



CEER Call for Evidence on Generation Adequacy Treatment in Electricity

Evaluation of Responses

**Ref: C11-ESS-24-03
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INFORMATION PAGE

Abstract

On 3 March 2010, CEER launched a call for evidence on generation adequacy treatment in electricity (C09-ESS-05-03). The document set out CEER's views on generation adequacy and how generation adequacy needs to be addressed throughout the European Internal Electricity Market (IEM).

The present evaluation of responses document (C11-ESS-24-03) addresses and evaluates the responses received to the CEER call for evidence.

Target Audience

Energy suppliers, traders, electricity customers, electricity industry, consumer representative groups, network operators, Member States, academics and other interested parties.

Related Documents

CEER/EREG documents

- ERGEG Position Paper on End-user Price Regulation, Ref: E07-CPR-10-03, 18 July 2007 http://www.ceer.eu.org/portal/page/portal/ERGEG_HOME/ERGEG_DOCS/ERGEG_DOCUMENTS_NEW/CUSTOMER_FOCUS_GROUP/E07-CPR-10-03_E-UPriceReg.pdf
- ERGEG Status Review on Building and Construction Authorisation and Permit Process - Case Examples, Ref: E08-EFG-27-04, 6 February 2008, http://www.ergereg.org/portal/page/portal/ERGEG_HOME/ERGEG_DOCS/ERGEG_DOCUMENTS_NEW/ELECTRICITY_FOCUS_GROUP/E08-EFG-27-04_BCAP_Case_Examples_06-Feb-08.pdf
- Implementing the 3rd Package: The next steps, Ref: C09-GA-52-06a, 18 June 2009, http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_PAPERS/Cross-Sectoral/2009/C09-GA-52-06a_Implementing_3rdpackage_18-Jun-09.pdf
- Generation adequacy treatment in electricity. A CEER Call for Evidence, Ref: C09-ESS-05-03, 10 December 2009, http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CLOSED%20PUBLIC%20CONSULTATIONS/ELECTRICITY/Electricity%20Generation%20Adequacy/CD/C09-ESS-05-03_gen%20adequacy_CfEvidence_9-Dec-09.pdf

- ERGEG Final Advice on the Community-wide Ten-year Electricity Network Development Plan, Ref: E10-ENM-22-03, 10 June 2010, http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_PAPERS/Electricity/2010/E10-ENM-22-03_TYNDP%20advice_10-Jun-2010.pdf

External documents

- Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emissions of certain pollutants into the air from large combustion plants ("LCP Directive"),
<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:309:0001:0001:EN:PDF>
- Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (recast),
<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:334:0017:0119:EN:PDF>
- Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment,
http://eurlex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&lg=en&type_doc=Directive&an_doc=2005&nu_doc=89
- Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC,
<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0055:0093:EN:PDF>
- Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators,
<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0001:0014:EN:PDF>
- Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003,
<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:211:0015:0035:EN:PDF>

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EXECUTIVE SUMMARY

The present document constitutes the evaluation of responses received to the call for evidence on generation adequacy treatment in electricity launched by CEER in March 2010.

Generation adequacy treatment in electricity concerns all the main challenges regarding the development of the European internal energy market. The respondents' remarks are related to the following topics that had been identified in the call for evidence:

Stable regulatory framework and policies

Investors need to benefit from a long-term vision in order to manage risk. The development of generation capacity in Europe will be easier if Member States can offer harmonised and stable policies. Generation adequacy has to be addressed at European level to avoid adverse effects from national approaches, as underlined in the CEER call for evidence. Respondents have also underlined the necessity of thinking about investments from a European perspective.

Market structure and efficiency

Price caps on wholesale markets and regulated tariffs for end-users hamper the efficiency of energy-only markets. European energy industry representatives have also confirmed the concerns related to these two factors, which distort investment signals. Peak load generation capacity that runs for only a few hours a year will face some difficulties in paying off investment costs.

Integration and development of renewable energy sources

Renewable energy sources benefit from priority access to the grid in Europe. In order to fulfil their 2020 objectives, Member States have developed support mechanisms that have to be carefully adjusted, in order not to distort the market. Respondents have expressed some concerns regarding the capacity of the transmission system to accommodate the increasing share of renewables due to their intermittence and unpredictability.

Grid reinforcement

Market actors urged for the development of interconnections and the simplification of permitting procedures for transmission system development. Removing the bottlenecks will increase market efficiency and reduce price differences between areas. Respondents also argued in favour of an increased correlation between generation and transmission adequacy, and some expressed concerns regarding the potential use of locational signals.

In conclusion, respondents indicated that there might be a risk to generation adequacy in Europe in the future, and they underlined that capacity markets could be a solution, even though they would have to be carefully studied before being implemented.

CEER will take into account the contributions of the respondents with a view to refining its approach on the key issues regarding generation adequacy in electricity. CEER plans to prepare Guidelines of Good Practice on this issue in 2012.

1. Introduction

1.1 Background

1.1.1 Generation adequacy

CEER's work on generation adequacy treatment started in 2007. An internal report served as the basis to launch a call for evidence on the subject in 2010, with the objective of drafting Guidelines of Good Practice on generation adequacy treatment. These guidelines will focus on the market framework, as well as on regulatory and political measures to allow adequate and timely investments in generation.

1.1.2 Objectives and purpose of this paper

The call for evidence on generation adequacy treatment in electricity (Ref: C11-ESS-24-03) set out CEER's views on generation adequacy and how generation adequacy needs to be addressed throughout the European Internal Electricity Market (IEM), with a view to drafting the CEER Guidelines of Good Practice on electricity generation adequacy by mid-2012.

1.2 Recap of CEER call for evidence

On 3 March 2010, CEER launched a call for evidence on generation adequacy treatment in electricity (C09-ESS-05-03).

The consultation closed on 27 April 2010 and 28 responses were received from stakeholders from all over Europe. Annex 3 of this document contains a list of respondents followed by the evaluation of responses.

The objective of this consultation was to gather input from stakeholders in the energy field regarding the CEER paper on generation adequacy, and to identify additional concerns regarding this issue.

