## **News Release**



#### FOR IMMEDIATE RELEASE

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# Hitachi Wins Order for "B-CHOP" Systems for New Macau Transportation System

Tokyo, Japan, June 13, 2012 – Hitachi, Ltd. (TSE:6501) today announced that it has won an order for 15 Energy Storage for Traction Power Supply ("B-CHOP") Systems for a new transportation system in Macau. This order was received from Mitsubishi Heavy Industries, Ltd., which is in charge of constructing a new Light Rail Transit (LRT) system in Macau, excluding the stations and civil engineering work. The LRT system is scheduled to start commercial operations in April 2015. The Macau LRT system is Macau's first new transportation system. Approximately 20 km long, it will run on rubber tires from northern Macau (a customs inspection point), which connects to Zhuhai in China's Guangdong Province, to the Taipa Ferry Terminal via the coastal area (Macau Ferry Terminal), the central city casino area, Sai Van Bridge and Macau International Airport. The LRT is the first in the world to employ a regenerative power storage system with storage batteries along the entire line.

The B-CHOP systems ordered today temporarily store regenerative power produced when a train stops or decelerates in rechargeable batteries installed in railway substations. This electricity is then fed back when it is needed to run trains. The system therefore reduces the amount of electricity required for railway operations. The system will use lithium-ion batteries developed for automotive applications by Hitachi Vehicle Energy, Ltd., which mainly develops and manufactures automotive lithium-ion batteries.

B-CHOP features high energy density and power density, indicators of battery endurance and power, respectively, as well as a large storage capacity. Thanks to these features, B-CHOP reduces electricity use by effectively storing regenerated energy from railcars. Indeed, it is expected to reduce electricity use by approximately 10% compared to the pre-introduction situation. Furthermore, because brake pad friction can be reduced by reducing the frequency of railcar mechanical brake usage,

it will also lower railcar maintenance costs. By installing B-CHOP systems throughout the entire Macau LRT line, Hitachi will reduce line energy use, helping create an environmentally friendly urban rail system for Macau.

Hitachi will continue to develop its rail systems business, cooperating with corporate partners in various countries to make railway traction substations more advanced and environmentally friendly with the relevant cutting-edge core technologies such as B-CHOP.

### About Hitachi, Ltd.

Hitachi, Ltd., (TSE: 6501), headquartered in Tokyo, Japan, is a leading global electronics company with approximately 320,000 employees worldwide. Fiscal 2011 (ended March 31, 2012) consolidated revenues totaled 9,665 billion yen (\$117.8 billion). Hitachi will focus more than ever on the Social Innovation Business, which includes information and telecommunication systems, power systems, environmental, industrial and transportation systems, and social and urban systems, as well as the sophisticated materials and key devices that support them. For more information on Hitachi, please visit the company's website at http://www.hitachi.com.