Utility Regulator
ELECTRICITY GAS WATER

Gas Storage

Regulatory Framework

Conclusions Paper

March 2010

Contents

1. Introduction

The Utility Regulator published a Gas Storage Regulatory Framework Consultation Paper (the Consultation Paper) on 22nd July 2009 to provide industry stakeholders with a position on the regulatory framework for gas storage facilities in Northern Ireland.

The Consultation Paper discussed the key legislative areas to be considered in the development of a gas storage regulatory framework for Northern Ireland. This included relevant Northern Ireland legislation as well as wider European legislation, in particular the new gas directive[1] (the Directive) contained in the recently adopted “Third Package” of energy measures. The Consultation Paper also referenced existing gas storage regulatory frameworks in Europe to provide working examples of regulation in practice.

In particular the Consultation Paper discussed selecting the most appropriate Third Party Access (TPA) access regime, either regulated or negotiated, and the option of granting exemptions to TPA.

The Consultation Paper proposed criteria and guidelines that the Utility Regulator intends to use to determine the most appropriate TPA access regime for future gas storage facilities in Northern Ireland. The proposed criteria and guidelines were largely drawn from relevant European bodies such as the European Energy Regulators (ERGEG) and the Council of European Energy Regulators (CEER). The analysis contained in the Consultation Paper used the proposed criteria and guidelines to inform the discussions on the potential gas storage regulatory framework for Northern Ireland. The Consultation Paper set out specific questions for respondents to answer and sought general comment on the analysis presented.

Additionally since storing gas in a gas storage facility is a licensable activity in Northern Ireland, a draft gas storage licence accompanied the Consultation Paper. Again the Utility Regulator sought comments on the proposed licence conditions.

The Consultation received seven responses, which are summarised in Appendix A.

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Directive 2009/73/EC of the European Parliament and of the Council concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC, adopted 25th June 2009.
Directive 2009/73/EC

1.1 Purpose of this paper

The intention of this Gas Storage Regulatory Framework Conclusions Paper (the Conclusions Paper) is to clarify the particular issues raised by respondents and to also confirm the criteria to be used in determining the most appropriate gas storage regulatory framework for Northern Ireland. As discussed in the Consultation Paper it is not possible at this stage to confirm the TPA access regime for a particular gas storage facility, given the early stages of the storage projects. However the Utility Regulator wishes to clarify the criteria and procedures that will apply when deciding upon the most appropriate access regimes for these storage facilities.

The Utility Regulator is also keen to support the development of gas storage facilities in Northern Ireland. Indeed the principal duty of the Utility Regulator is to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland. In recognition of this principal the Utility Regulator wishes to explore additional measures to promote the development of gas storage facilities in Northern Ireland. Therefore the Conclusions Paper also discusses some potential areas where the Utility Regulator may be in a position to provide an appropriate level of regulatory support.

2. Summary of Conclusions

Following the consultation and industry responses the Utility Regulator has concluded that the following criteria will be used to inform the most appropriate access regime for gas storage facilities in Northern Ireland. The final decision on the most appropriate access regime for a gas storage facility will be dependent on the circumstances of the particular application.

With respect to Article 33 of the new directive and the requirement to determine whether a gas storage facility is technically and/or economically necessary, the Utility Regulator plans to use the following criteria:

- The availability of flexibility tools
- The perceived impact to the market when TPA does not apply

Notably, if following analysis, TPA to a gas storage facility is deemed not technically and/or economically necessary then TPA does not apply to that particular gas storage facility.

In order to assess the availability of flexibility tools the Utility Regulator views that the UK and the flexibility market are the most appropriate geographic and product markets respectively.

With respect to Article 33 and the requirement to determine the most appropriate TPA regime, be that either regulated or negotiated, the Utility Regulator plans to use the following criteria:

- Level of market power
- Impact to investment
- Level of transparency
- Unbundling requirement

The Utility Regulator will also use the CEER checklist and ERGEG criteria discussed in this paper as supporting guidance.

With respect to granting an exemption to major new gas storage facilities, the Utility Regulator will use the following conditions set out in Article 36:

a) the investment must enhance competition in gas supply and enhance security of supply;
b) the level of risk attached to the investment must be such that the investment would not take place unless an exemption was granted;
c) the infrastructure must be owned by a natural or legal person which is separate at least in terms of its legal form from the system operators in whose systems that infrastructure will be built;
d) charges must be levied on users of that infrastructure;
e) the exemption must not be detrimental to competition or the effective functioning of the internal market in natural gas, or the efficient functioning of the regulated system to which the infrastructure is connected.

The Utility Regulator will also use the ERGEG guidelines discussed in this document as supporting guidance on determining exemptions under Article 36 of the Directive.

The criteria presented above are considered compliant with the new Directive and current regulatory guidelines. However European guidelines on TPA and other regulatory requirements may change in response to future developments in the gas storage market. Accordingly there may be additional criteria or guidance that may become relevant when determining the most appropriate TPA to gas storage facilities in Northern Ireland. The Utility Regulator will monitor any such developments and may amend criteria to comply with future European regulatory requirements or recommendations.

3. Article 33 – Access to storage

The relevant references to TPA are contained in Articles 33 and 36 of the new directive concerning common rules for the internal market in natural gas[2]. The Consultation Paper discussed TPA and exemptions in detail however a short summary is provided below. Exemptions relating to major new infrastructure under Article 36 are discussed in section 4.

Article 33 refers to Member States choosing between regulated or negotiated access to storage facilities when it is technically and or/economically necessary for providing efficient access to the system for the supply of customers.

Therefore when it is deemed *not* technically[3] and/or economically[4] necessary to provide efficient access to the system for the supply of customers then it is *not* necessary to provide TPA. In this case TPA requirements do not apply to the storage facility.

As a reminder regulated TPA is on the basis of published tariffs and/or other conditions as determined by the Utility Regulator. Whereas negotiated TPA refers to access on the basis of voluntary commercial agreements negotiated in good faith between the storage owner and users of the facility.