The present document gathers the respondents' comments and provides CEER's conclusions on this topic.

1.3 Questions in the call for evidence

In addition to inviting relevant stakeholders and market participants to give general responses to this consultation and participate in the discussions on this document, CEER sought respondents' opinions on a number of specific issues.

Respondents were invited to reply and provide comments on the following questions:

1. What are the key elements for ensuring generation adequacy in the competitive electricity market in EU Member States and the EU as a whole?

2. Do you observe any barriers for investing in new generation capacity? If yes, please list and explain them.

3. In case of additional measures for ensuring generation adequacy, what would be the key issues to take into account?

2. Summary of responses

In the following CEER provides a summary of stakeholders' responses to each of these questions.

2.1 Question 1: What are the key elements for ensuring generation adequacy in the competitive electricity market in EU Member States and the EU as a whole?

2.1.1 Generation adequacy definition

Various respondents noted that:

- Demand is not a fixed variable and the definition should emphasise the need to avoid enforced or involuntary interruptions.
- The definition should also emphasise the question of monitoring. Unnecessary legislative and regulatory interventions could distort market signals, hinder investment decisions and adversely impact future security of supply.
- Does generation have to be adequate to meet all demand at all times?
- Generation adequacy can also be defined as the amount of generation necessary to meet demand in a substantial liquid cross-border market. Network constraints also need to be taken into account.

In the on-going public debate, the requirement on the electricity market is that interruptions due to lack of generation capacity should not occur under any circumstances. Realistically, a 100% adequacy of supply would be prohibitively expensive. Instead, regulators should decide the desired level of adequacy and if deemed necessary take measures to ensure this level, requiring the TSOs to tender for generation capacity and demand flexibility.

2.1.2 Market efficiency and regulatory/policy framework

Some respondents insisted on the fact that generation adequacy should be considered through the scope of market efficiency and integration. It was argued that a well-designed and competitive market would lead to efficient price signals, indicating capacity scarcity and sending adequate price signals to new investments. It was therefore requested that regulatory and political interventions be minimised.

It was noted that policies and subsidies should not channel investments in technologies that the markets find undesirable, and give the wrong signals on the technology needed.

It was also emphasised that dominant positions by generators should be prevented or reduced by enlarging zones, and TSOs and DSOs should operate even-handedly and rapidly to minimise entry costs for new generators.

Thus, the main point of discussion regarding this question concerned the implementation of an efficient and competitive market, supported by long-term legislation and energy policy for generators to invest with confidence. European energy policies also have to be harmonised in order not to favour one region over another.

Some respondents also underlined the necessity of a clear, stable and sustainable regulatory framework both within each Member State and across the EU, in order to help investors make consistent decisions. Some were concerned that unstable European environmental regulations could disincentivise investment decisions.

Other respondents pointed out the necessary coordination of the activities of energy, competition and financial regulators to avoid unnecessary market distortions and regulatory overlaps, and to provide long-term investment signals to the market.

It was felt that regulatory instruments could also encourage a sound investment climate with further investments in grid reinforcement, to overcome current capacity constraints within Member States and on interconnection lines, and to support effective balancing.

One respondent commented that uncertainty of the regulatory framework to meet the 20-20-20 targets may hinder investment and make it difficult to make accurate forecasts.

It was felt that the definition of certain security of supply aspects, including long-term aspects, would be essential for the realisation of a market orientated structure of the European electricity system. On the one hand security of supply was suggested to be a public task regarding defined customers, with the market based announcement and procurement of required services. On the other hand it was felt to be the relation and influence of those market players which are exposed to market risks, and their contractual responsibilities.

2.1.3 Integration of renewable energy sources

Another relevant issue for respondents concerned the integration of renewable energy sources into the European generation grid. Some respondents defended the importance of harmonising the national policies and support mechanisms for renewable energy sources (RES).

In the following CEER provides a summary of these responses.

Supported technologies generate inconsistencies since they play a part in the formation of market price but are not remunerated at this price. Support schemes for RES should be consistent with the Member States' targets to avoid miscalculations that can lead to an inadequate generation mix.

A well-balanced generation mix is needed to balance the system in the light of an increasing share of RES.

An interconnected "Super-Grid" is a major prerequisite to enable the integration of a large

amount of RES from different locations in Europe without risking compromising generation adequacy.

Member States' energy systems have particular natural and renewable resource endowments that should be taken into consideration when developing policies at European level, supporting market adequacy to allow each Member State to effectively use its resources.

In the view of the respondents European energy regulators should recognise that the apparently higher wind energy costs must be compared with the opportunity to plan the economic future of Europe on the basis of known and predictable costs. In this regard, wind energy provides a domestic energy source, which is not only fossil fuel free, but is also without economic risk through fuel and carbon price volatility.

It has been suggested by a respondent that the CEER paper wrongly states that any "risk may also stem from uncertain environmental objectives and goals". On the contrary, the pathway towards the renewable energy source targets in the EU by 2020 will be depicted in detail in the National Renewable Energy Action Plans providing a quantifiable outline for wind power and other renewable energy generation deployment in each Member State. If a well-designed regulatory framework for electricity markets, network access and enhancement is not realised, RES will remain disadvantaged compared to a situation where conventional power sources are developed and introduced. European energy regulators should prepare for a future power system characterised by flexibility with more actors, rather than one in which large-capacity, slow-ramping fossil and nuclear plants provide power.

2.1.3 Grid reinforcement

Many respondents pointed out issues regarding grid reinforcement, and the need for adequate transmission capacity to remove bottlenecks and even out local fluctuations in supply and demand with larger market and price areas. It was felt that efficient congestion management mechanisms should be developed.

In respondents' view an adequate network is therefore a prerequisite in order to avoid incentives to investments in electricity generation bringing about distortions in price signals, preventing the further development of the most efficient and best connected plants.

It was noted that the European energy system must be technologically adapted to manage larger amounts of intermittent generation in order to meet the 20-20-20 objectives. European energy market evolution cannot be separated from market integration and the development of the grid.

