



By email: [gasintransition@energysecurity.gov.uk](mailto:gasintransition@energysecurity.gov.uk)

**Uniper UK Limited**

Compton House  
2300 The Crescent  
Birmingham Business Park  
Birmingham B37 7YE  
[www.uniper.energy](http://www.uniper.energy)

**Uniper**

Registered in  
England and Wales  
Company No 2796628

**Response to: Gas system in transition: security of supply**

18 February 2026

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**About Uniper**

Düsseldorf-based Uniper is a European energy company with global reach and activities in more than 40 countries. With approximately 8,000 employees, the company makes an important contribution to security of supply in Europe, particularly in its core markets of Germany, the UK, Sweden and the Netherlands.

Uniper's operations encompass power generation in Europe, global energy trading, and a broad gas portfolio. Uniper procures gas—including liquefied natural gas (LNG)—and other energy sources on global markets. The company owns and operates gas storage facilities with a total capacity of more than 7 billion cubic meters.

Uniper intends to be completely carbon-neutral by 2040. Uniper aims for its installed power generating capacity to be more than 80% zero-carbon by the early 2030s. To achieve this, the company is transforming its power plants and facilities and investing in flexible, dispatchable power generating units. Uniper is already one of Europe's largest operators of hydropower plants and is helping further expand solar and wind power, which are essential for a more sustainable and secure future. The company is progressively expanding its gas portfolio to include green gases like hydrogen and biomethane and aims to convert to these gases over the long term.

Uniper is a reliable partner for communities, municipal utilities, and industrial enterprises for planning and implementing innovative, lower-carbon solutions on their decarbonisation journey. Uniper is a hydrogen pioneer, is active worldwide along the entire hydrogen value chain, and is conducting projects to make hydrogen a mainstay of the energy supply.

**About Uniper in the UK**

In the UK, Uniper owns and operates a flexible generation portfolio of six power stations, a fast-cycle gas storage facility, two high pressure gas pipelines, and significant regasification capacity at the Grain LNG terminal in Kent. We're also progressing CCS and hydrogen projects and expanding our onshore wind and solar portfolio, to further support energy security in the UK.



## Summary of Uniper response:

Uniper welcomes government focus on the important topic of gas security of supply, and notes that government in 2022 assessed the UK gas market to be resilient to all but the most extreme combination of severe infrastructure failure or supply shock, due to specific conditions and features of the UK giving access to diverse supplies.

Key points in our response:

- NESO's limited modelling alone provides insufficient evidence to support government intervention.
- Focus should instead be on ensuring the UK gas market continues to incentivise diversity of gas supplies and facilitates efficient use of existing infrastructure. However, if UK government does decide to take forward plans for commercial support for gas supply infrastructure, then it is critical that measures do not introduce market distortions.
- The interaction between gas and electricity markets should be a key priority for NESO and it is disappointing that to date, no progress has been made.

## Consultation questions

**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.**

The underlying data used by NESO in its analysis is sensible and credible, but the Gas Supply Security Assessment (GSSA) is forecasting ten to fifteen years into the future, which requires large assumptions to be made about potential scenarios, significantly increasing the uncertainty of the findings. Even small changes in those assumptions can lead to very different outcomes. We also note that the GSSA has not been subject to industry consultation and our direct involvement was limited to a single discussion over 18 months ago with NESO representatives. In industry meetings, NESO has acknowledged that as this is the first time they have produced such a report, there are ways in which the GSSA can be improved for future iterations. For example, it was confirmed that the recent Kistos announcement to bring its Hole House storage facility back to market was not included in the GSSA analysis (despite it being announced pre-publication). We would welcome an update from NESO as to how this may impact their overall findings, given that this is expected to increase peak gas deliverability in the UK.

We also see limitations with the NESO modelling, particularly concerning peak deliverability / injection for gas storage. For example, only a single number is provided and it does not consider the relationship between this and storage fill levels. In other words, there is no explicit consideration of whether peak deliverability can always be achieved, regardless of fill level. This is something that NESO needs to model further to understand the impacts.



