



Hydro Green Energy

# NEWS RELEASE

**FOR IMMEDIATE DISTRIBUTION**

(Two Pages)

CONTACT: Mark R. Stover

[mark@hgenergy.com](mailto:mark@hgenergy.com)

## **FULL OPERATIONS INITIATED AT NATION'S FIRST COMMERCIAL HYDROKINETIC POWER STATION**

*FERC Commissioner Phil Moeller "Flips the Switch" During His Tour of Hastings, MN Power Project;  
Briefed on First-Ever Direct Hydrokinetic Fish Impact Study Validating Superior Fish Friendliness*

**HOUSTON, TX** – August 20, 2009 – While visiting the nation's first federally-licensed hydrokinetic power project, Philip D. Moeller, a Commissioner with the Federal Energy Regulatory Commission, today initiated full commercial power operations. In Hastings, MN, Commissioner Moeller released the brake on a 100 kW nameplate capacity hydrokinetic turbine manufactured by [Hydro Green Energy, LLC](http://www.hgenergy.com), allowing uninterrupted, 24/7 power generation to commence.

Commenting on his visit, Commissioner Moeller stated, "I was thrilled to be here today to witness another step forward in the advancement of hydrokinetic technologies. I look forward to continued innovation and advances in reaping the benefits of this clean, renewable resource."

"Today is another first for Hydro Green Energy and for the U.S. waterpower technology industry," stated Wayne F. Krouse, Chairman and CEO of Hydro Green Energy. "Commissioner Moeller has done something no one else can claim: he initiated full operations at the first licensed hydrokinetic power turbine in U.S. history. We were honored to have Commissioner Moeller, a strong advocate of new waterpower technologies, 'flip the switch' at the Hastings project."

Hydrokinetic power refers to the generation of electricity from moving water without impoundments or diversionary structures that are typically used at conventional hydropower facilities. The City of Hastings is installing a two-turbine, barge-mounted hydrokinetic power project downstream from its 4.4 megawatt run-of-river hydropower plant at U.S. Army Corps of Engineers Lock & Dam No. 2. The Federal Energy Regulatory Commission approved the project by a 5-0 vote on December 13, 2008.

Hydro Green has been successfully testing and calibrating the turbine and its power output since mid-February. The second turbine, a beta unit with increased power and efficiency, is targeted to be installed next spring. During his tour, Commissioner Moeller was also briefed on the completion of the first direct fish survival study performed on an installed hydrokinetic power turbine. The study was conducted from June 1-13, 2009.

"As enjoyable as it was to have Commissioner Moeller mark our full commercial operations, it was important for him to understand our commitment to advancing the understanding of the environmental performance of hydrokinetic technologies and to learn firsthand of the environmentally superior nature of our hydrokinetic product," said Krouse.

At the project, Normandeau Associates ([www.normandeau.com](http://www.normandeau.com)), a highly regarded environmental consulting firm that provides ecological, environmental and natural resources management services, evaluated the direct effects to fish by the hydrokinetic unit. To accomplish this task, Normandeau, induced 504 balloon and radio tagged fish of a variety of species and sizes into the hydrokinetic turbine to study fish survival. The performance of those fish was compared to 250 control group fish that experienced the full experimental procedure except for passage through the hydrokinetic turbine. Environmental scientists studied fish survival and injury rates after recapture of nearly all the tagged fish. Pre-installation computer modeling indicated an estimated 97.5 percent fish survival rating for the turbine.

“The preliminary results on the Hastings fish study confirm what we knew, and in fact, exceed our expectations and modeling. We look forward to completing the report and sharing it with the public as swiftly as possible. By disclosing this scientific data, all stakeholders will better understand how these technologies perform from an environmental standpoint – and that is exceptionally well,” said Krouse. “This stakeholder education will allow the industry to grow and to better contribute to achieving the energy, economic and environmental goals laid out by the Obama administration. And, I predict that this landmark study will be used not only in the U.S., but throughout the world, including in the tidal turbine sector.”

Known as the “HI-Z Turb N’ Tag” methodology, Normandeau’s patented methodology has been utilized at scores of conventional hydropower projects, including participation in the Department of Energy’s Advanced Hydropower Turbine System program, but never on a hydrokinetic turbine. This methodology uses a controlled experiment approach and produces comprehensive, statistically reliable and verifiable results on injury and survival of fish passed through a turbine, spillway or over falls. The results of the Hastings fish study, presently being written, will be released to the public for full stakeholder community review in approximately three weeks.

Hydro Green Energy is a privately-held renewable energy systems developer and integrator operating in the waterpower sector. Hydro Green Energy, a start-up company based in Houston, TX, closed its Series-A funding in April 2008 with a \$2.6 million investment from the Quercus Trust, a prominent investor in alternative energy companies with intellectual property. Hydro Green expects to soon close its Series-B financing, which will place the company in a position to aggressively move forward on its U.S. and international project pipeline, vigorously defend its intellectual property, continue technology innovation and add several executive level, engineering and regulatory employees.

Hydro Green Energy’s technologies operate in open rivers, at existing hydropower facilities, at lock and dam infrastructure, adjacent to non-powered dams and in cooling water systems at thermal power plants. The company holds U.S. Patent # 6,955,049, three international patents and has multiple dozens of additional U.S. and international patents pending on the company’s technologies.

The company is presently developing waterpower projects in Alabama, Alaska, Iowa, Illinois, Kentucky, Louisiana, Minnesota, Missouri, Mississippi, North Carolina, Ohio, Oklahoma, Pennsylvania and Wisconsin. The company’s project pipeline will result in the development of nearly 500 MW of clean, renewable energy.

For more information, please visit [www.hgenenergy.com](http://www.hgenenergy.com)