With the above references in mind, essentially there are three questions to be asked in the following order when applying Article 33:

1. *Is it technically necessary to provide access to the gas storage facility to enable the efficient supply of gas to customers?*

2. *Is it economically necessary to provide access to the gas storage facility to enable the efficient supply of gas to customers?*

If the answer to both of these questions is 'no' then TPA does not apply under Article 33. In this case the gas storage owner/operator is not required to provide TPA to the gas storage facility. If the answer to either of these questions is 'yes' then TPA to the gas storage facility is required. In this case a third question must be asked:

3. *Is regulated or negotiated access the most appropriate TPA regime?*

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[2] The numbering of the relevant articles as previously quoted in the Consultation Paper has changed due to later amendments in the directive. The relevant articles are now 33 and 36.

[3] Access to storage is technically necessary if there are no other types of flexibility tools that can satisfy any operator or new entrant's demand for a certain kind of flexibility services.

[4] Access to storage is economically necessary if flexibility tools, other than storage, are available but represent an economic barrier to entry in comparison with the cost of using storage itself.

Analysis and the subsequent answers to these three questions will determine the access regime for Northern Ireland gas storage facilities. The Consultation Paper proposed criteria from several sources to assist in the decision to select the most appropriate outcome.

A summary of the criteria the Utility Regulator will use to inform a decision on the most appropriate TPA regime for future gas storage facilities in Northern Ireland is provided in the following section. Figure 1 at the end of this section depicts the order of analysis and criteria to be addressed at each particular stage of analysis.

3.1 The availability of flexibility tools

This criterion is to be used to address questions 1 and 2 above.

Flexibility[5] is defined as the availability of gas and/or capacity (transmission, storage, LNG) needed to:

- adapt supply to foreseeable volume variations in demand and to adjust the erratic fluctuations of demand;
- exploit market opportunities with the market opening to competition, i.e. using different combinations of flexibility tools in order to achieve cost advantages or enjoy new market business;
- comply with public service obligations and strategic objectives

Flexibility tools provide flexibility on the supply side in order to meet fluctuations in demand. Examples of flexibility tools are storage, production flexibility, flow management, such as import flexibility, back-haul, interruptible and line-pack or other more sophisticated flexibility tools such as virtual storage and spot markets.

If access to flexibility tools is readily available then it would be unlikely that access to storage would be deemed technically necessary. If flexibility tools, other than storage, are available but they represent a prohibitive cost compared to the cost of storage then access to gas storage would be economically necessary.

The availability of flexibility tools is however dependent on the relevant geographic and product market; both are considered below:

[5] CEER, Recommendations on implementation of Third Party Access to Storage and Line-pack, 5th December 2003.

3.1.1 The relevant geographic market

The Consultation Paper defined the geographic market as:

"… an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogenous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different".

The Consultation Paper presented four possible geographic markets:

- European market
- North West Gas Regional Market
- UK market
- CAG Market

Following responses from industry and further analysis the Utility Regulator concludes at this stage that the relevant geographic market is the UK gas market. This is due to the link between the Northern Ireland gas market and the GB market through the National Balancing Point (NBP). The NBP is the price at which gas is traded in GB. This is linked to the price that consumers in Northern Ireland pay since the total price paid for gas is based on transportation costs to ship the gas to Northern Ireland plus the NBP price. The link through the NBP establishes a strong link between Northern Ireland and GB markets, sufficient to align with the definition of a geographic market set out above.

This paper also concludes that the European and North West Gas Regional market do not currently represent available geographic markets for Northern Ireland. The prevailing conditions of competition are appreciably different in these markets. However the Utility Regulator recognises that these regions represent future geographic markets for Northern Ireland. However at this stage the market conditions or availability of services are not readily available to the Northern Ireland market.

The CAG market remains a realistic and potential geographic market for Northern Ireland. The link with the NBP is also applicable to Ireland. Therefore if CAG is agreed then the geographic market would be expanded to include Northern Ireland, Ireland and Great Britain.

Most respondents agreed with having the UK and the potential CAG market as the relevant geographic markets for Northern Ireland.

Notably in the case of negotiated TPA, Article 33 (3) requires that regulatory authorities take the necessary measures for natural gas undertakings and eligible customers either inside or outside the territory covered by the interconnected system to be able to negotiate access to storage facilities and line-pack when it is technically and/or economically necessary to do so. The Utility Regulator will be mindful of this requirement, particularly when considering the tariff regime for storage.

3.1.2 The relevant product market

The relevant product market was defined as:

"A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use".

The Consultation Paper proposed that the relevant product market was the flexibility market. This included the range of flexibility tools available to NI shippers such as medium and long range storage, indigenous supplies and imports through interconnectors or LNG.

Most respondents agreed with this approach. One respondent did raise the point that long range storage should not be included in the relevant product market as the withdrawal rates from long range storage facilities would not be comparable with the withdrawal rates of the proposed facilities in Northern Ireland. Long range storage should not therefore be considered as 'substitutable'.

The Utility Regulator has concluded that the relevant product market is the flexibility market. If CAG is agreed then the relevant product market would be extended to include the products available in Ireland including future products from Corrib and Shannon LNG. With respect to the inclusion of long range storage, at this stage the final technical data for the proposed storage facilities is not fully known. Therefore the Utility Regulator will consider this issue when reviewing a future application.

3.2 Impact to market when TPA is not necessary

The Utility Regulator also concludes that if analysis on the availability of flexibility tools indicates that TPA is not necessary under Article 33, then it may be appropriate to carry out a further check on the potential impact of this upon the market. For example should TPA be deemed not necessary, then the potential impact on a storage operator or owner's market power, market share and any subsequent detrimental impact on competition and to consumers will be considered. This is an approach adopted by Ofgem and was discussed in the gas storage consultation paper. The indicators used by Ofgem to examine the impact to the market are market power, market signals and the economic use of storage capacity and monitoring of the market. The Utility

Regulator will use these indicators as guidance when considering the impact to the market when TPA to a gas storage facility is deemed not necessary.

