

Information Bulletin



Editorial

Flexibility and RES integration: the challenges ahead

Flexibility of power generation and integration of renewables in the distribution grid were high on the EEF agenda in October.

The task of power systems to balance electricity production with demand is not an easy one given the introduction of renewables in the grid. Solar and wind are essential to lower CO₂ emissions but their intermittency challenges the systems. The variation of electricity demand throughout the day adds to the issue. Conventional power plants are not built to match this intermittency and a new flexible way of guaranteeing that customers home are continuously powered needs to be put in place. Flexibility of power production, storage, interconnections and demand side response were all presented as part of the solution and so was an integrated approach of energy and ICT.

The system as we knew it is transformed and an adaptation is needed. Will the EU brilliantly take up the challenge?

Pascale Verheust
Director General

Upcoming events

04/11/2014

Dinner-debate in Brussels

The role of high-quality biofuels in decarbonizing road transport

At the invitation of **Neste Oil**

17/11/2014

Dinner-debate in Brussels

Thermal Power Generation in 2030 – Added Value for EU Energy Policy

At the invitation of **EPPSA**

25/11/2014

Dinner-debate in Strasbourg

Nuclear energy in the European Union - contribution to EU policy objectives, challenges and perspectives

At the invitation of **AREVA**

02/12/2014

Dinner-debate in Brussels

Waste-to-Energy: a vital link in the circular economy

At the invitation of **CEWEP**



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EEF events



Flexibility challenge: will the market deliver?

07/10/2014: Dinner-debate in Brussels

EU climate agenda requires the incorporation of renewables into the energy system. This brings about some technological challenges. Power generation through renewables such as solar and wind can cause swings in the amount of electricity fed into the system. The development of new solutions is necessary to balance the intermittent nature of these energy sources and ensure the continuous supply of power.

This intermittency challenge can be addressed by the development of a flexible power system that can balance the fluctuations in renewable energy generation. Currently, however, the market does not incentivize investment in flexibility sources.



Wärtsilä corporation focuses on the development of smart power generation technologies and presented during this EEF dinner-debate an overview on their expertise regarding the implementation of solutions which can introduce the necessary flexibility into the energy market.

In the opinion of **Mr. Kari Hietanen**, Executive Vice President, Corporate Relations and Legal Affairs at Wärtsilä Corporation, who was the main speaker of the dinner-debate, *"flexibility is extremely important and valuable, but the market structure needs to be designed in a way which brings up value (...): it is good for consumers as it reduces the energy bill, it is good for the competitiveness of our industries, it is good for sustainability since CO₂ emissions will go down and it improves security of supply."*



According to **Professor Klaus-Dieter Borchardt**, Director of the Internal Energy Market at DG Energy, the flexibility challenge is the *"burning issue at the moment"*. He considers the energy market will deliver, but might need some help, as there are important challenges to tackle, namely generation adequacy, intermittency of renewables and importance of distribution grids as well as expansion and modernisation of grids.

Mr. Borchardt agreed with the idea expressed by the main speaker of combining efforts for the generation and the regulation side, as this cooperation will lead to the implementation of a flexible market.



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The real challenge of renewables: integration into the distribution grids

21/10/2014: Dinner-debate in Strasbourg

The expansion of renewable energies is linked with a more decentralized and fluctuating energy generation. Having in mind that the overwhelming majority of the renewable energies are fed into the distribution grids, significant challenges – such as the expansion of the energy infrastructure, the development and implementation of smart grids or the grid stabilization - are emerging. The role of distribution grids has become more demanding.

The aim of this dinner-debate was to look at the challenges of a changing sector and analyse the role of Distribution System Operators in the current state of play.



Dr **Eberhard Meller**, Senior Counsellor at EWE Brussels Office, presented EWE's inside vision and experience in the field on behalf of Dr. Werner Brinker, Chief Executive Officer of EWE AG, who was eventually not able to travel to Strasbourg due to adverse weather conditions.

Dr Meller called on the need for a clear framework for possible flexibility options, a regulation that supports the merging of energy and ICT in a smart way, innovative regulatory approaches and a well defined role of distribution grid operators as market facilitators and a steady political framework for the 2030 targets that includes also a binding target for the expansion of renewables, not only at EU level, but also at national level.



According to Dr Meller, the role of the DSOs is of crucial importance for the correct functioning of the whole system. *"DSOs have involved in an active system management which operates and maintains the network, but also develops and enhances it. (...) Intelligent future policy has to continuously set right incentives for investment in innovation, while at the same time ensuring a stable investment climate. This is the only way to fully profit from the sectors' expertise and potential."*



Jan Panek, Head of Unit for Internal Market at DG Energy presented the Commission's view on the issue. In reaction to EWE's speech, Jan Panek confirmed that *"the way to facilitate this system change is through power flexibility."* However, the Commission also believes that flexibility should not only come from the production side, but it could also come from the demand side. According to Mr Panek, *"we would need to find a way in the system to offer an incentive so that they voluntarily adjust their consumption."*

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EEF Members News

DOW Chemical joins the EEF



Dow combines the power of science and technology to passionately innovate what is essential to human progress. The Company connects chemistry and innovation with the principles of sustainability to help address many of the world's most challenging problems such as the need for clean water, renewable energy generation and conservation, and increasing agricultural productivity.

Dow, is an American multinational chemical corporation headquartered in Midland, Michigan, United States. It is the second-largest chemical manufacturer in the world by revenue.

Dow manufactures plastics, chemicals, and agricultural products.

Christina von Westernhagen, Director EU Government Affairs & Public Policy At Dow Chemical, will be representing the company at EEF meetings and events.

GEODE's seminar on the role of local energy companies



EEF Associate Member GEODE is organising a seminar on [27 November in Barcelona](#) on the role that local companies should play in efficient energy markets.

The seminar 'Efficient Energy Markets – The Role of Local Energy Companies' seeks to discuss new business models for local energy companies in the context of functioning energy markets at regional/local level.

Europe's 8th energy region: investing to integrate Europe & ensure security of supply



[On 19 November](#), EEF Associate Member EURELECTRIC, in cooperation with Energy Community (EnC), sets up a one day workshop to address the investment challenges and options for improvement for 'Europe's Eighth Region', which consists of the member states of South East Europe, together with Ukraine and Moldova. EURELECTRIC runs a dedicated group of experts on Europe's neighbourhood and will use this workshop for presenting a position paper on how to improve the investment climate in this region.
