



OPALCO

Board of Directors Regular Meeting

Thursday, September 19, 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

Sequence of Events

- OPALCO Board Meeting
- Executive Session



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.

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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 – August 2024

District 1

(San Juan, Pearl, Henry, Brown, Spieden)
 ALEJOS ZAMUDIO, JOSUE & FELIX, GRICELDA
 ARAGON, COREY
 BRANDT, JONATHAN
 CRESWELL, LISA
 DE JONGE, JUDY & DE JONGE, KRIJN
 FUENZALIDA, NICOLE
 GONZALEZ, DOMINGO
 HAENTJENS, MATTHIEU & OWENS, ALAINA
 HILL, RAYMOND
 KEATING, NATASSJA & DOMINGUEZ, CESAR
 KING, JERI
 LAKE EDNA HOA
 LINDSEY, CHRIS & LINDSEY, RANDY
 LOURA, DREW & MOENCH, THEORA
 MAHALKO, DAVID
 MARINKOVICH, MADELINE
 MARRINER, JOHN
 MARTINEZ, ENRIQUE & OTT, HAILEY
 MURPHY, HEATHER & MURPHY, BRANDON
 MURPHY, TIFFANY & KIDWELL, MICHAEL
 ODINHAUS PROPERTI, ES LLC
 RAMSAY, ANDREW
 RUTHERFORD, FRANCIE
 RYAN, GAIL
 SGURR ALASDAIR RE, VOCABLE TRUST
 SOLIS CRUZ, RUBI
 SUMMERHILL, BROOKE

District 2

(Orcas, Armitage, Blakely, Obstruction, Double, Alegria)
 BEARDSLEY, MICHAEL
 BRADEN, DUNCAN
 HANSON, MARK & ERIKA, HANSON
 JOHNSON, TERRY
 LOLLAR, AARON & LOLLAR, MEGAN
 LUNDQUIST, LOREN
 MADISON, CHRIS & JABLONSKI, JEHNEAN
 MEDINA FLORES, ANGELICA
 MONTANO-RAMOS, OSCAR & RODRIGUEZ-RODRIGU, MARIA
 MONTGOMERY, JOHN
 NEVILLE, ASHLEY & NEVILLE, BRIAN
 OAKSEN, ERIK
 OWINGS, GEORGE & OWINGS, MONICA
 PREVIS FANCHER, ASHLEY
 ROSENBERG, ROBIN & SASAKI, DAN

District 3

(Lopez, Center, Decatur, Charles)
 BENTLEY, ADAM & BENTLEY, KRISTEN
 NIELSEN, STEFF
 O'BRIEN, SUELLEN & MCCAULEY, ROBERT
 O'CONNOR, CHLOE & CUNNINGHAM, CALEB
 PLUM, GINGER
 STAFFORD, MARCY
 WALLER, ERICA & BERNERT, DAVE

District 4

(Shaw, Crane, Canoe, Bell)
 RICHARDSON, PETER & HERBOTH, ANNETTE

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:

September	
Customer #	Amount
93609	219.71
Total	\$ 219.71

Staff requests a motion to approve the Consent Agenda.



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

Streaming through Zoom attendees were Board members Vince Dauciunas, Brian Silverstein, Mark Madsen, Tom Osterman, Jerry Whitfield, Chuks Onwuneme and Wendy Hiester. Staff present were General Manager Foster Hildreth; Manager of Engineering and Operations Russell Guerry; Manager of Finance and Member Services Nancy Loomis; Communications Manager Krista Bouchey; Head Accountant Travis Neal; Special Projects Office Coordinator Beth Stanford (serving as recording secretary); and Communications Specialist Johanna Lange. Also present were Legal Counsel Joel Paisner, and consultant Jay Kimball.

Members in attendance: Ron Zee, Charlene Caren and Heather Nicholson

Meeting commenced at 8:30 a.m.

Member Comment Period: No member comments.

ACTION ITEMS

CONSENT AGENDA

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

BOARD OFFICER ELECTIONS

Board members voted electronically, and the vote was tallied by Nancy Loomis, Manager of Finance & Member Services. Results were unanimous support for Vince Dauciunas, Board President; Jerry Whitfield, Vice President; Tom Osterman, Secretary-Treasurer.

DISCUSSION ITEMS

Q2 2024 Financial Report

Staff reviewed Q2 financials including HDD and weather patterns, revenues, ECA actuals, net margin, staffing levels, debt, cash flow and projections.

Bailer Hill Update

Staff provided an update on the continued delays from San Juan County on the Bailer Hill Solar Project; discussion ensued.

REPORTS

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

Regular Session ended: 9:42 am



Break: 9:42-10 am

Executive Session: 10 am – 10:36 am

Meeting Closed: 10:36 am

Vince Dauciunas, President

Tom Osterman, Secretary-Treasurer



Board and Annual Meeting Dates 2025

The 2025 Board and Rock Island Communications (RIC) meetings will continue to be held via Zoom with the exception of the Annual Member Festival. Following a successful two-part Annual Meeting in 2024, which drew approximately 300 members to the in-person event, the staff recommends continuing this format. Staff proposes holding the official Annual Meeting of the Energy members as a virtual event to cover the business portion, including bylaw-required elements, a State of the Co-op address, and election results. Members will be invited to participate via Zoom. This will be followed the next day by an in-person member-focused event featuring informational booths, family-friendly activities, safety demonstrations, and more. Proposed dates are as followed:

- January 16, 2025
- February 20, 2025
- March 20, 2025
- April 24: Annual Meeting
- April 25: Annual Member Festival - San Juan Island
- May 15, 2025
- June 19, 2025
- August 21, 2025
- September 18, 2025
- October 16, 2025
- November 20, 2025
- December 18, 2025

The Annual Meeting date determines the full election timeline pursuant to the Bylaws. More details and full election timeline to follow.

