

Board of Directors Regular Meeting

Thursday, March 21, 2024 Virtual Meeting via Zoom

Members may participate in the regular board meetings via Zoom. The first part of the meeting is reserved for member questions and comments. For security purposes, staff will be checking Zoom identities so please use your first and last name or you may not be let into the meeting. Please follow the protocols listed below:

- Mute yourself unless talking,
- Use your first and last name in your Zoom identity,
- Chat if you have a question/comment and the monitor will put you in the queue,
- OPALCO's Policy 17 Member Participation at OPALCO Meetings decorum must be followed.

The Zoom link will be updated monthly. Members can get the link to the meeting, submit any comments and questions in writing no less than 24 hours in advance of each meeting to: communications@opalco.com SAN JU

Sequence of Events

- **OPALCO Board Meeting**
- **Executive Session**



Board of Directors Regular Board Meeting March 21, 2024, 8:30 A.M.*

Virtual Meeting via Zoom

*Time is approximate; if all Board members are present, the meeting may begin earlier or later than advertised. The Board President has the authority to modify the sequence of the agenda.

WELCOME GUESTS/MEMBERS

Members attending the board meeting acknowledge that they may be recorded, and the recording posted to OPALCO's website. 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 email communications@opalco.com for post-meeting follow-up.

Agenda

ACTION ITEMS	3
Consent Agenda	3
DISCUSSION ITEMS	
2023 Year in Review	
2023 Unaudited Financials	15
REPORTS	17
General Manager	
DASHBOARDS	17
QUICKFACTS	
ENGINEERING, OPERATIONS, AND INFORMATION TECHNOLOGIES	
FINANCE	
MEMBER SERVICES	21
COMMUNICATIONS	23
Rock Island Communications	25
Appendix	26
Bailer Hill Microgrid	26
Why Local Renewable Projects? Mainland Power Demand Will Soon Exceed Supply	27

EXECUTIVE SESSION Legal, Personnel, Competitive, Other ADJOURNMENT



ACTION ITEMS

Consent Agenda

All matters listed on 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 at the request of a Board member.

The Consent Agenda includes:

- **Minutes** of the previous meeting and special meeting attached.
- Approval of New Members attached {as required by Bylaws Article I Section 2 (d)}

NEW MEMBERS – February 2024

District 1 (San Juan, Pearl, Henry, Brown, Spieden) **BENHAM, DAVID** BLANCHARD, KARL BRAND, CLARA ROSE BURKEEN, LEAH **BURNS, KATHLEEN & MCDOWELL, MICHAEL CB CRAFTWORKS LLC** CNL2 **DEVRIES, NADELLE DIGRAZIA, DAMIEN & WRIGHT, SUMMER** FORD, KELLY FRY, SAM & FRY, PAM GREENHOOT, WILLIAM & GREENHOOT, LISA **GRIMES, WILLIAM & GRIMES, LINDA** LEEMING, LORETTA LONG, MICHAEL & ACCETTURO, COURTNEY MATHIS, SHELLEY MCCULLOUGH, KEVIN & BENOIT, MARIE-ANNF MINTER, KATIE PAULEY, ELITA ROBERTS, LAURA & ROBERTS, PAUL ROSEWAY, ASTA ROUSE, PHILIP SEANS AUTO BODY L, LC SKATTUM, TIM SUNDBERG, ALAYNE SUTTON, JENNY TREISE, DAVID

District 2 (Orcas, Armitage, Blakely, Obstruction, Double, Alegria, Fawn) BEE, ERICA BORKAN, ALEXA CAPITANO, PAULA DURAND, MARC & DURAND, ANNE M & G LEGACY LLC MARRONE, WILLIAM ORCAS BAKERY ORCAS MADRONA LLC RODRIGUEZ VALDEZ, MAURO & CRUZ GONZALEZ, IGNACIO ROULAC, JOHN ZIER, JAKE & DELUCCHI, ANA District 3 (Lopez, Center, Decatur, Charles)

ALLRED, ADRIANE & ALLRED, JONATHAN BENTLEY, LAURA BURT, ORRIN & GRUENWALD, AUTUMN CISNEROS, JOSE JENSEN, KENT JOHNSTON, BLAKE MILLER, DAMIAN PRICE, TREVOR & PRICE, ELENA WOODS, CLIFFTON

District 4 (Shaw, Crane, Canoe, Bell) ADAMS, BENNI & HOLMES, DANIEL

Capital Credits

Staff requests payment of capital credits to the estates of the following deceased members and/or to organizations no longer in business by way of approval of the consent agenda:



Ma	irch
Customer #	Amount
64783	7,279.11
77257	400.52
63345	1,263.47
62088	276.77
61507	536.17
Total	\$ 9,756.04

RUS Form 219

Inventory of Work Orders of projects completed from the Construction Work Plan. These forms are submitted to RUS for approval of loan funds.

Inventory	Amount	Description
202312	\$735,626.24	Transformer Replacements, Sectionalizing, Pole Replacements
AV2312	\$57,870.29	Minor Projects (See Details on Form)
202401	\$28,059.23	Transformer Replacements

Staff requests a motion to approve the Consent Agenda.

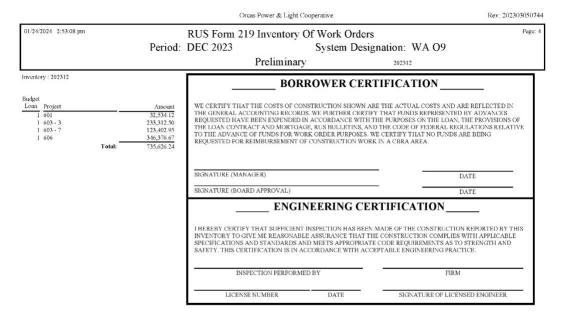


	Orcas Power & Light Cooperative									
01/24/2024 2:53:08	pm		R Period: D		Form 219 Inventory Of Work Orders 023 System Designation: WA O9					
					Prelimi	inary		202312		
Inventory: 202312				1	Gross Funds Cost Of Construction:	Required Cost Of Removal:	Salvage I New	Deductions Relating To Retirements	Contrib In Aid Of	Loan Funds Subject
Loan Project	Year	Construction (1)	Work Order Retirem	ent Bdgt (3)	New Constr Or Replacements (4)	New Constr Or Replacements (5)	Construction Or Replacements (6)	Without Replacements (7)	Constr and Previous Advances (8)	To Advance By RUS (9)
01	2023 3782	2	3782	1	22,665.67	0.00	0.00	0.00	0.00	22,046.82
601	2023 3988	3	3988	1	3,729.44	0.00	0.00	AFUDC: 618.85 0.00 AFUDC: 104.90	0.00	3,624.54
01	2023 4016	5	4016	1	3,101.25	0.00	0.00	0.00 AFUDC: 88.46	0.00	3,012.75
601	2023 4055	5	4055	1	4,023.95	0.00	72.69	0.00 AFUDC: 101.29	0.00	3,849.9
					33,520.31	0.00	72.69	0.00	0.00	32,534.1
503 - 3	2023 3663			1	241,026.05	0.00	0.00	0.00 AFUDC: 7,713.55	0.00	233,312.5
					241,026.05	0.00	0.00	0.00	0.00	233,312.5
603 - 7	2023 3434	1	3434	1	28,119.20	0.00	0.00	0.00 AFUDC: 919.01	0.00	27,200.15
503 - 7	2023 4023	3		1	97,933.13	0.00	0.00	0.00 AFUDC: 1,730.37	0.00	96,202.76
					126,052.33	0.00	0.00	0.00	0.00	123,402.93
606	2023 314	l		1	308,048.49	0.00	0.00	0.00 AFUDC: 12,236.82	0.00	295,811.67
506	2023 3200)	3200	1	41,334.60	1,370.36	0.00	0.00 AFUDC: 2,482.68	0.00	40,222.28
06	2023 4059	>		1	10,470.51	0.00	0.00	0.00 AFUDC: 127.79	0.00	10,342.72
					359,853.60	1,370.36	0.00	0.00	0.00	346,376.67
Grand Totals:				,	\$ 760,452.29	\$ 1,370.36	\$ 72.69	\$ 0.00	\$ 0.00	\$ 735,626.24

