Energy UK Response to a Consultation – Gas System in Transition: Security of Supply

25 February 2026

About Energy UK

Energy UK is the trade association for the energy industry, representing companies investing billions of pounds to secure our country's current and future energy needs.

From growing start-ups to major electricity generators, grid and infrastructure developers and energy suppliers, our members are driving change across power, heat, transport and flexibility.

We provide a collective voice for the sector working with governments, regulators, charities and other organisations to provide crucial insight that shapes policy, offers solutions and promotes best practice.

Our broad view across the whole system supports evidence-based positions which are not tied to particular technologies, and are focused on delivering strategic benefits for people, businesses and the economy.

We champion initiatives such as our Vulnerability Commitment, which pushes suppliers to go beyond regulation to support customers with additional needs, and TIDE, the industry's drive for greater inclusion and diversity. Through our Young Energy Professionals Forum, we support the development of future leaders.

We are equally committed to our team and are proud to be recognised as a 'Gold' Investors in People employer.

Executive Summary

Energy UK welcomes this government consideration of gas security of supply well ahead of when any significant system stress events may occur. This will enable further analysis and development of mitigating measures where necessary.

Our initial view is that support may be needed to ensure security of supply and that should be focussed on infrastructure rather than gas flows which we expect to respond to market signals. The first priority should be to secure gas storage capability to avoid risks of closure or reduced capacity. Also, that any intervention should be mindful of unintended consequences and risk of creating distortions in the market. As far as possible mechanisms should complement and work with the market rather than directly intervene, which could risk an overall detrimental impact on security of supply.

We also think there would be merit in a more joined up approach to security of supply across energy markets, not only the role gas plays in supporting the electricity

market but also on occasion when this may be reversed. For example, at a time of gas system stress it may be possible to reduce electricity demand or increase non-gas generation sources which could reduce the demand for gas generation and support the gas system. A whole energy system view by NESO would be needed for this.

Energy UK looks forward to further engagement with DESNZ and Ofgem as options are developed and refined.

1. Do you agree with the assessment that, as supply from the UK Continental Shelf continues to naturally deplete, imbalances between supply and demand may become possible in low-probability, high-stress scenarios? Please provide evidence to support your answer.

Energy UK agrees with the analysis and assessments presented in this document and the NESO's Gas Supply Security Assessment.

Energy UK also agrees that decarbonisation of the energy system, deploying renewable and low carbon energy sources will be key for security of energy supply and ultimately lead to reduced gas demand across many sectors. However, in times of low renewable generation output, the electricity system will remain dependent on gas generation for some time to come whilst other low carbon dispatchable technologies are deployed. At these times it will be the peaks in gas generation along with cold weather conditions that put the greatest demands on the gas system.

The analyses show there is a risk of low probability, high impact scenarios emerging under certain scenarios of very high gas demand and / or significantly reduced infrastructure availability in 2030/31 and beyond. We will look forward to NESO's further work on the years to 2030 due in 2026.

Energy UK notes that such detailed and complex analysis will always be based on a snapshot of information at a point in time and certain assumptions and will therefore be highly sensitive to those. We also note that:

- the analysis was prepared before the announcement by Kistos to recommission and expand its Hole House gas storage facility[1]
- Rough storage capacity / deliverability is not considered, even noting its availability is highly uncertain.
- Cold snap duration is assumed to be 11 days, no sensitivity to a longer cold snap is presented.

[1] Kistos gives go-ahead to UK gas storage plan | Upstream

- Storage peak deliverability analysis is limited (only a single value is provided) and it is not clear if it depends on the fill level.
- Increased dependence across Europe on timely LNG imports is not fully captured.

2. In light of the analysis outlining the priority of ensuring gas infrastructure capacity, do you think the market will respond to provide such insurance for low probability, high stress scenarios? Please provide evidence to support your answer.

Historically GB gas markets have responded by building infrastructure and delivering molecules when needed, such that intervention has not been required. However, the supply / demand situation is changing with demand becoming peakier (higher in relation to annual average demand). With domestic production in decline the UK is increasingly dependent on imports to meet its gas needs. This places increased focus on the assets to deliver those imports, interconnectors and LNG import facilities and gas storage facilities within GB to manage gas supplies already within the GB jurisdiction. Consideration is needed of the right mix of assets to provide bulk supply and peak supply which will be utilised less often.

Reflecting on the current circumstances for various supply sources:

UK domestic production – irrespective of any market signals, government's commitment not to issue new licences to explore for new fields limits any market response. Even if the potential is limited, marginal production would be within the UK jurisdiction and offset import requirements, often with a lower carbon intensity than LNG.

Interconnectors, the interconnector to Belgium (INT) has recently announced[2] reduced levels of import capacity to GB due to lack of demand for capacity. Similarly, BBL announced reductions in import capacity in 2024. It is not clear what would reverse this nor what lead-times may be required. For example, does a mothballed compressor need to be returned to service.

