

## **Consultation on a new energy market design (15 July 2015)**

### **Response of The Netherlands**

#### **1) Would prices which reflect actual scarcity (in terms of time and location) be an important ingredient to the future market design? Would this also include the need for prices to reflect scarcity of available transmission capacity?**

Yes. Our government firmly believes that scarcity prices are an important element in the future European electricity market design. Market prices that reflect scarcity will lead to more reliable price signals. In particular, the removal of price caps can allow for price signals to peak load generators and can in this way contribute to the availability of sufficient flexible capacity during peak periods. Removing restrictions on peak prices is important to ensure well-functioning electricity markets and to stimulate investments. Moreover, wholesale peak prices during scarcity conditions could trigger a (welcome) response from the demand side and other flexibility options, which will increase the flexibility of our energy system.

Concerning scarcity pricing of transmission capacity, we note that scarcity of cross-border electricity transmission capacity is already reflected in the outcome of market-based bidding procedures.

#### **2) Which challenges and opportunities could arise from prices which reflect actual scarcity? How can the challenges be addressed? Could these prices make capacity mechanisms redundant?**

If prices would always be able to reflect scarcity, it would mean that we can expect an increase in price fluctuations. With the further expansion of renewable energy production (in particular wind and solar power) there will be a growing need for flexible capacities. These capacities will be relatively expensive and will have higher variable costs. As a consequence, prices will fluctuate more strongly and more frequently. Allowing prices to reflect scarcity under all circumstances poses a challenge to policy makers to convince consumers and market parties of its necessity. In this respect it is important to note that very high prices during scarcity will especially appear at the wholesale market level; i.e. consumer prices will be more stable and smoothened during the year due to the use of supplier contracts.

Scarcity pricing is also important to incentivize new investments in generation capacity. Investors then need to be able to rely on governments not to intervene in the market in times of high price peaks. In addition stronger price fluctuations can also trigger a response from the demand side, thus allowing for more flexibility in our markets. In this way especially large industrial consumers can profit to the extent that they are able to shift the timing of their demand. Furthermore consumers will get incentives to hedge against price peaks on the wholesale market by using long term contracts. It is difficult to predict to what extent scarcity pricing will make capacity mechanisms completely redundant in any market, but it will certainly improve market functioning and will trigger new investments in capacity. In this sense we consider free pricing in the electricity market to be a "no regret" measure.

#### **3) Progress in aligning the fragmented balancing markets remains slow; should the EU try to accelerate the process, if need be through legal measures?**

Streamlining of balancing arrangements across the EU and in particular within a regional context is an important condition for the improved functioning of short-term electricity markets. In that respect we consider the current development of the Electricity Balancing Guideline of key importance. We understand that the finalization of this guideline by the Commission (and eventually in the comitology process) will take place in parallel with the debate on a new electricity market design. We support this approach. At this stage we find it difficult to assess whether or not there is a need for additional legal measures on top of the upcoming balancing guideline. Moreover, we very much support the current work on the early implementation of the guideline and the formation of coordinated balancing areas (CoBas). Also, in our region TSOs and NRAs have started initiatives aimed at increasing the efficiency of balancing arrangements, possibly through pilot projects. Our government supports these initiatives and will –together with other governments in the NWE region - be more involved in the ongoing discussions at European and regional level to better understand the operational, technical and regulatory challenges and to identify options for improved balancing arrangements in the region.

Furthermore, in the Pentalateral Energy Forum the development of more efficient balancing regimes is on the agenda, following the recent political declaration (June 8). The mandate for a new workstream on flexibility includes support for the development of regionally-integrated balancing markets and support for increasing the efficiency of market-based balancing arrangements. In this context the NL has proposed to assess the role of balancing responsibilities within the Pentalateral region and to explore how a possible harmonisation in this area could incentivize the provision of flexibility.