Staff recommends that the Board make a motion to confirm the Annual Meeting date, virtual format and Joel Paisner, OPALCO Legal Counsel, as the Parliamentarian.

RUS Resolution 1-2024

The following resolution is to give Tom Osterman as the OPALCO Secretary/Treasurer the authority to sign for Rural Utilities Services (RUS). Staff is requesting approval of the Secretary Certificate of Authority to Submit or Grant Access to Data: RUS Form 674.



SECRETARY'S CERTIFICATE

I, Tom Osterman do hereby certify that: I am the Secretary of Orcas Power and Light Cooperative (hereinafter the "Corporation;") that the following are true and correct copies of resolutions duly adopted by the Board of Directors of the Corporation at the regular meeting held September 19, 2024, and entered in the minute book of the Corporation; that the meeting was duly and regularly called and held in accordance with the bylaws of the Corporation; and that none of the following resolutions has been rescinded or modified:

RESOLUTIONS

1. RESOLVED that J. Foster Hildreth, the General Manager of the Corporation, be the Certifier on behalf of the Corporation, who shall be responsible for submitting and certifying to the Rural Utilities Service, an agency of the United States Department of Agriculture delivering Rural Development Utilities Programs, any and all data required by RUS Form 674.

2. RESOLVED that J. Foster Hildreth, the General Manager of the Corporation, be the Security Administrator on behalf of the Corporation, who shall give access to the Corporation's data, as appropriate, to other employees, officers, or contractors of the Corporation, for the purpose of complying with RUS Form 674; and

3. RESOLVED that both shall comply with the Instructions for RUS Form 674 in regard to use of the government's data collection system.

I FURTHER CERTIFY THAT each member of the Board of Directors of the Corporation was furnished with notice of said meeting in compliance with the bylaws of the Corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed the seal of the Corporation
this 19th day of September 2024.

Secretary

(Corporate Seal)



IRS Form 990

The draft 2023 IRS Form 990 will be reviewed during Executive Session. The IRS requires the OPALCO Board review and approve the Form 990 filing.

Note, these 990 figures were reviewed in March 2024 during the 2023 year-end review and again in May 2024 during the 2023 Moss Adams audit. The 2023 return is consistent with last year's filings and is based on the 2023 financial statements (including quarterly reviews), which were audited by Moss Adams and approved by the Board of Directors at the May 16, 2024, board meeting. No material adjustments have been made in the compilation of this tax filing.

NRECA has published a useful infographic for how to read a co-op Form 990:

<https://www.electric.coop/990-2/>

Please note that Staff will post Form 990 on OPALCO's website once it is officially filed and is available on the IRS website.

Upon review in executive session, Staff recommends the Board make a motion to approve the submittal of the 2023 Form 990.

DISCUSSION ITEMS

Bailer Hill Update

OPALCO is still waiting for San Juan County to provide us with the Conditional Use Permit Hearing date for the Bailer Hill Community Solar project.

OPALCO has submitted all project information previously requested by San Juan County's Department of Community Development as of July 2, 2024. Staff met with Kyle Dodd, Deputy Director of Community Development and Health and Community Services, on August 1, 2024, to discuss the process moving forward. The Bailer Hill Microgrid Conditional Use Permit Application materials have been transmitted to the Counties Land Use third-party reviewer to process. Staff anticipates another meeting with Kyle Dodd and the third-party reviewer. During our discussion with the County, we expect the meeting with the San Juan County Hearing Examiner to occur in October.

For background information on the Bailer Hill Project check out this Quick Fact: <https://www.opalco.com/quick-fact-bailer-hill-microgrid/2024/01/>.

2025 Rate Study

In preparation for OPALCO's 2025 Cost of Service Study, OPALCO staff is planning on performing a Cost-of-Service Analysis and Rate Design in 2025. Brian Silverstein, Vince Dauciunas, and Staff have prepared a document, available under separate cover, to lay the foundation for the upcoming analysis.

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/>.

- | | |
|---|---|
| <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 • Preparing for Mainland Power Outages |
|---|---|



ENGINEERING, OPERATIONS, AND INFORMATION TECHNOLOGIES

WIP

As of September 11, 2024, there are 333 work orders open totaling \$16.8M. Operations has completed construction on 140 work orders, totaling \$1.5M.

Safety

Northwest Safety Service conducted Pole Top Rescue Training. The total current hours worked without a loss time accident 352,379 hours.

Insurance Inspections

Staff conducted the Federated Annual Inspections of all substations and transmission rights-of-way. The feedback from these inspections was very positive, particularly regarding our work clearing the easements in Roche Harbor. The inspecting team praised our thoroughness and efficiency, noting that our efforts exceeded expectations and ensured the easements are clear, functional and safe. This demonstrates our strong commitment to community safety.

