,367.53
								AFUDC: 17,791.54		
					471,166.62	2,131.14	15,512.83	0.00	54,709.51	384,996.75
606	2018	2863		1	71,403.79	0.00	0.00	0.00	0.00	69,630.10
								AFUDC: 1,773.69		
606	2018	3134	3134	1	24,212.44	3,159.26	0.00	0.00	0.00	27,179.82
								AFUDC: 191.88		
					95,616.23	3,159.26	0.00	0.00	0.00	96,809.92
608	2018	2956	2956	1	57,625.74	6,290.27	0.00	0.00	0.00	62,841.44
								AFUDC: 1,074.57		
608	2018	3025	3025	1	23,370.24	0.00	0.00	0.00	0.00	23,238.71
								AFUDC: 131.53		
					80,995.98	6,290.27	0.00	0.00	0.00	86,080.15
608 - 27	2018	2692	2692	1	34,997.81	2,611.30	57.92	0.00	0.00	37,410.01
								AFUDC: 141.18		
					34,997.81	2,611.30	57.92	0.00	0.00	37,410.01
Grand Totals:					\$ 682,776.64	\$ 14,191.97	\$ 15,570.75	\$ 0.00	\$ 54,709.51	\$ 605,296.83

05/21/2019 10:50:58 am

RUS Form 219 Inventory Of Work Orders

Page: 4

Period: APR 2019

System Designation: WA AH O9

Inventory : 201904

Budget

Loan	Project	Amount
1	324	384,996.75
1	606	96,809.92
1	608	86,080.15
1	608 - 27	37,410.01
Total:		605,296.83

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

06/17/2019 10:06:06 am

Page: 2

RUS Form 219 Inventory Of Work Orders

Period: MAY 2019

System Designation: WA AH O9

Inventory: 201905

Loan		Work Order		Bdgt (3)	Gross Funds Required		Deductions		Contrib In Aid Of Constr and Previous Advances (8)	Loan Funds Subject To Advance By RUS (9)
					Cost Of Construction: New Constr Or Replacements (4)	Cost Of Removal: New Constr Or Replacements (5)	Salvage Relating To New Construction Or Replacements (6)	Retirements Without Replacements (7)		
Project	Year	Construction (1)	Retirement (2)							
501 - 1	2018	2640	2640	1	1,214,272.34	15,325.03	0.00	0.00	0.00	1,200,806.26
								AFUDC: 28,791.11		
					1,214,272.34	15,325.03	0.00	0.00	0.00	1,200,806.26
601	2018	3070	3070	1	10,678.57	0.00	0.00	0.00	0.00	10,604.04
								AFUDC: 74.53		
601	2018	3085	3085	1	9,167.51	0.00	0.00	0.00	0.00	9,098.60
								AFUDC: 68.91		
601	2018	3170	3170	1	3,840.34	0.00	0.00	0.00	0.00	3,814.06
								AFUDC: 26.28		
					23,686.42	0.00	0.00	0.00	0.00	23,516.70
608	2018	1690	1690	1	9,855.37	2,800.30	0.00	0.00	0.00	11,413.46
								AFUDC: 1,242.21		
608	2018	2960	2960	1	25,307.46	0.00	0.00	0.00	0.00	24,787.34
								AFUDC: 520.12		
608	2018	3150	3150	1	12,712.52	0.00	0.00	0.00	0.00	12,633.17
								AFUDC: 79.35		
					47,875.35	2,800.30	0.00	0.00	0.00	48,833.97
Grand Totals:					\$ 1,285,834.11	\$ 18,125.33	\$ 0.00	\$ 0.00	\$ 0.00	\$ 1,273,156.93

06/17/2019 10:06:06 am

RUS Form 219 Inventory Of Work Orders

Page: 4

Period: MAY 2019

System Designation: WA AH O9

Inventory : 201905

Budget

Loan	Project	Amount
1	501 - 1	1,200,806.26
1	601	23,516.70
1	608	48,833.97
Total:		1,273,156.93

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

June 21, 2019

To: Board of Directors

From: Foster Hildreth, General Manager

Re: Update to Strategic Documents

OPALCO's business and the energy industry are evolving rapidly. To meet our future power needs, we need to maintain our infrastructure, build renewable generation and plan for a transactive grid. As we approach grid parity (federal system vs. renewables), development of renewable generation may be the most cost-effective resource available. In order to protect our affordability over the long term, we must:

- Update our strategic documents to develop the renewable generation and storage essential to our future power supply and local resilience;
- Formulate a financial plan that supports building equity to allow us to meet our current and future capital needs;
- And communicate this vision to our membership.

In preparation for the 2020 budget and a refresh of the Integrated Resource Plan (IRP), staff is proposing minor updates to our Mission Statement and Values and Strategic Directives. The following documents lay the groundwork for long range planning:

1. ✓ **This Meeting** - Mission and Values: who we are (June 2019)
2. ✓ **This Meeting** - Strategic Directives: Board priorities for how we conduct our business (June 2019)
3. Integrated Resource Plan (IRP): what power resources will be required to meet future needs – including load forecast and PNGC initiatives (August 2019)
4. 2021 – 2040 Long Range Plan (LRP): 20-year capital planning (Q1 2020)
5. 2021 – 2040 Long Range Financial Plan (LRFP): 20-year plan for meeting the capital needs, cash and equity planning (Q1 2020)

Staff recommends the Board make a motion for approval of the updates as attached.

Mission Statement:

Orcas Power & Light Cooperative (OPALCO) serves our membership with safe, reliable and cost-effective and environmentally sensitive essential utility services with a commitment to the development of renewable resources and carbon reduction.

Values Statement:

The OPALCO Board of Directors and Employees strive for excellence with a passion and determination that is founded on the following values. These values inspire, guide and determine our conduct in carrying out our mission:

- We are dedicated to the 7 Cooperative Principles
- We are committed to building, nurturing and preserving lasting relationships with our member-owners and among ourselves
- We hold ourselves accountable to the highest legal and ethical standards
- We are dedicated to financial and environmental stewardship of member resources through sound governance, management and operating practices
- We are a socially responsible member-owned organization; we strive to make a positive impact in our community.
- We care deeply about our island communities and are dedicated to the protection of our sensitive environs
- We continually evolve our services, and offer programs to meet the needs of our membership
- We seek and implement innovative solutions and adopt technologies to improve and maintain our members' quality of life

OPALCO Board of Directors

Strategic Directives

Board Strategic Directives provide guidance in achieving the goals and objectives of OPALCO and serve as the basis for the General Manager's performance appraisal.

The Board of Directors shall maintain a long-range vision for the future of the Co-op that addresses the evolution, maintenance and operation of the power and communications grid with a focus on member quality of life, sustainable communities, healthy environment and local resiliency.

1. Safety

Safety is our highest priority. Safety programs will be implemented to engage all staff members and to promote OPALCO's high standards for safety with a goal of no accidents.

2. Reliability of Electric Service

Maintain reliability of electric service. Preserve our connection to the mainland power supply, support the federal hydro system and optimize locally generated power. Develop local resiliency for emergency conditions.

3. Sustainable Power Supply Strategy

Maintain a long-term strategy to provide safe, adequate, reliable, advantageously priced power, including consideration of which balances source risk, and economics, climate and energy policy uncertainties and environmental impact. consistent with our OPALCO grid operations. Leverage collaboration to access cost-effective and environmentally sensitive generation in our service territory and beyond.

Vision

Maintain a long range vision for the future of the Co-op that addresses the evolution, maintenance and operation of the power and communications grid with a focus on member quality of life, sustainable communities and local resiliency. Maintain and publish guiding documents (Load Forecast, Cost of Service Analysis, Rate Structure Design, Construction Work Plan, Long Range Plan, Long Range Financial Forecast, Integrated Resource Plan) that encompasses OPALCO's overall strategic vision for incorporating grid modernization and local renewable generation (i.e. loop feeds, AMI, utility scale renewables and storage).

4. Personnel

Attract and retain top quality employees by actively cultivating a workplace culture based on mutual respect that embraces diversity, encourages high team functionality and harmony, promotes personal and professional development and maintains high employment satisfaction. Maintain wage rates that are competitive within the industry and for our region. Include apprenticeship and training programs for all positions and succession planning for key positions.

5. Member Satisfaction

Sustain high levels of member satisfaction as evidenced through periodic member surveys.

6. Communications with Members

Provide regular communication outreach to inform members of relevant issues and to encourage member participation and engagement in co-op affairs. Maintain transparency for co-op governance and operations. Cultivate a culture of listening and provide opportunities for member feedback.

7. Cash and Debt Fund Availability

Ensure revenue and financial stability and have cash and debt availability to provide for foreseeable demands and to mitigate the impacts of potential significant damaging events including storm damage, loss of electric supply, equipment or cable failure.

8. Debt & Equity

Maintain appropriate levels of debt and equity that support the long-range financial strategic plans (power supply, capital projects and finances) while maintaining all loan covenants and meeting regulatory requirements.

9. Guiding Documents

Maintain and publish guiding documents.

10. Communication Backbone

Maintain fiber optic and wireless communications infrastructure to support grid operations for OPALCO and its subsidiary.

11. Rock Island Communications

Manage OPALCO's wholly-owned subsidiary to provide our membership high quality, reliable internet, voice and communications services. Prioritize communications to emergency responders and fiber to the home deployment while continually improving wireless services and maintaining key partnerships.

Vince Dauciunas, President

June 27, 2019

Date

MEMORANDUM

June 21, 2019

To: Board of Directors

From: Foster Hildreth, General Manager

Re: Washington State Clean Energy Transformation Act (SB5116) Kent Lopez

Kent Lopez will be attending the Board meeting to discuss the specifics of SB5116 (<https://app.leg.wa.gov/billsummary?BillNumber=5116&Initiative=false&Year=2019>) and timeline of implementation. Attached please find supporting documents for your edification.