#### **4) What can be done to provide for the smooth implementation of the agreed EU wide intraday platform?**

It is generally known that the implementation of the EU intraday platform has been delayed for several reasons. We acknowledge the complexity of this project. In our view the involved TSOs, power exchanges, NRAs and the Commission are in a better position to assess what is needed for a smooth and timely implementation of the intraday platform. Nonetheless it is important that governments keep pressure on the process and urge for a swift solution, either through direct contacts with the project parties, or through the Florence Forum. For that matter, in their recent political declaration Ministers of the Pentalateral Energy Forum have called for quick improvements in the cross border intraday market towards the target of EU flow based intraday market coupling.

#### **5) Are long-term contracts between generators and consumers required to provide investment certainty for new generation capacity? What barriers, if any, prevent such long-term hedging products from emerging? Is there any role for the public sector in enabling markets for long term contracts?**

The NL fully supports the remarks in the Commission Communication with regard to the importance of long term price signals to incentivize investments. Indeed long-term contracts between market participants can help reduce risks for capital-intensive investments in the electricity sector. Therefore, we agree that possible obstacles to competitive long-term contracting should be removed. An important pre-condition for allowing long term price signals is – just as in short term markets – to allow the market to determine the prices, i.e. to avoid any price regulation.

Long-term future contracts are already used by demand parties to hedge against short-term price volatility. Sufficient coverage with long-term future contracts is a prerequisite for wholesale market consumers to protect themselves against price peaks in the short-term market. Moreover, a sufficient level of long-term contracts helps to finance investments in new power stations. To the extent that there are barriers that prevent parties to enter into such long-term contracts, these barriers should be removed.

Also competition across borders between producers can be encouraged through the use of long-term contracts across borders. Consumers (primarily industrial users) while covering their needs for a given period, will have more choice between contracts that the different generators in their region can offer. Such contracts for cross border trade can increase competitiveness.

**6) To what extent do you think that the divergence of taxes and charges levied on electricity in different Member States creates distortions in terms of directing investments efficiently or hamper the free flow of energy?**

In a liberalised market in principle the market itself decides whether and where to invest in new generation capacity. One of the fundamentals of the internal market is to seek optimal locations for generation within the EU. National policy schemes, whether it concerns taxes, charges or subsidies for certain technologies, renewable energy support schemes, capacity mechanisms or different tariff systems, often constitute government interventions that influence investment decisions and create market distortions. However, generally taxes and charges make up a relatively small part of the power price for industrial consumers. The largest part of the power price that industrial consumers pay is determined by wholesale prices, and national wholesale prices within Europe are quite diverged. Since the largest distortive effect on investment is caused by differences in wholesale prices, primary focus of a review on market design should be on further integrating national energy markets which will result in increased price convergence. Eventually, our objective should be that European electricity markets are functional, competitive, liquid and transparent and that all energy sources are exposed to similar market conditions on a level playing field.

**7) What needs to be done to allow investment in renewables to be increasingly driven by market signals?**

Note: we have combined our answers to question 7 and 8

**8) Which obstacles, if any, would you see to fully integrating renewable energy generators into the market, including into the balancing and intraday markets, as well as regarding dispatch based on the merit order?**

Our position with regard to the integration of renewable energy generators in the electricity market is very much in line with the views of the Commission, as put forward in its Energy Market Design Communication (July 15) as well as in previous Communications on the internal energy market (2012/2014) and on "public intervention in electricity markets" (2013). In order to allow for a full market integration of renewables we indeed need a stable investment framework. Important features of such a framework are: (1) well-integrated short-term markets (intraday and balancing markets) in which renewable producers can compete on an equal footing with conventional producers and (2) well-designed renewable support schemes that are cost-efficient, sufficiently responsive to market signals and that are aimed at the integration of renewables into the energy market, which means that they should eventually be phased out. When it comes to the design of national renewable support schemes the NL supports the criteria and the outlined approach by the Commission in its November 2013 Guidance paper and the Environmental and Energy State Aid Guidelines (2014).

Moreover, an issue we consider to be of key importance is the role of balancing responsibility. With a view to the integration of renewables it is essential that renewable generators will just as other producers become fully responsible for balancing their portfolio. Also, a possible harmonisation of rules in the area of balancing responsibility at a regional level could incentivize the provision of flexibility. The NL is keen to explore this option in the context of the Pentalateral Energy Forum.

