



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

Common Arrangements for Gas (CAG)

Conclusions Paper on Security of Supply

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Executive Summary

In December 2008, the Commission for Energy Regulation (“the Commission”) and the Northern Ireland Authority for Utility Regulation (“the Utility Regulator”) published a Consultation Paper on Security of Supply arrangements in Ireland and Northern Ireland under the Common Arrangements for Gas (CAG) project¹. The Consultation Paper set out the current security of supply standards in Ireland and Northern Ireland and discussed areas of potential harmonisation across both jurisdictions through CAG. The Regulatory Authorities (“RAs”) requested general comments on the consultation and also invited responses to a number of questions relating to three specific areas:

- Network Security of Supply Standards
- Obligations on Shippers and Suppliers
- Gas Storage

The RAs received eleven responses to the Consultation Paper which are published alongside this paper. The responses were generally supportive of the RAs’ commitment to harmonising security of supply standards in the two jurisdictions. Following consideration of the responses and further analysis, the RAs are now putting forward a number of conclusions which are presented below.

With regards to implementation, it is envisaged that the action items in the conclusions presented will be incorporated into a revised CAG workplan. However, as outlined in the RAs’ note² to industry published in April 2009, it is recognised that the final decision on initiating CAG and progressing the associated workstreams rests with the Energy Ministers in both jurisdictions. In accordance with this update, the RAs will continue to identify potential areas for harmonisation and progress them to a suitable point in the workplan, where it remains appropriate to do so.

In addition, the conclusions presented in this paper will require further discussions with relevant parties with regard to either their future implementation or progression of next steps. For example, some of the conclusions may require code modifications or licence changes depending on legal requirements and practices in the relevant jurisdiction.

The RAs are also mindful of the recent European Commission publication: *Proposal for a Regulation to Improve Security of Gas Supplies*³. This proposed Regulation seeks to address

¹ In April 2008, the Commission and the Utility Regulator jointly published a Memorandum of Understanding on the development of the CAG project under the All-Island Energy Market Development Framework.

² Industry Update on Common Arrangements for Gas (CAG), 7th April 2009.

³ COM(2009) 363/4, Proposal for a Regulation of the European Parliament and the Council concerning measures to safeguard security of gas supply and repealing Directive 2004/67/EC.

the gas supply difficulties which emerged during the Russian-Ukrainian crisis in January 2009 and once finalised will repeal Directive 2004/67/EC. The final provisions of the proposed Regulation are to be negotiated by Member States from September of this year and it is expected to be finalised by Q2 2010.⁴ The implementation of the Regulation will be within the revised CAG timeframe.

With these issues in mind, the conclusions to the security of supply consultation paper are:

- The RAs remain committed to working together on the introduction of agreed security standards under the CAG project. As an underlying principle, and where it is possible, the RAs will aim to move towards a single security of supply standard for both jurisdictions through CAG. However, where this is not feasible, the approach will be to achieve a suitable degree of harmonisation across the relevant regulatory policies and industry practices in both jurisdictions.
- The RAs will consult with the relevant stakeholders to determine the approach to be taken following the confirmation of the provisions contained within the proposed Regulation. In practice, it is thought at this stage that the approach will involve the RAs and relevant government departments⁵ engaging with the Transmission System Operators⁶ (TSOs) in order to determine both jurisdictions' response to the requirements of the future Regulation and how they can be best addressed through the network security of supply standards to be implemented through CAG.
- Pending the finalisation of requirements set out in the proposed Regulation, shippers will continue to be obliged to book capacity in accordance with the agreed security standards in each jurisdiction. Once the requirements of the proposed Regulation have been agreed and the CAG workplan finalised, the RAs will be in a better position to engage with industry on the most appropriate security of supply standards to be adopted.
- Supply licences in Northern Ireland contain an obligation to secure supplies in order to meet both a 1-in-20 peak day demand and 1-in-50 severe annual demand. The matter of whether suppliers in Ireland should also be required to secure supplies for domestic and other priority customers needs to be considered further. Additionally, the definition of peak-day and severe winter criteria, as well as the methodologies behind the determination of 1-in-20/1-in-50 security standards, require clarification. Again these matters will be progressed once the requirements of the proposed Regulation are

⁴ See Section 1.2.

⁵ The Department of Communications, Energy and Natural Resources (DCENR) and the Department of Energy, Trade and Investment (DETI).

⁶ Gaslink is the independent Transmission and Distribution System Operator in Ireland. Northern Ireland has three transmission system operators, namely Premier Transmission Limited, Belfast Gas Transmission Limited and Bord Gáis Éireann (UK) Limited.

confirmed. The programme for addressing common supply standards and obligations through the CAG Operations and Licensing workstreams should be formalised following the introduction of the revised CAG workplan.

- Further consideration needs to be given to strategic storage. The RAs conclude that strategic storage should be dealt with in the work programme of the Joint Steering Group Sub-Committee on Security of Supply. This group was set up by both government departments, the Department of Trade and Industry (DETI) and the Department of Communications, Energy and Natural Resources (DCENR) to address security of supply issues, including strategic storage, at a government policy level. The RAs' view that this is an appropriate body to discuss and address these issues, and will continue to engage and support the work of the sub-committee. At this stage there is no specific timetable for a decision on strategic storage. However, it is expected that the work of the sub-committee will be progressed in line with the requirements of the proposed Regulation.

