

THE UNIVERSITY OF MICHIGAN

REGENTS COMMUNICATION

ACTION REQUEST

Subject: Research Agreement between the University of Michigan and Vortex Hydro Energy, LLC

Action Requested: Authorization to enter into Agreement

Preamble:

A statutory conflict of interest situation was identified by the Division of Research Development and Administration while reviewing the proposed research agreement that then triggered a review by the OVPR Conflict of Interest Review Committee. A plan for management of the possible risks associated with the conflicts of interest was then developed and approved by the Committee and agreed to by the parties involved.

The proposed agreement ("Agreement") falls under the State of Michigan Conflict of Interest Statute because Professor Bernitsas is both an employee of the University of Michigan ("University"), and an owner of Vortex Hydro Energy, LLC ("Vortex"). The law permits such an Agreement provided it is disclosed to the executive officers and approved in advance by a 2/3 vote of the Regents of the University of Michigan.

Background:

Dr. Michael Bernitsas occupies the dual role of Professor of Naval Architecture and Marine Engineering in the College of Engineering and is an owner in Vortex Hydro Energy, LLC (the "Company"). Dr. Robert Beck is a Professor in Naval Architecture and Marine Engineering in the College of Engineering and has no financial or management interest in Vortex. The Company wishes to fund a project in the College of Engineering under the direction of Dr. Beck with Dr. Bernitsas serving as a co-investigator on the University subcontract. The goal of this project is to develop experimentally enhanced power envelopes, using the mass ratio  $m^*$  as parameter, for a single cylinder VIVACE Converter – equipped with passive turbulence control (PTC). The power envelopes, one for each value of  $m^*$ , will represent the converted maximum hydrokinetic energy from the flow into mechanical energy in the VIVACE cylinders.

Agreement Terms:

The terms of the Agreement will conform to University policy. The period of performance for the project is approximately 12 months. The amount of funding support will not exceed \$112,000.

Impact of the Agreement

The goal of this project is to integrate a power take off (PTO) system into the VIVACE Converter.

Recommendation:

This matter has been reviewed and approved by the OVPR Conflict of Interest Review Committee. In light of the disclosure made in this document and our finding that the agreement was negotiated in conformance with standard University practices, I recommend that the Board of Regents approve of the University's entering into this Agreement with Vortex Hydro Energy, LLC.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Stephen R. Forrest". The signature is fluid and cursive, with a long horizontal stroke at the end.

Stephen R. Forrest  
Vice President for Research

September 2011