

Consultation on an EU strategy for LNG and gas storage

A EURELECTRIC response paper

30 September 2015

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EURELECTRIC is the voice of the electricity industry in Europe.

We speak for more than 3,500 companies in power generation, distribution, and supply.

We Stand For:

Carbon-neutral electricity by 2050

We have committed to making Europe's electricity cleaner. To deliver, we need to make use of **all low-carbon technologies**: more renewables, but also clean coal and gas, and nuclear. Efficient electric technologies in **transport and buildings**, combined with the development of smart grids and a major push in **energy efficiency** play a key role in reducing fossil fuel consumption and making our electricity more sustainable.

Competitive electricity for our customers

We support well-functioning, distortion-free **energy and carbon markets as** the best way to produce electricity and reduce emissions cost-efficiently. Integrated EU-wide electricity and gas markets are also crucial to offer our customers the **full benefits of liberalisation**: they ensure the best use of generation resources, improve **security of supply**, allow full EU-wide competition, and increase **customer choice**.

Continent-wide electricity through a coherent European approach

Europe's energy and climate challenges can only be solved by **European – or even global – policies**, not incoherent national measures. Such policies should complement, not contradict each other: coherent and integrated approaches reduce costs. This will encourage **effective investment** to ensure a sustainable and reliable electricity supply for Europe's businesses and consumers.

EURELECTRIC. Electricity for Europe.

Dépôt légal:

Question 1:

Do you agree with the assessment for the above regions in terms of infrastructure development challenges and needs to allow potential access for all Member States, in particular the most vulnerable ones, to LNG supplies either directly or through neighbouring countries? Do you have any analysis or view on what an optimal level/share of LNG in a region or Member State would be from a diversification / security of supply perspective? Please answer by Member state / region

The infrastructure assessment of regions appears to be factually correct. Security of supply is a national competence, but there could be merit in Member States assessing infrastructure adequacy and investment on a regional basis, for pipelines, storage and LNG (e.g. Baltics).

Member States are already encouraged to cooperate with other Member States under the Security of Supply Regulation which should be based on non-binding best practice guidelines.

The Third Package represents an appropriate regulatory framework for infrastructure investment to be undertaken on a regulated or exempted basis, where justified.

We do not support an optimal “one-size-fits-all” level of LNG per region or Member State.

Member States will address the issue of their supply diversity in the context of the:

- regulatory obligations contained in the Security of Supply Regulation and Third Package;
- political considerations and national regulation; and
- cost benefit analysis.

Question 2:

Do you have any analysis (cost/benefit) that helps identify the most cost-efficient options for demand reduction or infrastructure development and use, either through better interconnections to existing LNG terminals and/or new LNG infrastructure for the most vulnerable Member States? What, in your view, are reasons, circumstances to (dis)favour new LNG investments in new locations as opposed to pipeline investments to connect existing LNG terminals to those new markets?

EURELECTRIC does not have such analysis. Any attempt to compare the costs/benefits of LNG investment in new locations to pipeline investment connecting existing terminals to these new markets will be difficult, even with improved collaboration, as infrastructure planning, system operation and tariff setting are ultimately determined on a national basis.

Priority should be given to optimising the efficient use of existing infrastructure, both LNG, storage and pipeline, removing bottlenecks where a significant market interest deems it necessary. This will ensure gas is able to flow efficiently across Member States in support of hub-to-hub trading and market integration.

Efficient investment, whether at national or regional level, is important to minimise the risk of stranded assets, particularly where public funds are involved.

Virtual reverse flow could be a cost effective replacement for physical infrastructure investment in certain circumstances, absent any regulatory and tariff barriers.

Question 3:

Do you think, in addition to the already existing TEN-E Regulation, any further EU action is needed in this regard? Do you think the use of LNG gas and existing LNG infrastructure could be improved e.g. by better storage possibilities, better network cooperation of TSOs or other measures? Please give examples

Existing EU funding and support mechanisms are appropriate and should not discriminate in favour of any form of infrastructure. Security of supply and the impact on market integration, weighted against the possible costs of such an investment and the existence of significant market interest, should be the main criteria against which to compare alternative projects. Priority should be given to the most tenable projects.

Configuration of LNG infrastructure and its access to transmission systems will depend on local circumstances. To the extent there are any specific difficulties in this regard, or failures to comply with EU access obligations, these should be investigated.

Question 4:

What in your view explains the low use rates in some regions? Given uncertainties over future gas demand, how would you assess the risk of stranded assets and lock-in effects (and the risk of diverting investments from low carbon technologies such as renewables and delaying a true change in energy systems) and weigh those against risks to gas security and resilience? What options exist in your view to reduce and/or address the risk of stranded assets?