3.3 Criteria to determine negotiated or regulated TPA

If the result of the analysis above on questions 1 and 2 deems that TPA is necessary then answering question 3 is required i.e. what the most appropriate TPA regime is, either negotiated or regulated?

The Consultation Paper proposed the following criteria to be considered in determining the most appropriate TPA regime:

- Market power
- Investment
- Transparency
- Unbundling

Additionally the Consultation Paper drew upon a number of European guidelines:

- CEER checklist
- ERGEG criteria

The Utility Regulator has concluded that these criteria should be adopted to inform a decision on the most appropriate TPA regime for future gas storage facilities in Northern Ireland. A summary of the analysis and, where appropriate, comments from respondents are provided below.

Market Power

The Consultation Paper discussed the level of market power that could possibly be gained through the use of a storage facility in Northern Ireland. The analysis considered the relevant markets and market share when considering the potential level of influence that a storage user may be able to attain.

For example, a gas storage facility with a substantial share of the market could have the opportunity to influence market price. The analysis in the Consultation Paper indicated that where there is potential for a storage operator or a holder of a significant amount of storage capacity to develop a dominant position then a regulated TPA would be most appropriate. Regulation of TPA and tariff setting would be able to dilute the level of market power and provided a level of protection to consumers. A regulated TPA would therefore be more suited to a market with lower levels of competition.

Conversely a negotiated TPA regime would be more suited to a dynamic market where market power is challenged through competition. Under this model, competition would provide a level of protection to consumers. Storage operators would negotiate contracts with storage users on a commercial basis in good faith, rather than publishing a regulated tariff.

The analysis showed that the gas market in Northern Ireland is linked to the GB market through the NBP. Any gas placed into storage in Northern Ireland from GB would be purchased at the NBP and transported to Northern Ireland. As such a storage operator/owner in Northern Ireland would have little influence over the NBP element as this is traded within a liquid GB market.

Similarly a storage operator would have little influence on the price of gas from Corrib or Shannon LNG since suppliers will wish to offer a price that is competitive against the NBP price plus the cost of delivery through the ICs. Therefore the ability of a gas storage facility in Northern Ireland to influence the market price is limited due to the link with the GB market via the NBP. Accordingly the analysis concludes that if TPA is deemed necessary, then a negotiated TPA regime may be more suitable to future gas storage facilities in Northern Ireland. The majority of respondents agreed with this analysis.

One respondent did take the view that a regulated TPA regime would be the most appropriate regime where the gas storage business is part of a vertically integrated utility. As discussed under the unbundling criterion below, the Utility Regulator will review the independence of an applicant in relation to its storage business and other related business activities.

Investment

The Consultation Paper discussed the potential impact to investment with implementing either a negotiated or regulated TPA regime. A negotiated TPA regime would allow the storage owner and user to set access conditions through agreed commercial terms. Determining access conditions in this way may be a preferred approach to potential investors as this could provide a greater degree of commercial flexibility compared to a regulated access regime. Additionally adopting a negotiated regime could create a level playing field with GB where the default access regime is negotiated.

Whereas adopting a regulated access regime may be viewed as a negative investment signal and would not provide a level playing field with GB.

Transparency

Under this criterion, the Consultation Paper proposed that the Utility Regulator would be guided by the provisions contained in the ERGEG publication, Guidelines for Good TPA Practice for Storage System Operators (GGPSSO). The publication discusses guidelines for transparency arrangements under either regime. For example under a regulated TPA regime, the tariffs and tariff methodologies for each service offered should be published ex-ante. Under a negotiated regime, the main commercial conditions including the tariffs for standard services should be published and updated whenever required. Further guidelines on publishing information on the storage services offered, capacity allocation arrangements and secondary capacity trading were also discussed.

A negotiated TPA may not have the same level of regulatory input as the regulated regime; however an appropriate level of transparency would still need to be in place to comply with conditions set by the Utility Regulator.

Unbundling

The term ownership unbundling refers to the separation of network operation and ownership from any supply and production interests. In relation to storage, where an independent system operator has been appointed, a transmission system owner and a storage system operator which are part of a vertically integrated undertaking shall be independent at least in terms of their legal form, organisation and decision making from other activities not relating to transmission, distribution and storage.

In order to ensure the independence of the transmission system owner and storage system operator the following minimum criteria, as set out in Article 15 of the Directive, are to apply:

- the management of the transmission system owner and storage system operator may not participate in company structures of the integrated natural gas undertaking responsible, directly or indirectly, for the day-to-day operation of the production and supply of natural gas

- appropriate measures should be taken to ensure that the professional interests of persons responsible for the management of the transmission system owner and storage system operator are taken into account in a manner that ensures that they are capable of acting independently

- the management of the transmission system owner and storage system operator may not participate in company structures of the integrated natural gas undertaking responsible, directly or indirectly, for the day-to-day operation of the production and supply of natural gas

- appropriate measures should be taken to ensure that the professional interests of persons responsible for the management of the transmission system owner and storage system operator are taken into account in a manner that ensures that they are capable of acting independently

The Utility Regulator will use these criteria when assessing the unbundling requirement for future gas storage facilities in Northern Ireland. It is expected that all of the criteria would need to be met to ensure that the unbundling requirement is satisfied.

CEER Checklist

The CEER report "Recommendations on implementation of Third Party Access to Storage and Linepack" provided a checklist to assist in the decision process in determining the suitability of either a negotiated or regulated TPA regime.

The Utility Regulator will use the CEER checklist when determining the suitability of either a negotiated or regulated TPA regime.

3.4 ERGEG Criteria

The Consultation Paper also referenced ERGEG criteria relating to Article 33. The EU Gas Regulatory Madrid Forum 2009 proposed the following criteria that may be assessed when determining the access regime to storage facilities:

- the effectiveness of competition in the market
- the availability of alternative flexible tools
- the availability of capacity for storage users
- the availability of requested products by other storage operators
- the independence of the storage system operator

The Utility Regulator will use the ERGEG criteria to inform a decision on the most appropriate TPA regime for future gas storage facilities in Northern Ireland.

