Consultation on DRAFT Commission Regulation declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty

A EURELECTRIC response paper

February 2014

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.

EURELECTRIC's transparency register number: 4271427696-87

Dépôt légal: D/2014/12.105/8

Consultation on Draft General Block Exemption Regulation

A EURELECTRIC response paper *February 2014*

KEY MESSAGES

EURELECTRIC supports the main objectives of the state aid modernisation: to foster growth in a competitive internal market, focus enforcement of state aid rules on cases with the biggest impact and facilitate faster decisions. Support in the field of energy has increased rapidly, leading to major market distortions. ***We encourage the Commission to proceed with the state aid review without delay.***

- The Energy and Environment Guidelines, GBER, and RDI guidelines all influence state aid in the field of energy. They need to complement each other. The scope of the guidelines and the GBER as well as the links between them should be clearly expressed.

- EURELECTRIC finds the differentiation of support for companies of different size inappropriate in the GBER. Environmental benefits that follow from e.g. investments in renewable electricity are not linked to the size of the company and in many cases the whole value chains include different types of companies, from SMEs to large companies.

- State aid rules should facilitate public support for research, development, demonstration and first commercialisation of new technologies and incremental improvements in existing technologies through RDI. EURELECTRIC therefore supports the Commission's proposal to double the notification thresholds. However, we do not agree with the proposal to apply significantly lower aid intensity for experimental research than for other categories. Demonstration and early deployment (referred to as 'experimental development' in the guidelines) are indispensable parts of the power sector innovation chain.

- Unlike operating aid, investment aid does not distort short-term market price signals. As suggested, investment aid for combined heat and power (CHP) and renewable electricity should therefore be included in the scope of GBER. However, investment aid should be granted to both new and refurbished capacities.

- All producers should be obliged to take on balancing responsibilities as a prerequisite for obtaining state aid. Balancing responsibility for small-scale renewables can be handled by the supplier or a service provider – this is already the practice in many Member States. We propose to delete the reference to "where competitive intra-day balancing markets exist". The Electricity Directive mandates the development of competitive and integrated intraday and balancing markets across the whole Europe. There should be no conditionality for the introduction of balancing requirements.

Energy Policy and Power Generation Committee
Chair Oluf Ulseth
in cooperation with DSO Committee, Markets Committee
and Environment and Sustainable Development Committee

Contact:
Niina Honkasalo, Advisor – nhonkasalo@EURELECTRIC.org
Susanne Nies, Head of Unit, Energy Policy and Power Generation,
snies@EURELECTRIC.org

Introduction

EURELECTRIC welcomes the consultation on draft General Block Exemption Regulation. EURELECTRIC supports the main objectives of the state aid modernisation: to foster growth in a competitive internal market, focus enforcement of state aid rules on cases with the biggest impact on the internal market, streamline rules and facilitate faster decisions. Support in the field of energy has increased and led to major market distortions that hamper the functioning of the internal electricity market. ***We encourage the Commission to proceed with the state aid modernisation without delay.***

The Commission should facilitate integration of electricity market, minimise market and competition distortions and the fragmentation of the internal market caused by ill-designed national support measures and to provide an effective RD&D framework for the energy sector. Sound state aid rules that help to reduce market distortions are the foundation for a cost-efficient move towards the low-carbon economy as set out by the ambitious 202020 objectives. They should support the completion of the internal energy market by ensuring a level playing field and thus promote competitive energy supply.

The revision of GBER is only one part of the state aid modernisation, and we appreciate that the Commission is consulting simultaneously on the RDI guidelines and the Energy and environment guidelines. The different instruments need to complete each other and the scope of the guidelines and the GBER as well as the links between them should be clearly expressed. They cover together for example the whole innovation value chain up to the first commercial scale projects and wide spread deployment of technologies. But currently the interlink between the RDI guidelines and the EEAG or GBER is not sufficiently developed.

GBER contributes to a level playing field for the energy sector, and EURELECTRIC encourages the Commission to ensure that once the regulation has been issued, the GBER will be interpreted in the same way by the member states.