In order to develop the transmission grid, some respondents pointed out that simplification and speeding up of the permitting procedures for interconnections is necessary, as well as harmonisation of the legal framework regarding network expansion.

One respondent noted that the sizing of interconnections will have to accommodate large balancing flows caused by future wind and tidal renewable generation.

Others noted that a coordinated approach between generation and grid planning is necessary, as well as a balance between investments in generation assets and transmission infrastructures.

Transmission has to be planned ahead of generation investment as is pointed out in the CEER paper. In respondents' view this means that regulators have to allow TSOs to take on the risk of expected generation investments not being realised, and allow the costs resulting from apparently stranded transmission investments to be covered by the transmission tariffs. The risk of over-investment in transmission is small however. Firstly it is difficult to get licensees, secondly transmission capacity will sooner or later be needed, and thirdly transmission investments are small compared to generation investments. Closer cooperation on long-term planning between licensing authorities and TSOs could reduce the risk of stranded investments.

2.1.4 Price management

Respondents' comments on price management can be summarised as follows.

Price spikes and price volatility represent an important issue for some actors. In tight supply situations, they are necessary to contribute to cover the costs of back up capacity, and to incentivise demand response and storage capability.

Prices have to be allowed to change freely without intervention from policy makers: price spikes have to be accepted by governments and competition authorities, and negative prices on wholesale markets must also be accepted without restriction. Consequently, price and bid caps in wholesale markets can cause problems and uncertainties.

For some actors, the correct price signals from the open electricity market would help the appropriate generation mix to emerge. Volatile and peaking prices are associated with efficient market functioning. They are not specific to the electricity market.

However, the occurrence and magnitude of the price peaks must be above suspicion and well understood by regulators and competition authorities. A more integrated and competitive EU market with an active demand side and a high level of transparency will remove the opportunity for companies to benefit from withdrawing capacity and creating "bad" price spikes. Monitoring of price spikes by an independent European authority would be welcomed.

2.1.5 Balancing and demand flexibility

Some respondents believe that efficient ancillary services for balancing and back-up power shall be developed. To do so, national balancing zones should be merged to create regional zones to reduce market dominance. Imbalanced tariffs should differentiate incidental imbalances from systematic imbalances. Contractual instantaneous load-shedding from industrial plants should be generalised throughout Europe.

It was felt that demand response should remain a voluntary operation and shall not be integrated in the generation-load adequacy.

A strong need was also observed for balancing to be considered from a European perspective rather than from a purely national perspective.

2.1.6 ETS and CO₂

Some respondents mentioned elements of the Emission Trading Scheme (ETS). Certainty around the long-term carbon reduction targets to 2020 and beyond to underpin the EU ETS was felt to be a prerequisite to enable investors to select the appropriate technology for new build generation units to meet longer-term CO₂ reduction targets. It was noted that CO₂ emission allowances must be defined precisely and should be clear to the investor far beyond 2020.

2.1.7 Other remarks from respondents

Regulated return on investment should reflect the regulatory and market uncertainties, to give TSOs sufficient resources to finance infrastructure projects compatible with EU and national objectives.

A consultation process should be undertaken prior to proposing any changes to market rules.

Smart meters would facilitate the integration of distributed generation or gas production.

Decommissioning of large combustion plants and closure of nuclear generation capacity in some countries may create a tense situation not yet visible in electricity market prices. Regulators should decide the desired level of generation adequacy and if deemed necessary, take measures to ensure this level is achieved.

EU-wide deployment of intraday market trading with implicit auctioning and gate closure times as close to real time as possible is required, as well as the application of intraday wind power forecasting for low reserve requirements.

Capacity elements, like fees, must be kept at the edge and not at the centre of the market.

2.2 Question 2: Do you observe any barriers for investing in new generation capacity? If yes, please list and explain them.

Some respondents underlined as general barriers, the uncertainty and non-uniformity of the regulatory framework and long-term policy. Other respondents pointed to the absence of a clear energy policy, national restrictions on efficient generation technologies, and uncertain and lengthy permitting procedures, as well as a volatile legislative and political support combined with the uncertain trend in generation fuel type.

2.2.1 Market structure and prices

Regarding the regulatory framework and the structure of the market, respondents found that the existence of dominant market players in several markets constitutes a barrier to investment in new generation capacity. It was felt that unbundling should be developed, so that new entrants can easily access the market.

Changing market rules and evolving discussions were identified as increasing market uncertainty and hampering the business case for new generation facilities, in particular those with long lead times.

A large number of respondents also shared the view that regulated energy prices constitute a barrier for investing in new generation capacity.

Other barriers mentioned were unpredictable market parameters, post 2012 and in particular post 2020, and unstable environmental policies, i.e. no carbon targets beyond 2020, uncertainty about support scheme for RES.

It was suggested that price caps and floors weaken the investment signal and should not be artificially smoothed.

Some respondents also believe that energy-only markets would not be able to cope with highly volatile frameworks with regulatory distortions. Thermal plants will suffer from subsidised renewable energies, and will therefore have fewer fired hours which will affect their reliability, especially if price caps limit the recovery of investment costs.

It was noted that price spikes, even if left to occur freely, may not be sufficient in magnitude and frequency in certain markets to stimulate enough investment in flexible and back-up capacity.

It was identified that high levels of liquidity are crucial for ensuring generation adequacy but the markets are still too illiquid. Vertically integrated firms constrain competition, may dilute investment signals and crowd out smaller, independent players.

2.2.2 Grid reinforcement and plant authorisation procedures

Many respondents identified time-consuming authorisation and permit granting procedures, and local opposition as real barriers which could postpone investment. Diverse environmental requirements and plant authorisation procedures across Member States also create distortions.

It was noted that entry barriers can be caused by a lack of grid investment leading to the development of smaller price areas. Larger price areas have a better capability to absorb new investment in generation.

2.2.3 Renewable energy sources and CO₂

Respondents made the following comments.

The large penetration of politically driven RES can alter the energy mix and market equilibrium, making investments in thermal capacity riskier and leading to the earlier decommissioning of thermal plants. Necessary complementary investment in fossil fuels must be ensured.

