NTS CMF Position Paper

Storengy UK, a fully owned subsidiary of Engie, is operating one of the largest onshore gas storage facilities in the UK.

The current economic context of storage operators in the UK is already problematic with disproportionate business rates scheduled to improve only slowly in the coming years and a market value (seasonal spreads and shorter-term volatility) that reflects only partially the real value provided by gas storage to the gas system and the end users.

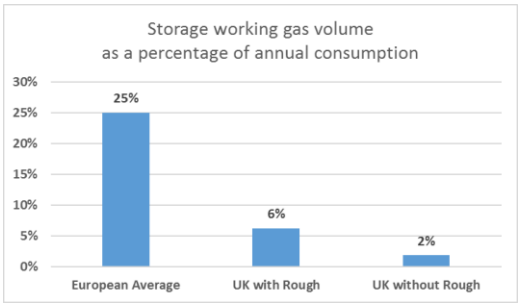
The current discussions on the implementation of the TAR Network Code and the GTRC could have a disastrous economic impact if the rules applying to storages are not adapted to take into account their unique role in the market.

This document expresses Storengy UK's position on the NTS CMF gas charging review.

General context in the UK

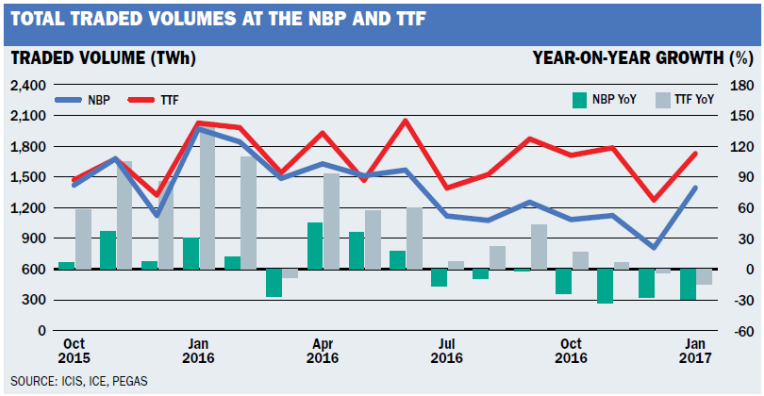
1- Gas storage plays an essential role in the well-functioning of the gas market. Storages act as a buffer to dampen the effects of gas supply and demand fluctuations, allowing network users to balance the grid, thereby contributing to reduce the price volatility. Additionally, storages provide security of supply to the markets they are connected, which plays a valuable role of an insurance against supply shocks.

2- Among major European countries, the UK has the lowest storage capacity relative to its annual consumption (between less than 2% and 6% depending on the assumption of availability used for Rough facility) compared to the rest of Europe (25%). Flexibility has historically been provided by UK Continental Shelf production. This indigenous supply flexibility is now fading and replaced with a reliance on just-in-time imports from world gas markets.



Source: Storengy UK

3- The increasing scarcity of flexible gas locally available in the UK, compounded by other factors such as currency fluctuations, is already starting to have a negative impact on the liquidity at the NBP. Liquidity at the NBP has lagged behind its continental peer TTF every month since June 2016. The UK relies on market signals to ensure security of supply, but these signals are weakening.



Source: ICIS

4- Due to adverse economic conditions faced by UK storage operators (punitive business rates and storage value only partly reflected in market prices), investment in storage has stalled. In fact, the UK is already experiencing a decline of its existing storage capacity with mothballing decisions taken in recent years (mothballing of 33% of Hornsea withdrawal capacity, Rough 47/8A platform and wells withdrawn from service), while no new project has been sanctioned in the last 10 years. Storage project developments have been either cancelled or put on hold indefinitely.

5- The UK industry as a whole is increasingly concerned about the current prospects for gas storage, which puts its competitiveness at risk, as illustrated[1] by the British Ceramic Confederation written evidence to the economic affairs committee inquiry into "the economics of UK energy policy": *"Gas storage facilities are key network infrastructure (…), additional UK gas storage is vital for security of supply".*

6- This context is already problematic for the UK gas market but it may become worse in the near future if TAR NC is applied without evaluating its far-reaching consequences on gas storage operators and their customers' behaviours.

Guiding principles expressed in the TAR NC and by OFGEM

7- The TAR NC[2] stipulates some principles in its introduction section, two of them are of interest for storage operators: the concept of *"… reasonable level of cost reflectivity …"* and the commitment to *"… avoid double charging for transmission to and from storage facilities, this Regulation should set a minimum discount acknowledging the general contribution to system flexibility and security of supply of such infrastructure"*.

8- Storengy UK believes there is no compelling economic reason to charge storage operators for transportation costs.

