

# Board of Directors

## Regular Meeting

Thursday, January 19, 2023  
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](mailto:communications@opalco.com)

### Sequence of Events

- OPALCO Board Meeting
- Executive Session



Board of Directors  
Regular Board Meeting  
January 19, 2023, 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](mailto:communications@opalco.com) for post-meeting follow-up.*

**Agenda**

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**EXECUTIVE SESSION**

Legal, Personnel, Competitive, Other

**ADJOURNMENT**

# ACTION ITEMS

## 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 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 – December 2022

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

BROWN, KAREN  
CAMP NOR WESTER  
CARLSON, JOHN  
COX, DALE  
DESMARAIS, PAUL & DESMARAIS, HELEN  
DONAHOO, SHELBY  
DUTTON, JUDITH  
HAYES, BYRON  
HEGRE, KAREN & HEGRE, JEFF  
JOHNNES, ADRIEL  
KIM, CARRIE & KIM, EUGENE  
KNIGHT, FAITH  
KREBS, HANNAH  
KRUEGER, FRANK  
NOAH'S WEB LLC  
OJC PROPERTIES, L, LC  
PERONNEAU, TAMARA RAE  
PYLE, ROD  
ROMANO, JAMES & ROMANO, BROOKS  
SAUNDERS, J  
SCATTERDAY, MARK  
SPAULDING, LAURIE  
THOMPSON, VERONICA  
VENTERS, JOE  
VENTURESOME CONTRACTING LLC  
VINCENT, BRIAN  
WALLS, MONICA  
WISEMAN, JENNIFER

#### **District 2** (Orcas, Armitage, Blakely, Obstruction, Double, Alegria, Fawn)

AREVALO GUILLEN, GABRIEL  
BOILEK, RYSZARD & BOILEK, NOELLE  
BOLKA, KEVIN  
COFFELT, SIDNEY  
DAVIS, OBYE & DAVIS, ULRIKE  
EMMENS, CHRISTINE  
FACKLER ADAMS, AURORA & MCNEIL, ALEX  
GREGUS, KEVIN & GREGUS, SUDINA  
HOLDING, ROBERT & HOLDING, LAURA  
LAKS, NICOLAS & KRAUSS, JENNIFER  
LERCHUNDI, IMANOL  
MARNEY, TYLER  
MARSYLA, RICH & MARSYLA, JILL  
MCCOMBS, TODD  
SEIM, CODY & SEIM, JANE

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

AUCKLAND, BRIAN & AUCKLAND, ANNE  
BOTTJEN, JULIE  
GREGORY, WILLIAM & GREGORY, CAROL  
HAAK, JAMES & TANG, KAREN  
SAPEK, ADAM  
WILSON, JEFFRY & HUMMEL, LISA

#### **District 4** (Shaw, Crane, Canoe, Bell)

SHEPPARD SHAW TRU, ST

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

January	
Customer #	Amount
10640	370.61
7050	830.36
2360	564.51
34350	2,603.65
67282	1,595.19
10110	1,316.33
64494	863.70
<b>Total</b>	<b>\$ 8,144.35</b>

- RUS 219s 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	RUS Description
202211	\$101,640.64	Transclosure Replacements and URD Replacements
<b>Total</b>	<b>\$101,640.64</b>	

Staff requests a motion to approve the Consent Agenda.



Orcas Power &amp; Light Cooperative

Revision: 108578

12/21/2022 1:11:37 pm

RUS Form 219 Inventory Of Work Orders  
Period: NOV 2022 System Designation: WA 09  
Preliminary 202211

Page: 1

Inventory: 202211

Project	Loan	Year	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)
			Construction (1)	Retirement (2)		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)		
601		2018 3959	3959		1	4,412.53	0.00	0.00	0.00	0.00	4,393.34
601		2018 3960	3960		1	7,566.69	0.00	0.00	AFUDC: 19.19 AFUDC: 35.52	0.00	7,531.17
						11,979.22	0.00	0.00	0.00	0.00	11,924.51
606		2018 3319	3319		1	91,101.55	3,626.85	546.13	0.00	0.00	89,716.13
						91,101.55	3,626.85	546.13	AFUDC: 4,466.14	0.00	89,716.13
Grand Totals:						\$ 103,080.77	\$ 3,626.85	\$ 546.13	\$ 0.00	\$ 0.00	\$ 101,640.64

55009

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Orcas Power &amp; Light Cooperative

Revision: 108578

12/21/2022 1:11:37 pm

RUS Form 219 Inventory Of Work Orders  
Period: NOV 2022 System Designation: WA 09  
Preliminary 202211

Page: 4

Inventory: 202211

Budget		
Loan	Project	Amount
1	601	11,924.51
1	606	89,716.13
Total:		101,640.64

**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

55009

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**Orcas Power & Light Cooperative  
Minutes of the Board of Directors Meeting  
Thursday, December 15, 2022**

Streaming through Zoom attendees were Board members Vince Dauciunas, Jerry Whitfield, Brian Silverstein, Mark Madsen, Tom Osterman, Rick Christmas, 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; Head Accountant Travis Neal; Member Services Supervisor Joey Wykoff and Communications Manager Suzanne Olson (serving as recording secretary). Also present were Legal Counsel Joel Paisner and consultant Jay Kimball.

Members in attendance included Robert Dashiell, Jen Taylor, Justin Wolfe (Rainshadow Solar), Chris Wolfe (Rainshadow Solar), Chom Greacen, Sandy Bishop, Susan West (9:30a), John Fleischer (10:00a)

OPALCO 2022 Scholars were also in attendance: August Moore, Satchel Bourne, McKenna Clark and Valeria Villareal.

Meeting commenced at 8:30 a.m.

Member Comment Period: Justin Wolfe, Chom Greacen and Sandy Bishop commented on solar rates.

**CONSENT AGENDA**

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

**ACTION ITEMS**

**MEMBER SERVICE POLICY 4: SERVICE CONDITIONS – SECOND READ**

Staff presented changes to Member Services Policy 4 for the Board's second read.

- **MOTION** was made by Christmas to accept the policy as presented. Seconded by Struthers and passed unanimously by voice vote.

**2023 TARIFFS – SECOND READ**

Staff reviewed tariffs for a second read. Discussion ensued. Whitfield shared a spreadsheet with detail on his solar system production and billing. Discussion ensued questions from members were addressed.

- **MOTION** was made by Christmas to accept the tariffs as presented. Seconded by Osterman and passed unanimously by voice vote.