Respondents added that as return on investment is recovered over a long time period, regulatory certainty is necessary for base-load generation. According to these responses, the current timeframe for certain renewable and carbon related policies is relatively short (e.g. the carbon pricing regime, renewable support mechanisms).

In the context of the uncertainty of long-term regulatory framework, generators cannot confidently make “future-proof” investment decisions whilst the goal posts are constantly being moved (e.g. the NEC directive, carbon framework post-2020, and regulatory framework for

energy trading).

The absence of an equitable and stable carbon price, applicable at the same level and over a sufficiently long time frame (~20 years) to all plant technology types, represents a serious barrier to future generation adequacy.

2.2.4 Concerns regarding the gas sector

Stakeholders made the following remarks regarding the gas sector.

Access to gas transport and storage needs to be improved.

Inadequate competition in gas supply markets and insufficient flexibility in gas procurement hampers investments in gas plants and therefore has an impact on generation adequacy.

There is a specific problem in Germany due to the lack of adequate access to gas pipelines and storage, as well as unsatisfactory unbundling in the electricity sector.

ENTSO-E is willing to cooperate with ENTSO-G on reporting measures on the increasing gas supply dependency for electricity generation in Europe.

Section 4.3 of the CEER call for evidence discusses the possibility of a fuel switch in thermal power plants away from gas. One respondent drew attention to the fact that modern gas plants are technically not equipped for a fuel switch. In addition to this, both the storage and the use of oil are very expensive and also subject to a range of specific legislation (e.g. Seveso II – Directive). It would be extremely expensive to ensure security of electricity supply by technically equipping gas plants for a potential fuel switch. Instead, they believe that the expansion of gas storage facilities in Europe is the right way forward to secure electricity supply in Europe.

2.2.5 Other remarks from respondents

If one set of low carbon generation technologies enjoys price certainty up to a certain date, but another set does not enjoy the same certainty, it is inherently discriminatory and may lead to society paying more for a given volume of carbon reduction, while facing lower security of supply.

Commercial restrictions on cross-border electricity flows are particularly harmful in terms of limiting the optimal allocation of generation capacity and consequently for security of electricity supply.

Necessary reserve capacity for security of supply should be maintained in the system by allowing a reasonable degree of flexibility in environmental legislation while at the same time safeguarding general environmental goals.

It is essential to apply the polluter pays principle to make conventional generating technologies pay the real social cost of their activities. All stakeholders should ensure the deployment, in the third phase of the ETS, of auctioning modalities which would eventually put a price on pollution and trigger the necessary investments in RES.

Conflicts between public and private interests may be expensive and time-consuming. Investments in grid technology may incur large costs which are missing in the financing of generation capacity.

2.3 Question 3: In case of additional measures for ensuring generation adequacy, what would be the key issues to take into account?

2.3.1 Market development

According to one respondent, market prices give signals to invest in different types of production, and to lower electricity demand during strained periods. The market must be allowed to decide, and the system must not encourage electricity wastage which can be the case with some subsidy schemes. In the coming years, technology will provide more possibilities, and legislation must not hamper this development. For example ill-planned subsidies might lead to sub-optimal technology paths.

One respondent recommended a top-down grid plan for the 2020-2030 period, R&D support for demand response, power storage technologies, smart and super grids, rapid EU-wide market coupling of spot markets and integration of intra-day and balancing markets.

2.3.2 Capacity mechanism

Respondents remarked that some form of capacity incentive mechanism could be required for investing in flexible backup capacity to balance electricity generation with renewable capacity.

One respondent is currently analysing potential advantages and disadvantages of capacity remuneration mechanisms and will present its findings over the coming months.

Some respondents noted that if a mechanism is introduced it is essential to ensure that it is non-discriminatory and complies with market mechanisms. There are examples which do not deliver this, such as lump sum capacity subsidies and locational signals based on nodal prices which are detrimental to liquidity and do not encourage generation investment as in the US case.

Stakeholders would like to be consulted about the nature of the mechanism before Europe decides to use a last resort mechanism to palliate the lack of generation capacity.

Others find that the mechanism should not be the call for tender by Member States as foreseen by the Directive, nor the creation of a capacity market.

Respondents noted that any mechanism should be judged against the following criteria: strong commitment towards an efficient wholesale European energy market, effectiveness in incentivising the required investment, consistency with the EU ETS, technology neutrality, no discrimination against existing generation capacity in favour of new build. Collateral policies (i.e. financial regulation reform) should also not deter investment decisions.

Respondents expressed reservations about making a decision on capacity mechanisms. Capacity remuneration removes incentives to develop demand response and energy storage which are cost efficient tools to safeguard system stability. It was suggested that the

implementation of such mechanisms at a national scale would create distortions in neighbouring countries, and be counter-productive for the common European electricity market development.

Finally, some respondents thought that capacity mechanisms should be avoided in order to remain as close as possible to liberalised energy market design.

2.3.3 Interconnections

Some respondents felt that interconnections must be promoted, especially for peripheral countries that face specific challenges to their security of supply. These countries must ensure the supply mainly through their own means and should be more cautious when dealing with investments in the infrastructure necessary for future supply (e.g. France-Spain).

Others argued in favour of the development of cross-border trade with a balancing market extended beyond national boundaries that could represent a strong incentive for the development of an adequate level of generation capacity located where it is more cost effective. Coordination between TSOs on some relevant issues (e.g. security margin calculation) can be beneficial as a point of reference for the development of an efficient electricity generation system open to cross-border trade.

New interconnection capacity will be constructed where it has merchant value, but the setting of arbitrary targets for regulated capacity regardless of market value/need/price differential signals would probably represent an uneconomic investment, as well as undermining the case for merchant interconnection projects that may be currently under assessment.

2.3.4 Market efficiency and monitoring

Respondents made the following comments.

Before considering additional measures, the existing market barriers should be removed to allow the free market to work, thus future demand may be satisfied through price mechanisms in a cost-optimised manner.

It is desirable to seek greater harmonisation of rules for further market integration, with initiatives such as those developed by the "target model" of the "Project Coordination Group" in the framework of the ERGEG Regional Initiatives.