55009

/pro/rpttemplate/acet/2.58.1/wo/WO_CLOSING_219.xml.rpt

tneal



/pro/rpttemplate/acct/2.58.1/wo/WO_CLOSING_219.xml.rpt



	Orcas Power & Light Cooperative									Rev: 202303050744
				4 2:33.08 pm RUS Form 219 Inventory Of Work Orders Period: DEC 2023 System Designation: WA					Page	
					Prelimi	inary		202312		
Inventory: AV2312	Cost Of C Construction: Ra	Cost Of Removal:	Salvage R New	Retirements	Centrib In Aid Of	Loan Funds Subject				
Loan Project	Year	Construction (1)	Vork Order Retirement (2)	Bdgt (3)	New Constr Or Replacements (4)	New Constr Or Replacements (5)	Construction Or Replacements (6)	Without Replacements (7)	Constr and Previous Advances (8)	To Advance By RUS (9)
1600	2023 310)1	3101	1	31,561.94	2,076.47	0.00	0.00 AFUDC: 732.83	0.00	32,905.58
1600	2023 323	79	3279	1	3,772.37	1,037.91	0.00	0.00 AFUDC: 63.91	0.00	4,746.37
1600	2023 364	\$1		1	12,872.72	0.00	0.00	0.00 AFUDC: 324.03	0.00	12,548.69
1600	2023 399	98		1	7,931.70	0.00	0.00	0.00 AFUDC: 262.05	0.00	7,669.65
				-	56,138.73	3,114.38	0.00	0.00	0.00	57,870.29
Grand Totals:				-	\$ 56,138.73	\$ 3,114.38	\$ 0.00	\$ 0.00	\$ 0.00	\$ 57,870.29

Minor Construction Work Orders

Work Order: 3101 - REPLACE OH BETWEEN 2192117 & 2192105 WITH URD FROM 2192107

Work Order: 3279 - REMOVE 3PH OH CONVERT TO 1 PH UGNO CONSTRUCTION ON PROJECT UNTIL 2020

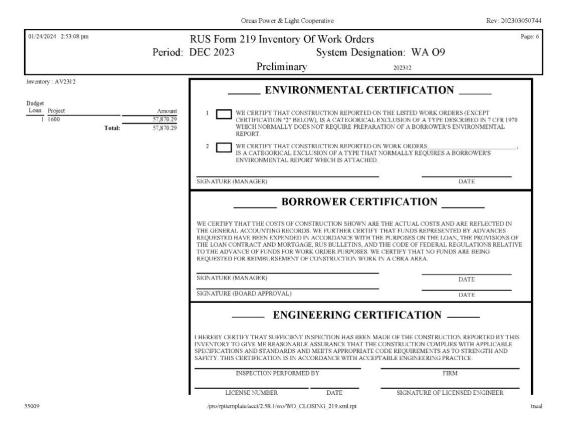
Work Order: 3641 - RELOCATE CONDUIT & WIRE FOR VILLAGE STORMWATER IMPVMENT

Work Order: 3998 - REPLACE EXISTING CABLE IN CONDUIT/CABLE ATTACHED TO NEW BRIDGE

55009

/pro/rpttemplate/acet/2.58.1/wo/WO_CLOSING_219.xml.rpt

tneal





		Oreas Power & Light Cooperative									
03/01/2024 1:56:4	1-4 pm		RUS Period: JAN		219 Invent	ory Of Woi Syst		ation: WA ()9	Page: 1	
Inventory: 202401	Nork Order Retirement (2)	Bdgt (3)	Gross Funds Cost Of Construction New Constr Or Replacements (4)	Required Cost Of Removal: New Constr Or Replacements (5)	Salvage R New Construction Or Replacements (6)	Deductions elating To Retirements Without Replacements (7)	Contrib In Aid Of Constr and Previous Advances (8)	Loan Funds Subject To Advance By RUS (9)			
501	2023 415	03	4193	1	12,728.50	0.00	0.00	0.00 AFUDC: 74.06	0.00	12,654.44	
601	2023 419	99	4199	1	15,479.81	0.00	0.00	0.00 AFUDC: 75.02	0.00	15,404.79	
					28,208.31	0.00	0.00	0.00	0.00	28,059.23	
Grand Totals:					\$ 28,208.31	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 28,059.23	

55009

55009

/pro/rpttemplate/acct/2.58.1/wo/WO_CLOSING_219.xml.rpt

3/01/2024 1:56:44 pm		DUCE 2101	entory Of Work Orders		Page: 3
and when a resource but	Period:	tion: WA O9	1 180		
ventory : 202401			BORROWER CERTIN	FICATION	
ndget oan Project 1 601 Total:	Amount 28,059.23 28,059.23	THE GENERAL ACCOUNTIN REQUESTED HAVE BEEN EX THE LOAN CONTRACT AND	HE ACTUAL COSTS AND ARE REFLECTED AT FUNDS REPRESENTED BY ADVANCES URROBES ON THE LOAN, THE PROVISION E CODE OF FEDERAL REGULATIONS REL. RTIPY THAT NO FUNDS ARE BEING A CBRA AREA.	SOF	
		SIGNATURE (MANAGER)		DATE	-
		SIGNATURE (BOARD APPRO	OVAL)	DATE	-13
			ENGINEERING CERT	IFICATION	
		INVENTORY TO GIVE ME RI SPECIFICATIONS AND STAN	EASONABLE ASSURANCE THAT THE CO	DE OF THE CONSTRUCTION REPORTED BY INSTRUCTION COMPLIES WITH APPLICAE DE REQUIREMENTS AS TO STRENGTH AN IBLE ENGINEERING PRACTICE.	LE
		INVENTORY TO GIVE ME RJ SPECIFICATIONS AND STAN SAFETY. THIS CERTIFICATI	EASONABLE ASSURANCE THAT THE CO NDARDS AND MEETS APPROPRIATE CO	INSTRUCTION COMPLIES WITH APPLICAE DE REQUIREMENTS AS TO STRENGTH AN	LE

/pro/rpttemplate/acet/2.58.1/wo/WO_CLOSING_219.xml.rpt

tneal



Orcas Power & Light Cooperative Minutes of the Board of Directors Meeting Thursday, February 15, 2024

Streaming through Zoom attendees were Board members Vince Dauciunas, Jerry Whitfield, Brian Silverstein, Mark Madsen, Tom Osterman, Chuks Onwuneme, and Jeff Struthers. Staff present were General Manager Foster Hildreth; Manager of Engineering and Operations Russell Guerry; Manager of Finance and Member Services Nancy Loomis; Communications Manager Suzanne Olson (serving as recording secretary) Assistant Communications Manager Krista Bouchey and Head Accountant Travis Neal. Also present were Legal Counsel Joel Paisner, Roger Gray PNGC and consultant Jay Kimball.

Members in attendance: Robert Memmott, Heather Nicholson, Jonathan Welch

The meeting commenced at 8:30 a.m.

Member Comment Period: No member comments.

ACTION ITEMS

CONSENT AGENDA

MOTION was made by Struthers to accept the consent agenda, seconded by Silverstein, and passed unanimously by voice vote.

MEMBER SERVICE POLICY 1 – Staff gave a final read to the workplace schedule and related policy change.
MOTION was made by Whitfield to accept the consent agenda, seconded by Madsen, and passed unanimously by voice vote.