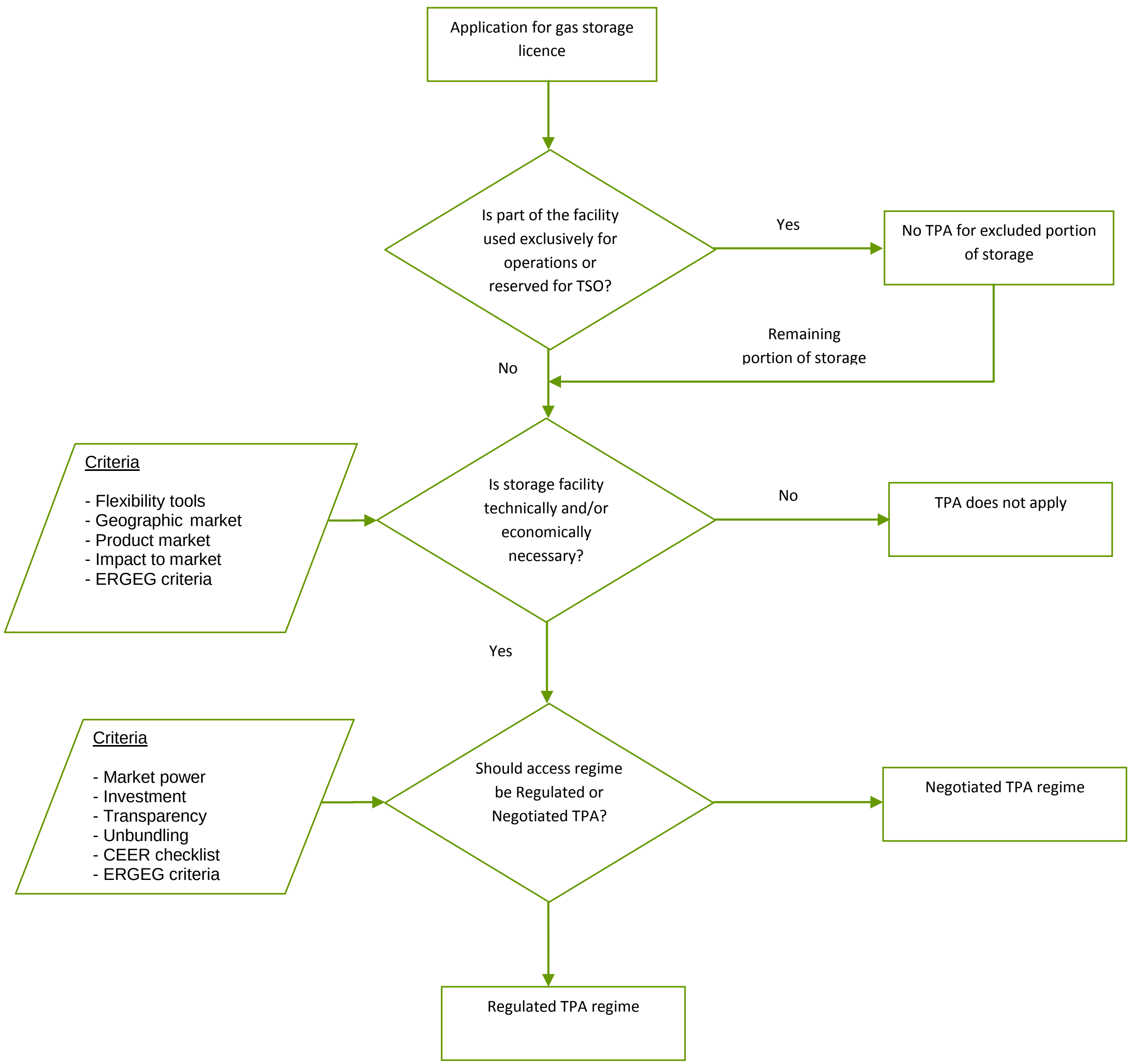
3.5 Review of Article 33

The analysis above presents the criteria and supporting guidance that the Utility Regulator will use in determining the most appropriate TPA regime relevant to the requirements under Article 33.

Respondents also requested some clarity regarding the order of analysis. The Utility Regulator trusts that the discussions above clarify the issue. The order of analysis is also presented in Figure 1.

Notably the directive defines "storage facility" as 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. This exclusion is also represented in Figure 1.

Figure 1: Decision process relating to Article 33



4. Article 36 - New Infrastructure

An exemption to TPA under Article 36 (previously Article 22 under the Second Directive) is available for major new gas infrastructure projects. A gas storage facility may be exempted, for a defined period of time, under the following conditions:

4.1 Conditions relating to Article 36

(a) the investment must enhance competition in gas supply and enhance security of supply;

(b) the level of risk attached to the investment must be such that the investment would not take place unless an exemption was granted;

(c) the infrastructure must be owned by a natural or legal person which is separate at least in terms of its legal form from the system operators in whose systems that infrastructure will be built;

(d) charges must be levied on users of that infrastructure;

(e) the exemption must not be detrimental to competition or the effective functioning of the internal market in natural gas, or the efficient functioning of the regulated system to which the infrastructure is connected.

4.2 ERGEG guidelines

Respondents requested further clarity on the application of exemptions including those granted under Article 36. In this respect ERGEG guidelines provide guidance on the analysis of each of the conditions set out within Article 36[6]. Each of the conditions is considered separately below:

4.2.1 Enhancement of competition in gas supply

The ERGEG guidelines note that the criterion of the enhancement of competition will in most cases require the most extensive proof by the applicant and examination by the regulatory authority. The guidelines suggest that the regulatory authority should define the relevant market and assess the position of the applicant and/or the proposed user in the relevant markets. Analysis should include an assessment of an applicant's existing and proposed market share together with the overall impact to the market of providing

[6] Guidelines on Article 22, An ERGEG Conclusion Paper, 9 April 2009. Ref: E07-GFG-31-07b

an exemption. This approach is similar to the market power criterion and subsequent analysis applied under Article 33, in section 3 above.