Gas Storage - aside from the Kistos announcement above, which is bringing back a previously mothballed facility, there are not sufficient market signals to promote investment in new or refurbishment of existing gas storage capacity. The seasonal spreads are too low to support seasonal facilities, such as Rough, even though such facilities can provide valuable supply security across with winter months. There has been no gas injection into Rough this summer and the owners report that it risks closure.

[2] Close of Open Season and Review of Interconnector's Belgium to GB Capacity Offering

Other gas storage facilities, mostly in salt caverns operate differently to seasonal stores and will cycle gas in and out multiple times in a year, providing short term supply into the market in response to price signals, including for peaks in demand. Some of these assets have degraded over time as market returns have not been sufficient to justify investment.

LNG terminals – there are plans to expand capacity at the South Hook terminal, whilst capacity and storage expansion was completed at the Isle of Grain in 2025.

Biomethane – we understand that support is being considered separately but note that it can make a useful GB based contribution to gas supplies, and hence security of supply whilst also progressing decarbonisation ambitions.

This brief summary shows that the current market outlook is driving different responses across the various supply sources and routes. However, the expansion in LNG import capacity may be more driven by the need for an increased baseline of imports than to meet exceptional peak demands.

In this context Energy UK welcomes, government's consideration of the gas security of supply situation in a timely manner in advance of potential gas system stress. Our initial view is that as demand becomes peakier relative to annual average supply there may be a need for government to intervene to ensure that low probability events do not lead to gas supply interruptions, as market signals alone may not be sufficient to deliver the necessary infrastructure.

We also think that there needs to be a more coordinated approach to energy security across the gas and electricity systems, this has been noted in a recent publication by the European Commission in an evaluation of energy security frameworks.[3] For instance demand reduction on the electricity system can also reduce gas demand, and support gas security of supply. We also note that very little progress has been made by NESO in assessing and addressing the risk associated with gas and electricity market interactions.

3. What gas supply and demand scenarios are you using for planning in your organisation and why? a. What impacts to your sector/business have you identified using these scenarios? b. What mitigating actions are you

[3] eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52025SC0435&qid=1767610011921 COMMISSION STAFF WORKING DOCUMENT EU energy security - evaluating the EU's security of electricity and gas supply framework December 2025

considering against the supply and demand scenarios your organisation is using for planning?

Energy UK as a trade association does not create its own gas supply / demand scenarios. We do note however that the analysis is highly sensitive to such assumptions, such that small deviations can under or overstate the risk of supply interruptions. Clearly confidence in the analysis will be an important consideration.

4. Do you agree with the assessment that ensuring resilient infrastructure capacity is a key priority as the gas supply mix changes? Please provide evidence to support your answer.

Energy UK agrees that resilient infrastructure both for imports and for gas storage for gas already with the GB jurisdiction is a key priority as the gas supply mix changes with GB's growing reliance on imports to meet demand. Such infrastructure will also help to support diversity of supply sources which have been a key feature of GB gas supply.

Whilst the onshore transportation system is not the focus of this consultation, it will also be important and will need to be robust to the changing direction of flows becoming more south to north in the coming years.

It will also be important to ensure that such infrastructure is planned and operated effectively and efficiently to ensure gas can be delivered when required. However, this will largely be determined between the network owners and Ofgem as part of price control negotiations. It will remain important that regulated network investment and planning keep pace with any changes in supply infrastructure, to avoid potential system constraints.

5. In light of the analysis outlining the priority of ensuring resilient infrastructure capacity, do you think the market will respond to achieve this priority? Please provide evidence to support your answer.

Please see response to question 2

In addition, we note here that investment will largely be driven by customer needs and so will be commercially rational. Infrastructure owners and developers' decisions will be driven by a strong enduring needs case and robust anticipated returns on investment. Clarity from government on the anticipated role of gas in GB in coming decades is key here.

With respect to network investment the market / shippers have a limited role here unless incremental capacity is signalled via a Planning and Advanced Capacity Reservation Agreement (PARCA). Some issues with these processes have been identified and are being addressed. However, investment decisions with respect to flow direction changes and resilience of the network with be made by Ofgem at price control review but will be a key part of ensuring security of supply.

6. Do you agree with our assessment is that ensuring a viable commercial model for infrastructure capacity is a key priority facing the gas sector? Please provide evidence for your answer.

Commercial viability is key for infrastructure assets, absent reasonable returns commercial entities will consider closure as an economically rational choice, this may be particularly relevant as assets age when significant investment may be needed to extend their life and ensure ongoing reliable operation. Investment towards end of life would need assurance of returns for several years ahead to ensure the investment is worthwhile.

Comments in relation to gas quality will be provided in response to Qn 36 onwards

7. In light of the analysis outlining the priority of ensuring commercially viable infrastructure capacity, do you think the market will respond to achieve this priority? Please provide evidence to support your answer.

Energy UK agrees with the commercial challenges for investment and ongoing maintenance facing infrastructure capacity, particularly as annual demand declines. However, as import dependence grows there will be continuing roles for LNG terminals and interconnectors. A key issue will be understanding the role of gas in the energy market in the coming years and decades. Government has a role to play here, with the Midstream Gas Market, update to the market in June 2025 being useful in this respect.

