

EURELECTRIC background notes for intervention of its representatives at the Florence Forum on 4-5 June 2015

2. Internal Energy Market: implementation of and compliance with the Third Energy Package

2.1. Electricity network codes and guidelines: what has been done - what is missing?

Key questions for discussion:

- 1. Once adopted, what are the main challenges concerning the implementation of network codes and guidelines?*
- 2. What other significant areas are not covered yet by network codes/guidelines?*
- 3. In your view, is the process for the development of network codes and guidelines fit for purpose in the future? If any, what elements of such process should be revisited?*
- 4. Are there any positive elements that can be brought forward from the gas network codes development?*

EURELECTRIC's views:

- 1. Once adopted, what are the main challenges concerning the implementation of network codes and guidelines?*

The European Commission, ENTSO-E, ACER and European stakeholder organizations have devoted considerable time over the past few years to the development of the network codes and guidelines for electricity. The aim should now be to have them adopted as soon as possible and start with the implementation process.

The implementation at national (and regional level) and monitoring of network codes and guidelines will probably represent an even greater challenge than their elaboration. In particular, the codes/guidelines define a lot of requirements – some of them are non-exhaustive, meaning that choices will have to be made in order to define what still has to be developed, such as regional agreements, common methodologies, etc. However, we should keep in mind that convergence across Europe should be a number one priority throughout the implementation of the codes. It should be ensured, that maximum ranges on capabilities of grid users are applied only when necessary. Also, it is important to highlight that what were originally intended to be market facing codes have ended up as market related guidelines, meaning that they lack a sufficient degree of harmonization. The challenge now is to ensure that harmonization and real obligations are created to bind markets and TSOs on pan-European basis¹.

EURELECTRIC therefore welcomes the establishment of European Network Code Committees and the overall coordination done by ACER. This set-up will help, as an overarching structure of all network codes/guideline to:

- monitor their implementation process, share views, formulate recommendations, etc.
- contribute to a more informed decision-making process for the methodologies and rules still to be developed.
- provide support for their future revision, where appropriate.

¹ For technical codes such as grid connection and system operation however, convergence of technical issues impacting DSOs is not necessary.

To make the stakeholder committees an effective body in the network process, it will be necessary to create sufficient information stream on all ongoing evolutions regarding implementations, demands for exemptions, derogations, ... This information will be needed **both ex-ante** in due time before any (national/regional) implementation is made or derogation is granted **and ex-post** to be sufficiently aware of the status of the implementation in all member states.

Furthermore, **such structure at European level should be completed by similar structures at local/regional level as implementation issues will be raised first at this level.** We therefore urge ACER and ENTSO-E to put pressure on the National Regulatory Agencies and the local TSOs to actually set up National Structures and Regional Stakeholder Committees in Members States where these are still missing. The links and the coordination process between the Stakeholders' structures set up at local/regional and European levels should be further clarified.

2. What other significant areas are not covered yet by network codes/guidelines?

EURELECTRIC believes that finalisation of the codes under preparation should be prioritised. The network codes/ guidelines cover the major relevant areas but EURELECTRIC believes that more needs to be done to ensure consistency between them. In particular, there should be a balance between the requirements put on system users in the Connection Codes and those placed on TSOs in the Operational Codes.

Efforts should now focus on the swift adoption and implementation of network codes at national level. Should new codes be developed in the future and/or should current codes be restructured, the European Network Code Stakeholder Committees should be closely involved. While the stakeholder committee does not have decision making powers, it should provide a representative forum for exchange of views on amendments, and provide when appropriate amendment proposals into the formal process led by ACER.

3. In your view, is the process for the development of network codes and guidelines fit for purpose in the future? If any, what elements of such process should be revisited?

- Should further codes be elaborated in the future, EURELECTRIC believes that **the process for the development of network codes and guidelines in the future should be adapted based on the lessons learned and from good practices in the gas network codes development** (see question 4).
- Impact assessments should be developed in a transparent manner, published and consulted upon in parallel to the FG and NC development. This is in contrast to publication at the end of the process when everything has been settled. Before any FG is developed there should be a thorough scoping exercise (as is the case with the Transmission Tariffs NC) with involvement of stakeholders. Only after that a decision should be taken whether or not a FG and NC are needed.
- EURELECTRIC believes that there is a **need to discuss and review the governance process for developing network codes. Stakeholders' involvement should be strengthened and convergence across Europe should be a number one priority throughout the entire development and implementation of codes.** The implementation of network codes is the backbone of the market integration process, and the governance process must ensure coherent, good quality codes. **Decisive action should be taken to strengthen the independence of the governance process.** We remain strongly concerned that ENTSO-E is given extensive power in elaborating the network codes, despite being an interested party. We would therefore encourage opening a discussion on actions increasing the control of the NC drafting process by ACER or the EC.