**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.**

The UK gas market has, up to now, been assessed by government to remain resilient to all but the most extreme combination of severe infrastructure failure or supply shocks and that “*diversity of gas supplies, sources, and routes to market are key features that support the UK’s continued security of gas supply*”<sup>1</sup>. For this reason, focus should be on ensuring the UK gas market continues to incentivise diversity of gas supplies.

The existing UK gas market has delivered significant infrastructure investment, and the analysis does not show evidence of market failure that might warrant government intervention. The UK gas wholesale market continues to be well-functioning and liquid. As a result, in periods of market tightness, we would expect wholesale prices to rise to signal the need for gas to flow to the UK. To date, despite highly challenging supply and demand situations, the UK gas market has delivered gas when and where it is needed.

**3. What gas supply and demand scenarios are you using for planning in your organisation and why?**

And

**a. What impacts to your sector/business have you identified using these scenarios?**

Our supply and demand scenarios generally use the same fundamental data as NESO describes in its GSSA, but note that assessing peak day supply and demand is challenging and highly uncertain, due to the large number of assumptions required.

As a pan-European and cross-commodity trader and asset owner/operator, we are looking at many markets but typically would not routinely consider peak daily gas requirements for such a long time ahead (2030s), focusing instead on monthly scenarios. Closer to gas delivery, our trading business will focus increasingly on peak daily requirements and ensuring our market obligations are met.

**b. What mitigating actions are you considering against the supply and demand scenarios your organisation is using for planning?**

Uniper is investing in, and maintaining, its existing gas assets in the UK to ensure they remain competitive in the market.

Our gas portfolio includes access to diverse sources of flexible gas, sourced through both short- and long-term contracts. This is important to help manage future supply and demand uncertainty.

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<sup>1</sup> [UK National Risk Assessment on Security of Gas Supply 2022](#)



**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.**

Yes, delivering safe and resilient infrastructure is a fundamental role of infrastructure providers. It is also important to recognise that resilient infrastructure alone will not deliver security of supply. Given that the responsibility for bringing gas to the UK sits with gas shippers and not infrastructure owner/operators, the UK also needs to ensure that the market remains competitive in terms of getting the gas to market.

Clearly, gas shippers value resilience when choosing which infrastructure providers to use, as managing the risks associated with a gas supply-demand imbalance sits with them and using infrastructure which is not robust would expose them to significant commercial risk. Therefore, strong incentives already exist for infrastructure providers to make the necessary investment to maintain existing infrastructure.

**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.**

UK gas supply infrastructure owner/operators must ensure they are able to offer commercially attractive products, to be able to compete effectively in the market for flexible gas. Gas shippers have no obligation to procure their flexibility needs from any particular provider and most supply infrastructure can be accessed through transparent, market-based mechanisms. This means that for gas shippers, the forms (and therefore providers) of flexibility are relatively substitutable.

To remain competitive in the market, owner/operators of the infrastructure will only invest in enhanced resilience, to the extent that their users are willing to pay for it. If owner/operators “over-invest” in resilience, then their commercial offering could become uncompetitive due to the increased costs which have to be recovered from their users. In this case, there is a risk that their customers then seek alternative forms of flexibility in the market. Equally, if customers are generally on short-term contracts, there is no incentive to pay more for a future resilience or service standard when they may no longer be customers. In the past year, government has consulted on potential measures to enhance “Gas Supply Facility” resilience, which we responded to raising strong concerns. Whilst we are still awaiting the outcome of that consultation, if new obligations are brought in to provide a level of resilience not currently valued by the market and for which costs can only be recovered from users (i.e. without commercial support), then this will add significant commercial challenges to ownership and operation of gas storage.