Utilisation rates of LNG terminals in the EU are principally driven by global price dynamics. Whilst higher prices in Asia than in Europe have been the predominant driver for low utilisation rates, this can change across short, medium and long term timescales.

At exempted LNG terminals and storage facilities, stranded asset risk is ultimately borne by the facility owner, who typically underwrites this risk through long-term capacity contracts for dedicated use.

Long-term capacity contracts can also exist at regulated terminals and facilities exposing users to stranded asset risk, although in other cases this risk may ultimately borne by end users, as revenues or rates of return are guaranteed regardless of the levels of capacity booking. OLT Toscana LNG terminal is an example of an exempted facility becoming regulated because it was deemed strategically important.

In both cases we would expect that any decision to invest is subject to rigorous cost benefit analysis, market testing and justification by project promoters and market participants (when taking final investment decisions) or by regulators (when agreeing development plans and price control regimes).

In both cases we would expect operational and tariff arrangements to be set in such a way as to encourage optimum use and flexibility of the facility e.g. LNG reloads and transshipments and offering storage capacity, injection and withdrawal separately. Terminal operators should be encouraged to work with market participants to develop new products which they value.

Regulatory frameworks which establish a level playing field between different flexibility sources in order to achieve security of supply obligations could improve the optimal use of LNG. Indeed, depending on their characteristics in terms of send-out capability and the level of gas in the tank, LNG terminals' send out can be adjusted to reflect demand variation (e.g. within day or seasonal variation) or in the event of particular types of hazards (e.g. cold snaps or adverse weather conditions), for example as in the case of peak shaving services provided by LNG in Italy.

Question 5:

The Energy Union commits the EU to meeting ambitious targets on greenhouse gas emissions, renewable energy and energy efficiency, and also to reducing its dependency on imported fossil fuels and hence exposure to price spikes. Moderating energy demand and fuel-switching to low carbon sources such as renewables, particularly in the heating and cooling sector, can be highly cost-effective solutions to such challenges, and ones that Member States will wish to consider carefully alongside decisions on LNG infrastructure. In this context, do you have any evidence on the most cost-efficient balance between these different options in different areas, including over the long term (i.e. up to 2050)?

Complying with greenhouse gas emissions whilst at the same time ensuring secure and affordable energy supplies (the energy trilemma) is a challenge Member States have been managing for nearly a decade. It is something they will continue to do as cost effectively as they can within the context of existing energy and climate regulatory frameworks, whilst recognising national circumstances.

Significant improvements will be needed to these frameworks, particularly as regards electricity (capacity remuneration mechanisms) and climate (reform of the ETS) if the energy trilemma is to be achieved in the long term, but these are separate subjects for discussion.

Question 6:

What in your view are the most critical regulatory barriers by Member State to the optimal use of and access to LNG, and what policy options do you see to overcome those barriers? Have you encountered or are you aware of any problems in accessing existing LNG terminal infrastructure, either because of regulatory provisions or as a result of company behaviour? Please describe in detail.

We are not aware of any obvious regulatory barriers currently. Historically the LNG market was based mainly on long-term contracts with established delivery locations and patterns, but this is changing as long-term contracts expire and spot market trades and diversions become more prevalent.

CEER's Status Review on monitoring access to LNG terminals published in October 2014 found that generally there was no contractual congestion and that all EU LNG terminals have properly functioning congestion management procedures.

Producers are increasingly using put options to optimise their delivery options and traders are increasingly comfortable taking long positions into Europe without holding terminal capacity. In some Member States the use of LNG terminals could be further optimized with the introduction of flexibility capacity products, especially in cases where LNG capacities and terminals are currently underused. To the extent problems do arise these should be able to be addressed through existing gas and competition law regulation.

Gas quality parameters could have an impact on the availability of gas from certain sources, in particular the Wobbe index. As such the ongoing discussion at EU level to develop a harmonised gas specification should be careful to avoid imposing barriers which prevent LNG accessing specific Member States or regions within Europe.

Question 7:

What do you think are the most critical commercial, including territorial restrictions and financial barriers at national and regional level to the optimal use and access to LNG?

See our response to question 6 above.

Question 8:

More specifically, do you consider that ongoing EU policy initiatives and/or existing legislation can adequately tackle the outstanding issues, or there is more the EU should do?

Completing the internal market by fully implementing the Third Package in all Member States will ensure LNG flows into and across Europe optimally, to the extent infrastructure allows.

