OPALCO's mission is to provide safe, reliable, sustainable, and cost-effective essential utility services with a commitment to the utilization of renewable resources and carbon reduction. How does this mission align with your vision for the cooperative and community?

My vision is closely aligned with our mission statement which is to provide safe and reliable power to our members. That is our first job as a director. We need to fulfil this mission as affordably as we can, given the rising cost of power, and control our costs. Within this framework, we must work to improve resilience, sustainability, and create local, renewable generation. We need to do all this while encouraging efficiency and moving away from fossil fuels by helping members switch to EVs and adopt heat pumps.

All elements of our mission are important, but they build on each other, starting from a foundation of safety and reliability. Our continued emphasis on Microgrid deployment should continue given the success of the Decatur Island project. I believe that Microgrid implementation with energy storage is one step that will assist with improving resiliency and local grid back-up and load allocation during emergencies. This approach however is not sufficient for a significant amount of load support in the interim (we are still dependent upon BPA provision of the majority of customer electrical load supply).

The region is in a period of major energy transformation away from carbon-emitting sources.

o Where will OPALCO get the capital to invest in required system upgrades and local renewable generators to keep the islands supplied with reliable power during the transition?

We as a relatively small rural co-op must continue to secure Grants and low interest loans that exist currently at the Federal and State level. There is a growing recognition by the government of the importance of replacing and improving current infrastructures, especially in rural areas, and we need to be very proactive in seeking out government funding, grants, and collaborations to become a leader in resilient, community-focused energy programs.

We have had recent success with the grant process, such as the Washington State Department of Commerce grant for San Juan Microgrid, partnering with the Pacific Northwest National Laboratory, and a Washington State Grid Modernization Grant, to study new renewable generation technologies. We should continue to explore opportunities to partner with San Juan County for those grants which are open to joint applications.

o How should OPALCO maintain affordability for all members while complying with legislation for decarbonization?

The cost of power is getting more expensive, so our job is to keep member power bills as affordable as possible. We do this by controlling expenses and the cost of service, building local generation and battery storage so that we are not always paying large peak charges for mainland power, and helping members move towards more efficient power consumption with the Switch It Up and on-bill financing programs. Adding a heat pump can lower member's bill while providing the same heating at home, for example.

Finally, we have very strong programs for assisting low-income members with power and internet bills. Our current plan includes an aggressive goal for dramatically increasing the percentage of locally generated power coupled with energy storage. In addition, new load growth driven by de-carbonization and shift to electrification will put additional pressure on load reduction efforts in existing homes/businesses with older technology via energy efficiency improvements. We must continue to maintain and improve resiliency and reliability with local energy storage distributed across the local grid. There will always be new challenges to our power system, and we must rise to those challenges – and at the same time improve environmental stewardship.

Solar power requires a lot of sunny land for solar arrays. Existing county land use codes favor preserving local rural character over solar generators on open land. How do you think about these potentially conflicting approaches to land use?

Preserving the character of our islands doesn't mean we can't have infrastructure. There are great examples of solar installations that co-exist with animal grazing and other agricultural activities. Solar arrays need to be built in ways that blend in well with the landscape, but we need to change our thinking about how solar power interacts with "rural character." Well placed solar power will help us keep density low, agricultural activities sustainable, preserve open space, and give us the local renewable power we need. We can design systems that don't conflict. For example, we can provide both environmentally friendly power and help local farms with an additional source of income to ensure that our farmland is not lost forever.

OPALCO depends on hydropower from the mainland for more than 84% of its total power supply. How important is hydropower in your vision for a future energy supply in the islands?

Hydropower is crucial to our lives here in the islands. It is a significant issue in terms of providing the majority of BPA grid-source energy and with consistency and stability as opposed to the solar and wind source variability. With the pressure to reduce hydropower capacity (dam removals) and other western states expecting to utilize more Pacific Northwest hydro power to meet their energy plans, there will be increased pressure to increase percentage of renewables such as wind and solar along with increasing electrification. These competing forces will impact other sources of firm predictable power and will keep the electrical grid stable and reliable and provide the bulk of the capacity we need. It is simply not possible to meet our entire demand locally. Hydropower is a limited resource, though, so it must be augmented with other renewable resources, both at large scale where appropriate (e.g., solar and wind in Eastern

Washington), locally in the form of individual member-owned solar, cooperatively owned community solar arrays, and carefully selected sites for tidal power production.

It's estimated that OPALCO's load growth will double between now and 2050 due to the electrification of heating and transportation.

Where should this new energy come from?

Local generation in the form of solar plus storage should be considered to the extent that it is economically viable and acceptable to the community. Tidal generation may be promising, as there are favorable locations in the waters around San Juan County, and the variability and predictability are better than solar. In the long term, OPALCO would benefit from a new undersea cable extending to the Northeast from Orcas Island which may allow for power purchases from BP Hydro or Powerex, British Columbia power agencies, whose power is nearly 100% renewable.

Where should new renewable projects be located?

Community solar arrays should be located at sites with good exposure and proximity to substations, but we need to work with the County, neighbors, and landowners to make sure that projects are built in a way that is sensitive to the needs of each site. Tidal power will require a site on land to bring cables ashore and tie into transmission adjacent to the underwater tidal locations. As we demonstrate with existing undersea cables, this can be done in a sensitive manner, if the sites can be found. But doing this will require us to come together as a community and make land use for renewable energy a priority.