Comments article by article

RECITALS

Paragraph 60

All RES technologies are subject to obligations set out in relevant directives and regulations that aim at limiting environmental impacts. Member States (and EEA/EFTA-states), granting aid or not, must respect not only Directive 2000/60/EC establishing a framework for Community action in the field of water policy, but the full '*acquis communautaire'*. It is therefore misleading to refer to other obligations, i.e. Directive 2000/60/EC, in these Guidelines (paragraph 113). Hydropower is fully recognized as a renewable energy source in the RES-directive, in the present Guidelines as well as in the Draft Guidelines. Referring to specific conditions only for hydropower (and later biomass and biofuels), might give the impression that in the Commission's view technology is particularly problematic or less important.

Also other energy technologies may have negative impacts on the environment on biodiversity and the activities must meet the requirements in several directives including for example Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. It will be impossible and is unnecessary to give a full overview in the state aid guidelines.

Chapter 1

ARTICLE 1 – SCOPE

General

Currently the interlink between the RDI guidelines and the EEAG or GBER is not sufficiently developed. For example, ***it should be clarified if aid for projects of first commercial scale belong to aid for research and development or aid for environmental protection.***

Paragraph 2 (a)

It is useful to include a notification threshold for schemes. However, further clarification of what "scheme" refers to is needed. In several member states operating aid for the power sector consists of several schemes: there are e.g. specific schemes for offshore wind and small scale RES. The notification threshold should take a more holistic view on support in the sector in order to prevent division of RES support into several schemes to avoid notification.

ARTICLE 2 AND ANNEX I - DEFINITIONS

Clarity and disambiguation should be ensured by defining the relevant terminology and concepts precisely.

The following terms should be added to definitions for the sake of clarity:

- Operating aid
- Investment aid: investment aid can be either a one-off payment or e.g. periodic payment throughout the life of the plant. In both cases the compensation is based on capacity (MW),not energy (MWh).
- There is no definition for the "start of the project" i.e. when a project is considered as being started in the context of incentive effect. Preparatory work is usually carried out on beneficiary's own risk prior to application (e.g. application or preparation for environmental permission) in order to reduce the time to implement the project. We suggest adding a definition for "start of the project".
- Term "eligible costs" is central in the guidelines and the definition should be given in Chapter 1.3 (Definitions), not only in the main text (paragraph 77).
- Projects of first commercial scale has to be defined

Furthermore the following definitions should be modified:

- Levelised costs should include reasonable profit.

ARTICLE 4 – NOTIFICATION THRESHOLDS

Paragraph 1

(h) Aid for research and development

EURELECTRIC supports the Commission's proposal to double the notification thresholds for all included categories - fundamental research, industrial research and experimental development. Demonstration and early deployment (what is defined as 'experimental development' in the guidelines) are indispensable parts of the power sector innovation chain. Not only does

demonstration enable real-world validation of emerging R&D findings, but when integrated within an effective overall innovation policy, it also is a crucial step towards commercialisation and subsequent widespread deployment.

(p) Investment aid for environmental protection and (s) Operating aid for the production of renewable electricity

In EURELECTRIC's view ***the Commission should assess support schemes instead of individual projects within notified schemes.*** Notification of individual projects appears out of line with the Commission's objective to streamline state aid processes and would impose an unnecessary administrative burden on developers. The additional notification leads administrative burden, higher risks and possibly also higher costs especially for projects with long time span between investment decision and start of operation. Focus on large projects does not appear meaningful because high support levels can lead to significant market distortions even in case of small scale generation.

Regarding renewable electricity, even support schemes for small scale generation can cause significant market distortions when the total budget is large and/or support levels high. In addition, a capacity based threshold for renewable energy can lead to schemes being sized below the economic optimum simply to avoid the notification requirement.

In case individual notifications will be carried out also in the future, annual thresholds would ensure equivalent criteria for notification between aid granted repeatedly for a one-year period and aid granted once for a multi-year period. However, we recognise that it is not possible to determine the exact amount of annual support ex ante. The suggested notification threshold for investment aid is the same as before (7.5 mE), and can be considered relatively low. It should be increased at least to take into account the inflation since the publication of the existing guidelines.