4.2.2 Enhancement of security of supply

In considering whether a project enhances security of supply the following possible criteria are recommended:

- Total amount of new capacity
- Diversification of supply sources
- Required capacity expansions to meet future demand

4.2.3 Level of Risk attached to the investment

Regulatory Authorities should investigate the financing of the proposed storage project when considering the level of risk associated with the investment. The following (minimum) information should be provided by the applicant when applying for an exemption:

- Estimated construction costs and operating costs of the project
- Expected depreciation period
- Expected rate of return
- Expected revenues

4.2.4 Unbundling requirement

The unbundling requirements of the Third Directive should equally apply here. This is similar to the unbundling requirement presented in section 3.

4.2.5 Charges on users of storage facility

The project sponsor will have to prove in connection with the information to be provided on costs, revenues, and depreciation etc if and to what extent charges will be levied on users.

4.2.6 Impact to Internal Market

The exemption must not be detrimental to competition or the effective functioning of the internal market in natural gas, or the efficient functioning of the regulated system to which the infrastructure is connected. Regulatory Authorities are required to determine if the proposed project is deemed compatible with this definition by ensuring that:

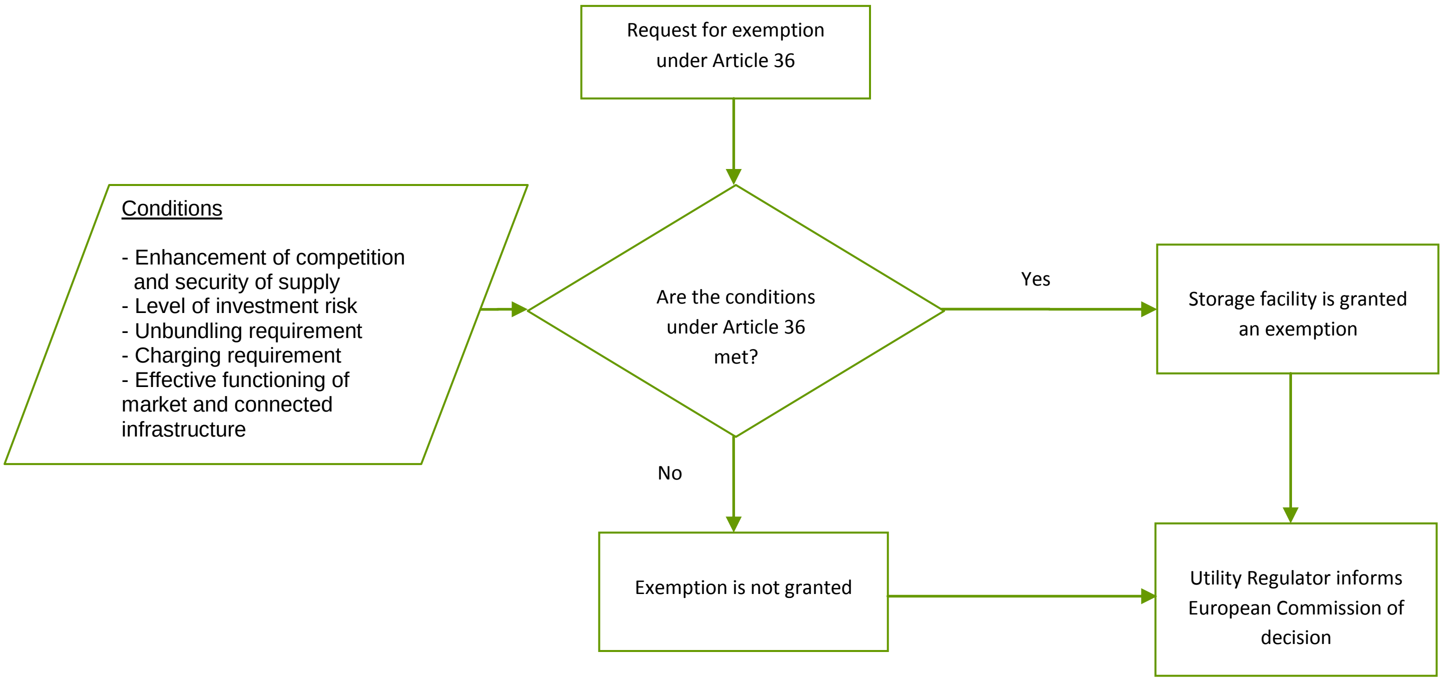
- The projects will not cause constraints on the regulated system requiring investments having a significant adverse effect on the welfare of system users including end consumers;
- In particular the project economics are not unduly influenced by peculiarities (e.g. simplifications, socialisation of certain costs) in the tariff system of the regulated infrastructure.

4.3 Review of Article 36

The above points provide a summary of the ERGEG guidelines to be used by regulatory authorities when considering exemptions for major new gas storage infrastructure. Notably the guidelines recommend that all conditions are met for an exemption to be considered. The Utility Regulator is also required to inform the European Commission of its decision on whether to grant an exemption or not.

Therefore should a storage developer wish to apply for exemption under Article 36 the Utility Regulator will use the five conditions set out within Article 36 and also use the additional guidance provided by ERGEG. Additionally for clarification, Figure 2 presents the decision process that the Utility Regulator will apply when considering exemptions under Article 36.

Figure 2: Decision process relating to Article 36



5. Summary of TPA outcomes

As discussed above there are three possible reasons why TPA is not applicable.

1. storage is exclusively used for production operations or reserved by the TSO in carrying out their functions. In this case the portion of storage used for production operations or reserved by the TSO is *excluded* from TPA requirements.

The storage owner/operator will need to demonstrate that gas storage is exclusively used for production operations or for use by the TSO and this will need to be reviewed by the Utility Regulator.

2. storage is deemed not technically and or/economically necessary for providing efficient access to the market for the supply of customers. In this case TPA *does not apply* under Article 33.

