

ACER public consultation: European Energy Regulation: A bridge to 2025

Response from the European Wind Energy Association

June 2014

Introduction

EWEA welcomes the ACER consultation and recognises it as a step towards the achievement of the goals outlined in the 3rd Liberalisation Package.

The wind industry's objective is to be competitive in a fully liberalised electricity market, and to deliver the benefits of wind energy in the most affordable way for consumers. Investments made possible by stable legislative frameworks help drive down costs, will enable on-going cost reduction and, ultimately, remove the need for specific incentives. Well-functioning electricity markets and adequate infrastructure are the key priorities for the European wind industry.

1. Electricity wholesale markets

EWEA agrees with the broad trends outlined by ACER in electricity wholesale markets, such as market distortions induced by national capacity remuneration mechanisms, the need for greater TSO cooperation with ongoing market integration and emphasis on market designs which enable the pricing of flexibility.

Well-functioning electricity markets are instrumental in improving the integration, competitiveness and affordability of wind energy. Functioning intraday markets in particular are crucial for the efficient and cost effective integration of large amounts of wind energy and system operation.

The current ambition of a fully functioning EU electricity market does not include the fundamental features of intraday and balancing markets, which are essential for wind energy integration. These features include measures to improve market liquidity, moving trading as close as possible to real time to allow use of better forecast updates, harmonising rules across borders and the interactions between intraday and balancing markets.

- ⇒ **Regretfully, emphasis on how to achieve progress in the roll-out of these market forms seems to be missing in the ACER consultation document. Instead, the focus is put on alleged market distortions by national RES support mechanisms, lack of balancing responsibilities and priority dispatch provisions without any further contextualisation.**
- ⇒ **Priority dispatch of conventional generators in some Member States as well as market distortions created by congestion management practices from TSOs and non-harmonised grid tariffs seem not be part of the energy sector trends analysis. Furthermore, actions to tackle the persisting structural market distortions are limited only to regulated prices, but not to high market concentration or continued subsidies to fossil fuels and nuclear energy.**

The ACER document ignores the fact that in many markets wind energy is already taking on **balancing responsibility**¹. However, a number of market features need to be in place to ensure balancing risk is shared by both renewables and conventional technologies.

Wind generators can be exposed to balancing responsibility in mature intraday markets with a high level of liquidity and non-discriminatory rules. An important part of this is the uptake of intraday markets. While the latter exist in some Member States, the volumes of energy traded are still relatively low, gate closure times are far from energy delivery times and markets are not regionally integrated reducing the opportunities to reduce forecast errors from wind, and subsequently its imbalances.

- ⇒ **An important item missing in this section of the ACER document is how to enable wind generators to participate in balancing markets. Most existing regulations lock wind generators out of providing reserves and balancing energy.**
- ⇒ **Voluntary participation in the market, with or without pre-contracting capacity, together with suitable reserve and balancing energy products - that wind generators can offer - are fundamental if wind energy generators are to be accountable for their imbalances.**
- ⇒ **Clear and harmonised prequalification procedures for participating in balancing markets are needed. This latter aspect is totally overlooked in the Electricity Balancing Network Code, currently in ACER's hands.**

Finally, integrating balancing markets across coordinated areas, necessary to smooth variability and reduce uncertainty, is currently foreseen only after 2022 according to the current version of the Electricity Balancing Network Code. The balancing responsibility of wind generators has to be assessed against this significant delay from the 2014 target of a fully implemented target model and completion of the internal energy market

Priority dispatch

EWEA agrees that priority dispatch is to be understood as a transitional measure and be gradually phased out. However, the paper seems to lack understanding of the overall rationale of priority dispatch for RES as put forward in the RES Directive. A fully functioning EU electricity market should be in place to ensure that the technologies with low marginal costs are dispatched first.

- ⇒ **As a first step, priority dispatch for conventional generators and non-variable renewables should be ended.**
- ⇒ **Secondly, clear and transparent rules for curtailing wind, today not present, together with harmonised remuneration mechanisms for this grid support service, should be established².**

ACER's role driving these arrangements is missing from its proposed actions.

In Member States where the energy market is incomplete and the requisite infrastructure is not in place, priority dispatch for low marginal cost renewables should be maintained, until the overall market distortions are resolved. To phase out priority dispatch for low marginal cost renewables, EWEA suggests the following minimum conditions are met in Member States' power markets:

¹ As of December 2013, EWEA identified 16 MS with balancing responsibility for wind and 14 without.