ARTICLE 5 – TRANSPARENCY OF AID

Paragraph 1

According to this paragraph "*This Regulation shall apply only to transparent aid, that is aid in respect of which it is possible to calculate precisely the gross grant equivalent ex ante without need to undertake a risk assessment*." The Commission should clarify how this is interpreted in case of operating aid. It is not possible to calculate ex ante the exact amount of support because the support is granted per MWh/generated electricity and the level of support is often tied to another quantity e.g. wholesale power price.

ARTICLE 6 – INCENTIVE EFFECT

Paragraph 2

According to the draft guidelines the Commission considers that aid does not present an incentive effect for the beneficiary in all cases in which work on the project already started prior to the aid application. ***We suggest adding a definition for "start of the project".*** Preparatory work, such as application or preparations to apply for environmental permission, is usually carried out on beneficiary's own risk prior to application in order to reduce the time to implement the project. In addition, in practise projects are carried out in phases, and execution of the first phases does not

mean that the next stages could be carried out without aid. Pre-feasibility assessment activities could be determined to be excluded from the implementation of the project or it could be defined that "starting the project" means taking the final investment decision.

EURELECTRIC considers the requirements regarding incentive effect incomplete: member states are not required to ensure that incentive effect exists.

ARTICLE 7 – AID INTENSITY AND ELIGIBLE COSTS

"Eligible costs" is a central term in the General Block Exemption Regulation and should also be included in the definitions.

ARTICLE 9 – PUBLICATION AND INFORMATION

EURELECTRIC is in favour of providing stakeholders information on the costs of aid measures in the field of energy. However, ***the Commission should assess carefully whether the suggested measures would allow competitors to gather information that reflects sensitive business information***.

Section 4 – Aid for Research and Development and Innovation

ARTICLE 24 – AID FOR RESEARCH AND DEVELOPMENT PROJECTS

The Commission suggests significantly lower aid intensity for experimental research than for other categories. EURELECTRIC does not agree with this approach, because demonstration and early market uptake are crucial steps towards commercialisation and widespread deployment.

ARTICLE 27 – INNOVATION AID FOR SMES

EURELECTRIC finds the differentiation of support for small, medium size and large companies inappropriate in the GBER. Benefits that follow from e.g. successful RDI activities or investments in renewable electricity are not linked to the size of the company. Furthermore, in many cases the whole value chains include different types of companies: large companies build value chains with SMEs, facilitating access to technology and innovation.

Section 7 – Aid for Environmental Protection

Article 36

Energy efficiency should be explicitly mentioned in Article 36 In order to make it clear that this article also refers to energy efficiency. Definition for energy efficiency based on the definition of Directive 2012/125/EC Article 2 point 7 should be included among definitions in GBER. For more legal certainty, the article should also include a reference to energy services according to the definition in article 2, paragraph 7 of Directive 2012/125/EC as well as energy audits according to the definition in article 2, paragraph 25 of the above mentioned Directive.

ARTICLE 38 – INVESTMENT AID FOR HIGH EFFICIENCY COGENERATION

General

When comparing the varying distortive impacts of investment aid and operating aid, unlike operating aid, investment aid does not distort the short term market prices signals. The compensation is based on capacity (MW), not energy (MWh). EURELECTRIC supports inclusion of investment aid in the scope of GBER.

Paragraph 3

The investment aid should be granted to both newly installed and refurbished capacities. Refurbishments of CHP plants are needed e.g. to increase their flexibility in order to adapt to the increase in variable RES generation.

However, the member states need to be able to justify the incentive effect.

ARTICLE 39a – INVESTMENT AID FOR THE PROMOTION OF ENERGY FROM RENEWABLE SOURCES

When comparing the varying distortive impacts of investment aid and operating aid, investment aid is a payment based on installed capacity (either one-off or a periodic payment based on the amortization and remuneration of the investment) and as such it does not distort the short term market price signals.

Paragraph 2

This paragraph refers to ILUC directive proposal
EURELECTRIC questions in general references to draft directives in state aid guidelines. In addition, when directives have been approved, member states and EEA/EFTA-states have to implement them regardless of whether they are mentioned in the state aid guidelines.