BAILER HILL COMMUNITY SOLAR – Staff discussed proposed financial metrics for the Bailer Hill project to prepare for member subscription materials. Discussion ensued.

MOTION was made by Struthers to accept the financial metrics as proposed, seconded by Madsen. Discussion continued. The motion passed unanimously by voice vote.

DISCUSSION ITEMS

Regional Power Presentations on Renewable resource mapping, reliability, firming power, land use issues - Discussed PNW regional reliability issues and potential for blackouts, due to lack of resource development (permitting, land use, funding, NIMBYism, etc.). While we support the move to cleaner energy, the industry is not replacing the eliminated firmed generation fast enough.

REPORTS

GM REPORTS – Staff reviewed reports, dashboards, grant and budget tracking, and project updates.

Member Comments: Jonathan Welch announced that he is running for County.

Break: 9:55-10:10



Regular Session ended: 11:23 Executive Session: 11:23 -12:20 Meeting Closed: 12:20

Vince Dauciunas, President

Brian Silverstein, Secretary-Treasurer



DISCUSSION ITEMS

2023 Year in Review

2023 was a year of preparation as the region adjusts for a decarbonized power world. OPALCO sought out grant funding to prepare our infrastructure for the changing energy landscape. Grant applications included electric vehicle infrastructure, a new submarine cable, tidal generation, and commercial energy efficiency projects to Department of Energy (DOE), USDA Rural Energy for America Program, and Bonneville Environmental Foundation Zero Emission Vehicle Innovation Fund. The OPALCO team made it through the year maintaining a reliability rating of 99.8% while Rock Island kept the internet up 99.99% for the year – and while also maintaining a near perfect safety record for both organizations.

The Switch it Up Program had its best year yet with total lending over \$11M for more than 600 energy efficiency projects completed. OPALCO members saved ~412k kilowatt hours through efficiency projects while getting ~\$319k back into their pockets with BPA-funded rebates. Member solar generators rose significantly with on-bill financing availability: 110 new generators in 2022 for a total of 712 on the system. OPALCO supported 61 members in beneficial electrification measures (DHP and EV chargers), totaling \$91,500 and an additional 44 EV charging stations were installed at member homes and businesses. Staff continue to work closely with PNGC on regional reliability and future power supply issues and members continue to engage in high numbers with our Island Way workshops and events.

Affordability is key to OPALCO's mission of delivering power to twenty islands. The Co-op's bill assistance programs are a model for utilities across the nation and we are well positioned to meet the legislative mandates of Washington's Clean Energy Transformation Act (CETA) for support of low-income households. OPALCO awarded ~\$81.9k of PAL assistance to 308 low-income households. Energy Assist participation increased with an average of ~267 households receiving monthly bill credits which totaled ~\$127.9k.

Although the following list is organized by department, most efforts span multiple departments and staff throughout our company and subsidiary, which truly demonstrates the "cooperative" spirit of both OPALCO and Rock Island.

OPALCO Team Accomplishments 2023

Safety:

- Exceeded 298,000 hours worked without a loss-time accident.
- Actively monitored safety improvement plans as outlined in our RESAP program (Rural Electric Safety Achievement Program).
- Committed to NRECA's Zero Contacts initiative.
- Held monthly comprehensive virtual and in-person safety meetings to sustain our culture of safety.

Engineering, Operations & Information Technology:

- Average service availability rate of 99.8% for the year.
- Reached a system extreme of ~87 MW (instantaneous load not hourly demand).



- Replaced ~133,000 feet of aging and failing underground cable (mixture of three phase and single phase).
- ROW Trimming: Unlike 2022, ROW crews were available to trim. Roughly 5.8 miles of transmission corridors were able to be cleared for safety and operational access in addition to side trimming of distribution corridors.
- Replaced 18 aging and deteriorated transmission poles and 141 aging transmission insulators. The transmission pole replacements being steel poles to reduce woodpecker damages in the future.
- Friday Harbor Substation equipment procurement and 100% design completed.
- Completed new Advanced Distribution Management System and Outage Management System integrations allowing for faster notification to staff and members during major system outages.
- Bailer Hill Solar and battery projects are in a 100% design stage. Project was submitted for Conditional Use Permit and has been in County review since early July.
- Completed feasibility study for tidal generation plus storage.
- Submitted DOE Tidal Generation Grant; awarded Phase One funding; DOE agreement negotiations starting in 2024.

Finance & Accounting:

- The 2023 Year End results are extremely positive with a net margin of ~\$5.6M compared to the budget of ~\$3.2M. Of the margin variance ~\$2.4M, ~\$1.1M was associated with the BPA Reserve Distribution Clause (RDC). With the goal not to over collect or under collect, the yearend financials are within 3.7% of budgetary figures, excluding the RDC.
- Unqualified opinion of Financial Audit for 2022. No audit comments in the 'communication of internal control related matters' letter to management and the Board.
- The Switch-It-Up on-bill financing program financed 274 energy efficiency projects for more than \$5.5M in additional financing provided by OPALCO to our members. 2023 was the biggest year yet in terms of project volume, with +86 more projects financed than in 2022. It was also our largest year in terms of dollars financed, ~\$810k over 2022.
- Continued capital credit smoothing methodology, retiring \$1.4M in capital credits back to the membership in 2023. Thanks to the continued generosity of our members, capital credit reoccurring donations went from \$13k in 2022 to \$15k in 2023.

Management and Human Resources:

- Hired two Apprentice Journeyman Lineman and a Member Representative.
- Retired one Member Services Representative.

Energy Savings: Rebates, Electric Vehicles & Renewables:

- Rebate dollars awarded to members through December: ~\$319k.
- Energy saved by members through BPA/PNGC rebates: 412,049 kilowatt hours.
- Total interconnected members generating renewable power: 712 with 110 new in 2023.
- 568 MWh of member solar/wind production incentivized by WA State.
- Supported 61 members in beneficial electrification measures, totaling \$91,500.
- Incentivized the installation of 44 EV charging stations for homes and businesses.
- Decatur Community Solar project:
 - 260 members participated.



- Produced 476.08 MWh enough to power 500+ typical SJ County homes for a month, or 42 homes for a year.
- distributed \$37k through production credits on participants' bills (\$181.2k since energization), including an additional \$9,350 to the PAL and Energy Assist programs.

Member Services:

- Five Member Services Representatives handled more than 10,950 inbound calls from members.
- Billed members ~\$40.0M for energy usage of ~240.1M kWh.
- During the first part of 2023 (the 2022-2023 PAL season) the local family/community resource centers awarded ~47.9k of PAL assistance to 172 low-income households.
- During the second part of 2023 (2023 2024 PAL season), OPALCO staff took over the program and awarded 136 low-income households with ~ 34k of PAL assistance funds.
- Energy Assist participation decreased with an average of ~267 households receiving monthly bill credits which totaled ~\$127.9k.
- ~9.1k accounts are on autopay.
- ~7k accounts are paperless.

