ABSTRACT

An LNG FEGaSuS is composed of onshore LNG receiving terminal and onshore power plant, and it is moved on the sea. It stores, vaporizes and supplies LNG to onshore through the subsea pipeline, is moored at floating mooring. At the same time, it supplies electricity produced by gas and steam turbines to onshore via subsea cable. The LNG FEGaSuS does not use seawater as a heat source to vaporize LNG, so it does not adversely affect the marine life and the sea. In addition, the LNG FEGaSuS also performs a same role of an LNG bunkering station. It can transport LNG to an LNG fuelled vessel. If the Northern voyage route opens, Korea can jump into the Asian logistics center by using the role of LNG FEGaSuS that can supply LNG to an LNG fuelled vessel. The LNG FEGaSuS can quickly provide energy and meet the increasing energy demand in developing countries, such as Southeast Asia, South America and South Africa etc. So, the LNG FEGaSuS will be the new value of the energy supply market products.

KEY WORDS: LNG FSRU; LNG Re-gasification Plant; Floating Power Plant; LNG Bunkering Terminal.

INTRODUCTION

Definition

The LNG FEGaSuS is composed of onshore LNG receiving terminal and onshore power plant, and it is moved on the sea. It stores, vaporizes and supplies LNG to onshore through the subsea pipeline, is moored at floating mooring. At the same time, it supplies electricity produced by gas turbine to onshore via subsea cable. The LNG FEGaSuS does not use seawater as a heat source to vaporize LNG, so it does not adversely affect the marine life and the sea. In addition, the LNG FEGaSuS also performs a same role of an LNG bunkering station. It can transport LNG to an LNG fuelled vessel.