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Suggested cutline of attached JPG:
People from Ocean Renewable Power Company and the University of Maine Advanced Structures and Composites Center stand beside the driveline test stand at UMaine in Orono. From left are Tom Snape, Curtis Libby and Ken Williams representing UMaine, and Jason Huckaby and Matt Wilson representing ORPC.

ORPC successfully concludes Power Take-off testing at UMaine
Innovative components will advance marine renewable power systems

PORTLAND and ORONO, Maine — Ocean Renewable Power Company (ORPC) has successfully completed full-scale testing of a specialized, water-lubricated bearing system and associated driveline components designed for underwater systems that capture energy from ocean tides and river currents at the University of Maine Advanced Structures and Composites Center.

The purpose is to make the systems more durable and efficient, reduce operation costs and advance commercialization of marine hydrokinetic power systems.

“This is a first step in solving technical challenges we had with past generation designs,” said Chris Sauer, ORPC co-founder and CEO. “We successfully collected several hundred hours of high-resolution data that verified our specialized bearing performed as expected. We look forward to further analyzing the results.”

ORPC worked with the UMaine Composites Center because of its well-equipped testing facility and skilled personnel.

“We were extremely pleased to conduct an extensive test program on ORPC’s bearing system and components in our laboratory, part of our ongoing mission to serve Maine through research and development,” said Habib Dagher, executive director of the UMaine Composites Center. “Maine needs renewable ocean-based energy to further diversify our energy sources and jump-start our coastal economies.”

U.S. Sens. Susan Collins and Angus King said in a joint statement that “ORPC has established itself as a global leader in hydrokinetic energy, and this announcement is an exciting step forward in its ongoing work to develop this promising clean energy resource.”

“By creating comprehensive hydrokinetic power systems, Maine is on the cutting edge of an innovative and affordable energy opportunity. We commend the hardworking men and women at ORPC whose work will both help provide clean energy and grow Maine’s economy,” they said.

This is the first phase of ORPC’s project, Power Take-off System for Marine Renewable Devices, which is based on work supported by the Department of Energy under award DE-EE0006398.

Future phases of the project will center on development of a highly rugged electrical generator to reduce failure rates.

These innovations will advance the market opportunity for ORPC’s underwater power systems and the entire marine renewable industry — one that has great potential to create jobs by opening a market for reliable, secure energy from local resources.

Since 2007, ORPC and UMaine have been collaborating to link the disciplines of marine science and engineering in pursuit of ocean energy excellence. Their work has included computer modeling of tidal currents, sub-scale technology testing and the pioneering of environmental monitoring technologies, techniques and analysis.

ORPC has partnered with UMaine’s Maine Tidal Power Initiative, worked closely with the School of Marine Sciences and helped fund the work of graduate students.

About Ocean Renewable Power Company
Worldwide ORPC is the only company to have built, operated and delivered power to a utility grid from a hydrokinetic tidal project (in Maine), and to a remote community grid from a hydrokinetic river project (in Alaska). ORPC is committed to working with local partners and creating local economic opportunities. For more information, visit www.orpc.co.

About the University of Maine Advanced Structures and Composites Center
The University of Maine Advanced Structures and Composites Center is a world-leading, interdisciplinary center for research, education, and economic development encompassing material sciences, manufacturing, and engineering of composites and structures. Since 1996, the center has: financially supported more than 2,000 positions for undergraduate and graduate students; served more than 500 industrial and governmental clients, including 150 Maine companies; formed 14 spinoff companies, and received more than 40 national and international awards. The center has gained an international reputation through major research and development projects such as the VolturnUS 1:8, the first grid-connected floating offshore wind turbine in the U.S. and the first in the world made out of concrete and composite materials, the inflatable composite arch bridge technology now approved in the AASHTO code, the first Modular Ballistic Protection System (MBPS) approved by the U.S. Army

to protect troops in tents from blast and ballistic threats, development of coated wood technology for blast and hurricane resistant wood buildings, and the longest carbon-fiber composite vessel built for the U.S. Navy. For more information, visit: www.composites.umaine.edu