Who pays for it?

We as a co-op all pay for it, but we do so in many ways – not just in the electrical rates. We do as much as possible using grants, especially in the initial stages of a renewable project.

OPALCO has a very strong track record obtaining grants to drive our renewable generation projects; community solar and our tidal power planning have all been supported by grants. But ultimately, we must build infrastructure. To build, we rely on ultra-low interest federal loans, which allow us to pay for the infrastructure we need over the decades, rather than all at once. Members themselves also invest in solar, batteries, and energy efficiency, and every bit of that investment is also part of "how we pay for it all." We are all in this together.

OPALCO's current rate structure collects almost half of the revenue to cover fixed costs through the kWh (energy use) charge. As we become more energy efficient and embrace more renewable energy, OPALCO won't collect enough kWh revenue to cover fixed costs. How would you address this rate structure dilemma?

The current rate structure generates ~25% of total revenue from fixed fees, and ~75% from the power sales. This is typical of many electric utilities. This presents a bigger challenge going forward, as the volatility in the price of mainland energy is expected to increase as intermittent renewables become an ever-larger portion of the total energy market. We need to continue to separate the basic cost of providing service – which all members would pay – from the variable amount each person pays based on what they use (or produce!). Doing so all at once is tough for everyone, so the best approach is to move towards a better division of fixed versus variable costs over several cycles of rate adjustments, along with plenty of discussion in the community about the long-term benefits of moving to a better way to structure how we pay for energy. A few of the concepts we are exploring are:

- **Tiered** (or step): rate changes with the amount of use (some go up to encourage energy conservation, others go down to encourage electric use for GHG reduction).
- Time of Use (TOU): different rate depending on the time of day.
- **Demand Rates**: based on the peak demand for electricity a consumer uses over some time period.
- **Tiered within TOU**: different rates depending on how much they use at a specific time of day.
- **Seasonal Rates**: charged for those that do not use their facilities year-round (e.g., a cottage).

What role should the Co-op play in state and regional public power affairs? How do you see OPALCO influencing public policy and elected officials?

We are responsible for complying with energy legislation, it is important that OPALCO share its knowledge and experience with those who are drafting legislation and regulations. The mandates in CETA (Comprehensive Energy Transition Act), CCA (Climate Commitment Act), and others pose significant challenges for utilities in terms of timetables, costs, and other factors.

OPALCO has established good relationships with our State Senator and House Representatives. Membership in PNGC allows OPALCO to join with 15 other Pacific Northwest Cooperatives in making our views known at the State and National level. Building consensus for energy policies with other Cooperatives, and the Public Power community (Public Utility Districts) is important.

The high cost of living in the islands (especially housing) and a very competitive labor pool in the industry has made it challenging to hire and retain staff. What ideas can you offer for hiring and retention of qualified employees?

The affordable housing challenge for all San Juan County affects us all. Currently the County Council is exploring creating a permanent, local funding source to complement federal, state, and private funds, and performing "other related powers and duties." It will be important to follow this work and evaluate the recommendations.

I would be interested in exploring building a small development of employee housing that concentrates housing into a portion of available land, while preserving a portion of the land for open space uses, such as conservation, recreation, or agriculture. There are several bills concerning improving the ability to permit and build ADU's (Accessory Dwelling Units) being considered in the state legislature. These dwellings could serve as temporary housing for new hires until such time as rental or permanent housing became available.

ROCK ISLAND:

1. How important is access to communication technology throughout San Juan County?

Today, internet access is almost essential for day-to-day living. Mobile, or cell phones, are used by 72% of the population in the United States. The United States has made universal internet access a goal. The Washington State Broadband office goals are among the most aggressive in the nation. Like electricity a century ago, broadband is a foundation for economic growth, job creation, global competitiveness, and a better way of life. Rock Island has given our county a leap of progress in preparing our grid for the future of balancing more member devices on the system, more local distributed power, as we move forward members will take control of their energy usage, local generation and storage.

2. Rock Island provides internet connections to nearly 50% of the OPALCO membership. How should Rock Island and OPALCO prioritize reaching the balance of the membership with access to broadband?

We need to continue to organize groups of homeowners to share costs, which allow for rapid initial deployment of fiber connections, and spread the "middle mile" burden among all. Secondly, grant money is available, to expand the "middle mile" fiber network into areas where there may be the desire for a connection where there is no organization such as a Homeowners Association to facilitate cost sharing. We need to continue to look for grant opportunities that specifically target assistance to Low Income users. The Washington State Broadband Office administers a number of these programs.

3. Who should pay for the cost of internet connections?

The Washington State Broadband Office (WSBO) "estimates it will take at least \$3 billion to achieve Washington's 2024 and 2028 goals. This huge effort cannot be achieved without federal funding. We will require some combination of Federal and State funding, and cooperation with San Juan County. Rock Island and OPALCO are actively seeking those grants which are being made available, especially ones targeted at rural areas, and Electric Cooperatives.

As Rock Island's profitability increases, it will be possible to continue investing and expand the "middle mile" infrastructure, bring more possible connections closer to residences, businesses, and institutions.

4. What would you bring to the Co-op to help Rock Island realize its full vision?

As an OPALCO Board member since 2018, I have participated in virtually every aspect of Rock Island. My background in business and technology, and experience with organizational development has allowed me to contribute to Rock Island's growth. I continue to provide knowledgeable oversight as a Board member.