



European Commission  
DG Energy - ENER.B.2  
'Internal Market II: Wholesale markets; electricity & gas'  
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07 February 2013

Dear Sir/Madam,

**RE: Consultation paper on generation adequacy, capacity mechanisms and the internal market in electricity**

Gazprom Marketing and Trading Limited (hereinafter "GM&T") welcomes the opportunity to take part in the public consultation on generation adequacy, capacity mechanisms and the internal market in electricity. GM&T is a UK registered wholly-owned subsidiary of the Gazprom Group. With a considerable asset base in the European community, the Gazprom Group remains one of the key long-term investors in European pipeline infrastructure, gas storage facilities and retail supply activities. Furthermore, the Gazprom Group is pursuing a number of initiatives in developing gas-to-power generation facilities across Europe and intends to invest in new electricity generation infrastructure that will enhance Europe's security of supply.

GM&T is active in the marketing and trading of energy commodities worldwide including power, gas, oil, LNG and carbon allowances. With respect to electricity GM&T is an active wholesale market participant in twenty European jurisdictions and therefore maintains a keen interest in the policy and legislative developments in respect of capacity remuneration mechanisms.

Below please find our comments on the specific questions addressed in the consultation document.

- **Do you consider that the current market prices prevent investments in needed generation capacity?**

Undoubtedly, at their current levels wholesale electricity prices across Europe do not provide efficient economic signals for investment in new generation capacity. In 2012 the clean spark spread - a measure of the economic profitability of gas-fired CCGTs which are widely recognised as the generation

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technology most suited to complement the growth of intermittent renewables – was in negative territory in certain jurisdictions (including Europe’s largest power market, Germany) or at historically low levels in others. This is, of course, discouraging investment in new generation infrastructure with electric utilities either abandoning previously announced investment plans or postponing final investment decisions indefinitely. At the same time, a number of European power generators are now considering (or have already decided) to mothball or permanently close existing uneconomic plant. This is intensifying concerns about security of supply in future particularly in anticipation of the steady expansion of intermittent technologies over the following decade.

As is indeed pointed out in the consultation document, the current price levels can be attributed to a variety of different reasons. Firstly, the decline in electricity demand resulting from the ongoing economic uncertainty across Europe. Secondly, the oversupply of carbon allowances in the EU ETS market, which has led to the collapse of the CO<sub>2</sub> price to a level that no longer provides any meaningful signal for investment. Thirdly, the market distortion caused by the subsidisation of renewable energy sources, which are not only pushing wholesale prices to artificially low levels (or have occasionally led to negative spot prices), but are also restricting the number of operating hours across which conventional power generators can recover their upfront capital costs. Finally, an additional factor that undermines investment in new generation capacity is, in our opinion, the perceived lack of a clear and stable regulatory framework which can be relied upon by investors if not for the entire economic lifetime of a development project, at least for a good fifteen to twenty years.

- **Do you consider that support (e.g. direct financial support, priority dispatch or special network fees) for specific energy sources (renewables, coal, nuclear) undermines investments needed to ensure generation adequacy? If yes, how and to what extent?**

State support for specific energy sources, be it renewables or any other form of electricity generation, distorts the level playing field in the internal market for electricity as in effect national governments (and subsequently the end consumers) insulate certain investors from the long-term electricity price risk, whilst the remainder of the market remains exposed to this. This creates undue complications when making investment decisions not only because subsidised technologies are largely indifferent to the underlying electricity price and hence very difficult - if not impossible - to compete against, but also because investors in non-subsidised technologies lack certainty as to how quickly and in what volume these supported technologies will enter the generation mix. With that in mind, we believe that direct financial support for certain energy sources undermines security of supply as a whole as it deters private investment in exactly the type of generation technologies mostly needed to attain it, i.e. flexible mid-merit and peaking plant. To a certain extent the same is true for the preferential treatment, e.g. priority dispatch, granted to certain technologies as this erodes the income of other generators, who are most

frequently instructed to reduce their scheduled production without appropriate compensation for the actual and the opportunity costs they incur or are forced to stop and restart their operations thereby increasing wear and tear and the risk of associated outages. It is therefore essential to improve the current market design by introducing measures aimed at the full market integration of subsidized technologies.