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



In practice, the current commercial model is the wholesale gas market, and we see no convincing evidence that it is failing to deliver. As a result, we do not believe there is a need for government to intervene in the UK gas wholesale market.

Building on NESO's initial findings, government needs to do much more work to examine the potential scenarios and the extent to which gas supply shortages might materialise, before concluding that it should fundamentally change its approach to the UK gas wholesale market.

**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.**

Yes, we expect the market to respond. There is no evidence to suggest it will not.

**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?**

Although Uniper is not an owner/operator of LNG infrastructure in the UK, we agree with this assessment. Based on publicly available information, it is apparent that most LNG terminals have long-term customer contracts in place, providing financial certainty and the ability to recoup costs incurred. However, whilst a terminal may be commercially viable, it does not automatically follow that it will remain commercially viable for gas shippers to bring LNG to the UK. Therefore, it is important that LNG terminals also remain competitive, or seek to increase their global competitiveness.

In the UK, LNG terminals have some of the highest variable costs (excluding Grid fees), which can act as a strong disincentive to deliver LNG to the UK. In particular, the significant costs of nitrogen ballasting to meet GS(M)R requirements and high electricity costs (for compressor usage) are all recovered from terminal users, and therefore directly impacts the "netback" that can be achieved by delivering LNG to the UK versus other markets.

**9. Is there a strategic case for enhancing or expanding storage capabilities at LNG terminals?**

**a. What role should government play in supporting this?**

LNG storage can (and does) provide significant amount of flexible gas, but consistent with government's initial view, we believe the market will deliver any increase in LNG storage, if it is signalled. There are also specific issues to consider with LNG storage, versus geological storage. These include:

- Increasing the on-site storage tanks and capability would create more peak send-out capability for the UK, but it would require also additional NTS entry capacity / capability to ensure it can be delivered.

- More tanks would also mean more boil-off gas every day, which needs to be put into the grid and, again an increase in network capability might be needed to facilitate this.
- LNG terminal customers do not necessarily also have tank storage rights, and the extent of these storage rights varies by terminal. For example, certain terminals have limited storage capacity so customers may have to send gas out straightaway under the terms of their contracts. This may limit the ability of LNG storage to meet certain demand scenarios.
- As customers have private bilateral contracts with LNG terminals, it may not be straightforward to either charge existing users for new tanks, or to re-allocate storage capacities, without a regulated solution.

**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. (Wilhelmshaven was funded by Government taxpayers in response to a sudden and very specific risk)**

We would question whether this should be the government's focus. From an LNG perspective, the UK does not suffer from a lack of capacity and there is underutilisation of existing terminals. Adding an FSRU to the UK's LNG import capacity would only make sense if the existing LNG infrastructure was fully utilised and surplus demand for LNG was still unmet. As a result, there is a risk of FSRU capacity being brought to market, but not being used.

In addition, FSRUs have no storage on site, so users must send out gas immediately. To this extent, an FSRU is unlikely to offer any guaranteed increase in peak deliverability, unless an LNG delivery is timed exactly with when the gas is needed. Therefore, in terms of addressing a high impact, low probability event, an FSRU would offer limited benefits to UK 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?**

We are not aware of any plans to build new LNG terminals in UK, but if any are brought forward, developers will still face uncertainty in terms of long-term user demand. Whilst government can assist in certain aspects of project development (such as planning), ultimately long-term user commitments will be required for new LNG infrastructure to be delivered.

**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?**



Any FSRU operator, whether government or a commercial third party would face future uncertainty over the appetite from users in their product.

If the FSRU is intended to be used only as a strategic supply source, which we understand to mean that it would only be used as a last resort / pre-emergency measure, then it would require a dedicated LNG tanker to be available to deliver at short notice, when required. In practice, we are unclear how this would work in a dynamic, global LNG market.

**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?**

The market impact is impossible to determine without knowing the product and the price. For example, if the FSRU is subsidised and able to offer the same services as other LNG terminals (or other flexibility sources), but at a much lower cost, then there are likely to be significant impacts on competition.