**DISCUSSION ITEMS**

**SAN JUAN COUNTY DOCKET PROCESS**

Staff reviewed docket process for San Juan County. Discussion ensued about key topics to advance energy planning.

**SCHOLARS PRESENTATION**

Staff introduced the Nourdine Jensen Cooperative Youth Scholarship Program and the 2022 scholars. The scholars gave a presentation about their experience at the Cooperative Youth Rally, expressed their gratitude for the opportunity and the scholarship awards and answered questions from the Board.

**REPORTS**

GM presented the monthly General Manager's Report and Dashboards. Discussion ensued.

Board paused the Regular Meeting at 11:27 am and went into Executive Session. Board returned to Regular Session and meeting ended at 12:37 pm.

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Vince Dauciunas, President

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Brian Silverstein, Secretary-Treasurer



**Orcas Power & Light Cooperative**  
**Minutes of the Board of Directors Special Meeting**  
**January 9, 2023**

A Special Board meeting of the OPALCO Board was held on January 9, 2023 via electronic mail pursuant to Article IV, Section 2 of the OPALCO Bylaws. All members of the board participated and waived in person attendance and notice of the meeting.

At the special meeting all directors voted in favor of the submission of a grant application as laid out in Resolution No. 1-2023. OPALCO's application is a \$12M grant of ARPA funds through the Washington State Broadband Office (WSBO). Below is the resolution describing the project. This is a competitive grant with priority given to unserved and underserved areas that meet the federal low-income guidelines.

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Vince Dauciunas, President

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Brian Silverstein, Secretary-Treasurer



**BOARD OF DIRECTORS  
RESOLUTION 1 -2023  
BOARD OF DIRECTORS SUPPORT FOR  
WSBO BROADBAND INFRASTRUCTURE GRANT PROGRAM**

**WHEREAS**, the Board of Directors of Orcas Power & Light Cooperative (OPALCO) seeks to provide its members and residents of San Juan County, Washington with broadband services, and

**WHEREAS**, the Board of Directors of OPALCO is aware of grant funding opportunities through the Washington State Broadband Office (WSBO) that would allow the extension of its fiberoptic network to unserved areas of San Juan County, Washington as provided for in the WSBO Broadband Infrastructure Grant Program, and

**WHEREAS**, OPALCO is a mutual non-profit corporation organized pursuant to RCW 24.06 and is an eligible grant applicant, and

**WHEREAS**, OPALCO seeks to partner with its wholly owned subsidiary Island Networks LLC dba Rock Island Communications (RIC) as the Internet Service Provider (ISP) that will extend these needed fiberoptic networks to unserved residents of San Juan County, Washington; and

**WHEREAS**, the Board of Directors of OPALCO understands that the WSBO Grant Program requires a 10% match, in cash or in kind, which will be met through existing network components - submarine cable installations for fiber transport and the ISP construction incentive of \$1,500 per connection in kind.

**IT IS HEREBY RESOLVED**, that the foregoing recitals are incorporated herein to this Resolution as if fully set forth below; and

**IT IS FURTHER RESOLVED** the Board of Directors of OPALCO supports the WSBO grant application and agrees to provide the 10% match to be achieved through providing access to RIC and its customers to be served through access to OPALCO's submarine cable facilities and ISP construction incentives in the amount of \$1,500 per connection: and

**IT IS FURTHER RESOLVED**, that attached to this Resolution is Exhibit No. 1 reflecting the four separate projects in San Juan County that will serve 950 cooperative members with broadband services using fiber to the home at no cost to the member at an estimated total project cost of \$12,000,000.

**IT IS FURTHER RESOLVED**, that the Board of Directors of OPALCO hereby grants to its General Manager, J. Foster Hildreth, the authority to execute all necessary agreements to apply for the WSBO Broadband Infrastructure Grant Program.

**ADOPTED** unanimously by the Board of Directors for Orcas Power & Light Cooperative, at its Special meeting held this 9th day of January 2023.

**CERTIFICATE OF SECRETARY**

I, Brian Silverstein, Secretary of the Board of Orcas Power & Light Cooperative, do hereby certify that the above is a true and correct Resolution of the Board of Directors, held on the 9th day of January, 2023 at which meeting a quorum was present, and that the above Resolution has not been modified or rescinded.

**IN WITNESS WHEREOF**, I have set my hand and affixed the seal of Orcas Power & Light Cooperative, this 9th day of January 2023.

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Brian Silverstein, Secretary





## Climate and Sustainability Advisory Committee

The Board of Directors are required to disclose any potential conflicts of interest. The OPALCO Bylaws state the following:

*“No energy member or their immediate family member who currently holds public office or serves on a governmental appointment or commission whose charter, duties or scope of influence materially intersects with the business of the Cooperative or its subsidiaries or affiliates, if any; ...”*

The board process includes review by legal counsel and Board discussion of any potential conflict(s) to determine if there is material intersection with the business of the Cooperative.

In April of 2022, two OPALCO Board members were appointed to the San Juan County Climate and Sustainability Advisory Committee. Per San Juan County:

*“The Climate and Sustainability Advisory Committee was established by the San Juan County Council in early 2022 to ensure coordination and communication of actions across departments and to feed into existing County advisory committees and commissions. The Committee advises on policy, helps set priorities, and harnesses the momentum of existing work to help steer the County’s climate action plan. The goal is to provide opportunities for cross-pollination of ideas and to increase collaboration around climate and sustainability efforts throughout San Juan County.”*

Per legal counsel, the Climate and Sustainability Advisory Committee appears to have a very broad scope and is not a regulatory body imposing specific mandates or regulations that could impact OPALCO’s business. OPALCO Policy 23: Conflict of Interest, specifically Section 23.8 allows Directors to serve on commissions if there is no “material” intersection of interests or the Board of Directors determines that it would be in the Cooperative’s best interest for such participation.

OPALCO’s legal counsel requests that the Board discuss this topic in more detail to determine whether there is any reasonably foreseeable harm to the Co-op or the subsidiary from such service.

After discussion, staff requests a motion to determine whether or not the participation of Jerry Whitfield and Vince Daucinas in the Climate and Sustainability Advisory Committee is acceptable.