Electricity prices should be passed through to consumers and remaining regulated tariffs should be removed, especially those set below the market price.

Member States should monitor generation capacity to avoid structural deficits between offer and demand.

In accordance with Directive 2005/89, a wholesale market framework with regard to balancing supply and demand should be developed.

Administrative burdens for data collection need to be addressed. Significant reporting requirements for TSOs are already in place. Any extension should be justified with a demonstration of the market benefits and should also identify the party best placed for the

publication.

System adequacy forecasts must help to identify problems regarding generation adequacy at national and EU level. Unknown factors leading to forecast errors shall be identified where possible. Respondents suggested there should be a bi-annual study at a European scale for future load/demand curves and gap for future generation capacity, grid evolution and planned power plant buildings to allow visibility for base load, semi-base and peak generation investments.

The impact of support schemes on prices should be transparent and published for each Member State.

2.3.5 Locational signals

Respondents expressed the view that locational signals should be compatible and if possible, harmonised, at EU level, although it was acknowledged that the impacts must be carefully considered.

According to some other respondents, locational signals are over-estimated: there are physical reasons for having load centres located separately from production.

Some suggested that locational signals can discourage investment and distort trading. They discourage renewable generation located in high charging areas, and encourage earlier closing of existing generation located in high charging areas. Finally, short term volatility of locational signals introduces uncertainty.

It was felt that such mechanisms have not shown their efficiency in terms of maximisation of the collective benefit. Power plant location choices involve additional or superior considerations (acceptability, administrative procedures, technical, and social matters etc.). Some respondents considered that TSOs should have at their disposal legal means (such as calls for tenders) when an issue related to locating power plants arises.

It was noted that the range of network charges can vary significantly between projects and should therefore not be subject to specific locational charging regimes that disadvantage wind generators.

2.4 Other remarks from respondents

In the near future, EU capacity adequacy concerns will mainly relate to the lack of flexibility rather than lack of capacity in quantitative terms.

Measures to foster investment in the transmission network and interconnections should be established at EU level.

One stakeholder remarked that long-term bilateral contracts between consumers and generators should be promoted, as well as powerful cogeneration units.

Renewable energy will be at the core of developments in generation as the market moves gradually away from the traditional model. New legislative/regulatory initiatives may alter market

signals therefore it is essential that they do not jeopardise future security of supply.

Measurement of security of supply characteristics is multidimensional and yet critical to understanding generation adequacy. It could include risks associated with price, delivery (especially, and critically, the reliability of deliverability at time of peak demand), as well as the more usual peak margin assessment of energy supply vs. peak demand.

The proposal of the CEER call for evidence document to publish information on power plants with time horizons exceeding three years must be viewed with great caution. Beyond three years, regulatory and political uncertainties exist that could impact the quality of the information delivered. In order to avoid this difficulty, it has been suggested that this information should be confined to the three year time horizons.

Other distortions that alter the generation mix by artificially limiting price signals for investments should be removed:

- Electricity import bans across European borders hampering European market integration, mainly when there are interconnections with hours of un-allocated capacity and high price spreads between both markets.
- Some compulsory Virtual Power Plants (VPPs) that oblige some companies to sell their products at a price which is not related to the market.

3. Conclusions

Respondents to the CEER call for evidence on generation adequacy treatment in electricity welcomed the consultation, and most of the remarks corroborate the main issues underlined in the CEER document.

However, one of the main remarks emerging goes to the heart of the generation adequacy discussion. Some respondents asked for a more complete definition of generation adequacy than the one given in the call for evidence. CEER has noted this concern and will put forward a more explicit definition of generation adequacy in its Guidelines of Good Practice on Generation Adequacy to be elaborated in 2012.

CEER underlines that the current document is not a CEER position paper but a summary and evaluation of the responses received. It constitutes initial feedback on the main issues raised by respondents. The comments will be considered and taken into account in the preparation of the Guidelines of Good Practice on generation adequacy treatment.

Annex 1 – CEER

The Council of European Energy Regulators (CEER) is the voice of Europe's national regulators of electricity and gas at EU and international level. Through CEER, a not-for-profit association, the national regulators cooperate and exchange best practice. A key objective of CEER is to facilitate the creation of a single, competitive, efficient and sustainable EU internal energy market that works in the public interest.

CEER works closely with (and supports) the [Agency for the Cooperation of Energy Regulators \(ACER\)](#).

ACER, which has its seat in Ljubljana, is an EU Agency with its own staff and resources. CEER, based in Brussels, deals with many complementary (and not overlapping) issues to ACER's work such as international issues, smart grids, sustainability and customer issues.

The work of CEER is structured according to a number of working groups and task forces, composed of staff members of the national energy regulatory authorities, and supported by the CEER Secretariat.

This report was prepared by the Electricity Security of Supply Task Force (ESS TF) of the CEER Electricity Working Group (EWG).

Annex 2 – List of abbreviations

Term	Definition
CACM	Capacity Allocation and Congestion Management
CEER	Council of European Energy Regulators
DSO	Distribution System Operator
ENTSO-E	European Network of Transmission System Operators for Electricity
ENTSO-G	European Network of Transmission System Operators for Gas
ERGEG	European Regulators Group for Electricity and Gas (dissolved with June 2011)
ETS	(EU) Emission Trading Scheme
EU	European Union
FG	Framework Guidelines
GGP	Guidelines of Good Practice
IEM	(European) Internal Electricity Market
MS	Member State
NEC	National Emissions Ceilings
NREAP	National Renewable Energy Action Plan
R&D	Research and Development
REMIT	Regulation on Wholesale Energy Market Integrity and Transparency
RES	Renewable Energy Sources
SoS	Security of Supply
TSO	Transmission System Operator
VPP	Virtual Power Plant