While the European Network Codes Stakeholder Committees to be established do not have decision making powers, they should provide a representative forum for exchange of views on amendments, and provide when appropriate amendment proposals into the formal process led by ACER. A proper representation within the Stakeholder Committees should be ensured, depending on the subject of the Network Code.

4. Are there any positive elements that can be brought forward from the gas network codes development?

EURELECTRIC/Stakeholders are generally very pleased with the open and transparent approach ENTSOG has taken so far to develop the various NCs. ENTSOG organizes regular meetings throughout the process (generally 4 or 5 so called Stakeholder Joint Working Sessions - stakeholders can decide whether they will be prime-movers (= commitment to participate in a lot of extra (bilateral) meetings with ENTSOG's staff), active participants, or only consultation respondents) where they make sure all the relevant issues are raised and debated. ENTSOG also systematically organizes a feedback workshop after a consultation has taken place. Before sending a draft NC to ACER they run a Stakeholder Support Process (SSP) where stakeholders can say about each section of the NC whether they support it fully, partially or not at all and comment.

2.2. Update on (early) implementation projects (forward, day-ahead, intraday)

Key questions for discussion:

5. *What are the main obstacles in the implementation of the CACM Regulation (e.g., definition of capacity calculation regions)? How can these be tackled?*
6. *What can be done to provide for the smooth implementation of the agreed European intraday platform? How can consistency be ensured with local implementation projects?*
7. *Beyond the balancing network code, on what elements would we need more harmonisation to allow for an effective cross-border balancing market to develop?*

EURELECTRIC's views:

5. What are the main obstacles in the implementation of the CACM Regulation (e.g., definition of capacity calculation regions)? How can these be tackled?

Our main concern is the smooth implementation of the day-ahead market coupling and the central intra-day trading platform without delay. Implementation of the CACM should support the swift implementation of these.

Specific comments from EURELECTRIC on the upcoming comitology process on the Network Code Forward Capacity Allocation:

Since the beginning of the discussions on the Network Code on Forward Capacity Allocation (NC FCA), EURELECTRIC has been calling for the definition of an appropriate and clear firmness regime for Long Term Transmission Rights.

Since capacity rights are made to facilitate cross-border trade by providing hedging instruments against the risk of price differentials, unduly limiting the firmness of such products would be detrimental to liquidity and competition in forward electricity markets. Hedging instruments have indeed to hedge their owner as much as possible and the risks should be borne by those best-suited to assess and mitigate them (i.e. Transmission System Operators (TSOs)).

In this respect, we fully support the view taken by ACER in its recommendation on the NC FCA published on 22 May 2014 as regard the firmness regime. We very much agree with ACER's recommendation that the total congestion income used for calculation of capped compensation in case of curtailment should include the total congestion income arising from all timeframes over the calendar year (and not the one month threshold proposed by ENTSO-E).

For the ongoing early implementation of the code, it is crucial to ensure that ENTSO-E should adapt the harmonized allocation rules to the most advanced rules in force in the CWE regions, at least as regards firmness regimes, as these are mostly in line with the objectives envisaged by ACER guidelines and favorable to the efficiency of transmission rights as efficient hedging products. If these rules cannot be fully implemented on some European borders immediately after the entry into force of HAR, specific derogations for a limited period of time and subject to the approval of NRAs could be included in the annexes to reduce the firmness of the allocated PTR or FTR.

6. What can be done to provide for the smooth implementation of the agreed European intraday platform? How can consistency be ensured with local implementation projects?

For many years and on many occasions, EURELECTRIC has raised concerns about the continued delays in the implementation of the cross-border intraday solutions (XBID). Indeed, EURELECTRIC has been urging Europex and ENTSO-E for years to come up with a fully-fledged action plan with clear deadlines and commitments.

EURELECTRIC therefore welcomes that an agreement could be reached among PXs for the implementation of the central European Intraday Platform and urge project parties to stick to the agreed timeline of July 2017 for the go-live date with all Local Implementation Projects (LIPs) attached.