**SB 5116 - Supporting Washington's clean energy economy and transitioning to a clean, affordable, and reliable energy future.
(Washington Clean Energy Transformation Act)**

Sec. 1	<p>Introduction and Intent language:</p> <ul style="list-style-type: none"> • “The legislature finds that Washington must address the impacts of climate change by leading the transition to a clean energy economy.”
Sec. 2	<p>Definitions (key definitions list):</p> <ul style="list-style-type: none"> • “Consumer-owned utility” includes electric cooperatives and mutual corporations or associations in the business of distributing electricity to more than one retail electric customer. • “Energy transformation project” <ul style="list-style-type: none"> ○ Provides energy-related goods or services other than generation ○ Results in reduction of fossil fuel consumption ○ Results in reduction of GHG emissions ○ Benefits customers ○ Such as: <ul style="list-style-type: none"> ▪ Energy efficiency measures ▪ Transportation electrification ▪ DER and grid modernization ▪ Renewable NG investments ▪ Contributions to self-directed investment for large industrial customers ▪ EE and emission reductions in agriculture • “Governing body” includes the board of directors of an electric cooperative or mutual association that has the authority to set and approve rates. • “Non-emitting electric generation” means electricity from a generating facility or a resource that does not emit greenhouse gases. • “Renewable resource” means water; wind; solar energy; geothermal energy; renewable natural gas; renewable hydrogen; wave, ocean or tidal power; biodiesel fuel; biomass. • “Retail electric customer” means a person that purchases electricity from a utility for consumption and not resale.
Sec. 3	<p>No-coal standard</p> <ul style="list-style-type: none"> • By 12-31-25, each electric utility must eliminate coal-fired resources from its portfolio. • Failure to comply results in administrative penalty

Sec. 4	<p>GHG neutral standard</p> <ul style="list-style-type: none"> • By 1-1-2030, each electric utility must use a combination of non-emitting resources, renewable resources, or alternative compliance options in its portfolio. • Four-year compliance periods: <ul style="list-style-type: none"> ○ 1-1-2030 through 12-31-2033 ○ 1-1-2034 through 12-31-2037 ○ 1-1-2038 through 12-31-2041 ○ 1-1-2042 through 12-31-2044 • Non-emitting generation used to meet the requirements must be generated during the compliance period • Each electric utility must also achieve all cost-effective, reliable, and feasible conservation and efficiency resources per methodology in EIA, and demand response. • Through 12-31-2044, up to 20 percent of the portfolio may be met with alternative compliance options which include: <ul style="list-style-type: none"> ○ Alternative compliance payment ○ RECs ○ Energy transformation projects ○ Electricity from an energy recovery facility • Does not prohibit BPA power. • Energy transformation projects: <ul style="list-style-type: none"> ○ Must use criteria developed by Ecology, Commerce and UTC ○ Must be real, specific, identifiable, quantifiable, permanent, verifiable ○ Not required by another statute ○ Not assumed to occur absent investment ○ Associated with consumption of energy in Washington ○ May only be associated with the utility using the energy transformation project for compliance, BPA on behalf of its preference customers, or a joint operating agency. • Electric utility must ensure that all customers benefit from transition to clean energy • Failure to comply results in administrative penalty
Sec. 5	<p>100% Non-emitting standard</p> <ul style="list-style-type: none"> • By 1-1-2045, non-emitting and renewable resources must supply 100 percent of all sales to retail electric customers. • The non-emitting standard must be incorporated in all planning and resource acquisition. • Each electric utility must also pursue all cost-effective, reliable, and feasible conservation, efficiency resources, and demand response. • Does not prohibit BPA power.

Sec. 6	<p>Clean energy implementation plans</p> <ul style="list-style-type: none"> • By 1-1-2022, and every four years thereafter, every electric utility must submit a plan for meeting the GHG neutral and 100% non-emitting standards that has been adopted by the governing board that: <ul style="list-style-type: none"> ○ Includes proposed interim targets ○ Is informed by the utility's clean energy action plan ○ Identifies specific actions • The plan is adopted by the governing board after a public meeting. • Plans must be consistent with: <ul style="list-style-type: none"> ○ Maintaining and protecting the safety, reliable operation, and balancing of the system. ○ Lowest reasonable costs, considering the risk. ○ All customers must benefit ○ No customer or class of customers is unreasonably harmed by the resulting cost increase. • An electric utility is in compliance with the GHG neutral and 100% non-emitting standards if over four years the incremental cost of meeting the standards is two percent or more for each year.
Sec. 7	<ul style="list-style-type: none"> • Each utility must provide its GHG content calculations to Commerce • Ecology will determine emissions rate for unspecified electricity • BPA may exclude purchases of generation not associated with load in Washington
Sec. 8	<ul style="list-style-type: none"> • By 1-1-2024, and every 4 years, Commerce must submit a report to the legislature that includes: <ul style="list-style-type: none"> ○ A review of the standards ○ An evaluation of generation resources to meet forecasted load ○ An evaluation of financial costs and benefits to electric utilities ○ An evaluation of technologies that could be considered renewable ○ An assessment on the middle-income families, small businesses and manufacturers

Sec. 9	<ul style="list-style-type: none"> • An electric utility that fails to meet the no coal standard or the GHG neutral standard must pay an administrative penalty equal to \$100 per MWh times the following multipliers: <ul style="list-style-type: none"> ○ 1.5 for coal-fired resources ○ 0.84 for gas-fired peaking power plants ○ 0.60 for gas-fired combined-cycle plants • An electric utility may pay an alternative compliance payment (\$100/MWh) • A governing body may authorize a temporary exemption from the GHG neutral standards requirements if: <ul style="list-style-type: none"> ○ Compliance conflicts with NERC standards ○ Due to reasons beyond the reasonable control of the utility, such as: <ul style="list-style-type: none"> ▪ Weather-related damage ▪ Natural disasters ▪ Mechanical or resource failures ▪ Failure of a third party to meeting contractual obligations ▪ Actions of governmental authorities ▪ Inadequate transmission ▪ Limitations, restrictions or prohibitions on nonemitting generation or renewable resources ○ The utility submits a plan to achieve full compliance • The auditor will issue a finding confirming the actions of the governing body • The electric utility must notify its retail customers when it pays the administrative penalty • The auditor is responsible for auditing compliance • The governor may suspend or delay implementation or exempt any utility via emergency declaration • Courts are authorized enhanced valuation of property subject to condemnation by a muni, PUD or irrigation district that is identified in a utility's clean energy action plan or clean energy implementation plan • A utility that extends its service territory must serve those premises in compliance with this act and the EIA if applicable
Sec. 10	<ul style="list-style-type: none"> • Commerce will adopt rules to streamline compliance with EIA • Nothing in this act restricts the rate-making authority of the governing boards • Commerce will adopt rules establishing reporting requirements for compliance • An electric utility must also make reports required in this section to its retail customers
Sec. 11	<ul style="list-style-type: none"> • Requirements in sections 3 – 9 don't replace EIA requirements • Activities to comply with EIA also qualify for compliance of this act

Sec. 12	<p>Low income assistance</p> <ul style="list-style-type: none"> • An electric utility must make programs and funding available for low-income assistance by 7-31-2021 • Each electric utility must disclose to Commerce: <ul style="list-style-type: none"> ○ The amount and type of assistance ○ The amount of money passed through to third parties that administer energy assistance programs ○ Other information requested by Commerce • Every 2 years, each electric utility must submit to Commerce an assessment of: <ul style="list-style-type: none"> ○ Programs and mechanisms used to reduce the energy burden of low income customers of the utility ○ The outreach strategies in use to encourage participation in low income assistance programs ○ The low income assistance programs funding levels needed to meet: <ul style="list-style-type: none"> ▪ 60% of the current energy assistance need or a 15% increase over 2018 levels, whichever is greater, by 2030 ▪ 90% of the current energy assistance need by 2050 ○ A plan to improve the effectiveness of the assessed mechanisms and strategies • A COU may enter into an agreement with an organization to aggregate the disclosures and assessments required • Nothing in this section restricts the rate-making authority of the governing boards
Sec. 13	<ul style="list-style-type: none"> • Commerce must convene a stakeholder work group to examine: <ul style="list-style-type: none"> ○ The integration of this act with carbon and electricity markets outside the state ○ The compatibility of this act with a linked cap-and-trade program ○ Representatives from electric utilities, gas companies, BPA, public interest and environmental organizations • Commerce and UTC to develop rules: <ul style="list-style-type: none"> ○ To address retail electric load met with market purchases, the western energy imbalance market or other centralized market ○ To prohibit double counting of RECs
Sec. 14	<p>Clean energy action plans</p> <ul style="list-style-type: none"> • Amends 19.280.030 RCW to require a clean energy action plan be included in a utility's resource plan by 12-31-2020 and every 2 years thereafter • Identifies how the utility plans over a 10-year period to implement the GHG neutral standard and the 100% non-emitting standard • Nothing limits the protection of records containing commercial information • Must include the cumulative impact analysis
Sec. 15	<ul style="list-style-type: none"> • Specifies the social cost of GHG emissions is equal to the cost per metric ton of carbon dioxide equivalent emissions, using the 2.5 percent discount rate.
Sec. 16	<ul style="list-style-type: none"> • Amends definition of "eligible coal plant" in RCW 80.84.010
Sec. 17	<ul style="list-style-type: none"> • This section is the tax preference performance statement for the tax preferences contained in sections 18 and 19

