ABSTRACT

The Samcheok LNG receiving terminal of Korea Gas Corporation is the fifth LNG terminal in Korea which is located in east coastal area of Korea. According to long-term gas demand in Korea, KOGAS decided to construct the Samcheok LNG terminal to provide gas to North-East of Korea. This terminal has a storage capacity of 2,400,000 m$^3$ in 12x200,000 m$^3$ 9% nickel containment LNG storage tanks and a gasification capacity of 2,340 ton/h. This terminal will have a berth capacity for 270,000 m$^3$ LNG carriers. The start-up of the terminal is targeted for 2013. The first phase of construction for 9 LNG storage tanks of 200,000 m$^3$ with gasification process of 780 ton/h will take place from 2013 to 2014. The send-out process can be extended to a capacity of 2,340 ton/h. This project will be developed in phases with consideration being given to future expansion. This paper describes the key aspects of design and features of Samchuck LNG terminal whose construction was initiated in early 2010. We also show the unique engineering aspects associated with the facility’s process design and storage tank design.

KEY WORDS: LNG; Samcheok LNG receiving terminal; process design, storage tank

INTRODUCTION

This terminal has a storage capacity of 2,400,000 m$^3$ in 12x200,000 m$^3$ 9% nickel containment LNG storage tanks and a gasification capacity of 2,340 ton/h. This terminal will have a berth capacity for 270,000 m$^3$ LNG carriers. The start-up of the terminal is targeted for 2013. The first phase of construction for 9 LNG storage tanks of 200,000 m$^3$ with gasification process of 780 ton/h will take place from 2013 to 2014. The send-out process can be extended to a capacity of 2,340 ton/h. The overview of the Samcheok LNG terminal is shown in Figure 2.