Paragraph 3

According to this paragraph, investment aid shall be granted only to new installations. EURELECTRIC recommends to include also refurbishment of existing plants to increase the share of bioenergy from the scope of GBER. It facilitates refurbishment of existing plants in the scope of GBER. This is often a cost efficient alternative, and also the system costs of biomass are significantly lower than those of variable RES. Furthermore, it facilitates increasing use of renewable electricity in areas where new generation capacity is not needed.

Paragraph 5

In EURELECTRIC's view, balancing responsibility should apply to all power generation. Usually all normal market responsibilities (including balancing) apply to installations that have received investment aid.

Paragraph 7

EURELECTRIC finds the differentiation of support for small, medium size and large companies inappropriate in the GBER. Benefits that follow from e.g. successful RDI activities or investments in renewable electricity are not linked to the size of the company. Furthermore, in many cases the

whole value chains include different types of companies: large companies build value chains with SMEs, facilitating access to technology and innovation.

ARTICLE 39b – OPERATING AID FOR THE PROMOTION OF ENERGY FROM RENEWABLE SOURCES

General

The requirements regarding operating aid for RES are similar to those for operating aid for deployed RES in the scope of draft energy and environment guidelines. EURELECTRIC find this approach reasonable. Because support in the scope of GBER is not notified, only most market based should support should be included in the GBER.

No reference has been made to the use of cooperation mechanisms of the RES directive. In EURELECTRIC's view a more European approach is paramount to cost-efficient RES development. Hence, EURELECTRIC encourages the Commission to support initiatives giving a more regional and ultimately European dimension to RES deployment in Europe.

Paragraph 2

The bidding implies competition between technologies and projects. EURELECTRIC considers this very positive.

Paragraph 3

We consider the possibility to limit the maximum share of certain renewable energy source to 80% of the total budget an acceptable way ensure that more than one RES technology is promoted in cases where member states find this necessary. The limit is high enough not to significantly deviate from the principle of technology neutrality. Competition between technologies decreases the costs of RES support. E. g. the Netherlands applies currently a technology neutral tendering scheme for RES[1].

Paragraph 4

The draft regulation allows exclusion of biomass from the RES support schemes without any justification. ***EURELECTRIC opposes discrimination of technologies and pleads for equal treatment of all renewable energy sources.*** In EURELECTRIC's view state aid guidelines should promote a technology neutral approach: they are not the right instrument for addressing sustainability of biomass. Biomass sustainability is address in the context of the new EU Forest Strategy, and the Renewables Directive also obliges the Commission to consider the need for sustainability requirements for solid biomass.

We would also like to point out that EU utilities are committed to voluntary sustainability measures by collectively developing sustainability requirements for pelletised biomass and sourcing wood from certified forests (such as PEFC or FSC).

The draft regulation also provides the member states with a possibility to exclude RES in certain geographic areas from support due to grid stability issues. EURELECTRIC agrees that this

[1] The design of the Dutch tender support system has an innovative component: every year, a certain budget is defined for supporting RES. This budget is allocated to all RES technologies in tender rounds where the maximum support level is increased over the rounds. Once the budget is reached no further tender rounds are set up.

possibility could be needed in some areas. Exclusion of geographic areas should however take place only after a transparent process that involves stakeholders. Situations where use of suitable and cost-effective sites for RES projects is prevented without credible justification must be avoided. We propose such decisions to be subject to a holistic cost benefit assessment taking into account alternative solutions including grid extension, flexible grid access regimes (in combination with compensation for curtailed RES) and other solutions to enhance grid stability. It should also be clarified that the areas have to be clearly defined before project development starts.

Paragraph 5

EURELECTRIC welcomes a shift from Feed-in-Tariffs towards the relatively less distortive Feed-in-Premiums. Feed-in-Premiums allow for more market integration (i.e. obligation to find a seller for the electricity production). ***However a FIP's effectiveness in terms of market exposure varies depending on the specific design.*** Especially in cases where variable costs are comparatively high, and premium is needed to incentivise generation, significant market distortions can occur otherwise.

