

## EGC Candidate Questions

Candidate: Mark Madsen

March 30, 2017

1. What qualifications, prior experience or contributions do you hope to bring to the position, which might add value to the OPALCO Board of Directors?

I am presently an OPALCO director, having served since the retirement of Glenna Hall from the board. I have strong experience in internet networking and service provider businesses, having helped start Internap Network Services (NASDAQ: INAP) in 1997, growing from services in Seattle to 30 cities worldwide, before leaving in 2002. I have 25 years of experience in technology related businesses, and currently am chief Data Scientist for Ibis Networks, a software and hardware company doing plug-level energy management and control systems, helping large companies, schools, and laboratories reduce their plug-level energy usage by up to 30%.

During my time on the OPALCO board, I have focused my attention on the governance structure and business plan for our Rock Island subsidiary, our low-income assistance programs, studying our options for renewable energy initiatives (and the rate structures that will support individual power generation), and reviewing OPALCO's election process. I believe I bring significant technical and business experience to the board, and the ability to make good decisions about the many challenges OPALCO faces as the world of electricity production and distribution changes radically over the next decade, and as we grow into the county's major broadband Internet provider.

2. Please tell us about any other experiences you have had, serving on a board of directors.

In addition to serving on OPALCO's board, I have served as a Trustee for the San Juan Island Library District since 2009, I am a board member (and currently board President) for the San Juan County Economic Development Council, and I serve on the board of Seattle Arts and Lectures, having been board President and Treasurer. I was previously on the board of the San Juan Islands Agricultural Guild, serving as board chair (along with Elaine Kendall) during the acquisition of the Brickworks facility in Friday Harbor.

Commercially, I have served on the boards of several companies, including AllRecipes.com, of which I was also a co-founder, and Network Clarity, and was a managing partner of an angel investment partnership in the 1990's, with board-level involvement in several companies including Performant and eProject (now Daptiv).

I have a good working knowledge of board service, and understand the role that board members play in an organization (governance, oversight, and strategy).

3. As you look at OPALCO, what do you see as OPALCO's strengths, weaknesses, opportunities and challenges?

OPALCO's greatest strength (beyond having an involved and passionate membership) is the quality of our staff and crews, the high standards they keep on service levels, safety, and the quality of our infrastructure, all of which we measure and are constantly improving. OPALCO is in a strong financial position despite being in a period where we are actively investing in capital projects and infrastructure, and coming out of the submarine cable replacement and completion of OPALCO's own fiber optic backbone (as distinct from Rock Island's fiber distribution network), that financial position will get keep getting better.

Our biggest challenge, as always, is that we have relied upon a single major source, BPA, for our power supply. That source is becoming more expensive, and over time is losing its mandate to provide cheap power to rural communities rather than selling power at market rates. We are, and will, work on a variety of fronts to diversify our power supply and protect the membership from harmful increases in the cost of power, to the maximum extent possible.

Our weakness, in recent years, has been the difficulty of maintaining good communication with all members such that the members understand the variety of issues that face us as a Coop, and what the board and staff are doing to address these issues. We are operating on many fronts now, especially with a broadband Internet subsidiary, and we need to find ways to make sure that the membership is not only informed about current issues and projects, but is actively providing us feedback – and not just during election season.

Our greatest opportunity now is to capitalize on the infrastructure we've created via the fiber backbone and "smart grid", and our membership in PNGC for buying power as a consortium, to keep our electricity costs as low as possible, even as BPA raises the cost of hydropower, moves towards market-rate sales of power, and as we deal with the challenges of warmer winters, which reduce the revenue needed to maintain our system. The review we will conduct in 2017-2018 of how electricity rates are structured will focus on meeting the financial needs of the coop while planning for these challenges, and creating a "fair" rate structure across the membership.

4. What strategies do you have in mind to help OPALCO navigate through these challenges?

Our membership in PNGC is among the most important ways we can plan for major changes to our electrical power supply, and we need to actively participate in PNGC decision making and

governance to ensure that OPALCO has a strong voice in how and where PNGC buys power for its members.

We need a have a strong community conversation about rate design during 2017 and 2018. Normally when we discuss “rates,” the membership’s focus is frequently on whether raised are being raised or lowered, and that level is important. But the structure of the rates, and how they impact different types of customers, is even more important.

We especially need community input on several issues: (a) how we can balance the fixed costs of maintaining our infrastructure and highly trained staff, with the desire of members to have low fixed charges and “only pay for what they use”, (b) how we can best help low-income members as the cost of electricity rises, and (c) how we can structure rates to incorporate “net metering” by members who have solar panels or other ways to generate their own electricity, and want a two-way connection to the electrical grid.

There are many ways that utilities and cooperatives have structured rates to achieve these goals, so the input of our community and membership is important in making the right choices.

5. OPALCO's 2015 Integrated Resource Plan addresses those types of planning issues. Are you comfortable with that document, or do you feel it is time to revisit and update it?

The 2015 IRP does outline the key issues facing the Coop and San Juan County with respect to energy needs, how the energy market is changing, and what strategic initiatives we need to undertake to adapt to those changes. We should always be considering the adequacy of the IRP and the strategic plans that arise from it, but over the next 3-5 years, I believe our job as management, board, and community is to continue making the initiatives outlined in the 2015 IRP a reality. We have a strong start on this task.

Among the near-term initiatives, several are critical: (1) PNGC, as a generating and power purchasing consortium of cooperatives, will be fully incorporated into the way we manage our cost of electricity, (2) we will work within the community to design rate structures that enable personal and distributed electricity generation, and (3) installing a large scale solar facility and storage battery facility on Decatur Island, as a prototype for local generation of electricity on a large scale.