Jackson Beach Transmission Pole Relocation Project

The Operations Team has a final design for relocating the poles off Jackson Beach on San Juan Island. San Juan County is undertaking a salmon recovery project, and eight poles need to be relocated off the shoreline to the roadside. This will give OPALCO better access to the poles in emergency situations and less Right-of-Way clearing. Construction is likely to start in October.

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	Submitted in April 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
Advanced Cybersecurity Technology (ACT) 1 Prize	DOE	OPALCO Cybersecurity Initiative-	\$50k	\$50k	Determination in Q1 2024

FINANCE

2024 Budget Tracking

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

Income Statement Summary (in thousands)	2024 Projection (actuals for prior months)		
	Budget	Projected	Variance
Operating Revenue	\$ 37,407	\$ 39,165	\$ 1,758
ECA Surcharge / (Credit)*	\$ -	\$ 58	\$ 58
Revenue	\$ 37,407	\$ 39,223	\$ 1,816
Expenses:			
Cost of Purchased Power	\$ 9,159	\$ 9,246	\$ 87
Transmission & Distribution Expense	9,735	9,339	(396)
General & Administrative Expense	7,087	6,570	(517)
Depreciation, Tax, Interest & Other	9,313	9,462	149
Total Expenses	35,294	34,617	(677)
Operating Margin	2,113	4,606	2,493
Non-op margin	673	765	92
Net Margin*	2,786	\$ 5,371	2,585
OTIER	1.99	3.24	1.25
TIER	2.30	3.61	1.31
Equity %	40.3%	41.4%	1.2%
HDD	1,029	959	(70)
kWh Purchases	219,000	228,501	9,501
kWh Sales	208,000	217,654	9,654

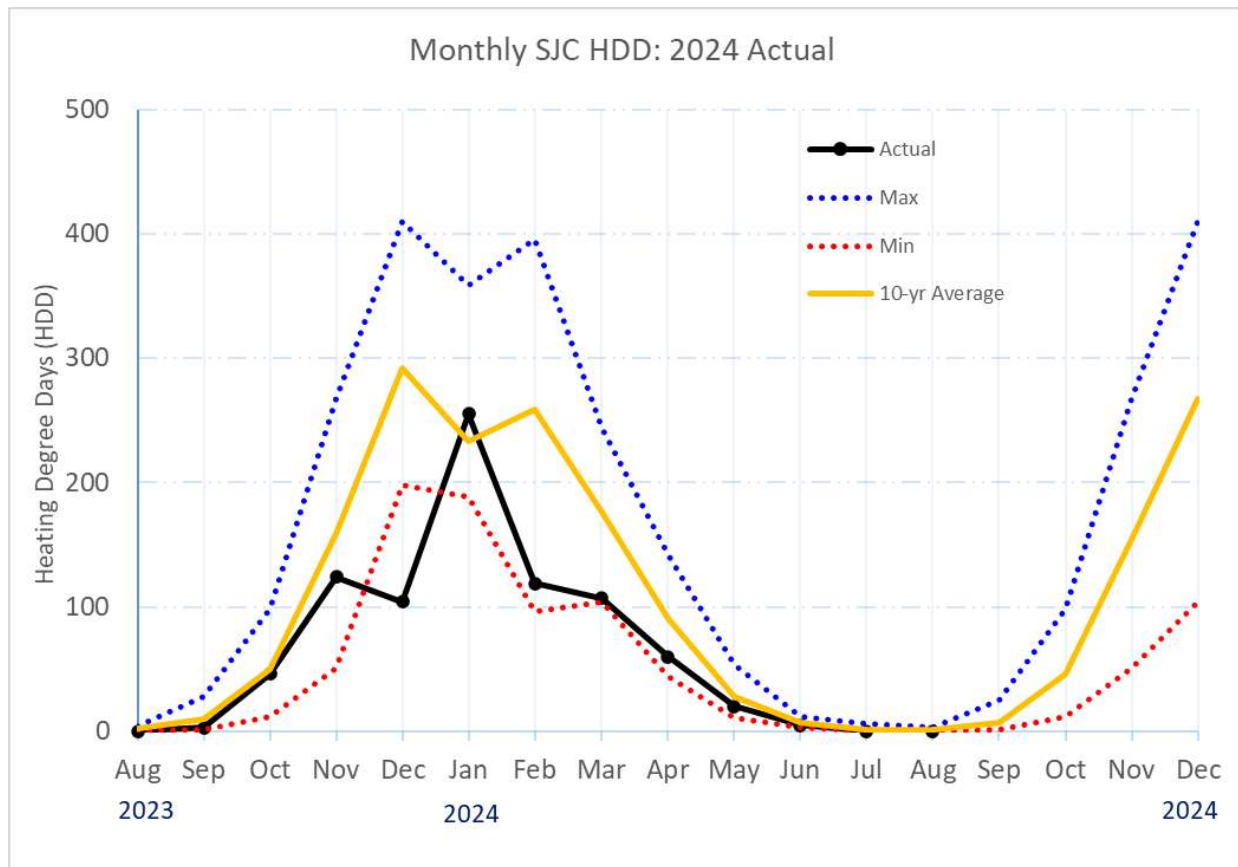
* The ECA collected a net \$58k from members through August 2024.