Communications:

- Launched Ruralite magazine to have consistent wide-reaching communication with OPALCO members on topics such as energy savings, our energy future, the Island Way Campaign, and a variety of timely articles that affect the membership.
- Staff continued the Island Way Campaign including hosting Island Way Workshops via Zoom with a variety of topics including tidal energy, Inflation Reduction Act, commercial member grant programs, ductless heat pump maintenance, and Switch It Up.
- Hosted a virtual Annual Meeting with 70 members in attendance.
- Worked with Sustainable Connections to promote grant that helps businesses in San Juan County to get energy efficiency incentives including hosting workshops, business outreach and advertising.
- Created five new Quick Facts digital information sheets (for a total of 32).
- Promoted and held the annual Board Candidate election including 3 candidates. 2,048 members voted which is ~18% of the membership.
- Electric Vehicle promotions including EV Road Trip social media campaign, earth day event, Rotary Car show, and an EV Jamboree on Lopez with more than 200 members in attendance.
- Award five Youth Scholarships and took the scholars to the ICUA Youth Rally.
- Attended community events like Touch-A-Truck, Truck-or-Treat, the San Juan County Ag Summit, and Chamber Mixers for outreach opportunities.
- Worked with the Orcas Island Historical Museum to create a historical display about getting power to the islands including an interactive map hosted on the OPALCO website.
- Managed major planned outages including a three-night county wide outage and one overnight outage on San Juan Island.
- Applied for: two DOE GRIP, two DOE ERA, one DOE OCED BIL funded grants and one Bonneville Environmental Foundation Zero Emissions Vehicle grant (BEF ZEVI).
- Successfully presented tidal proposal to DOE visiting team and garnered DOE OCED grant for tidal generator in Rosario Strait (Phase 1).
- Successful with BEF ZEVI grant to install 10 EV chargers in low-income neighborhoods (2023-2025)



- Completed USDA REAP-EA grant (2022-23) for commercial energy audits, tech assistance and solar development.
- >800 followers on Instagram, ~2700 followers on Facebook and ~1485 followers on Twitter. Engagement has been high on Facebook and Instagram throughout 2023 with members regularly commenting and getting info from these sites including very successful outage communications and reputation management on group social media sites.
- Produced and distributed monthly bill inserts, weekly newspaper ads, monthly email newsletters, updated, and created new forms including digitizing and modernizing processes, documents and content for the Member Services and Engineering departments.

Rock Island Team Accomplishments 2023

Safety:

- Maintained 99% injury free work.
- Initiated managerial training programs that assisted those in leadership positions to track and identify hazards in the workplace.
- Increased monitoring of harmful elements around work sites to reduce potential exposure levels.
- Rebuilt our Safety Committee to better service all department needs for focused safety work.

Finance and Operations:

- Increased revenues from Rock Island Subscriptions to \$9.8M in 2023 (Plus an additional ~\$2M expected shortly that will influence year end numbers in revenues from T-Mobile). Once realized by accounting, these funds will bring Rock Island revenues well ahead of target (\$10.1M per plan) for 2023.
- Secured \$15M in grant dollars for broadband to 1100 locations via the American Rescue Plan Act
- Successfully acquired a cable outfit (PoGo Zone) bringing additional revenue and plant assets on Orcas while consolidating a competitive ISP distraction for customers.
- Continued to mitigate inflationary impacts and keep Operational Expenses better than plan by \$105k.
- Well managed employment timing and recruitment strategies helped Rock Island stay under their labor budget by \$160k.
- Ended the year \$3.19M EBITDA positive.
- Rock Island still diligently works to retain and help customers in need through offered assistant programs (ACP/EAP/School Districts) and will continue to explore ways to do so in the coming year.
- RIC collaboration with Whidbey Telecom resulted in their securing a grant, earmarked for a crucial undersea cable project. This initiative, stretching from Seattle to San Juan County and beyond is set to enhance our out-of-county connectivity upon completion.
- 2023 year marked the significant 10-year anniversary of the CenturyLink undersea cable failure, which disrupted internet, cell phone, and 911 services. Rock Island's accomplishments stand as a testament to our commitment to resilience and continuous improvement of our network infrastructure to our community.
- Successfully consolidated the legacy seasonal rates to a simplified structure resulting in higher ARPU's for residential services.



- Remained resilient and adaptive despite rising costs/interest rates, and unexpected cost demands for things such as wage adjustments (for labor retention) and retirement contributions (for compliance reasons).
- 2023 was our strongest financial year yet despite challenges to the workforce and other issues related to pandemic hangovers.
- Successfully completed a highly graded Audit.
- Launched a Customer Portal for better support and guidance through construction work orders.
- Integrated a contracts and invoicing system in our CRM to facilitate fast and effective contract procurement.
- Continued to support and grow a community support funding process through Orcas Community Foundation for low-income assistance.
- Accounting implemented a new automated suspension process that makes collection efforts more effective and timelier, reducing bad debt rates.

Plant and Construction:

- Added 15 new Anchor Sites to the LTE network.
- Installed over 31 miles of new Fiber plant.
- Project managed the extension of a 4-mile backbone connection to Doe Bay, eliminating a wireless link for backhaul.
- Built custom monitoring solutions for the county radio system, giving real time alerting on all system components.
- Fiber has been made economically available to nearly 8,900 residences in SJC by way of the incentive program and grant funding.
- Delivered a 99.998% reliability rate to our fiber and wireless customers.
- Handled regular local ferry catastrophes by dynamically adapting to crew and schedule needs without advanced notice.
- Maintained consistent and substantial onboarding rates despite major hiring gaps in the workforce.

Sales and Marketing:

- Connected 523 homes and businesses to our fiber network, and 424 to LTE.
- Captured 52% and growth of the total internet subscriber market in the county.
- Grew fiber ARPU to over \$102 and LTE ARPU to over \$75.
- Launched Business and Residential VOIP phones with great take rate success.
- Enhanced our relationship with our partner T-Mobile to include compensation toward the maintenance of the infrastructure.
- Launched LTE + and LTE Unlimited services.
- Successfully consolidated the legacy seasonal rates to a simplified structure resulting in higher ARPU's for residential services.
- Enhanced the customer experience of the showroom in Friday Harbor
- Enhanced fiber residential service offering by raising speeds without raising rates (Fiber 100 & 200)
- Designed and launched an additional construction incentive plan that allows for up to \$3k of incentive for gig service.



2023 Unaudited Financials

Under separate cover, please see the 2023 Year End Unaudited financial report. The Year End results are extremely positive with a net margin of ~\$5.6M compared to the budget of ~\$3.2M. Of the margin variance ~\$2.4M, ~\$1.1M was associated with the BPA Reserve Distribution Clause (RDC). With the goal not to over collect or under collect, the yearend financials are within 3.7% of budgetary figures, excluding the RDC.

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), and capital projects budget tracking.

The energy charge adjustment (ECA) returned a net \$328k to the membership throughout 2023. This is driven by a combination of higher kWh sales revenue, lower power costs than budgeted due to BPA dividend credits that were included through April '23. The Board approved, at the May 2023 regular meeting, a prospective adjustment to the Tariff ECA calculation which became effective as of the date of the board action, May 18, 2023. The calculation now excludes the Bonneville Power Administrations' provision knows as the Reserves Distribution Clause (RDC) from the total purchased cost of power. Overall operating revenue was higher than budget with kWh sales coming in slightly over budget.

Income Statement Summary	Year H	End	2023 (unauc	lite	d)
(in thousands)	Budget		Unaudited		Variance
Operating Revenue	\$ 35,842	\$	36,836	\$	994
ECA Surcharge / (Credit)*	\$ -	\$	(328)	\$	(328)
Revenue	\$ 35,842	\$	36,508	\$	666
Expenses:					
Cost of Purchased Power	\$ 9,631	\$	8,572	\$	(1,059)
Transmission & Distribution Expense	7,780		8,359		579
General & Administrative Expense	6,621		5,913		(708)
Depreciation, Tax, Interest & Other	9,080		8,816		(264)
Total Expenses	33,112		31,660		(1,452)
Operating Margin	2,730		4,848		2,118
Non-op margin	457		778		321
Net Margin*	 3,187	\$	5,626		2,439
OTIER	2.30		3.47		1.17
TIER	2.37		3.86		1.49
Equity %	39.6%		41.6%		2.0%
HDD	1,367		1,090		(277)
kWh Purchases	222,000		228,592		6,592
kWh Sales	208,700		214,371		5,671

The table below provides a summary of the financial results of 2023.

