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 Proposal Approval Form which 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 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.

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 of Vortex Hydro Energy, LLC ("the Company"). Dr. Armin Troesch is a Professor and Chair of the Department of 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. Troesch with Dr. Bernitsas serving as a co-investigator on the University subcontract.

Nature of the Agreement:

The goal of this NOAA 2011-1 SBIR Phase I project is to develop and test a self-powered, unmanned underwater vehicle (UUV) to carry NOAA sensors for environmental monitoring. The Company would like to subcontract a portion of the work under this contract to the University, pursuant to University’s Proposal No. 11-PAF03690 entitled “Self-Powered by Low Speed Hydrokinetic Energy, Unmanned Underwater Vehicle Carrying NOAA Sensors.” The University's conduct of this work will be under the direction of Dr. Troesch as Principal Investigator.
Agreement Terms:

The terms of the Agreement will conform to University policy. The period of performance for the project is approximately five (5) months. The amount of funding support is anticipated to be $28,543.

Impact of the Agreement:

The Agreement will enable the University to participate in important research efforts to explore and develop innovative technology that will make it possible for NOAA to monitor broad marine areas with a single UUV carrying a variety of sensors. Weather, pollution, fish migration, fish-population, currents, thermal-distribution, etc, can be monitored by a small fleet of self-powered UUV's using the VIVACE Converter in the open ocean, near coasts or in rivers. VIVACE can power UUV's or garages for UUV's or the existing surface-bound NOAA sensors.

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.

Respectfully submitted,

[Signature]

Stephen R. Forrest
Vice President for Research

May 2011