

Surging New “Gas” Look of LNG Ships

The 2nd Topco LNG Tanker / Shipping Assembly from 15 to 16 October was convened in Shanghai, China. The industry insiders have paid close attention to the heating up of LNG industry. The reporter was informed at the Assembly that the order volume of LNG ships would hopefully be on the rise again in the second half of the year in light of optimistic market prospects.

Increasing Industrial Demand

In recent years, following the transformation of energy development and the enhanced appeal in terms of eco-environmental protection, the international demand for LNG has continued to increase. As revealed in the report of the International Energy Agency, the LNG trade will reach 450 billion cubic meters by 2019.

Based on the latest data report of the International Gas Union 2014 Version, the global LNG trade volume was 236 million tonnes in 2013. In particular, there was a total of 17 countries exporting LNG. Qatar and Nigeria were the leaders of spot trading in the market, taking 44% of the total volume. Others include the coast of the U. S. A. and Mexico, the Western Canada, the Eastern Africa, the Asia-Pacific Brown Region, the Russian Projects and the Eastern Mediterranean.

Judging from the LNG import, there was a total of 29 countries importing LNG resources as at end-2013. In particular, the Asia-Pacific region was the most active market worldwide, taking 61% of the total imported volume. Japan was the biggest importing country of LNG, with Europe ranking the second. China was also a major importing country. At present, China has already constructed 9 LNG receiving stations with 7 still under construction. By the end of the “12th Five-year” Plan, the total number of stations will reach 16.

Gu An-zhong, Secretary General, China LNG Association of China Industrial Gases Industry Association said, “The rapid economic development in China has brought about the substantial increase in the demand of natural gas. In future, it is likely that not only those ships in the inland waterways or

the coastal region, but also the big vessels of over 10,000 tonnes will be required to use the natural gas. Obviously, LNG is a very good choice.”

Generally speaking, LNG has two major ways of transportation, that is, either (1) transmission by pipeline, or (2) transportation by sea. In respect of the length of the pipeline, China has merely 63,000 km of natural gas pipeline for the time being which is far from meeting the demand, while the U. S. A. has secured a much longer length of approximately 500,000 km. Therefore, the LNG ship has become the supplemental transportation means of great importance with outstanding advantage in particular.

Order Volume Likely to Grow

Hu Wei-ping, Secretary General of China Industrial Overseas Development and Planning Association and Former Vice Director, Oil & Gas Department of China National Energy Administration under National Development And Reform Commission, has made such analysis, “Following the great development of the industry, the current LNG ship market is expanding extremely rapidly.”

This judgment can also be proved by the statistics of Clarkson. According to the statistical data of Clarkson, the orders for LNG transport ships in the global shipbuilding market keep on increasing. Last year, the new orders for a total of 46 LNG transport ships were signed, representing a year-on-year increase of 21.5%. In terms of the global LNG orders, it is expected that over 80 LNG ships of approximately 44 companies will proceed with tender invitation and bidding in 2014. In the coming five years, the orders of at least 100 new ships will be generated.

As introduced by Hu Wei-ping, China has already started the proactive planning since the mid-90s of the previous century in the capacity of a major shipbuilding country. With extensive reference to the experience and foundation of both Japan and Korea, it is explicitly pointed out that China shall be the major party of China’s LNG projects and proceed with the investment, transport and management of LNG ships.

China's ever-increasing demand for importing LNG brings about the development opportunities for shipbuilding enterprises in the emerging market of LNG ships in respect of coastal and inland transshipment between the large-scale LNG receiving terminals and the LNG satellite stations.

According to estimation, China's LNG import will reach 65 million tonnes in 2025 with the sources of import extended to the U. S. A., Canada, Russia and East African countries. With the apparently increase of voyage, approximately 90 large LNG ships are required. 65 new large LNG ships are required on the basis of 2013. During 2014-2015, the annual demand is approximately 6 new ships.

As for the small LNG ships, in light of their higher turnover rate, and greater dependence on the development of relevant package facilities as well as the formulation and implementation of favorable policies, it is expected that the increasing demand will be expedited.

Ship Enterprises in Pursuit of New Room

Supported by the driving force of demand and the support of national policies, China's shipbuilding enterprises have begun the substantial contribution of manpower and financial resources in the research and development of LNG transport ships.

From the independent design and construction of the first LNG transport ship in 2008 to the receipt of the first order from the overseas owner in 2010, China's shipbuilding enterprises have experienced rapid growth in the construction of LNG transport ships, with the hopeful expectation of taking 25% of the global shipbuilding market in ten years.

Equipped with the comparatively matured and leading-edge technology, Hudong-Zhonghua has the shipbuilding orders for 14 LNG ships at present. According to the news available, in order to compete against overseas shipbuilders for international orders, Hudong-Zhonghua is planning to expand by more than doubling its LNG ship production capacity in the coming four years. With bigger production capacity, Hudong-Zhonghua will hopefully take more orders for LNG ships.

It is worth mentioning that in the shipbuilding sector of small LNG transport ships, China has various shipbuilding enterprises equipped with matured techniques and experiences. Their overseas and domestic orders have obvious growth. Shanghai Bestway established its joint design team three years ago to carry out the design of small LNG transport ships. The first batch of 30,000 cbm LNG transport ships are being built in Dalian Shipyard.

As introduced by Qin Bing-jun, General Manager of Shanghai Bestway Marine Engineering Design Co., Ltd., starting from the design of LNG powered ships to the design of LNG transport ships, Shanghai Bestway aiming at the LNG industry chain will make gradual use of the obtained technical reserves for downstream extension which includes obtaining the operation qualifications for LNG transport and the source of goods.

“We are endeavoring to construct the marine LNG replenishment network including the investment and operation of the future marine LNG powered fleet, the integrated research and development for the natural gas system and the operation of the vehicle and ship refueling stations to form a complete industry chain gradually.”

Assisted by National Gas and National Prosperity, Shipbuilding Enterprises Should Make Self-improvement

At present, the ever-increasingly active LNG production and trade worldwide is turning out to be the new hot spot of global oil and gas industry while China’s energy strategic concept is in the course of transformation as well. In light of the continuous increase of the national energy demand, the introduction of LNG will have important effects for optimizing China’s energy structure as well as solving the dual problems of energy supply safety and eco-environmental protection effectively.

The LNG project is a national project. Various countries have taken measures to ensure the “national gas and national prosperity”. In the neighborhood of China, both Japan and Korea have managed to promote the development of their own LNG transport industry and shipbuilding industry by grasping and controlling the LNG transport right and setting up the marine

LNG fleet under the conditions of LNG buyer's market in the 80s and 90s of the previous century.

China's relevant strategies are more or less the same. Therefore, the rapidly growing LNG demand will bring about substantial LNG shipbuilding orders for the domestic shipbuilding enterprises. However, for the time being in China, only Hudong-Zhonghua has the experience in building large LNG ships with the annual shipbuilding capacity of approximately 3 ships. According to the expert's estimation, China has the annual demand of approximately 6 new large LNG ships.

Apart from satisfying the domestic demand in the aspect of production capacity, China's shipbuilding enterprises should pay attention to the latest LNG ship development trend, so as to satisfy the ever-changing demands of LNG ship owners and practically grasp the development opportunities.

(Source: Steel Union Information)