In order to ensure a smooth implementation, we believe that:

- **the implementation of the LIPs by TSOs should be done in parallel of the platform development by PXs and a fallback should be foreseen in case LIPs are not ready on time for the go-live date.**
- On some NWE borders where rather poorly implemented/not workable intraday exists or clear improvements could be obtained. We support the target implicit model with an explicit access to cross border capacity as fall-back solution to guarantee that intraday capacity can be used even when the implicit platform is not available. Nevertheless, we believe that **“quick wins”/clever planning should be implemented locally to allow more cross-border access to intraday capacity, and thus more flexibility to compete in the market in the meantime.**
- **Stronger stakeholder involvement should be ensured throughout the process** – the establishment of the XB ID UG is a first step in the right direction. As market participants will be the main users of the system, they should be more closely involved in the ongoing discussions.

7. Beyond the balancing network code, on what elements would we need more harmonisation to allow for an effective cross-border balancing market to develop?

Considerable work is still required to complete the drafting of the balancing network code to ensure that the code complies with the Framework Guidelines and fulfils the basic principles of efficient functioning and harmonization of balancing markets. A harmonization across bidding zones of balancing periods, procured reserve profiles, contract for reserve, imbalance settlement arrangements and imbalance penalties would assist the development of pan-European primary and secondary markets in balancing timeframe products.

2.3. Update on enforcement of the Third Energy Package

Key questions for discussion:

8. *What should the key priorities be for implementation and enforcement of existing EU energy legislation?*

EURELECTRIC's views:

The completion of the Internal Energy Market is a clear no-regret option. Well-functioning energy markets, supported by a meaningful CO₂ price, will underpin the transition to a low-carbon economy, while ensuring security of supply at the lowest possible cost. The swift implementation of the 3rd Energy Package and the integration of wholesale markets across all timeframes thus remain absolutely crucial objectives.

EURELECTRIC sees the following areas as the priority action points for the completion of the IEM:

- Market integration should focus in particular on developing robust cross-border intraday and balancing markets to ensure that the system remains balanced as the share of renewables continues to grow. Yet, progress on this front is lagging behind.(see more details under question 6)
- There is a need to discuss and review the governance process for developing network codes and strengthen its independence. Stakeholders' involvement should be strengthened and convergence across Europe should be a number one priority throughout the entire development of codes. (see more details under question 3)
- Building more interconnectors is absolutely critical for the furthering of the Internal Energy Market, in particular as the growth in renewables leads to more cross-border trading. Yet, we believe that the need for new transmission lines should be decided on a case-by-case basis following a positive cost-benefit analysis.
- In many markets, the introduction of a capacity element is becoming increasingly important. In this context, we recognise that properly designed centralised or decentralised capacity markets are an integral part of a future market design. EURELECTRIC therefore supports capacity markets that ensure a level playing field for all market participants (conventional and renewables' generation, demand, storage). (see more details under questions 17 to 19).
- We wish to also note that there still remain considerable barriers to entry in some member states. In conflict with the provisions of the 3rd Package but also contradictory to general internal market legislation. For example, licensing rules in some countries deny market entry to companies that do not have a registered office in that country. Furthermore some countries deny access to their energy exchanges to traders who do not speak that language.

3. Electricity market design ongoing initiatives

3.1 Challenges to market operation and integration of renewables

Key questions for discussion:

9. *What market distortions should be addressed as a priority? How?*
 10. *What are the major obstacles for full integration of renewable energy generators into the wholesale market? How can these be tackled?*
 11. *How can regional convergence and cooperation in support schemes be further promoted? What would be the advantages or disadvantages of shifting towards support mechanisms for renewables focused on investment aid instead of operating aid?*

EURELECTRIC's views:

9. What market distortions should be addressed as a priority? How?
10. What are the major obstacles for full integration of renewable energy generators into the wholesale market? How can these be tackled?

- The same rights and obligations of market participation should be applied to RES in line with what happens with other market participants (operational integration of RES). For example the exclusion of some renewable output from mainstream wholesale power market discipline needs to be addressed as a matter of urgency.
 - o Move towards placing operational market responsibilities on all generation, either directly or indirectly through a service provider ;
 - o Furthermore, renewables should compete on a level playing field with other generation as regards balancing arrangements, dispatch and network charges;
 - o RES generation should bear the same technical requirements and charges for grid connection and network use as other generators;
 - o Remove the priority of dispatch for RES technologies and, especially, incentives to produce when market prices are below variable costs;
 - o At the same time, gate closures of national and cross-border intraday markets should be moved closer to real time to enable operational integration of renewables.
- Cost-efficient RES support schemes should maximise market orientation and minimise market distortion to achieve competitiveness;
- Poorly designed Feed-in-Tariffs (FIT) or Feed-in-Premiums (FIP) have the potential to distort the market by incentivizing inefficient dispatching and increasing the likelihood of negative prices;
- We need the full execution of an integrated European energy market, i.e. the completion of the IEM. This includes the implementation of the Third Energy Package and the integration of wholesale markets across all timeframes; Interconnections also help to integrate RES, for which the PCI process is helpful.