* The ECA returned \$328k to members through Dec 2023. The credit is partially driven by BPA dividend credits (of \$543k through April 2023) included in, and artificially reducing Cost of Power.

For more details, please note the following key points:

Heating Degree Days (HDD) were ~20% below budgeted levels (actual of 1,090 vs. budget of 1,367).
 Overall kWh sales were ~5.7M kWh above budget (214.4M vs. budget of 208.7M).



- 2023 power purchases were \$1.1M lower than budgeted due to a combination of higher overall kWh purchases offset by large BPA dividend credits of approx. \$1.44M. Actual kWh purchases were 6.6M kWh above budget (228.6M vs. budget of 222M).
- Excluding purchased power, 2023 operating expenses were approximately \$316k under budgeted amounts. See budget notable drivers within the financial packet for specific account details.
- For 2023, Transmission Expense came in at \$1.3M (\$786k over budget) due to increased ROW clearing contracting expense throughout 2023 carried over from delay in Q4 of 2022.
- The ECA for 2023 was a net credit to members (and decrease to operating revenue) of \$328k, or \$10.35 for a member using 1000 kWh/month. This was partially driven by BPA dividend credits that were included in the calculation through April 2023 of \$543k. The board approved, at the May 2023 regular meeting, a prospective adjustment to the Tariff ECA calculation which became effective as of the date of the board action, May 18th, 2023. The calculation now excludes the Bonneville Power Administrations' provision knows as the Reserves Distribution Clause (RDC) from the total purchased cost of power.
- Rock Island Communications 2023 Financials included in separate packet.

OPALCO 2023 Financial Package under separate cover.



REPORTS

General Manager

DASHBOARDS

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

Finance

- Budget Variance
- TIER/Margin
- Expense
- Cash
- Power Cost
- Purchased Power
- Annual Power Metrics
- Capital
- Debt/Equity
- WIP

Income Statement Trends Member Services

- Disconnects
- Uncollectable Revenue
- PAL
- EAP
- Membership
- Service Additions
- Annual Service Additions
- Revenue Dist. By Rate

Outage

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

QUICKFACTS

Please review the Quick Facts at https://www.opalco.com/newsroom/quick-facts/.

- OPALCO's Plan for our Energy Future
- Decarbonization 4 Part Series
- Switch It Up!
- WA 2021 Energy Strategy
- Will there be enough power?
- OPALCO Rates
- Energy Independence? Not entirely
- Rock Island Communications
- OPALCO election process
- Wireless Services
- Cost of Service
- Staff Compensation
- NRECA
- OPALCO Debt and Capital Projects
- Ocean Health
- NW Resource Adequacy in a Rapidly Decarbonizing World
- Land for Renewable Energy Projects

- Understanding the Change in Solar Rates
- Decatur Island Battery Storage Project
- Why Hydropower is Important to our Power Supply
- Where does OPALCO stand on regional issues and the dams?
- Future Power Purchase Strategy
- Industry Association Memberships and Co-op Benefits
- Climate Change News Review September 2022
- OPALCO Tidal Energy Pilot Project
- Solar Rate for Residential Members
- Right-of-Way Program
- Inflation Reduction Act (IRA) Benefits
- Wildfire Mitigation
- Surge Protection
- OPALCO Needs a New Submarine Cable
- Bailer Hill Microgrid



ENGINEERING, OPERATIONS, AND INFORMATION TECHNOLOGIES

WIP

As of March 13, 2024, there are 353 work orders open totaling \$11.9M. Operations has completed construction on 153 work orders, totaling \$3.2M.

Safety

Northwest Safety Service conducted Chainsaw Safety and Operations training for operations. The total current hours worked without a loss time accident 312,025 hours.

Grants

Grant Seeking

Grant Program / partner	Funder	Project Title (\$\$)	Grant \$\$	Matching \$\$	Timeline
Grid Resilience and Innovative Partnerships Program (GRIP) - Topic 1 (grid resilience) Concept Paper / BPA partner	DOE	Energy Resilience Transmission Project: Submarine Cable (\$100M)	\$66.6M	\$33.3M	February 2024 - Encourage for full application (Submittal in May 2024)
Advanced Cybersecurity Technology (ACT) 1 Prize	DOE	OPALCO Cybersecurity Initiative-	\$50k	\$50k	Determination in Q1 2024
Waterpower Technology Office	DOE	Pilot Tidal Project – Phase 2	\$29M	\$7.25M Minimum	Dependent on Project Awarded Below

Grant Awards

Grant Program / partner	Funder	Project Title (\$\$)	Grant \$\$	Matching \$\$	Timeline / Notes
Zero Energy Vehicle Infrastructure (ZEVI) / partner with OPAL CLT	Bonneville Environmental Foundation	EV Chargers for OPAL Neighborhoods (\$45k)	\$25k	\$20k	Working with OPAL Install in 2024
Remote Communities Broadband ARPA	WA State Broadband Office	Last Mile Broadband	\$15M		In contracting
Clean Energy Fund 3 Grid Modernization	WA Dept of Commerce	Bailer Hill Microgrid	\$2.4M	\$2.4M	Land Use Permitting
Clean Energy Fund 4 Grid Modernization	WA Dept of Commerce	Rosario Strait Tidal Generation Study	\$150k	\$150k	Q1 2024
Clean Energy Fund 4 Grid Modernization	WA Dept of Commerce	Friday Harbor Ferry Electrification Prelim Design	\$150k	\$150k	Q4 2024
Clean Energy Fund 3 Grid Modernization	WA Dept of Commerce	Low Income Solar – Bailer Hill Microgrid	\$1M	\$1M	2024
Waterpower Technology Office	DOE	Pilot Tidal Project – Phase 1	\$3M	\$750k	Awarded – In Negotiations



FINANCE

2024 Budget Tracking

Energy (kWh) sales were slightly higher than budgeted levels through February 2024. The table presents the full year 2024 projection with actuals for prior months where available.

Income Statement Summary	2024 Projection (actuals for prior months)							
(in thousands)		Budget		Projected	V	ariance		
Operating Revenue	\$	37,407	\$	37,609	\$	202		
ECA Surcharge / (Credit)*	\$	-	\$	(54)	\$	(54)		
Revenue	\$	37,407	\$	37,555	\$	148		
Expenses:								
Cost of Purchased Power	\$	9,159	\$	9,539	\$	380		
Transmission & Distribution Expense		9,343		9,508		165		
General & Administrative Expense		7,054		7,004		(50)		
Depreciation, Tax, Interest & Other		9,316		9,329		13		
Total Expenses		34,872		35,380		508		
Operating Margin		2,535		2,175		(360)		
Non-op margin		673		672		(1)		
Net Margin*		3,208	\$	2,847		(361)		
OTIER		2.19		2.02		(0.16)		
TIER		2.50		2.34		(0.16)		
Equity %		40.3%		40.1%		-0.2%		
HDD		1,029		973		(56)		
kWh Purchases		219,000		223,954		4,954		
kWh Sales		208,000		212,750		4,750		

* The ECA returned \$54k to members through Feb 2024.

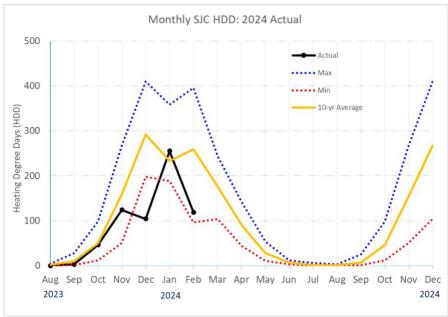
Monthly Energy Charge Adjustment (ECA)

February 2024 ECA collected \$110,879 from members, or \$4.27 per 1,000 kWh. The March billing period ECA is projected to be a bill surcharge of \$.005259 per kWh on member bills, or \$5.26 per 1,000 kWh. The exact amount of the ECA is an estimation based on known kWh sold and a recalculation of our contractual power bill, which may occasionally include other one-time factors or adjustments.