1.0 Introduction

Under the CAG project, the RAs aim to facilitate the development and operation of the natural gas market in Ireland and Northern Ireland on an all-island basis. A key element of CAG is the harmonisation of the security of supply requirements in the two jurisdictions in order to mitigate the effects of potential gas shortages on the island.

The Consultation Paper produced by the RAs in December 2008 sets out a Security of Supply Framework under the CAG project which includes the areas where harmonisation between the two jurisdictions would be most appropriate. Comments were specifically sought on security standards, supplier obligations and gas storage. The Security of Supply Framework and a summary of the consultation issues are discussed further in sections 1.3 and 1.4 respectively.

1.1 Purpose of this Paper

The purpose of this paper is to:

- respond to relevant questions and comments arising in relation to the harmonisation of security of supply arrangements under the security of supply work-stream as outlined in the Consultation Paper;
- set out conclusions of the RAs in relation to security standards, obligations on shippers/suppliers and gas storage; and
- set out next steps in relation to these matters.

1.2 EU Legislative Requirements

The RAs are mindful that any arrangements proposed under CAG should meet current European Directives addressing security of supply issues and also take into account any future requirements. A summary of the relevant European communications is given below:

- The European Council Directive 2004/67/EC 'Concerning measures to safeguard security of natural gas supply' places requirements on Member States to ensure a sufficient level for the security of gas supply, in particular in the event of a major supply disruption.
- The European Commission's Second Strategic Energy Review, published in November 2008, is also particularly significant in relation to the advancement of gas security of supply in the EU.⁷ This review takes into account the importance of mechanisms to respond to possible gas disruptions.
- Gas security of supply was specifically addressed in the European Commission's Communication⁸, also published in November 2008, on the implementation of Directive 2004/67/EC. Having evaluated the implementation of the Directive in each

⁷ COM(2008) 781, Second Strategic Energy Review: An EU Energy Security and Solidarity Action Plan

⁸ COM (2008) 769 on the Directive 2004/67/EC of 26 April 2004 concerning measures to safeguard security of natural gas supply.

Member State, the Communication summarises the most important findings and sets out those security of supply issues, standards and response measures raised in the Directive which need to be addressed further.

- In July of 2009, the EC published a Proposal for a Regulation to improve security of gas supplies. This proposed Regulation seeks to address the gas supply difficulties which emerged during the Russian-Ukrainian crisis in January 2009 and once finalised will repeal Directive 2004/67/EC. The provisions of the proposed Regulation are to be negotiated by Member States from September of this year and will subsequently be considered by the European Parliament. The RAs are working on the assumption that the Regulation will be finalised by Q2 of next year. However, given the nature of the processes involved, a later date for the publication of the Regulation cannot be ruled out.⁹

1.3 Security of Supply Framework

The RAs consider the introduction of agreed network standards and related obligations as key to enhancing security of gas supply in Ireland and Northern Ireland and note their commitment to jointly achieve this objective under the CAG project. While it is acknowledged that the implementation of common standards across the two jurisdictions may not ultimately be possible for technical or economic reason, the RAs note the importance of an aligned operational regime to the harmonisation of security of supply requirements.

Common network standards will be used in the modelling analysis of the transmission networks on an all-island basis in order to determine the ability of the system to deliver under peak day or severe weather conditions. The results will be incorporated into future capacity statements produced by the RAs which will be used to identify any development work required on the network to meet future demands. Network modelling was carried out on an all-island basis for the first time this year for the Joint Capacity Statement 2009 which was recently produced by the RAs¹⁰.

In both jurisdictions there are obligations on suppliers to book capacity to agreed network standards. It is envisaged that the establishment of common security of supply standards under the CAG will be facilitated through the CAG System Operator (SO). It would be the responsibility of the CAG SO to ensure that common networks standards are adopted and incorporated into an agreed all-island Transportation Code(s). The development of these standards needs to be addressed in the CAG's Operations workstream.

⁹ COM(2009) 363/4, Proposal for a Regulation of the European Parliament and the Council concerning measures to safeguard security of gas supply and repealing Directive 2004/67/EC. In particular see, see Article 6 *Infrastructure standard* and Article 7 *Supply standard*:<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009PC0363:EN:NOT>

¹⁰ The 2009 Joint Capacity Statement is available on both the websites of the Commission and the Utility Regulator.

In Northern Ireland, shippers/suppliers are obliged under licence conditions to secure supplies in order to meet both a 1-in-20 peak day demand and 1-in-50 severe annual demand. There are no corresponding obligations on shippers/suppliers in Ireland at present. In the context of an all-island market, such obligations on shippers and suppliers should be aligned in order to ensure the proper functioning of the market, in particular the CAG retail market. It is considered that the harmonisation of such shipper/supplier requirements will be dealt with as part of the CAG's Licensing workstream.

It should be noted that in order to introduce security standards and related shipper/supplier obligations, the programming of relevant work items needs to be formalised through the relevant workstreams as noted above. This will be addressed when the revised CAG workplan is developed.