Distributed generation:

- Development of distributed generation should take place cost efficiently, there should be a level playing field between all generation technologies, storage and demand response;
- When the regulatory framework is stable and provides a market based environment, companies engage in developing products and services that make it easier for consumers to become prosumers;

- The key factor for the efficient development of distributed generation is the design of grid tariffs: the balance between volumetric and capacity charges, and the removal of taxes and levies. This is well developed in the draft paper on distributed generation, and also in the Issue management paper. We need to make a strong point about this;
- Phasing out power purchase obligations and price regulation are key prerequisites for market integration of prosumers;
- DSO regulation should facilitate economically efficient investments in smart grids in order to foster the integration of prosumers into the power system and market;
- Regulation should ensure a fair allocation of costs among different customers' categories, encourage customers towards overall system efficiency (not only energy efficiency as energy consumption savings) and a full and timely cost recovery for DSOs, irrespective of the current (short term) utilisation of the network, as long as they make efficient decisions in managing and building their networks. Network charging should evolve towards more capacity based network tariffs to ensure that customers pay for the grid capacity they use; Small scale should not be seen as a reason for not to apply market principles. Also prosumers can have for example balancing responsibility, and outsource the service from an aggregator/supplier.

11. How can regional convergence and cooperation in support schemes be further promoted? What would be the advantages or disadvantages of shifting towards support mechanisms for renewables focused on investment aid instead of operating aid?

Regional convergence and cooperation on support schemes:

- For the period after 2020 a market-based and cost-effective deployment of RES has to take place, progressively phasing out subsidies and with the ETS as main driver for mature low carbon technologies, accompanied by dedicated support to immature technologies primarily through research, development and demonstration support.
- Prior to 2020
 - o Increased coordination of national policies, including RES support, especially in the regional context. Coordination should start from the early stages of policy development. Gradual harmonisation of support levels would be beneficial from the perspective of cost efficiency.
 - o partial opening of the support schemes is a positive sign, member states should examine this option
 - o common projects.

Investment aid:

- Investment aid does not distort operation of the plant, and thus causes less distortions on the wholesale market
- Investment aid involves less uncertainty for the RES producers, when it's paid during shorter period of time)
- It is more suited to the cost structure of RES, since this is mostly investment cost
- It would be a complement to market revenues, so RES would have an incentive to adapt its dispatching to market signals
- On the other hand, also investment aid would conflict with the preferred means of signalling a need for carbon abatement, which is the EU ETS.

3.2 The flexibility challenge

Key questions for discussion:

12. *What are the stakeholders' views of the current draft electricity balancing code? To what extent can future flexibility challenges be addressed through this tool?*
13. *How can small and large consumers be encouraged to be more active in providing and benefitting from flexibility? What market barriers prevent demand participation?*
14. *What should be the roles of TSOs, DSOs and other existing or new players as regards flexibility?*
15. *What role can electricity storage play in delivering flexibility to the market? What are the shortcomings?*
16. *What else needs to be done in order to ensure flexibility can be provided within the market?*

EURELECTRIC's views:

12. What are the stakeholders' views of the current draft electricity balancing code? To what extent can future flexibility challenges be addressed through this tool?

- Intraday and balancing markets are the main tool to value flexibility. There is a need for more harmonization in balancing. A harmonisation across bidding zones of balancing periods, procured reserve profiles, contracts for reserve, imbalance settlement arrangements and imbalance penalties would assist the development of pan-European primary and secondary markets in balancing timeframe products. Furthermore:
 - The network code should include a clear definition of balancing responsibility.
 - The network code should provide a clear description of TSOs activation philosophy and ensure that TSOs allow the market to determine the most economic dispatch until close to real time and thus the ID markets should be strengthened; and only perform the residual balancing of the system. Role and responsibility of BRP should be included.
 - TSOs should not be granted a right to offer balancing services as this would imply owning and operating generation assets, which conflicts with the unbundling rules of the 3rd Energy Package.
 - Balancing should be a fully market based solution and the code should not allow mandatory participation in balancing markets.
 - Proposals currently being prepared by ENTSO-E would imply potentially a list of 37 different balancing standard products. This can hardly be called standardisation. There is a need to move towards fewer numbers of standard products by potential merger/fusion, deletion of some products.

