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Position Paper
Contribution to the debate on
electricity market design and
capacity markets



Eurogas is the association representing the European gas wholesale, retail and distribution sectors. Founded in 1990, its members are 43 companies and associations from 24 countries.

Eurogas represents the sectors towards the EU institutions and, as such, participates in the Madrid Gas Regulatory Forum, the Gas Coordination Group, the Citizens Energy Forum and other stakeholder groups.

Its members work together, analysing the impact of EU political and legislative initiatives on their business and communicating their findings and suggestions to the EU stakeholders.

The association also provides statistics and forecasts on gas consumption. For this, the association can draw on national data supplied by its member companies and associations.

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■ **Can the Energy Only Market be made to work better?**

In developed and well-functioning markets the commodity price of energy, including carbon footprint, should be the driver for competition whether it is electricity, natural gas or any other fuel. Market spreads should therefore guide investment choices and contribute to security of supply (energy-only market (EOM)).

The completion of the internal energy market is expected to deliver more integrated balancing markets and better functioning intraday markets both for electricity and for gas. Such an integrated approach is intended to be more flexible as well as create market and trading opportunities in Europe that could cope with the increased intermittency of renewable energy sources (RES). An integrated internal energy market would also improve market signals for investment in new and flexible generation capacity. The integration of day-ahead, intraday and balancing markets can positively contribute to the optimal use of the power system and the best way to dispatch the power generated, resulting in competitive prices for end consumers.

Eurogas advises that any current barriers and limitations to the energy markets should be removed in the interest of an integrated EU energy market. In particular:

- The integration of wholesale electricity and gas markets and their improved functioning to achieve the completion of the internal market as soon as possible must remain the priority of policy makers, regulators and involved stakeholders (ENTSO, TSOs, Power Exchanges). More integrated balancing markets and better functioning intraday markets which adequately reward flexibility are central to this. Therefore the European Commission should ensure that the requirements of the Third Package are fully implemented in each Member State and the timely progress of network codes is maintained.
- The European Commission should increase the pressure on Member States to remove existing distortions, such as regulated end-user prices, restrictions or unnecessary regulatory requirements on plant operations as well as price caps and floors to allow EOMs to have a chance to function properly. This includes: replacing unjustified technical requirements put on generators and other market participants through codes and regulation by markets; removing “must-runs” for power plants and the prohibition to exit the market; promoting price signals to allow free commercial disclosure of assets, and socio-economic optimal investment signals.
- The absence of a level playing field may result in different appetites for investment or availability of technologies and thus in different geographic or technological choices of the generation mix among Member States. Regulatory interventions affecting the power generation sector such as fuel taxes, Robin Hood tax for energy companies and so on should be avoided. Instead, the focus should be on developing fair competition on the basis of transparency.
- Europe must invest in developing cross-border capacity and overcome national congestion through grid development.

- Concerning the increasing market share of RES, to benefit from (and deliver benefits to) a smooth energy system and market, generation from RES should finally be integrated into the market with the same obligations as for other market players, i.e. meeting scheduling, nomination and balancing requirements. Market integration also implies that the financial requirements apply to all market participants equally (regardless of whether it is a thermal power plant, renewable energy source, electricity storage or a demand response operator). Market prices should encourage demand-side response and policy should promote the development of electricity smart metering so that market-based changes in demand contribute to wholesale market spot price formation.
- Free investment choice should be possible, but also, when operators come to the conclusion that plants are no longer profitable, they should be allowed to freely decommission or mothball their power plants.
- Member States should take a harmonised approach to assessing the overall generation adequacy. The availability of flexibility should also be examined in the context of security of electricity supply.

Therefore, Eurogas is of the opinion that these barriers and limitations should be removed as a priority.

■ **Is a capacity market needed to ensure necessary investment and to integrate Renewable Energy Sources into the electricity market?**

The removal of current barriers and limitations to the EOM is indispensable if the EOM is to function efficiently, and should be made a priority. The outcome is particularly dependent on local conditions, such as insufficient networks and national energy policies, including national renewable support schemes, which may result in a lack of peak and backup plants. In this situation introducing a CRM is one approach to face the economic challenges of ensuring generation adequacy and present a tool to bridge the missing investment signals from the EOM, and ensure a stable investment climate. Flexibility should be adequately rewarded by the spot and balancing market, but if this is not the case, the design of CRMs should also consider the flexibility needs of the system.