A Joint Steering Group (JSG) Sub-Committee¹¹ on Security of Supply was established to address the diverging requirements related to security of supply in Ireland and Northern Ireland. The conclusions of the RAs have been presented and discussed at the JSG meetings. The RAs intend to continue to address the issues raised in this paper at subsequent JSG meetings. An important consideration in this regard is the proposed Regulation on security of gas supply.

1.4 Summary of Consultation Issues

The RAs noted in the Consultation Paper that uniformity of practice in Ireland and Northern Ireland is desirable in relation to network security standards, shipper/supplier obligations and gas storage. The issues raised are summarised below:

1. Network Security Standards

These standards refer to the security criteria which pertain to network design and include the harmonisation of definitions of the standards. This will enable a network design standard to be agreed for both jurisdictions and will subsequently allow suppliers to book capacity in line with that standard.

2. Obligations on Shippers/Suppliers

These requirements involve the introduction of potential measures to book capacity to meet the all-island network security of supply standards and to have contracts for commodity in order to safeguard supplies for domestic customers in the event of a severe winter or peak period

¹¹ This group comprises the two RAs as well as the Department of Communications, Energy and Natural Resources from Ireland and the Department of Enterprise, Trade and Investment from Northern Ireland.

3. Gas Storage

The potential benefits of gas storage for security of supply are recognised by the RAs. While there is currently limited gas storage available in the two jurisdictions, the RAs are mindful of the proposed development of a number of commercial storage facilities over the coming years. The requirement for strategic storage is contingent on the progress of commercial projects and may be dictated by the proposed Regulation on security of gas supply. The RAs therefore recognise that further consideration must be given to the impact of storage on shippers/suppliers and the Irish gas market before any decision can be made.

1.5 Comments Received

The RAs received responses to the Consultation Paper from the following eleven parties. Non-confidential responses are listed below and are published in conjunction with this paper on the websites of the RAs unless otherwise requested.

- Airtricity
- Bord Gais Energy Supply
- Bord Gais Strategic Investments and Storenergy
- ESB International Ltd on behalf of Coolkeeragh ESB (CESB)
- Gaslink
- Irish Offshore Operators' Association (IOOA)
- Islandmagee Storage Limited (previously Portland Gas NI Limited)
- Island Oil & Gas PLC
- Phoenix Natural Gas Group
- Shannon LNG
- Viridian Power & Energy Limited

1.6 Structure of this Paper

Section 2 of this paper presents the responses to the Consultation Paper which the RAs have considered in their analysis.

Section 3 addresses the responses received from the Consultation Paper. It should be noted that certain responses did not address all of the issues as some parties may not have been directly interested in some aspects of the Consultation Paper.

Section 4 presents the RAs' conclusions and outlines the next steps in light of the areas discussed in this paper.

1.7 Contact Details

For further information on the issues set out in this paper please contact the following:

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2.0 Comments Received

2.1 Network Security of Supply Standards

Directive 2004/67/EC sets out the minimum security of supply standards for Member States in order to safeguard gas supplies for household customers. The Directive outlines a minimum 1-in-20 severe winter criteria. The definition of the relevant timeframe in relation to the network's peak day, severe winter and partial disruption criteria must be decided upon.

In Ireland, the Code of Operations, licence obligations and the Gas (Interim) (Regulation) Act 2002 (as amended by SI 697 of 2007) provide the basis for current security of supply standards. Gaslink designs the Irish transmission system to meet a 1-in-50¹² peak day demand. However, there is no specific obligation on the Transmission System Operator (TSO) to design the transmission system to meet severe winter criterion as in GB.

In Northern Ireland there is no explicit obligation on TSOs to design or reinforce the transmission system to a specific standard. Rather network codes and licence conditions oblige TSOs to assess the ability of the transmission system to operate under future demand and supply scenarios through modelling under the Joint Capacity Statement. Network codes also set out the detailed requirements for network operation including provisions for capacity shortfalls and emergency planning in the event of restrictions to the supply of gas.

Taking into account the relevant national and EU legislation, the RAs put forward the following questions:

1. Should an obligation be placed on network operators to build and maintain the network to a 1-in-20 or a 1-in-50 peak-day?
2. Is a period of five days appropriate for the period for which supplies to domestic customers must be protected in the event of a partial disruption to national supplies?
3. Does a peak-period (as specified in 19A (1)(c)(ii) of the 2002 Act) need to be specified? Or does a 1-in-50/1-in20 peak-day imply a sufficient period for this purpose?
4. Are there additional minimum standards required for other energy undertakings or offshore producers?

The comments provided by respondents are summarised in turn below.

¹² 1-in-50 peak day refers to the ability of the transmission network to be able to transport gas supplies which would at least equal the daily firm demand for a peak period which, having regard to historical weather and other data demand from at least the previous 50 years, is likely to be exceeded (whether on one or more days) only in 1 year out of 50 years.

2.1.1 1-in-20/1-in-50 peak-day

- Should an obligation be placed on network operators to build and maintain the network to a 1-in-20 or a 1-in-50 peak-day?

The respondents welcomed the introduction of a common design standard for Ireland and Northern Ireland and were generally in favour of the application of a 1-in-50 peak-day standard. One emphasised that the decision should ultimately be left to the RAs. A further respondent suggested that the transmission pipeline operators are best placed to make this assessment.