13. How can small and large consumers be encouraged to be more active in providing and benefitting from flexibility?

- Demand response will develop when the market signals the needs. Demand side response should be market based and developed on a natural level playing field with other flexibility resources; in the end demand response is demand elasticity in the market.
- Deployment of smart meters and the opportunity to get settlement at balancing period level for all consumers would make it possible to participate in all markets.
- Phasing out regulated prices is key to further demand response development. Going further, more flexible price signals are key to develop demand side response through supply contracts. A large part of household electricity bills is regulated (taxes, levies). This part of the bill

remains unaffected by changes in the wholesale prices. The larger it is, the lower the signalling effect for customers, reducing the likelihood that customers' flexibility potential will be used.

- Consumers flexibility potential also highly depends on the appliances they own and operate, but also on their lifestyles and more generally on their individual preferences. Engaging smaller consumers successfully requires clear demand response signals and tools that are easy to set and use (automation). Demand response will develop on a larger scale when consumers see a real value in these services and hence wish to engage.

What market barriers prevent demand participation?

- Flexibility market mechanisms are already in place and should thus be priced through improved day-ahead, intra-day, balancing and ancillary services markets. The design of the current balancing and intraday markets must be improved, introducing, for instance,
 - a) possibilities to trade balancing forward and more sophisticated products, and
 - b) timeframes that better fit the flexibility requirements (ramp-up, down rates, etc.).
 - c) Additional flexibility services for system operators, related to smart grids, have to be developed.
- The 3rd electricity directive and the Energy Efficiency Directive (2012/27/EU) provides the legal background for enabling demand side response to participate alongside supply in wholesale and retail markets, including balancing and ancillary services provision. Proper transposition at national level will ensure that flexibility can be provided to the system in the most efficient manner. Specific demand response models should not be pushed through regulation to the detriment of others.
- Technical specifications for participation in these markets must include the participation of aggregated demand side response. European energy policy should ensure that key principles are met when defining the appropriate market design. EURELECTRIC engages with main stakeholders in this field in order to define operational and cost-efficient solutions to handle the relations between third party aggregators and BRPs.
- Regarding third party aggregation, a number of key operational arrangements must be put in place in order to handle the impact of this activity on other market players for instance:
 1. Ensuring that the demand response value is market-based in order to avoid any extra costs to the system, customers and other actors.
 2. Implementing adequate communication between third party aggregators and BRPs/suppliers to ensure that demand response can take place effectively.
 3. Ensuring that BRPs/suppliers are compensated for the energy they inject and that is re-routed by third party aggregators, this payment should reflect the BRP/supplier actual sourcing costs.
 4. Ensuring that, on a commercial basis, BRPs/suppliers are able to renegotiate supply contracts to take into account the indirect effects of demand response (e.g. rebound effects) and consequent impacts on sourcing costs.
 5. It is critical to ensure that an appropriate baseline methodology is applied in order to define the actual volumes that being shifted.

As mentioned above, interactions between customers, third party aggregators, BRPs/suppliers and network operators need to be clarified regarding the adjustments to be made to existing contracts, the type of information to be exchanged and the need for new operational or contractual arrangements. These arrangements should provide a fair sharing of the additional costs, in order to allow a sound development of demand side flexibility services.

A standardized contractual approach, supported by standardized processes, could facilitate the operational arrangements between BRPs and third party aggregators. EURELECTRIC is ready to collaborate further with SEDC on this topic.

The standardized contractual framework should provide operational solutions to deal with the following open issues:

- How to define the **baseline methodology**, bearing in mind that the baseline ultimately defines the demand response volumes that the third party aggregator sells on the market
- How to ensure that the **BRP is financially neutral to the third party aggregator's actions?**
- Which **information should be exchanged** between third party aggregator and BRP to ensure that demand response takes place effectively?
- How to **handle the risks**, such as the credit risk?