**9) Should there be a more coordinated approach across Member States for renewables support schemes? What are the main barriers to regional support schemes and how could these barriers be removed (e.g. through legislation)?**

Yes. The NL supports more coordination across Member States on the design of their renewables support schemes. Increased coordination on support schemes is urgently needed. Ill-designed support schemes can easily lead to market distortions and electricity prices that do not reflect marginal costs. E.g. this could have a negative impact on investment decisions in conventional base load and peak generation capacity. More coordination on support schemes should not necessarily be aimed at a harmonisation of national schemes. Streamlining of support schemes and agreement on key design criteria (e.g. cost efficiency, technology neutral, non-discriminatory,) can already significantly improve the level playing field for investors, since existing market distortions seem to be primarily caused by the huge differences in the application of national support schemes.

While we do advocate a streamlining of national support schemes, at this juncture we are not convinced by the need for "regional support schemes". Member States should keep their national responsibility and competence in this respect. Nonetheless we are very much in favour of developing a regional approach to the market integration of renewables. Recently, pentilateral ministers have called upon the Pentilateral Forum to develop a common vision on the market integration of renewable energies that may help to ensure the transition to a sustainable electricity system based on an increased share of renewable energy generation. We very much welcome this mandate.

**10) Where do you see the main obstacles that should be tackled to kick-start demand-response (e.g. insufficient flexible prices, (regulatory) barriers for aggregators / customers, lack of access to smart home technologies, no obligation to offer the possibility for end customers to participate in the balancing market through a demand response scheme, etc.)?**

The obstacles for the development of demand side response can be different for large (industrial) consumers and for small consumers (households, small companies).

In the NL we are currently facilitating experiments which include options to explore the obstacles for demand-response on the retail market. For the development of demand side response by small consumers scaling up seems to be an important condition. Scaling up is necessary to create a business case for aggregators. Important ingredients for scaling up are standardisation and a more uniform market model. Also, appropriate price signals for end users might play an important role. Those price signals could relate to commodity prices or network tariffs, but could also consist of a periodic compensation for providing flexibility. In the near future smart meters can help to facilitate this.

Furthermore, it is essential to open energy market access to demand aggregation. This could mean that the consumption by a number of individual consumers is managed under contract to a single service provider. The aggregator uses the demand under contract to sell the equivalent of energy production into the market. It is important to make an assessment – possibly at EU-level – of regulatory barriers for aggregators to play a role in the market.

Another key to tapping the potential of the demand side is to offer dynamic pricing (preferably real time pricing) to parties that wish to participate in demand side services and to remove barriers to participation by demand in day-ahead and intra-day markets. At the moment, participation is possible in some of these markets by industrial consumers, but not for residential or small commercial customers. As for the development of demand side management by large (industrial) consumers it seems important to allow these consumers access to imbalance markets. To the extent that there are regulatory or technical barriers to allow this, these should be removed.

**11) While electricity markets are coupled within the EU and linked to its neighbours, system operation is still carried out by national Transmission System Operators (TSOs). Regional Security Coordination Initiatives ("RSCIs") such as CORESO or TSC have a purely advisory role today. Should the RSCIs be gradually strengthened also including decision making responsibilities when necessary? Is the current national responsibility for system security an obstacle to cross-border cooperation? Would a regional responsibility for system security be better suited to the realities of the integrated market?**

The level of integration of EU electricity markets has strongly increased in the past years. This is particularly the case in the North West European region, where the introduction of market coupling has given a boost to cross border trade. The recent start of flow based market coupling in our region was a next step in the integration process and has increased interdependency in our region with regard to network stability, balancing demand and supply at every hour of the year and security of supply. This increased market integration automatically entails the need for more cooperation at the operational level between TSOs in the region. In the NWE region progress has been made in the cooperation between TSOs, inter alia in the existing common coordination platforms and the start of the RSCIs (regional security coordination initiatives). The NL supports the RSCIs and believes that further cooperation on system security issues is necessary in the current integrated markets which has the potential to increase benefits to society.

