



**FOR IMMEDIATE RELEASE**

## **Emerson Network Power and Pentadyne Successfully Demonstrate High-Power Parallel Operation with the Liebert FS Flywheel Power System**

Chatsworth, Calif. – January 28, 2005 – Pentadyne Power Corporation and Emerson Network Power today announced the successful demonstration of the Liebert FS flywheel power system with a 750 kVA Liebert Series 610 Uninterruptible Power Supply (UPS). The Liebert FS is the result of a partnership between Liebert and Pentadyne designed to optimize Pentadyne's *Voltage Support Solution*™ (VSS) for Liebert UPS systems.

The demonstration was conducted as a joint Liebert-Pentadyne effort at Liebert's facility in Delaware, Ohio, and was witnessed by users with high-power requirements. It involved eight Liebert FS power systems, each capable of providing 120 kW of power to the DC bus of the UPS, connected in parallel to the Liebert 610 system.

The demonstration included a series of multiple, short-duration input outages and a sustained input outage. N+2 operation of the flywheel system was also demonstrated by sustaining the load while sequentially dropping one and then a second Liebert FS unit. In each case, the flywheel system was able to provide the required power to operate the UPS at rated conditions.

"This successful demonstration highlights the flexibility and ease of integration of our Voltage Support Solution with Liebert 3-phase UPS systems, including these high power systems," said Paul Craig, CEO of Pentadyne Power Corporation. "The users who witnessed this demonstration saw how multiple flywheels can work together in parallel to meet high-power requirements."

"We are very pleased with the performance of Pentadyne's flywheel technology with our UPS system," said Bill Campbell, product manager for the Liebert FS. "We are committed to providing our customers with a reliable, proven flywheel storage energy solution for battery-less ride-through and battery-hardening power quality systems."

Pentadyne's flywheel power system provides a stable, reliable, low maintenance, extended-life DC voltage source to either replace or supplement batteries in UPS systems. The VSS 120 can completely eliminate the need for UPS batteries in many applications by providing sufficient ride-through for an orderly system shutdown or until a standby engine-generator can come on-line. To help protect batteries, the VSS 120 minimizes battery discharge "whiplash" effects commonly experienced with each use, thus improving battery reliability and preserving battery capacity for occasions that demand a longer back-up time. When connected to most UPS models, a single model VSS 120 provides sufficient energy to support loads up to 150 kVA. Multiple VSS units in parallel provide economic ride-through for power levels up to 2 MW.

### **About Pentadyne Power Corporation**

Pentadyne designs, manufactures and markets advanced flywheel power systems that provide high quality, reliable power for power quality sensitive customers, urban rail power recycling, and urban transportation. Whether integrated into other products or used alone, Pentadyne's flywheel systems provide an economic, long lasting, low maintenance, lightweight and environmentally sound power solution for a range of applications. Pentadyne is backed by leading venture capital groups and industry players including Nth Power, DTE Energy, MVV Innovations, Sempra Energy, Electricité de France and Ben Rosen (co-founder of Sevin Rosen and Chairman emeritus of Compaq Computer). For more information, please visit [Pentadyne.com](http://Pentadyne.com) or contact the representatives below. For more information on Pentadyne, visit [www.pentadyne.com](http://www.pentadyne.com).

### **About Liebert**

Liebert, an Emerson Network Power company, is the world leader in mission critical power and cooling technology. Liebert delivers unparalleled protection of critical systems through a complete range of power, environmental and monitoring systems that are tailored to application requirements by a network of local representatives that average better than 16 years of experience in the industry. Liebert Global Services is the world's largest service team dedicated to the maintenance and on-site repair of critical computer support systems. For more information on Liebert, visit [www.liebert.com](http://www.liebert.com).

### **About Emerson Network Power**

Emerson Network Power is an Emerson business that provides a full spectrum of reliable power solutions, including inbound power, connectivity, power supplies, power systems and precision cooling, backed by the largest global services organization in the power industry. These Emerson companies serve the needs of telecommunications networks, data centers, health care and industrial facilities worldwide. For more information, visit [www.emersonnetworkpower.com](http://www.emersonnetworkpower.com).

### **About Emerson**

St. Louis-based Emerson ([www.gotoemerson.com](http://www.gotoemerson.com)) is a global leader in bringing technology and engineering together to provide innovative solutions to customers in electronics and telecommunications; process control; industrial automation; heating, ventilating and air conditioning; and appliance and tools. Sales in fiscal 2003 were \$14 billion.

### **For More Information Contact**

Greg Evans (Pentadyne Agency Support)  
President, Account Executive  
WelComm, Inc., 7975 Raytheon Rd., Ste 340,  
San Diego, CA 92111  
(858) 279-2100 / Fax: (858) 279-5400  
[Greg@welcomm.com](mailto:Greg@welcomm.com)

Melissa Dykstra (Liebert Agency Support)  
Fahlgren Mortine Public Relations  
(614) 825-1743  
[melissa.dykstra@fahlgren.com](mailto:melissa.dykstra@fahlgren.com)