

## **Free Flow Energy Signs Development Agreement with Lucid Energy Technologies for Use of Gorlov Helical Turbine**

### *Turnkey Hydrokinetic System to be Built*

**Lee, New Hampshire, October 10, 2009** -- [Free Flow Energy](#), Inc., has completed a development agreement with Lucid Energy Technologies authorizing the use of the Gorlov Helical Turbine (GHT) in a Free Flow Energy turnkey hydrokinetic system. The Free Flow Energy branded system will convert tidal and river currents into electricity in a manner considered more environmentally benign than conventional hydropower. The GHT will also be used by Free Flow Energy in the design of a novel submersible generator.

“Free Flow Energy will ‘get it right the first time,’” stated Free Flow Energy President Rob Cinq-Mars. “Every effort will be made to avoid the pitfalls and problems encountered by early installations of other renewable energy technologies. The improper siting and sizing of wind turbines, for example, led to system failures and disappointing results. Free Flow Energy will take a particularly thoughtful and considerate approach to siting and make every effort to ensure that what is promised is delivered.”

### **Proven Technology**

Invented by Prof. Alexander M. Gorlov of Northeastern University, the GHT won the prestigious Association of Mechanical Engineers Edison Patent Award in 2001. The well known, well tested turbine is licensed to a joint collaboration of GCK and Lucid Energy Technologies. The turbine, which was at the heart of early testing by GCK Technology and Verdant Power, has demonstrated exceptional performance. Free Flow Energy will now build upon their years of laboratory and field testing.

### **Winning Approach**

The Free Flow Energy turnkey hydrokinetic system will accommodate different power ranges and siting conditions. Initially an above-surface generator will be used. The design of a submersible, rim-mounted, axial flux permanent magnet generator is currently underway. The GHT in the Free Flow Energy system will be constructed from composites, rather than aluminum, to improve its strength and durability.

The Free Flow Energy hydrokinetic system will offer a very high 35% percent efficiency. In a strong, two meter-per-second flow, with minimal turbulence, this equates to approximately 1.4 kW of electricity for every square meter of turbine area. (The average American home uses 30 kW-hours of electricity per day.) Initial installations will provide on the order of twenty five to fifty kilowatts in a two meter per second flow.

The first Free Flow Energy systems are non-utility scale, run-of-the-river power that do not require impoundments such as dams. Early systems will be best suited for homeowners, real

estate projects, and businesses that abut swift-moving water and seek to benefit from one of the most environmentally benign forms of renewable energy.

**For additional information, contact:**

**Rob Cinq-Mars, President**  
**Free Flow Energy, Inc.**  
**1 Captain Parker Drive**  
**Lee, NH 03862**  
**Tel: 800-928-0435**  
**Fax: 888-385-5099**  
[Rob@FreeFlowEnergy.com](mailto:Rob@FreeFlowEnergy.com)  
[www.FreeFlowEnergy.com](http://www.FreeFlowEnergy.com)