14. What should be the roles of TSOs, DSOs and other existing or new players as regards flexibility?

- First of all, we need to define what is meant by “flexibility” to ensure we all have a common understanding. For example: is it encouraging the build/ availability of fast response generation and/or demand; is it demand shifting to different time slots; or all of these?
 - Suppliers are already providing significant flexibility to the system through offering demand side response and other innovative services to their customers, through time-varying prices for example. For instance, suppliers can use flexibility to optimize their portfolio in a cost-efficient way. Customer engagement is key and demand side response offered by suppliers allows simplicity, efficiency and satisfaction for customers (single bill, single counterpart). Suppliers will continue to play a key role in providing flexibility services.
1. **DSOs** are increasingly being requested to move away from the ‘connect and forget’ approach towards more active system management and optimisation to make sure that only efficient investment takes place and that network tariffs are cost-efficient.
 - DSOs must be allowed to conduct constraints management if the secure operation of the distribution system is threatened, and DSOs should be allowed to access the relevant data for this purpose. This could take the form of access to information from the demand response bids, including operation schedules (as early as possible and at gate closure time at the latest) and activations located in congested zones, in order to detect network constraints. On the other hand, DSOs should actively communicate on the availability of the network for purposes of activating decentralised customers for DR aggregators’ bids (informational purpose).
 - This could be facilitated with a traffic light system informing about the network availability (green/orange/red states). It would provide the relevant information to market parties as well as transparency on how “available” different customers are to deliver their services to aggregators, taking into account network constraints. Such

processes will require more detailed analysis as they are complex to set and implement.

- In an emergency situation in order to ensure the safety and integrity of the distribution network, DSOs should be able to directly control the customer's network connection at (not beyond) the connection point.

Sensible regulation should allow market parties to send unambiguous price signals (revealing market scarcity) to customers. As situations might arise in which the interests of suppliers to use load flexibility for supply portfolio management will be in conflict with DSOs to maintain local grid stability, a new set of contractual agreements will be needed between the different market players.

Besides the role of DSOs, DSOs and TSOs could investigate possible options for coordinating the use of flexible resources:

1. Active / Reactive Power management

DSOs and TSOs should:

- Carry out integrated Transmission/Distribution grid analysis at regional level in order to minimise long term costs;
- Have the freedom to jointly implement an agreed tailored approach;
- Be able to select the best solutions for solving local challenges (TSO-DSO-DER);

2. Network planning procedures

DSOs and TSOs should:

- Exchange DER forecast in order to optimise power flows at the T/D connection point. Work together to increase citizens' acceptance of network construction projects.
- Work together in defining technical requirements for new technologies and ancillary services.
- Align network planning on the interface.

3. System Operation

DSOs and TSOs should:

- Develop information and data exchanges and agree on common procedures to do so.
- Work together in defining mandatory assistance procedures (cascading principles between network operators).
- Coordinate real time congestion management procedures (short term) with integrated markets.

15. What role can electricity storage play in delivering flexibility to the market? What are the shortcomings?

All different sources of flexibility, such as generation (including storage), demand response and cross-border participation, should be considered, allowing flexibility to be delivered in the most cost-efficient way. The choice of the best compatible technology should be left to the market. All market participants (of any type) should compete on a level playing field. The proper valuation in the market of flexible capacity is the key. The choice of the best compatible technology should be left to the market.

16. What else needs to be done in order to ensure flexibility can be provided within the market?

The full availability of existing interconnectors and the building of new interconnector capacity is essential for enabling the full use of European-wide flexibility resources. The benefits of flexible day-ahead, intraday and balancing energy deliveries for all stochastic needs across Europe should be taken fully into account in the cost-benefit analysis of new grid investment projects.

3.3 Restoring proper investment signals in the power system

Key questions for discussion:

17. What can be done to ensure that Member States rely on resources outside their borders as a contribution to their security of supply?

18. What would be the added value and the challenges arising from a common assessment of generation adequacy at regional and/or at Union level?

19. How can adequacy assessments and their results provide a basis for a decision on the need for CRMs? How can it be ensured that CRMs, if needed, are the most competitive and least distortive for the market? What features of CRMs could be made common at regional and/or at Union level?

EURELECTRIC's views:

17. What can be done to ensure that Member States rely on resources outside their borders as a contribution to their security of supply?

We see arising conflicts between different logics at play in moments of system stress that occur simultaneously in two Member States:

- Contract logic
- Market logic
- System logic

The “contract logic” is based on capacity that has been contracted in another Member State. The “market logic” is based on the day-ahead/intraday/balancing markets price signals. The “system logic” is based on the incentives faced by the system responsible entities, especially TSOs. In a well organised and efficient system, all the three logics should be coherent with each other. However, “market logic” can contradict “contract logic” if market coupling is inadequate or even non-existing (e.g. balancing markets), or if price caps, gate closure or other market design elements are not harmonized. “Contract logic” can contradict “system logic” if TSOs incentives and decisions are simply national and there is no transparent monitoring of transmission constraints (e.g. cross-border capacities) as reported by TSOs. “System logic” can contradict “market logic” if the system responsible entities have power and incentives to bypass market trading without proper and exhaustive justification (essentially force majeure events).