A number of respondents noted, however, that other issues must be taken into consideration before a decision on the most suitable standard can be made. One party noted that the potential impact on commercial arrangements and tariffs in the two jurisdictions must be taken into account. Another stated that such an assessment can only be made once there is clarification on whether domestic and/or commercial demand is to be secured on the island. One respondent also called for a cost-benefit analysis on network improvements to be firstly carried out and distributed to industry for comment.

2.1.2 5-day Protection for Domestic Customers

- Is a period of five days appropriate for the period for which supplies to domestic customers must be protected in the event of a partial disruption to national supplies?

The majority of shippers regarded the five-day requirement as unsuitable. This was rejected by respondents for a variety of reasons: One party noted this period is inadequate given that increasing reliance of the UK on EU imports. Two respondents also made note of the Russia-Ukraine dispute which lasted longer than five days.

Three respondents recommended the introduction of storage to address such a partial disruption. One party emphasised that, where supplies from Moffat are disrupted during a long term emergency, gas held at Inch would not be sufficient to meet demand of the non power sector. They therefore recommended a 90 day storage level for the non power sector. Another suggested that ten days of reserve for domestic customers should be required. One party suggested that the number of days required should be decided on a case by case basis depending on the nature of the incident and recommended that the cost of protecting supplies for more days should be weighed against the probability of an incident occurring as well as its associated impact.

Two respondents stated that further analysis needs to be carried out on this issue and one party emphasised that a 'partial disruption to national supplies' needs to be more clearly defined.

2.1.3 Specification of Peak-Period

- Does a peak-period (as specified in 19A (1)(c)(ii) of the 2002 Act¹³) need to be specified? Or does a 1-in-50/1-in-20 peak-day imply a sufficient period for this purpose?

Three parties noted that further clarification on the definition of peak period is needed. Two respondents supported the 1-in-50 peak day requirement. However, one of these noted that the 1-in-50 peak day requirement is adequate given the current low level of storage but the issue will have to be re-examined as the level of storage increases in the future. One party noted that this decision must take into account both the pipeline delivery system and the available natural gas supplies.

2.1.4 Additional Minimum Standards

- Are there additional minimum standards required for other energy undertakings or offshore producers?

The introduction of further minimum standards was supported by most respondents. The nature of proposed additional criteria varied significantly. One party stated that minimum standards for private companies should be contained in their commercial contracts with customers. Another respondent suggested that producers be obliged to maximise their production and that these requirements be set out in their licences and safety case arrangements.

A further respondent suggested that demand side management or interruptible contracts be agreed with non-domestic customers which would allow TSOs to reduce or cease their gas supply in the event of an emergency. Those customers who cannot swiftly reduce their intake should be required to hold reserves. This respondent also recommended that TSOs assess their capability to curtail the gas usage of non domestic customers during an emergency.

One party suggested that a requirement be put in place for a minimum level of LNG to be stored. Another respondent emphasised that additional standards should focus on potential sources of gas in the event of an emergency which they regard as more significant than potential difficulty with pipeline infrastructure.

¹³ This refers to 1-in-20 severe winter criteria.

2.2 Obligations on shippers and suppliers

In Ireland, the Network Code obliges shippers to the Non-Daily Metered (NDM) sector to reserve capacity to meet their 1-in-50 peak day demand. However, no shipper and supplier licence requirements are in place to meet domestic supply during peak/severe winter periods. In Northern Ireland, conveyance licenses include an obligation on distribution companies to secure capacity in order to meet 1-in-20¹⁴ peak day demand. Supply licenses contain an obligation to secure supplies in order to meet both a 1-in-20 peak day demand and 1-in-50¹⁵ severe annual demand.

The RAs posed the following questions in relation to shipper/supplier obligations:

5. Should shippers/suppliers be required to book peak-day/severe winter capacity for a *1-in-50* or a *1-in-20* peak-day? What costs would be incurred by shippers/suppliers in order to meet such proposed requirements?
6. Should shippers/suppliers be required to secure supplies for a *1-in-50* or a *1-in-20* peak-day? What costs would be incurred by shippers/suppliers in order to meet such proposed requirements?
7. Should obligations be placed on shippers/suppliers ensuring minimum levels of diversity in their contracted sources of supply?
8. Should obligations be placed on shippers/suppliers relating to long-term contracts?
9. Are shipper/supplier obligations best provided for through licence conditions or through the Code(s) of Operations?

An overview of the responses is provided below.

2.2.1 Peak-day/severe winter capacity for 1-in-50/1-in-20 peak day

- Should shippers/suppliers be required to book peak-day/severe winter capacity for a 1-in-50 or a 1-in-20 peak day? What costs would be incurred by shipper/suppliers in order to meet such proposed requirements?

