

Gas storage regulation for a competitive gas supply market

Gas Directive 2003/55/EC requires third party access (TPA) to gas storage facilities. This paper provides a user view of how that access should be structured and regulated in order to support the development of gas trading and competitive gas supply markets.

In summary

- Third Party Access must be provided to all gas storage facilities connected to high pressure pipelines in the EU
- Limited, but important, exemptions are permitted to mandatory TPA to gas storage. In particular, new storage facilities that enhance competition should be encouraged.
- All Storage Operators (SOs) providing TPA services must be legally separated and with similar unbundling and compliance controls as required for TSOs.
- Unless there is sufficient competition in storage services, it is necessary for TPA to storage to be regulated.
- The level of competition should be tested for each sector of the storage market, defined by the purpose for which the storage service is required. Sufficient competition is only likely to exist if there are transparent and liquid wholesale gas markets within the gas network to which the storage facilities are connected.
- In the case of Negotiated TPA, procedures must still be in place to ensure non-discriminatory access to storage services.

1. What has EFET said in the past?

Gas storage

Third party access to storage is an essential feature of gas market opening. Storage providers that have or share dominant positions must be regulated during the transition to fully competitive conditions.

What should be regulated?

- Monopoly services associated with the transmission, distribution and storage systems must be regulated with published tariffs or an approved transparent marketbased pricing mechanism.
- Competitive services that are shown to be subject to sufficient competitive forces do not need regulatory intervention. Prices and commercial arrangements can be left to the parties involved.

Source: Principles for European Gas Market Development, EFET October 2002



2. What does the Gas Directive 2003/55/EC say?

Article 19 of the directive requires TPA to all storage facilities that are "technically and/or economically necessary for providing efficient access to the system for the supply of customers." TPA must "operate in accordance with objective, transparent and non-discriminatory criteria." Article 8 also requires the storage operator to "refrain from discriminating between system users or classes of system users, particularly in favour of its related undertakings" and "to provide system users with the information they need for efficient access to the system".

In Article 19 Member States can choose to apply either (or both) regulated or negotiated TPA. Under negotiated TPA, parties are obliged to negotiate access in good faith. Storage operators must publish their main commercial conditions for use of storage, and update annually. Under regulated TPA, access is on the basis of published tariffs and/or other terms and obligations for use of the storage.

According to Article 25, regulatory authorities must monitor the access to all storage as provided for in Article 19. Parties may complain to a regulatory authority with respect to issues mentioned in Article 19, and the regulatory authority shall issue a decision.

Certain new investments in major gas storage infrastructure may be exempted from TPA, under Article 22, by agreement of both the Member State and the Commission. The exemption is subject to strict criteria e.g. the new investment must enhance competition in gas supply and enhance security of supply.

The starting point, however, is what the directive defines a storage facility to be.

3. What is a 'storage facility'?

Article 2.9 states that:

"storage facility' means a facility used for the stocking of natural gas and owned and/or operated by a natural gas undertaking, including the part of LNG facilities used for storage but excluding the portion used for production operations, and excluding facilities reserved exclusively for transmission system operators in carrying out their functions;"

The regulatory authority must therefore examine the purpose for which the storage facility is used and the obligations (if any) on the TSO relating to the TSO's need to reserve exclusively a portion of the storage capacity.

Regarding the exclusion of "the portion used for production operations", the intent appears to be to ensure that the portion of gas storage that is used exclusively as an integral part of hydrocarbon production is not required to be subject to TPA. It follows that <u>any portion of a gas storage facility that is used for the purpose of supply is included</u> in the Directive as gas storage.



Regulatory authorities may need to make judgements on where to draw the line between the use of storage exclusively for production and use for supply. But, it is clear that storage facilities are <u>not</u> excluded from the definition simply because they are, for example, operated by an Exploration and Production company, located near a production facility or because the facility itself is a depleted gas reservoir.

Is part of YES storage facility used exclusively No TPA for excluded for production or reserved for TSO? portion of storage (Article 2.9) Rest of storage facility NO is storage facility necessary for efficient NO No TPA supply etc. to customers? (Article 19.1) YES 🛨 YES Is it a NO new facility? (Article 22) Are the **RTPA or NTPA** conditions for (Article 19) **TPA exemption met?** NO (Article 22) Is there YES sufficient competition in the YES relevant storage market? (Recital 22) **Member State decides** Negotiated and Commission approves **TPA** NO access conditions, if any Regulated (Article 22) **TPA**

Diagram 1 – The logic in 2003/55/EC

Making the choice between regulated and negotiated TPA

4. Is the gas storage facility subject to TPA?

Regulatory authorities must then decide if all or part of a gas storage facility is necessary for providing efficient access to the system for supplying customers. We believe that the only reasonable starting point is to require all existing storage connected to high-pressure¹ networks to provide TPA, although the regulatory authority should grant exemptions to those parts of gas storage that are not covered by the gas directive. There are only two categories of exemption to TPA that are realistic to consider in this context: a) gas that is held in store by the Storage Operator (SO) in relation to some form of security of supply obligation that has been imposed directly or indirectly on the

¹ i.e. all national or regional gas pipelines with pressures exceeding 1 bar



SO or b) a new storage facility that meets the competition requirements of Article 22 of the gas directive.