Monthly Energy Charge Adjustment (ECA)

The August 2024 ECA returned \$6,821 to members, or \$0.55 per 1,000 kWh. The September billing period ECA is projected to be a bill credit of \$(.004328) per kWh on member bills, or \$4.33 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 year-end 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 February through August 2024. We are anticipating a warmer trend (El Niño) for the remainder of summer & cooling to a La Nina trend as we come into the winter months. We continue to monitor weather trends monthly.

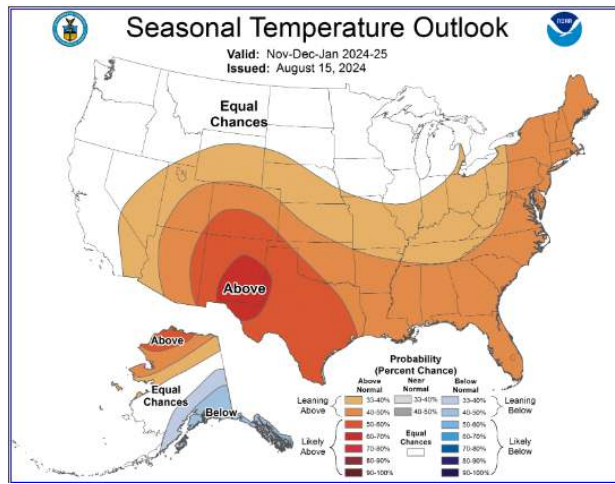


*max, min, avg is based on 10 year average

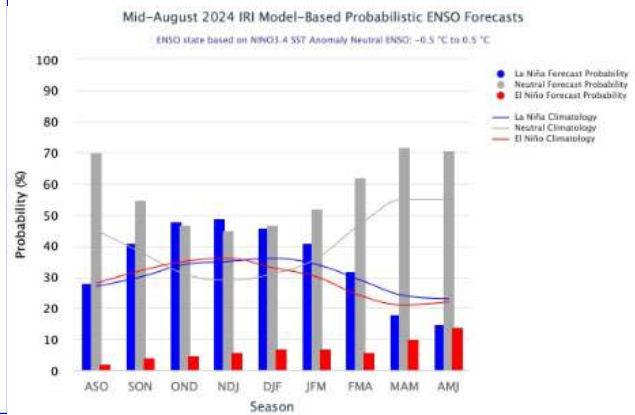
Weather Forecast

Looking ahead to the NOAA 'three-month outlook temperature probability' for Nov-Dec-Jan '24-'25, the outlook is currently showing mild La Nina temperature conditions in our region in the upcoming winter season. The models in the International Research Institutes' (IRI) ENSO (weather) prediction forecast a shift to a La Niña condition through summer and continuing into the fall and upcoming winter. We continue to monitor these predictors monthly.

2024 Nov-Dec-Jan 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	477	1,166
	Total Assistance	111,996	135,595	158,434	158,740	156,761	141,748	109,868	973,142
PAL	# of Accounts	212	205	329	363	297	268	150	857
	Total Assistance	45,155	53,137	80,975	104,880	82,912	80,500	37,750	485,310
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	504	1,498
	Total Assistance	157,151	188,732	349,283	390,659	270,018	222,248	147,618	1,725,710

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. 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 August 2024, 275 members received ~ \$11.7k from the low-income Energy Assist program, compared to 229 members who received ~ \$9.2k in assistance in August 2023.

Project Pal: Project PAL award season will resume in November 2024.



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

WA Department of Commerce (DOC) Clean Energy Credits for Washington Families Grant Program: During August 2024, 655 Members received ~ \$131k from the Washington Families Clean Energy Credit. The program to date has distributed \$319.6k to 1,598 members. The program will end on September 15th.

Switch it Up!

OPALCO can utilize \$46.8M in Rural Energy Savings Program (RESP) funds to provide on-bill financing for co-op members for energy efficiency measures. OPALCO is reimbursed for the funds once member measures are installed. There are now 794 projects completed and billing for a total of \$14.4M net outstanding (total projects less member pay-offs). There are another 40+ projects in various stages of the process. Current project details are as follows:

Measure	Project Origination Year						Grand Total
	2019	2020	2021	2022	2023	2024	
Appliance					36,112	28,480.29	\$ 64,592
Energy Storage				39,510	8,204	43,236.96	\$ 90,950
Ductless Heat Pump	648,252	620,060	641,765	1,571,737	1,781,049	1,365,192.00	\$ 6,628,054
EV Charger						27,455.76	\$ 27,456
Fiber		30,725	48,681	29,301	41,929	54,054.30	\$ 204,690
Ducted Heat Pump	8,119	30,000	15,000	18,127	956,159	313,254.00	\$ 1,340,660
Heat Pump Water Heater	13,985	9,805		5,012	15,701	6,021.56	\$ 50,525
Insulation				256,935	42,634	135,510.72	\$ 435,080
Other	14,543			92,649	188,075	1,500.00	\$ 296,768
Solar + Storage				480,057	425,011	200,817.24	\$ 1,105,884
Solar				1,897,659	2,678,908	1,151,843.13	\$ 5,728,410
Windows				563,557	437,569	316,362.85	\$ 1,317,489
Grand Total	\$ 684,900	\$ 690,589	\$ 705,446	\$ 4,954,544	\$ 6,611,350	\$ 3,643,729	\$ 17,290,557

Energy Savings

During August there were a total of 22 rebates paid out to members totaling ~\$31.3k. This includes four fuel switching ductless heat pump rebates and seven 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 Rebates*	# of Accounts	442	303	147	210	261	142	1,505
	Total Awards	\$228,418	\$167,432	\$149,886	\$227,622	\$313,945	\$165,057	\$1,252,360
	Total Energy Savings (annual kWh)	733,432	783,431	359,269	346,900	440,382	152,577	2,815,991

**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.*

Solar Programs

Interconnects

There were 15 new interconnect applications submitted during August, with 11 members interconnected with solar for a total of 800. There are an additional 43 members pending connections. (<https://energysavings.opalco.com/member-generated-power/>).