Sec. 18	<ul style="list-style-type: none"> Amends 82.08.962 (retail tax) to provide a tax exemption for machinery and equipment for fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal resources or heat recovery In order to qualify for the exemption, L&I must certify that the project is developed under a community workforce agreement or project labor agreement.
Sec. 19	<ul style="list-style-type: none"> Amends 82.12.962 (retail tax) to provide a tax exemption for machinery and equipment for fuel cells, wind, sun, biomass energy, tidal or wave energy, geothermal resources or heat recovery In order to qualify for the exemption, L&I must certify that the project is developed under a community workforce agreement or project labor agreement
Sec. 20	<ul style="list-style-type: none"> Amends 80.04.250 to provide the UTC flexible authority to value the property needed for implementation of this act for rate-making purposes
Sec. 21	<ul style="list-style-type: none"> Allows an IOU to account for and defer for later UTC consideration costs incurred in connection with major projects required by the IOU's clean energy action plan
Sec. 22	<p>State energy strategy</p> <ul style="list-style-type: none"> By 12-31-2020, and every 8 years thereafter, Commerce will update the state energy strategy. Membership of the energy strategy advisory committee must include one person recommended by rural electric cooperatives
Sec. 23	<ul style="list-style-type: none"> Commerce must establish an energy and climate policy advisory committee by 1-1-2020 to make recommendations to the legislature: <ul style="list-style-type: none"> Consideration of existing resources Establishment of new resources Cost-benefits of energy-related policies, programs, functions, activities and incentives Other energy-related studies as directed by the legislature
Sec. 24	<ul style="list-style-type: none"> Health dept. must develop an impact analysis to designate communities highly impacted by fossil fuel pollution and climate change by 12-31-2020
Sec. 25	<ul style="list-style-type: none"> EFSEC chair shall convene a transmission corridor work group and report to the governor and legislature by 12-31-2022. Work group shall: <ul style="list-style-type: none"> Review the need for upgraded and new transmission Identify areas where transmission and distribution facilities may need to be enhanced or constructed Identify environmental review options Include: <ul style="list-style-type: none"> One individual from utility industries One individual from PUDs BPA representative as ex-officio member
Sec. 26	<ul style="list-style-type: none"> Designates this bill as the Washington Clean Energy Transformation Act
Sec. 27	<ul style="list-style-type: none"> Designates sections 1 through 13 and 26 as a new chapter in 19 RCW
Sec. 28	<ul style="list-style-type: none"> Amends the EIA to include federal incremental hydro as an eligible renewable resource

Sec. 29	<ul style="list-style-type: none"> • Amends the EIA allow freshwater RECs • Amends the EIA to allow a utility to be in compliance without purchasing power or RECs that it doesn't need as of 1-1-2030.
Sec. 30	<ul style="list-style-type: none"> • Severance provision
Sec. 31	<ul style="list-style-type: none"> • The act is effective immediately

Clean Energy Transformation Act Timeline of Requirements

Date	Action Required
July 1, 2020	Low Income Assistance (Sec. 12) <ul style="list-style-type: none"> Each utility must disclose the following information to Commerce: <ul style="list-style-type: none"> The amount and type of energy assistance and the number and type of households served for programs administered by the utility; The amount of money passed to third parties that administer energy assistance programs; and Subject to availability, any other information related to the utility's low-income assistance programs that is requested by Commerce.
Dec. 31, 2020 and every 4 years thereafter	Clean Energy Action Plans (Sec. 14) <i>Small Utilities (Less than 25,000 or full-requirements customers)</i> <ul style="list-style-type: none"> By December 31, 2020, and in every resource plan thereafter, identify how the utility plans over a 10-year period to implement this act. Plans must be presented at a public meeting and adopted by the governing board.
June 1, 2021 and annually thereafter	Greenhouse Gas Disclosure (Sec. 7) <ul style="list-style-type: none"> Each electric utility must disclose its GHG content consistent with and as part of its fuel mix disclosure report.
July 31, 2021	Low Income Assistance (Sec. 12) <ul style="list-style-type: none"> An electric utility must provide energy assistance programs and funding available for low-income households and demonstrate progress in providing energy assistance.
Dec. 31, 2021 and every 4 years thereafter	Clean Energy Implementation Plan (Sec. 6) <ul style="list-style-type: none"> Each COU must submit to Commerce a 4-year clean energy implementation plan that: <ul style="list-style-type: none"> Proposes interim targets for meeting the GHG net-neutral standard Is informed by the COU's clean energy action plan; Identifies specific actions to be taken by the COU over the next 4 years, consistent with the utility's long-range resource plan and resource adequacy requirements that demonstrate progress towards meeting the GHG-neutral standard and 100% non-emitting standard and proposed interim targets.
July 31, 2022 and every 2 years thereafter	Low Income Assistance (Sec. 12) <ul style="list-style-type: none"> Each utility must disclose the following information to Commerce: <ul style="list-style-type: none"> The amount and type of energy assistance and the number and type of households, if applicable, served for programs administered by the utility; The money passed to third parties that administer energy assistance programs; The programs and mechanisms used to reduce energy burden; The outreach strategies used to encourage participation of eligible households; A cumulative assessment of the funding levels needed; <ul style="list-style-type: none"> By 2020 – greater of 60% of current need or 15% increase over 2018 By 2050 – 90% of current need A plan to improve the effectiveness of the assessed mechanisms and strategies toward meeting the energy assistance need.

Dec. 31, 2025	Eliminate Coal (Sec.3) <ul style="list-style-type: none"> Each electric utility must eliminate coal-fired resources from its allocation of electricity. Non-compliance is subject to administrative penalty
Jan. 1, 2030	Greenhouse Gas Neutral (Sec. 4) <ul style="list-style-type: none"> An electric utility must demonstrate it is carbon neutral using a combination of non-emitting electric generation and electricity from renewable resources. An electric utility must pursue all cost-effective, reliable, and feasible conservation resources, and demand response consistent with the requirements of RCW 19.285.040, if applicable. Non-compliance is subject to administrative penalty
Jan. 1, 2045	100% Non-emitting (Sec. 5) <ul style="list-style-type: none"> Each electric utility must use non-emitting and renewable generation to supply 100 percent of all sales of electricity to retail customers in Washington Each electric utility must incorporate the 100 percent standard in its relevant planning and resource acquisition An electric utility must pursue all cost-effective, reliable and feasible conservation, efficiency resources and demand response.

PNGC WORKING DRAFT

WASHINGTON STATE CLEAN ENERGY TRANSFORMATION ACT (CETA) BILL SUMMARY AND PRELIMINARY CONCLUSIONS

(Some source material provided by the following: Public Generating Pool, Washington State Legislature, leg.wa.gov)

OVERVIEW: On Tuesday, May 7, 2019, Washington State Governor, Jay Inslee signed a bill (SB 5116) that will eliminate coal power by 2025 and transition the state to 100 percent clean and renewable electricity by 2045. This memo outlines the relevant provisions of the legislation with narrative sourced directly from bill summaries provided by the Public Generating Pool and the Washington State Legislature's "Final Bill Report" (E2SSB 5116).

PNGC is still in the process of assessing how this new law will impact its members and provide updates and compliance insight throughout the bill's implementation process.

COAL PHASE-OUT STANDARD: By December 31, 2025, all electric utilities must eliminate coal-fired resources from their allocation of electricity.

GREENHOUSE GAS NEUTRAL STANDARD: By January 1, 2030, each electric utility must make all retail sales of electricity to Washington customers GHG neutral.

An electric utility must achieve compliance with the GHG neutral standard for multi-year (four-year) compliance periods beginning January 1, 2030, through December 31, 2044.

All renewable resources used to meet the compliance obligation must be verified using renewable energy credits (RECs), and must be tracked and retired in the tracking system selected by Commerce. Non-emitting generation resources used to meet the obligation must be generated during the compliance period and must be verified by documentation that the utility owns the non-power attributes of the electricity.

TO ACHIEVE COMPLIANCE WITH THIS STANDARD:

- 80% of power delivered to retail load must be carbon free. Fortunately, it appears that this includes large hydro (e.g. BPA) and nuclear (e.g. Columbia Generating Station) as well as renewables such as wind and solar.
- Up to 20% of power delivered may be satisfied with an alternative compliance option through December 31, 2044. (see details below)

ALTERNATIVE COMPLIANCE OPTIONS MAY INCLUDE ANY COMBINATION OF THE FOLLOWING:

- **Making an alternative compliance payment (i.e. administrative penalty).** Specifically, \$150/MWh for coal-fired resources, \$84/MWh for gas-fired peaking power plants, and \$60/MWh for gas-fired combined cycle power plants. The penalty is adjusted for inflation beginning in 2027.

- **Purchasing unbundled RECs.** I-937 qualifying RECs can be used, as well as any unbundled REC created within the compliance period. No double counting with programs in other jurisdictions. We are still pinning down exactly what is meant by "double counting" and suspect that rules will be developed to fill in missing details.
- **Investing in energy transformation projects.** Criteria for these projects must meet criteria and quality standards developed by the Department of Ecology, in consultation with Commerce and the UTC.
- **Electricity from an energy recovery facility using municipal solid waste.** Using electricity from an energy recovery facility using municipal solid waste as the principal fuel source, where the facility was constructed prior to 1992 and is in compliance with federal and state air quality standards.

CLEAN ENERGY STANDARD: By January 1, 2045, each electric utility must meet 100 percent of its retail electric load to Washington customers using non-emitting electric generation and electricity from renewable resources.

IMPLEMENTATION PLANS AND INCREMENTAL COST CAPS: By January 1, 2022, and every four years thereafter, each electric utility must develop a four-year Clean Energy Implementation Plan (CEIP) for the GHG neutral and clean energy standards and establish interim targets for meeting the standards.

COU COMPLIANCE: A COU must be considered in compliance with the GHG neutral and clean energy standards if, over the four-year compliance period, the average annual incremental cost of meeting the standards or the utility's interim targets meets, but does not exceed, a 2 percent increase of the COU's retail revenue requirement above the previous year.

EXEMPTIONS: Language is included that gives the governing body of a consumer-owned utility, the ability to relieve a consumer-owned utility of its administrative penalty under certain circumstances. Additionally, the Governor may waive a penalty by declaring an emergency due to adverse system reliability impacts.

ENERGY INDEPENDENCE ACT (I-937): Compliance under I-937 can be used for compliance with this bill – the requirements of this act do not replace or modify the requirements of the Energy Independence Act. If a utility meets 100% of their load with renewable resources, non-emitting resources or I-937 RECs, they are considered under compliance with both this Act and I-937.

RULEMAKING AUTHORITY: By January 1, 2021, UTC for IOUs and Commerce for consumer-owned utilities may adopt rules. Nothing restricts rate-making authority of the governing bodies of COUs unless otherwise provided by law.

Commerce is the agency responsible for adopting rules establishing reporting requirements for electric utilities to demonstrate clean energy standard compliance.

Ecology is the agency responsible, in consultation with UTC and Commerce, to establish requirements for energy transformation project investments.

LOW-INCOME ASSISTANCE: Electric utilities must make funding available for low-income bill assistance by July 31, 2021. Beginning July 31, 2020, Commerce collect and aggregate data estimating energy burden

and energy assistance need and reported energy assistance need for each utility, and update the specific aggregated data biennially.

