



The first geothermal power generation project by Enhanced Geothermal System (EGS) in Korea

Tae Jong Lee (1), Yoonho Song (1), and Woon-Sang Yoon (2)

(1) Korea Institute of Geoscience and Mineral Resources, Geologic Environment Division, Daejeon, Korea, Republic Of (megi@kigam.re.kr), (2) NEXGEO, Inc.

Though Korea does not have high-enthalpy geothermal resources from volcanic sources, it still has huge amount of geothermal resources at depth; i.e. technical geothermal potential of 19.6 GWe within 6.5 km deep by enhanced geothermal system (EGS) technologies. The first proof of concept project for geothermal power generation by EGS has started in Pohang, Korea in Dec. 2010. The project aims to develop a pilot geothermal power plant of 1 MW or more of installed capacity from a doublet EGS system in 5 years. This work summarizes our two years efforts including geological/geophysical surveys, site selection, civil engineering, permission for drilling, setting up the drill rig, and setting up the micro-seismic network and monitoring. At the end of Dec. 2012, drilling reached down to 2,250 m deep. Results of borehole investigation will be also discussed about.