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**ExxonMobil's Response to Ofgem's Consultation "Gas Security of Supply Significant Code Review – Draft Policy Decision"**

Dear Sir/Madam,

ExxonMobil International Limited is responding to this consultation on behalf of its gas shipping and marketing affiliate ExxonMobil Gas Marketing Europe Limited.

**Background**

GB energy security of supply has been reviewed annually by DECC and Ofgem for many years, from 2007 in the form of the Energy Market Outlook and since 2010 through the Statutory Security of Supply report. At the end of 2010 the Security of Supply Regulation 994/2010 introduced new standards for European security of supply, including the N-1 infrastructure rule, a standard that GB comfortably meets. The Regulation is based on well-functioning market principles and is intended to complement the Third Energy Package and other European infrastructure work to improve market functioning and further free up flows of gas across Europe; together these steps are expected to improve overall European security of gas supply.

In 2010 Ofgem concluded Project Discovery, which specifically examined GB energy security challenges in the years to 2020 and beyond and laid out a series of options (from less to more interventionist) for ensuring security of supply in both the gas and power sectors. DECC followed Ofgem's work with a policy statement on gas security of supply in April 2010 that considered "*the probability of risk events occurring...is very low, and that our gas market is resilient*". In July 2010 DECC released further documents associated with these studies in support of that conclusion. Nonetheless, Government considered that Ofgem should continue to assess ways to improve resilience of the gas market and proceeded to provide GEMA with new Gas Act powers (via the Energy Act 2011) that would allow it to direct National Grid to make changes to the Uniform Network Code (after industry consultation) where it believed such changes would reduce either the risk of a gas supply emergency occurring or the severity of any gas supply emergency. Whilst UNC governance changes, concluded in 2010, already provide Ofgem with the ability to propose development of UNC terms through a Significant Code Review ("SCR") process, its newly granted Gas Act powers will allow Ofgem to push security of supply related changes through without the normal level of industry scrutiny.

Ofgem has indicated that the SCR related changes to which this consultation relates would only partly "plug the gap" Ofgem has identified in GB security of supply, and that it is minded to proceed with these ahead of and separately from a subsequent review to identify further "interventions" capable of plugging the remaining part of the "gap".

It is clear that DECC and Ofgem believe they may need to go further than the standards set out in the Security of Supply Regulation and have tested the risks (probabilistic assessment of "energy unserved") and possible solutions to reduce those risks for both the power and gas markets. Ofgem's 2009 "Project Discovery" has evolved in part into the current Security of Gas Supply Significant Code Review, an intensive program covering a wide variety of rule changes within Section Q of the UNC, including many

that would be complex to develop and implement (for example, identification and allocation of disconnected load).

The SCR seeks to create a stronger incentive for UK shippers and suppliers to alter the way gas supplies are contracted or arranged (including discovery of demand side response) to significantly reduce or avoid the risk of a gas deficit emergency occurring, limit the severity of any emergency as well as enable compensation for firm consumers whose load has been disconnected involuntarily (i.e. outside of a contractually arranged interruption).

Ofgem discusses three (of four) options involving capped cash-out prices (set at £20/therm or higher) to form a “market based incentive” to drive the contracting part of the change including demand side response. The level of the incentive is arrived at by reference to estimations of consumer Value of Lost Load (“VoLL”) that could be used to set compensation for consumers who have suffered firm load disconnection during a gas deficit emergency (“GDE”).

In addition to the three options presented under the consultation for a VoLL based emergency cash-out reform, Ofgem retains an option (Option 3) for “no change” of the UNC but which allows for a separate review of “alternative interventions” comprising (i) technology non-specific such as information obligations, licence obligations or reliability options (similar in concept to that under consideration for the EMR Capacity Mechanism) (ii) Demand Side Response options including standard contracts or auctions for interruptible rights and (iii) physical storage options.

Ofgem has published a draft impact assessment and supporting consultant studies from both Redpoint (probability modelling) and London Economics (VoLL analysis). We have decided not to address points of detail within these documents and focus our response entirely on articulation of arguments we see for pursuing one of the options (Option 3 – no change to the UNC) addressed in the draft policy decision document.

## **ExxonMobil Response**

- 1. ExxonMobil supports Option 3** and believe Ofgem should suspend further work on this SCR and redirect efforts to consideration of alternatives. It would be appropriate that DECC and Ofgem liaise to agree the approach to further studies and in any event we would encourage a further assessment of the nature and size of the security of supply gap that might exist to be plugged.

A carefully designed preliminary consultation with industry would provide an opportunity to identify alternatives commanding the greatest support, assist in setting work priorities and establish for instance whether a holistic approach to such studies would be widely supported. Clearly the SCR work to date could be included for comparison with any other alternatives.

- 2. ExxonMobil does not support any VoLL based change to UNC Section Q** In large part this is based on our judgement that an emergency cash-out incentive/consumer compensation level of £20/therm or more is very unlikely to result in much change to the level of demand side response contracting or (storage) investment necessary to significantly reduce the risk of a GDE occurring.

Having heard the views of suppliers and consumer representatives at Ofgem’s workshops we would find it hard to believe that a significant increase in the contracting of demand side response (interruption rights) with consumers could be relied upon. Industrial consumer representatives have indicated something close to mistrust of supplier-led interruption; it appears the same end users are more comfortable about an arrangement in which National Grid contracts for and exercises a firm capacity interruption. Even if there were to be some improvement in DSR contracting it seems unlikely that such contracting would be at efficient price below the default VoLL. Interruption services are likely to result in an increase in costs whilst the full potential of DSR is very unlikely to be captured.