Where necessary, arrangements for access to small or low-pressure storage, can be allowed to vary from country to country. For example, arrangements for access to storage facilities that are connected to the distribution networks of some Member States should be reviewed by the regulatory authority to ensure that there is non-discriminatory treatment in the services provided to users.

New major investments in gas storage infrastructure may be partially or fully exempted from TPA, provided they meet the requirements of Article 22. It must also be clear, however, that new storage facilities, particularly where they are a small part of the storage market, must be encouraged if competition is to develop. Investors in new storage services that genuinely compete with existing regulated monopoly services, or services operated by a dominant player, must be allowed the commercial freedom to make their own commercial arrangements for use of their storage services.

5. How should the regulatory authority decide between applying regulated or negotiated TPA?

Negotiated TPA should only be applied if the relevant sector of the storage market is subject to sufficient competitive forces. Regulated TPA must be applied if there is insufficient competition. However, the introduction of more competition should be encouraged. It may be necessary for certain (dominant) facilities, therefore, to be regulated, whilst smaller, new storage services are subject to negotiated TPA or even exempt from mandatory TPA altogether.

In determining the level of competition, the Member State must first define the relevant market, in particular considering the needs of network users. The type of flexibility services demanded by network users will be driven by their requirements to operate competitively within the local geographic market. For example, demand will be driven by the local network access and balancing regime, national supply licence obligations, physical network design and availability of substitute (interchangeable) flexibility tools.

Separate "markets" are likely to exist for different time periods (e.g. within day, seasonal etc.). These separate "markets" or "market sectors" can also be defined in terms of the purposes for which flexibility is required (e.g. to cover peak and seasonal demand, daily balancing, supply interruptions etc.) In different geographical locations there may well be different physical sources of flexibility, but, it is likely that in each flexibility "market sector", several (but not all) flexibility tools can be used to meet users' needs.

In determining the existence of sufficient competitive forces in each "market sector", a further test is needed to see if two necessary conditions exist:



- a) Transparent and liquid wholesale gas markets revealing the value of storage and other flexibility services over the relevant time period (e.g. by showing the summer/winter spread or the system marginal price within the day)
- b) Entry/exit systems allowing gas trading within the transmission grid, thereby allowing alternative sources of flexibility to compete with flexibility from storage facilities.

The work undertaken on the choice between RTPA and NTPA could be usefully extended to set guidelines for granting any exemptions from TPA for new storage facilities. Notably, the tests for determining if the new investment enhances competition in gas supply, any detrimental effects the exemption could have on the gas market and whether the level of risk is sufficient to warrant an exemption.

6. What should regulated TPA mean?

Regulated TPA must mean the ex-ante approval of the tariffs (or underlying methodologies) and terms and conditions by the regulatory authority, using a processes similar to those set out in Articles 18.1, 25.2, 25.3 and 25.4 and as applied to transmission, distribution and LNG facilities. The regulatory authority is responsible for ensuring that the SO complies with its tasks set out in Article 8.

7. What should negotiated TPA mean?

In cases where TPA is negotiated there is still a requirement for regulatory oversight to ensure that the SO complies with its tasks set out in Article 8 of the Gas Directive. That is to say that the regulatory authority must ensure that the SO does not discriminate between system users (including any supply affiliates), that system users are provided with the information they need to use the facility efficiently and that information flows between network and storage operators guarantee efficient operation of the interconnected systems. The regulatory authority must also ensure that, as required in Article 19, the SO regularly publishes the main commercial conditions for use of storage and negotiates in good faith. Within this framework the SO is free to set the commercial conditions, including tariffs, for third party use of its facility.

8. What measures need to be put in place to ensure effective TPA and non-discrimination (as applicable to both regulated and negotiated systems)

To ensure non-discrimination, under both negotiated and regulated TPA, there must be sufficient separation of storage operations (including storage marketing) from any supply and/or trading affiliate. The level of separation should be similar to that required between TSOs and their supply affiliates, as set out in the gas directive.

In a vertically integrated undertaking, storage operations should be carried out by a separate legal entity from the part of the company responsible for the production or supply of natural gas. This must include clear managerial, functional and accounting separation, set out and monitored by a compliance officer. For example, there must be



separate staff and control facilities, and third party user's information must be kept confidential from the supply or trading affiliate.

These and further measures should be set out in TPA good practise guidelines for SOs. However, if such guidelines are voluntary, users must have confidence that SOs will actively implement them. The relevant authorities must monitor and report on application of the guidelines for SOs.

9. Further measures e.g. market power remedies

Even if the competition and separation conditions suggested above exist, there may be issues of market power that must be addressed by conditions on the SO or owner, or supply affiliate.

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