



December 2014

The Dynamics of a Liberalised European Gas Market

key determinants of hub prices, and roles and risks of major players

Executive Summary

Hub pricing is dominant in north west European gas markets and is spreading to the south and east of the Continent. The most important determinants of future hub pricing, which will determine price levels over periods of several years, will be global market dynamics. The six major uncertainties in global gas market dynamics which will impact European hub prices over the period up to 2030 are: demand for natural gas and LNG in Asia; transition away from JCC pricing in Asian LNG markets; scale and pace of US LNG export approvals and construction; scale of LNG ramp-up from non-US suppliers; shale gas development outside North America; and Russian response to `overspill' of excess LNG into the European market.

Having surveyed this landscape and its uncertainties, we think it likely that to the end of 2015, Europe will rely to a greater extent on Russian pipeline imports (subject to weather trends) due to continued LNG diversion to Asia. In the period 2016-18, the LNG market should ease depending on the pace of Japanese nuclear re-starts, start-up of Australian LNG projects and Chinese demand growth. Post-2018, the global market becomes very unpredictable with potentially large volumes of US LNG and new projects from Australia, Canada, East Africa and Russia. Overspill of 'excess LNG' into Europe could trigger Russia to utilise its considerable spare production and export capacity to reduce European hub prices in an attempt to keep LNG out of Europe. But should US shale production costs increase (reducing US LNG export volumes), and higher project costs slow the pace of non-US LNG projects, this would (especially if combined with higher Chinese LNG demand) lead to the possibility of a tighter global LNG market in the early 2020s, with very significant impacts on European hub prices.

Changes in prices and contracts in the new competitive environment of European gas markets have impacted the roles and risks of the major groups of gas market players. Producers and exporters are selling more of their gas short term at hubs but their traditional business model remains essentially intact. Local distribution companies may lose their larger customers to competitors, but their traditional business model is still workable. Mid-stream energy trading (former merchant gas transmission) companies have the biggest problems because liberalisation, competition and the move to hub prices have rendered their traditional business model (at least partially) unworkable. In order to restore profit margins they need to buy gas at hub-minus, and sell gas at hub-plus, prices. However it is not clear that producers and end-users will be willing to agree to such commercial terms unless these reflect the value provided by mid-stream companies (in terms of security of demand and supply).

If hub-minus/hub-plus framework either proves unacceptable, or fails to improve the financial position of mid-stream energy companies, the market will consolidate until a smaller number of mid-stream



players can earn acceptable returns. This will have significant impacts on security of supply and the likelihood that existing long term contracts can survive into the 2020s (let alone the 2030s). Markets are still in transition and, in those countries where competition has been slower to develop, it may be several years before players experience these pressures. Resolution of problems in markets where these pressures are already evident and acute may point the way to the future.