

Predictable and Reliable Power from Rivers and Tides

What is the RivGen® Power System and how does it work?

The RivGen Power System is a renewable energy system that converts the energy of free-flowing rivers and tides into electricity, using a submerged turbine. Power from the RivGen is transmitted to shore through an underwater power cable and connected to the existing community grid, where it can be used to power lights and appliances in homes and businesses.

Does the RivGen Power System produce electricity all year?

Yes. The RivGen Power System can operate 24 hours per day in all seasons, providing a predictable and reliable power source. It operates while completely submerged, protected from storms, high winds, and ice. The RivGen Power System is most effective at sites that have strong currents above 2 meters per second with little seasonal variations in flow.

Does the RivGen Power System harm the environment?

No. The RivGen Power System requires minimal modifications to the project site, and the electricity produced can be used to lower emissions and reduce dependency on fossil fuels. Once installed, RivGen projects are carefully monitored in partnership with community members, universities, and independent national labs. After over a decade of research and development, ORPC's power systems have been shown to have little or no adverse impact on the environment.

How are community members involved in RivGen projects?

ORPC seeks guidance from community partners well before the project begins and provides training opportunities during each project phase. RivGen projects employ local barge and vessel captains and crew, local safety and environmental monitoring crews, power station operators, and other local vendors, contractors and housing services.

What are the financial benefits of a RivGen project?

Local renewable energy projects increase the long-term sustainability of remote communities. When communities install renewable energy systems like the RivGen Power System they save money on their electricity bills, and the community is protected against sudden changes in fossil fuel prices or availability. The amount of savings depends on existing costs of energy, and energy policies in your area.

"We identified an ideal partnership with ORPC. We admired their founders and philosophy. We liked their professionalism and high character. We appreciate the manner in which ORPC collaborates with locals to modify design and deployment, and most importantly, to study vigilantly the two highest local concerns: the ice and our salmon."

AlexAnna Salmon, President, Igiugig Village Council, Igiugig, Alaska