EURELECTRIC pleads for flexible support schemes where technology learning and decreasing LCOE is inversely linked to the support and regular assessments take place. Following to principles need to be taken into consideration:

- By establishing that the premium is not to be received when the market price is below a given threshold.
- The amount of the premium should be regularly (but definitely longer than every 6 months) revised for new installations in order to adapt them to technological evolution and market prices and avoid excessive costs for society (e.g. by linking degression rates to deployed volumes). But this process has to be transparent to investors as from the start.
- Both fixed and variable premiums should be allowed, however taking into account the principles mentioned above.

Support schemes thus have to reflect the optimal compromise between investment stability and market compatibility.

Furthermore, the Commission should not see FIP as the only solution, as per se market compatible.

- Feed-in-premiums are not the only way of ensuring that RES production is sold into the market. There are cases (such as Spain) where production subject to FIT is sold into the market and the FIT is financially settled as the difference between the market price and the desired FIT level.
- Feed-in-Premiums can be almost as market distortive as Feed-in-tariffs, in the case of generation technologies with relevant variable costs (biomass, CHP-cogeneration or Concentrated solar power) and if combined with high support levels, since they incentivize production when wholesale price is below the variable cost of production.

Paragraph 7

No conditionality should be added to the requirement on balancing. Balancing responsibilities should be introduced in all countries in line with the requirement by the Internal Electricity Market Directive mandating the development of competitive and integrated intraday and balancing markets across the whole Europe. ***Indeed all technologies should be allowed to participate in these markets, according to its characteristic and possibilities.*** Therefore we

propose to delete the reference to "where competitive intra-day balancing markets exist" to avoid complex discussions about if competitive intra-day and balancing markets exist.

Balancing is paramount to the internal European energy market: EURELECTRIC draws the Commission's attention to the fact that we do not start here from scratch: Since the existing Internal Electricity Market Directive and the Network Codes under development already introduce the obligation to introduce integrated and competitive balancing markets. EU member states actually already have introduced balancing markets with various requirements and designs, and these designs should be harmonized once the NC on balancing is approved.

Balancing obligations have been successfully introduced already in a number of markets and the experience indicates that as the majority of RES generation opt for outsourcing balancing responsibility to another supplier/balancing responsible party, the market for balancing services has developed well. This development is reflected in a sufficient number of competitive offers in those markets, establishment of specialised service companies and active participation of foreign companies, as well as a variety of services offered. The imbalance costs remain in the range of 1-3 EUR/MW. Furthermore, there are no widely known cases of complaints from the side of RES producers regarding the degree of competition among the balancing service providers. (See Annex 4 on country experience on balancing obligations).

Balancing requirements should apply to all new projects. Please see Annex 1 on balancing.

ARTICLE 39c – OPERATING AID FOR THE PROMOTION OF ENERGY FROM RENEWABLE SOURCES IN SMALL SCALE INSTALLATIONS

General

Experiences in several countries supporting residential PV with a feed in tariff (FIT) show that small installations if they come in large quantities can have a significant distortive impact on the market and lead to high costs (please see Annex 3). ***Support for small scale installations must urgently be made more market-based and cost-efficient.***

In EURELECTRIC's view balancing obligations should apply to all new projects, regardless their scale or maturity of technology in question. A new paragraph on balancing should be introduced. Please see Annex 1 on balancing.

Selling their energy on the market and carrying balancing responsibility is realistic also for residential installations[2] since such models already exists today in a couple of Member States (often in combination with net metering[3]): It is usually the relevant electricity retail company who "buys" the injected electricity of its PV clients and manages imbalances. The PV owner gets a FIP or investment support, etc. on top. However these existing models could be improved by mandatory installation of (quarter-) hourly smart meters which would make the value of the injected electricity as well as imbalances caused by PV more transparent.

