



3.2 million Euro, ORPC Ireland-Led Project Gets Underway

Dublin, Ireland, November 15, 2016 -- ORPC Ireland, a wholly owned subsidiary of Ocean Renewable Power Company, is pleased to announce the kick-off of a multi-million euro technology development project for which it is the technical lead. Funded by the EU's Horizon 2020 Programme, University College Cork (UCC), Ireland, is project coordinator and along with ORPC Ireland, is joined in a strong consortium with Letterkenny Institute of Technology (Ireland), Fraunhofer-Gesellschaft (Germany) and SKF (U.K.) Limited.

The project is called "Technology Advancement of Ocean Energy Devices through Innovative Development of Electrical Systems to Increase Performance and Reliability," or TAOIDE for short. TAOIDE's overarching goal is to radically improve system reliability by developing a more robust power transfer system from prime mover to electric grid, specifically, a direct drive permanent magnet generator capable of operating in a fully flooded condition. In addition to ORPC benefitting from this innovation, colleague companies in Europe and worldwide will be helped.

The centerpiece of TAOIDE will be ORPC Ireland's lab testing to validate system improvements to a full-scale ORPC hydrokinetic turbine and associated economics at UCC's Lir National Ocean Test Facility which houses state of the art wave tanks and electrical rigs that allow for scaled testing in a controlled environment. The Sustainable Energy Applied Research Centre at Letterkenny Institute of Technology is responsible for developing maintenance plans and applying systems and preventative maintenance strategies to lower the levelized cost of energy production in the marine environment. Fraunhofer-Gesellschaft's Institute for Wind Energy & Energy System Technology is developing advanced control algorithms for load reduction and power quality improvement and is contributing its expertise in condition monitoring, and SKF is designing the generator bearings and rotary seals capable of operating in a fully flooded environment.

"Proving the functionality of a wet-gap generator will be a major development for the ocean energy industry", said ORPC President & CEO, Chris Sauer, "and will make our marine renewable energy systems more competitive with other renewable energy options. We look forward to working with our dedicated partners in the EU to significantly advance ocean energy technologies and help secure Europe's global competitiveness."

Dr. Jimmy Murphy, Lir National Ocean Test Facility Manager noted, "I am delighted with the opportunity to work with ORPC Ireland and the other partners on this exciting major project over the next three years."

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University College Cork's Lir National Ocean Test Facility is part of the Centre for Marine and Renewable Energy (MaREI), which is supported by Science Foundation Ireland, and coordinated by UCC's Environmental Research Institute. Headquartered at the Beaufort Building, Ringaskiddy, County Cork, MaREI has 130 researchers working across six academic institutions and collaborating with over 45 industry partners. For more information, visit <http://www.marei.ie/facilities/lir-notf/>.

Ocean Renewable Power Company, LLC, is a global leader in hydrokinetic power system technology and project solutions. Worldwide it is the only company to have built, operated and delivered power to a utility grid from a hydrokinetic tidal project, and to a remote community grid from a hydrokinetic river project. ORPC is committed to working with local partners and creating local economic opportunities. For more information, visit www.orpc.co.

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