Community Solar

- 1) During the month of August 2024 billing cycles, the [Decatur Community Solar](#) array produced 80,800 kWh. A total of ~\$8,113 was distributed to 263 accounts during August.
- 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 Comm Solar	# of Accounts		265	268	262	264	263	
	Total Payments		\$93,734	\$95,497	\$84,658	\$86,983	\$37,868	\$398,740
WA State Incentives*	# of Accounts	256	259	58	57	59	0	689
	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
	Total Payments	\$53,109	\$51,897	\$50,896	\$123,477	\$0	\$0	\$279,379

*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 interest died out. The program ended September 30, 2022, with a final payout of all program dollars that remained.

COMMUNICATIONS

Island Way Workshop: Tidal Generation Project

The tidal generation workshop on August 27 was well attended with 120 registered and 64 in attendance. The OPALCO team had a slide presentation and then had a question-and-answer session. The questions addressed during the session included requests for clarification on the project timeline, inquiries about Tribal engagement, concerns regarding the safety of marine life, and an assessment of the financial feasibility of the Tidal Project. All questions submitted were answered – see appendix. The recording and the presentation can be found in the Tidal Generation Quick Fact that has all of the latest information available to OPALCO members.

Resource Fair

On September 3, the OPALCO team went to the Orcas Island School Resource Fair to promote OPALCO programs and get people to sign up for the state energy credits.