Table 1 – List of Abbreviations

Annex 3 – Evaluation of Responses

List of responses received

Organisation		Country of origin
AEP	Represents small/medium/large companies who generate more than 95% of UK capacity	UK
BDEW	German Association of Energy and Water Industries	Germany
BNE	Represents the interests of suppliers and producers in Germany	Germany
Centrica	Energy company	Spain
CEZ	Energy company	Czech Republic
Consumer focus	Consumer association	UK
Danskenergi	Danish energy association	Denmark
EDF	Energy company	France
EDF Energy	Energy company	UK
Edison	Energy company	Italy
EnBW	Energie Baden-Württemberg AG - Energy company	Germany
Enel Endesa	Energy Company	Italy
ENTSO-E	European Network of Transmission System Operators for Electricity	-
E.ON	Energy company	Germany
Eurelectric	Union of the Electricity Industry	-
EWEA	European Wind Energy Association	-
Finnish Energy Industries	Power and district heating sectors' association	Finland
Fortum	Energy company	Finland
GABE	Belgian group of electricity self-producers	Belgium
GEODE	Association of European independent distribution companies of gas and electricity	-
Iberdrola	Energy company	Spain
IFIEC Europe	International Federation of Industrial Energy Consumers	EU
RWE	Energy company	Germany
SSE	Scottish and Southern Energy plc - Energy company	Scotland, UK
Tiwag	Tiroler Wasserkraft AG - Energy company	Austria
UNESA	Spanish association of the electricity industry	Spain
Vattenfall	Energy company	Sweden
Verbund	Energy company	Austria

Evaluation of responses to the questions from the call for evidence

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
Q1: What are the key elements for ensuring generation adequacy in the competitive electricity market in EU MS and the EU as a whole?				
Generation adequacy definition				
1.	1	The definition of "generation adequacy" in the CEER Call for Evidence is not complete because demand to be met is considered to be a fixed variable; it should emphasise the need to avoid <i>enforced</i> or <i>involuntary</i> interruptions (balance between supply and demand).	Y	The meaning of generation adequacy will be further elaborated and analysed for the GGP.
2.	1	Should generation always be adequate to meet all demand?	Y	CEER will work on a more detailed definition of generation adequacy (see Q1).
3.	1	Commonly agreed definition of adequacy – the definition in the CEER document is not detailed enough for monitoring. What is generation adequacy and how is it to be measured? All technology options should be available for investors; unnecessary legislative and regulatory interventions will distort market signals, hinder investment decisions and may adversely impact future SoS.	Y	See Q1
4.	1	Generation adequacy can also be defined as the amount of generation necessary to meet demand in a substantial liquid cross-border market. Network constraints also need to be taken into account.	Y	See Q1
5.	1	In the current public debate the requirement on the electricity market is that interruptions due to lack of generation capacity should not occur under any circumstances. On the other hand, realistically, 100% security of supply would be prohibitively expensive. Instead the Regulators should decide the desired level of adequacy and if deemed necessary, take measures to ensure this level, e.g. requiring the TSOs to tender for generation capacity and demand flexibility.	NA	The "level of adequacy" will be a political decision. Regulators can give recommendations, but are not in the position to decide.
Market efficiency and regulatory/policy framework				
6.	1	Many respondents underline the necessary implementation of a long-term legislation and energy policy allowing generators to invest with confidence. European energy policies must also be harmonised to ensure one region is not favoured over another.	Y	This statement will be considered for the GGP. Regulators will give recommendations for harmonisation where deemed necessary.
7.	1	Furthermore, a respondent argues that those policies (and subsidies) should not channel investments in technologies that the markets find undesirable, and give the wrong signals on the technology that is needed.	Y	Policies should reflect real needs (market and technical).

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
8.	1	Generation adequacy should be considered through the scope of market efficiency and integration. Otherwise there can be biased competition between European countries and investments in conventional technologies that could become riskier and less attractive. A respondent specifies that a well-designed and competitive market will lead to efficient price signals, indicating capacity scarcity and send adequate price signals to new investments.	Y	Agree. This should be considered.
9.	1	Open, transparent and liberalised markets with good liquidity are a prerequisite to the creation of a level playing field and to ensuring generation adequacy. A pre-condition to promote liquid markets is to remove regulated tariffs.	Y	We agree with this statement which is in line with the call for evidence.
10.	1	The dominant position of generators should be prevented/reduced by enlarging zones, and TSOs and DSOs must operate even-handedly and rapidly to minimise entry costs for new generators.	NA	Agree that TSOs and DSOs have to cooperate closely but this does not necessarily lead to minimised entry costs for generators. Tariff regimes are still national issues.
11.	1	Market efficiency encompasses the right balance between the operation of free market forces and market intervention, and minimised regulatory and political interventions.	Y	This statement will be considered for the GGP.
12.	1	Contracts with different runtime, contracts with different price elements and conditions (interruptible contracts, flexible prices).	NA	The statement is unclear.
13.	1	Along with clear and long-term policies, actors underline the necessity of a clear, stable and sustainable regulatory framework both within each Member State and across the EU. An unstable and unpredictable regulatory framework does not help to support consistent decision-making. One respondent pointed out the need for coordination of the regulators' work in order to provide long-term investment signals to the market. In addition unstable European environmental regulation (every 3-8 years) could inhibit investment decisions due to the high levels of uncertainty.	NA	General comment
14.	1	According to a respondent, the regulatory framework should also encourage (via robust regulatory instruments) a sound investment climate with further investments in grid reinforcement to overcome current capacity constraints within Member States and on interconnection lines.	NA	General comment
15.	1	Stable legislative and regulatory frameworks with a proper balance between the objectives of competitive prices, security of supply, environmental protection.	Y	This statement will be considered for the GGP.
16.	1	Coordination of the activities of energy, competition and financial regulators to avoid unnecessary market distortions and regulatory overlaps.	Y	This statement will be considered for the GGP.
17.	1	Uncertainty on the regulatory framework to meet the 20-20-20 targets may hinder investment and make it difficult to make accurate forecasts.	NA	-
18.	1	Clear policy and regulatory framework due to the development of environmental constraints (e.g. CO ₂ objectives).	NA	General comment