PRELIMINARY PNGC CONCLUSIONS: PNGC staff is still completing its assessment of the impacts of CETA on its Washington members specifically and the entire PNGC membership in general. The following are preliminary conclusions that still need to be vetted fully. PNGC does not recommend any specific actions yet based on these preliminary conclusions as these are early general observations and we are still seeking clarification on aspects of CETA.

- It appears that first direct effect on Washington PNGC members will occur in 2030. We are not aware of any Washington COUs that own coal so the coal phase-out by 2025 does not directly impact COUs in Washington.
- The BPA contract expires in 2028. The largely carbon-free nature of our BPA power supply (i.e. about 88 to 98% carbon free depending on hydro conditions) will make BPA power more attractive in the short-term and particularly the long-term. This must shape our thinking about a post-2028 BPA contract. One factor that could now change in a major way is that the IOUs that have access to BPA power under the 1980 Power Act may want direct access to BPA power rather than the "financial settlement" they now receive under the Residential Exchange settlement that goes through 2028.
- Once the 2030 provisions of CETA start, COUs that rely on BPA for power will likely still have compliance obligations. This could vary each year depending on hydro conditions. PNGC staff will seek more answers on how this particular issue (compliance obligations that vary based on hydro conditions) will be handled. Ideally, there would be some kind of multi-year smoothing similar to what it appears Oregon plans to adopt.
- Based solely on REC current prices, it appears that it would be far more economic to meet post 2030 compliance obligations with RECs rather than paying the high administrative/compliance fees for generation of GHG. It is likely even more economic to build carbon free resources than be subject to the high administrative/compliance fees for generation of GHG. However, REC prices could rise as a result of a new market demand to meet CETA requirements.
- CETA is a major policy shift that, along with carbon policy in California and likely Oregon, will have both direct and indirect impacts on power markets. California carbon policy, for example, influences market prices for power in the West. Carbon-free resources are now carrying a premium due to carbon pricing. While RPS tended to deflate power prices by causing oversupply, carbon pricing will likely have an opposite impact. This could have a positive impact on BPA secondary revenues which, in turn, helps BPA customers with additional revenue to offset costs we otherwise pay.
- CETA and other carbon policy in California and Oregon are going to accelerate the closure of coal plants. We are already seeing this play out. This has already put upward pressure on power prices in short volatile periods (for now). We are also seeing an increase in extreme pricing events similar to this past March. It is also setting up a possible reliability situation as legacy firm dispatchable plants (i.e. gas and coal) are shuttered. It is not yet clear how the

power system needs for this firm capacity to back up wind, solar and other intermittent power will be met. California is pursuing a battery-based solution. That is expensive and it does not meet the unique winter needs of the Northwest. This need will ultimately have an impact on Washington utilities as well as all PNGC members and utilities in the entire region.

DRAFT

MEMORANDUM

June 21, 2019

To: Board of Directors

From: Foster Hildreth, General Manager

Re: Solar and Storage in San Juan County – Rainshadow Solar

At the May meeting, the Board was inquiring about the trends of the solar and battery markets. Justin Wolfe and Chris Wolfe of Rainshadow Solar were kind enough to offer to attend the meeting to share their perspectives on current industry trends in renewables and energy storage with a focus on technology, funding, state and national policy, and expectations for the coming year.

MEMORANDUM

June 21, 2019

To: Board of Directors

From: Foster Hildreth, General Manager

Re: Board and Member Informational Topics and Quick Facts

With summer upon us and the greatest number of our members on island, it's a great time to tell the OPALCO story. The following information is to inform your conversations and remind you of the resources available on our website if members have further questions. We have a good story to tell – tell it loud and proud!

A great deal of progress has been made in the past five years (2015-2019) and member satisfaction is high (83% high/very high in 2018 survey). At the 2019 Annual Meeting and Candidate Forums, member comments were positive and supportive of the Board and leadership. The following is a brief recap of the accomplishments of the past five years, and also a snapshot of the key capital projects that members are paying for in their rates.

Co-ops use debt as a tool to build and maintain their systems and, with depreciation and interest spread over the 30-year loan term, the members who are using the system pay for it. Many of the capital projects we have built in this period are creating a more reliable, sustainable system that will help keep rates lower well into the future.

SAFETY:

- Started an internet service company, Rock Island Communications, and solved communications crisis across all 20 islands
- Joined with RESAP to be proactive partners for workplace safety
- Built on OPALCO's fiber backbone, installed devices in the field and put devices in field crew's hands and trucks to ensure seamless communication throughout the territory for safe working conditions and to get help in case of emergency.
- Developing a county-wide radio network for public safety workers and first responders built on OPALCO's fiber backbone

RELIABILITY:

- Provide service availability rate that averages 99.98% (2018)
- Replaced end-of-life submarine cable from San Juan to Lopez (2017) with a more efficient, more durable cable that includes 288 strands of fiber optic cable and will last the Co-op 50+ years
- Rebuilt the 1951 Decatur substation and added a second tap from BPA to provide power directly from the mainland, dramatically increasing the redundancy in our system

- Upgraded substations and conductor to route power from Decatur to Eastsound to keep members energized during outages on the other feeder and to manage capacity and lifespan of equipment
- Replaced 12.7 miles of failing direct buried underground conductor

RESILIENCE:

- Garnered \$5.8M to pass on members for energy efficiency projects that will increase their long-term affordability and reduce carbon consumption
- Built Decatur Community Solar Project with participant dollars; first battery storage project will be installed this year, and planning for the next solar and energy storage on Lopez in 2020-21
- Instituted bill pay assistance to members who need it through Energy Assist – Rock Island matches OPALCO assistance for their customer's bills.
- OPALCO's assets have increased by 30% since 2015 (primarily sub cable)

QUALITY OF LIFE:

- Established a healthy workplace culture where employee satisfaction has risen and teams work together effectively. Quarterly staff training and team building events have increased cohesion and harmony across departments
- Contributed a strategic vision for healthy, connected and sustainable island communities to the County Comprehensive Plan Update (2018)
- Advocated for the successful affordable housing measure (2018) to support a good quality of life for co-op staff and members
- Advocating for WSF hybrid electric ferries on San Juan Islands route – striving for a carbon free environment in our lifetimes and maintaining a reliable connection to the mainland
- Supporting Governor Inslee's Southern Resident Orca Whale Survival task force and initiatives

FUTURE:

- Modernized OPALCO's grid (infrastructure backbone) for more efficiency, safety and real-time control of the electrical distribution system, and also to prepare for greater loads of intermittent renewables and local distributed power
- Proactively addressing the biggest change in the power industry since the REA by joining forces with PNGC to optimize power purchases now, lobby for state and regional issues and collaborate with other cooperatives to plan for clean and cost-effective generation in the future (post-2028 BPA contract renewal)
- Hired the next generation of OPALCO staff to effectively and efficiently run our modern electric distribution system
- Established a member Elections & Governance Committee to oversee elections and review governance policy and issues – increasing member engagement and participation in governance

OPALCO strives to keep rates as low as possible by controlling expenses and pricing electricity at the cost of service. Major expense areas are:

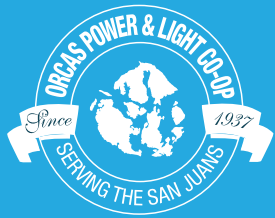
- Cost of Power (~30%) – costs increase 5-7% every year

- Capital Improvements and Maintenance of the System (~50%)
- Quality of Service (~20%) – administrative, inflation, keeping the doors open

Please review the following “Quick Fact” documents about Co-op operations:

- Rates
- Debt & Capital Projects
- Staff Compensation
- Rock Island

All documents are available in our document library and will be updated on a regular basis. Understanding the operations of a co-op are key for our membership.



Quick Co-op Facts:

Rates & Affordability

OPALCO strives to keep rates as low as possible by controlling expenses and pricing electricity at the cost of service. Low-income households are served by several energy assistance programs designed to help pay their power bills and level the playing field for all co-op members.

- The average OPALCO member pays less for their electricity compared to US, WA and Peer electric co-ops due predominantly to the low cost hydro-electric power provided by PNGC/BPA. This is especially significant as OPALCO's carrying costs are greater than most to supply power to 20 rural, remote islands.
- Reliability saves money. OPALCO's power is remarkably stable thanks to the undergrounding of distribution cable; the distribution system is up to about 87% underground now. It costs about five times more to underground than to go overhead, but it helps the Co-op ride out storms better, and saves costly outage and repair expense.
- Rates are on the rise at the Co-op to pay for major capital projects like the \$15M submarine cable (depreciation and interest over the coming 30 years) and also the increased cost of power purchases (30% of total co-op expense).
- Members who use power today are paying for the cost of service for OPALCO's system as it stands today: power purchases, capital projects and maintenance and administration – keeping the doors open.
- OPALCO does all it can to assist members from low and fixed income households, including Project PAL program, Energy Assist and LIHEAP. OPALCO works with county family resource centers to reach as many households as possible. The Energy Assist program continues to increase its award amounts to keep up with rate increases (increase was \$5/month in 2019 to exceed the average rate increase).
- The OPALCO board holds public rate workshops to explore options for rate setting and conducts an independent Cost of Service analysis every few years to make sure each member is paying their fair share (2018 was most recent study).
- There was a 5.2% revenue increase in OPALCO's 2019 budget, which represents an average \$4.50/month increase to residential members. This increase is driven by the loan expense (capitalization) for the submarine cable replacement (George), inflation and power cost increases. The budget also includes two new Apprentice Lineworker positions to prepare for retirements on the horizon.
- The Board anticipates similar rate increases into the future. BPA, our main power provider, continues to raise its rates an average of 5-7% per year, which gets passed on to our members. The Board is looking at ways to increase our investments in renewable energy to diversify our power supply for the future.

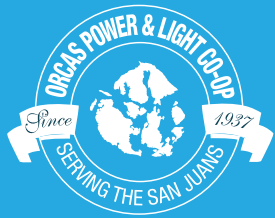
Understanding Power Costs: www.opalco.com/rates

2019 Rate Analysis:

www.opalco.com/wp-content/uploads/2018/11/Board-Presentation-2019-Rate-Analysis.pdf

2018 Cost of Service Study:

www.opalco.com/wp-content/uploads/2018/09/2018-Cost-of-Service-Study-Presentation.pdf



Quick Co-op Facts:

Debt and Capital Projects

OPALCO debt is healthy and well managed. Debt is how co-ops finance growth and capital projects. In 2019, OPALCO comes to the end of a period of intensive capital projects that pushed the debt ratio up higher. This is the pattern over the decades: 1) build equity for capital projects, 2) borrowing and construction, 3) pay loans off over 30 years, 4) do it all over again.