[2] With regard to prosumer installations, EURELECTRIC also believes that they should more and more be driven by grid parity and less and less by support payments. However, hidden subsidies that create "artificial" grid parity should be removed (e.g. net metering needs to be replaced by smart meters, grid cost and balancing cost must be attributed correctly, exemptions for auto consumption e.g. from RES surcharges should be reviewed)

[3] The meter of the prosumer is running backwards whenever he is injecting into the grid

Paragraph 2

Specific rules for small scale RES are however needed in order exempt them from the tendering requirement, which could cause too much administrative burden. The threshold should however be lowered considerably. ***Tendering should not be applied to support for RES installations smaller than 100 kW.*** The definition of thresholds for the exclusion of small facilities must be carefully assessed because of the possibility of loopholes (for example by dividing a single facility between several owners). The same threshold should apply to all technologies, no exception should be made for wind or other technologies. A separate threshold in itself is inconsistent with the principle of technology neutrality.

Paragraph 3

This paragraph refers to ILUC directive proposal. EURELECTRIC does not find it meaningful to mention the draft directive at the stage when it has not been approved. Furthermore, member States (and EEA/EFTA-states), granting aid or not, must respect this directive if the council and parliament agree on it.

Paragraph 4

EURELECTRIC has in general doubts regarding the use of levelised costs as a reference to determine the allowed amount of aid in the context of state aid. Calculation of levelised costs is highly dependent on many assumptions and at the moment comprehensive, objective source of data and standardised approach is missing. In case levelised costs are used, the calculations should take into account reasonable profit.

According to the draft, a revision of the support level should be updated at least every 6 months or each 1 GW of installed new capacity. Project development, and the time span between investment decision and start of operation can both take years. This should be taken into account when reviewing the support level. This problem could be solved by introducing adequate transitional periods or allowing using the point in time of an investment decision.

CHAPTER IV Final Provisions

ARTICLE 51 TRANSITIONAL PROVISIONS

Paragraph 4

The review of state aid rules needs to be done in a way that is conducive to investor confidence; this includes retroactive changes to be avoided. To avoid uncertainty the regulation should include a clear statement that member states do not have to take any measures regarding existing commitments within existing support schemes.

Annex 1

EURELECTRIC input on balancing obligations

For deployed (120d) and less deployed (121c):
"Beneficiaries are subject to standard balancing responsibilities where competitive intra-day balancing markets exist."

EURELECTRIC feedback:
EURELECTRIC supports introducing a requirement for imposing balancing responsibilities on RES producers. In this case, a RES producer acts as a BRP himself or outsources balancing responsibility to a 3rd party (a BRP). While absolute percentages of RES generation in the EU total generation volumes do not appear to be significant (2,1% - solar, 4,88% - wind at EU level), the impact on the market has gained in importance, in particular in markets with large shares of RES.

EURELECTRIC supports introducing a requirement for imposing balancing responsibilities on RES producers as a prerequisite for obtaining state aid: balancing obligations should apply to **all deployed and less deployed** generation. Both these categories can opt for handling balancing risks themselves or outsourcing it to a BRP.

EURELECTRIC believes that the specific category of **small installations** should be deleted from the guidelines. Balancing responsibility for small scale RES (e.g. residential PV) could be handled by the supplier or a service provider- which is already the practice today in many Member States. In this case, a supplier manages additional imbalances caused by residential RES as part of its consumption balance. The supplier normally makes a judgement of the balancing costs for a typical RES installation of the relevant type and includes this in its offer.

Balancing obligations should be mandatory for **new installations**. For existing installations, balancing obligations should be incentivised.

EURELECTRIC proposes to delete the reference to "where competitive intra-day balancing markets exist" with the following argumentation:

- *Legal argument*: Electricity Directive is mandating the development of competitive and integrated intraday and balancing markets across the whole Europe. Therefore this should not be introduced in the guidelines as a precondition.

- *Level playing field and market efficiency argument*: Introducing balancing obligations on RES will ensure a level playing field with other market participants and stimulate competition. RES producers will be incentivised to improve wind forecasting (e.g. data from Spain shows an important improvement of forecasting of wind generation: between 2006 and 2010, the error of wind output forecasts /4 hours before real time/ felt from 17% to 10%) and thus reduce their exposure to balancing risks and as a result, imbalance costs. Furthermore, imposing balancing responsibility on RES operators can boost the development of liquid and competitive ID/balancing markets since it offers new opportunities for BRP service providers and RES operators themselves. It will also improve market functioning in general.