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
19.	1	Essential for the realisation of a market orientated structure of the European electricity system will be the definition of certain aspects of security of supply – also regarding long term aspects – as public task regarding defined customers and the market based announcement and procurement of the required services on the one side and on the other side the relation and influence to the contractual responsibility of those market players (with all consequences) which are exposed to the market risks.	NA	-
Integration of renewable energy sources				
20.	1	Some respondents highlighted the importance of harmonising the national policies and support mechanisms for renewable energy sources.	Y	European energy regulators are working on the implications of non-harmonised support mechanisms for renewables. Currently each Member State has to fulfil its target regarding RES development by its own means.
21.	1	Also, some underline that support levels for renewables must be carefully set. The integration of these supported technologies generates inconsistencies since play a part in the formation of market price but is not remunerated at this market price. Support schemes for RES should be consistent with the Member State's targets to avoid miscalculations that can lead to an inadequate generation mix.	Y	Partly agree with the statement. The Member States have defined in their NREAPs their goals regarding renewable energy deployment. Support schemes can be revised where miscalculations are identified in order to ensure the development of RES stays on track.
22.	1	Renewable generation will cause new issues that need to be managed.	Y	This statement will be considered for the GGP.
23.	1	A well-balanced generation mix is necessary to balance the system against an increasing share of RES.	Y	This statement will be considered for the GGP. There has to be sufficient flexibility to face intermittent production of RES.
24.	1	Certainty about EU energy policy for RES and the aligned support schemes for RES is of utmost importance for generation adequacy. A major prerequisite is an interconnected "Super-Grid" to enable the integration of a large amount of RES from different locations in Europe, without risks to generation adequacy.	Y	This statement will be considered for the GGP.
25.	1	Any investment decision has a European perspective.	Y	Partly agree with this statement. It is very important, especially in the case of large scale investments, to have a regional/European-wide market analysis, which confirms the necessity of such investments. In the case of supported generation, it is even more important. For distributed generation, local circumstances play a major role.
26.	1	In one respondent's view the CEER paper wrongly states that any "risk may also stem from uncertain environmental objectives and goals". On the contrary, the pathway towards the RES targets in the EU by 2020 will be depicted in detail in the forthcoming NREAPs providing a quantifiable outline for wind power deployment, and the deployment of other renewable energy generators in each MS.	Y/N	Partly agree with this statement. The NREAPs implemented by every Member State set out a clear path towards the completion of the RES objectives. However, Member States still benefit from some flexibility in how they choose to achieve these objectives, and this flexibility can create some uncertainty for investors.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
27.	1	As long as a well-designed regulatory framework for electricity markets, network access and electricity infrastructure development is not realised, wind power and other RES will remain disadvantaged compared to the situation under which conventional power sources such as oil, gas, coal and nuclear power sources were developed and introduced.	Y/N	Partly agree with this statement. European objectives for the share of RES in the energy mix, will lead to incentives for Member State to achieve these goals. Regulatory frameworks are currently being adapted.
28.	1	European energy regulators should prepare for a future power system characterised by flexibility – with dynamic electricity markets (and an increased number of market participants) playing a role to facilitate the integration of wind power generation and other renewables – rather than one in which large-capacity, slow-ramping fossil and nuclear plants provide power.	Y	NRAs and TSOs already work together on the integration of RES to the European network.
29.	1	Renewables should compete in relation to network access.	N	According to EU legislation, renewables benefit from priority access to the network.
30.	1	The increased use of RES will require substantial backup and storage capacity, such as modern combined cycle gas turbine (CCGT) plants and pump storage plants, in order to manage the highly intermittent nature of wind and solar generation and to secure a stable and reliable electricity supply.	Y	This statement will be considered for the GGP. Demand response and more stable RES (biomass, geothermal, or biogas), can also be used as backup or storage capacity.
31.	1	Environmental goals should be translated into incentives for environmental performance and not into choice of certain techniques. All types of generation should bear their own costs, and subsidy schemes should be designed such that they minimise the disturbance of market functions.	N	Member States have the freedom to choose the policy and incentives they want to implement in order to achieve their RES goals, and develop a balanced energy mix. In addition, support schemes for certain technologies may also be used to foster their development and maturity.
Grid reinforcement				
32.	1	According to one respondent, adequate levels of transmission capacity are crucial and increased investments in interconnections and internal grid reinforcements are necessary to develop larger markets.	Y	This statement will be considered for the GGP.
33.	1	Sufficient grid capacity will help to even out local fluctuations in supply and demand with larger market and price areas.	Y	This statement will be considered for the GGP.
34.	1	Sizing of interconnections to accommodate large balancing flows caused by future wind and tidal renewal generation.	Y	Interconnections are mainly developed in order to remove bottlenecks and manage congestion. The development of RES in Europe will lead to reinforcement of the grid and the interconnections.
35.	1	A number of respondents argue in favour of efficient congestion management mechanisms in Europe, as well as the development of new interconnection capacity in order to remove bottlenecks. Existing capacity is insufficient.	Y	This statement will be considered for the GGP.
36.	1	A respondent would like to specify that the European energy system should be technologically adapted to manage larger amounts of intermittent generation in order to meet the 20-20-20 objectives. European energy market evolution cannot be separated from market integration and the development of the grid.	Y	Directive 2009/28/EC on the promotion of the use of energy from renewable sources, refers to the specific case of grid access for RES in Article 16.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
37.	1	Also, the regulated network business needs investment incentives to improve and extend the transmission grid to accommodate RES.	Y/N	Possibly. It depends on the infrastructure investment climate.
38.	1	In order to develop the transmission grid and the interconnections, simplification and harmonisation of the permitting procedures for interconnections is necessary, as well as speeding up these procedures.	Y	This statement will be considered for the GGP.
39.	1	A coordinated approach between generation and grid planning is necessary, as well as a balance between investments in generation assets and transmission infrastructures.	Y	ENTSO-E already assesses the need for investment in the transmission system via the TYNDP and based on the system adequacy forecasts, taking into account generation capacity evolution. Greater coordination on locational signals might be helpful.