On the other hand, the system will perform if flows follow market signals and scarcity prices and other market design elements are coherent across systems, capacity contracts are honoured even in stress situations, and TSOs and other system responsible entities are required to coordinate among themselves and to base their decisions in a transparent way open to examination by the remaining market agents.

According to this, EU-wide regulation (e.g., through a modification of the SoS Directive and the NC emergency and restoration) should establish that contracts (CRM) between Member States must be honoured at moments of system stress, unless Force Majeure circumstances make unavoidable curtailing interconnection capacity. This should then be further developed in secondary legislation of the third package, in particular the network codes and guidelines.

18. What would be the added value and the challenges arising from a common assessment of generation adequacy at regional and/or at Union level?

The establishment of regional capacity markets requires common regional adequacy assessments. Performing purely national adequacy assessments would not be efficient. System adequacy assessments should include economic viability checks to verify whether the generation capacity they assume to be available actually has the economic conditions to do so. More specifically, it should not only be assumed that capacity of certain providers will be available for the system just considering – for instance – its residual lifetime, but it should also be verified whether current market/regulatory arrangements lead to a viable economic situation for existing providers or new investments. TSOs must cooperate fully to conduct these assessments and a common, transparent methodology has to be set up in order to let the market understand the outcome of TSOs' assessments.

19. How can adequacy assessments and their results provide a basis for a decision on the need for CRMs? How can it be ensured that CRMs, if needed, are the most competitive and least distortive for the market? What features of CRMs could be made common at regional and/or at Union level?

Capacity markets are market-based solutions that deliver long-term system adequacy by properly valuing reliable and firm capacity and thereby providing signals for necessary existing capacity to stay online or new capacity to be developed.

The overarching goal of any capacity market must be to ensure generation adequacy, i.e. firm capacity. Other political objectives such as decarbonisation should be met through instruments like the EU Emissions Trading System (ETS) and should therefore be left out of the capacity market debate. Consequently, the capacity market should only value plant availability based on their firm contribution to system adequacy.

In order to maximise cost-efficiency and market orientation, any capacity market should follow a set of fundamental design features:

- Market-based – Capacity should always be valued in a competitive market. Capacity prices should be allowed to move freely without distortive price regulation;
- Technology-neutral – All technologies that provide firm capacity should be able to participate in the market without discrimination;
- Open to new and existing plants – Market access should be based on a level playing field between both new and existing firm capacity providers;
- Regional – The capacity market design should take regional interdependencies into consideration and allow the selection of the cheapest set of capacity on a regional basis, taking into account interconnection constraints;
- Open to generation, demand response and storage – All forms of capacity throughout the value chain should be able to participate in the market.

- Geographic neutrality - All assets that provide firm capacity should be able to participate in the market without discrimination based on their location; this includes well connected assets in third countries.

A properly designed capacity market should have no effect on the dispatch order: it prices availability/firmness, not the actual energy production or energy delivery. However, capacity markets that keep sufficient capacity in the system to ensure long-term system adequacy should experience fewer scarcity periods. Total system costs must be kept under control by correctly identifying the amount of capacity needed for long-term system adequacy. Properly designed capacity markets will only attract this pre-set amount of capacity.

At regional and/or at Union level, the following set of fundamental elements should be defined and harmonised:

- Determination of the capacity needs (volume regulation) – the regional adequacy assessment should result in the total necessary capacity to be procured, either through a centralised auction process or through a well-defined (and regulator approved) methodology that determines how much capacity each supplier or customer should procure in obligation certificate systems in relation to the customers' consumption. In any case, a homogeneous and transparent methodology should determine the adequacy target level that the regulator (or government) wants to achieve.
- Product definition
 - The capacity market should put a value on firm capacity to be available at Y+L in periods of scarcity; in order to have cross-border products, the lead time "L" should ideally be the same across the region where the cross-border participation is possible.
 - There is a need to provide an accurate definition of firmness. Capacity markets should have the provision of firm capacity as their overarching goal. Thus, a clear line should be drawn between capacity markets and other markets such as balancing markets, and a product distinction should be made between the products in capacity markets and products such as reserve power procured by TSOs in flexibility markets.
 - Diverging capacity products within regions may lead capacity providers to privilege specific markets when offering their capacity within each region. Thus, while maintaining the core principle of delivering a level playing field, capacity products should be as harmonised as possible.
- Right to free exit – capacity providers should be entitled to freely decide when to operate/mothball/close down their assets if their capacity has not been contracted. To facilitate these decisions, secondary markets should be set up to trade the obligations that capacity providers have entered into with other market participants.
- Product details – elements of the capacity product to be valued in the capacity market such as its trigger price, duration and other characteristics must be well defined. The trigger event for the activation of contracted capacity should be market based. Contract lengths should also be defined so that they adequately reflect the need for capacity to be available for long-term system adequacy.
- Penalty regimes – the penalty regime should reflect the scarcity in the system. Scarcity should be revealed through market prices (i.e. exceeding the trigger price signal). The preferred option would thus be basing the penalty on market prices as well. Harmonising penalty regimes (in terms of the principles applied to derive them) prevents the risk of building

capacity not where it is most needed/valued, but where penalties are lower. National regulators should coordinate amongst themselves and with TSOs to define the appropriate penalty regimes and establish common principles.