- **Do you consider that work on the establishment of cross-border day ahead, intraday and balancing markets will contribute to ensuring security of supply? Within what timeframe do you see this happening?**

Although it is essential for the creation of a liquid and well-functioning common electricity market, the ongoing work on the harmonisation and further integration of national power markets by means of coupling mechanisms and cross-border balancing markets is unlikely, in our opinion, to play a major role in ensuring security of supply in the long run. So long as the market distortion caused by the subsidisation of certain technologies and the regulatory uncertainties persist, the risk of underinvestment in generation capacity cannot be ruled out. Under normal circumstances market coupling, for example, would be expected to generally enhance security of supply by maximizing cross-border capacity utilisation in the most economic direction of flow. Yet, we doubt it that it could play a major role in a highly intermittent system, which would require the activation of reserves in specific locations, for specific timeframes and at a very short notice. Furthermore, in the current context of distorted price signals, the extension of coupling mechanisms across all EU frontiers by 2014 could actually amplify the problem in the sense that coupling increases price convergence, which could well mean that distorted price signals in heavily subsidised markets transfer to neighbouring markets as well.

- **What additional steps, if any, should be taken at European level to ensure that internal market rules fully contribute to ensuring generation adequacy and security of supply?**

A number of policy measures could be taken at a pan-EU level to address the market inefficiencies that have led to the current situation; first and foremost a pan-European approach towards market oriented, as opposed to administrative, support schemes for subsidized technologies. The system of guaranteed feed-in tariffs, which is widely used across Europe, combined with priority dispatch rules and the fact that subsidized generation is (as a general rule) exempted from imbalance costs, does not incentivise subsidised technologies - particularly intermittent ones - to actively trade their output on the wholesale market, respond to price signals by increasing or decreasing production accordingly and, most importantly, endeavour to accurately forecast their own generation so as to avoid large deviations between scheduled and actual production. In effect, under the current regime a large proportion of available supply operates completely outside the market, it is completely indifferent to electricity price signals and hence inelastic to price volatility and has no incentive to be in balance as it is largely

exempted from imbalance costs, which are paid for by end consumers. It is, hence, essential to foster the market integration of subsidised technologies as this will remove a lot of the distortions the market is experiencing at the moment.

- **What additional steps could Member States take to support the effectiveness of the internal market in delivering generation adequacy?**

The establishment of a clear, stable and reasonably straightforward regulatory framework is of utmost importance in our opinion. European power markets are going through a period of significant transformation with Member States pursuing a suite of different policy measures that will have a long lasting impact not only on their national markets, but also on the internal market for electricity as a whole. These measures introduce changes across different areas of the value chain for power; from the redesign or fine-tuning of support schemes for subsidized technologies to the introduction of capacity remuneration schemes or the reform of transmission charging arrangements and balancing markets. At the same time, Member States are relying increasingly on new national tax measures, such as fuel consumption duties or environmental taxes, to drive investment in low-carbon generation effectively undermining the role of the EU ETS and leading to fragmentation of European power markets. The unprecedented pace of change in the policy and regulatory arenas intensifies uncertainty and does not help alleviate investors' concerns about the possibility of sunk costs due to unexpected changes in legislation.

- **Do you consider that capacity mechanisms should be introduced only if and when steps to improve market functioning are clearly insufficient?**

Ideally, yes. Due to the distorting impact capacity remuneration mechanisms may have both on electricity prices and on forward market liquidity, in principle they should be used as a last resort method only after all other possible measures to address the current market inefficiencies<sup>1</sup> have been exhausted. We note, however, that capacity remuneration mechanisms are already in existence in a number of countries, e.g. Spain, Ireland, Greece and Sweden, whilst others like Germany, Belgium, France, Italy and the UK have already passed legislation to this effect or intend to do so in the following months. In light of the above, the question as to whether capacity remuneration mechanisms are indeed necessary or what are the preconditions for introducing one has limited practical value. As things currently stand, the critical issue in our opinion is how to implement the best possible practices to

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<sup>1</sup> e.g. full integration of renewables, re-balancing of the ETS market to sharpen the carbon price signals, removal of administrative wholesale price caps, establishment of well functioning balancing markets that enable imbalance prices to rise sufficiently high in times of scarcity so as to reflect the true underlying value of reliability.

deliver the required investment in the most reliable, flexible and efficient technologies in order to secure generation adequacy in the future.