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

Interconnectors provide a useful link between the UK market and continental Europe, but like any other infrastructure, require long-term user commitments / bookings to ensure their viability. As gas interconnectors currently rely on short-term bookings, there are clearly questions over the future for these assets.

If interconnectors close, there will be a reduction in gas flexibility and if the UK decouples from Continental Europe then there will be significantly more gas price volatility. On the other hand, the existence of interconnectors does not guarantee that gas shippers will use them and so there is no absolute certainty of gas coming to the UK via an interconnector. For example, in a scenario where there is a sustained cold spell then the UK will be directly competing for gas with Continental Europe; which is also likely to be facing similar weather conditions and high demand, as well as potentially having to meet solidarity requirements, which do not apply to the UK, post-Brexit. This may serve to limit interconnector flows unless there is a significant price differential between markets.

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

At present, evidence has not been presented that suggests that government support is required to protect UK gas storage capacity and deliverability. However, if government does conclude that action is necessary then it is imperative that existing assets are not undermined by distortions to the market.



It is important to recognise that the role of gas storage is far wider than just acting as an insurance policy for unplanned or unexpected events. The UK's gas storage sites, including Uniper's Holford facility are operating in the market daily to help National Gas balance the system and in doing so, addressing supply-demand imbalances which could deteriorate into more significant situations such as a gas emergency. Some gas storage capacity is also contracted for National Gas's Operating Margins purposes, thereby providing an important pre-emergency system support function. As a result, when considering the future of the gas storage market, it is critical that government consider both total capacity and peak deliverability.

Measures to support existing storage to unlock more potential (which may require some form of commercial support) may be a more efficient solution than seeking to build a new strategic store, for example. It would also support the continued diversity of gas supplies, rather than focusing all efforts on one potential solution.

**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.**

Given the profile of the UK's gas storage facilities, target fill levels and/or compulsory stock obligations are not necessary or helpful for security of supply. If a blanket obligation was introduced to keep these sites full or to limit withdrawals, then the UK would lose a very significant amount of daily and peak day flexibility by turning them into small seasonal stores. From a technical point of view, an obligation to book "peak deliverability" in a fast cycle store would be more appropriate, but this also risks limiting the flexibility of the store and takes significant volumes of storage out of the market. Such an obligation may also make it technically challenging or very costly for the storage operator to meet multiple user demands and may also be limited by the design and geology of the site. As a result, fill obligations are more appropriate for seasonal or strategic stores.

It is also important to note that most UK gas storage sites have third party access exemptions in place (granted by Ofgem). Whilst these can of course be amended or even revoked, so long as the exemptions exist, there is no obligation on the facility owner to offer storage services to the market. Therefore, if an obligation to use or fill gas storage was placed on all gas shippers, they may find it challenging to buy storage space.

We observe UK gas shippers already making use of German seasonal storage located in Germany. Therefore, if government wishes to target total gas in store (i.e. to increase total working gas volume) then it should explore how the UK can best make use of existing seasonal facilities outside of the UK through existing market mechanisms. It may be better value for consumers if gas shippers reserve space in European storage at market prices, rather than directly subsidise the lengthy new build of a domestic seasonal gas storage facility. This could be achieved, for example, by a shipper obligation to book a certain percentage of their demand as gas storage, which could be discharged by bookings in non-UK storage facilities.

**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?**

None of the UK's operational storage sites, which are all fast or medium cycle, are suitable for strategic storage purposes. Designating them as such would effectively take them out of the wholesale market, reducing the overall flexibility available to gas shippers to balance the network.

The main challenge of a specific strategic store will be the significant cost of filling it from empty and the risk of placing all bets on one source of gas, even if it based in the UK.