There was general agreement amongst suppliers to book capacity for domestics/NDM customers. Respondents diverged, however, on whether a 1-in-50 or a 1-in-20 peak day should be applied. One party stressed that the NDM sector is the most temperature/weather sensitive and therefore recommended that shippers/suppliers should be at least obliged to book 'Exit Capacity' to meet demand of the 1-in-50 NDM peak day, as per the Code of Operations in Ireland. Another party supported this approach but noted that such an

¹⁴ 1-in-20 peak day criteria refers to the availability of a supply of gas for a defined peak period which would at least equal the daily firm demand which, having regard to historical weather and other data demand from at least the previous 50 years, is likely to be exceeded (whether on one or more days) only in 1 year out of 20 years

¹⁵ 1-in-50 severe winter criteria refers to the availability of supplies of gas over a year which would equal the aggregate amount of daily firm demand over a year which, having regard to historical weather and other data demand from at least the previous 50 years, is likely to be exceeded only in 1 year out of 50 years.

obligation should not be required for entry points as this would increase costs and represent a return to point to point type booking. One respondent also noted that such an approach may be warranted but stated that no additional obligations should be placed on suppliers to book peak day/severe winter capacity for a 1-in-50 peak day given the likely increase in costs. This respondent noted that all such security of supply issues should rather be coordinated by the system operator/transporter. Two respondents also proposed that shippers/suppliers supplying domestic customers should be required to book capacity in accordance with 1-in-20 peak day criteria.

Two respondents disagreed that shippers/suppliers should be obliged to book capacity for a 1-in-50 or 1-in-20 peak day due to financial burden which would be placed on suppliers. One of these parties noted that the commercial reliability of gas supplies for large customers should be assured in the relevant supply contracts. They also stated that gas supplies for NDM customers could be assured by suppliers by demonstrating that they have access to the open gas market and the ability to purchase necessary supplies in this market.

One party questioned the need for shipper/suppliers to book capacity on peak day/severe winter basis and suggested that overcapacity in the interconnectors be used and made available to shippers/suppliers on a pro rata basis of total capacity.

2.2.2 Supplies for 1-in-50 /1-in-20 peak day

- Should shippers/suppliers be required to secure supplies for a 1-in-50 annual demand or for a 1-in-20 peak day? What costs would be incurred by shippers/suppliers in order to meet such proposed requirements?

The majority of respondents commented that a peak day requirement to secure gas supplies would impose an unfair burden on suppliers and may result in expensive gas sales prices. Two parties emphasised that requiring suppliers to secure supplies for a 1-in-50 winter would not ensure that gas is delivered to Ireland in the event of a disruption of supplies in GB and noted that storage requirements should rather be considered. Another respondent commented that security of supply should be met through market mechanisms.

One respondent agreed that shippers/supplier should be obliged to supply customers during a 1-in-20 or 1-in-50 peak day but suggested that shippers themselves should decide whether they contract gas supplies to guarantee supply for a 1-in-20 or 1-in-50 peak day or whether they take the risk of buying gas on the day at a potentially higher price. Another party recommended that shipper/suppliers should be required to secure supplies for a 1-in-20 peak day as opposed to a 1-in-50 annual demand.

2.2.3 Requirements re minimum levels of diversity

- Should obligations be placed on shippers/suppliers ensuring minimum levels of diversity in their contracted sources of supply?

This approach was rejected by the majority of respondents due to the likely increased costs for customers, the negative effect on competition and given that it would not address a

potential disruption in supplies from GB. Two respondents suggested that this should only be considered for shippers/suppliers serving NDM customers and where multiple entry points are in place.

2.2.4 Requirements re long-term contracts

- Should obligations be placed on shippers/suppliers relating to long term contracts?

Such requirements were rejected by the majority of respondents as ineffectual in terms of furthering security of supply on the island. It was generally recommended that such decisions be determined by market forces and the commercial requirements of shippers/suppliers.

2.2.5 Obligations in licence conditions or Code of Operations

- Are shipper/supplier obligations best provided for through licence conditions or through the Code(s) of Operations?

There was a diversity of opinions amongst respondents. Some parties contended that such obligations would be best facilitated through the Code of Operations. Others commented that their inclusion in supply licences of the relevant jurisdiction would be sufficient for this matter. The latter would align with arrangements in Northern Ireland where, as discussed earlier, supplier obligations are placed within the supply licence. It was noted on the one hand that it would be a more difficult procedure to modify licences and on the other that not all suppliers may be classed as shippers and therefore as a party to the Code. Two respondents stated that requirements may be best included in licence conditions and reflected in the Code of Operations.

2.3 Gas storage

Directive 2004/67/EC, while recognising gas storage as an important instrument to the enhancement of security of gas supply, does not impose specific requirements related to the development of gas storage in Member States. It is stated that indicative minimum targets for gas storage may be set either at national level or by the industry.

The RAs are especially mindful of the importance of gas storage to the development of security of supply on the island. For example, in the event of a disruption at Moffat, the transmission system would be able to supply the non-power sector in Ireland for approximately 2-5 days depending on the severity of the weather and the availability of gas supplies (and providing that fuel switching of generators and emergency procedures were

carried out).¹⁶ South West Kinsale (SWK), operated on a commercial basis by PSE Ireland Limited (formally by Marathon Oil Ireland Limited) is currently the only storage facility available. It would be able to supply approximately 50% of the domestic and small commercial sector in Ireland for up to 60 days in the event of loss of supplies from GB¹⁷. A number of proposed storage facilities may significantly add to security of gas supply on the island and allow for the release of sufficient supplies in the event of emergency, peak day or severe winter event. Gas storage may be developed at the salt deposits at Larne in Northern Ireland and at the proposed Shannon LNG terminal at Tarbert in Ireland. A further potential option is the development of depleted Celtic sea fields as storage.