- **Under what circumstances would you consider market functioning to be insufficient:**
  - a. to ensure that new flexible resources are delivered?**
  - b. to ensure sufficient capacity is available to meet demand on the system at times of highest system stress?**

It is widely argued - and we share this view - that if the market were left on its own devices, it would deliver not only sufficient volume of capacity to meet peak demand throughout the year, but also the right type of capacity to accommodate the flexibility needs of the system. The situation starts to become problematic when non-market mechanisms, e.g. the subsidisation of certain technologies, interfere with the functioning of the market and it is further aggravated when the means by which regulation tries to address the unintended consequences of those non-market mechanisms leads to even further administrative interference with the market, e.g. centrally dispatched strategic reserves or administratively determined capacity payments. To a large extent, the circumstances under which the market ceases to function properly have been identified in the consultation document; the “missing money” problem resulting from the fact that peak prices do not rise high enough to reflect the true underlying cost of peak supplies, the fact that an ever increasing part of generation remains completely indifferent to competition by means of guaranteed tariffs and preferential treatment both of which distort the generation merit order, the existence of more or less outdated rules – particularly in respect of the intraday and balancing markets - that do not provide sufficient flexibility to market participants to optimise their portfolios and self-balance close to real time. To these we would add, as previously mentioned, the lack of confidence in the regulatory framework itself especially given the raft of reforms currently under way on top of the already frequent changes the market has experienced over the past few years.

- **In relation to strategic reserves:**
  - a. Do you consider that the introduction of a strategic reserve can support the transition from a fossil fuel based electricity system or during a nuclear phase out?**

We are of the view that the strategic reserve model – albeit seemingly one of the simplest forms of a capacity remuneration mechanism – has a number of inherent drawbacks that should be avoided. We explain our rationale in the following subparagraph.

**b. What risks, if any, to effective competition and the functioning of the internal market do you consider being associated with the introduction of strategic reserves?**

We remain mindful of the perverse incentives that the introduction of strategic reserves could create. The mere existence of an administratively set cap on market prices (implied by the strike price for the activation of the strategic reserve) - which could be revisited periodically at the discretion of the policy maker at the time - would discourage private investment in flexible peaking plant. The economic viability of this type of plant depends on the level of scarcity rents received in times of system stress when prices on the electricity market are very high. Removing the ability of the market to capture these scarcity rents will inevitably reduce the incentives for investment in such plant; more so if potential investors anticipate they would be in a comparatively better situation if they postponed their investment until a new tender for strategic reserve takes place, which could grant them quasi-regulated stable annual returns. Our view is that a strategic reserve could actually amplify the problem it is trying to solve and create an overreliance on centrally procured capacity to address the issue of generation adequacy.

- **In relation to capacity markets and/or payments:**

- a. Which models of capacity market and /or payments do you consider to be most and least distortionary and most compatible with the effective competition and the functioning of the internal market, and why?**

The model of capacity payments, whereby a central agency determines the exact level of remuneration granted to each type of technology and/or vintage, is yet another non-market mechanism which distorts effective competition and can only be detrimental to the functioning of the internal market. The fundamental drawback of this mechanism in our opinion is that price formation is not the outcome of a transparent competitive process, but of an administrative calculation exercise highly susceptible to subjectivity. Therefore, this model of capacity remuneration mechanism does not help reveal the true underlying cost of reliability nor does it ensure the least cost solution for the end consumer. Moreover, it does not create confidence in the mechanism itself as capacity payments are at the sole discretion of a central agency, who might decide to amend or completely remove them for reasons not related to the generation adequacy needs of the system.

This distortionary impact can be effectively mitigated with a model of capacity market which limits the role of the central agency to the following two areas leaving the rest - including price discovery and the delivery of the least cost solution - to the market. First, the determination of the required reliability level and hence the total amount of capacity to be procured by the market and second, the technological characteristics eligible capacity must meet particularly in terms of flexibility, efficiency and reliability.