# DISCUSSION ITEMS

## Outage Summary – 12/22-23, 12/24

During an extreme cold snap and snowstorm, an equipment failure on the mainland transmission lines feeding OPALCO caused extended power outages beginning about 5 pm on Thursday, December 22 with power restored in the early morning (~10 hours). A second mainland caused outage occurred on the same power pole on December 24 (~six hours). The transmission lines are owned and maintained by Puget Sound Energy (PSE), who manage that piece of Bonneville Power's (BPA) power delivery system to the islands. Right before the power went out on December 22, the OPALCO system reached a record high energy usage of ~85(MW).

OPALCO crews were called out immediately and remained on standby during both outages with temperatures in the high teens and twenties, ready to bring OPALCO's distribution system back up as soon as mainland repairs were complete.

On the night of December 22-23, the OPALCO team waited nine hours for PSE crews to respond and complete the work on the mainland feed. Throughout the evening and into the wee hours of the morning OPALCO was in constant communication with BPA and PSE to coordinate the outage work.

During the day of Christmas Eve, a second outage occurred on the same mainland pole. An OPALCO engineer happened to be driving through Anacortes and saw a flash as equipment failed on the transmission feed that serves San Juan County. He stopped to document and report the damage to the equipment and was able to get a video of the equipment failing from a neighbor (shared on OPALCO's Facebook page). By 2:40 PM, Puget Sound Energy (PSE) had completed the repairs on the transmission line. They replaced two jumpers and an insulator (in addition to the jumper they replaced on 12/23). By 5:30 pm Christmas Eve, all in San Juan County had their power fully restored.

Members were updated regularly throughout the outages through SmartHub notifications, the Outage Center at [www.opalco.com](http://www.opalco.com), on social media channels and through the phone system.



Read the news articles OPALCO published about these county-wide outages:

- <https://www.opalco.com/extreme-winter-weather-leads-to-county-wide-10-hour-power-outage/2022/12/>
- <https://www.opalco.com/islanders-brace-through-second-county-wide-outage-on-christmas-eve/2022/12/>

Due to the delayed response time and duplicate equipment failures, OPALCO requested that BPA investigate both outage incidents. BPA staff updated OPALCO on January 10, 2023 as follows:

BPA met internally and developed some follow-up questions to pose to PSE to get some additional clarity on the sequence of events and to determine if there are any potential improvements to find in coordination going forward.

### **Decatur Island Microgrid Pilot Project (battery commissioned June 2022)**

The battery on Decatur has been able to provide limited capacity outage mitigation in the past (~400 homes) but, due to a known software issue, it was unavailable during the December outages. The software issue has now been resolved and, going forward, the Decatur Battery will be helpful for outage mitigation for Decatur residents for limited durations. The primary purpose for this device is to reduce peak loads on our infrastructure. OPALCO plans to build additional microgrids close to town centers to increase energy resilience over time and as grants become available.

## **Grants**

OPALCO has submitted three concept papers as a preliminary step in applying for funding through the Department of Energy's (DOE) Grid Resilience and Innovation Partnerships, which is part of the Infrastructure Investment and Jobs Act. If any of the concepts are encouraged to move forward to the next step by DOE, OPALCO and their partners will submit a full application in March - May. Each of these



grants has matching fund requirements. Staff are researching matching fund options; however, it will be a financial challenge to meet these requirements if any of these grant applications are successful.

1. Grid Resilience: \$30M - Grid Transformation Readiness. Update aging infrastructure to increase reliability and add resilience through construction and integration of two microgrids (Orcas and Lopez) to mitigate disruptive events. Includes EV charging banks on Orcas and Lopez.
2. Smart Grid Innovation: \$30M - Smart Grid Modernization for Electric Ferry Charging and Future Load Management in partnership with Washington State Ferries - Phase one: Infrastructure on Orcas and San Juan. Includes substation upgrades and preparation for future battery storage to manage demand and peak shaving for electric ferry charging. Future grant phases will include battery installation and infrastructure at the other two island terminals.
3. Grid Innovation: \$100M - Enhanced Reliability Transmission Project in partnership with San Juan County, the Lummi Nation and Bonneville Power Administration to install a redundant submarine transmission cable connecting the San Juan Islands to the mainland.

# REPORTS

## General Manager

### 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
- 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
- Simpson Proposal and the Northwest Energy Evolution
- 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



## ENGINEERING, OPERATIONS, AND INFORMATION TECHNOLOGIES

### WIP

As of January 10, 2023, there are 428 work orders open totaling \$10.33M Operations has completed construction on 135 work orders, totaling \$3.90M.

### Safety

Northwest Safety Service conducted winter and defensive driving training for operations staff. The total current hours worked without a loss time accident 220,386 hours.

### Awarded Grants

#### Washington Department of Commerce - Grid Modernization

- San Juan Microgrid (Grant \$2.4M) (partnered with PNNL) – Staff anticipates issuing an RFP for battery system balance of plant in December 2022 since battery vendors RFPs have been received. Staff is in process of executing purchase agreements on the battery systems in January 2023.
- WA DOC CEF4 Grid Modernization Grants. OPALCO has received conditional award of the following projects. This conditional award awaits the negotiation of contracts with WA DOC and final approval to proceed.
  - San Juan Islands Tidal Generation Conceptual Design (Phase 1 – Preliminary Design Only) – Staff and subcontractors have initiated outreach with the tribes and regulatory agencies. \$150K
  - Friday Harbor Ferry Electrification Preliminary Design (Phase 1 Only) – On hold until WA DOC releases the next stage in contracting. \$150K

#### Washington Department of Commerce – Clean Energy Fund 3 Solar

- Low-Income Community Solar Deployment (Grant \$1M) – Staff has executed construction contract and anticipates the engineering design to be at 90% in January. Conditional Use Permit is anticipated to be submitted to the County by the end of Q1 2023.

#### US Forest Service (minor in-kind efforts only)

- Biomass Generation with Biochar (60% Design Grant \$72,835) – Project report and economics are anticipated in Q4.

## FINANCE

### 2022 Budget Tracking

Energy (kWh) purchases and sales were higher than budgeted levels through for 2022. kWh sales included the historic 'cold-snap' for both January'22 billing cycles. There was another very large cold snap in December '23 which drove overall gross operating revenue above budget by ~\$1.2M and purchased power above budget by ~\$260k. The cold snap in December will result in an ECA credit for January '23 due to unusually high kWh sales for the month. The ECA collected a net ~1k for 2022. The table presents full year 2022 projection with actuals for prior months where available.