- The owner/operator (whether government or a gas shipper) will be known to be a stranded buyer in a competitive global gas market, and therefore the cost of filling could be very high and/or unpredictable as it will depend on the wholesale market price. This risk could be mitigated by implementing a long fill period and spreading the obligation over a number of market participants, over several years, to minimise market distortions.
- If there is just one single strategic store, resilience and reliability becomes critical. For example, if an on-site compressor were to fail when the strategic store is needed and no gas can be delivered to the system, then it would be disastrous for the market and consumers. Ongoing maintenance costs could be very high given and the likely need for significant back-up capabilities.

As previously assessed by government, the UK gas market can best manage security of supply through diversity of supplies, and there's limited value in investing in a single specific strategic facility, which also risks being a single point of failure if it cannot deliver when required.

**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)?**

The potential impact on the market is intrinsically linked to the triggers for release of gas into the market. By definition, we would only expect such a strategic store to be used as a last resort to help avoid a potential gas emergency. Whilst in principle a strategic store may provide a large amount of working gas volume, in practice this capability would be kept out of the market in normal conditions and therefore would not have any price dampening effect.

However, if government decides that a strategic store of gas is in the best interests of consumers, then it should consider the case for incentivising shippers to make use of



existing gas storage sites outside of the UK, as a potentially better value option that can be delivered much sooner than new build, which could take 10-15 years.

It is possible that the existence of a strategic store undermines the existing strong incentives on gas shippers to balance, both in day-to-day market operations and in a pre-emergency scenario. Some gas shippers may perceive that the strategic store will always “bail out” the market when short, which would reduce their incentive to take their own measures to help the system.

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

This would depend on the terms of operation and filing requirements, including length of fill. In our view, a single commercial party (such as a gas shipper) would not want to take on the considerable commercial and technical risk of filling and maintaining such a store.

We would expect such a strategic store to be fully regulated and therefore it would be for Ofgem to oversee operations and conditions of use.

**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)?**

Most of the existing gas storage is covered by TPA exemptions, so if any of these sites were designated as strategic storage, then it would add significant regulatory and commercial obligations on the operator if they are forced to market it and manage the needs of multiple users.

How a strategic store is filled and levels maintained is clearly an important issue. There are existing models in other European countries that can be considered, such as France. Assuming that a new strategic storage would be a large, “seasonal”-type facility, then it would make sense to have a market-wide approach to filling and maintaining it, with relevant gas shippers required to cover their own demand in some sense (e.g. a percentage of their retail portfolio). However, further work would need to be done to explore specific options.

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

In terms of domestic gas storage, the main drawback to this approach is that this would sterilise a percentage of the storage site’s capability and prevent it from being used in normal market conditions. Unless a new facility was built, this would reduce the UK’s available gas flexibility and potentially increase the cost of balancing the system on a day-to-day basis, if it is not replaced elsewhere.



It is unclear exactly what is meant by leasing, but it could be interpreted as government acting as an additional gas storage user, with no obligations in terms of maintaining or supporting the storage site. If so, there would be little incentive for a fast-cycle storage operator to offer this service to government, as it increases complexity and risks of operating the store, if a certain percentage of stock always has to be held-back. Government would likely have to pay a premium to be able to reserve such a product.

If the storage site was located abroad, then there are issues to consider regarding geopolitical risk, interconnection and potential legal restrictions. However, as noted above, gas shippers in the UK are already using German storage and so to this extent, we do not see there are market barriers or failures that would warrant government intervening in the market.

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

As owner/operator of the Holford gas storage facility, we cannot share the costs through this public consultation but would be willing to discuss the issue with government privately.

More generally, the cost of developing storage varies significantly depending on where it is in the country, primarily due to geological factors (e.g. how deep the store is). Therefore, it will be challenging for government to define a fixed cost of developing gas storage.

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

This is impossible to quantify unless the terms of such a 'lease' and the storage product required are better defined. For example, would leasing mean government acting as an additional storage user, like any gas shipper? Alternatively, does it mean government covering some of the owner/operator obligations and costs, such as maintenance or investment for resilience? This is not clear and requires more detail before we can comment further.