**b. Which models of capacity market and /or payments do you consider to be most compatible with ensuring flexibility in a low carbon electricity system?**

We are pleased to observe that the value of flexibility is being given the right amount of attention in the Commission's questionnaire as this is an important consideration which is not often present in the public debate around capacity remuneration mechanisms. The overall objective of any capacity remuneration mechanism should be not only to deliver the right amount of capacity, but (equally importantly) the right type of capacity both in terms of flexibility characteristics but also in terms of efficiency, carbon emissions and reliability. In our opinion, this can be achieved only if the design of the capacity remuneration mechanism draws upon the following fundamental principles:

- Remuneration should be targeted only at generation technologies that are most flexible, efficient and reliable; therefore best suited to address wind/solar intermittency and general system needs;
- The mechanism should operate as a market that is separate and distinct from the electricity market and should not place any restriction on generators in respect of how they dispatch their plant or sell their output on the forward/spot/intraday and/or balancing markets except for obligations to be available to generate power when the supply/demand balance is tight.
- Capacity payments should be determined through a competitive process in order to reveal the true value of reliability and thus ensure the lowest cost to consumers.
- The mechanism should look at the entire energy value chain, including fuel supply so that the fuel is readily available when required. The greater the flexibility needs of the system in terms of dispatchable power generation, the greater the investment that will be required in the upstream fuel supply chain (production facilities, transportation and storage systems) to accommodate this. At the same time fuel suppliers need to be confident of stable demand that is attractive enough to justify their upstream investments. In other words, the issue of generation adequacy must be addressed with a holistic approach. We believe that companies with significant expertise across the different elements of the energy value chain, such as the Gazprom Group or its European peers, can certainly play a considerable part not only in ensuring security of supply in the long term, but also in promoting the optimal use of infrastructure along the entire value chain and hence in delivering the least cost solution for end consumers of electricity.
- The CO<sub>2</sub> and other emissions produced should be taken into account. This could be done by supporting the EU ETS or by setting an emission performance standard for all fossil fuel power stations.
- The mechanism should provide sufficient lead time for the procurement of capacity (minimum 4 years). This will enable new entrants to participate in the capacity mechanism.



- The mechanism should ensure high usage of the infrastructure assets (i.e. power transmission lines and fuel transportation infrastructure) in an optimal way so that fixed costs are spread over a large number of generating hours.
- c. Are there any models of capacity mechanism the introduction of which would be irreversible, or reversible only with great difficulty?**

Any capacity remuneration mechanism - be it in the form of strategic reserve, a capacity market or capacity payment, should be viewed as a fundamental policy intervention that will have a long lasting impact on the wholesale market. As such, the introduction of a capacity mechanism is certainly not something that can be reversed with great ease and/or speed. This applies to all forms of capacity mechanisms in our opinion. For example, some variants of capacity mechanisms grant multi-yearly contracts (e.g. 10-year contracts) to capacity providers. These contracts must, of course, be honoured till they expire. Other variants of capacity mechanism might not actually foreclose the market for such long periods of time, e.g. a capacity market with annual contracts, but would normally dictate generators' investment decisions, the repercussions of which will only become visible after a number of years, say 4-7 years. As a result, we are of the view that all forms of capacity mechanism are equally difficult and time consuming to reverse in practice.

- Which models of capacity mechanisms do you consider to have the least impact on costs for final consumers?**

Certainly the ones that support price discovery via competitive means, either through a central auction for capacity or through a bilateral market between providers of capacity and retail suppliers or consumers, as these models will allow competition in the market place to reveal the least-cost solution in delivering generation adequacy.

- To what extent do you consider capacity mechanisms could build on balancing market regimes to encourage flexibility in all its forms?**

The interaction between capacity remuneration mechanisms and balancing market regimes is something that should be carefully looked into not only because of the impact the introduction of a capacity mechanism can have on the balancing market, both in terms of merit order and in terms of pricing, but primarily because the overall objective of the capacity mechanism should be to deliver investment in the most flexible forms of generation, which will enable the system operator to procure the type of ancillary services required to balance renewable intermittency. To achieve this, the design of the capacity mechanism should demonstrably promote flexibility by means, for example, of clear eligibility requirements in terms of ramp-up/ramp-down characteristics or by scaling the overall





remuneration that generators receive by a technology-specific “flexibility” factor meant to reflect the contribution of that particular technology to overall system needs for the provision of ancillary services.

- **Should the Commission set out to provide the blueprint for an EU-wide capacity mechanism?**

This would be certainly useful, although we recognise that – given the complexity of the issue at stake and the fact that plenty of Member States have either implemented or are currently developing their own very different capacity mechanisms - this might not have a visible impact in the short to medium term.

We hope you find these comments useful. Should you have any queries, please do not hesitate to contact us on the e-mail address [RegulatoryAffairs@gazprom-mt.com](mailto:RegulatoryAffairs@gazprom-mt.com) or on the telephone number at the bottom of this page.

Sincerely yours,

*(Unsigned as sent by e-mail)*

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