Reduced seasonal price spreads are mentioned, it is difficult to see spreads increasing in a sustained way to support investment in storage and other assets, given the linkage of GB gas markets with European markets and global markets via LNG. Wide seasonal spreads were much more of a feature of the GB market when it was less coupled to other markets, several decades ago.

Similarly capacity bookings have tended to be shorter term due to capacity being readily available and given the diversity and optionality of supplies to meet demand

on any day. The benefits in competition this has provided to the market has been seen over many years.

8. Government's assessment is that existing LNG infrastructure is robust and commercially viable, do you agree? a. If not, what actions do you think would be required to protect the strategic importance of existing LNG infrastructure?

Energy UK would tend to agree with this assessment given the expansion projects noted in the document, long term contracting for LNG capacity and Centrica's recent purchase of equity at Isle of Grain[4] noting its value as a strategic asset that will support energy security for decades to come.

9. Is there a strategic case for enhancing or expanding storage capabilities at LNG terminals? a. What role should government play in supporting this?

Additional storage of gas that has been landed in GB would enhance security of gas and also electricity supplies. However, there are considerations as to whether additional storage capacity is required at LNG terminals is required, and where it should be located or whether maintaining existing capacity is sufficient. In any event we consider that all forms of storage should be treated fairly and consistently.

Adding LNG storage tanks at entry points, may not mean additional gas can flow to meet demand if the network is constrained, this is already the case in relation to Milford Haven and Isle of Grain terminals. Additional re-gas capacity would also be required to ensure the additional supply can be delivered when needed.

Storing gas as LNG will also give rise to boil off, unless re-liquefied, which will reduce the volume stored over time and there may also be the risk of limiting imports if tanks are full.

Storing gas closer to demand may offer better resilience for short term peaks in supply driven by high demand in a cold spell and / or reduced renewable generation output.

The cost and lead-time to build and operate additional tanks would need to be considered alongside other means of providing additional capacity.

[4] Investment in Grain LNG

10.Do you agree with the assessment that the introduction of an FSRU could help ensure gas infrastructure and resilience? Please provide evidence to support your answer.

Energy UK agrees that the introduction of an FSRU could help to provide additional import capacity and then supply to the market when needed, so long as the entry capacity required is not already being utilised. Whilst capacity at existing LNG terminals is under utilised there may not be appetite for adding more capacity, however withdrawals may rise in response to market signals under stressed conditions, which may mean gas from an FRSU located at an existing LNG terminal would not add to overall supply. Other locations may need to be considered and in any event diversity of supply is not increased once the initial stock is regasified, it would need to be replenished by an LNG delivery as any other LNG import facility, which would face similar risks of disruption.

Clearly there would be costs involved in chartering a vessel and maintaining the gas stocks until the gas is needed. Whether this can be a fully commercial option is not clear.

If financial support is needed then consideration will be needed over who pays and how, when and how injection in the system is called and how this interacts with normal market operation. There would be a risk of creating distortions and potentially disadvantaging other providers of flexible gas supply to the market. This could undermine ongoing investment in such assets leading to more reliance on intervention measures to ensure gas security of supply.

11.Do you agree that there are no significant barriers to entry for new LNG entry points, including for an FSRU, and that the market can deliver additional capacity if this is necessary? a. If not, what could government do to resolve the barriers to entry for new LNG entry points?

It is unclear why it is suggested that there are no significant barriers to entry for new LNG entry points. Although the issues would be similar to those for existing LNG entry points

Issues would include:

- Availability of deep-water docks
- Planning and consents to build the entry point connection
- Availability of network capacity
- Gas quality – nitrogen ballasting may be needed
- Entry tariffs

12.Do you consider there to be other advantages and/or disadvantages of government directly chartering and appointing an operator of an FSRU, to be operated as a strategic gas supply source?

A key issue would be funding and value for money for customers if they are expected to pay for this option.

Defining the triggers for use would also be key, how these are set will determine the risk of unintended consequences on the wider market which may dampen price signals for investment elsewhere. Triggers could be driven by price, demand, unplanned outage, other triggers or only to avoid an emergency. The latter would have the least distortion to the market but may never be called but would then act as an insurance policy.

13.If HMG were to directly charter an FSRU, please explain whether and how you think this would impact your role in the market and your current operating model?

As a trade association Energy UK does not have a direct role in the market.

However, depending on the level of intervention this could have a significant impact on the market, which may become more reliant on such a strategic reserve supply. A consequence could be reduced incentives to invest to deliver supply flexibility by other means by market participants who subsequently view government as responsible to security of supply.

14.How can the strategic importance of interconnector capacity be protected, and what actions do you think might be required?