Income Statement Summary (in thousands)	2022 Projection (actuals for prior months)		
	Budget	Projected	Variance
Operating Revenue	\$ 34,267	\$ 35,490	\$ 1,223
ECA Surcharge / (Credit)*	\$ -	\$ 1	\$ 1
Revenue	\$ 34,267	\$ 35,491	\$ 1,224
Expenses:			
Cost of Purchased Power	\$ 9,496	\$ 9,756	\$ 260
Transmission & Distribution Expense	7,204	7,358	154
General & Administrative Expense	6,079	5,756	(323)
Depreciation, Tax, Interest & Other	8,586	8,853	267
Total Expenses	31,365	31,723	358
Operating Margin	2,902	3,768	866
Non-op margin	285	450	165
Net Margin*	3,187	\$ 4,218	1,031
OTIER**	2.42	2.86	0.44
TIER**	2.64	3.08	0.44
Equity %	39.9%	40.4%	0.5%
HDD	1,375	1,543	168
kWh Purchases	220,000	241,711	21,711
kWh Sales	206,800	224,724	17,924

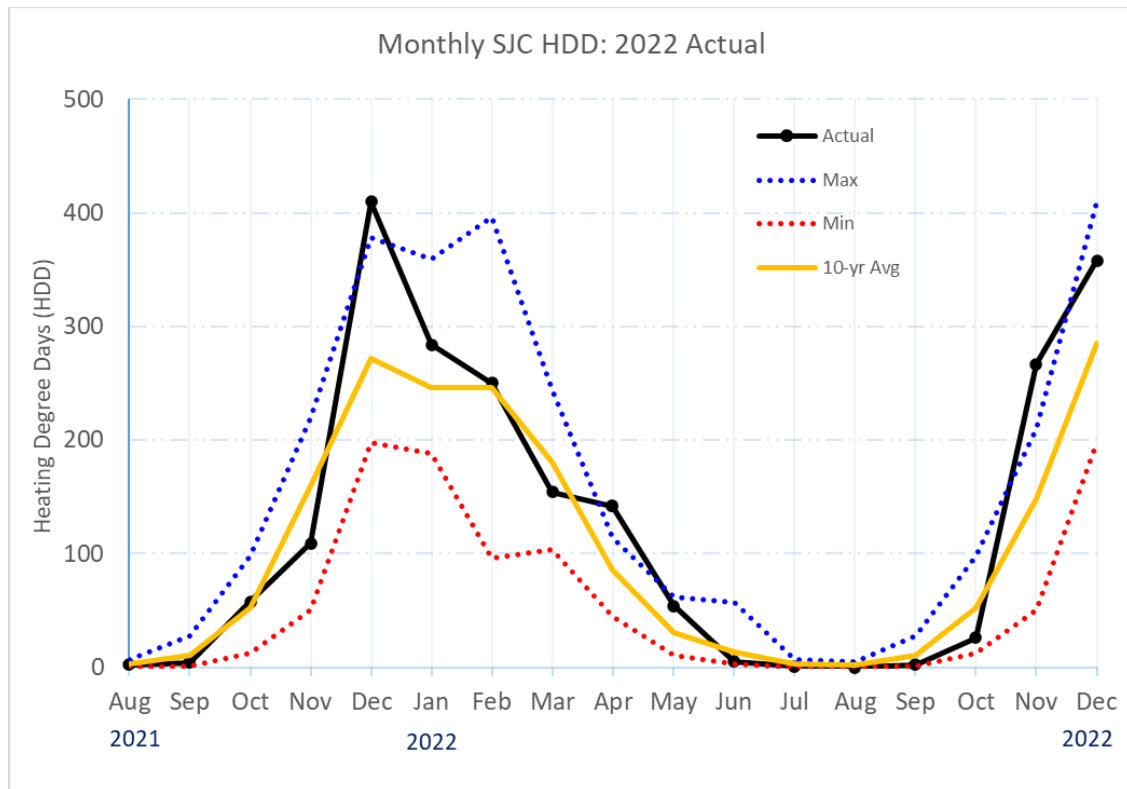
\* The ECA collected \$1k from members through the full year of 2022. Note this is a large projected credit for Jan'23 due to high revenue in Dec'22

### Monthly Energy Charge Adjustment (ECA)

The calculated amount for the December ECA was a bill credit of \$.003432 per kWh which returned \$96,812 to members, or \$3.43 per 1,000 kWh. For the full year of 2022, the ECA was a net surcharge to members of only \$1,494. The January billing period ECA is projected to be a bill credit of (\$.008760) per kWh on member bills, or \$8.76 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)

December 2022 saw a very cold weather snap similar to what we saw in 2021, and HDDs came in well above the 10-yr average. We continue to monitor weather trends monthly.

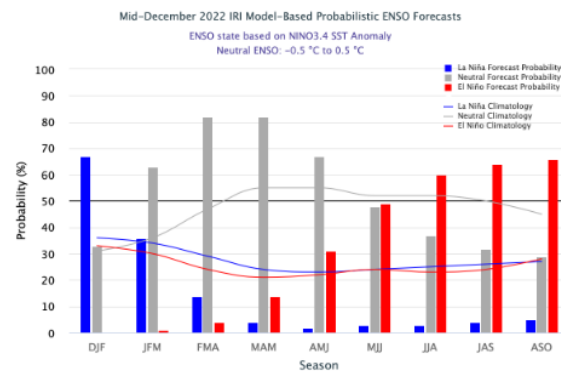
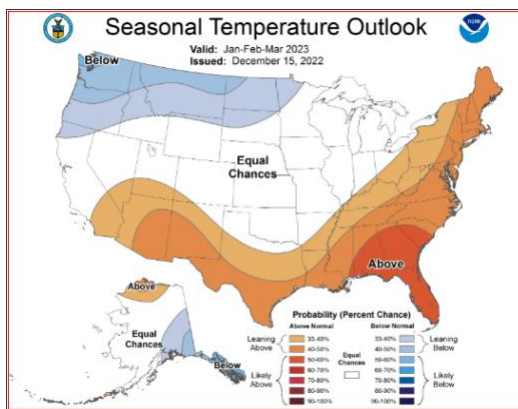


\*10-year max, min, avg is 1912-2021

## Weather Forecast

Looking ahead to the NOAA 'three-month outlook temperature probability' for Jan-Feb-Mar '23, the outlook is currently showing 'likely below' normal temperatures in our region in the coming winter months. We continue to monitor these predictors monthly.

### 2023 Jan-Feb-Mar Outlook



Source: NOAA National Weather Service



## MEMBER SERVICES

### Annual History of Energy Assistance Funding

All values are as of first of the month reported.