Heating Degree Days (HDD)

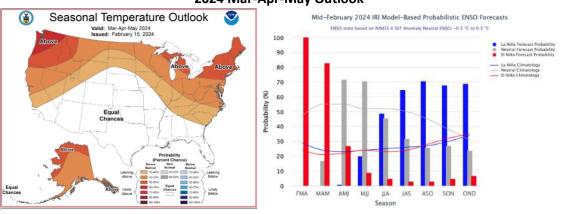
At the yearend 2023, we experienced very warm weather, as predicted, with December HDD's coming in below the 10-year minimum. In January 2024, we transitioned back to an average (yellow line) HDD trajectory, though slipped back toward a minimum level in February. We are anticipating a warmer trend (El Niño) for the remainder of the winter months. We continue to monitor weather trends monthly.



*max, min, avg is based on 10 year average

Weather Forecast

Looking ahead to the NOAA 'three-month outlook temperature probability' for Mar-Apr-May 2024, the outlook is currently showing strong El Niño temperature conditions in our region through the remaining winter months and into spring. We continue to monitor these predictors monthly.



2024 Mar-Apr-May Outlook

Source: NOAA National Weather Service



MEMBER SERVICES

Annual History of Energy Assistance Funding

All values are as of first of the month reported.

		2018	2019	2020	2021	2022	2023	2024	Grand Total
Energy Assist Credit	# of Accounts	444	460	574	577	546	519	381	1,121
	Total Assistance	111,996	135,595	158,434	158,740	156,761	141,748	31,682	894,957
PAL	# of Accounts	212	205	329	363	297	268	86	835
	Total Assistance	45,155	53,137	80,975	104,880	82,912	80,500	21,500	469,060
EAP Residential - COVID	# of Accounts			88	74	63			98
	Total Assistance			21,535	27,606	8,348			57,489
EAP Commercial - COVID	# of Accounts			107	97	79			119
	Total Assistance			73,340	87,233	21,998			182,570
PAL - COVID	# of Accounts			131	122				222
	Total Assistance			15,000	12,200				27,200
Grand Total	# of Accounts	460	488	835	825	754	584	403	1,458
	Total Assistance	157,151	188,732	349,283	390,659	270,018	222,248	53,182	1,631,275

Note: EAP funds are collected, primarily, from a program OPALCO created by including a line item on <u>all</u> OPALCO member bills. Additional funds are directed to the EAP from the Decatur Solar Project (10% of all production credits). In 2020/2021, additional funds (not included in this chart) were paid out to members who were impacted by COVID. When the Bailer Hill Microgrid Projects comes online, up to 45% of its production will be directed to EAP. The "# of Accounts" are the distinct accounts assistance was provided to over the year or as a total. The "Total Assistance" varies based on single account adjustments.

EAP: During February 2024, 379 members received ~ \$16.2k from the low-income Energy Assist program, compared to 380 members who received ~ \$15.3k in assistance in February 2023.

Project Pal: During February 2024, 31 members received ~\$7.8k from the Project PAL Award program, compared to 41 members who received ~\$10.5 in February 2023.

Since the Project Pal Program is now administered internally by the OPALCO Member Services team, a savings of ~\$7k in member dollars has been realized, which represents processing fees that would have been paid to the Community and/or Family Resource Centers for their administration of the program.

Project Pal is an important safety net for islanders during the heating season and we encourage all members to donate by rounding up their bill or making a contribution here: <u>https://www.opalco.com/account-services/project-pal/contribute/</u>.

LIHEAP: Notifications and Awards for LIHEAP and T-RAP have slowed considerably from the Opportunity Council.

Switch it Up!

There are now 677 projects completed and billing for a total of \$11.4M net outstanding (total projects less member pay-offs). There are another 30+ projects in various stages of the process. Some projects have been delayed as residential contractors have been limited by supply chain issues. Staff have made the new Switch It Up measures available and have received lots of interest from members. Current project details are as follows:



Project	2019	2020	2021	2022	2023	2024	Grand Total
Appliance					36,112	5,834	\$ 41,945
Energy Storage				39,510	8,204		\$ 47,713
Ductless Heat Pump	648,252	617,060	641,765	1,575,722	1,763,868	356,717	\$ 5,603,384
Fiber		30,725	48,681	29,301	41,929	3,398	\$ 154,033
Ducted Heat Pump	8,119	30,000	15,000	18,127	889,537	198,017	\$ 1,158,800
Heat Pump Water Heater	13,985	9,805		5,012	15,701		\$ 44,503
Insulation				256,935	42,634		\$ 299,569
Other	14,543			90,649	188,075		\$ 293,268
Solar + Storage				480,057	250,438	31,607	\$ 762,101
Solar				1,844,179	2,118,476	215,074	\$ 4,177,729
Windows				563,557	285,975	59,719	\$ 909,252
Grand Total	\$684,900	\$687,589	\$ 705,446	\$4,903,049	\$5,640,948	\$870,365	\$13,492,298

Energy Savings

During February there were a total of ten rebates paid out to members totaling ~\$9.6k. This includes four fuel switching ductless heat pump rebates and four EV charging station rebates.

Member Benefits from Energy Efficiency and Fuel Switching Programs:

OPALCO is committed to helping members prepare for an efficient and sustainable energy future with programs, incentives, and rebates. All values are as of first of the month reported.

		2019	2020	2021	2022	2023	2024	Totals
EE	# of Accounts	442	303	147	210	261	29	1,392
Rebates*	Total Awards	\$228,418	\$167,432	\$149,886	\$227,622	\$313,945	\$29,507	\$1,116,810
	Total Energy Savings (annual kWh)	733,432	783,431	359,269	346,900	440,382	16,974	2,680,388
Switch It	# of Accounts	72	87	69	188	274	42	732
Up**	Total Financed	\$684,900	\$687,589	\$705,466	\$4,903,049	\$5,640,948	\$870,365	\$13,492,298

*BPA includes the cost of the Conservation (Rebate) program in the power bills that OPALCO pays. When members utilize the rebates and OPALCO documents it, the Co-op then gets credited back that amount. In essence, we are overbilled for the rebate program and only get credited if members utilize the rebates. OPALCO is unique in the pool of BPA utilities for consistently using all or most of the available conservation dollars in this program. We have often used conservation funds allocated to other Co-ops that they were unable to use through their member rebate programs.

**Funds for the Switch it Up! Program comes from the USDA Rural Energy Savings Program for relending to members. OPALCO charges 2-3% interest to cover administrative costs for members financing projects with these funds; there is no impact to member rates.

Solar Programs

Interconnects

There were 12 new interconnect applications submitted in February, with eight members interconnected with solar for a total of 727 (<u>https://energysavings.opalco.com/member-generated-power/</u>). There are an additional 42 pending connections.

Community Solar

- During the February 2024 billing cycle, the <u>Decatur Community Solar</u> array produced 10,000 kWh. A total of ~\$2,030 was distributed to 264 accounts in February.
- 2) Bailer Hill Solar is contingent on a successful San Juan County Conditional Use Permit, in progress.



Solar Benefits Paid to Members

All values are as of first of the month reported.

		2019	2020	2021	2022	2023	2024	Totals
Decatur	# of Accounts		265	268	262	264	264	
Comm	Total Payments		\$93,734	\$95 <i>,</i> 497	\$84,658	\$86,983	\$2,030	\$362,902
Solar								
WA State	# of Accounts	256	259	58	57	59	0	689
Incentives*	Total Payments	\$224,766	\$218,222	\$91,461	\$84,828	\$82,717	\$0	\$701,994
MORE**	# of Accounts	144	144	140	135	0	0	563
MONE								

*The funds paid out to members for the Washington State Incentives are included in OPALCO's state tax bill and then credited when paid out to members.