Energy UK notes that bidirectional interconnectors to the EU used to flow seasonally exporting in the summer and importing in the winter, this changed following the reduction in Russian supply into the EU from 2021. Since then, imports have been limited, however the capacity remains an important part of supply flexibility to GB and also provides a route to European markets for gas imported to the UK, helping to support market liquidity.

The reductions in capacity at both INT and BBL are understandable given limited or unpredictable use in recent years, and it is unclear what would be required to reverse this. It would be useful to understand what steps are needed to restore import capacity, what the costs would be and leadtime needed.

The combined capacity is now around 58mcm with the National Gas winter outlook[5] at page 31 noting that interconnector flows are not required during at 15-day cold snap based on the 'Beast from the East' demand levels from 2018. This does assume availability of other infrastructure, and UKCS supply which will decline in the future. During the actual Beast from the East event in 2018, from memory, interconnector flows reversed during the day to an import rate of around 70mcm, so not much higher than the reduced level of capacity going forward. We also note that there was a significant level of coal generation running at the time, which in today's system would largely be replaced by gas generation, taking gas demand even higher.

Hence it is important for import capacity to be available even if used infrequently, market participants are unlikely to book such capacity long term given the shift to shorter term capacity booking and traded market reliance in a competitive market.

Any further reductions in available capacity would be a concern as diversity of supply sources would be reduced.

With respect to imports via the interconnectors there is also an issue of whether molecules will flow when needed. Under normal market conditions responding to price signals we may be confident in this, but under more stressed conditions EU solidarity provisions may prevail and limit exports to GB as a third country not included in EU legislation. The UK should monitor the EU review of energy security frameworks referenced in response to Question 2.

Government needs to carefully weigh up the costs and benefits of potential market intervention or whether alternative sources of gas flexibility can replace the loss of any single piece of infrastructure, in future.

Providing commercial support just for interconnectors would have impacts on the whole market for flexible gas, which is much wider than just interconnectors and includes storage. There is a risk that commercial support for one type of user might provide them with increased market power, raising barriers to entry or foreclose access to certain services.

15.How can geological storage capacity and deliverability levels be protected and what actions do you think might be required?

There seem to be two aspects here, maintaining the storage capacity, including investment to maintain it rather than it closing and ensuring that it is used effectively.

The document explains well, how mid-range storage is used both seasonally and in response to shorter term price signals, with this captured in figure 11. Noting how

[5] Gas Winter Outlook 2025.pdf

storage can also enable more uniform LNG import flows to store gas, we think this has a value alongside the general principle of storing gas within the direct control of GB that is to support GB security of supply.

Gas is also cycled in and out to meet demand and to be revenue enhancing for the facility. However, returns have not been sufficient at some existing facilities to maintain space and deliverability of assets. Where there have been points of failure these have not been refurbished and the oldest assets (>50 years) will risk closure absent support to underwrite the investment. A cap and floor type mechanism may be appropriate, as this minimises market distortion whilst maintaining affordability.

Energy UK is not sure that intervention is required to ensure gas flows in and out of storage as expected, as this currently works in response to market signals and has been effective in meeting demand for gas, including filling storage in advance of (or re-filling during) winter. Rather if support is considered, it should focus on the infrastructure.

16.To what extent do you think targets and compulsory stock obligations would address any of the three priorities set out in Chapter 2 (ensuring sufficient infrastructure capacity; ensuring resilient infrastructure capacity; and commercially viable infrastructure capacity)? Please provide evidence to support your answer.

Stock obligations or targets would risk limiting the use of storage capacity to meet demand in normal market conditions and for cycling storage capacity to enhance revenue at mid-range storage facilities. This could have a detrimental impact if there were to be high demand early in the winter and stock could not be called upon if stock levels needed to be maintained for later in the winter.

GB only has one long range storage facility (Rough) that is used seasonally and therefore may be more suitable for mandated targets and could enhance security of supply, but its owners have stated that it risks closure without financial support

Compulsory stock obligations would require very significant expansion of domestic gas storage capability which would come with significant costs and lead-time. It is unclear that holding gas in store in the EU would enhance GB security of supply given solidarity requirements in EU regulations.

Any market intervention will come with additional costs that will need to be recovered. If the costs are targeted to customers, this will need to be seen to be value for money and considered in the wider context of a desire to reduce customer bills.

17.What are your views on the strategic storage options outlined above in relation to addressing the priorities set out in Chapter 2 (ensuring sufficient infrastructure capacity; ensuring resilient infrastructure capacity; and commercially viable infrastructure capacity)? a. Do you recommend a specific strategic gas storage option? b. Are there any alternative strategic gas storage options we have not listed?

This section suggests a strategic store under government control, both in terms of capacity (space/ injection/deliverability) and management of flows.

There is insufficient detail to provide a more considered response here although the document rightly notes some key issues which would need to be considered as part of a proposal

- How would the space / injection / deliverability requirements be determined
- New capacity would take a long time to deliver
- Sequestering part of an existing site does not add capability
- Sequestering part of an existing facility decreases storage capability available to the market
- Market distortions may be created
- Rules for when gas in this storage is released would need very careful consideration to avoid market distortions
- Reduced incentives on others to invest
- Cost of cushion gas
- Costs and funding of this approach
- Risk of creating a distressed buyer
- Risk of single point of failure

Energy UK members have a range of views on whether intervention is needed to support gas storage and that which may address the concerns set out by NESO. In general, more market-based approaches are favoured.