It should be noted that a working group comprising the RAs, the Department of Communications Energy and Natural Resources (DCENR) in Ireland and the Department of Enterprise Trade and Investment (DETI) in Northern Ireland have also taken into account the potential storage options originally set out in the April 2008 report entitled 'Study on Common Approach to Natural Gas Storage and Liquefied Natural Gas on an All Island Basis', jointly commissioned by DCENR and DETI and produced by a consortium led by CSA Group.¹⁸

Taking into account, the current level of storage on the island, as well as the proposed developments outlined above, the RAs put forward the following questions:

10. Should storage operators be required to hold minimum levels of storage?
11. Should shippers/suppliers be required to hold minimum levels of storage?
12. Should storage stocks in GB storage facilities be considered an appropriate security of supply measure?
13. Would obligations in relation to storage distort the Irish gas market?
14. Are there sufficient incentives in place for the commercial provision of adequate storage?

¹⁶ Gaslink, Transmission Development Statement 2008/09 to 2014/15, pg. 37

¹⁷ It should be noted that these figures may increase or decrease depending on the time of year and the level of residential demand during any given period.

¹⁸ Some of these are included in Table 5 of the Consultation Paper. The executive summary is available at <http://www.detini.gov.uk/cgi-bin/downutildoc?id=2161>

2.3.1 Storage operators to hold minimum levels of storage

- Should storage operators be required to hold minimum levels of storage?

This requirement was not favoured by the majority of storage operators¹⁹. One respondent stated that minimum levels should only be imposed where related costs are not passed on to the customer and allowed to impact upon competitiveness. They recommend a mechanism to ensure commercialisation of gas storage but without increasing end user costs.

There was a range of opinions amongst other respondents. One supported the requirement to maintain minimum levels of stock in storage in order to maintain the safety of the system. This respondent also suggested a system similar to the gas monitoring employed in GB be employed. Another party distinguished between requiring minimum storage space and minimum gas in storage. In relation to the former it was suggested that some capacity could be reserved for use by the TSO and the related gas would be purchased by the TSO itself. However, the unit price of the remaining capacity should not be allowed to increase as a result. As regards the latter, the respondent noted that reserve gas could be held as strategic storage with suppliers contracting for access to storage capacity and requiring the TSO to purchase gas to fill this booked capacity.

A number of suppliers noted storage facilities could provide gas from storage to the system but this service should be commercially driven and should not be a regulatory requirement.

2.3.2 Shippers/suppliers to hold minimum levels of storage

- Should shippers/suppliers be required to hold minimum levels of storage?

There was no general agreement on this point. This approach was supported by the majority of storage operators provided it does not adversely affect energy costs or competitiveness. Another respondent favoured this approach and again provided the example of the GB Gas Monitor regime. The remainder of respondents rejected this requirement due to commercial considerations and the potential for market distortion. A variety of other options were put forward including strategic storage reserve guaranteed by all Irish consumers and the underwriting of minimum levels by government authorities.

2.3.3 Storage stocks in GB storage

- Should storage stocks in GB storage facilities be considered an appropriate security of supply measure?

The majority of storage operators were not in favour of this approach. They noted that Irish shippers may not have access to gas where supplies are restricted to Ireland in the event of

¹⁹ The responses of a number of parties to the Consultation Paper dealt principally with the questions relating to gas storage. Such respondents are not operational in the market at this time but are collectively referred to as 'storage operators' in this Conclusions Paper.

an emergency in GB or in the event of a disruption at Moffat. Other respondents regarded GB storage facilities as a viable option which would specifically mitigate against a possible restriction of supplies during a GB emergency. However, a number of these respondents recognised that an incident at Moffat must still be taken into account and that the development of indigenous storage should be supported.

2.3.4 Impact of storage requirements on gas market

- Would obligations in relation to storage distort the Irish gas market?

Storage operators rejected that such obligations would have a negative effect on the Irish market. It was noted that the withdrawal of gas under this obligation would simply balance supply and demand in the event where supplies to Ireland are reduced.

The majority of suppliers emphasised the potential adverse impact of such requirements for a variety of reasons. One respondent noted that it may restrict the ability of shippers to take advantage of price differentials. Another party commented that costs incurred as a result of these obligations may create differences between parties and have a corresponding effect on end user unit rates. It was suggested that that storage facilities could have both commercial and strategic components where the strategic storage is financed through a PSO levy. One party stated, however, that storage obligations would not distort the market as the customer will inevitably have to pay to hold stock levels when strategic storage is not drawn upon.

2.3.5 Sufficient incentives in place for commercial storage

- Are there sufficient incentives in place for the commercial provision of adequate storage?