- *Reality check argument*: balancing obligations have been successfully introduced already in a number of markets and the experience indicates that as the majority of RES generation opt for outsourcing balancing responsibility to another supplier/BRP, the

market for balancing services has developed well. This development is reflected in a sufficient number of competitive offers in those markets, establishment of specialised service companies and active participation of foreign companies, as well as a variety of services offered. The imbalance costs remains in the range of 1-3 EUR/MW and can be assumed by the RES producers without significant impact on their economic situation. Furthermore, there are no widely known cases of complaints from the side of RES producers regarding the degree of competition among the balancing service providers.

Experience by country

Rules for balancing responsibility and main consequences for RES

Norway: All market actors are balance responsible from the beginning of the liberalisation, independent of technology used or green certificates received. They can either take that responsibility by themselves or ask a third party to provide them with that service. Imbalances are relatively small and balancing cost is considered low.
Finland: All market actors are balance responsible. Balancing of smaller electricity users is handled by their electricity retailer or by joint ventures.

The Netherlands: Since 2001, all market actors (including RES) are balance responsible for their offtake and/or production and must have balancing arrangements. Market actors can outsource it to a BRP (a legal entity recognised by the TSO) and most of them do. For small customers (including those with RES) the supplier is obliged to take over the balancing responsibility.

Belgium: RES operators connected to the medium voltage and high voltage grids have balancing responsibility. A RES operator can be a BRP himself (which is de facto only realistic when the RES operator has access to back-up capacity via own assets or the intra-day market) or he can outsource balancing responsibility to another BRP (done often by independent RES operators that only own RES generation capacity). This BRP is usually a supplier that also buys the production from the RES operator (PPA-type contracts). The BRP/supplier (PPA owner) charges the RES operator for the balancing service by applying a discount on the price he offers for the RES production. RES operators have of course the possibility to sell their production to any BRP/supplier based on the best offer (i.e. the BRP/supplier that requires the lowest discount for balancing, profile service, etc.).

Thus competition among potential buyers of RES electricity also implies competition for offering balancing services at the lowest price.RES operators connected to the low voltage grid (PV prosumers) are treated like any other residential consumer: the supplier who usually also takes over the role of the BRP has to cope with imbalances in his portfolio. Due to the lack of smart meters the imbalances caused by PV can't be identified and allocated individually thus the cost are socialized among all customers of this supplier.

Spain: Balancing responsibility for subsidized RES was progressively introduced, first for large units (>10 MW) in 2004, and for all units in 2007 and as a result, the quality of forecasting has notably improved. No relevant economic impact for subsidized RES producers has been noted and they support an estimated cost of imbalance as any other market undertaking.

Types of balancing service providers

Norway: Most medium sized RES producers manage their RES balancing by themselves in a portfolio with their other assets. Balancing service providers for small RES producers, which want to outsource this work, are traditional utilities (e.g. Agder Energi, Statkraft), but also pure

origination / trading / portfolio management companies (e.g. Axpo, Bergen Energi, Markedskraft and NEAS).
Finland: Utilities are the main providers of balancing services. There around 300 listed BRPs in the market.

The Netherlands*:* There are more than 30 BRP's with a full license and some 30 more with a limited license in the Netherlands. (Full license means that a recognized legal entity is allowed to bear Balance Responsibility for grid connections. The entity with a limited license is not allowed to do this). Most of them are (trading departments of) energy companies and the rest are oil companies and banks.

Belgium: More than 70 BRPs, mostly utilities, large customers and some banks.

