



Control Co-design and Co-optimization of a Transformational Cost-Efficient Hydrokinetic Energy Turbine System

\$3.68 million collaborative award with U.S. Department of Energy Advanced Research Projects-Energy [ARPA-E] Office (DE-AR0001447)

Timetable: November 2020 – present

Principal Investigators: D. Duquette & R. Blom, Ph.D.

Summary: Project to advance LPS's novel hydrokinetic current energy conversion turbine, including mooring and deployment/retrieval subsystems, rigorously following a control co-design and co-optimization engineering process focused on minimizing cost and maximizing system availability. The work culminates with a pilot tidal installation in the Kootznahoo Inlet, Angoon AK.

Team members:

- LPS
- GE Research
- European Marine Energy Centre Ltd.
- National Renewable Energy Laboratory
- Inside Passage Electrical Cooperative
- Eclipse Group Inc.