If intervention is deemed necessary, the priority for improving GB security of supply should be to increase the capacity for delivery of gas from reliable sources during a stress event. Any strategic storage options should be in addition to this rather than instead of support for existing and expanded capacity.

18.How would a strategic storage reserve impact your role in the market (would it have a positive, neutral, or negative effect on your current operating model)?

See response to Qn 17

19.Who would be best placed to operate a strategic storage site, purchase the gas, and set conditions of use?

In general activities are generally best undertaken by parties with experience in those activities. So, a storage operator would be best placed to operate a facility and, shippers to buy gas.

Setting the conditions of use should be led by government with industry consultation to ensure all issues and consequences have been considered and that the rules for use and refilling are well understood, with full consideration given to whether they are rules based or what level is discretion may be necessary. We consider that any discretion would need to be accompanied with incentives for efficient purchase and utilisation.

20.What other factors, including gas usage and refilling terms, should be considered in any strategic gas storage proposal (either through new facilities or by securing capacity at existing sites)?

See response to Qn 19

21.What are the implications of leasing part of an existing or future storage site, either in GB or abroad?

Issues with leasing part of a GB site have been considered under Qn17

Energy UK does not support government leasing part of a site outside of GB

With respect to an EU storage site there are additional challenges of withdrawing the gas and ensuring it reaches GB when needed. These include reservation of capacity at interconnection points in all the relevant countries along the route and also interconnector capacity to bring the gas to GB. Shippers are best placed to overcome these market complexities.

Misalignment of EU rules and EU solidarity requirements could mean the gas does not flow to GB in extreme circumstances when it is most needed.

EU fill targets and stock holding requirements and national differences in implementation may also have an impact, although these are being reviewed.

22.Please provide any evidence on the cost of developing a new storage facility.

Absent any recent new gas storage developments, government may be able to benchmark some costs to current hydrogen storage proposals.

23.Please provide any estimations on the cost of leasing existing storage capacity.

Energy UK has no information on this

24.Should we attempt to encourage or require shippers to enter more long-term contracts with producers? If yes, can you explain what mechanism you believe to be most appropriate to encourage or require long-term contracting?

The GB market already has a mix of short and long term contracts albeit short term contracting dominates the contract mix, with each shippers deciding what suits its customer profile. This is likely to still be the most effective approach as they are best placed to understand the evolving European and global LNG markets.

Any approach to incentivise or require shippers to enter into long term contracts would need to consider what fraction of their portfolio this should cover and it is not clear why government or regulators would be better placed to do this than market participants. Longer term contracts may come with increased risk for both seller and buyer and therefore higher prices, which would be passed on to customers. Any price cap regime would need to recognise this.

There would also be the risk that if introduced, shippers would be seen as distressed purchasers also placing upwards pressure on prices.

In addition, whilst such supplies would provide a baseline of supply such contracts may limit flexibility to respond to meet demand when needed.

Overall Energy UK does not favour this approach.

25.Do you agree with the assessment that there would be limited benefits to security of supply or to consumer prices if we entered the wholesale market and purchased gas directly?

It is not clear whether government would seek to buy in the market year round or only at times of crisis, in any event Energy UK agrees with the assessment that there would be limited benefits. Government may also be seen as a distressed buyer.

Such intervention would be detrimental to the market overall, and could lead to a spiral of further interventions

26.If HMG were to secure gas on the wholesale market directly, what would be the impact on your current operating model and position in the market?

Energy UK does not trade in the market, but we would expect this to mean reduced incentives on individual shippers to secure supplies, knowing that a government supported backstop exists.

27.Do you think industrial demand side response measures are helpful in either ensuring sufficient infrastructure capacity; ensuring resilient infrastructure capacity; or ensuring commercially viable infrastructure? Please explain your answer.

Industrial demand side response is generally thought of as a commercial measure rather than providing infrastructure for security of supply.

However, if gas consuming plant is supplemented or adapted to use other fuels and can switch away from using gas at times of tight gas supply, it could be considered as part of the infrastructure for providing gas security of supply.

National Gas' tenders for industrial demand side response have only managed to secure limited quantities since the process was launched and it is not clear how this could be substantially increased, so this has not been particularly helpful in ensuring gas security of supply, albeit it adds some diversification of options.

28.Are you aware of National Gas' existing Demand Side Response scheme for Daily Metered consumers?

Energy UK represents organisations that meet the criteria to offer demand side response to National Gas. However, gas generators do not generally participate given the substantial penalties they will face if not available to deliver into the electricity capacity market if called to do so.