The majority of storage operators emphasised the importance of incentives for commercial storage. One respondent suggested that new arrangements should be developed such as fiscal/taxation incentives or the development of Public Private Partnerships. Another party commented that incentives such as a clear transmission tariff regime would reduce investor risk and allow Irish storage infrastructure to be delivered on time. This party also emphasised the importance of continued exemption for third party access in Ireland and that facilities developed in Ireland must be able to compete with those in the UK. One respondent suggested that such a level playing field could be ensured by the introduction of storage charges consistent with tariffs set by the National Grid in the GB. Two respondents proposed the introduction of a PSO levy as a means to provide for storage, especially where strategic reserves are to be developed.

The majority of suppliers also commented that adequate incentives are not in place and emphasised the importance of such incentives in developing additional all-island storage. One respondent noted, however, that additional costs should not be imposed on customers and that storage should rather be driven by market solutions and direct investment.

3.0 Responses of the Regulatory Authorities

The RAs have examined the responses of all respondents in relation to each of the security of supply issues dealt with in this paper. We would like to thank the respondents for their time and contributions to the consultation process.

In reaching the conclusions set out below, the RAs have paid particular attention to all relevant national and EU legislative requirements relating to security of gas supply. The RAs believe that these decisions will ensure that greater harmonisation between the two jurisdictions is progressed whilst operating within the intentions of the relevant legislation.

In this regard, the RAs are particularly mindful that the advancement of security of gas supply on the island is not an isolated, short-term measure but an ongoing process and an integral aspect of the CAG project which will require continuing input from all stakeholders. The RAs are also conscious that requirements must not jeopardise the proper functioning of the market and should not unduly raise costs for market participants and final customers.

3.1 Network Security of Supply Standards

1. *Should an obligation be placed on network operators to build and maintain the network to a 1-in-20 or a 1-in-50 peak-day?*
2. *Is a period of five days appropriate for the period for which supplies to domestic customers must be protected in the event of a partial disruption to national supplies?*
3. *Does a peak-period (as specified in 19A (1)(c)(ii) of the 2002 Act) need to be specified? Or does a 1-in-50/1-in-20 peak-day imply a sufficient period for this purpose?*
4. *Are there additional minimum standards required for other energy undertakings or offshore producers?*

The RAs consider that a range of issues must be examined before requirements in relation to the most suitable security standards can be introduced. While the RAs have noted that there was general support for a 1-in-50 peak-day standard, the potential effect of one common standard must be examined further before a decision on the most suitable security standard can be made. The RAs have also taken into account the general view amongst respondents that a five-day requirement is not an adequate period for the protection of domestic customers. The RAs have therefore decided that the TSOs in Ireland and Northern Ireland will be asked to consider in light of respondents' comments appropriate standards to be adopted; specifically in relation to the following:

- Determination of 1-in-20 or 1-in-50 network standard;
- Choice of partial disruption period;
- Definition of 'partial disruption';
- Introduction of additional minimum standards.

The final determination of the above parameters rests with the RAs. It should be noted that the proposed Regulation on security of gas supply is more prescriptive in its approach in relation to infrastructure and supply standards, as well as in relation to monitoring and reporting of security of gas supply, than those currently in place. The revised standards to ensure gas supplies to protected customers, in particular, may have a significant impact on market arrangements and obligations on shippers/suppliers. The RAs therefore consider that it is necessary for transporters to take into account the provisions of the proposed Regulation in considering security standards to be applied under CAG.

The RAs also recognise that some confusion exists at present regarding the exact definition of peak-day and severe winter criteria, as well as the methodologies behind the determination of 1-in-20/1-in-50 security standards. These issues need to be clarified as part of the harmonisation of security standards and related obligations.

3.2 Obligations on shippers and suppliers

5. *Should shippers/suppliers be required to book peak-day/severe winter capacity for a 1-in-50 or a 1-in-20 peak-day? What costs would be incurred by shippers/suppliers in order to meet such proposed requirements?*
6. *Should shippers/suppliers be required to secure supplies for a 1-in-50 or a 1-in-20 peak-day? What costs would be incurred by shippers/suppliers in order to meet such proposed requirements?*
7. *Should obligations be placed on shippers/suppliers ensuring minimum levels of diversity in their contracted sources of supply?*
8. *Should obligations be placed on shippers/suppliers relating to long-term contracts?*
9. *Are shipper/supplier obligations best provided for through licence conditions or through the Code(s) of Operations?*

The RAs have noted that while the majority of suppliers supported the requirement to book capacity for domestics/NDM customers, there was no general agreement as to whether a 1-in-50 or a 1-in-20 peak day should be utilised. The RAs agree that the obligation to book capacity for domestic customers should continue. Furthermore, the RAs and relevant government stakeholders will consider any requirements relating to winter criteria following acceptance of the proposed Regulation and will engage with the TSOs in order to determine the security of supply standard to be implemented through CAG in accordance with the Regulation.

With regards licence conditions relating to the supply standards discussed above, suppliers in Northern Ireland are currently obligated within their supply licence to secure gas supplies to meet both a 1-in-20 peak day demand and 1-in-50 severe annual demand; whereas Irish suppliers do not have such a specific requirement set out in their licence. This may offer a potential area for harmonisation; however at this stage the RAs are of the opinion that any proposal to align licence conditions or introduce new obligations would be premature given the recent publication of the proposed EU Regulation on security of gas supply.