- In decentralised capacity models, suppliers need to be able to prove that they have sufficiently contracted capacity corresponding to their sales and according to a well-defined methodology. The methodology should create fair incentives to all suppliers.
- TSO coordination requirements regarding the availability – TSOs should be jointly responsible for managing infrastructure in a way that allows existing capacity market assets in a system to contribute to the security of the total regional systems to the optimal possible physical extent. Therefore, TSOs must cooperate closely in the case of a stress event, and it should be possible to verify if cross-border capacity within the region (both transmission and contracted capacity market assets) is was available. This requires TSOs to define transparent cross-border verification procedures. TSOs also need to respect existing cross-border contracting of capacity resources.
- Price regulation – Capacity should always be valued in a competitive market and capacity prices should be allowed to move freely without distortive price regulation.

3.4 Strengthening the secure system operation at regional level [14:30-16:30]

Key questions for discussion:

20. Compared to the current situation, what additional competences could RSCIs have in the future? What can be done to strengthen the role of RSCIs? What would be the gains and the shortcomings?

21. What instruments would be best for strengthening the role of RSCIs? Within what timeframe do you see this happening?

22. Looking beyond, do you see a need for a wider integration of system operation at European level in the long term to cope with the challenges of a low-carbon energy mix?

EURELECTRIC's views:

20. Compared to the current situation, what additional competences could RSCIs have in the future? What can be done to strengthen the role of RSCIs? What would be the gains and the shortcomings?

21. What instruments would be best for strengthening the role of RSCIs? Within what timeframe do you see this happening?

Cross-border participation and a seamless cooperation among TSOs will be the cornerstone of any market design adjustments that aim to ensure security of supply. EURELECTRIC therefore welcomes the efforts made by ENTSO-E to achieve greater coordination based on an all-TSOs Multilateral Agreement to be developed in 2015, making participation in Regional Security Coordination Initiatives (RSCIs) mandatory for interconnected TSOs. This is a step in the right direction.

22. Looking beyond, do you see a need for a wider integration of system operation at European level in the long term to cope with the challenges of a low-carbon energy mix?

- Cross-border participation and a seamless cooperation TSOs will be the cornerstone of any market design adjustments that aim to ensure security of supply. TSOs should indeed act with a clear European focus and **act as one** – ENTSO-E should be the driver to ensure such goal. Establishing regional system operators (SO) could be a first step towards more operational coordination of

TSOs in the future; EURELECTRIC already defended this approach in the 2007 discussion paper about Regional Independent Operator (RIO). EURELECTRIC is currently working on developing more concrete ideas on how to ensure this goal in particular on what should be the economic incentives and regulation needed to improve TSO cooperation.

- This goal should apply for operational issues, but also for all TSO actions to facilitate the market (i.e. capacity calculation,...). Therefore we welcome initiatives like the harmonised set of auction rules, the merger of CASC and CAO to a new entity, and we hope over time that all capacity allocations (including e.g. BritNed and IFA) will be managed by the same new allocation entity. This will facilitate market actors' cross-border access and also reduce operational burden on their side.
- There is a need to improve in the future the coordination on the TSOs side to elaborate a genuine common grid model, in particular regarding:
 - the capacity calculation that should be based on a common methodology but also on shared assumptions on congestion planning and management in order to treat XB connections the same as internal connections; in this perspective, we are surprised to see still many different approaches (e.g. GSK methodology) in the flow based market coupling project: EURELECTRIC is convinced that using the same methodology by all involved CWE TSOs, and later by extension also the CEE TSOs, will help creating trust in the flow based model and also make it much more transparent for market participants.
 - sharing costs for cross- border re-dispatch and have the same operational rules and speed as for internal redispatch;
 - coordinated approach to abolish the practice of moving congestion to the border.
 - Same gate closures on borders as within TSO area
 - Cooperation and related cross-border arrangements necessary to make CRMs truly regional.