Question 9:

How do you see worldwide LNG markets evolving over the next decade and what effects do you expect this to have on EU gas markets? Do you expect a shift away from oil-indexed LNG contracts, and if so under what conditions?

EURELECTRIC does not have a view on the global LNG outlook over the next decade, but the analysis included in chapter 4 is consistent with the consensus view of a likely global oversupply, increasing the competitive pressure on EU gas markets and narrowing global price differentials.

Increased pressure on LNG margins worldwide, and in Europe, will increasingly shift market power away from producers to buyers, which could transform market arrangements the industry has historically relied upon including, for example, oil-indexation.

Question 10:

What problems if any do you see with the functioning of the international LNG market, particularly at times of stress? Are there specific actions the EU should take, in dialogue with our international partners, including in trade negotiations, to improve its functioning and/or to make the EU market more attractive as a destination for LNG? Could voluntary demand aggregation be helpful in some way?

We are not aware of any obvious problems with the functioning of the international LNG market. At times of stress, wholesale markets can be expected to rise, creating strong financial incentives for market participants to optimise supplies of gas and flexibility (from all sources) within the confines of the existing contractual agreements and infrastructure.

The EU should promote good diplomatic relations with its international partners and seek to eliminate restraints on global trade, for example through equitable free trade agreements. Any attempt by the EU to intervene in the global LNG market risks being counterproductive and distortive.

Demand aggregation through common purchasing is only acceptable when undertaken voluntarily by companies of their own free volition, in full compliance with energy and competition law regulation. Member States should have no role, either directly or indirectly, in entering into, promoting or underpinning common purchasing arrangements.

“Voluntary demand aggregation” is neither an effective or efficient instrument to enhance the attractiveness of the European market for LNG supplies (as witnessed on previous occasions when similar instruments were being considered, such as the Caspian Development Corporation) or to develop new infrastructure.

Question 11:

What technological developments do you anticipate over the medium term in the field of LNG and how do you see the market for LNG in transport developing? Is there a need for additional EU action in this area to reduce barriers to uptake, for example on technology or standards, including for quality and safety?

EURELECTRIC is aware of technological developments associated with LNG such as:

- floating regasification terminals (FSRU) and vessels;
- its use as a fuel in marine and road transport, and;
- small scale rural tanker deliveries where pipeline infrastructure does not exist,

However, we have no view on what, if any, barriers to uptake exist, or how this could be reduced.

Question 12:

Do you think there are any sustainability issues specific to LNG that should be explored as part of this strategy? What would be the environmental costs and benefits of alternative solutions to LNG? Please provide evidence in support your views.

No comment.

Storage

Question 13:

What opportunities or challenges do the supply projections for different sources, in particular LNG and pipeline gas and low carbon indigenous sources, present for the use of gas storage / for gas storage operators?

Increased need for gas system flexibility caused by reduced production swing and increased variability in gas fired power station demand (triggered by greater penetration of intermittent RES) should increase the “extrinsic value” of storage as a flexibility provider. However, extrinsic value will vary depending on the characteristics of storage facilities, with fast cycle storage facilities having greater extrinsic value than seasonal storage facilities.

Nevertheless, greater supply availability and competition reduce the “intrinsic value” of storage by reducing summer/winter price spreads.

Question 14:

Are, in your view, current market and regulatory conditions adequate to ensure that storages can fully play their role in addressing supply disruptions or other unforeseen events (e.g. extreme cold spells)?

Current market and regulatory arrangements are broadly appropriate, although enhancements should be considered in the context of the review of the Security of Supply Regulation (see our April 2015 response to the Commission’s consultation on measures to revise it).

CEER’s Final Vision on Regulatory Arrangements for the Gas Storage Market published in May 2015 also makes a number of recommendations regarding regulatory levers, some of which we support.

Question 15:

As an alternative to mandatory reserves, how could market based instruments ensure adequate minimum reserves?

Well-functioning markets can be expected to provide reserves based on market participants' ongoing assessment of their supply and imbalance risks.

A results orientated approach to meeting the supply standards with competition from different flexibility sources (storage, LNG, demand side response etc) is preferred to market intervention in the form of storage obligations or strategic storage, and is currently appropriate in mature and liquid gas markets. Where intervention is deemed necessary however, this should be justified, proportionate and time limited to minimise the risk of distorting market development, competition and cross-border trade.

Where prescriptive measures are considered necessary and can be justified accordingly, then measures which place obligations on market participants individually are considered more distortive and threatening to market development than measures where obligations are discharged centrally.