The Utility Regulator will consider all applications for a gas storage licence against the criteria contained in this paper regarding TPA requirements under Article 33. This will determine if TPA is deemed technically and/or economically necessary and if this is the case the appropriate TPA regime, either regulated or negotiated will apply.

3. storage is a major new gas storage infrastructure and meets the exemption conditions. In this case the storage facility is *exempt* from TPA requirements under Article 36.

Exemptions to TPA for major new gas storage facilities will require a request from the licence applicant for exemption under Article 36. The Utility Regulator will review the request against the conditions set out in this paper and decide to grant an exemption or not. If an application for an exemption under Article 36 is unsuccessful, then Article 33 will still apply.

6. Regulatory Support

The Utility Regulator is aware that securing financial investment in the initial phases of development is crucial to the construction of future storage projects. Therefore the Utility Regulator is exploring potential ways of establishing a suitable regulatory environment that could support the development of such projects, at least in the early stages of development. This approach aligns with the Utility Regulator's principal objective of promoting the development of an efficient, economic and co-ordinated gas industry.

Notably the Utility Regulator also has duties to protect gas consumers. The intention is therefore to put in place a regulatory environment that will support the development of gas storage facilities that will not be open to abuse or allow a dominant position to be attained. Therefore when designing an appropriate regulatory environment to support such projects, consideration should also be given to ensure a level of protection for consumers.

With these principles in mind some of the potential options that the Utility Regulator is considering are presented below.

6.1 Exemption to TPA

The Utility Regulator may consider exemptions as a potential means of reducing the level of risk associated with financing gas storage developments in Northern Ireland. This could allow storage developers to sign long term contracts that could provide a level of future revenue and ease the risk associated with the projects for financial investors.

Exemptions may be given for an entire facility or for a part of a facility. Exemptions could also be granted for a limited period of time or until gas storage operations are well established. A correct balance must be found between facilitating the investment and TPA requirements. Consumers could be protected to any risk of market power by effective regulatory control. For example, licence conditions could contain measures to restrict long term contracts or use-it-or-lose-it arrangements could be put in place to ensure any unused capacity is made available to other parties.

6.2 Supply obligations

Another potential means of establishing a supporting regulatory framework could be by requiring gas suppliers to hold a specified quantity of gas in storage in order to meet security of supply standards. The requirement could be reviewed once the storage market is more mature.

This approach has the additional benefit of strengthening security of supply arrangements by ensuring suppliers have a diversified supply portfolio based on existing supply contracts and gas storage contracts.

Such an approach could be implemented by making appropriate changes to supply licences. Supply licences already have a requirement to have access to gas supplies to meet severe winter conditions; this could be extended to include a requirement to hold a reserve of supplies in gas storage.

Consideration would also need to be given to putting in place arrangements that would prevent a storage operator, with supplies in storage, from developing a dominant position in the event of a restriction on supplies or an emergency situation.

7. Next steps

This Conclusions Paper presents the criteria that the Utility Regulator plans to use when considering the most appropriate TPA access or exemption regime for future gas storage facilities in Northern Ireland.

The decision to adopt the most appropriate TPA regime will be carried out on a case-by-case basis, the outcome of which will be included as a condition within the gas storage licence of the successful applicant. Regarding timings the Utility Regulator expects to consider the most appropriate TPA regime for an applicant alongside the request for a gas storage licence. It is envisaged that any specific request for an exemption would also be considered at this time.

The Consultation Paper published a draft gas storage licence indicating the conditions that may be included in a future gas storage licence in Northern Ireland. Further work is required on confirming the detail of the licence conditions and in particular the conditions that could provide an appropriate level of support to storage developers in the initial financing stages of the project.

Following confirmation of the standard gas storage licence conditions, the Utility Regulator and DETI will update the gas licence application criteria[7] to include the relevant steps relevant to applying for a gas storage licence.

It is also envisaged that the regulatory framework and storage licence developed for a gas storage facility in Northern Ireland would also be consistent with the regulatory requirements under a potential CAG market.

The Utility Regulator will continue to work with the storage developers to advance their particular issues both in terms of the storage licence and other related regulatory issues. The Utility Regulator recognises the significant benefits that gas storage facilities can bring to Northern Ireland and is keen to provide a regulatory environment which can support the progress of these projects in order to facilitate the delivery of the benefits to Northern Ireland.

[7] Gas Licence Application Criteria

Appendix A - Summary of responses to Consultation Paper

The consultation paper received seven responses, which are summarised below. The full responses will be published on the Utility Regulator website alongside this conclusions paper. Responses were received from:

- Airtricity Ltd (AL)
- Bord Gais Energy/Storengy (BGE/SE)
- Consumer Council Northern Ireland (CCNI)
- Endessa Ireland Ltd (EI)
- Islandmagee Storage Ltd (ISL)
- Phoenix Natural Gas Ltd (PNG)
- Viridian Power and Energy Ltd (VPE)

The Utility Regulator would like to thank respondents for their replies as the queries and industry recommendations have helped inform the development of the regulatory framework. The Utility Regulator trusts that queries have been addressed in the main section of this paper, however further responses to issues raised are presented in italics below.

Q1. The Utility Regulator seeks industry views on the concept draft gas storage licence presented as part of the gas storage regulation framework for Northern Ireland.

ISL, BGE/SE and AL viewed that the Storage System Operator (SSO) should be the licensed entity as the SSO was best placed to comply with the regulatory requirements and meet the licence conditions.

BGE/SE raised the issue that the consultation assumes that the SSO would also be the owner or members of the same group. The response pointed out that the SSO may not necessarily be the owner of the facility.

Respondents also made comments on specific licence conditions.

The gas storage licence will be the primary tool for applying the regulatory framework in Northern Ireland. As such the Utility Regulator views that licensing the SSO is the most appropriate way to apply regulatory control on future gas storage facilities.

The comments on the specific licence conditions provided by respondents are useful and have been considered in the development of the detailed gas storage licence.

PNG had no specific view on the licence holder however they noted that the best option should deliver the greatest benefits while ensuring a safe operating regime.