**The MORE (Member Owned Renewable Energy) program closed to new participants in 2016. Members purchased "green leaves" of renewable power to support local solar producers. OPALCO fully supported this voluntary member program until member interested died out. The program ended September 30, 2022, with a final payout of all program dollars that remained.

COMMUNICATIONS

Election Update

Voting is now open in the OPALCO Board Elections. We have two candidates for two open positions:

- Wendy Heister District 2
- Tom Osterman District 3

Voting closes on April 22 and per the OPALCO bylaws we need 10% of the membership to get a quorum.

Election Timeline

Event	Date		
Legal Notice for Election (RUS requires minimum 30 days prior to	12/15/23 (extra time to avoid		
nominating process)	holidays)		
Director Candidate Applications due (via EGC)	01/22/24 (12:00 Noon PST)		
Nominations posted - (80 days prior to meeting)	02/05/24		
Nominations by petition due (via OPALCO)	02/16/24 (12:00 Noon PST)		
Nominations by petition posted - (55 days prior to meeting)	03/01/24		
Candidate Forum (virtual)	03/06/24		
Notice to members/Ballots mailed - (21-50 days prior to	03/06/24-04/04/24		
meeting)			
Election closes - (3 days prior to meeting)	04/22/24		
Annual Meeting	04/25/24		

For further information, please visit our election hub: https://www.opalco.com/about-community/elections-hub/why-run/



Island Way Workshops

OPALCO hosted a workshop on **Smart Home Devices** on February 15 with 19 members in attendance. There are two more workshops coming up this month:

- March 19th @ 4 pm: Climate Change in San Juan County
- March 26th @ 4 pm: Bailer Hill Microgrid Project

All workshops are held via Zoom and members can register at <u>www.opalco.com</u>.

OPALCO Annual Meeting Member Appreciation Event

Mark your calendars for April 26th, when the OPALCO Eastsound campus will be transformed into a hub of fun and festivities from 3-6 pm.

From swag giveaways to bucket truck demonstrations, there's something for everyone at this Co-op member appreciation event. The line crew will have safety demos, bucket trucks, and games.

There will be food, kids' activities, the latest in electric vehicle technology, and info on our energy-saving programs. In addition, there will be a raffle, where members can walk away with fantastic prizes.

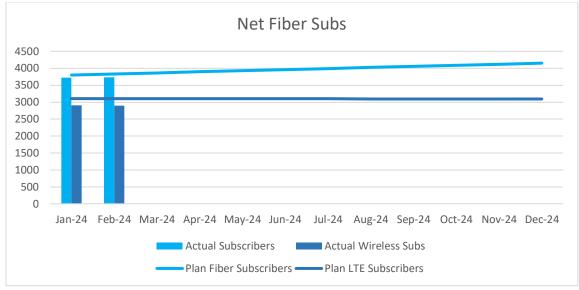
This year we are doing the event in Eastsound but in future years we will rotate islands. We are offering shuttle service if members do want to travel from another island. Sign up for that by emailing communications@opalco.com.



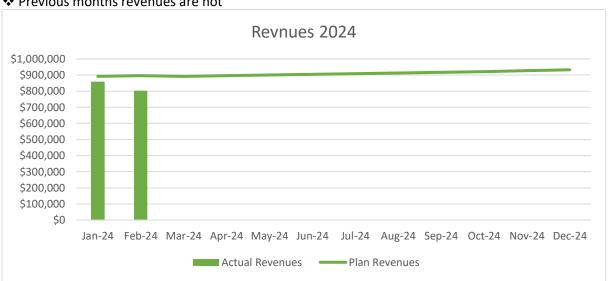
Rock Island Communications

6,595 Internet Service Customers

Net Subscribers



Revenues



Previous months revenues are not

closed out and are subject to change. Major contract revenue for January will be recognized at the close of agreements with partners, which will bring January and February revenues up to forecasted levels.



Appendix

Bailer Hill Microgrid

The following email was sent out on Monday, March 18th.

We Need Your Help!

Local, renewable power is key to a healthy and affordable energy future

The Bailer Hill Microgrid project will include a community solar array and battery storage to provide a small amount of local energy resiliency for the islands - in addition to giving Co-op members access to the benefits of solar without the cost and maintenance burdens of personal projects.

Why local energy generation? Why now? The region is mandated by legislation to get fossil fuels out of our energy diet. During this transition, rolling blackouts and other gaps in power supply are forecast as new clean energy resources are developed, as well as new transmission lines to bring the power to consumers like us.

The Bailer Hill project has been delayed for several years with supplier and permitting delays - but we are now at a critical point and need your help to complete our permitting with San Juan County. A conditional use hearing scheduled for April 24th and we need your written comments delivered to the County **before April 3rd**.

Your personal letter of support will help illustrate to the County the importance of local, renewable power on our islands. Your letter of support for project permitting in no way obligates you to buy Community Solar shares – but helps pave the way for this important project on San Juan Island.

Please send your letter of support to: San Juan County Department of Community Development PO Box 947 Friday Harbor WA 98250 or via email: <u>dcd@sanjuanco.com</u> - and please copy us at communications@opalco.com.

Here are some talking points:

- As the regional meets decarbonization mandates, power supplier reliability will be challenged by fossil fuel generators being retired faster than renewable resources are being developed to replace them. The industry expects blackouts during peak demand events and storms. These local energy project provide a small power supply for the islands during emergencies.
- OPALCO has partnered with a neighboring sheep farmer to graze the Bailer Hill property. Oak Knoll Farm has been grazing the site for several years and will continue after the panels are installed.



- OPALCO partnered with the San Juan Islands Conservation District to develop a farm plan for the site. The farm plan demonstrates that the best practices OPALCO plans to follow will result in improved soil health over the 25-year project.
- Use of this land for solar does not preclude future agricultural uses. The project includes plans to decommission the solar panels after 25 years and the land can be returned to full agricultural use.
- The project is consistent with San Juan County Comp Plan including the following excerpts (but not citing every alignment that exists):
 - Section B, Element 2, Subsection 2.2.C (Energy): "The policies in this section include a provision that San Juan County 'provide opportunities for the development and use of alternative energy resources that are compatible with the natural environment.'
 - Section 8.5.A General Goals and Policies:
 - Goal 6: "Minimize the environmental impacts of electricity production and use while promoting energy independence."
 - Policy 1: "Encourage utility service providers to explore innovative and alternative methods of producing energy."
 - Policy 2: "Work with the San Juan County Conservation District and OPALCO to promote community solar projects and provide technical assistance and incentives to increase individual home solar installations."
 - Policy 7: "Ensure that solar installations are sited and designed in a manner that minimizes impacts on agricultural land, allows for flexibility in future agricultural activity and maximizes potential for multiple benefits from "agrivoltaics"
- OPALCO has already received National Environmental Policy Act (NEPA) approval for the project.
- Infrastructure improvements that OPALCO will make to the land, including vehicle access, fencing, power supply and water, will improve conditions for current and future farming uses.
- OPALCO has secured a \$1M grant from the WA Dept of Commerce's Clean Energy Fund to dedicate a portion of the project benefits to low-income households in San Juan County.

Why Local Renewable Projects? Mainland Power Demand Will Soon Exceed Supply

OPALCO is Preparing for Mainland Rolling Blackouts

Did you know the Northwest power grid almost crashed during the January 2024 cold snap? As the hydro system hit capacity, the region turned to California, the Southwest, and BC to import massive amounts of energy. **Wholesale electric prices jumped 2,400%**.