Indeed, operational decisions are still mainly the responsibility of the separate national TSOs. We perceive increased cooperation between TSOs at the operational security level as an essential next step to meet the challenge for TSOs to continue their role as key actors in providing security of supply to the region. Before entering into detailed discussions on how this could be realised, it is important that EU member states provide a clear answer to a fundamental question, i.e. are we willing to accept a regional responsibility in the field of operational security and to accept that our security of supply concerns are (at least partly) addressed at a regional level? In case of a positive answer to that question, several options for increased coordination on operational issues could be explored. It is important to start with an analysis of specific TSO tasks and responsibilities that merit increased regional coordination. These tasks in the field of system operations could include e.g. capacity calculation, capacity allocation, congestion management procedures, redispatch mechanisms and balancing market operations. The objective of this analysis could be to identify the most cost-efficient ways to organise system operation in future EU electricity markets in the context of deeper market integration and an increased share of (intermittent) renewable energy in the system.

**12) Fragmented national regulatory oversight seems to be inefficient for harmonised parts of the electricity system (e.g. market coupling). Would you see benefits in strengthening ACER's role?**

We took note of the plea by the Commission in its recent communications on the Energy Union (Feb 2015) and Market Design (July 2015) for a reinforcement of powers and independence of the Agency for the Cooperation of Energy Regulators (ACER). Although there might be good arguments to underpin this, the NL is not convinced that the ongoing integration of electricity markets in the EU automatically merits an enhanced role for the Agency for the Cooperation of Energy Regulators (ACER).

ACER has recently called upon EU member states to agree on enhancing the available resources for ACER, to be able to fulfil its mandate on trade monitoring following the implementation of the new EU rules (REMIT) on transparency and integrity. We understand this request for extra staff in order to better prepare ACER for the fulfilment of its current tasks under the Third Energy package and subsequent legislation. But when it comes to the attribution of more powers and responsibilities to

ACER in the future, the NL has the opinion that this needs to be well-founded. This means that it needs to be explicit that without such reinforcement the effective functioning of the internal energy market and cross border infrastructure is at risk and that ACER cannot effectively cope with the challenges of our further integrated markets by making use of its existing powers.

In any case this question merits further discussion.

**13) Would you see benefits in strengthening the role of the ENTSOs? How could this best be achieved? What regulatory oversight is needed?**

The NL is not yet in a position to provide a clear answer to these questions. Although we support the important role that ENTSO-E plays (e.g. in the development of the ten year network development plan, the coordination between national TSOs or the development of EU network codes), for us the need for a stronger role of ENTSO is not obvious. Again this requires further argumentation and discussion with member states, as well as an assessment of possible areas where a stronger role for ENTSO-E could help to increase or accelerate market integration and internal market functioning. Even in a situation of further system operation integration and a possible future role for regional entities it would not be completely apparent that we require a stronger ENTSO-E.

**14) What should be the future role and governance rules for distribution system operators? How should access to metering data be adapted (data handling and ensuring data privacy etc.) in light of market and technological developments? Are additional provisions on management of and access by the relevant parties (end-customers, distribution system operators, transmission system operators, suppliers, third party service providers and regulators) to the metering data required?**

We are of the opinion that the electricity market needs fully independent distribution system operators. This means that distribution networks need to be fully independent from commercial activities in the field of production, supply or trade and the financial risks that are involved with these activities. The mentioned experiments in reaction to question 10 of this consultation will help to answer our questions on what kind of (new) functions and services a market with more volatile energy sources will need and which parties are best suited to pick up those functions. At this juncture, it is too early to judge what will be the role of distribution system operators in delivering and/or facilitating these services.

In the Netherlands the large scale roll-out of smart meters started in January 2015. Ensuring data security is one of the most important aspects of the acceptance of smart meters and the success of their roll-out. The Dutch legal framework has set clear rules for the protection of the end-consumer metering data. It is forbidden to share end-consumer metering data with third parties without the explicit permission of the end-consumer. Suppliers are also obliged to provide an audit report that states that the legal requirements concerning privacy have been met. The energy regulator (ACM) and the Dutch Data Protection Authority (DPA) supervise the compliance with these requirements. Furthermore, system operators have set up an organisation to work together on more detailed privacy and security guidelines, technical safety requirements, audits and tests. In the light of the above, we do not see a direct need for additional European legislation in this area.