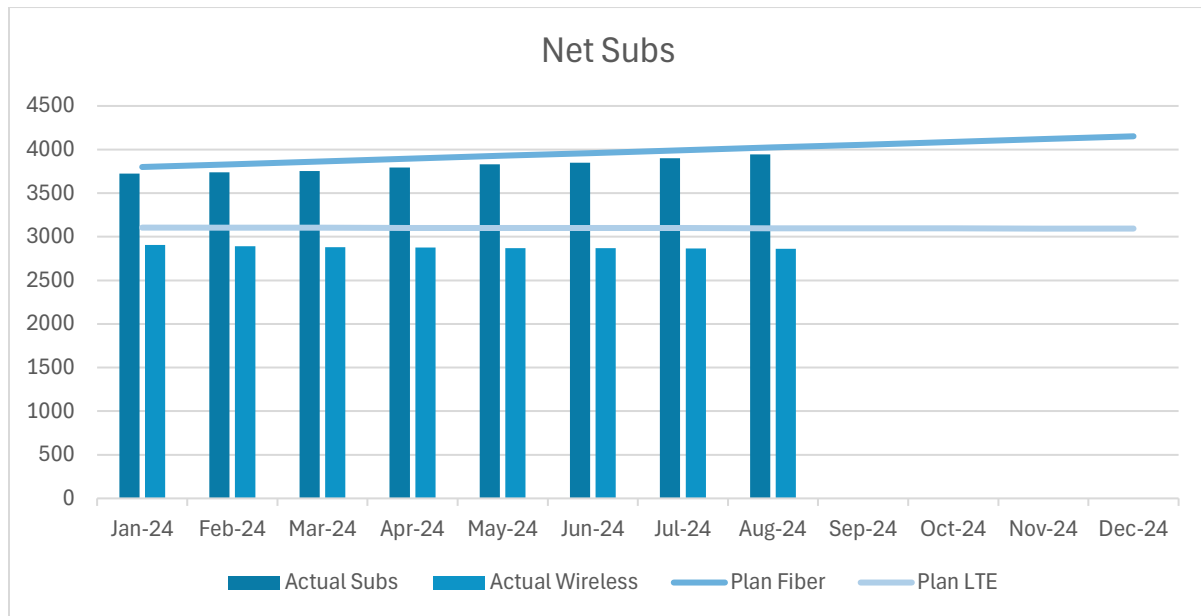


Rock Island Snapshot

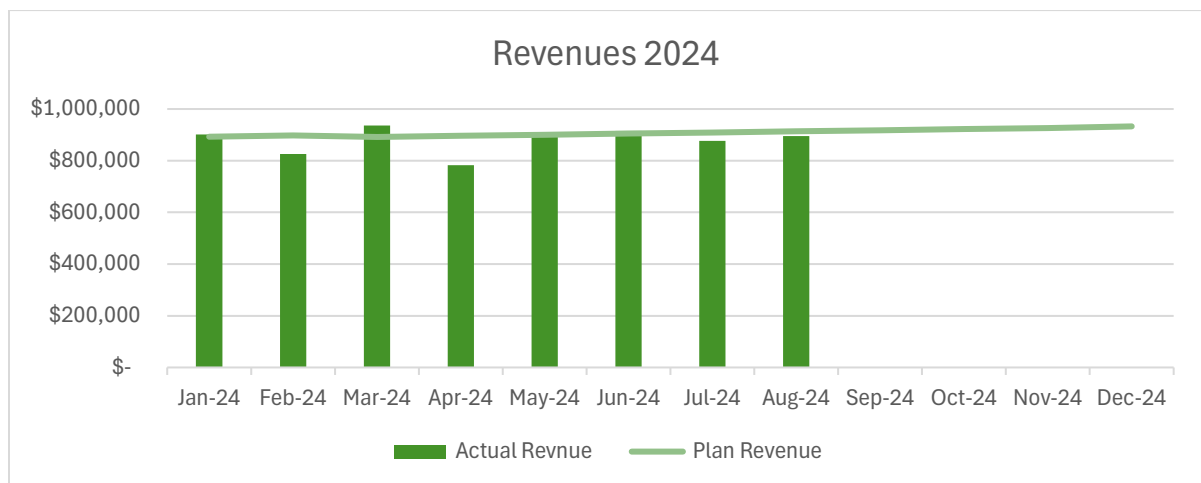
6,735 Internet Service Customers

Net Subscribers

8/31/2024



Revenues



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

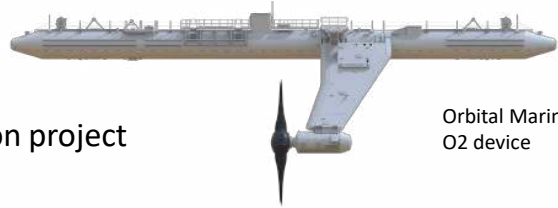
Appendix



Pilot Tidal Energy Project
August 2024

DEPARTMENT OF ENERGY (DOE) PHASE 1 FUNDING-FEASIBILITY

- FERC Pilot Project
- Floating stream tidal generation project
- ~2MW Peak Output
- ~5GWh of annual generation
- Current grant is for feasibility of project and is competitive
- Successful projects will move into Phase 2 funding after 12 months



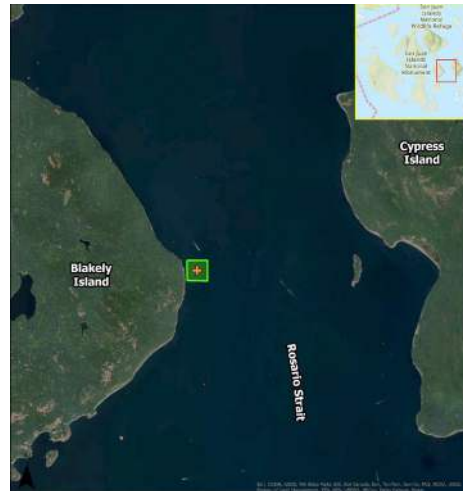
Orbital Marine
O2 device

Proposed Technology

- O2 device: Orkney Islands, Scotland
 - In water since 2021
- Dimensions (current design)
 - Total Length – 243ft
 - Total Width – 194ft
 - Main Tube Width – 13ft
 - Blades – 65ft Diameter
 - Average 8.5 RPM
 - Anchored at four points
 - Drilled/bolted to rocks or gravity anchors



Proposed Site



Why this location

Pre-existing infrastructure

- Existing conduits available at south end of Blakely Island

Lower local abundance of sensitive species such as:

- SRKW (orca)
- Humpback whale
- Rockfish species
- Salmonids



Location Table

San Juan Islands Channels	Maximum Tidal Energy at Spring Tide (m/s)	Minimum Tidal Energy at Neap Tide (m/s)	Existing Infrastructure	Ferry Route	Navigation Route	Endangered Species Presence and Abundance	Critical Habitats	Protected Marine Mammals Presence	Essential Fish Habitats	Seabirds Presence and Abundance
Spieden Channel	2.55	1.37		Yes	Major route	Southern Resident Killer Whale (SRKW) ++ Humpback Whale (HW) ++ Bocaccio (B) ++	All four channels have critical habitat for: Southern Resident Killer Whale	All species*	All four channels have essential fish habitat for: CPS Pacific Coast Salmon	All species** ++
San Juan Channel	2.61	1.15	Conduit Subsea cable Ferry terminal	Yes	Small vessels only	SRKW + HW + B ++	Bocaccio Yelloweye Rockfish			All species** +
Rosario Strait	3.14	1.80	Conduit	Ferry crosses very southern tip only	Secondary route	SRKW + HW + B +	Chinook Salmon		Pacific Coast Groundfish	All species** ++
Middle Channel	3.28	1.62		No	Secondary route	SRKW ++ HW ++ B +	Middle channel also has critical habitat for: Green Sturgeon			All species** +

Most desirable
 Moderately desirable
 Least desirable

* Southern resident killer whale, humpback whale, gray whale, short-finned pilot whale, California sea lion, harbor porpoise, harbor seal, Steller sea lion, northern elephant seal, minke whale, Dall's porpoise
 ** Pinnipeds: auklet, mottled sculpin, tufted puffin, pigeon guillemot, pelagic cormorant, double-crested cormorant, common murre
 + Moderate abundance
 ++ High abundance

Process & Timeline

February 2024:

DOE Award Notification

March – Aug 2024:

Permitting to assess the site

- This will let us deploy environmental monitoring devices at the proposed site this will include mapping the sea floor, assessing the tidal flow, monitoring tagged fish going through the area, and measuring underwater noise levels

Process & Timeline

Aug – Oct 2024: **Pacific Northwest National Lab
Environmental Risk Register**

- Resource for independent/objective analysis
- Review existing studies and project data
- Help prioritize key environmental issues

April 1, 2025: **Submit Draft License Application to FERC**

May 2025: **Complete Phase 1 Grant**

External Engagement

Outreach to the following groups:

- Local, state, and federal agencies
- Tribal Sovereign Nations
- Local Stakeholders
- OPALCO members



Key Milestones

- Ongoing Community Outreach
- Site Environmental Studies
- Environmental Risk Register
- Draft License Application to FERC
- Complete Feasibility



August 27 Island Way Workshop Member Questions & Answers

If the project reports are due in April, is that sufficient to track and monitor SRKW and salmon movement which happens probably more in the summer?

