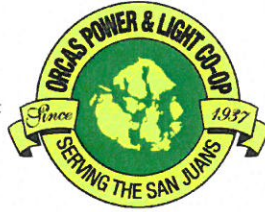


ORCAS POWER & LIGHT COOPERATIVE

A Touchstone Energy Co-op



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For the BIG WIN: Electrify the San Juan Ferry Route First

The current WS Ferries Long range plan for deploying electric ferries appears to put San Juan routes last on the list (20 or more years from now). Your strategy includes a rotation of moving the older boats from the southern routes up to the islands until they age out and then, finally, it's our turn to get newer, more efficient boats. We propose that the opposite approach provides bigger wins for WSF stakeholders – and the environment.

The San Juan Islands are the jewel of Washington State, in the international spotlight as a travel destination and the home of the Southern Resident Killer Whales who are critically endangered. Reducing carbon emissions and noise in the heart of the most beautiful and sensitive ecosystem in the state will achieve greater reach across multiple measures: visibility for public relations, contribution to the Governor's key initiatives to improve habitat for the Orcas, and a stable of ready partners to share resources and help leverage results.

Environment

The Salish Sea is a tremendously dynamic, diverse, and ecologically significant inland sea. It has supported indigenous communities for millennia and is now one of the most heavily used coastlines in the world. Salish Sea Ecosystem Conference (Western WA University: 2018)

Carbon pollution impacts our sensitive marine environment through acidification, warming air and water temperatures and changes to shoreline health and levels. Ferries make up 63% of the carbon emissions from the Washington State Transportation Fleet. The number of species that are affected in the Salish Sea area of the Puget Sound is remarkably concentrated and diverse: humans, Orcas whales, salmon, oysters, clams, bait fish, near shore eelgrass and kelp beds, birds, otters, seals, sea lions, invertebrates, and myriad other fish and mammal species.

In addition to carbon (and other contaminant) pollution, vessel noise has been identified as a major barrier to the health and survival of our Southern Resident Orcas Whales. The Governor's 2019-2021 budget initiative states: *"The frequent daily transits of Washington state ferries are a significant contributor to underwater noise in Puget Sound."*



Ready Partners

OPALCO looks forward to working with WSDOT to increase its capacity to meet the needs of electric ferries at two landings on the San Juan Islands routes: Orcas and San Juan islands. In addition to upgrading our electric system capacity to the landings, this year we are also installing the first of what we envision as many battery energy storage systems which may enable us to partially offset the large peaks that charging electric ferries will incur. OPALCO has successfully garnered a \$1M grant from the WA DOC Clean Energy Fund for our first battery storage project and has several other smart grid/renewable grant proposals under consideration. OPALCO has the expertise and is willing to work with WSF on joint grant funding proposals to help flatten the electrification learning curve.

It may be a stretch, but we'd also like to explore becoming the power provider for the ferry landing in Anacortes. Puget Sound Energy has a much higher carbon profile in their fuel mix than OPALCO does and may be less willing to help WSF mitigate peaks charges. If OPALCO were managing the power, we may be able to shave the peak loads down through smart grid innovations and provide a significant reduction to your electricity costs.

There are numerous state and non-profit agencies already heavily invested in the health, monitoring of and advocacy for the Salish Sea including the Friends of the San Juans, the Sea Doc Society, San Juan County Land Bank, San Juan County Preservation Trust, the San Juan County Marine Resources Committee, NOAA, Center for Whale Research, WDFW, WA Dept of Ecology, UW Pacific Marine Energy Center and others. Because of the dire straits of our whale population, we have in-depth baselines for every environmental measure in the region and we expect we can count on the cooperation of these agencies to continue to monitor and report the good work and results of WSF reduced carbon impacts.

It goes without saying that Governor Inslee is particularly invested in the health and sustainability of our small inland sea and has already allocated significant resources to address the issues that put it at risk.

Connectivity

Through OPALCO's wholly owned subsidiary, Rock Island Communications, there is now seamless gigabit fiber internet connection to every ferry landing on the San Juan Islands ferry routes, including Anacortes, and a dedicated wireless LTE communication system that ensures continual in-route connections. This provides a unique opportunity to connect the new electric ferries to the internet of things (devices, motors, data) for real-time access to data and provide a sharing platform for broad audience engagement. WSF will be able to closely monitor ferry systems, maximize operational efficiencies and collect the data to measure and demonstrate cost and carbon reduction savings. OPALCO is interested in partnering with WSF to create kiosks at ferry landings to help engage riders in the project and champion WSF's successful stewardship of our natural resources.

Resiliency

OPALCO provides energy and internet services to 20 islands in the archipelago. There are about 12,000 residents and, during the high tourist season, the population swells by 2-3 times. OPALCO gets its carbon-free power from the Federal Columbia River Power System (through BPA and PNGC), which relies on a mainland delivery system to our local grid. We maintain 26 submarine cables and 11 substations to keep the power flowing.

Adding electric ferries to OPALCO's rural, remote system provides a number of benefits: it adds revenue through new load at a time of declining energy usage due to climate change and efficiency gains; and it opens up the potential for a ferry to act as a battery and provide a power source during extreme emergency situations. The good old days of islanders lighting kerosene lamps and getting out the Scrabble board are gone. Islanders today depend on power for their every move. Indeed, when the CenturyLink cable failed in 2013, banks couldn't dispense cash, gas pumps were shut down and 911 traffic was limited.

OPALCO is eager to study the effects of reducing peak charges by grid automation (instantaneous load reduction and battery usage) at the exact moment when ferry boats plug in to the grid and share those results as a model for replication.

Audience

We have unique demographics in the San Juans. Our local population is very active and engaged in environmental issues, and a large portion of tourism is based on wildlife viewing, kayaking, scuba diving and boating. WSF ridership numbers have swelled on this route, and riders are a captive audience during one of the longest ferry rides in the WSF system. The opportunities to share this success story and position WSF as a leader in environmental stewardship are great.

Please reconsider the WSF plan for deploying electric ferries and start with the San Juan Islands routes. It's not that we mind the notion of hand-me-downs – islanders are boot-strappers – but the opportunities for significant, measurable results are far too great to ignore. Please give our community the reliable electrified ferry service that is appropriate for our environmentally sensitive environment.

We appreciate the partnership we have with WSF: over the long run you've gone above and beyond to help us get personnel and equipment from island to island during outages; you allow us to hold our annual meeting on the boat and have been great to work with every step of the way. Please let us know what we can do to influence the priorities of WSF for the electrification of ferries. It matters a great deal to our Co-op, our membership and the health of our home environment.

Thank you for your consideration.

Sincerely,



Foster Hildreth, General Manager
Orcas Power & Light Cooperative

Copies:

Jerry Whitfield, OPALCO Board Vice President
Rick Christmas, OPALCO Board Member
Elizabeth Kosa, Chief of Staff, WSF
Matt Von Rud, Director of Vessel Engineering, WSF
Kevin Bartoy, Environmental Program Manager, WSF
Jim Corenman, Chair, San Juan County FAC
Rick Hughes, San Juan County Council Member, San Juan County FAC Member