The IRP does need periodic review since it represents a 20 year planning horizon, but the time for a next major revision is after we address the critical tasks stemming from the 2015 plan, and finish the infrastructure work that enables us to achieve them.

6. What do you hope to accomplish if you are elected or re-elected?

If elected, I first expect to see Rock Island through to break-even and then profitability, and to help oversee the transition from actively building infrastructure (i.e., a construction-focused company), to a stable long-term service provider business.

Second, with the completion of the Lopez/SJI submarine cable replacement and fiber backbone around the county, I will work with the board and staff to “do more with what we have.” We are moving from a period of major construction and into an era where we will use those investments in communications and “smart grid” devices to run our electrical grid with better efficiency and reliability, which will decrease our costs. Furthermore, we will be managing the finances of the Coop to allow our equity position to increase, in anticipation of the next submarine cable projects a decade or more from now.

Third, I will participate in our next major review of the rate structure, and I hope to help find a way to structure our rates that does not create major uncertainty for Coop finances, but can help reduce the impact of the fixed charges on low income and low-usage members.

7. Do you feel it should be a priority to try to reduce our reliance on BPA as OPALCO's primary source for our power?

It already is a major strategic priority for OPALCO to have more diverse sources for power. This is important given that the role of BPA in providing subsidized power to rural community is changing, and will change further in the coming years, and the cost of hydropower will regularly rise each year going forward. The sources and cost of our electricity are something every board member, including myself, takes very seriously since they impact every aspect of what OPALCO does, and the cost to our membership.

Our recent decision to join PNGC, a consortium of electric coops whose collective buying power is designed to produce the best prices for organizations like ours, is a major step in that direction.

Additional steps that are underway, or planned for the next several years, include exploration of new substation-scale battery technology (underway) to help reduce our peak usage from BPA and keep us within the “cheap” power tier to the degree possible, and the use of our “smart” power grid to effectively manage and use locally-generated power sources including individual members who generate power and feed it back into the grid (“net metering”).

8. What role do you think Solar Energy should play in OPALCO's future?

Solar is the most important of the locally generated, renewable energy sources we have available, and the Coop and membership need to use it in several ways, and in many ways, is the “test case.” If we get it right, we will be ready for an energy future with a variety of energy sources, at the grid, community, and individual level. Solar is also the renewable energy source which is closest to having a positive financial return for both individuals and the membership,

while other sources are further away from having positive payback, or are difficult to implement here in the islands (e.g., wind).

Individual members are placing solar panels and batteries in homes and businesses, to reduce the net cost of their electricity needs, while still drawing on the grid for usage when needed or when weather makes solar less efficient and productive. The technology for individual production, storage, and feeding the excess back into the grid is getting better, cheaper, and more efficient each year, and we should expect that more Coop members will adopt these technologies. We need good decisions about rate structures that allow distributed power generation and net metering which also recognize the fact that solar producers still rely on the grid for some of their energy needs, and that all Coop members need to bear some of the cost of maintaining our shared infrastructure. We also need to play a strong role in educating members about the options available, their costs and benefits, and what resources exist to help members choose their own solutions.

Second, community solar projects (both on OPALCO-owned properties, and in public-owned contexts such as schools) will become increasingly important contributors to our power supply. OPALCO needs to both spearhead such projects (when appropriate), and have good policies and rate structures to encourage private or public projects where we are not the ones directly building and managing a project.

#### 9. What is your vision for OPALCO's subsidiary Rock Island?

I believe that we will come to see the purchase of Rock Island business and the launching of Rock Island's partnership with T-Mobile as watershed events which allowed us to take control of our broadband destiny and govern it as a community, rather than having our broadband infrastructure controlled by a national company whose policy in rural communities is to minimize investment.

My vision for Rock Island is to carefully manage the transition from a construction-oriented startup company, to a stable long-term service provider for the residents of San Juan County. Rock Island will be a profitable business, able to reinvest in our needs, or return those profits to the Coop. In addition, Rock Island and the hundreds of miles of fiber and communications infrastructure it owns (on top of OPALCO's own fiber backbone), represent a major capital asset which is ultimately owned by the membership and has significant financial value.

Our main task as we move out of the construction phase in 2018 and into a stable long-term operating company, is to adjust the governance, size, and staffing of Rock Island to reflect that shift from startup to mature company. Some of the changes we need to contemplate include community and technical advisory boards, to help us guide Rock Island into that long-term future, help us track the needs of the community and advise on appropriate investments to ensure that we continue to provide the best service and solutions to the membership, and all residents of San Juan County.

10. Do you have any ideas about improving communications between OPALCO and the membership, or about increasing member participation?

Communication is vital, and it needs to move in both directions.

The Coop puts out more information and documentation of our operations and decision-making than any other electrical Coop we know, but the availability of information does not automatically equal an informed and participating membership.

I believe we need to continue and extend our quarterly district meetings and “tea talks” across the four districts. I believe we should also explore options such as regular monthly “office hours” where members can talk with board members, ask questions, and get answers to their questions.

I am also strongly in support of video recording our board meetings, and making them available for the membership to watch since it is difficult for working people to attend in person.

We recently started having Rock Island staff attend informal tech gatherings at the San Juan Island Library, to answer questions, help people with their specific issues, and provide information about options. This kind of informal “workshop” can and should be extended to other topics including solar energy, low-income assistance options, home energy efficiency upgrades and how to finance them, and so on.

There is no single way that we can best communicate on every issue, so we have to try multiple ways, not just to “get the word out,” but even more importantly, to “get the word back in,” and find out what issues concern members, and what options would work best in our community.