We are also inclined to agree with views expressed that there is such a low probability of a GDE occurring in the base case that it is unlikely any gas supplier would consider investing in additional insurance even at these levels of emergency cash-out price. Ofgem could not assume with any reasonable certainty that a VoLL referenced cash-out price would incentivise new storage investment.

The existence of a higher cash-out price during an emergency may or may not have the effect of reducing the severity of any GDE. Ofgem is concerned that the emergency cash-out price under the current arrangements may be set too low to attract supplies. However we firmly believe that dynamic cash-out pricing (which operates until NEC takes command and control) will be sufficient to obtain whatever gas supplies are available and at the most efficient price. Furthermore normal market price signals will be sufficient for so called “slow burn” supply side variations to be mitigated with alternative supplies.

There will always be a possibility of short notice (on the day) GB based significant infrastructure events; and if such events occur during a period of tight supply demand there may be insufficient replacement local gas available to maintain pipeline pressure. For such events, rare as they are likely to be, the steepness of the market or cash-out price is unlikely to make any difference to the outcome. Once a GDE is declared and disconnection has started the industry will be in a very unusual place and reputational considerations are likely to play a much stronger part in organising an efficient recovery than that played by the value of the emergency cash-out price. The current post emergency claims process will, we believe, be sufficient to allow restoration gas supplies to be appropriately paid for.

More importantly, if there were ever to be a GDE with cash-out prices at £20/therm there is a much more significant risk that the market after supply restoration would (i) comprise fewer participants (some will have exited after direct/indirect credit defaults),(ii) would see less gas traded at the NBP (the emergency cash-out price would be viewed as an incentive to contract more of future GB gas supply outside of the NBP) and (iii) consequently suffer a decline in liquidity. Any loss of confidence in price formation at the NBP would increase uncertainty around future supply of gas and reduce GB’s security of gas supply. This emphasises the need to focus on exploring for solutions that can cost effectively reduce the risk of a GDE occurring.

### **3. The potential for a gas supply emergency**

Our view is that the level of gas security of supply enjoyed in GB is amongst the highest of any significantly sized gas market and that situation is more likely to improve than deteriorate for a number of reasons:

- High standards of operational reliability and integrity will be expected by GB gas infrastructure operators;
- GB infrastructure meets n-1 requirements and GB market participants are able to connect to a diverse range of internationally sourced gas supplies through LNG terminals and pipeline interconnectors;
- European codes are being developed to further improve cross-border gas flows, and a significant list of new infrastructure projects will contribute to an increase in supply diversification and access;
- Global gas supply side fundamentals remain strong over the long term whilst GB gas demand is more likely to be flat or declining;
- The NBP market is liquid, well-functioning and at a global level market participants are confident in the prices formed on that market. As long as NBP price formation continues to be seen as reliable and as long as there is no visible threat to that position from policy making or regulation, GB security of supply is likely to remain robust in the face of external supply variations.

This raises the question once again as to the size and nature of the security of supply gap that might exist and the costs to the consumer or risks to the market’s well-functioning that might be involved in plugging it. There have been significant developments both on the supply and demand side since Project Discovery and we think this justifies further effort to identify the nature and size of the risk as part of confirming or otherwise future work on alternative interventions. In part we feel this is required because some of the Redpoint GDE probability work has used assumptions that we believe may be suspect. For example we were surprised to read (page 49) of their report that the probability of at least one LNG or pipeline interconnector

outage over a year is as high as 30%. It appears this assessment has been made by reference to historical data but such assumptions have a fundamental impact on a probabilistic analysis and that work in particular should be subject to much more scrutiny by industry experts.

To conclude: we do not believe that security of supply is lower by virtue of longer supply chains or increased import dependency. Events most likely to develop into a GDE are in all likelihood those of significant, on the day infrastructure outages in the UK itself. One of the most significant events of recent years followed the fire on the Rough storage facility – despite removing a substantial gas flow capability from the market the outage did not lead to a GDE situation.

#### **4. Alternative Interventions**

The alternative schemes that might realistically be able to contribute to an improvement in UK gas security of supply in our view are limited to physically backed schemes that can be locally actioned against a short notice and significant infrastructure outage or combination of outages.

Within that subset of physically backed schemes, market based solutions would be preferred and those that involve the imposition of onerous obligations on market participants, and which are likely to interfere with the functioning of the market, should be avoided.

Physically backed solutions include those that aim to efficiently capture available demand side response and those that incentivise storage investment or rational levels of stockholding. Physical solutions combined with some additional information obligations might also provide more market confidence than a market mechanism alone.

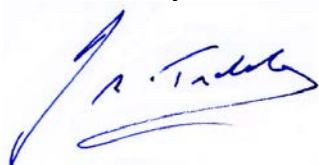
Alternatives that we believe may merit development work include:

- National Grid price auctions for demand side response;
- A pre winter stocking obligation on licensed gas suppliers;
- A reliability options market mechanism.

#### **Summary and Conclusion**

Ofgem has constructively engaged throughout the SCR process and has helped industry develop its thinking around the nature of security of supply and gas supply emergencies. We believe that further development of this scheme should be suspended pending review of realistic alternative interventions. However, before that work is commissioned, we would encourage Ofgem (and/or DECC) to revisit the basis for further work, focussing on establishing the nature and size of the security of supply gap to be plugged and bringing supply/demand databases up to date. Industry should be consulted throughout and specifically on the alternative interventions that command most support for study; subsequent work should be prioritised accordingly. SCR options may be compared with such alternatives in terms of their costs, risks and effectiveness in meeting the main objective of reducing the risk of a gas supply deficit.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'I. Trickle', with a large, sweeping flourish underneath.

Ian Trickle  
Europe Regulatory Advisor