**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?**

As an established and experienced gas shipper, we contract for gas through a range of long and short-term contracts, which provides us with a balance of certainty and flexibility in the market. In general, the benefit of long-term contracts is certainty, as gas shippers don't face risk going into the market every day to procure the gas they need. This may be particularly relevant and important for shippers supplying retail customers.



The question of how to encourage or oblige gas shippers to enter such contracts is also important to consider and clarify. Furthermore, obliging gas shippers to buy more expensive long-term contracts than they would ordinarily do, might place significant financial pressures on them, undermining market stability. This could lead to companies failing or exiting the market to avoid costs and obligations. Some gas shippers may also find it difficult to contract for long term gas, unless producers are similarly obliged or incentivised to sell gas on the same basis.

**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?**

And

**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?**

Yes. We support maintaining the existing and established roles in the market, which in principle work.

It is government's role to set the overall targets, aims and framework, which would be compromised if government were itself a market participant. Infrastructure providers such as TSOs, terminal and storage operators provide the infrastructure in a safe, reliable and non-discriminatory manner. Shippers and Traders then manage the commodity. UK government does not need to expand its role but rather focus on setting the right framework, within which existing market participants can operate effectively and efficiently.

**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.**

Demand side response for industrial customers can have a significant role to play in helping to manage supply shortages or constraints and, if well designed, can potentially avoid the need for network investment. However, the current gas DSR model is based on short-term tenders and has had limited uptake from customers. As a result, it is difficult to view it as a credible replacement for supply infrastructure investment.

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

Yes – but for clarity, Uniper is not in the business of gas supply to the industrial customer (i.e. daily metered) market.

**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.**

In recent years the focus of DSR product development has been on industrial loads. Generators, whilst not specifically excluded from participation, are strongly disincentivised to do so, as they are exposed to significant commercial penalties in electricity markets for non-delivery, which are likely increased by signing up to DSR contracts in the gas market. The interaction between gas and electricity markets, particularly in pre-emergency situations should be a key priority for NESO and it is disappointing that to date, no progress has been made. One main problem is that there is not a single decision point across gas and electricity network operation, resulting in uncertainty and risks for market participants.

Facilitating the participation of gas fired generation into gas DSR has the potential to unlock significant demand side response volumes. However, it is a complex topic and likely requires a bespoke product, rather than simply extending the existing DSR offering to generators. In our view, a joint gas and electricity product is needed, overseen by NESO, to ensure that it is only exercised when it would not cause problems in adjacent markets. In principle, NESO should have visibility across all gas and electricity TSO contracts, so would be best placed to make the right and decisions for the whole energy system. We would encourage NESO to undertake more work in this area.

**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.**

Commercial support options may provide assistance to infrastructure owners, but in the UK context, we see significantly more drawbacks than benefits to government intervening in the gas wholesale market. Government should continue to help facilitate diversification of gas supplies across the whole system rather than focusing all efforts on one potential solution.

If government does decide to intervene, due to a market failure (the existence of which has not yet been proven), then it will be critical that any “one size fits all” solution should be avoided.

**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.**

Whilst we do not support government intervention in the UK gas storage market for the reasons mentioned above, if government does take forward commercial support, then



the first task is to define exactly what product they want. This may require consideration of more than one commercial model.

The gas market is structured quite differently from the electricity market, since infrastructure owners and shippers are separate entities; unlike the integrated model used in electricity. Because of this, commercial models applied in electricity might not be suitable for gas, or they may need to be specially adapted for the gas sector.

Maintaining the capability of operational gas storage facilities should be the top priority of any commercial support, focusing on both space and deliverability, as well as factoring in duration and the potential for improved capabilities. We prefer an approach that encourages innovation and maintains commercial incentives in the gas storage sector, whilst retaining elements of risk and reward sharing.