		2014	2015	2016	2017	2018	2019	2020	2021	2022	Grand Total
Energy Assist Credit	# of Accounts			241	407	444	460	574	577	531	1,079
	Total Assistance			29,151	81,957	111,996	135,595	158,434	158,740	143,258	819,131
PAL	# of Accounts	180	226	228	217	212	205	329	363	249	1,018
	Total Assistance	31,560	46,345	46,885	48,833	45,155	53,137	80,975	104,880	64,887	522,658
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	180	226	325	447	460	488	835	825	731	1,574
	Total Assistance	31,560	46,345	76,036	130,790	157,151	188,732	349,283	390,659	238,490	1,609,048

Note: EAP funds are collected, primarily, from a program OPALCO created by including a line item on all 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” many vary based on single account adjustments.

**EAP:** During December 2022, 353 members received ~\$13.4k from the low-income Energy Assist program, compared to 364 members who received ~\$13.4k in assistance in December 2021.

**Project PAL:** During December 2022, 56 members received ~\$16.4k from Project PAL, compared to 43 members who received ~\$9.4k in December 2021.

**LIHEAP:** Award Season Notifications have begun to be received for the new season.

### Switch it Up!

There are now 398 projects complete and billing for a total of \$5.2M net outstanding (total loan less member pay offs). There are another 34 projects in various stages of the process. Some projects have been delayed as residential contractors have been limited by COVID-19 and 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	Grand Total
Energy Storage				39,510		\$ 39,510
Ductless Heat Pump	648,252	617,060	641,765	1,517,537	63,398	\$ 3,488,012
Fiber		30,725	48,681	29,301		\$ 108,707
Ducted Heat Pump	8,119	30,000	15,000	18,127		\$ 71,246
Heat Pump Water Heater	13,985	9,805		5,012		\$ 28,802
Insulation				235,753		\$ 235,753
Other	14,543			90,649		\$ 105,193
Solar				1,322,361	44,611	\$ 1,366,972
Windows				457,166		\$ 457,166
Grand Total	\$ 684,900	\$ 687,589	\$ 705,446	\$ 3,715,416	\$ 108,009	\$ 5,901,359

### Energy Savings

During November there were a total of 14 rebates paid out to members totaling \$13.2k. This includes one fuel switching ductless heat pump rebates and six 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.

		2014	2015	2016	2017	2018	2019	2020	2021	2022
EE Rebates*	# of Accounts	490	524	266	155	264	442	303	147	210
	Total Awards	\$367,552	\$359,835	\$146,601	\$84,809	\$161,262	\$228,418	\$167,432	\$149,886	\$227,622
	Total Energy Savings (annual kWh)	1,423,477	1,696,662	731,392	896,425	479,323	733,432	783,431	359,269	346,900
Switch It Up**	# of Accounts						72	87	69	188
	Total Financed						\$684,900	\$687,589	\$705,446	\$3,715,416

2014-2022		Totals
EE Rebates*	# of Accounts	2,801
	Total Awards	\$1,896,884
Switch It Up**	# of Accounts	416
	Total Financed	\$5,793,351
Total		<b>\$7,690,235</b>

\*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 come 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 seven new interconnect applications submitted in December and six members were interconnected with solar for a total of 602 (<https://energysavings.opalco.com/member-generated-power/>). There are an additional 30 pending connection.

#### Community Solar

During the December 2022 billing cycle, the [Decatur Community Solar](#) array produced 8,000 kWh. A total of ~\$671 was distributed to 262 accounts in December.

#### Solar Benefits Paid to Members

All values are as of first of the month reported.

		2014	2015	2016	2017	2018	2019	2020	2021	2022
Comm Solar	# of Accounts							265	268	262
	Total Payments							\$93,734	\$95,497	\$84,658
WA State Incentives*	# of Accounts	136	162	171	197	268	256	259	58	57
	Total Payments	\$100,425	\$100,000	\$114,037	\$125,635	\$167,971	\$224,766	\$218,222	\$91,461	\$84,828
MORE**	# of Accounts	104	132	147	149	145	144	144	140	135
	Total Payments	\$58,451	\$50,674	\$52,587	\$53,259	\$54,173	\$53,109	\$51,897	\$50,896	\$123,477



2014-2022		Totals
Comm Solar	Total Payments	\$273,889
WA State Incentives*	Total Payments	\$1,227,345
MORE**	Total Payments	\$548,523
Total		<b>\$2,049,757</b>

*\*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

### High Bills Due to Cold Temperatures

Member bills are high this month due to the prolonged cold temperatures in late December. Staff published a media release to increase awareness (<https://www.opalco.com/heads-up-cold-temps-caused-high-opalco-bills/2022/12/>) and give members tools to lower their bill. Members can also look at the [Lower My Bill Toolkit](#) on the OPALCO website.

### Ruralite Magazine

Member feedback on OPALCO's inaugural issue of Ruralite has been mostly positive – especially on the cover story about one of our Journeyman Lineman and how outage restoration works in the field. The second most popular feature this month is Pepper's Backpage, which is used as an editorial to highlight key messages. A handful of members unsubscribed, which is within expectations. OPALCO has partnered with Pioneer Utility Resources (a fellow cooperative) who works with electric cooperatives across the region to produce this magazine in an affordable and cost-effective way. The magazine will be distributed monthly.

### Board Election

Staff met with the Elections & Governance Committee (EGC) to coordinate nomination activities.

#### 2023 Election Timeline

Event	Date
Candidate application available online	12/16/22
Director Applications deadline - to EGC	01/25/23
Nominations posted - (80 days prior to meeting)	02/08/23
Nominations by petition deadline	02/17/23
Nominations by petition posted - (55 days prior to meeting)	03/03/23 (03/05/22 – 55 day – Sun)
Candidate Forum	03/09/23
Notice to members/Ballots mailed - (21-50 days prior to meeting)	03/10/23-04/08/23
Election closes - (3 days prior to meeting)	04/26/23
Annual Meeting	04/29/23

The 2023 election will include two board positions from two different districts as outlined below:

Election Year	District			
	D1 - San Juan	D2 - Orcas	D3 - Lopez	D4 - Shaw
2022*	1B - Madsen		3A - Silverstein	4 - Whitfield
<b>2023</b>	<b>1A - Dauciunas</b>	<b>2B - Christmas</b>		
2024		2A - Struthers	3B - Osterman	
2025	1B		3A	4

\* All terms are 3-year terms starting in 2022



## Member Comments

Subsequent to the outages referenced above, Jerry Whitfield received member communications from Jim Corenman. Mr. Corenman expressed concern about the lack of redundancy from our mainland power source through PSE. He took it upon himself to reach out directly to the Utilities and Transportation Commission (UTC) – below find the communications he had with UTC.