- Recent capital projects include: \$15M Submarine Cable project, major substation rebuilds, a new mainland power feed, grid modernization and replacement of aging direct buried cables.
- OPALCO conducts a comprehensive review and forecast of debt, equity and cash balances to fund all of our capital project needs each year in the budgeting process, and works from a four-year Construction Work Plan that is reviewed and approved by USDA/Rural Utilities Service (RUS), our lender. The Board of Directors reviews the status of this plan on a quarterly basis.
- There is a very consistent rise and fall pattern of debt and equity throughout OPALCO's history and that is typical among rural cooperative utilities:
 - 1) rising equity to build toward major capital expenses – particularly submarine cable projects – during which the debt ratio falls;
 - 2) a cycle of rising debt as each project gets funded with loans, built and capitalized – during which the equity ratio falls; and
 - 3) followed by a recovery period of rising equity ratio and falling debt ratio as we prepare for the future capital projects.

1) How do we pay for this debt? Each year's budget includes a share of the depreciation and interest on the 30-year loan – so each member pays for the system that they are using themselves.

2) OPALCO's ability to borrow funds for capital projects is based on its TIER (times interest earned ratio), which is closely monitored by OPALCO's primary lender, USDA/RUS. RUS consistently finds OPALCO's TIER to be acceptable and healthy.

3) Our current forecast (2019 Budget Executive Summary) shows equity trending upward and borrowing slowed (2018-2022) as we prepare for the next submarine cable replacement project post 2030.

4) Note the 2018 budget financial metrics below (as well as the recently completed 20-year long-range financial plan) forecasts debt decreasing in upcoming years as we build equity in preparation for our future major capital expenditures (i.e. local generation resources).

5) Rock Island's debt is independent of OPALCO and covered by Rock Island subscriber revenue over the course of the 30-year loan term. As the parent organization of a wholly-subsidary, OPALCO guarantees their loan and has Rock Island's assets and value as collateral to more than cover the guarantee.

Debt charts - published in quarterly financial reports:

www.opalco.com/resource-library/#rlfinancequarterlyreports2019

2019 Budget:

www.opalco.com/wp-content/uploads/2018/12/2019-Budget-Report-FINAL-rev-12.14.18.pdf



Quick Co-op Facts:

Staff Compensation

OPALCO conducts a thorough comparative review to verify that salaries are competitive within our industry. Hiring and retaining top notch personnel is critical to the operation of OPALCO's complex electrical and communications systems.

- OPALCO's wage philosophy is directly in line with the national network of electric co-ops. OPALCO pay is competitive based on electric utility cooperatives in the region.
- Utilizing technology and retaining highly talented personnel allows OPALCO to keep staffing levels flat/lower by doing more with less. OPALCO has maintained an average of 50 full time employees (FTE's) over the last 10 years and this level of staffing is forecast to remain consistent in the upcoming years.
- OPALCO has been fortunate to attract and hire a very talented new generation of staff in key positions and must remain competitive to retain them in an environment where utilities nationwide are scrambling to find qualified employees.
- The wage rates of our union represented employees follow a collective bargaining agreement, which goes through its own prescribed comparison process every time the collective bargaining agreement is renewed.
- GM Compensation: In 2018, following a thorough performance review, the Board reviewed GM compensation data from more than 22 cooperatives (IRS Form 990 cooperative tax filings), and a publication listing 83 Northwest electric utilities. The Board also commissioned an independent wage analysis by a compensation consultant. All three independent wage efforts concluded that the GM's compensation falls well within the range of competitive market practices for GMs in organizations similar in size and location. Here are some figures:

OPALCO General Manager Compensation (2017 Tax Report 990) 2017 base wage is \$239,375. The 2017 BASE SALARY compares to other General Managers of peer electric cooperatives:

Average Base Salary of 10 WA Co-ops:	\$250,173
Average Base Salary of 12 OR Co-ops:	\$265,397
Average Base Salary of 22 Regional Co-ops:	\$258,477
Base Salary of Seattle City Light GM:	\$340,000
Base Salary of previous OPALCO GM (2014):	\$211,548

And, as a point of reference, here are some specific examples of GM salaries from Washington State:

- Chelan County PUD General Manager Steve Wright: \$345,000
- Clark Public Utilities CEO Wayne Nelson: \$270,000
- Snohomish County Public Utility CEO John Haarlow: 329,600
- Tacoma Public Utilities CEO Bill Gaines: \$387,650
- Puget Sound Energy CEO Kimberly Harris: \$900,000 base + \$2.9M in bonus pay

Reference links from OPALCO's online Document Library:

- **June 2018 Board Materials** on how OPALCO determines staff wages:
www.opalco.com/wp-content/uploads/2018/06/June-Board-Materials-1.pdf, page 16.
- **Form 990:** www.opalco.com/resource-library/#rlffinanceform990 Page 34 of 47



Quick Co-op Facts:

Rock Island & OPALCO

Rock Island is OPALCO's wholly-owned subsidiary. Together they have built a hybrid fiber and LTE wireless network to meet the needs of our rural, remote territory. This robust communication system solves multiple critical needs including improving public safety, controlling OPALCO's electrical system maintenance and outage costs, and providing a connection to resources and the greater world.

- OPALCO gave Rock Island an initial start up loan for \$5M and was paid back in 2016.
- OPALCO members contributed \$1M to support Rock Island's initial debt service on the loan through a monthly charge on power bills of ~\$3/member over 24 months (2015-2016) for a total of \$72 per member. This was a time-limited member investment and the only impact to member bills.
- OPALCO is a 100 percent equity owner of Island Network LLC, doing business as Rock Island Communications. OPALCO maintains ownership of our backbone infrastructure, while Rock Island owns all distribution assets they have installed.
- As of year end 2018, Rock Island has almost 5,000 subscribers, with positive cashflow expected in 2019-Q3. Beginning in 2024, Rock Island is forecast to generate \$8.7 million annually. A portion of Rock Island profits will come back to the Co-op to help slow electrical rate increases in the future.
- The expansion of fiber and 38 LTE sites throughout our remote island territory has increased the safety and communication for our crews in the field. It enables greater automation of our electrical system through installation of more devices in the field that can be monitored and controlled remotely.
- Rock Island has received multiple national awards for best internet speed and customer service and the model is so successful that T-Mobile is replicating it across the nation to bring access to broadband in other rural communities.
- Rock Island provides 35 local living wage jobs in the community - plus local contractors.
- Rock Island's rapid deployment has given us a leap of progress in preparing our grid for the foreseeable future of balancing more member devices on the system, more local distributed power and positioning OPALCO to serve as a balancing authority as we move toward a more transactive energy world when members will take control of their energy usage, local generation and storage.
- High-speed, two-way communications is the solution to the biggest challenge facing utilities today as they embrace more and more renewables and local distributed power. This project provides us with the perfect platform to meet our current and future needs.
- Board Strategic Directive #11: Manage OPALCO's wholly-owned subsidiary to provide our membership high quality, reliable internet, voice and communications services. Prioritize communications to emergency responders and fiber to the home deployment while continually improving wireless services and maintaining key partnerships.
- Rock Island Governance: Policy 1 states, "The Board shall also oversee any subsidiaries of the Cooperative. Such oversight shall include regular updates from the General Manager, financial performance review, business plan and strategy review, review and approve debt increases, and consistency with overall Strategic Directives."

Rock Island Business Plan:

www.opalco.com/wp-content/uploads/2018/12/2019-Rock-Island-Business-Plan-FINAL-12_20_2018.pdf

Page 35 of 47

2019 Budget: www.opalco.com/wp-content/uploads/2018/12/2019-Budget-Report-FINAL-rev-12.14.18.pdf

GENERAL MANAGER'S REPORT

June 2019

DASHBOARDS

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

Finance

Budget Variance
Cash
Power Cost
TIER/Margin
Debt/Equity
Capital
WIP
Expense
Capital Projects

Member Services

Disconnects
ECA
PAL
Energy Assist
Community Solar
Service Additions
Member Generation

Outage

Historical SAIDI - Graph
Historical SAIDI - Figures
Outage Stats – Monthly
Outage Stats – Rolling 12 Mth
SAIDI by Category
Outage Summary
Outage Summary - Monthly

ENGINEERING, OPERATIONS, AND INFORMATION TECHNOLOGIES

WIP

As of June 21, 2019, there are 367 work orders open totaling \$4.96M. Operations has completed construction on 94 work orders, totaling \$798k.

Fire Risk and Prevention

Considering the recent issues in the region with wildfires, staff wanted to update the Board of the measures OPALCO takes to reduce the risk of fire and our liability in the event of a disaster.

Engineering - Our transmission and distribution overhead protection devices will be in a non-reclose state to ensure an instance of a downed line does not start a fire. Devices equipped with high impedance fault detection are enabled to allow for de-energization of lines that are on the ground will not have enough fault current to operate.

Operations - Overhead line right-of-way clearing will increase to include ground clearing. General Foreman and Engineering staff continue to negotiate an increase to our easements and right of way clearing.

Insurance - Staff is working with Federated to obtain insurance quotes for increased catastrophic coverage. Current combined coverage is at \$37M.

Public Outreach - Communications staff will be reaching out to the fire departments in the county to collaborate on a campaign to promote better forest and property management throughout the county.

Operations

Below is the replacement of the air-break switch which feeds the Furikawa cable installed in 1990 at the Lopez West Terminal serving San Juan Island.



Below is the work to de-energize one of the Shaw to Orcas submarine cables.



Safety

David Tribolet, Training Officer of the Coast Guard Auxiliary, conducted boater's safety training. The total hours worked without a loss time accident: 159,544 hours. Staff also gathered for team meetings and some demonstrations with the bucket truck.