**15) Shall there be a European approach to distribution tariffs? If yes, what aspects should be covered; for example tariff structure and/or, tariff components (fixed, capacity vs. energy, timely or locational differentiation) and treatment of self-generation?**

To the NL it is unclear for which specific elements of distribution tariffs it would be beneficial to implement a European approach. National decisions on tariff structure and components are related to the division of network costs among the different system users, such as self-generating entities, households, baseload facilities and peak-load facilities. Member states or their NRA can take these

decisions with national goals in mind, for example concerning incentives for energy savings, support for decentralized renewable production, encouragement of demand response facilities, reducing regulatory burden or social redistribution between different national regions. It is important that harmonisation of distribution tariffs would not preclude such differences in national policy.

National distribution systems can differ between member states in their fundamental characteristics: redundancy criteria, dependency criteria, regional spread of system users, amount of system users, difference versus peak and baseload of the system and regional characteristics such as water-crossings and height differences in the landscape. Regulatory systems also differ concerning the amount of distribution network operators, regional versus national distribution tariffs, single or multiple bidding zones, in the way that distribution system operators handle (temporary) congestion, and the tasks of distribution system operators. These are all aspects that shape the way a member state or NRA manages its distribution tariff structure.

Finally, the NL is currently experimenting with grid tariff structures and regulatory systems – within the limits of the applied European legislation – to find out how different systems might help lower peak system load, better accommodate renewable energy and reduce unnecessary and costly investments in distribution systems. E.g. we are studying the effect of certain tariff structures on the willingness of demand response facilities to participate in flexibility and balancing markets. It is important that a European approach to distribution tariffs will not obstruct our ability to allow such national experiments.

**16) As power exchanges are an integral part of market coupling – should governance rules for power exchanges be considered?**

The NL would like to recall that many aspects of this question have been discussed during the negotiations in the Electricity Cross Border Committee on the CACM Guideline in 2014. This new Commission Regulation requires member states to designate one or more Nominated Electricity Market Operators (NEMO) that will have the task to implement the market coupling operator function. This CACM Regulation also contains provisions that aim to provide governance to the market coupling process and the role of NEMOs. Article 7 of this Regulation obliges NEMOs (de facto: power exchanges) to submit a plan to NRAs that sets out how they jointly set up and perform the market coupling operator functions. ACER is given the task to monitor NEMO's progress in establishing and performing the MCO functions. Moreover, article 4 of the Regulation provides that NRAs will ensure compliance with the CACM by all NEMOs performing day ahead and intra-day coupling within their member state, regardless of where the NEMOs are designated. In our view, the consequence of the CACM regulation is that NEMOs (i.e. power exchanges) in the EU will – much more than in the past – be subject to regulatory oversight.

The NL would prefer to await the implementation and application of the new CACM rules, before starting up a new EU discussion on governance of power exchanges.

**17) Is there a need for a harmonised methodology to assess power system adequacy?**

Yes. The NL certainly believes that a harmonisation across the EU of methodologies for adequacy assessment is warranted. For more explanation we refer to our reaction to question 18.

**18) What would be the appropriate geographic scope of a harmonised adequacy methodology and assessment (e.g. EU-wide, regional or national as well as neighbouring countries)?**

In the pentilateral region TSOs have taken a major step in this direction with the publication of their common regional adequacy report in March 2015. TSOs in our region have made a significant effort

towards integrating their adequacy assessment methodologies and have shown their willingness and ability to contribute to a regional approach to security of supply. This first common pentilateral adequacy report shows that regional cooperation is needed to ease national adequacy problems by sharing available capacity. TSOs have acknowledged that existing infrastructure already contributes significantly to regional security of supply, although new infrastructure allowing additional regional exchanges between markets is necessary to improve the adequacy situation. TSOs also concluded that deeper market integration and the implementation of more efficient short-term markets in the region can play an essential role.