Government should also carefully consider factors such as the essential components of administration and governance of the support mechanism, relevant triggering conditions, and suitable subsidy levels to prevent any market distortions. All those elements must be subject to a separate industry consultation before any final decisions are made.

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

Government intervention in the market can have significant drawbacks and unintended consequences that require careful consideration. In particular:

- It could reduce gas market liquidity and therefore cause greater price volatility and add complexity to the market.
- These measures could be costly (compared to no market intervention), especially if government decides to support all three components of gas supply infrastructure (storage, LNG and interconnectors). If support measures are needed for security of supply then the cost would need to be borne by consumers.
- Additionally, such actions could impact electricity and emerging hydrogen markets by altering price signals and investment incentives.

**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.**

No.

**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?**

Maintaining the financial viability of the existing gas storage facilities is essential for their potential conversion to hydrogen storage in the future. Without a reliable and predictable

revenue stream, these sites may face closure prior to future transition to hydrogen, limiting repurposing opportunities and available infrastructure.

Additionally, it is crucial that business models and regulatory frameworks for both the gas and hydrogen / CCS sectors remain aligned to facilitate a seamless transition and avoid unintended consequences. A comprehensive and well-coordinated strategy is therefore required to optimise existing assets and support the long-term shift towards a low-carbon energy system.

From a technical point of view, storage of CO<sub>2</sub> is permanent and does not require cycling or withdrawal capabilities. In contrast, hydrogen storage is expected to regularly cycle to help balance supply and demand. Therefore, hydrogen storage sites and gas storage sites are more likely to be credible alternatives, where there is more potential for perverse incentives – rather than natural gas and CO<sub>2</sub> stores, which are performing very different roles.

**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 regulatory framework provided by the Gas Act is well established and understood and provides certainty for investors and market participants. Incremental development of the existing legislation is the best approach for the market, rather than a completely new legal framework, which could introduce significant risks and uncertainty.

**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?**

The question of whether GS(M)R remains suitable for GB cannot be answered simply. For Generators, including the purpose of ensuring security of supply of electricity, GS(M)R is suitable. On the other hand, for gas importers, including LNG, the existing GS(M)R limits can present certain cost barriers, due to the requirement for ballasting before it enters the network.

Potential changes to GS(M)R need very careful consideration, not only from a safety point of view, but also to ensure whole energy market stability. At present, the HSE has primary responsibility for GS(M)R, but has no explicit duty to consider factors outside of health and safety. Clearly this reflects their statutory duties but does not always ensure a holistic approach to potential gas quality changes. These commercial topics are then picked by DESNZ, with the role of Ofgem and NESO being important, but undefined. As a result, the whole process for gas quality changes is currently uncertain and for market participants, often opaque, with insufficient early industry engagement.

To be clear, it is inappropriate to move the governance of gas quality changes into the hands of the industry. Given the competing commercial drivers, it is important that high

quality, independent analysis is undertaken to understand the safety, commercial and regulatory issues are fully considered – and that the final decision rests with government.

Future changes to gas quality beyond those identified, such as the Upper Wobbe limit, may be driven by future changes to European gas quality standards and the extent to which GB chooses to align (or not align). Beyond this, we do not see any major issues but note that currently there is no hydrocarbon dew point specified in GS(M)R. Introducing a number would be helpful for generators in tuning their plant to run more efficiently.

**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?**

Changing any assimilated EU legislation would require government to table legislative changes and is beyond the power of both industry codes and individual market participants. However, the existing industry code governance process provides the ability for potential changes to be discussed and the case for or against change to be considered and tabled. It would then be for government to consider if it is appropriate to change legislation. This incremental approach to market change is appropriate and promotes regulatory certainty and stability.

**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?**

Whilst it is not an explicit consideration in this consultation, investment in the regulated networks needs to keep pace with investment in supply infrastructure, to ensure the molecules can continue to be transported to where it is needed. As a result, network resilience and Ofgem oversight will remain a critical topic for the UK gas market.