EI and VPE both agreed with the general approach of the licence and proposed further recommendations. EI pointed out that the requirement for the licensed business to operate through a legally distinct and separate entity from any other business which is engaged in the production or supply of natural gas in Northern Ireland should be extended to UK and Ireland given the developments under CAG.

VPE made a number of recommendations to improve transparency and accountability such as ring fencing provisions and a compliance regime to ensure that regulatory arrangements are robust and accountable. Capacity auctions and use-it-or-lose-it capacity arrangements should be included to strengthen the draft licence.

Similarly ISL commented that the Utility Regulator should consider principles that would prevent capacity hoarding such as the SSO offering unused storage capacity on the primary market without delay and arrangements that allow users to re-sell their contracted capacity on the secondary market.

CCNI were satisfied with the general licence condition requiring consultation with CCNI.

Future gas storage facilities in Northern Ireland will be required to meet the unbundling requirement as set out in directive 2009/73/EC. This requirement will be examined under the unbundling criterion as set out in this paper. The Utility Regulator notes EI's reference to include UK and Ireland.

Capacity management arrangements such as use-it-or-lose-it are being considered in the detailed drafting of the storage licence. The Utility Regulator will also consider any recommendations from the pending ERGEG consultation on Guidelines of Good Practice on CAM (Capacity Allocation Management) and CMP (Capacity Management Procedures) for storage facilities.

Q2. Are there any further aspects of the Third Package legislation that should be considered for the future regulatory framework of gas storage in Northern Ireland?

EI suggested that the Utility Regulator should consult with the stakeholders in the North West Gas Regional Initiative (NW GRI) in the development of the gas storage licence.

The Utility Regulator will continue to engage with the work outlined in the regional initiatives and with developments at a wider EC level with respect to gas storage.

AL view that the discussions on TPA, unbundling and transparency sufficiently capture the essence of those provisions. Once these three key aspects are sufficiently addressed, AL view that most other legislative issues will subsequently be easily tackled.

VPE viewed that the Utility Regulator should give particular attention to Vertically Integrated Utilities (VIUs) containing storage businesses. As such the gas storage licence should ensure consistency with the directive.

The Utility Regulator agrees that the regulatory regime for storage will need to be consistent with the relevant aspects of the Third Directive.

Q3. The Utility Regulator seeks industry views on the relevant geographic and product markets applicable to a gas storage facility in Northern Ireland.

Most respondents agreed that the relevant geographic market for gas storage in Northern Ireland should be the UK and Ireland, once CAG is live.

VPE viewed that including GB in the competition analysis could be misleading by commenting that gas storage facilities in Northern Ireland and Ireland may only respond to all-island market signals rather than market signals from the GB market. This, VPE argued, was due to the unique market nature of Northern Ireland and Ireland and other future supply considerations such as gas flows from Corrib and Shannon LNG.

PNG view that GB is a relevant geographic market due to the strong link between the GB and NI markets via the NBP. PNG also agree with the analysis that many flexibility products available in GB are also available to NI shippers therefore it is appropriate to consider these products within the product definition.

As stated above the Utility Regulator has concluded that the relevant geographic and product markets are the UK and Ireland markets. The Utility Regulator notes the comments by VPE but in our view the strong link with the GB market through the NBP cannot be discounted. It is also envisaged that storage facilities in Northern Ireland would be competing with storage facilities in GB and should therefore be included in the market definition.

Q4. The Utility Regulator seeks industry views on the discussions on market power in relation to a storage facility in Northern Ireland and its influence on selecting the most appropriate TPA regime.

IMS view that the development of transmission tariffs for storage which do not discriminate against storage developed in Northern Ireland, Ireland, and Great Britain is key to creating an open market for access to storage. The development of CAG will create an island of Ireland and GB market area and in due course with EU liberalisation this will lead to a European market. The wider the market the less market power the gas storage facility will have, in turn making a negotiated regime the most appropriate TPA regime.

BGE/SE comments that a facility in Northern Ireland will have a limited ability to influence market prices given the link to the NBP and competition from storage facilities in the GB market. BGE/SE also view that negotiated TPA is the most appropriate regime for storage in Northern Ireland, as the relevant geographic market should encompass Great Britain and the relevant product market encompasses non regulated sources of flexibility. The response views that, it is very important that storage in Northern Ireland is as much as possible on a level playing field with its alternatives/competitors.

EI agrees that the gas storage market in Northern Ireland is effectively an extension of the GB market as the price in Ireland and Northern Ireland is effectively the NBP price plus the interconnector charges and as such that it is unlikely that an SSO will be in a position to influence this price as congestion is not an issue on the interconnector with GB. However, the gas markets in Ireland and Northern Ireland are at an early stage of development in comparison to the GB market and may not be considered sufficiently competitive to implement a negotiated TPA regime.

However EI would hope that by the time a storage facility is commissioned, competition would be sufficiently advanced to allow for a negotiated TPA regime. EI supports light-touch regulation and considers that a negotiated TPA regime would be preferable.

AL state that a facility in Northern Ireland would have limited ability to attain and maintain market power given that the relevant geographic market encompasses the island of Ireland, with significant interconnection to GB. The strong link to the GB market via NBP prices, which generally provides the marginal pricing mechanism, places a cap on the ability to manipulate prices. Significant competition will also be posed by both Corrib and Shannon LNG, further limiting market power potentials.

VPE view that, in light of the directive requirements, it is probable that access to storage will be necessary to provide efficient access for the supply of customers in NI; negotiated TPA should not therefore be the default position. It is also important that if a VIU is engaged in storage it is important that this does not confer any advantage that would hinder competition.

PNG comment that if the facility is determined to have significant market power then the most appropriate approach is a regulated regime. Additionally the regulatory framework must ensure that any market dominance cannot be abused.

Each application for a gas storage licence will be judged on its own merits against the criteria set out in this paper. Market power is a key criterion in the regulatory framework and will be a factor in the decision to select the most appropriate TPA regime for future gas storage facilities in Northern Ireland.