The new methodology that was used by penta-TSOs will now also be applied on a larger scale by ENTSO-E. We support this. Nonetheless, we find that the most logical geographical scope for harmonising methodologies and for common adequacy assessment is primarily regional. National assessments based on harmonised methodologies can be used as valuable input for a regional adequacy analysis. The regional scope should be linked to the level of market integration, mutual dependency and interconnectivity. In their recent political declaration penta-ministers have stated that regional adequacy assessments can contribute to a better mutual understanding of security of supply and that in a highly interconnected system compatible methodologies are beneficial.

**19) Would an alignment of the currently different system adequacy standards across the EU be useful to build an efficient single market?**

Yes. Indeed we believe that such an alignment of adequacy standards could be helpful to improve market efficiency but it is not by definition a necessary condition. In our view the following elements are evenly important:

- a mutual understanding between countries of system adequacy concerns
- improved coordination between countries at the level of governments, TSOs and NRAs as regards decisions on national security of supply measures with potential cross border effects
- confidence that scarcity situations can be handled with the help of neighbours
- a clear emergency framework, i.e. arrangements at the regional level on how to deal with simultaneous scarcity situations.

In any case, in the pentilateral region work will be taken up to explore the possible future alignment of adequacy standards. In their mandate ministers have asked to explore the option of developing a common reliability standard in the region. Also, further work will be done to improve the consistency between adequacy assessment methodologies by streamlining the use of data, indicators and by developing a shared vision on risk scenarios

**20) Would there be a benefit in a common European framework for cross-border participation in capacity mechanisms? If yes, what should be the elements of such a framework? Would there be benefit in providing reference models for capacity mechanisms? If so, what should they look like?**

The need to allow cross border participation in capacity mechanisms is an important element of the Environmental and Energy State Aid Guidelines (2014) and is mentioned in various recent Commission communications. The NL supports this important principle. Cross border participation in capacity mechanisms is an important condition for ensuring a level playing field for capacity providers in the region.

In recent years many consultancy and academic reports as well as seminars have been dedicated to the question of how the principle of cross border participation could effectively be included in the various types of national capacity mechanisms. It is widely established that there are many challenges



to an effective implementation and that the assessment of its effects is extremely complex. Currently, TSOs in the pentalateral region are undertaking a study that investigates the existing and projected capacity mechanisms in the region with a particular focus on the possibility for cross-border participation in these mechanisms and the conditions to guarantee compatibility between the mechanisms. The results of this study should also foster the further development of a coordinated approach to security of supply in the Pentalateral region.

In our view it is too early to judge whether a EU framework for cross border participation in capacity mechanism will be beneficial. However, we do see the need for a well-informed discussion on this issue at the EU-level. This is also an important subject in the context of our upcoming EU debate on electricity market design. The results of the pentalateral TSO-study (final results expected in June 2016) could contribute to our discussions. Evenly important will be the assessment of the solutions for cross border participation that will appear in possible amendments to the British and French capacity markets in the near future.

**21) Should the decision to introduce capacity mechanisms be based on a harmonised methodology to assess power system adequacy?**

The NL does favour the harmonisation at regional and/or EU-level of adequacy assessment methodologies, as outlined in our reaction to questions 17 and 18 of this consultation. In addition we generally support the idea of using adequacy assessments as a basis for national policy decisions with regard to security of supply, such as the implementation of capacity mechanisms. In that regard, it would make sense to give a positive answer the question posed above.

However we think it is important to underline that the use of a harmonised methodology as a basis for national decisions on capacity mechanisms is not the key issue. More importantly, EU member states should increase their coordination with neighbouring countries before taking decisions on national security of supply measures with possible harmful cross border effects and they should work on a mutual understanding of system adequacy concerns between member states in their region. This can lead to an increased confidence that adequacy concerns can be dealt with, with the help of neighbours.

Besides that, the NL considers capacity mechanisms to be a second-best option and an instrument of last resort. The focus should be at enhancing market functioning and at improving the design of "energy only markets". Actions could include further regional integration of markets, streamlining of balancing arrangements, enhancement of interconnections, investment in storage capacity and development of demand side response. Better integrated policies, regulations and support programs are required to reinforce incentives for market based flexibility to deliver security of supply at least cost. It is our view that only once these policy options have been depleted, governments could consider to apply capacity mechanisms to address security of supply concerns on a temporary basis and with a minimum of market distortion.

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