Today RES are not yet fully integrated in the market and are not yet fully accountable for the costs that they impose on the system. These costs include those for backup reserves and real-time balancing capacities from which RES are currently exempted in some Member States. To benefit from (and fairly contribute towards) a smooth energy system and market, power generation from RES should be integrated into the market in line with the same obligations to which other market players have to adhere, i.e. meeting scheduling, nomination and balancing requirements, and paying for any imbalance. The same market rules and financial requirements should apply equally to all market operators. Eurogas envisages a market for RES being developed with R&D support directed to those RES technologies that are new and not yet mature.

Eurogas notes that the problem of reduced operating hours of conventional power plants, as far as this is caused by subsidies to mature renewable energy sources and the low price of carbon dioxide allowances, may not only affect the outlook for gas-fired power plants. It could also cause a more intermittent use of gas grid infrastructures and have an impact on the profitability of other gas infrastructures (particularly underground storage facilities), which are necessary for the delivery of fuel to the power plants concerned at peak times. Moreover, a reduced consumption by gas-fired thermal plants would increase the cost of infrastructure to be carried by other gas end-users. For these reasons, an impact assessment on the introduction of CRMs should concentrate on the electricity market but should also pay due attention to the gas market.

Furthermore, the achievement of EU climate targets, of which gas is recognised as a key contributor, is put at risk. Eurogas is of the opinion that the achievement of a low-carbon energy market should be driven by fair competition among the different low-carbon energy technologies, with the EU emissions trading system (ETS) as the key instrument. The choice of the most cost-effective technologies to achieve carbon dioxide emission reductions would then be the result of a competitive market. Therefore, price signals from the EU ETS need to be stronger and in line with climate targets.

■ **Is it possible to integrate Capacity Remuneration Mechanisms into the Energy Only Market?**

A CRM will create an additional market instrument to attract sufficient firm capacity to achieve the targeted adequacy of the system, if the EOM is not working efficiently. An adequate CRM would send earlier and longer-term investment signals than an EOM and would thereby reduce the risk of having a shortage in electricity markets. If the introduction of a CRM is considered, the market design should be based, as far as possible, on competitive elements to ensure efficient solutions. The aim should be that the market design is compatible with that of neighbouring markets to minimise market distortions and to avoid overinvestment.

Generation adequacy assessments should pay attention to the financial viability of the existing capacity in the system to determine if the conventional or renewable generation, storage, or demand-side response being used is financially viable and should continue to be in operation or might progressively exit the system.

The capacity market should be designed in a competitive and efficient way with the following requirements:

- CRMs should ensure the provision of capacity needed to achieve an adequately functioning system. Flexibility should be adequately rewarded by the spot and balancing markets, but if this is not the case, the design of a CRM should also consider the flexibility needs of the system. This is not the case, for example, if price signals, such as price spikes and price volatility, are not accepted and prices are capped or if other interventions, such as restrictions or unnecessary regulatory requirements on plant operations, endanger the ability of the market to deliver those flexible resources.

- The requirements should be aligned with the advice of expert groups, and consider import from neighbouring countries to avoid any sub-optimal solutions and overcapacity.
- The capacity price should be determined in a competitive way and respond to the actual supply and demand of firm capacity. The objective of a CRM is to ensure the availability of adequate capacity. If revenues from the energy market are sufficient to do so, the price of capacity should tend to zero.
- The approach should be technology-neutral provided that different technologies offer the same level of firm and reliable capacity.
- Existing plants should compete with newly-built plants as well as demand-response measures and electricity storage for the most efficient solution by following the approach of “one product – one price”.
- The capacity market should be open to electricity undertakings operating in other Member States.