Q5. The Utility Regulator seeks industry views on the application of the technically and/or economically necessary assessment regarding access to a gas storage facility in Northern Ireland.

BGE/SE requested clarity on the order of analysis regarding necessary storage i.e. access to storage that is technically and/or economically necessary. BGE/SE commented that TPA is only required if access to the storage facility in question is deemed technically and/or economically necessary to provide efficient access to the market. If the facility is deemed not necessary storage, then the decision on negotiated or regulated access is not applicable since the facility does not require third party access.

Further clarity on the order of analysis is provided in section 3 of this paper including a flow diagram depicting the decision process relating to Article 33. This clarifies the question of when the decision on negotiated or regulated access is applicable.

BGE/SE also view that whether a facility is deemed to be technically and/or economically necessary depends on the range of flexibility tools available to the gas market. The response views that a storage facility in Northern Ireland would not be technically and economically necessary as Irish shippers have access to a liquid and competitive gas market in GB including a range of flexibility tools.

IMS comment that it is appropriate to apply the technically and/or economically necessary assessment in Northern Ireland but the entire supply chain and market area must be considered. To date Northern Ireland has relied on the flexibility within the GB market to supply flexibility.

EI considers that access to storage on the island of Ireland is necessary for gas suppliers to operate in an efficient manner and provide economically efficient prices for the customers on the island. EI views that access to gas storage facilities in GB is limited; furthermore, gas storage in Northern Ireland should provide a more economic solution for customers on the island thereby limiting gas transportation costs. Therefore, EI considers that storage facilities in Northern Ireland should be considered economically necessary.

The views of the respondents have been noted by the Utility Regulator. As discussed, the decision to determine whether access to a particular gas storage facility is technically and/or economically necessary will be assessed against the criteria in this paper; the outcome of which will be dependent on the particular application.

Q6. The Utility Regulator seeks industry views on the appropriateness of each regime (negotiated and regulated) as a framework for access to gas storage facilities in Northern Ireland.

IMS view that negotiated TPA is the most appropriate regime assuming that future transmission tariff arrangements ensure that the relevant geographic market area is Northern Ireland, Ireland and GB. It is also appropriate that Northern Ireland should adopt a similar regulatory framework to GB.

BGE/SE comments that Irish shippers have access to a liquid and competitive gas market in GB. Since markets that are developed tend to adopt a light touch approach to regulation BGE/SE favour a negotiated versus regulated approach to rate setting.

The response also points out the drawbacks to a regulated approach. BGE/SE view that regulated rate setting is typically based on cost-based tariff design and does not accurately reflect the value of storage service in peak periods or periods of high volatility which salt cavern storage provides. Also choosing regulated TPA for storage in Northern Ireland without some kind of compulsory bookings imposed upon suppliers would result in a very high level of commercial risk that might deter developers from investing in storage projects in Northern Ireland. If there is no obligation to book storage capacity in Northern Irish facilities but the storage capacity prices for these facilities are regulated by a fixed tariff, it is very likely that shippers will buy storage capacity in Northern Ireland only when the fixed tariff is lower than the costs of other flexibility sources (such as storage in GB, the price of which would be set at market rate). If the fixed tariff was higher than the market rate no capacity would be booked and the storage operators would receive no revenues.

AL preference is for a negotiated TPA regime. Reduced regulatory intervention is generally interpreted as a positive investment signal. In addition, a regime that is more exposed to commercial interactions is more likely to develop to meet the needs of the market.

PNG comment that if a regulated TPA regime and a guaranteed rate of return on investment is considered appropriate then the framework must legislate against under utilisation and the creation of a stranded asset which would ultimately increase tariffs for Northern Ireland customers.

The Utility Regulator considers that the ability of a gas storage facility in Northern Ireland to influence the market price is limited due to the link with the GB market via the NBP. However the final decision on the most appropriate access regime for a particular gas storage facility will be dependent on the particular application.

Q7. The Utility Regulator seeks industry views on the suitability of applying exemptions to the Third Party Access requirements for a gas storage facility in Northern Ireland.

IMS supports the proposal to consider exemptions to the TPA requirements to minor facilities. Where firm contracts are necessary in the early years to provide security for financiers, IMS view that consideration should be given to facilitate TPA exemption for larger facilities during the initial period of such contracts.

BGE/SE strongly supports an exemption regime for facilities that are not technically and/or economically necessary. In addition the response notes that an exemption regime is also available under the Third Directive on the grounds that the facility in question would enhance security of supply and competition but would not be built without an exemption. A gas storage facility in Northern Ireland would clearly enhance security of supply on the island but given a small market in terms of number of potential customers, it is conceivable that a TPA exemption may be required for commercial viability of such a facility.

Furthermore BGE/SE point out that, since storage in Northern Ireland will compete with storage in GB, it is important to have as much as possible a level playing field with GB.

The EI response states that the two groups currently considering investment in storage facilities in Northern Ireland include incumbents that possess a high level of market power. As such, investment in gas storage facilities by these companies is unlikely to result in higher levels of competition in the region, suggesting that an exemption to TPA may not be appropriate. EI suggest that a very strong case would need to be made in order for these companies to demonstrate eligibility in relation to the exemption criteria. EI recognises that in some instances, exemptions to TPA are required. Where these exemptions are required, it is their experience that partial exemptions for a limited duration of time are sufficient to obtain project financing.

AL view the Utility Regulator's proposals to use the indicators discussed in Ofgem's letter as a guide in considering exemptions to gas storage facilities in Northern Ireland as reasonable.

VPE consider that exemptions should be discussed on a case-by-case basis and consulted on as and when exemption requests are made.

Applications for exemptions under Article 36 will be considered against the conditions set out in the directive and as discussed in section 4 of this paper. Again the application for an exemption will be dealt with on a case-by-case basis and will be dependent on the circumstances of the particular application. The Utility Regulator is therefore not in a position at this stage to provide a definitive answer regarding granting exemptions for a particular gas storage facility.