

ABB wins contract worth more than \$50 million for one of the world's first floating LNG facilities

Supplying safe and reliable electrical systems to PETRONAS' second floating liquefied natural gas facility

Zurich, Switzerland, February 5, 2015 – ABB, the leading power and automation technology group, has won a contract worth more than \$50 million to supply the electrical system for one of the world's first commercial floating liquefied natural gas (FLNG) facilities, and the second to be owned by Malaysian oil and gas company PETRONAS. It will be called "PFLNG2".

The contract was awarded in the fourth quarter of 2014 by Japanese engineering contractor JGC Corporation. JGC is part of a consortium that is building the facility for PETRONAS, along with Samsung Heavy Industries of Korea.

Under the terms of the contract, ABB will support the optimization of the facility's electrical side by designing, manufacturing and supplying transformers, switchboards, motor-control centers and power management system. In addition, ABB will also manage the installation of the equipment and ensure the electrical supply is integrated with systems it is powering.

"ABB is delighted to be selected by JGC for this pioneering project," said Peter Terwiesch, President of ABB's Process Automation Division. "FLNG is a market with great potential and we are well placed to deliver to it with our vast experience in floating production, our extensive manufacturing base and innovative solutions in offshore oil and gas. Our fully engineered electrical system solution incorporates the latest technologies adapted to the offshore environment; it is a safe solution that ensures reliable electricity throughout the plant for the PFLNG2 to meet its demanding performance requirements," he added.

FLNGs have long been considered an attractive concept, and a recent report by Douglas-Westwood estimated the market to be worth \$64 billion between now and 2020. The agility of FLNGs allows oil and gas companies to exploit fields that would otherwise be uneconomical, and their environmental impact is minimal compared with conventional production platforms and pipelines.

The PFLNG2 will be built at Samsung Heavy Industries' yard in Geoje, Korea in 2015. When operations start in 2018, the facility will be moored over the deepwater Rotan gas field located off the Malaysian coast. It is designed to produce 1.5 million tons of LNG annually for at least 20 years before it requires a dry dock.

FLNG plants resemble container ships, but are fitted with all necessary equipment to receive, liquefy and store natural gas extracted from offshore fields. The FLNG plant transfers LNG at sea to carriers that deliver it directly to the markets.

The machinery and controls supplied by ABB for PFLNG2 will be accommodated in two electrical houses, or e-houses, that stretch as high as a five-storey building. These prefabricated steel

Press release



substations designed by ABB ensure the equipment remains safe from the corrosive marine environment as well as hazardous gas and provide a safe environment for the operation crew.

One particular challenge when designing systems for FLNG facilities is to make them compact enough to fit in a confined area. Floating facilities must include every process element of an onshore plant, including the means to generate the power necessary to compress the gas within limited space while still meeting demanding performance targets.

ABB (www.abb.com) is a leader in power and automation technologies that enable utility, industry, and transport and infrastructure customers to improve performance while lowering environmental impact. The ABB Group of companies operates in around 100 countries and employs about 140,000 people.

For more information please contact:

ABB Group Media Relations:

Thomas Schmidt; Antonio Ligi

Switzerland: Tel. +41 43 317 6568

media.relations@ch.abb.com

twitter.com/ABBcomms