Energy UK is aware the NESO is undertaking work on interactions between the gas and electricity markets under emergency conditions but is not aware of the detail. It is possible with NESO oversight that gas generators may be able to provide demand

response to the gas market if alternative forms of generation are available, but currently there is no mechanism to achieve this. An extension of this could be for electricity demand side response to provide relief to the gas market, in simple terms 1kWh of electricity demand side response could release 2kWh of gas to support gas security of gas supply. This could be managed commercially and may avoid emergency measures being required.

In this context we note with some concern a derogation for NESO with respect to the Emergency Process Assessment for gas[6]

29.If you were aware of the scheme, are there any change(s) that would make it more likely for your organisation to submit a bid to the existing scheme? Please support your answer with quantitative data where possible.

Gas generators would be more likely to participate if there was a more joined up approach across the gas and electricity markets. NESO should take the lead as it is a whole energy system topic.

30.Do you think the possible commercial support options outlined would address any of the three priorities set out in Chapter 2 (ensuring sufficient infrastructure capacity; ensuring resilient infrastructure capacity; or commercially viable infrastructure capacity)? Please include any additional evidence you have on why action of this kind is/is not required in your answer.

Some members believe that it is appropriate for government to further consider commercial support for certain type of infrastructure that are vital for security of supply for GB. Other members believe that the market does not require intervention.

All three types of infrastructure have a role to play in this regard and can contribute to the three priorities outlined. Whether all need support is a wider question and we are very mindful of any support will need to be funded and paid for by customers or some other means.

Any support will need to consider which of the three priorities are to be served and the quantities required. The priorities may also be rephrased as:

- New / expanded infrastructure
- Maintenance of existing capabilities (physical / commercial)
- Molecules being delivered when needed.

[6] Decision to grant NESO a derogation for Emergency Process Assessment

Energy UK is not convinced that support is required to ensure gas flows when needed, for the foreseeable future we expect market forces to drive the delivery of molecules when required. Rather we consider that the focus should be on ensuring the availability of infrastructure to enable such deliveries.

Given the fiscal environment it is important that any measures are well targeted and cost effective, noting that any approach will need to be tailored to meet the more specific requirements (eg gas salt cavern facilities have specific features, they are not all the same). The definition of these requirements will be a significant task in itself and we would expect further consultation on the process for defining these.

From the options proposed we think there is potential for learning from experience where these have already been deployed and we think that approaches that work with the market, bring the least risk of unintended consequences and market distortion. Some members believe that, cap and floor, contracts for difference and capacity market arrangements may meet these criteria and that it would be beneficial to keep these options on the table and develop them further with industry. For example, cap and floor is being deployed to support electricity interconnectors, long duration energy storage and the hydrogen storage business model. The revenue floor helps to secure investment whilst exposure to market signals is retained between the cap and floor, managing potential market distortions.

31.If you do think these commercial models address one of the three priorities, which option(s) do you believe to be most appropriate? Please provide evidence of how these options could work for the three types of gas flexibility facilities (LNG terminals, interconnectors, and storage sites) focused on in this chapter.

Of the three mechanisms noted above a further level of detail is required about what they are expected to provide is required, is it new capability, expansion of existing, capability or ensuring viability of existing capability. The most appropriate option will be informed by the needs and further assessment of likely costs and risks.

Government will also need to decide whether it supports one infrastructure type or more, given the latter will entail significant cost. Transparency and fairness will be important for any approach, aswell as value for money in targeting resources to the most impactful options(s).

Energy UK's initial view is that support for storage to ensure existing facilities' capability is maintained should be the first priority, both in term of space and deliverability, alongside considerations around duration and enhanced capability.

In line with responses above we are not convinced LNG importation (Qn8) needs a direct support mechanism, whilst understanding interconnector import capacity restriction drivers and means to address these would be helpful.

32.What might be the possible advantages and drawbacks (including unintended consequences) of such an intervention in the market?

The cost of support mechanisms and how they are funded will be a challenge. Whilst we would expect a greater understanding of these issues to be developed as models are developed

33.Are there other alternative models that are preferable to those listed above? Please outline the basic principles of an alternative model and why you would believe it would be more appropriate.

Energy UK noted in response to questions 28 and 29 that there could be benefits from a more joined up consideration of energy security across gas and electricity markets and in the longer term potentially hydrogen, if it can be produced at a sufficiently low cost.

34.What are the risks and opportunities of interaction between a possible gas storage commercial support model and other business models in energy, notably hydrogen storage and carbon dioxide storage?

Most natural gas storage is in salt caverns and this is expected to be the case for hydrogen too beyond above ground tanks / bullets. There are limited salt deposits suitable for gas / hydrogen storage therefore there needs to be a more strategic joined up consideration of storage for natural gas and hydrogen. This will ensure best use of GB salt deposits and provide for both natural gas and hydrogen security of supply. This should include the potential for existing and potentially new natural gas storage facilities to repurpose to hydrogen in due course. Identifying and outlining such a pathway could support natural gas storage in the shorter term, although we note the hydrogen storage business model is only currently open to new facilities or mothballed natural gas caverns. If support for natural gas storage is deployed there could be benefits of utilising a similar support framework model to that for hydrogen storage, this could help to smooth the transition to hydrogen storage in due course.