Spain: RES producers can handle balancing responsibility themselves and bid independently into the market or they can outsource it to another BRP, the company who will integrate forecasts of different RES plants into a unique bid in the market and will assume the cost of the imbalance of the portfolio as a whole. The cost of the imbalance will be charged individually to each plant.Dominant operators can only act as representatives of the plants they own. However they cannot integrate the bid of subsidized RES plants with conventional generation units. There is also an obligation for incumbents to act as "last resort representatives". In this case, incumbent operators are allowed to charge 10 €/MWh to RES producers, when regular representatives are charging less than 5€/MWh, as a fee. Additionally RES producers will have to assume the costs of the imbalances. Additionally to the obligation to bid, RES producers are obliged to be connected to a control centre to receive instructions from the TSO in cases production has to be limited because of excess of generation in the system, as well as sending real time metering to the TSO. This kind of services can be provided by any operator with a control centre service, included dominant operators, and are different from the representation in the market.

Number of offers of balancing services

Norway: At least 4 from the trading companies mentioned above, plus some from traditional utilities.

Finland: It depends how RES-generator is understood. For micro-generators there are currently approximately 10 electricity retailers who advertise that they buy micro-generated electricity.

The Netherlands*:* Most suppliers in the Netherlands offer their customers "green electricity" as a separate product (through Certificates of Origin). Therefor RES generators have no problem getting offers from several suppliers/BRPs because these parties want to buy the electricity / certificates for their customers. This contract usually includes the balance responsibility of the RES generator.
Belgium: RES operators usually sell their generation on the market based on bilateral PPA-type contracts. The PPA owner takes over (sometimes partly) the price risk, volume risk, and profile risk and balancing risk; we estimate that there are at least 5 parties offering such contracts

Spain: The level of competition is enough to say that this has not been an special issue in Spain for RES generators.

Extra cost incurred by RES producers when they assume balancing obligations

Norway: For very small producers it is typically cheaper to outsource that responsibility instead of building up the necessary competency to manage their installations themselves.

Finland: RES producers, as all generators, have balancing responsibility. That is the same cost as any generator entering the market.

The Netherlands*:* It is difficult for an ordinary RES producer to be a BRP, so most of them outsource balancing responsibility to a supplier/BRP. They usually pay a percentage of the electricity price for the balancing costs. Some BRPs have portfolio's to accommodate intermittent RES and the competition among BRPs guarantees efficient costs levels for RES producers. The extra costs occurred for a RES producer will differ and is highly correlated with the predictability of its production. Typical costs would be between 1 and 3 EUR/MWh.

Belgium: extra costs are difficult to estimate as they depend on individual forecast accuracy, portfolio, flexibility of the system at a given time. Moreover the system of imbalance pricing in Belgium has changed in 2012, so there is not a lot of data available.

Spain - The level of extra cost of imbalance is between 15-20% of day ahead market price. For a wind farm, it means around 2-3 €/MWh

Cases of complaints from RES producers against unfair competition in this area

Norway: No, before the introduction of the subsidy scheme some producers hoping to receive the subsidy complained, but with the scheme in place there are no longer complaints from the sector, which proves that there is a functioning marked for these services and that the prices are considered fair and not too expensive.

Finland: No complaints are known

The Netherlands: No

Belgium: No complaints are known

Spain - No

Views of the national regulator on the market for balancing services and competition in this area

Norway: The National regulator NVE insisted from the beginning of the subsidies scheme, that all producers have to have balancing responsibility and hasn't changed its view. NVE was worried that exempting some producers from balancing responsibility would lead to more irresponsible behaviour by the beneficiaries and to increased unbalances and cost for the whole sector. That's why all producers have balancing responsibility. There is no indication that NVE is reconsidering that policy, which indicates that they haven't received any complaints and that the market for balancing services works for those small producers that choose to outsource that work.

The Netherlands*:* We believe the ACM is content with the way balancing services and obligations are organized in the Netherlands.

Belgium: The regulator (CREG) supports the idea of equal balancing responsibility of all generators irrespective whether they are RES producers or not. In this context, CREG has also

asked for abolishing the special balancing regime that exists for offshore wind. Regarding the market for balancing services offered to RES operators, no official CREG position exists.

Spain: No relevant concerns on this issue.

Union of the Electricity Industry - EURELECTRIC aisbl
Boulevard de l'Impératrice, 66 - bte 2
B - 1000 Brussels • Belgium
Tel: + 32 2 515 10 00 • Fax: + 32 2 515 10 10
VAT: BE 0462 679 112 • www.EURELECTRIC.org