



Community Information Sheet - Data Center Opportunity

Stated Opportunity: A small-scale, edge AI Data Center may rent space in the former Ocean Beauty cannery from the current owner and utilize existing and unused electrical service infrastructure to energize up to 1-2 MW of data center server capacity.

Project Benefits:

- **Private Enterprise Benefits:** To utilize vacant commercial space and an unused, existing electrical service to support a small-scale data center in Petersburg. Project to start at smaller levels of power (1 MW) to “prove out” business model and utility benefits. Expand capacity of servers up to 2MW at a future date.
- **Local Utility Benefits:** To reduce electrical rate pressure on existing PMPL customers by supporting a customer that will provide a consistent demand of power from the utility’s available distribution capacity, while also accepting curtailment or diesel generation surcharge conditions required by the utility.
- **Regional Grid Benefits:** To utilize a greater portion of hydroelectric capacity available from SEAPA (Tye Lake) to power global AI servers on a local level.

What is an "edge" Data Center?

Unlike massive "hyperscale" data centers (the size of several football fields), an **edge data center** is a small-scale facility—roughly the size of a small retail shop or a modular shipping container. Its purpose is to process data for clients around the globe. By making AI available in all geographic areas around the world, there is preparation for the next generation of AI enhanced services and consumer demands.

Economic Benefits to Petersburg

- **System Reliability:** These facilities do not increase resident utility rates. In fact, their high-value power needs often lead to distribution system improvements that increase electrical reliability for the whole town.
- **Electric Rate Stabilization:** The addition of a large-scale customer to Petersburg’s limited population and utility customer base will inject additional revenues (**up to \$2.1 million/yr**) into the PMPL budget and spread the utility’s fixed costs out over more kwh sold. These benefits will exert **downward pressure** on electrical rates in future years and stabilize all PMPL customers’ billings.

- **Example:** Through our rate study software, and without additional customers, a residential customer with a \$300 monthly energy bill today will likely see that bill increase to over \$427 in 10 years. If a 2MW data center becomes a Petersburg customer, their injection of revenue into the utility could reduce prospective rate increases over that 10-year period and that same customer's monthly bill would be \$362, a savings of \$65 per month or \$780 per year.
- **Job Creation:** While they require few on-site staff (typically 1-2), they create local jobs for maintenance support, building contractors for building modifications, electricians and HVAC technicians. The company desires to focus on local-hire policies to provide long-term employment without exerting pressure on limited local housing options.

Quiet & Discreet Operations

Edge data center owners understand that noise control is a top priority for residents. Edge facilities are designed to be "silent neighbors" through:

- **Acoustic Barriers:** Servers will be inside of an existing structure which limits sound escapement.
- **Silent Cooling:** Greensparc's edge facilities use closed-loop liquid cooling systems or silent fans, eliminating the loud "hum" associated with older industrial customers or large-scale data centers.
- **Industrial zoning:** Installed in areas where noise from industrial customers is common and accepted by the community and surrounding neighbors, in Petersburg's case at a former fish cannery.

Resource Efficiency

Small-scale edge data centers do not monopolize local utilities.

- **Power Usage:** Edge data centers will access "stranded" power in Petersburg by utilizing a pre-existing, large capacity electrical service that formerly served the Ocean Beauty cannery but is presently unused. In 2025, SEAPA spilled the equivalent of 48,000 Megawatt-hours that they could not sell, a portion of which could have been sold to customers through this unused service.
- **Water Usage:** Edge data center's small-scale design uses **closed-loop water cooling** if needed above standard air cooling, so that they consume virtually no water once initial systems are filled. This means no adverse draw on local potable water resources.

Safety & Security

- **Health:** These small centers emit **no harmful radiation** or odors. They are simply a room of high-end computers that use high-speed internet (fiber optic connections) to provide service.
- **Security:** Facilities are monitored **24/7/365** with high-tech surveillance, providing a secure and professional presence in the area.

Winter Peak Shaving Considerations?

- **Mitigating System Peaks:** Higher year-round electrical loads would mean additional diesel generation could be needed during single-digit weather, however, agreements with the data center could lead to curtailment of their service during these colder days or payments for the additional diesel fuel needed to maintain adequate power delivery to the community. The data center company has expressed their willingness to discuss these options to minimize any impact on existing customers.
- **Ample Power Under Normal Conditions:** For the majority of the calendar year, Petersburg has ample power to serve the needs of existing customers while also meeting the needs of a small-scale data center.
- **Tyee Lake Third Turbine:** Once SEAPA completes the third turbine at Tyee Lake in 2027, their system capacity will provide ample power even during the coldest days of the year and eliminate the need to run diesel generators for peak shaving.

Petersburg Municipal Power and Light supports this project and the benefits it will bring to all of our customers.

Past vs. Present Opportunity At-A-Glance

Business	Data Center	Seafood Cannery
Truck Traffic	Near Zero	High / Constant during season
Noise Level	Controlled (Like a quiet HVAC)	High (compressors, motors, equipment, steam boilers)
School Impact	Moderate learning opportunities and benefits to school data needs	Limited direct alignment with local educational programs
Electric Utility Revenue	24/7/365 controlled power usage creates dependable, year around utility revenues Revenue for 1MW = \$1.05M/yr Revenue for 2MW = \$2.1M/yr	High utility revenues during processing season only
Water/Sewer Needs	Less than a small retail shop.	High seasonal water demand. Discharge of processing water to the Narrows. Domestic wastewater flows high in summer only.
Jobs	1-2 local-hire employees annually, but opportunities for support services such as HVAC, IT, electricians, carpenters/contractors	High seasonal jobs in production, maintenance and management; local jobs available but often utilizing migrant workers for production jobs
General Community Benefits	A small-scale data center operates in the background all year long with no outward demands or hazards to the community. Electric rate stabilization.	Job creation is high, but seasonal. Supports local fishing fleet. Increased container traffic. Raw fish taxes from landings.