Enduring storage for carbon dioxide is in depleted fields so is rather different to the above.

35.To what extent do you think the current gas framework will remain fit for purpose over the coming decades? What changes, if any, need to be made and why?

The current framework has served the gas industry and wider energy sector well over several decades and we see no fundamental problems with the market structure and shipper / supplier arrangements. We also note that the hydrogen market framework will be designed with similar principles.

The governance arrangements will evolve, with the introduction of a code manager and Ofgem strategic oversight over codes. These changes are expected to support changes to the codes in line with wider policy objectives.

An area which is currently being addressed is ensuring continuation of efficient cross border trade by review of the changes to EU codes for capacity allocation by UNC changes and legislative amendments. Clearly these measures will be important for day-to-day trade and under more stressed market conditions.

36.Do you expect the standards set out in the GS(M)R to remain suitable should GB become more reliant on imported gas generally, and LNG for baseload supply? If not, why, and how could this be alleviated?

There is a long standing tension between the current gas quality specification set out in GS(M)R and the quality of LNG arriving in GB which needs to be processed with nitrogen added to meet the GS(M)R specification. LNG shippers pay fees to ensure gas entering the transmission system is compliant with GS(M)R however these costs along with other LNG terminal fees are not publicly available. It is also not clear if such costs were to reduce, whether this would affect NBP prices.

From 2016 IGEM set up a working group to explore changes to GS(M)R but HSE in 2021 rejected an increase in the upper Wobbe Limit on safety grounds relating to carbon monoxide poisoning risk.

Gas fired generators also have concerns with potential changes to the upper Wobbe limit, in particular as this could widen the range of gas delivered to their sites. Gas generating plant are set up to operate on a certain quality of gas, with a small % range of variation around this. Outside of this range combustion dynamics can emerge and the plant could trip. Some plant can adjust automatically to changes to gas quality whilst others require manual adjustment. A change to GS(M)R would require the original equipment manufacturers (OEMs) to assess any impacts and mitigations on plant or systems with any adaptation being scheduled in planned outages. The costs can be high and timelines protracted as OEM resources are limited, particularly if several plant sought assessments in parallel. In short

generators would incur costs but not benefit directly from a change to GS(M)R. In the future as load factors decline, but generator reliability becomes more important to ensure electricity security of supply when renewable generation is limited, such costs become a more significant factor in decisions over the commercial viability of a plant.

There is limited data on LNG gas quality but a Marcogas report[7] has gone some way to fill this gap.

Energy UK is aware that Ofgem, HSE and DESNZ are meeting to discuss consequences of change to the Wobbe Index limits. In this context we would encourage them to seek similar data for LNG being delivered to GB (although this will be from similar sources) to ensure assessments of the costs of gas quality compliance for LNG imports are evidence based. However it is clear from the Marcogaz report that most of the LNG imports (from USA or QATAR) already meet or are very close to the current GS(M)R specification.

37.How might GB's gas regulatory regime (including assimilated EU legislation) be impacted by the EU's own regulatory and policy plans for transitioning their energy system to net zero?

There are a number of areas that could impact trade

- Misalignment of rules
- Capacity allocation arrangements
- Divergent gas quality
- Tariffs and tariff structures
- Rules for security of supply and solidarity

38.Are there any other current regulations (not the upper limit of the Wobbe number or LNG terminal capacity) that may be acting as a barrier to investment, gas security, and/or affordability? a. Please demonstrate the impact of the regulation, and the likely impact of alternative arrangements.

It is reported that LNG faces the highest costs in Europe to land and be processed for delivery into GB. Terminal fees are part of private commercial contracts so are not public, between owner / operators and users and include gas quality fees as noted above. Whilst network entry charges are public and are reported to be high compared to other locations, the comparisons are not on a like for like basis. We would recommend DESNZ / Ofgem examines all costs associated with delivery of

[7] G5-GQM-LNG-Database_final.pdf – Marcogaz LNG quality database December 2024

LNG into the GB market to better inform discussions on this topic, and whether change is required.

Network investment to transport additional LNG or to relieve constraints. This has been delayed due to limitations in the PARCA regime, but these are now being addressed.

39.Are there any other aspects of GB's regulatory or market framework that could be a barrier to LNG being brought to GB where this is needed or impacting on our security of supply?

Energy UK is not aware of the detailed processes and effectiveness of the sale of unused berthing slots and capacity, nor the UIOLI regime. We understand not all details are published nor if such services are used so it is not possible to say if these processes are efficient. Ofgem/ DESNZ may wish to explore this topic.

40.Do you have examples of when these barriers had an impact on LNG imports?

Energy UK has no information on this

41.To what extent would increasing the upper Wobbe limit address any of the three priorities set out in Chapter 2 (ensuring we have sufficient supply capacity to meet future demand; ensuring resilient supply capacity; and ensuring commercially viable supply capacity)? Please provide evidence to support your answer.