**a. 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? Please demonstrate the impact of the regulation, and the likely impact of alternative arrangements.**

We have not identified any such regulations.

**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?**

UK's LNG terminal use fees are unregulated and given the high costs relative to many LNG terminals in Europe, it may be appropriate for more regulatory scrutiny to ensure the costs remain competitive.

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

In normal market conditions, the combination of high terminal use fees and high transportation charges is disincentivising LNG cargoes coming to the UK. Many European terminals charge significantly lower terminal usage fees, which makes delivery to these terminals far more commercially attractive than the UK.

**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.**

An increase in the upper Wobbe limit would reduce the need for expensive nitrogen ballasting to meet GS(M)R requirements, thereby reducing costs for LNG importers. However, such a change will directly impact all gas-fired generation plant which will require significant and costly upgrades to be made to their plant, in order to cope with the wider range of gas quality. If these upgrades are not made, there is an increased risk of plant tripping, which clearly has the potential to undermine UK electricity security of supply. OEMs also have limited stock and staff able to make the upgrades for the entire UK gas generation fleet, so any implementation timetable would need to carefully take this into account.

The topic is, therefore, a whole energy system issue and not simply a matter of removing an arbitrary barrier for LNG importers. The shift in costs from LNG importers to Generators and the resulting competition impacts need to be considered carefully by government.

**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?**

In isolation, yes – but as noted above, this topic is a whole energy system issue, so any potential increase in security and competitiveness in the gas market needs to be weighed against a potential loss of security and competitiveness in the electricity sector. A full cost-benefit analysis of the impact on the whole energy system would be required, to ensure this change is justified.

**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?**



Uniper is both an LNG importer and a Generator so is well placed to understand the relative impacts.

From a generator perspective, the costs and operational risks would be driven by the timetable for implementation. It is our understanding that a significant change to the Upper Wobbe limit, as previously proposed, would require work to be carried out on all gas turbines in the UK, not just Uniper plant. With so many manufacturers, models and stage of upgrades, the amount of changes required and associated cost will vary by individual turbine. We have previously provided detailed cost information in response to government's review of GS(M)R and associated HSE consultations and impact assessment, so will not reproduce that information here. However, as a general guide, to minimise the cost to generators, as much notice as possible is required. In practice, this means a notice period measured in years, not months. This is to minimise the operational burden, by allowing upgrades to be made during planned maintenance cycles, avoiding previously unscheduled outages and to ensure OEMs have stock available when needed.

From an LNG importer perspective, we would expect the terminal usage fees to reduce as a direct result of avoiding the need for nitrogen ballasting – the cost of which is currently recovered by terminals from its users. Terminal usage fees are commercially confidential and so cannot be shared here, but we would advise government to speak with LNG terminal operators to better understand these costs and their charging approach towards users.

**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 increasing role that LNG is expected to play in the UK gas market, government and Ofgem may wish to re-consider their approach to regulation of terminals, which at present is minimal.

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

Regulation of terminal usage fees could help make them more attractive to existing and potential future users, if it results in lower fees.

**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?**

No.

**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.

And

**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?**

This is a complex topic, which would be better dealt with as a standalone consultation. There are many difficulties and complexities associated with the EU Methane Standard which need to be considered when determining the best approach for the UK gas market.

**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?**

No. Significant volumes of gas in the UK are traded shipper to shipper, via the NBP virtual trading point and, as a marker of healthy market liquidity, the same gas is often traded multiple times before actual delivery. On a typical gas day, the amount of gas traded is approximately 5-10x the physical gas nominations (Source: [Find gas reports | National Gas Transmission Data Portal](#), "Wholesale Gas Market Liquidity Data"). As a result, maintaining physical traceability becomes near impossible for NBP gas trading.

**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)?**

As above, this is complex topic that warrants a standalone consultation. It cannot be dealt with properly through a couple of consultation questions, here.

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

No.