

## **Eastern Star Gas appointed TOYO and Hitachi to undertake FEED on Mid-Scale Electric-Motor-Driven LNG Plant in Newcastle**

February 7, 2011

Toyo Engineering Corporation

Hitachi,Ltd.

Tokyo, Japan, February 7, 2011 - Toyo Engineering Corporation (TOYO) and Hitachi, Ltd., (NYSE: HIT / TSE: 6501) announced today that they have been appointed by Eastern Star Gas Limited (ESG) , an Australian gas and Coal Seam Gas (CSG)\* development company, to undertake Front End Engineering and Design (FEED) for ESG's LNG Newcastle (LNGN) Project upon the completion of feasibility studies, which have been conducted since May 2010. ESG plans to determine their investment by the first quarter of 2012 and start to export products in 2015.

FEED work will be completed by the fourth quarter of 2011 and will involve optimization, design, and detailed costing of the LNGN Project, including the LNG storage tank, jetty, and loading facilities. TOYO and Hitachi will be closely supported by Chart Energy & Chemicals, Inc., which will provide IPSMR™ process technology and core equipment for the gas liquefaction process.

The electric-motor-driven, mid-scale, single mixed refrigerant technology offers multiple advantages, especially for LNG projects fed by CSG, including 1) low capital cost and quick construction, 2) high reliability, high efficiency, and low environmental impact, 3) operational flexibility and train size ideally suited for CSG development, 4) a small footprint and low noise ideal for the site location.

The LNGN Project is expected to use electric-motor-driven mid-scale LNG technology with a capacity of one (1) Million Metric Ton Per Annum (MMTPA) at the 24 hectare parcel of land on Kooragang Island, Newcastle port. It is anticipated that the site will be capable of accommodating a capacity of up to 4 MMTPA in the future. Hitachi's cutting edge electric-motor-driven technology, which has been cultivated in its railcar and steel plant business will contribute to the excellent performance of LNGN.

This is the first case in which TOYO and Hitachi are cooperating together to FEED for a Mid-Scale LNG plant. Therefore, it is an important milestone for both companies as one strategy to expand business domains in the future. TOYO and Hitachi will further expand business in global market, where small- and medium-scale gas fields are utilized effectively.

Note \* Called coal seam gas in Australia, this gas is generally referred to as Coalbed Methane (CBM) and is extracted from coal seams and their surrounding areas.

#### **About Hitachi, Ltd.**

Headquartered in Tokyo, Japan, Hitachi, Ltd., (NYSE: HIT / TSE: 6501) is a leading global electronics company with approximately 360,000 employees worldwide. Fiscal 2009 (ended March 31, 2010) consolidated revenues totalled 8,968 billion yen (\$96.4 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>.

#### **About Toyo Engineering Corporation**

Toyo Engineering Corporation (TOYO) employs approximately 7,000 people worldwide. Established in 1961, the company provides concept planning and engineering, procurement, and construction services in areas including general chemicals; petrochemicals; petroleum refining; petroleum and natural gas; power generation; nuclear power; advanced production systems; distribution networks; pharmaceutical, biotechnology, and environmental businesses. TOYO was the EPC contractor for the construction of the 9.6 million ton per annum Sakhalin II LNG Project in Russia, completed in 2008. For more information on TOYO, please visit the company's website at <http://www.toyo-eng.co.jp>.

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