

System Flexibility Update from National Grid NTS

Transmission Workstream, 3rd September 2009

Following the presentation given at the System Flexibility workshop held at Ofgem on 24th June, National Grid NTS requested further feedback from the industry. This note summarises the feedback received during August in the hope that further thinking may be stimulated.

We now plan to hold the next workshop in October, therefore if any other parties wish to meet either on a bilateral or group basis during September then we remain happy to do so. Please direct any such requests or any other feedback to Phil Hobbins philip.hobbins@uk.ngrid.com, tel: 01926 653432.

National Grid NTS held a meeting during August with an industry participant and two other parties. The participant shared the results of analysis that it had commissioned relating to future flexibility requirements on the system and the future UK security of supply situation.

The main messages we picked up from their analysis and subsequent discussion were:

- The participant believed that swing capability from existing facilities / fields is declining rapidly and will continue to do so out to 2020 without additional investment.
- The participant believed that the renewables targets are very challenging, and therefore considered that gas will be the primary new build source of generation over the next decade as retirement of some existing coal and gas plants force its adoption between 2016 and 2020. A significant quantity of new generation capacity is therefore required by 2020 – most delivered by new CCGT build, causing an increased gas demand on the NTS and hence a requirement for more NTS swing capability.
- The participant believed that new storage would be the main contributor to meeting this increased demand for flexibility. NGG commented that while new storage is expected to help the security of supply situation, there was the potential for it to consume within day flexibility as well as to provide it, for example, the need for storage to refill may cause locational deficits. The participant's view was that new storage will respond to market signals and therefore will always be a benefit to the system.
- The participant held reservations about the capability of LNG to provide the UK's 'just in time' supply source for several reasons:
 - Terminal operations to deliver flexible gas supplies would be uneconomic;
 - The 'batch process' nature of operations;
 - Practical constraints that may prevent ships arriving eg. port congestion, fog constraints and the number of LNG carriers that will need to be dedicated to the UK supply chain;
 - The UK may be able to attract the volume required, provided it makes itself an attractive market to suppliers by way of certainty and improved netback value. If not, to attract cargoes in the spot market, the UK will end up paying the highest price, given demands for LNG elsewhere in the world.

NGG held a higher expectation of LNG's contribution to delivering supply flexibility, given that ~1bcm of supply capability is now connected with more planned and the significant variation in flows seen to date from Grain, although accepted that operational experience from the Milford Haven terminals will inform a greater understanding.