Prior to sending his email to the UTC, Mr. Corenman requested related information from OPALCO. Below please find his emails and our responses.

### **EMAIL TO UTC FROM CORENMAN**

From: **Jim Corenman** >

Date: Thu, Jan 5, 2023 at 10:54 AM

Subject: PSE Transmission Outages

To: UTC

Good morning,

First some background: My wife and I live on San Juan Island, residents for some 30 years and full-time for about 20. We have a home on the west side of the island, in a rural area. Our power is provided by OPALCO, a local coop which serves the county. However, this issue is NOT about OPALCO, their reliability has been excellent. When an outage does occur the OPALCO response is exemplary, day or night.

We did have two recent outages. The first started at 4:53pm on Dec 22, and was not resolved until 4:55am on the 23rd-- a full 12 hours. There was a foot of snow on the ground making travel impossible, and temperatures were 10-20 degrees and stayed there. The outage was county-wide (nearly 15,000 customers) and was caused by a failed PSE transmission line in Anacortes. We learned later that it was a failed jumper on a 115KV transmission line feeding the Fidalgo substation (where the cables connect). No other routing option was available. OPALCO did a good job of keeping everyone informed (and cell phones stayed up) but every message through the night was "waiting on PSE".

A day later, at 8:23am on the 24th, power again failed. Temperatures were still in the teens. This was another PSE transmission failure, in fact on the very same pole that had just failed. And again, the information from OPALCO was "waiting for a response from PSE". This outage was resolved about 3pm, about 6 hours.

I've attached a photo which was posted OPALCO of the pole in question: It is not a great shot but the failure of the top jumper appears to be at a splice. The middle jumper is clearly (and crudely) spliced, and the third jumper also looks like it has been spliced. Also, the top guy-wire is slack. These are the three wires that feed our county,

The bottom line is that our entire county is dependent on power transmission provided by Puget Sound Energy. OPALCO contracts with BPA, and PSE transmits the power to redundant undersea cables from Anacortes to OPALCO's network at Decatur Island. It doesn't matter how careful or diligent BPA and OPALCO are when the outfit in the middle is unreliable.



What I am asking is that PSE be required to provide a redundant transmission path to the submarine cables, and until that can be done then designate the non-redundant portion as a critical line maintained to a much higher standard than it currently is. A failed jumper with a 12-hour response not acceptable, a second failure at the same point a day later is inexcusable.

The risk to the consumers cannot be over-emphasized. Power failures are generally no problem, cold weather is generally no problem, but the two together can be deadly. Without power there is no heat, no water, no communications. And as we continue to transition to renewable energy-- i.e. electric-- the situation will only get more dangerous.

Any assistance is most appreciated, and best wishes for the new year!

Jim Corenman

**EMAIL FROM UTC TO CORENMAN**

From: **Cook, Corey (UTC)** >

Date: Fri, Jan 6, 2023 at 4:34 PM

Subject: WA UTC Complaint CAS-42932-K7Y7M4 for Jim Corenman CRM:0132496

To: Jim Corenman

Jim Corenman,

I am writing to you regarding your complaint against Puget Sound Energy (PSE). I appreciate the opportunity to respond.

First, let me say I absolutely understand how frustrating it can be to lose power, especially during inclement weather.

Please understand, major storms cause significant damage and outages across Washington and PSE's service territory. I absolutely understand your community is reliant upon PSE to feed power to the local electric provider; however, please understand major storm outages are not considered when measuring PSE's reliability and compliance with reliability and outage restoration standards.

During major storms, PSE addresses outages to the best of its ability. Damage and road conditions can often cause unavoidable delays in PSE's ability to restore service. Again, I realize this storm caused significant difficulties and inconveniences for your community. However, please understand the suggestions which you are making, such as 100 percent redundancy, or increased priority for the submarine line serving San Juan Island, are not reasonable expectations. Power outages and interruptions are common and expected in Washington. PSE has no ability to control when or how its facilities are impacted by extreme weather events.

I am uncertain as to the exact connection between OPALCO's and PSE's facilities; however, based on the information which you provided, OPALCO would need to make a request to PSE to engineer its facilities to provide the type of reliability which you are suggesting. Please understand, as the requesting party, it would be OPALCO's financial responsibility to pay for these system improvements.

I hope this helps provide a better understanding of PSE's responsibility to restore service during a major weather event.



I apologize the commission cannot be of further assistance to you in this matter.

Regards,  
Corey Cook  
Complaint Investigator

## **BACKGROUND INFORMATION**

### **EMAIL #1:**

From: Jim Corenman  
Date: Sat, Dec 24, 2022, 11:13 AM  
Subject: Outage  
To: Jerry Whitfield

Jerry,

Merry Christmas, and best wishes also to all of the hard-working folks at Opalco-- particularly the folks that worked through the wee hours yesterday morning to get u all back up. .

This is the second outage in two days, the previous went 12 hours in sub-freezing temperatures. We didn't suffer any damage but many did. Just a very cold night with no heat.

Our backup is a portable generator, enough for essential lighting and heat (propane radiant but needs power to run). I am just a few weeks post hip surgery, and Sue and I were not physically able to get the generator moved and running Thursday evening. No heat, and no protection for the water system. This morning much of the snow has melted and we were able to mobilize the generator.

But clearly, our backup plan is inadequate and needs revision.

These comments posted this morning are interesting:

12/24 @ 9:30 am: With mainland events response time is slower than if it was a local event. We don't have a restoration time but it will be longer than 4 hours.

9 am: One of our team happened to be driving in Anacortes and noticed a flash right as our power was going out. See picture for what we believe is the issue. This is a line that Puget Sound Energy manages and gives power out to the islands.

My takeaway here is that (1) We've got a single point of failure on the mainland, which (2) appears to be poorly maintained.

I understand that this megawatt stuff is complex, but at least one other jumper on that pole appears hastily repaired. They know how to do "quick and sloppy". Which itself seems like a problem: Is that sort of repair (middle jumper) at all suitable for a critical line serving an entire county? And what about that loose guy wire, isn't that inviting the top of the pole to snap off?



Clearly, we can longer treat electricity as a given, not through any fault of Opalco but PSE simply cannot be depended on.