The RAs have decided that it would be inappropriate to impose obligations in relation to minimum diversity levels given that multiple entry points have not been developed on the island and given the limited level of storage available on the island at the current time. Further consideration may be given to this in the CAG Code of Operations workstream.

The RAs are in agreement that obligations relating to long-term contracts would not ensure the provision of adequate supply and would not be in the best interest of competition. Therefore, the RAs do not intend to impose such requirements.

Lastly, as regards imposing requirements in licence conditions or in the Code of Operations, the RAs have noted that there was no consensus amongst respondents on this issue. The RAs believe, however, that there is a role for supply licences and the Code in relation to such requirements and therefore, these obligations will be considered further as part the CAG governance arrangements.

3.3 Gas storage

- 10. Should storage operators be required to hold minimum levels of storage?*
- 11. Should shippers/suppliers be required to hold minimum levels of storage?*
- 12. Should storage stocks in GB storage facilities be considered an appropriate security of supply measure?*
- 13. Would obligations in relation to storage distort the Irish gas market?*
- 14. Are there sufficient incentives in place for the commercial provision of adequate storage?*

The RAs agree that additional storage will be required to ensure the long term security of supply for gas supplies but acknowledge that it is not suitable to impose requirements on shippers/suppliers in relation to holding minimum levels of storage where gas storage facilities are underdeveloped on the island.

It should also be noted that substantial costs may be associated with the introduction of strategic storage requirements given that constant minimum levels would be necessitated throughout the year. The costs associated with holding certain levels of commercial storage for use during the winter months would be relatively low.

The RAs are also mindful that the European Commission is not explicitly proposing at present a requirement in relation to obligatory strategic gas stocks. Indeed, the Commission has noted that there is insufficient evidence to support the introduction of such obligations and has emphasised the high costs associated with strategic gas stocks.²⁰ The development of commercial storage is rather supported.²¹

²⁰ COM (2008) 781, Second Strategic Energy Review: An EU Energy Security and Solidarity Action Plan, p.11.

²¹ COM(2008) 769, on the Directive 2004/67/EC concerning measures to safeguard security of natural gas supply,

The RAs note that the development of storage stocks in GB would be beneficial to security of supply across the two jurisdictions. However, the RAs consider that reliance on GB storage would not guard against an incident at Moffat and given our high reliance on this entry point, the development of independent storage facilities on the island could alleviate these concerns.

In relation to the impact of storage requirements on an all-island gas market, there was a notable divergence of opinion between storage operators and shippers/suppliers. The RAs have also noted the general support of all respondents for incentives in order to develop adequate gas storage on the island.

The RAs will continue to monitor the introduction of strategic gas stocks in the Irish gas market in light of relevant EU communications. However, they do not believe that a decision on requirements relating to either commercial and/or strategic storage is prudent at this time. The RAs work on this issue will continue through the JSG sub-committee meetings on security of supply.

4.0 Conclusions and Next Steps

The RAs are committed to the introduction of agreed network standards and related obligations on shippers/suppliers through the CAG project in order to enhance security of gas supply in Ireland and Northern Ireland. Where this initiative does not prove feasible, the approach will be to achieve a suitable degree of harmonisation across the relevant regulatory policies and industry practices in both jurisdictions. It is envisaged that the development and introduction of network standards will be implemented through the CAG System Operator. The RAs are therefore mindful that such common standards and obligations must be addressed through the CAG Operations and Licensing workstreams. It is recognised that the programme for addressing these issues should be formalised following the introduction of the revised CAG workplan. The provisions of the proposed Regulation on security of gas supply should also be taken into consideration in addressing the matters raised as part of the CAG's Security of Supply Framework. While given the nature of the processes involved it is not possible to provide an exact date, the proposed Regulation is expected to be finalised by Q2 2010. The implementation of the Regulation will be within the revised CAG timeframe.

Therefore in light of the comments received and following further consideration of the relevant issues in this paper, the RAs intend to take the following steps:

- The RAs will engage with the TSOs in order to determine both jurisdictions' response to the requirements of the proposed Regulation and how they can be best addressed through the network security of supply standards to be implemented through CAG.
- Shippers will continue to be obliged to book capacity in accordance with the current security standards in each jurisdiction. Once the requirements of the proposed Regulation have been agreed and the CAG workplan finalised, the RAs will be in a better position to engage with industry on the most appropriate security of supply standards to be adopted.
- Further consideration will be given to supply licence obligations relating to securing supplies to meet peak-day and severe winter criteria. The RAs also note that the definition of peak-day and severe winter criteria, as well as the methodologies behind the determination of 1-in-20/1-in-50 security standards, require clarification. The RAs will defer a decision on the specific requirements, pending agreement on the contents of the proposed Regulation.
- The RAs conclude that strategic storage should be dealt with in the work programme of the Joint Steering Group Sub-Committee on Security of Supply. At this stage there is no specific timetable for a decision on strategic storage. However, it is expected that the work of the sub-committee will be progressed in line with the requirements of the proposed Regulation.

The RAs remain committed to working together on the introduction of agreed security standards under the CAG project. As discussed above, it is intended that the agreed security standards will be implemented through the CAG Operations and Licensing workstreams.

Therefore, once the revised CAG workplan has been agreed and the proposed Regulation finalised, the RAs will be able to progress the steps outlined above.