Measures should not rely just on storage but should allow for competition between different sources of flexibility, thus ensuring the targeted level of security of supply at the lowest cost.

In order to ensure tangible security of supply to customers, it is necessary to translate supply standards and any binding obligations or reserve requirements into the specific quantities of energy which must be foreseen by each relevant stakeholder and monitor how they are being met.

Question 16:

Do you have any analysis or view on what an optimal level/share of storage in a Member State or region would be? What kind of initiatives, if any, do you consider necessary in terms of infrastructure development in relation to storage?

We do not support an optimal "on-size-fits-all" level of storage capacity per region or Member State. Any level or share of storage deemed necessary for security of supply is a national competence.

The EU is not currently short of storage capacity as a whole, but the amount of storage capacity in Member States differs because of geology and historic supply and market circumstances. Storage located in one Member State often provides flexibility and security to other Member States through direct connections, or via interconnected transmission systems.

Question 17:

Do you think, in addition to the existing TEN-E Regulation, any further EU action is needed in this regard?

See our response to question 3 above.

Question 18:

Given uncertainties over future gas demand, how would you assess the risk of stranded assets (and hence unnecessary costs), lock-in effects, the risk of diverting investments from low carbon technologies such as renewables, delaying a transition in energy systems and how would you weigh those against risks to gas security and resilience? What options exist in your view to reduce the risk of stranded assets?

See our response to question 4 above.

Question 19:

What do you think are the most critical regulatory barriers to the optimal use of storage in a regional setting?

As stated in our response to question 16 above, storage located in one Member State can provide flexibility and security to other Member States. The extent to which it can do this effectively and efficiently will be driven by the complete and consistent implementation of the Third Package and EU network codes across all Member States, along with the application of a results orientated approach to meeting supply standards.

Transparency of gas stock, gas flow and system imbalance data is also essential to achieve this objective. Whilst there have been considerable improvements in the availability of gas stock data over the last few years, improvements are still needed in the frequency (near-real time) and granularity of gas flow data and in the frequency and accuracy of system imbalance data, in many Member States.

Language differences and the complexity of some legal frameworks and agreements can make it difficult for some market participants, particularly those not resident in the country, to contract with confidence, as can a lack of clarity on the component costs of storage services (capacity, injection, withdrawal) and the distinction between storage and transmission tariffs.

Question 20:

Do you think ongoing initiatives and existing legislation can tackle the remaining outstanding issues or is there more the EU could do? Do initiatives need to include additional issues further to the ones described here?

Current market and regulatory arrangements are broadly appropriate although enhancements should be considered in the context of the review of the Security of Supply Regulation (see our April 2015 response to the Commission's consultation on measures to revise it).

Question 21:

Do you consider EU-level rules necessary to define specific tariff regimes for storage only or should such assessment be made rather on a national level in view of available measures able to meet the objective of secure gas supply?

Any benefits to transmission systems arising from the presence, or location, of storage facilities should be taken full account of by NRAs when setting their national transmission tariffs. Establishing a clear distinction between injection and withdrawal capabilities which have positive effects for the transmission system, and those which do not, will be crucial in this respect. EU-level rules regarding tariff regimes for storage are not considered necessary at this stage.

Question 22:

Have you ever encountered, or are you aware of, difficulties in accessing storage facilities? Has this concerned off-site or on-site storage facilities? Please describe the nature of the difficulties in detail.

As a trade association EURELECTRIC has not directly encountered difficulties in accessing storage. But anecdotally we are aware of historic instances of gas-fired power station operators not being able to book storage or effectively access it, because priority was given to other users. Thankfully however, these inefficiencies seem now to have been largely removed and we do not consider this to be a problem.

CEER's Report Monitoring Implementation of the Gas Storage Guidelines of Good Practice published in July 2015 also indicates improvements in access to storage capacity across the EU, although it highlights a number of areas where improvements could still be made.

Question 23:

Have you ever encountered, or are you aware of, difficulties related to feeding LNG gas from the storage site back into the gas network? If so please describe the nature of these difficulties (regulatory provisions, company behaviour, technical problems) in detail.

We are not aware of any such difficulties but clearly the quality of regasified LNG which can enter each transmission system must comply with national specifications, which may in turn require conversion capabilities.

EURELECTRIC pursues in all its activities the application of the following sustainable development values:

Economic Development

▶ Growth, added-value, efficiency

Environmental Leadership

▶ Commitment, innovation, pro-activeness

Social Responsibility

▶ Transparency, ethics, accountability



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