Is it reasonable to ask PSE to sponsor an assistance program to help with installing backup generators? They are taking our money and not spending it on reliable infrastructure, so there should be plenty of funding available.

Thanks, Jim

**EMAIL #2**

**From:** Jim Corenman

**Date:** December 26, 2022 at 9:58:09 AM PST

**To:** Jerry Whitfield

**Cc:** Foster Hildreth

**Subject:** Re: Fwd: Outage

Jerry,

Thanks. Talking to Sue, i sounds like you had some freeze damage, I am sorry to hear that. It is hard to protect against the combination of sub-freezing temps and power loss. And the need to shift to renewable (i.e. electrical) energy sources makes reliability all the more important.

I spent some time going through Opalco's 2020-2040 Long Range Plan, interesting reading and generally well-thought out. The focus on redundancy is important, anything can fail.

There appears to be two areas of weakness: the Fidalgo substation is a county-wide risk, and for us personally (and many others I am sure) the decaying underground distribution cables are also a concern. Those are both areas where single-point failures can leave us without power for extended periods. And this morning's news about attacks on substations doesn't provide any comfort.

The single feed in Anacortes is an obvious risk. Is there any plan by PSE to provide redundancy at that end?

The other issue for us is local. Kanaka Bay and Mountain Shadows distribution is all underground, dating from early 1980's, unjacketed concentric-neutral cable with exposed AL neutral conductions-- reported as "completely gone" by Opalco ten years ago.

I note that the LRP calls for replacement when more than one failure is experienced, or multiple failures and concentric neutral corrosion. (pg. 37, 69, 113).

Certainly complete failures require replacement. What is the risk posed by corroded neutrals?

Thanks, Jim

**OPALCO'S RESPONSE TO EMAIL #1 & #2 ABOVE**





**From:** Foster Hildreth

**Date:** December 27, 2022 at 1:39:51 PM PST

**To:** Jim Corenman

**Cc:** Jerry Whitfield

**Subject:** Jim Corenman: Outage Observations

Hi Jim:

Jerry Whitfield forwarded your emails to me to respond to your inquiries. First of all, thanks for taking the time to read our long-range planning documents. You're right about the pinch point in the system: the Fidalgo substation (and poles leading to the substation) is indeed a weak link.

We have met with Puget Sound Energy (PSE) over the years to discuss a redundant transmission line and were told, "good luck." Note that our transmission contract is with BPA and dealing with PSE's transmission and planning group compares to that of WS Ferries' bureaucracy. The challenge of getting new transmission sited through the residential areas where it would have to be located would be a decade+ long and expensive process at a cost ~\$3-5M per mile to build, if we were successful in gaining the easements necessary. The feasibility for success is very low and, as a small electric co-op, we have very little bargaining power and even less financial leverage as we maintain our cost of service through rates. Every \$340k that we add to OPALCO's budget equals a one percent rate increase to our membership.

You also raise the issue of aging direct-buried conductor and, as you may know from reading our long-range plan, we have an aggressive schedule of replacing distribution line based on outage frequency data and typically replace ~10 miles of distribution line per year.

OPALCO relies Bonneville Power Administration (BPA) to supply and maintain our transmission facilities on the mainland through PSE's service territory. In most cases, we feel they are responsive and do a good job maintaining those facilities. At least PSE's mainland transmission line is above ground and fairly easy to access and repair it. In the case of the county-wide outages that occurred on December 22-23 and again on December 24, we are not satisfied with the response and are investigating the incident with BPA and PSE.

We are currently applying for a grant to construct a new redundant submarine cable route to the mainland. The first phase of the project is \$100M. With the federal IJA grant funds now available, there are new opportunities for funding - but there's also lots of competition throughout the nation for new transmission projects. As a small co-op, grants are the only way we can approach these major projects without putting the burden on the backs of our ratepayers.

Answer to other specific questions:

1. Is it reasonable to ask PSE to sponsor an assistance program to help with installing backup generators?

RESPONSE: No PSE cares only about their shareholders and won't be providing incentives for OPALCO. If lack of reliability intensifies, OPALCO will bring up the larger issue to the UTC. Our first step is to request BPA to conduct a formal investigation. Once the investigation is complete,



we will meet with PSE for resolution. If we are not satisfied, then we shout from the treetops.

OPALCO is submitting grant applications for various grid enhancement and reliability projects over the next five years. Grant awards usually come with “stings” attached, such as matching funds. One of our concerns will be how to financially match the larger grants we intend to submit.

2. Are there plans for PSE to provide redundant feeds through Anacortes?

RESPONSE: No. Given the low probability of obtaining a new transmission easements and project costs, PSE has no plans to build redundant feeds for OPALCO.

3. What is the risk posed by corroded neutral?

RESPONSE: Corroded neutral ultimately result in outages. Once an outage occurs, we record the outage on our mapping software. When multiple outages are recorded the line segments in question get put on our replacement schedule. on a line segments,

Please let me know if you have other questions - I'm happy to speak with you directly.

