

Methane arrives in Italy by ship

I saw a ship a-sailing ...

The first off-shore regasification plant in Europe has been moored at Porto Viro, not far from Venice, Italy, to satisfy the growing demand for "clean" energy.

The owners of the facility, Exxon Mobil, along with Edison and Qatar Petroleum, chose to install Elster-Instromet ultrasonic gas meters because of the reliability and precision of the meters and the group's long-standing experience in the production of large volume gas measurement systems (almost 75 years). Elster-Instromet ultrasonic meters have also been installed in Italy's first mainland regasification plant at Panigaglia, the metering station at Masera for the methane pipeline from Northern Europe and more than 10 SNAM distribution stations, for a total of over 130 ultrasonic meters of different diameters. Gastec S.r.l., a company based in Rosate (in the province of Milan), is working in partnership with Elkrogas S.p.a. to install and activate all the ultrasonic meters and flow computers.



Q.Sonic-5C 20" at Minerbio plant

The first section of pipeline, installed by Terminale GNL Adriatic, spans across 15 km of sea, 10 km of the Po river delta and 15 km of inland regions, before reaching the metering station at Cavarzere (in the province of Venice). The second section, installed by Edison, is 84 km long and will transport the gas from Cavarzere to the SNAM national gas pipeline hub at Minerbio (in the province of Bologna). Here a second metering station, again equipped with Elster 20" ultrasonic meters,



connects the methane pipeline to the national grid.

LNG is simply methane gas that has been liquefied by lowering its temperature, so that it can be transported by ship. This tried-and-tested method is safe and reliable, and is currently used for about one quarter of all international transport of gas throughout the world.



FC2000 line 4



Overview Minerbio plant

Methane gas is liquefied by cooling it to -162°C . This reduces its volume by 600 times. The liquefied gas is transported in special tankers.

LNG technology overcomes the problems associated with conventional pipelines. It

bridges the gaps between markets and gas production sites, using ships to make energy resources available where they would otherwise be inaccessible.

Although LNG only accounts for 5 percent of the gas imported by Italy, it is set to play an increasingly important role by expanding the traditional sources of energy imports and thus contributing to the safety and competitiveness of Italy's energy supplies. The facility, built by Terminale GNL Adriatic Srl – in which Qatar Terminal Limited and Exxon Mobil Italiana Gas each have a 45 percent interest and Edison a 10 percent interest – will be the world's first off-shore plant capable of receiving, storing and regasifying liquefied natural gas.

The LNG terminal will have a regasification capacity of 8 billion cubic metres of gas per year, increasing Italy's regasification capacity by 200 percent and supplying 10 percent of the country's demand for gas. The plant will thus have a key role in increasing the safety of Italy's energy system and boosting competition on the country's natural gas market.

The Italian Government has approved the construction of other regasification facilities, which will start in 2009.

The Elkrogas team contributed to the realisation of the metering station equipped with ultrasonic meters with a high level of competence, providing technical and commercial support from the very beginning, and acquiring the know-how for forthcoming projects.