Grid Modernization Projects

- 1) **Decatur Battery Energy Storage System (ESS) – WA DOC CEF2 Grid Modernization (~\$1M Grant)** - Staff continues to finalize contract and agreement to begin manufacturing of batteries.
- 2) **Lopez Microgrid – WA DOC CEF3 Grid Modernization (Grant \$ Amount TBD) –** Staff anticipates completing the WA DOC contract by end of Q3.

FINANCE

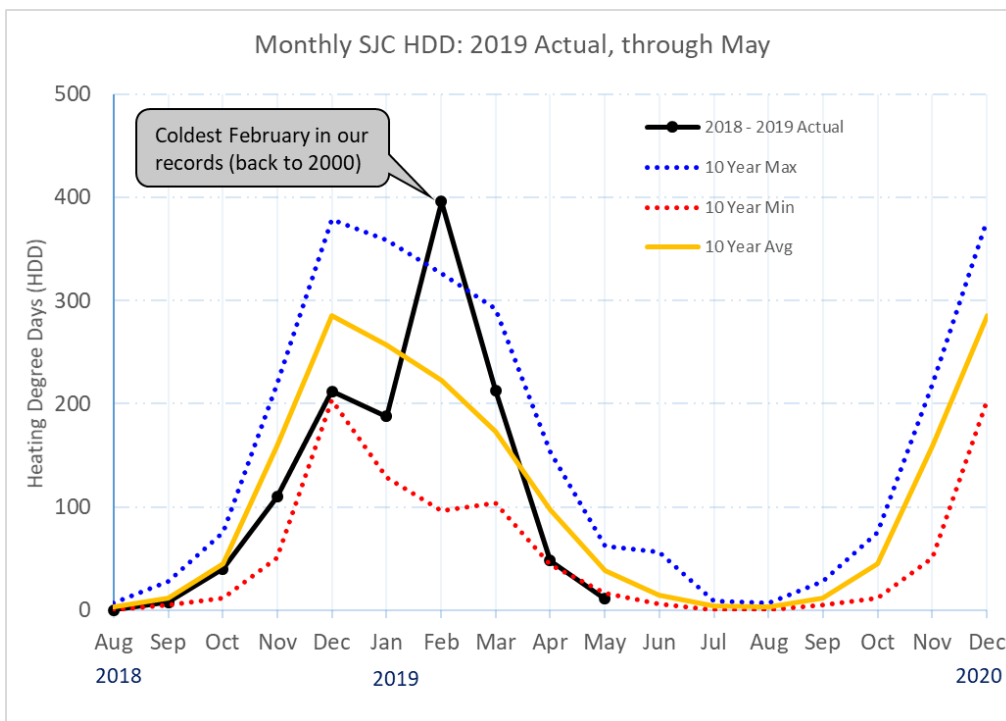
2019 Budget Tracking

Kilowatt hour (kWh) purchases, sales were slightly higher than budgeted through May 2019.

Income Statement Summary (in thousands)		May 2019 YTD		
		Budget	Actual	Variance
Gross Revenue	\$	14,589	\$ 14,860	\$ 271
ECA Surcharge / (Credit)		-	(235)	(235)
Revenue		14,589	14,625	36
Cost of Power		4,511	4,391	(121)
Revenue (net of Power Cost)		10,078	10,234	156
TIER		3.40	3.38	(0.01)
HDD		596	856	260
kWh Purchases		99,498	105,730	6,232
kWh Sales		93,031	99,669	6,639

Heating Degree Days (HDD)

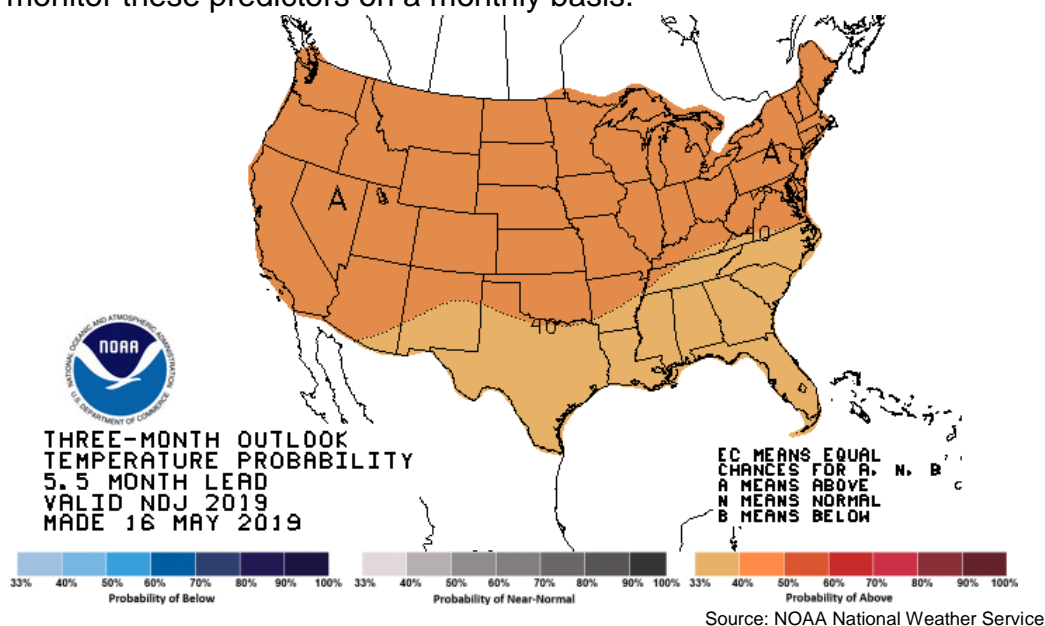
As a reminder, HDD is a measure of how many degrees a days' average temperature is *below* a base temperature. We use 50° as our base temperature and track HDD on a monthly basis. This winter HDD trended towards the warmer El Niño cycle temperatures, driven by prevailing winds from the south. Then February surprised us with extreme cold as the wind and weather shifted, coming from the northeast. April and May have returned to the warmer El Niño pattern.



*10-year max, min, avg is 2009-2018

Weather Forecast

The current NOAA '3-month outlook temperature probability' for Nov-Dec-Jan 2019-20 shows a 40-50% probability of 'above normal' temperatures in our region for the upcoming winter. We continue to monitor these predictors on a monthly basis.



Monthly ECA

The calculated amount for the May ECA was a surcharge of +\$0.008047 per kWh which collected \$111,685 in May, or \$8.05 per 1,000 kWh. The YTD ECA through the May billing period is a credit to members (and reduction to operating revenue) of \$235,400, or \$9.85 for a member using 1000 kWh/month. The June billing period ECA will be a credit of -\$0.005175.

2018 Capital Credit General Allocation Process

Based on the Board acceptance of the 2018 financial statements at the May 16th board meeting, the 2018 margin of ~\$3M was allocated to ~14.7k accounts. Notices to the membership will appear on the June 17th and June 28th billing. Please note, this is an allocation of margins as required to retain our cooperative status. The actual cash distribution of these funds will be per the 25-year cycle as per Member Service Policy 11.

MEMBER SERVICES

Energy Assistance

During May 2019, 270 members received \$~9.9k from the Energy Assist program, compared to 301 members receiving \$~8.9k worth of assistance in May 2018. There has been about a 25% decrease in participation since April 2019 due to the annual reapplication period (some members did not reapply in a timely manner). Staff is doing additional outreach to increase participation in the program.

Energy Savings

Members applied for 18 rebates totaling \$~17.9k, including 8 rebates for beneficial electrification totaling \$12k. Staff is continuing to host monthly Energy Roundtable discussions with the San Juan Islands Conservation District and invite members to participate on the last Wednesday of each month. Sign up for meeting notifications by emailing Ryan Palmateer – Ryan@sjicd.org.

Community Solar

During the May 2019 billing cycle the Decatur Community Solar array produced 66,080 kWh, and 9 kWh per solar unit was credited to member participants. A total of ~\$6.08k was distributed to 274 accounts, including an additional \$~624 for the PAL and Energy Assist programs.

COMMUNICATIONS

Governor Inslee



On Tuesday, May 28th, leadership from OPALCO and T-Mobile met with Governor Inslee to share the Rock Island Communications broadband success story in support of the Governor's new statewide broadband office and initiatives. With its robust fiber and LTE foundation in place, OPALCO is excited to help move some of Governor Inslee's key initiatives forward including Southern Resident Orcas Whale Survival, Clean Energy and Economic Development. Read the full story: <https://www.opalco.com/governor-inslee-meets-with-opalco-to-talk-broadband-clean-energy-and-electric-ferries/2019/06/>

Switch It Up!