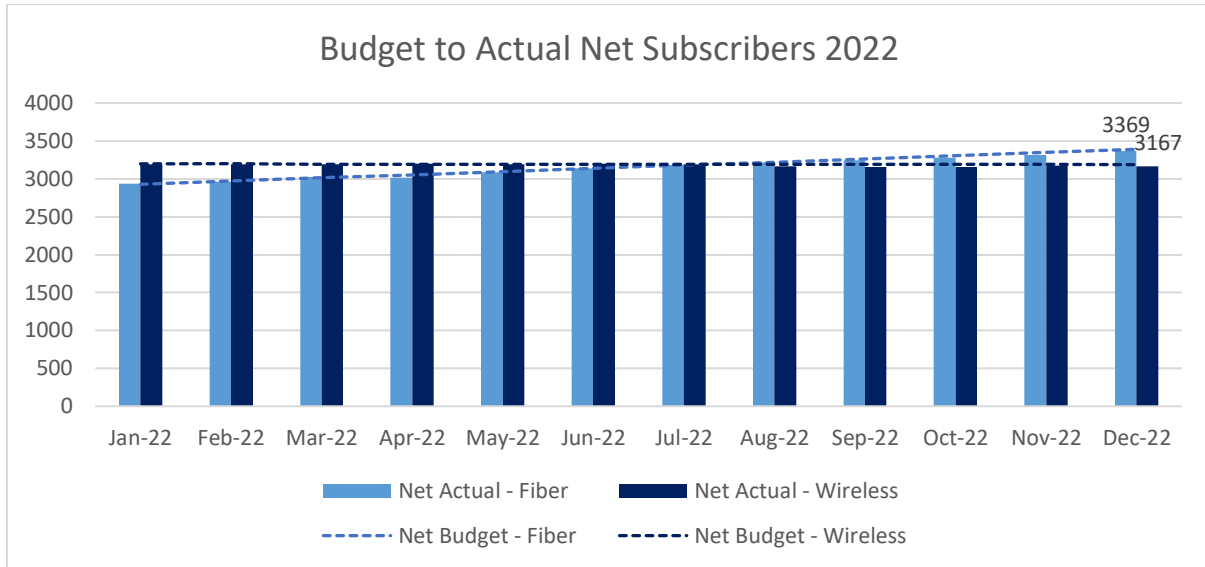
Best,

Foster Hildreth

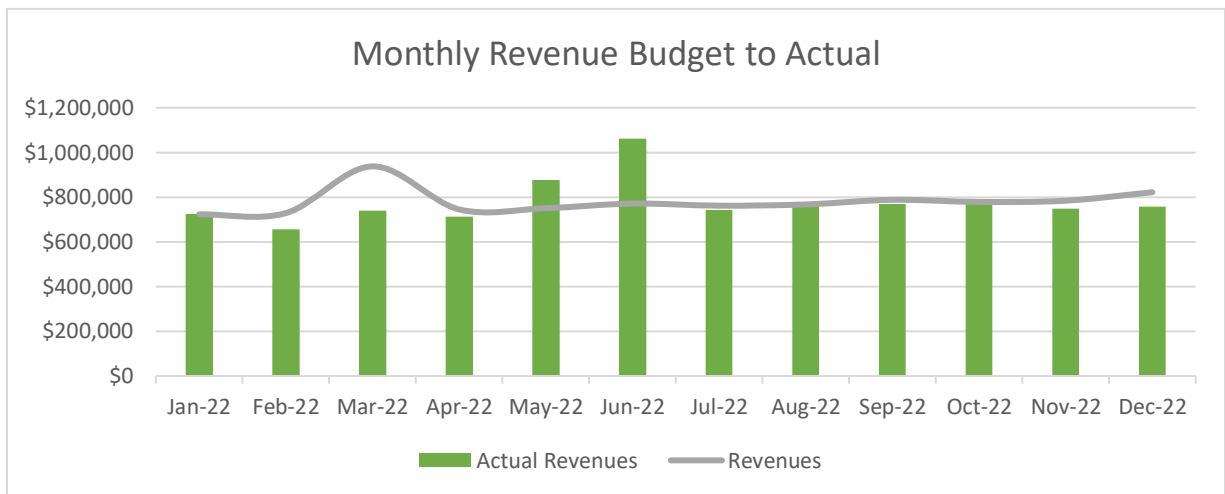
# RIC Snapshot

**6,519 Internet Service Customers**

## Net Subscribers



## Revenues



❖ Previous months revenues are not closed out and are subject to change.

# Appendix

## Related Articles

[https://www.capitalpress.com/opinion/editorials/editorial-a-sobering-outlook-on-the-power-supply/article\\_1e08fcf4-888e-11ed-883b-c3569e323821.html](https://www.capitalpress.com/opinion/editorials/editorial-a-sobering-outlook-on-the-power-supply/article_1e08fcf4-888e-11ed-883b-c3569e323821.html)

Editorial: A sobering outlook on the power supply | Editorials | capitalpress.com

### Editorial: A sobering outlook on the power supply



A non-profit that analyzed the electrical grid questions Oregon's and Washington state's plans for higher demand and lower generation capacity in the coming decade.

Carl Sampson/Capital Press File

As Oregon and Washington set climate policies that simultaneously increase the demand for electricity and reduce supply, a recent report lays out some sobering prospects for the next decade.

The North American Electric Reliability Corporation is a non-profit that oversees the reliability and security of the electric grid in the United States and Canada. The grid connects the continent's generating stations and facilitates the transmission of electricity from where it is produced to where it is needed.

Part of NERC's mission requires that it make regular assessments of the system's adequacy and forecasts demand and capacity. Annually, it makes a 10-year forecast of the system's reliability. Its most recent assessment, released in December, makes for interesting reading.

[https://www.capitalpress.com/opinion/editorials/editorial-a-sobering-outlook-on-the-power-supply/article\\_1e08fcf4-888e-11ed-883b-c3569e323821.html](https://www.capitalpress.com/opinion/editorials/editorial-a-sobering-outlook-on-the-power-supply/article_1e08fcf4-888e-11ed-883b-c3569e323821.html) 1/2



Editorial: A sobering outlook on the power supply | Editorials | capitalpress.com

“The bulk power system is undergoing unprecedented change on a scale and at a speed that challenges the ability to foresee and design for its future state,” said John Moura, NERC’s director of Reliability Assessment and Performance Analysis. “Managing the transformation and proactively preparing for the role that the grid will play is the greatest challenge to reliability over the next 10 years. Our assessment provides valuable insight into the reliability risks facing the bulk power system as it is shaped by government policies, regulations, consumer preferences and economic factors.”

In dispassionate terms, the report lays out how state climate policy is taking coal and natural gas generating stations offline faster than new solar or wind facilities can replace the capacity. NERC says 88 gigawatts of generating capacity is scheduled to be retired over the next 10 years, and as much as 22 additional gigawatts of capacity could be retired in the following five years.

According to the U.S. Department of Energy, it takes 3.125 million solar cells or 333 utility-scale wind turbines to generate 1 gigawatt.

“It is critical that the pace of generator retirements be managed until solutions are in place that can continue to meet energy needs and provide essential reliability services,” the report says.

In the Northwest, NERC expects capacity to fall from 80,562 megawatts in 2023 to 74,611 megawatts in 2032. At the same time, new regulations will increase the number of electric vehicles and furnaces in the region.

“The risk of energy shortfalls from wide-area, long duration heat events are expected to increase. Coal and natural gas generation retirements and lower amounts of hydro availability threaten reliability over the next 10 years. With high reliance on energy transfers, wide-area severe weather poses an increased risk to electricity supplies and transmission network impacts.”

In short, extreme summer and winter weather could reduce locally generated electricity and prevent all-important electricity produced in Montana and Wyoming from being available to offset the shortfall.

Increase demand, reduce capacity. What could go wrong? It looks as though we’ll find out.