PQ Energy plans up to 2.8GW of reserve plants in Germany

18 May 2015 15:29

Power plant developer PQ Energy plans to construct three natural gas-fired reserve power plants in Germany with total capacity of 2.8GW.

This is an early sign that German energy policy aimed at allowing companies make money backing up renewable energy installtions with fossil-fuels is convincing investors to look past poor profit-margins for natural gas-fired plants.

The idea is that the plants will take part in a planned capacity reserve, where transmission system operators (TSOs) will pay companies for keeping plants on standby, and that this revenue stream would offset the fact that the plants run for very limited hours.

‘‘All the three gas-fired power plant projects in southern Germany are alive,” said Dominique Candrian, CEO and partner of PQ Energy.

The Schweinfurt plant with a capacity of up to 1GW will be located in northern Bavaria and the Gundelfingen with a capacity of up to 1.2GW will be located in central Bavaria. These two plants will be located close to the nuclear plants of Grafenrheinfeld and Gundremmingen. Both nuclear plants will shut down in the near future – 1.3GW Grafenrheinfeld in the second half of June, 1.3GW Gundremmingen B by the end of 2017 and 1.3GW Gundremmingen C by the end of 2021.

The third plant that PQ Energy is planning, Griesheim with a capacity of up to 600MW, will be located in Frankfurt.

Almost all large German gas-fired power plant projects have been cancelled or put on hold recently as gas-fired generation is not profitable due to low wholesale electricity prices (see EDEM 21 November 2014). PQ Energy, however, believes that its three plants can be profitable as they would not sell power to the market.

‘‘These power plants are designed to become reserve plants, they will not operate in the market, but will become regulated assets,” said Candrian. “They will help safeguard power system stability and security of supply at times when there is too little or too much electricity generation in the system.”

For example, when there is too high wind power generation in northern Germany, some plants there have to shut down and more generation is needed in the south. In such cases, PQ Energy’s plants could avoid overloading the north-south transmission lines, Candrian explained.

Germany already has a network reserve for ensuring power system stability and the economics ministry plans to establish a capacity reserve for instances when supply falls short of demand on the short-term wholesale market unexpectedly and abruptly.

According to PQ Energy, its projects would be suitable for participating in both reserves. The projects are in the process of some zoning plans modifications ahead of applying for environmental permits. Plans for establishing electricity and gas interconnectors for the plants also need to be set.

‘‘Investment decisions will be taken once agreements have been concluded with relevant transmission system operators that the plants could be part of a reserve,” said Candrian. “Currently, we are waiting for detailed plans of the German government about the planned capacity reserve.”

The German government plans to publish more details about the reserve in the beginning of June in a white book that outlines its proposals about the new power market design. The government will make concrete legislative proposals after public consultations that will be held in the summer (see EDEM 30 April 2015).

PQ Energy expects to take investment decisions for its plants latest by mid-2016. The Schweinfurt and Griesheim plants could become operational earliest at the end of 2018 and the Gundelfingen plant earliest at the end of 2019, said Candrian.

PQ Energy will be the owner and operator of the plants, which will be financed by its owner, investment and advisory firm Blackstone. laura.raus@icis.com