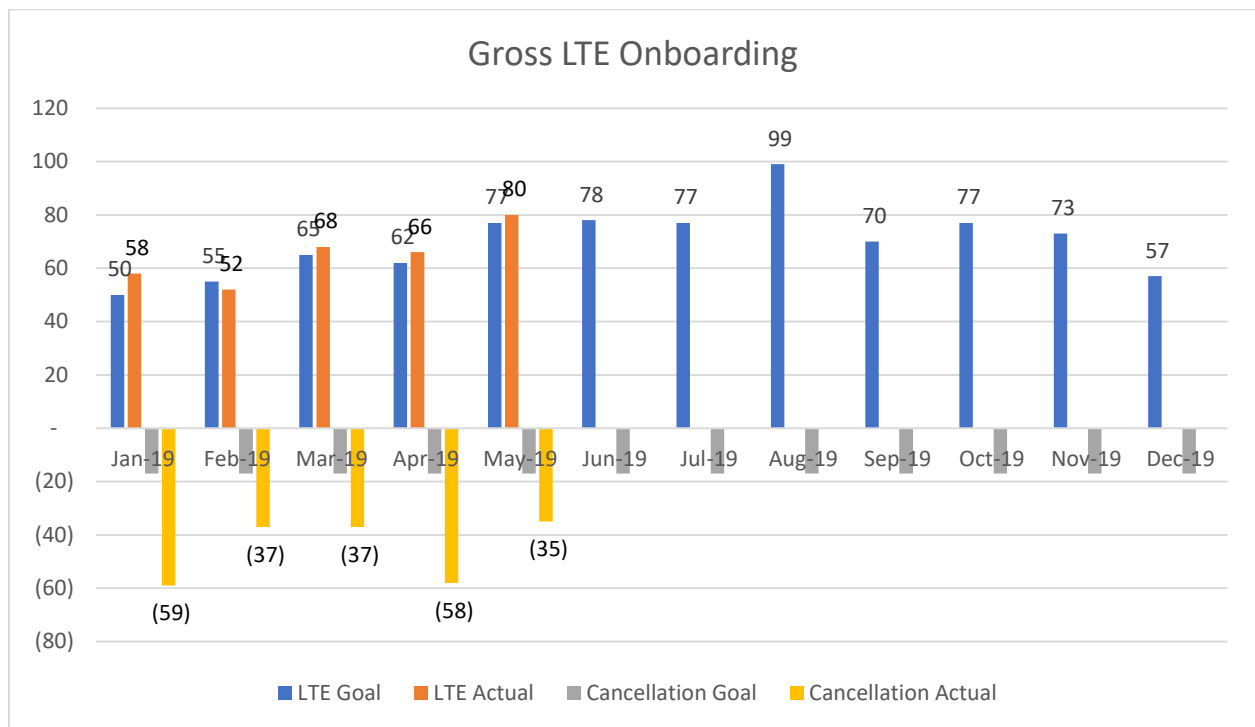
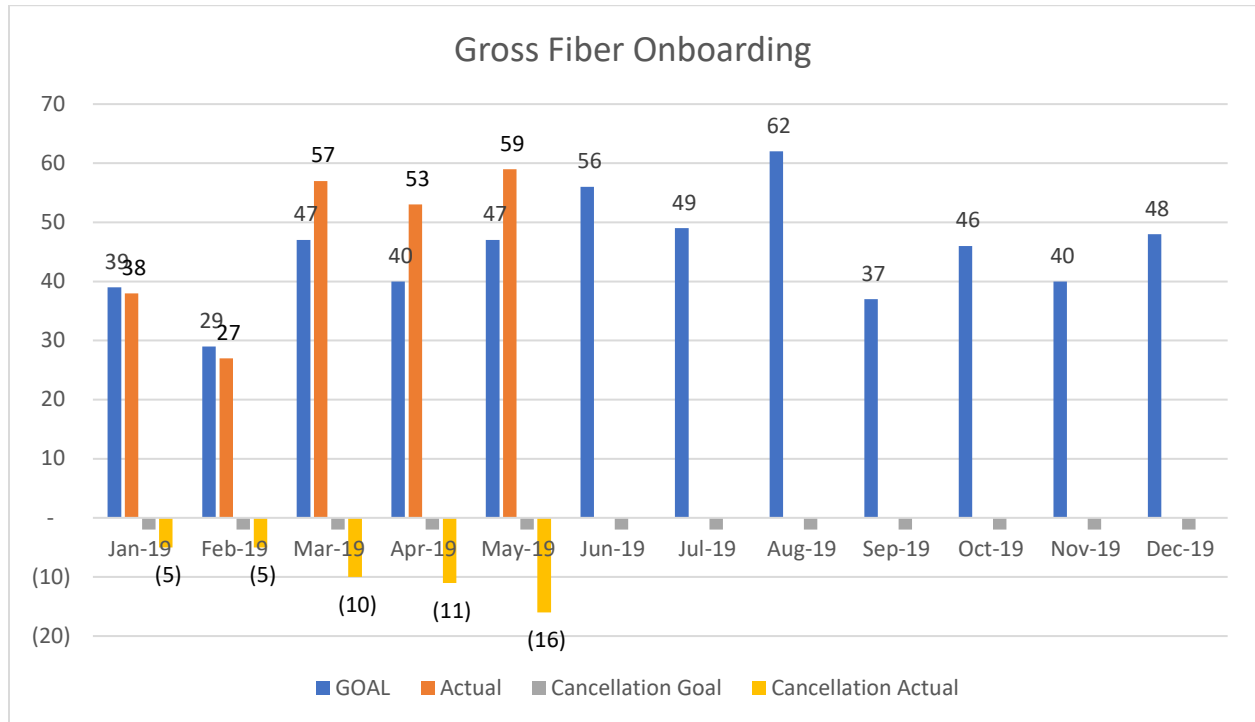
There are now 34 projects in various stages of participation: 11 complete and billing, 16 pending installation and 6 more approved awaiting member action for a total of ~\$302k in play (including the Outlook Inn project). Switch It Up! will be promoted at the County Fair and staff continue to speak at civic/community meetings to encourage participation.

Scholarship Program

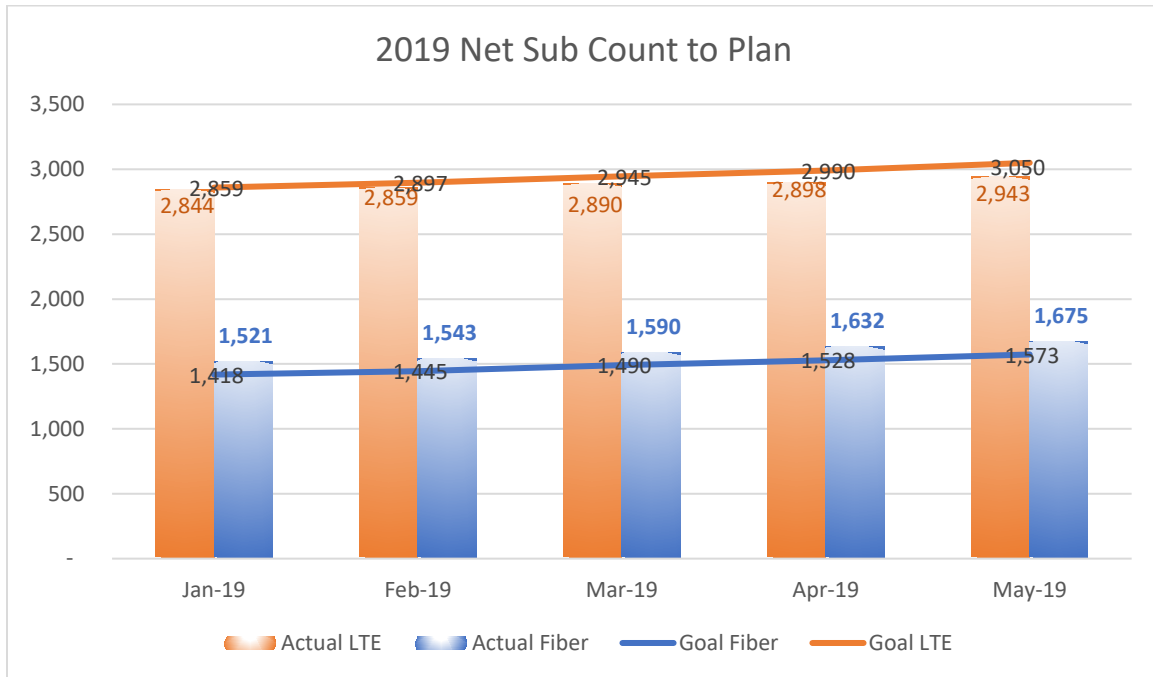
Five delegates (first year students) and one youth director (second year student) are preparing to attend the Youth Rally at the College of Idaho July 14-20. Staff chaperones are Krista Bouchee and Ed Lago. Four of OPALCO's scholars from past years graduated high school this June. Scholarships can be redeemed up to three years post award date. Scholarship funds are provided by OPALCO (50%) and the family of Nourdine Jensen (50%).

Snapshot June 2019

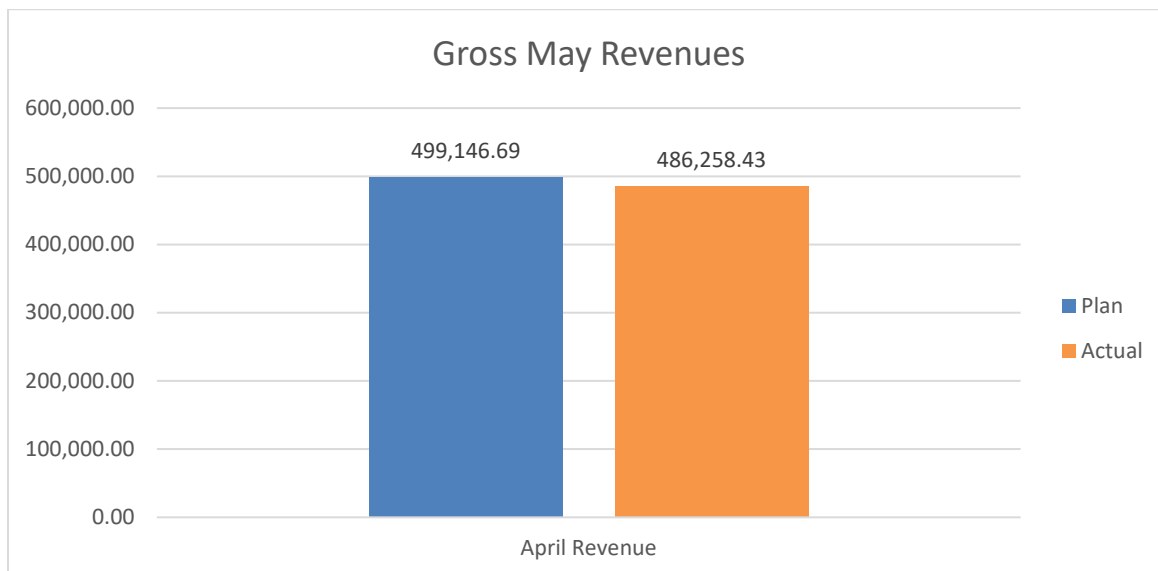
Gross Subscriber Onboarding as of May 31st, 2019



Net Subscribers as of May 31st, 2019



Gross Revenues May 2019



- ❖ Please note that without officially closing May business, this number can fluctuate by ~\$2-3k. Expenses still project our Net Income Loss to be better than plan.

PNGC Power Pulse

May 2019

Inside This Issue

- 1 Changing Political Landscape
- 2 New Salmon Graphic
- 3 PNGC Peak
- 3 Mid-C Pricing
- 3 BPA Happenings
- 4 Upcoming PNGC Events

Changing Political Landscape

Recent comments by Rep. Mike Simpson (R-Idaho) at a salmon and energy summit held in Boise, Idaho demonstrate the changing political landscape around energy production in the Northwest. In late April, Rep. Simpson, a senior member of the Northwest Congressional Delegation, addressed a conference that focused on the four lower Snake River dams titled "Energy, Salmon, Agriculture, and Community; Can We Come Together?" While the congressman didn't call for the outright removal of the dams, his remarks caught our attention.