9- As stated[3] by OFGEM in its November 2015 Confirmation of policy view: *"Storage gas circles around the system. It enters the NTS and exits to reach the storage facility; and then enters and exits the system again to meet demand. This means that gas going into storage has already paid an entry charge to access the system, and will pay an exit charge when it*

[1] http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/economic-affairs-committee/the-economics-of-uk-energy-policy/written/39462.pdf
[2] http://www.gasgovernance.co.uk/sites/default/files/EU%20Tariff%20Code%20-%20final%20clean.pdf
[3] https://www.ofgem.gov.uk/sites/default/files/docs/2015/11/gtcr_confirmation_of_policy_view_and_next_steps.pdf

ultimately exits the system to meet demand." This gas has therefore already made its contribution to cost recovery before it is injected and withdrawn from storage

10- The previous points are shared in the wider gas industry and led to previous decisions to exempt storage from the TO Commodity Charge and SO Commodity Charge.

11- Based on this, Ofgem proposed in its November 2015 Confirmation of policy view, following industry consultation, that "*storage users would not be charged the floating element, preserving the existing arrangements whereby they don't pay the commodity charge.*"

12- Ofgem published[4] an Open Letter on 21st February 2017, indicating its preference for "floating capacity charges" to be applied at all IP and non-IP points, and rejecting a "dual regime". In this letter, there is no mention of storage users not being charged the floating element. The Open letter is calling for justification from market participants to go beyond the 50%, which is the minimum discount specified by the TAR NC.

Arguments for a 100% discount applied to storages

13- Storage operators consider that future capacity charging arrangements must preserve the current arrangement for storage, on both entry and exit storage connection points. In the context of the TAR NC and the GTCR, this means a discount of 100% should apply to storage sites.

14- Any storage discount lower than 100% would undermine the level playing field in the flexibility market, dis-incentivising UK storage over just-in-time imports, whose gas is exempt from double charging as it only pays capacity once when entering the system. This may push UK gas storage operators out of the market.

15- The example below illustrates why any discount lower than 100% would lead to a double charging of storage operators, a principle the TAR NC specifically wants to avoid. A shipper imports gas and then delivers it to its customers. It can buy and sell without storing the gas or it can decide to store it. The cost structure for both cases is as follows, x% being the level of discount:

Gas imported and directly delivered to the end user or exported	Gas is imported and stored before being delivered to the end user or end user
Gas price + 100% entry fee to the UK NTS + 100% exit fee of the NTS	Gas price + 100% entry fee to the UK NTS + (1-x)% exit fee from NTS to storage + (1-x)% entry fee from storage to NTS + 100% exit fee of the NTS

All things being equal, any x% different from 100% would lead stored gas to be charged much more than any other gas used in the UK. Respecting the TAR high-level principle on no double charging and preserving a level playing field between flexibility assets should lead to 100% discount.

[4] https://www.ofgem.gov.uk/system/files/docs/2017/02/gas_transmission_charging_policy_view_21_feb_2017.pdf

16- Storage users typically inject gas at time of low demand on the network, in response to market signals. They are not in any way a constraint for the gas network, but on the contrary, they provide relief to the transmission system, helping to minimise investment. This is reflected by the current baseline exit capacity level, which is zero for storage sites in Cheshire. The 100% discount is justified by the benefits gas storage facilities are providing to the system.

17- Storage users mainly inject gas using off-peak capacity. Consequently, storages have never represented any significant contribution to TO revenue on the exit side, mirroring the fact they did not require investment into the grid to allow gas storage injections. The 100% discount is thus justified by the cost reflective principle.

18- To put this in perspective, charging storage users on gas that has already paid for the transmission system would be of the same nature as charging shippers at the NBP when they exchange gas. It would lead to double charging and significantly reduce both financial and physical exchanges with tremendous impact on liquidity and volatility.

Potential consequences of a lower than 100% discount for storage operators, storage users and the NBP gas market

19- A significant tariff increase on storage incurred by implementing the provisions of Chapter III of the TAR NC to all entry and exit points (i.e. going beyond what the TAR NC itself requires) whilst not mitigating its negative effects (with a 100% discount as permitted by Article 9 of the TAR NC) may cause major shifts in storage users' behaviour to the detriment of the gas market end users.

20- Any increase in cost of injecting and/or withdrawing gas to/from the storage would impact the ability of medium range storage users to capture price movements, "extrinsic" value would vanish, destroying a substantial part of storage users benefit. In addition to the financial impact, this will have as well an influence on the physical gas system. A good example is the re-fill of storages at times of low demand in winter; it would be much less likely to happen, adding further pressure when demand increases sharply during the rest of the winter.

21- The profitability of storage operations would be strongly impaired by this fall in captured extrinsic value, which would lead to asset closures in the UK. With fewer and fewer physical assets on its soil, the UK would most probably see its price volatility increase and its liquidity compared to other hubs decrease. This will not benefit end users.

22- An impact assessment addressing specifically potential changes of capacity charges at storage connection points must be undertaken before any modification proposal is tabled, and well ahead of any decision.

23- Storengy UK believes that a 100% discount applied to storage capacity is the only solution able to deliver a safe, secure and high quality transmission system for the UK.