² See also EWEA position paper on priority dispatch, May 2014:

http://www.ewea.org/fileadmin/files/library/publications/position-papers/EWEA_position_on_priority_dispatch.pdf

- Existence of a fully functioning intraday and balancing market.
- A satisfactory level of market transparency and proper market monitoring by the national regulatory authority.
- Priority dispatch for conventional generation and all other forms of non-RES power is phased out.
- The requisite transmission and distribution infrastructure is in place, which can be assessed against the completion of TYNDP projects in the relevant Member State.
- Best use of sophisticated forecast methods as close to real time as possible and operational routines by the TSO.
- A harmonised, transparent and remunerated curtailment regime, as a grid support service, is in place.

Notwithstanding these criteria, priority dispatch should be granted to 'combined offshore grid solutions' - as planned with Kriegers Flak - where two or more countries could be connected via offshore wind farms. This would more adequately reflect the increased risks developers face in such novel approaches.

In addition, ACER wrongly stipulates in this section that RES generators' characteristics include less flexibility than other power sources, whereas, when producing electricity, wind power generators are among the most flexible with regards to their technical ramping up or down capabilities³.

Policy interventions to ensure adequacy

EWEA is disappointed by ACER's and the NRA's apparent lack of ambition to further scrutinise the need of present or future capacity remuneration mechanisms (CRMs). CRMs can distort price signals to consumers, undermine the development of demand response and lead to over-investment in national power generation capacity making the generation fleet unnecessarily expensive.

- ⇒ **Capacity remuneration mechanisms should, therefore, be analysed more critically by ACER.**

ACER should consider taking a more prominent role in overall system adequacy assessments; become the monitoring body of ENTSO-E's work on the System Outlook and Adequacy Forecast and monitor NRA's assessments of national adequacy analyses.

- ⇒ **ACER should provide rules on how to assess adequacy in an integrated market versus national approaches.**

ACER and the NRAs need to be more involved in establishing whether there is a capacity problem in the power system in question, and if so, to what extent. Another aspect to be clarified in such a system adequacy analysis is how much firm capacity from variable renewables and other technologies can be counted on.

The ACER paper rightly mentions that a distinction between the need for more operational adequacy in terms of short-term flexibility and the more long-term aspects of system adequacy in terms of meeting annual electricity demand needs to be made. Clearly justified and carefully

³ It is important to distinguish dispatchability from flexibility. The fact that wind resource is not available at will is a constraint for dispatching its energy when is required to cover demand, but not an attribute of the technology flexibility. In addition, significant changes in output from wind are in timeframes in the range of hours to days, not short-term timeframes in terms of minutes or seconds. All the contrary, other generation technologies and transmission assets are by far more prone to unexpected short-term changes in output.

evaluated CRMs can only be an option in case an issue on the latter is identified. Any more short-term operational adequacy problems ought to be addressed with additional electricity market features rewarding flexibility and cross-border trading rather than CRMs.

- ⇒ **EWEA welcomes ACER's emphasis on the importance of simple, market-based approaches to tackle future challenges such as remuneration for flexibility.**
- ⇒ **However, more is needed than achieving the EU-wide target model. Consequently, EWEA recommends including a call for a modernised version of the target model ("EU-wide target model 2.0") to be agreed and endorsed jointly by the regulators, European Commission, Member States, TSOs and the power industry.**

Grid support services markets

Beyond providing day-ahead market integration across borders and improved transmission capacity allocation, a more ambitious vision of cross-border balancing markets should be developed, as well as a more prescriptive design for intraday markets.

- ⇒ **Future energy market forms like grid support services markets should be set-up, to ensure the most cost-effective provision of the latter whilst providing additional non-discriminatory revenue streams to investors. These new market forms are crucial given the lack of timely investment signals coming from energy-only markets.**

With a growing share in the power mix, wind energy is able to contribute significantly to reliable system operation. This includes the provision of support services to the grid in an increasingly similar way to conventional generators. This capability has value in an integrated market, therefore, grid connection requirements for all generators must focus on the essential aspects of technical performances, leaving an opening for remunerated grid support services.

To achieve maximum cost efficiency when setting up these new market forms, grid connection requirements in Europe should first consider market options for grid support services instead of compulsory requirements to be fulfilled without specific remuneration. This should be properly reflected in sound, well-balanced and non-discriminatory rules encompassed in ENTSO-E Network Codes which should be put in place before 2020, and reviewed on a regular basis.

2. Infrastructure investment

EWEA agrees with ACER that **cross-border cost allocation** is one of the main regulatory obstacles to making infrastructure investments. Regulators' actions must, therefore, include innovative planning and financing schemes for pan-European transmission grid reinforcements at EU level, in particular geared at facilitating the first legs of a HVDC overlay grid and integrated offshore grid solutions.