Motivated by a desire to revitalize salmon and steelhead runs in his lifetime, The Spokesman-Review quoted Simpson as saying, "We need to stop thinking about what currently exists and ask ourselves, 'What do we want the Northwest to look like in 10, 20, 30, 40, 50 years?'" (April 25, 2019)

As a generation and transmission cooperative that depends on federal hydropower to fulfill an outsized proportion of our members' power supply (approximately 80%), we are tracking this discussion closely. Securing our future access to reliable, carbon-free federal hydropower while mitigating against further loss of Endangered Species Act-listed salmon is a complex issue that will take collaborative efforts to address. We believe that hydropower offers the best, lowest-cost, environmentally sustainable, carbon-free power resource in the Northwest. We believe the lower Snake River dams do not need to be removed since they are part of a multi-purpose river system providing transportation, irrigation, and economic viability, on top of clean energy. We view hydropower in the Northwest as a model for how to use the resource effectively in an integrated resource plan that puts efficient, carbon-free energy at the forefront of a national economy.

Hydropower and ESA listed salmon species can co-exist. As BPA customers, we support and heavily invest in regional efforts to protect salmon populations that navigate the federally operated river system. The Bonneville Power Administration currently oversees the largest fish and wildlife mitigation plan in the country. And the federal Action Agencies, including the U.S. Army Corps of Engineers, Bureau of Reclamation, and BPA as co-lead agencies, are undertaking a holistic environmental review of the river system in accordance with the National Environmental Policy Act (NEPA). There are so many factors threatening fish populations in the Northwest including ocean quality, pollution and habit



degradation, and overfishing. To avoid unintended consequences, we want to rely on the best scientific data to formulate the best, most comprehensive solutions.

We are optimistic that solutions can be found that retain all the benefits of a federal hydropower system, but also meet the needs of the iconic fish and wildlife species that define the culture of our region. As stewards of the Columbia River System, it is our responsibility to help identify practical solutions to tough problems. We will continue to work with Rep. Simpson and others motivated to engage in this important work.



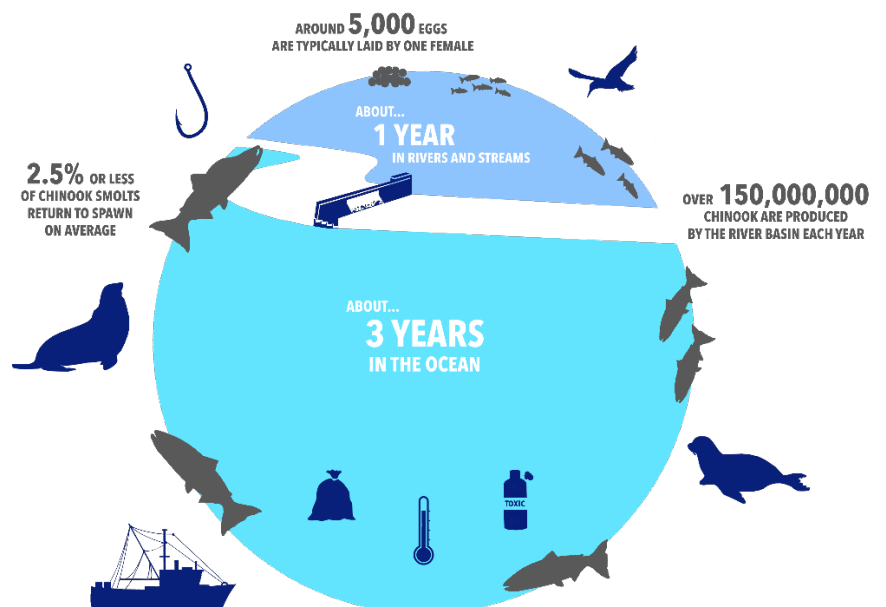
Highlighting the benefits of Hydropower: On Tuesday, May 22, representatives from PNGC, BPA, ORECA, Umatilla Electric Cooperative, Oregon Municipal Electric Utilities Association, and Oregon Peoples Utility District Association gathered at the Oregon State Capital for "Hydro Days." A special thank you to Alec Shebiel from Umatilla Electric for organizing the event.

New Salmon Graphic

Northwest RiverPartners has created a new graphic depicting the lifecycle of the Columbia and Snake River Chinook. It's available in .png and .jpg format for use throughout the region. Per Kurt Miller, Executive Director of Northwest RiverPartners, "Go forth and educate."

Let us know if you need this graphic in electronic format.

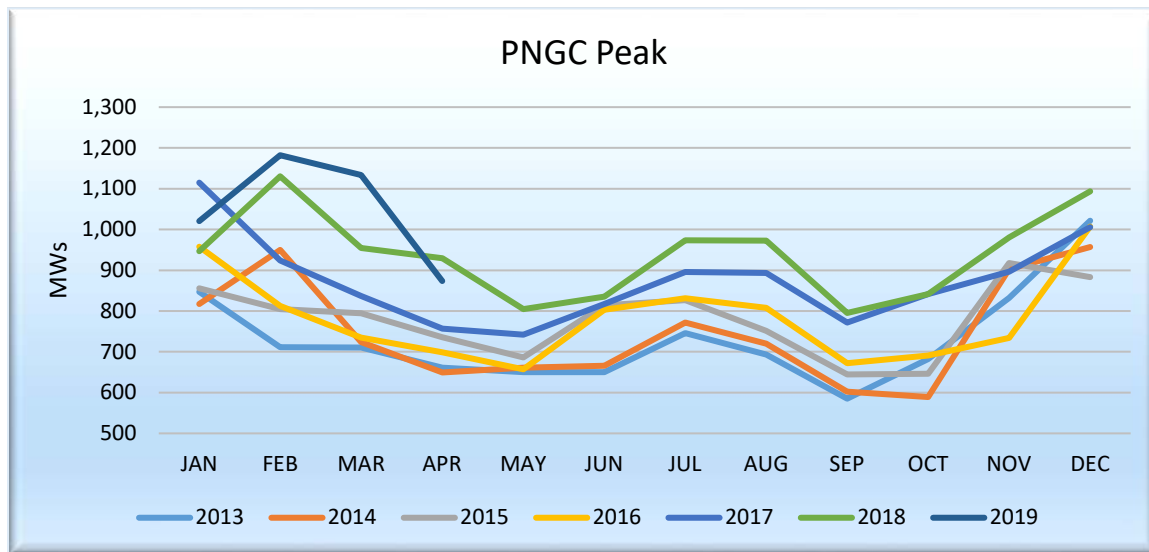
THE CHINOOK'S JOURNEY



*NUMBERS ARE BASED ON DATA COLLECTED ON COLUMBIA AND SNAKE RIVER POPULATIONS OF SPRING, SUMMER, AND FALL CHINOOK COMBINED. VISIT WWW.NWRIVERPARTNERS.ORG FOR MORE INFORMATION

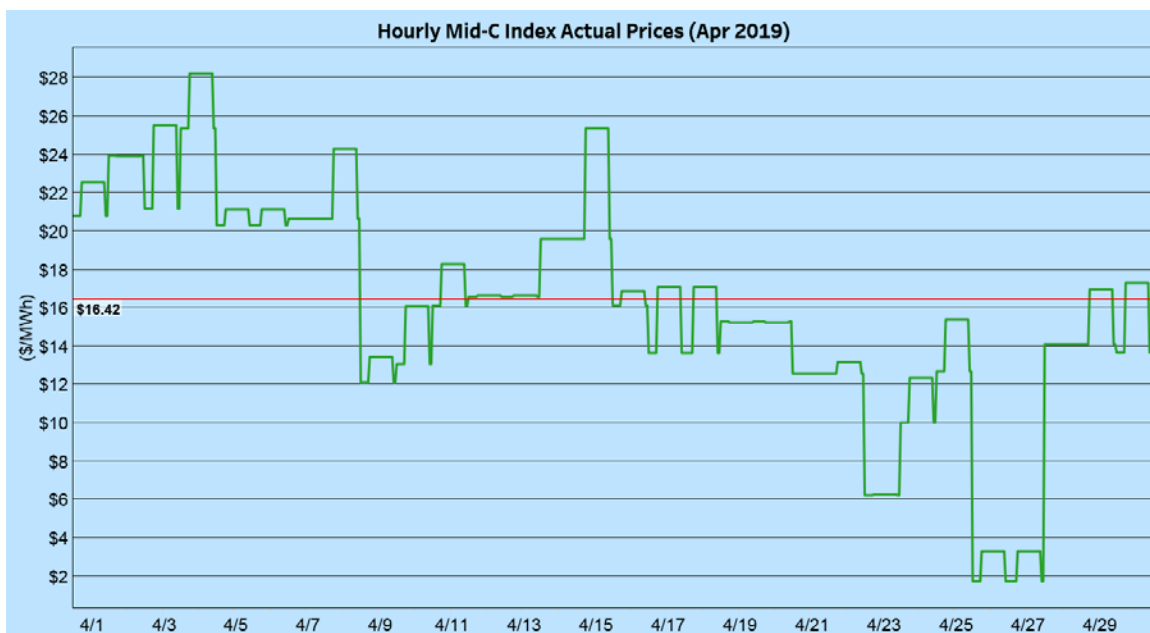
PNGC Peak

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 April 2019



BPA Happenings

- | | |
|---------|---|
| June 12 | EIM Stakeholder Meeting |
| June 13 | TC-20 Implementation Update |
| June 19 | Commercial Business Process Improvement (CBPI) call |
| July 30 | FY 2019 Q3 Quarterly Business Review |

Upcoming PNGC Events

June 3-5	PNGC Strategic Planning Meeting – Eureka, Montana
June 15	Fall River Annual Meeting
June 27	Coos-Curry Annual Meeting
July 4	Independence Day – PNGC Office Closed

Newsletter hiatus: I'm turning 40 at the end of June and decided to take a long hike through northern Spain. I won't be here to write the newsletter for a while, but don't worry. I'll return with a summer edition to let you know everything that PNGC has been up to. See you again in August! – Andrew Barter



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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.