The reports due in April are an accumulation of the science to date and a compilation of site data. If this project continues, there will be a next stage of monitoring.

Which agencies are the permitting agencies?

For this current process we are working towards a Draft License Application with the Federal Energy Regulatory Commission (FERC). If the project moves forward there would be additional permitting required and would be addressed with various agencies at that time.

Why do you believe it is feasible to place these in a critical habitat of southern residents, which are endangered because of habitat degradation?

We are in the process of conducting feasibility studies to determine the environmental impacts of the device. We chose this location based on a study by PNNL that stated there was less marine mammal traffic than some of the other local locations.

Will there be a report on how much internal time and money is spent on this and a comparison of what OPALCO would have been using that time for otherwise?

OPALCO maintains full transparency regarding operational expenses. We are dedicated to employing staff whose primary responsibility is to ensure reliable service and keep the lights on for our members. The full cost of the project is still being determined. OPALCO only plans to move forward with the



project if it is financially feasible and doesn't affect OPALCO member rates. We would need to get grant funding for this project to move forward.

Has this type of system been in operation long enough to determine real world maintenance costs?

Maintenance costs for this project are still being determined.

Is there research we can read on wildlife impact from the Scotland installation? How does the power connect to the transmission infrastructure?

Orbital Marine Power has an article called "[Orbital's Commitment to Restoring our Oceans](#)" where you can read about some of their wildlife impact studies.

If licensed, the project would include one floating tidal turbine, one submarine cable, and connect to OPALCO's distribution system via a preexisting marine shoreline conduit that attaches to an existing land-based shoreline conduit facility on the end of Blakely Island.

Preliminary Economic Assessment estimates cost to OPALCO for Tidal Energy \$40 million from 2024-2027. Where does this \$ come from? What is the projected rate of return?

The full cost of this project is still being determined. OPALCO only plans to move forward with the project if it is financially feasible and doesn't affect OPALCO member rates. This is a competitive grant through the Department of Energy for \$3M. Based on the outcomes of the yearlong grant, our project could be selected to receive more grant funds and advance to the next phases. It will provide 5GWh of annual generation serving approximately 400 homes based on annual average usage in San Juan County.

Has consultation with tribes already begun, and if not why not?

Yes. Engagement and collaboration with the Tribal Nations are a key aspect of project development. The Tribal Nations with ancestral lands in the San Juan Islands have strong spiritual and cultural ties to salmon and other aquatic species in the region that includes thousands of years of access and use for religious/cultural ceremonies, subsistence, and for commercial purposes. The proposed project would be in the Usual and Accustomed (U&A) fishing area for the region's Tribal Nations who were signatory to the Treaty of Point Elliott. The team is meeting with these Tribal Nations to get feedback and share information throughout the project. There will be other opportunities through FERC for the Tribal Nations to give official comment on the project. We started our outreach to Tribal Nations over 2 years ago and are continuing with these throughout the duration of the DOE/FERC process. It started with initial outreach to the Tribal Chairpersons from the Tribes we regularly consult based on our state, local, and federal agency recommendations. We have expanded our outreach to include the fisheries, environmental, and cultural departments and preservation officers as recommended by the Tribal Nations. We have strived for early engagement and an inclusive approach based on working with each Tribal Nation to determine how best to engage them throughout this process. To date we have had 10 meetings with the Tribal Nations and additional meetings are scheduled over the next month.

Has a consultation to orca experts begun?



We have done initial engagement with the National Marine Fishery Service. This is the group we are required to work with because Orca Whales are in the area. They will dictate what studies we need to do and who we will need to consult. This is all mandated by the Marine Mammal Protection Act and the Endangered Species Act.

You stated that tidal power is mostly needed in the winter when solar isn't as effective. Can the O2 operations be temporarily halted or scaled back during e.g. peak wildlife migration periods?

We have yet to determine the logistics of the project and what would be needed to make this project feasible for the local wildlife. These kinds of details are being looked at in the grant.

Does OPALCO already have the needed grid to upload the energy you hope the unit provides?

One of the positives for this project and the location is the existing infrastructure on Blakely Island that can feed the power onto our grid.

There's a Compliance Methodology study. Requests for it haven't been answered. Will you make it available?

We are also trying to get access to this study from PNNL. As soon as we have access to it, we will make it available.

The tidal plant would supply only 8.3 days worth of power for the whole year. How does that really help?