- ⇒ **National regulators must collaborate on solutions for cost allocation issues for projects implying a higher cost on one country while benefits are expected in adjacent power systems.**
- ⇒ **If national regulators cannot agree, ACER must swiftly decide on a cost-distribution key as provided for in the new TEN-E instrument.**
- ⇒ **The right of ACER to enforce a compromise on cross-border cost sharing is a big step towards a more European infrastructure planning and should be further exploited with ACER gradually becoming a more European regulator.**

EWEA also agrees with ACER's assessment that **transparent and cost-reflective network tariffs** are important aspects to facilitate network investments. However, there are no actions proposed despite the recently published ACER opinion on the appropriate range of transmission charges paid by electricity producers.

In EWEA's view, the variety of different national transmission tariff structures threatens the achievement of the Internal Energy Market as it can distort the investment decision of a power generator in a particular country according to the level of the charges. The very ACER opinion on this topic states: *"The Agency notes that even power-based G-charges may have significant distortive effects on investment decisions if they are not cost-reflective, lack proper justification or are not set in an appropriate and harmonised way"*.

- ⇒ **ACER and the European Commission should make best use of the future EC Guideline on harmonised transmission tariff structures to create a level-playing field.**

Generator borne transmission charges (or G-charges) were useful at a time when it was cost efficient to build generation near to centres of demand. However, given that new generation assets are now being built irrespective of these network signals, such charges are an unnecessary cost and act as a barrier to wind energy deployment.

- ⇒ **In the long-term, such transmission tariffs should be removed to ensure the cost efficient deployment of generation assets, lowering the overall system cost for consumers by maximising the renewable resources available across Europe.**

In addition, ACER and the NRA's should carefully assess investment distortions in interconnectors caused by CRMs in adjacent countries and possible impact in terms of cross-border cost allocation, risk perception by the involved investors and network tariffs. Detail on how future TSO cooperation should be incentivised is missing in the ACER paper.

- ⇒ **Full TSO cooperation, optimised system operation and power market functioning through the establishment of regional and, subsequently, European system operation facilities should be supported and coordinated by the involved NRA's in the region and, in the long term, ACER.**

This would include improved coordination strategies rolled out by **regional and subsequently European system operation facilities** and modelled on existing regional best practise, for example CORESO, CASC and TSC (TSO Security Cooperation). Such facilities have a proven track record with regards to their contribution to cross-border electricity markets by load-flow control to alleviate loop-flows and increase interconnection capacities and should be further developed across Europe. The objective is to ensure coordination of network operation in normal and emergency conditions, provision of network information day ahead, intraday and real-time, and all other measures to increase operational coordination between TSOs.

3. Consumers, retail markets and the role of DSO's

Enabling a market in demand response.

Demand response and more flexible loads in general are not only important means to reduce the need of peak capacity and grid infrastructure investments, but also are facilitators of electricity market integration with large shares of variable RES like wind energy. Most importantly, this

would enable responsiveness of demand at peak times shaving off any large price variations and providing a more stable price pattern on electricity markets.

While ACER sets out important features on how to enable engaged consumers' participation at household level, it lacks proposals on how to facilitate demand side management by industrial players.

The former will be more challenging to utilise as household electricity consumption and customer preferences differ significantly across Europe⁴. Also, it will depend on a variety of other factors such as the successful roll-out of smart meters and further ICT applications, but also on the sheer awareness of customers on potential savings and access to flexible end-user contracts.

It is clear, on the other hand, that most industrial consumers already have incentives to react to price fluctuations. However, despite the obvious positive cost benefit ratios of industrial demand response, it still has not managed to establish itself within most European markets.

The main barriers are of a regulatory nature. Currently, only power generation resources are enabled to provide balancing power to TSOs while industrial consumers mostly have no possibility to bid in a balancing market, despite the fact that they would offer the same product. This missed market opportunity is, in fact, the main obstacle for the further development for demand response. At present, large industrial consumers have, therefore, solely the incentive to shift consumption in response to very high price levels based on their own production and electricity consumption schedules.

- ⇒ **To alleviate these shortcomings, the development of balancing markets with bidding rules that enable demand response to compete on a level playing field should be encouraged through the ENTSO-E network code on electricity balancing as it constitutes the same market commodity as balancing power provided by a power plant.**

Over time, this should also be applied at cross-border level guaranteeing that the development in all regional markets follows the same principles and is open to both generation and demand side resources to ensure improved system operation. Moreover, this should include the ability of third parties, such as aggregators to enter the market and further facilitate the market uptake of demand response.

