## ORPC and Shell Marine Renewable Program work together to initiate a Modular RivGen Power System demonstration in Lower Mississippi River

**Portland, Maine, US, May 2, 2023** –<u>ORPC</u>, an internationally recognized marine renewable energy developer whose power systems harness the energy of free-flowing rivers and tides, is working together with Shell Technology – Marine Renewable Program to initiate a Modular RivGen® Power System demonstration project in the Lower Mississippi River.

The collaborative project represents an opportunity to showcase how the next generation of ORPC's proven hydrokinetic technology can provide highly predictable baseload electricity to help decarbonize onshore assets. Once deployed, the system can potentially support the electrification of Shell facilities, including providing power to EV chargers and supporting alternative fuels production.

The initiation of the demonstration project builds off previous work completed by ORPC for Shell. ORPC completed a feasibility study in November 2022 to help identify mutually beneficial applications of ORPC technology by Shell and assess the business case for pursuing pilot projects to demonstrate their use in the field. The report identified three priority use cases where ORPC power systems could contribute toward decarbonizing Shell's existing operations, the first of which is to provide power for Shell's onshore facilities.

In early April, ORPC technicians traveled to multiple Shell sites in Louisiana. With support from Louisiana State University, they assessed each location's viability to support the production of hydrokinetic power generation. Resource characterization at the sites is ongoing, along with stakeholder engagement. This most recent award will focus on acceleration towards a demonstration project including the selection of a suitable site(s) as well as associated permitting and applications engineering.

The Modular RivGen device uses the proven cross-flow turbine technology of ORPC's commerciallyavailable RivGen Power System, optimized for lower velocity sites and reduced cost. The product is being developed at ORPC's river test site in Millinocket, Maine with financial assistance from the Department of Energy's Water Power Technologies Office. The Modular RivGen system can be stacked vertically or placed side-by-side to integrate into existing or new works, including infrastructure modernization and EV charging stations, making it a versatile option to support Shell's goal of increased renewable energy adoption.

"ORPC welcomes the opportunity to partner with Shell to demonstrate the Modular RivGen System in the Lower Mississippi River region," ORPC CEO Stuart Davies said. "With its ease of transport, installation, and adaptability to different sites and industrial uses, the Modular RivGen System can be scaled into large arrays and replicated in rivers globally. Once deployed, these arrays can provide a highly-predictable baseload renewable energy resource that can serve as the foundation of a fully-renewable energy grid in the future. We look forward to showcasing its capabilities in partnership with Shell."

## About ORPC

Headquartered in the U.S., with subsidiaries in Canada, Ireland and Chile, ORPC is a recognized leader in marine energy technology innovation and operational excellence. A developer of clean, renewable power systems that harness energy from free-flowing rivers and tidal currents, ORPC's rise to a leadership position in the worldwide marine energy industry is based on an impressive record of continuous improvement and success.

In 2021, ORPC was honored as "Innovator of the Year," by the State of Maine's International Trade Center and has a long track record of prestigious awards dating back more than a decade, including "World's Top Ten Most Innovative Companies in Energy" by Fast Company (2013), and the National Hydropower Association's Award for Operational Excellence in 2016 (ORPC is the first marine energy company to receive this award).

Read more about ORPC at <u>www.orpc.co</u>. Images are available for download <u>here</u> and <u>here</u>.

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