The energy world is changing dramatically due to climate impacts, carbon reduction legislation, and the transition toward renewable power. Our dilemma is figuring out how to satisfy increased demand for electricity while our supply of carbon-free firm power is shrinking. As more coal plants shutdown and are replaced with intermittent resources (solar and wind), energy blackouts are predicted. We need reliable power when the sun isn't shining, and the wind isn't blowing. As impacts of climate change and legislation drive up the costs of green power, OPALCO is committed to exploring local, renewable energy sources. With water being 836 times the density of air, a smaller tidal turbine can produce much more power than a wind turbine. While solar is minimal in the winter, tidal power is strong and predictable year-round, but more importantly, it can be firmed with a small fraction of the storage solar or wind would require. Each tidal generator generates more energy than all the rooftop solar currently in the county. We need to start somewhere – this will by no means solve the problem, but it could be a first step.

Since you are using grant money mostly for labor costs right now, does OPALCO benefit regardless of whether you get the grant/project?

The OPALCO team feels it is critical to explore local renewable energy projects as blackouts in the region are becoming more and more likely. OPALCO is only committed to moving forward if the project is financially feasible.

What reactions/comments/questions have the tribes posed?



We are not at a stage where Tribal Nations have formally commented or expressed their support. Since we are still in the feasibility phase of the project, we are still gathering and sharing information and helping define what should be studied. To date, the Tribal nations have been responsive and engaged and have been great to work with. We will be sharing all information that is studied with the Tribal Nations.

If this project is granted and goes forth and works, has there been any thought given to expanding OPALCO tidal power, or is the 2MW unit visualized upper limit?

Since this is a pilot project it is too early to comment on the possibilities. We need to thoroughly study and explore feasibility before making those kinds of plans.

What Foster mentioned about BPA power doubling or tripling, that's regarding Tier 2 not our main supply of Tier 1. There is uncertainty on what Tier 2 will get to and is pretty much market. Could Foster make sure people understand this isn't about our main BPA power?

The hydro system is maxxed out, so as load increases, it comes from new resources, imported, or yet to be built. Estimates show that will be much more expensive than Hydro. Tier 2 cost has been increasing exponentially, with growing demand and shut down of coal power. Estimates are that the region will see dramatic price spikes, especially during summer heat domes and winter cold snaps as the Tier 2 share of energy delivered increases. OPALCO Tier 1 allocation is a fixed amount. New load beyond that allocation is charged at Tier 2.

If the peak output of the generator is 2MW, it seems that we will see roughly 2 peaks per day, with 2 periods of zero output, and a mean output of 1MW. You mentioned battery, which I assume would be to fill in the valleys, giving roughly a 1 MW output for the system. Does that make sense? And about pumped water battery systems, what is the cycle efficiency of pumped water?

Since this pilot project is still in the feasibility phases, the details of types of battery or if battery storage is needed is too early to comment on. We don't anticipate that this project would replace our mainland power supply – which we could always use to balance the ups and downs of the tidal generation.

Tidal is some of the most expensive power to produce. Couldn't battery get subsidized as well?

Tidal is expensive, in the same way that wind and solar were expensive in the early days. Tidal energy is an emerging innovation, and the price per kWh will likely follow a similar decrease as production scales up. For a good example, wind power cost improved exponentially when California embraced wind power 25 years ago. OPALCO has received grants for battery storage which is a valuable asset for power storage. OPALCO is still interested in exploring power generation assets as well.

How would battery be compared to tidal?

A battery stores energy. It doesn't produce energy. Solar, wind and tidal generate energy, which can be used real time or stored in a battery for later use, when the wind doesn't blow, the sun doesn't shine, or tide doesn't flow. Because tidal energy is predictable and regular, it works year-round, night and day, and requires about 12X less battery storage to firm it, compared to solar.



Who else is competing for the grant?

This information can be found [at this link](#).

Who is going to do these studies? What are their qualifications for doing environmental studies?

OPALCO is working with a team of consultants who specialize in marine environmental issues. Through our grant we will have access to the best available science through the Pacific Northwest National Lab.

What is the carbon footprint to manufacture these turbines, transport them, and maintain them?

These types of details are still being investigated for this project. This is a pilot project still in feasibility phase so there are still a lot of unknowns that OPALCO is studying. Information will be published as it becomes available.

How much of the Northwest power load is consumed by Data Centers?

Data center load information can be found in [State of Data Centers in the Northwest Load Forecast 2022-2030](#).

Further Reading on Data Center Load:

- [Seattle Times](#) “Data centers guzzle power, threatening WA’s clean energy push” July 28, 2024
- NWPCC [Pacific Northwest Power Supply Adequacy Assessment for 2029](#)

Over the next five years across the Pacific Northwest, **significant load growth and changing system dynamics are creating risks for maintaining power system adequacy**. If **data center load** growth accelerates and more closely aligns with utility projections in the region by 2029, the resource strategy will ... be insufficient to maintain adequacy.

Data center and chip fabrication loads (tech loads) are projected to be a driver of load growth in the Northwest. There is substantial uncertainty regarding how much load they will bring to the region.

How would this tidal hydro project compare with a couple of 2-4 MW wind turbines on top of Mount Constitution?

While Tidal and Solar produce approximately the same annual output and average value, tidal is less variable over both short and seasonal time periods. For a given amount of battery storage (1x), Solar requires 9.3 times as much battery for equivalent firming. And battery storage is much more expensive on a MWh basis than the generation itself.

Wind analysis shows performance as significantly worse than tidal or solar in San Juan County.