Novel trading concepts must be prepared. For example, programmable household smart meters linked up to centralised dispatching systems could measure regional supply and demand. The result could be significantly lower energy costs as well as reduced consumption as less standby production capacity would be needed. Regardless of the methods for buying and selling electricity, system operators and regulators must be directly involved in a neutral, centralised network management.

Engagement and active participation of both industrial and household consumers will only be possible with **market-reflective prices**. This requires liquid and integrated wholesale electricity markets together with transparent price mechanisms. Again, regulated end-user prices must be phased out across the EU in order to provide these types of prices. All consumers should be given the option to be active consumers.

⁴ Average yearly household consumption in Nordic countries is nearly three times higher than in Southern Europe.

Storage

With end-user participation, not only large-scale storage, but also decentralised storage solutions at household level (such as heat pumps) will play an increasing role for the most cost efficient uptake of wind energy.

While “smartening” grid solutions will be beneficial to all stakeholders in the energy sector, DSO’s mainly bear the cost of the initial investments to encourage development of commercial solutions for smart grids. Therefore, an adapted regulatory framework is needed with regulators revising their outdated investment models that allow for business-as-usual expenditure only.

- ⇒ **Regulatory incentives must be designed that encourage DSOs to invest in smarter distribution grids, including innovative and ICT-based investments. Otherwise demand response will remain limited to large industrial consumers.**

4. Implications for governance

EWEA agrees with ACER’s emphasis to provide fit-for-purpose processes for the implementation and enforcement of market rules, in particular network codes. Importantly, we welcome the intention to review ENTSO-E’s governance arrangements to ensure that the EU-dimension of their responsibilities prevails over the specific interests of their individual members, given their commercial interest of TSOs in an increasingly liberalised market environment.

With many network codes now in the pre-comitology stage, EWEA is concerned that network codes have not been developed with any quality objectives following principles of transparency, unambiguousness, measurability, consistent terminology and both future proofing and relevance to the present. In order for ENTSO-E (a technical body) to take forward-looking initiatives in terms of avoiding “lowest common denominator” positions when drafting network codes, its decision-making processes need to be reviewed.

- ⇒ **ENTSO-E’s decisions should be taken by qualified majority rather than unanimity to ensure innovative solutions can be agreed rather than approaches that represent the lowest common denominator among the 41 member TSOs.**

To improve the quality of the network codes and their development process, EWEA would like to reiterate that the envisaged timeline of 12 months according to Article 6(6) of Regulation (EC) No 714/2009 is extremely short for drafting a robust Pan-European code which will ultimately serve as a binding regulation.

Sufficient lead-time is essential for the required in-depth technical discussions and to take proper account of all specificities of the power generation fleet in a non-discriminatory manner, in particular in view of the upcoming large-scale integration of variable renewable electricity generation such as wind energy. The lack of such thorough exchanges of view will, inevitably, lead to an insufficient level of detail as seen in the current drafts of most network codes. Ultimately this will compromise any practical and unambiguous application by the power system users once a network code is in force.

- ⇒ **ACER should encourage ENTSO-E to begin a voluntary consultation process with all concerned stakeholders before the start of the official 12 month period. Moreover, there should be the possibility to prolong the period by 6 months if necessary.**



In view of the rapid technical developments in power system and generation technologies, EWEA believes that a regular and flexible process of maintenance and implementation of the network codes is needed to adequately reflect technical and regulatory progress in all aspects of the power system.

- ⇒ **EWEA welcomes that an institutionalised review cycle of each network code through a stakeholder committee comprised of ENTSO-E and relevant stakeholders on a regular basis is endorsed by ACER.**

To ensure a smooth and transparent functioning of such stakeholder committees they should be set up as soon as possible, to gain experience (be it on a voluntary basis) and to anticipate and better understand the task they will have to perform. These will include the preparation of changes or amendments to the network codes to reflect changes for technical requirements.

Another essential accompanying document to the network codes are the so-called implementation guidelines, which, as many requirements are non-exhaustive and will require discussions at national level, should give important guidance to stakeholders on how to interpret and transpose the non-exhaustive requirements into national law in a clear, transparent and non-discriminatory manner.

- ⇒ **To this end, these implementation guidelines should be drafted by ENTSO-E in close collaboration with the stakeholders concerned and accompanied by a consultation process. ACER should play a part in monitoring this process, together with the European Commission.**

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The European Wind Energy Association (EWEA) is the voice of the wind industry, actively promoting the utilisation of wind power in Europe and worldwide. Over 650 members from nearly 60 countries, including manufacturers, developers, research institutes, associations, electricity providers, finance organisations and consultants, make EWEA the world's largest wind energy network.