

NGGT BRIEFING NOTE: OPERATIONAL IMPACT TO THE GB ENERGY MARKET

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This note presents the main impacts that would be experienced by both the energy market and the wider UK economy following a situation where the Feeder 9 pipeline would need to be isolated.

In the short term, the isolation of Feeder 9 would immediately and dramatically reduce east coast transmission capability and constrain Easington area entry flows (both the Easington terminal and onshore storage sites) to approximately 75 mcm/d post system reconfiguration, which represents up to a 40% decrease to recent operating levels and effectively decouples the UK's integrated balancing zone. Any such isolation process would require both significant market adjustment along with fast and substantial operational action by our Gas National Control Centre (GNCC), given Feeder 9 is the highest throughput feeder on the National Transmission System (NTS).

We have clear processes that must be followed to maintain safe operation and reduce risk to supplies. If isolation were to happen under winter conditions, it is very likely these will include the need to issue a Gas Deficit Warning, as well as undertake robust energy balancing and capacity management actions to reduce demand / secure additional supplies, predominantly LNG and interconnector importation, in the south to support and maintain supply security. Additionally, our portfolio of actions will likely include restrictions to non-firm offtake capacity to those large end users, namely Power Stations and large Industry, who do not have firm access rights, thus introducing a heightened and consequential risk into the UK electricity market. This will be necessary to arrest the early phases of pressure degradation until the NTS can be stabilised and system balance restored. These scenarios would be highly dependent upon the potential timings of market and network configuration response and the number of days over which the initial phase of the incident occurs.

Over a longer period, we estimate that continued high levels of intervention by the GNCC would be needed to allow the market sufficient time to reposition and respond to the need to shift UK market supply. This includes the need to reduce intake from the North Sea and Norway and regularise supplies needed to support the network from southern sources. We estimate that it could take up to three weeks for the market to re-establish a sustainable supply pattern, creating considerable daily volatility in energy prices and a need for us to more proactively manage the balance throughout this time.

For the totality of the event, our analysis suggests that GB will be wholly dependent on competing for and accommodating LNG and interconnector supplies from global markets, with a likely case of needing prices to at least match Asian LNG Spot and interconnected supplies from mainland Europe. Gas supplies (and therefore Line Pack) would no longer be capable of being optimally distributed across the UK with such transmission route limitation. Furthermore, the combination of significantly reduced overall gas margin and the potential for other asset failures to occur, realistically heightens the likelihood of deeper interruptions to gas demands and the possibility of having to invoke emergency actions and procedures.

Further context: The most recent and comparable experience of significant supply losses that would be on par to the isolation of Feeder 9 occurred on 1 March this year, when additional supply volumes materialised across the market. We had to manage the event and drive adequate market response by issuing significant market notices, utilising reserve holdings and taking balancing actions at prices up to 499p/th before the system balanced through additional Gas from LNG and additional flows through the Continental Europe interconnection. This situation, however, contained significantly less network configuration risk and was much shorter in duration than we would expect to see for Feeder 9.