Why are mainland rolling blackouts becoming more likely?

It's a basic problem of electricity Supply and Demand:

- **Supply** is falling as coal power plants are shut down to slow climate change, but replacement renewable energy projects are held up or canceled due to public and local permitting pushback.
- **Demand** is increasing as the Northwest population grows and rapidly shifts from fossil-fueled to electric transportation and heating. In San Juan County, over 80% of greenhouse gas (GHG)

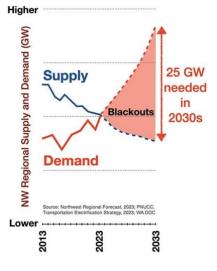


pollution comes from transportation and to reverse the global climate catastrophe, the US must cut GHGs by 50% by 2030.

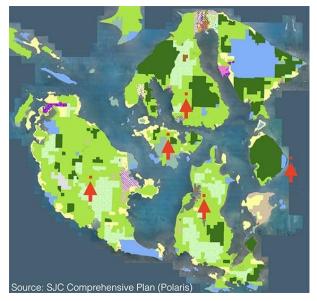
The northwest region is at an energy tipping point. The chart at right illustrates how the supply-demand gap increases over the next ten years. An estimated **25 GW of new renewable energy supply will be needed to meet the rapidly growing demand – almost double what is used today**. Over the past 20 years, the Northwest has only been able to build about <u>one GW per eight years</u>. Rolling blackouts and market price shocks will increase until supply can meet demand.

How is OPALCO preparing?

Over 98% of OPALCO energy currently comes from the mainland, and most of the significant OPALCO outages are due to mainland outages. During the January cold snap, mainland electricity price extremes flowed through to OPALCO and co-op members. To maintain reliability and reduce price shocks, OPALCO plans to develop more local energy capacity – a combination of solar and tidal energy.



Over 35% of OPALCO energy can be supplied from about 0.5% of county land. The map below shows four red squares on land, representing the amount of land needed for community solar arrays, and one red square east of Blakely Island, representing one tidal generator.



Rooftop solar can only supply a small fraction of our local energy (less than 5%), and it doesn't work during outages. The only way to generate enough local energy to reduce the impact of mainland outages and price spikes is through community microgrids large enough to meet the county load.

OPALCO built its first community microgrid project in 2018 on Decatur Island, where islanders have hailed its improving island power during outages.

The planned Bailer Hill Microgrid project is OPALCO's next community solar array. It will more than double the county's local energy compared to all the rooftop solar, which took 13 years to build.

It is our first agri-solar project, in cooperation with

local farmers who will graze sheep in the shade of the solar array. \$1M of the project is allocated towards OPALCO's low-income energy assistance program through grant funding.

This and future microgrids can only happen if there is public support for it. On the mainland, over 70% of utility renewable energy projects are canceled due to local permitting and public opposition.





Learn More: links and references

<u>Harvesting the Sun</u> – This video is chock full of agri-solar info. Featuring experts from Oregon State University (OSU), the National Renewable Energy Labs (NREL), and others.

"In Harvesting the Sun, the leading voices of the agri-solar movement come together to share their stories and shine a light on a climate solution that can increase farm profitability, save valuable water, improve the soil, provide shade for farm workers, develop valuable ecosystem services, and increase the resiliency of rural communities."

<u>Energy System Near Miss</u> – February 2024 OPALCO Board meeting presentation on the January 2024 cold snap. Includes analysis of 25 GW gap in supply and demand.

Cold Snap Strains Northwest Utilities as Energy Prices Surge – In the days before the cold front came in, SnoPUD held back water at its 112 MW Jackson Hydro Project. Once the temperatures started to fall, it ran the project at max generation throughout the event. The PUD still had to turn to the market despite the high prices. *"It was all-hands on our power trading desk." "Market prices hit the Western Electricity Coordinating Council's \$1,000/MW soft cap. The California Independent System Operator raised its soft cap from \$1,000/MW to \$2,000/MW for several hours during the three-day-long cold snap"*

<u>Counties are blocking wind and solar across the US</u> – USA Today – Statewide blocks and limits put the nationwide goal to reach 100% clean energy by 2035 at risk.

"Local governments are banning green energy faster than they're building it."

<u>A New Surge in Power Use Is Threatening U.S. Climate Goals</u> – NY Times – "Many power companies were already struggling to keep the lights on, especially during extreme weather, and say the strain on grids will only increase. Peak demand in the summer is projected to grow by 38,000 megawatts nationwide in the next five years, according to an analysis by the consulting firm Grid Strategies, which is like adding another California to the grid." "The stakes are high. If more power isn't brought online relatively soon, large portions of the country could risk blackouts, according to a recent report by the North American Electric Reliability Corporation, which monitors the health of the nation's electric grids."

<u>Quick Fact: Northwest Resource Adequacy in a Rapidly Decarbonizing World</u> – OPALCO has been concerned about the growing supply-demand problem for several years. This Quick Fact from two years ago has more background and links to deepen your understanding of rolling blackouts, and forecasts on load and generation.

<u>Congressional action on energy permitting remains stuck, but states and developers are finding</u> <u>solutions</u> Environmental advocacy group Natural Resources Defense Council is breaking with its past position to agree. *"NRDC has historically said 'no' to infrastructure that was a threat to the environment,"* said NRDC Senior Clean Energy Transmission Advocate Cullen Howe. But pivoting to "yes"



by pushing to make permitting reforms more efficient is "a necessary change," though the reforms will likely force "hard choices," he acknowledged." "Outdated environmental rules and hundreds of amendments and judicial interpretations built into them are causing "a crippling delay in permitting new projects,..."

<u>Solar on Farmland</u> – Opportunities and Considerations in NW Washington – This excellent 88 minute video is moderated by Faith Van De Putte, San Juan County Agricultural Resources Committee, hosted by WSU SJC Extension and SJC ARC. It features farmer and OSU engineer Chad Higgins.

"In the face of climate change and development pressure, Northwest Washington needs both solar power generation and increased protection of agricultural land. Agrivoltaics are an emerging strategy that incorporates photovoltaic arrays into agricultural systems. We take a look at some pros and cons of adding solar to a farm operation, offer some considerations for where and when to site solar on a farm, and discuss what to include in your decision-making tree as you think about adding solar arrays to your farm or land. We also hear about the impact of solar on agricultural ecosystems, the opportunities it provides, and a brief overview of the costs of installation and incentives that are available. This presentation is geared toward farmers and agricultural landowners, although all are welcome."

Agrivoltaics Combines Production of Agriculture and Solar Power – Sierra Club

"Agrivoltaics, which pairs solar panels (photovoltaics) with agriculture, is a double-duty climate solution that yields benefits to farmers while minimizing the Nation's need to use undeveloped natural lands for solar energy development."

Agri-solar generation is being deployed in farmland worldwide and is proving much more cost-effective and efficient than rooftop solar. In less than a year, the most recent planned Bailer Hill agri-solar project will more than double the local energy in the county, compared to all the rooftop solar in the county, which took 13 years to build. And at a small fraction of the price and time to build rooftop solar.

The 2022 USDA Ag Census of San Juan County farmland economics shows that we have 264 farms, on 19,571 acres, averaging 74 acres per farm. Even with government subsidies, **each farm loses an average of \$3,754 annually**. And the cost of farmland is rising rapidly as our population swells. The economics are not sustainable. **To increase local food production, we need healthy farm economics**. Agri-solar is raised up on stilts, allowing farming beneath. It increases farmland productivity and provides dual use of the sun – producing food and energy. That energy produces an additional income for the farm of about \$8,300 per acre per year, turning the typical farm here cashflow positive. 35% of county electricity use could be generated with just 0.5% of all land in San Juan County.