Predictability and reliability are essential preconditions for investors, therefore:

- The creation of effective incentives for new investments as well as reliable and transparent market rules are essential to build confidence in the market. These rules should also determine in which market situation a change of market rules is required and on which basis the change will be made.
- Adjustments of the capacity mechanism as well as changes in the policy and regulatory framework that lead to stranded costs create additional risks for investors and existing operators, which make them reluctant to invest. Therefore, the more self-regulated elements a mechanism offers, the fewer regulatory interventions are necessary.
- Politicians have to consider the time lag (e.g. construction period) between the political decision and the effectiveness of the market reaction. Retroactive changes to the legal framework should be avoided.

Experience suggests that any strong regulatory intervention, if insufficiently complementary to the existing energy market, leads the market to call for further regulatory interventions to adjust the system. This increases the risk of adverse “spillovers” to the gas market.

■ **How can cross-border participation in capacity markets be encouraged?**

Poorly designed capacity mechanisms without any regional coordination increase the risk of market distortions. A sub-optimal outcome caused by isolated national approaches should be avoided. To reach European integration, at least a supranational/regional generation adequacy assessment should be carried out. A negative impact on European

competition and market integration, because of different approaches in EU Member States, should be avoided. Moreover, remunerated capacity should not lead to a restriction on the produced electricity in the country where it is generated. Cross-border flows should not be restricted.

Priority should therefore be given to better interconnectivity in the electricity market. With the completion of the internal energy market, security of supply becomes a supranational/regional issue and an assessment should be carried out in order to come to a level of EU adequacy. Therefore, Eurogas highly welcomes the recent approach made by the Pentilateral Energy Forum (PLEF) on a regional generation adequacy assessment.

A transparent set of rules for TSO-TSO cooperation to manage shared stress events also needs to be prioritised by the European Commission and ENTSO-E.

■ **To what extent should adequacy levels be harmonised amongst Member States?**

A Europe-wide or at least regional generation adequacy with a harmonised methodology could be a first step forward. Although an agreed level of security of supply (e.g. LOLE) is not necessary and should be the decision of the Member State. Clear rules are needed to provide guidance that compares procured foreign capacity with imbalanced domestic demand or different levels of security of supply.

■ **What is the role of DSOs?**

In the emerging new design of energy markets DSOs need to be involved, not least because of their evolving role in facilitating demand-side response. To tackle future challenges better, a platform for cooperation between DSOs and TSOs could be considered in this context.

■ **How should storage be remunerated?**

Within the capacity remuneration scheme, electricity storage should compete with generation capacity as well as with demand-side response measures for the most efficient solution by following the approach of “one product – one price”.

■ **How should demand-side response be treated?**

Eurogas foresees that technological developments will drive further change in the market, expanding opportunities for customers who want to participate in the market. How fast the pace of development will be, and what proportion and categories of customers will seek to take up these new opportunities is difficult to gauge in advance. It will also depend on the ability of market operators to optimise system costs and deliver the related benefits to their customers. If such conditions are met, we should see some impact of smart systems and meters in the next ten years. Member States should thereby be encouraged to remove barriers limiting customers' exposure to market prices. Without the deployment of demand-side response services, other innovative products and offers could be affected.

However, demand-side response measures should compete equally with power generation and storage within a capacity remuneration mechanism. Within a capacity mechanism it should not matter how and from whom the required capacity is provided. The price for the provided capacity should be identical for all participants ("one product – one price"). As demand-side response measures also face investment costs (e.g. metering and steering mechanisms, organisational processes) providers have identical investment considerations as any other capacity provider. The introduction of a CRM can even trigger investment in end-consumer flexibility. Therefore, demand-side response should be rewarded in the same way as generation or storage capacity in a capacity remuneration scheme.

■ **What should be the roles of ACER and ENTSO-E in this context?**

Eurogas supports the future strengthened role of ACER to ensure effective engagement of stakeholders in the Electricity Network Code implementation process. The intended stakeholder committees will be chaired by ACER and engage interested parties. Eurogas also welcomes that relevant European associations are foreseen to play an active role in the process. However, ACER should also have a stronger role in the development process of the Network Codes to ensure a balanced position between stakeholders and TSOs. The new energy market design should also establish the parameters for improving the governance of ACER over ENTSO-E and ENTSO-G.