See response to Qn36

Lifting the upper Wobbe Index Limit could make GB a more attractive destination for LNG at existing terminals and potentially new locations, processing costs may be reduced, and so there could be greater diversity in supply sources. Supply would not be dependent on the availability of nitrogen for ballasting, which may give more assurance for delivery to the system when needed and reduce capital costs. This would be positive for infrastructure its reliability and commercial viability.

However, in an emergency situation it is not obvious more gas would be attracted to GB as the commodity price will need to rise to very high levels to compete globally, and the nitrogen ballasting costs will be insignificant.

GB and the NBP as a liquid market is already an attractive destination for LNG and it also has possibilities for onward transit to Europe. So, this would need to be assessed in this context.

42.Would increasing the upper Wobbe Index limit strengthen GB's energy security and competitiveness in the global LNG market and, if so, why? a. Would increasing the upper Wobbe Index limit strengthen GB's energy security and competitiveness in the global LNG market and, if so, why? What would be impact of making no changes to the upper Wobbe Index limit?

See response to Qn36 and 41

43.What impact would increasing the upper Wobbe Index limit have, particularly in relation to cost and operational burdens, for your organisation, whether positive or negative?

See response to Qn36

Energy UK as a trade association is not directly impacted but our gas generation members would face costs of assessing the impact on their plant and adaptation if needed. They may face operational risks if gas quality changes rapidly which may cause the plant to trip leading to loss of income and impacting security of supply to the electricity market.

If change to GS(M)R were to be considered, it would be useful to understand the direction of travel over the next decade with respect to all gas quality parameters (eg H2 blend) such that assessments by OEMs can be made in parallel and plans made for adaptations in line with planned outages. Noting major outages are planned 4-5 years ahead.

44.To what extent do you agree that current regulatory and market arrangements for LNG terminals are suitable for the future needs of the gas system? Please provide evidence to support your answer.

Given the growing importance of LNG supply to GB, Ofgem and government may wish to consider if the current minimal regulation is appropriate, particularly in relation to terminal usage fees which are unregulated but constitute a large proportion of the costs of delivery of LNG to GB.

45.How could HMG best support the continued effectiveness and adaptability of the regulatory and market framework for LNG terminals, if needed?

Energy UK has nothing further to add

46.Are there any other areas of emerging regulation you believe government should monitor or engage with to support the existing commercial models in place within GB's gas sector?

Government should monitor EU regulatory and code changes and whilst alignment is not required it may at times be necessary or expedient to ensure efficient trade and not undermine the attractiveness of GB and the NBP as a destination for gas.

47.Would the introduction of an equivalent UK import standard be a viable route to managing the risks presented by the EU standard? Please provide evidence to support your answer.

Energy UK understands the importance of reducing methane emissions arising from any part of the gas value chain from production, processing and transportation given the short-term global warming potential of methane. It is vital to reduce methane in the atmosphere to addressing climate change impacts.

The EU has established a Regulation which will require reporting of methane emissions by importers and for these to meet thresholds which may be set by 2030. We are aware that there are many challenges in implementing this regulation and change to the Regulation itself may be necessary. A coalition of energy suppliers in the EU has outlined these[8].

We therefore think that it would be premature for GB to consider a similar import standard until these issues are addressed and there is clarity on the way forward.

48.If applicable, what Measurement, Reporting and Verification frameworks do you currently have in place and do you believe they meet EU requirements? a. If not, what do you think the main barriers are to your Measurement, Reporting and Verification frameworks meeting EU requirements?

[8] Joint Statement: Calling for Reducing Methane Emissions while Ensuring EU Energy Security - Eurogas

This does not apply to Energy UK

49.Do you consider it feasible to provide methane-related data for gas traded through virtual hubs, given the challenges of physical traceability, and how?

Most gas in GB is traded at the NBP virtual trading point, where it may be traded several times over before being nominated for delivery to customers, storage or export.

With gas supplied along a complex supply chain from numerous producers then comingled within the transmission system it is not physically possible to trace molecules back to the point of production. The challenges associated with identifying the producer to achieve compliance with the EU Methane Regulation have already been set out in the document referenced in response to Qn47. This considers verified certificates as the most efficient solution to enable compliance. It is, however, worth noting that whilst a certificate provides an important tool to facilitate compliance, the third-country producer must still be able and willing to comply with these regulatory requirements.

50.What are your views on the different options for addressing methane emissions from imported gas (e.g. mandated Measurement, Reporting and Verification requirements, certification schemes, and performance standards)?

Any options being considered for the UK must be considered in the light of security of supply and competitiveness given the interactions with global supply chains and increasing reliance on LNG imports. To ensure all those impacted by potential changes to methane regulation in the UK understand the issues and potential impact, Energy UK recommends this is addressed through a separate consultation.

51.Are there any other alternative mitigations we have not named that could address the priority of ensuring a commercial model that works?

Energy UK does not have a view on this