40.	1	One respondent finds that harmonisation of the legal framework regarding network expansion (permits and licences) is necessary, as well as the establishment of an environmental impact assessment process.	Y	The European Commission is dealing with this issue, evaluating the possibility for harmonisation of network expansion procedures
41.	1	Need for predictable and short permitting procedures.	Y	This statement will be considered for the GGP.
42.	1	On the issue of the transmission grid, a respondent finds that debottlenecking the existing electricity grid should be set as a clear priority when developing a generation facility in a certain area. An adequate network is therefore a prerequisite in order to avoid incentives to investments in electricity generation bringing about distortions in price signals, preventing further development of the most efficient plants already well interconnected.	Y/N	Partly agree with this statement. The location of generation capacity is subject to many constraints, and can be facilitated by the absence of bottlenecks. But debottlenecking should not be achieved in order to favour a location rather than another.
43.	1	Transmission has to be planned ahead of generation investment as is pointed out in the CEER paper. This means that regulators have to allow TSOs to take the risk that the expected generation investments sometimes are not realised, and that the costs resulting from transmission investments which thereby appear to be stranded, are allowed to be covered by the transmission tariffs. The risk for over-investments in transmission is however small, because first it is difficult to get licensees, second transmission capacity will soon or later be needed, third transmission investments are small compared to generation investments. A closer cooperation on long term planning between licensing authorities and TSOs could reduce the risk of stranded investments.	Y	Partly agree. Closer cooperation on long-term planning would indeed reduce the risk of stranded costs. In some very specific cases the TSO could cover stranded costs, but since in general the risk is very low, this does not appear to be a major concern regarding generation adequacy.
Prices management				
44.	1	Price spikes are an important issue for a certain number of respondents. According to some, price spikes and price volatility in tight supply situations are necessary to generate the required income for peak generation facilities which only run during these tight situations. Price spikes are necessary to help cover the costs of back up capacity and to incentivise demand response and storage capabilities.	Y/N	Partly we can agree with this statement as stated in the call for evidence. However in some cases, regulatory interventions can be necessary. The application of interventions therefore requires careful investigation. REMIT (Regulation on Wholesale Energy Market Integrity and Transparency) could help.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
45.	1	Prices must be allowed to change freely without intervention from policy makers: prices spikes must be accepted by governments and competition authorities, and negative prices on wholesale markets must also be accepted without restriction. Price and bid caps in wholesale markets can cause problems and uncertainties.	Y/N	Agree as far as price spikes are not caused by market manipulation. Free price formation requires at least full transparency on the availability of generation resources.
46.	1	One respondent points out that the occurrence and magnitude of price peaks must be above suspicion and well understood by regulators and competition authorities.	Y/N	Occurrence and magnitude of price spikes may provide relevant price signals for investment but price spikes must be above suspicion in order to be accepted by regulators and competition authorities.
47.	1	It is vital for price formation to work without any intervention. Volatile and peaking prices are then associated with efficient market functioning rather than market failure.	Y/N	See 45 and 46.
48.	1	The correct price signals from the free electricity market would help to emerge the appropriate generation mix.	Y	Correct price signals emerging from the free market and the renewable support schemes together could give adequate messages.
49.	1	A more integrated and competitive EU market with an active demand side and a high level of transparency will remove the possibility for companies to benefit from withdrawing capacity and creating "bad" price spikes.	Y	It will contribute to the removal of this potential, but we do not believe it will remove it altogether. Market integration and a high level of transparency are not sufficient. Additional measures such as sufficient network/interconnection capacity and avoidance of large market shares may be necessary to mitigate market power.
50.	1	One stakeholder would like to precise that price volatility is not specific to electricity markets. In other markets however, players have tools to manage risk in the long term: for example, natural gas prices are volatile but contractually indexed on oil products prices. The time lag between changes in oil prices and changes in gas prices helps smoothing and therefore dampens the effects of those changes on consumers.	NA	-
Balancing/Demand flexibility				
51.	1	Demand response should remain a voluntary operation and should not be integrated in generation-load adequacy.	Y/N	We partly agree with this statement. Demand response through end user tariff signals can be considered while establishing the generation-load adequacy needs.
52.	1	Demand side response, as well as consumer participation should be encouraged and developed.	Y	This statement will be considered for the GGP.
53.	1	According to one respondent, the contribution of large industrial customers to generation adequacy should be based on the following points: - Modulation to encourage when feasible - Incentives to modulate without obligation - Cannot be considered a main source of contribution to generation adequacy - Valorise properly this contribution as from today	Y/N	3 rd bullet: can be an important source of contribution to the generation-load balance when there are a large number of bids.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
54.	1	We see a strong need for a generation balancing to be considered from a European perspective rather than from a purely national perspective.	Y/N	Agree as far as “European generation balance perspective” does not mean “copper plate”. A European perspective is necessary but a “generation adequacy” point of view is not sufficient for that. An integrated “generation and transport” (bulk power system) approach is necessary to develop the European perspective, in order to be sure that the possible large scale geographical imbalance of generation can be fully compensated by power exchanges, without higher prices in the zones of lower installed generation capacity.
55.	1	According to a stakeholder, efficient ancillary services for balancing and back-up power shall be developed. To do so, national balancing zones should be merged to create regional zones to reduce market dominance. Un-balance tariffs should differentiate incidental imbalances from systematic imbalances. Finally, contractual instantaneous load-shedding from industrial plants should be generalised in Europe.	Y/N	ACER is currently working on drafting Framework Guidelines on electricity balancing market integrations. Cross-border balancing should be encouraged; nevertheless, enlargement of balancing zones requires a new definition of the balancing responsibilities. “Contractual instantaneous load shedding” should be more precise. Y if it is related to demand response (= generation-load balance), “NA” if related to emergency response.
ETS and CO₂				
56.	1	One respondent finds that certainty around the long-term carbon reduction targets to 2020 and beyond, to underpin the EU ETS, is a prerequisite to enable investors to select the appropriate technology for new built generation units to meet longer-term CO ₂ reduction targets.	Y	This statement will be considered for the GGP.
57.	1	A stakeholder exposes uncertainty around the future EU ETS and of other EU environmental legislation and so uncertainty in the investments to decarbonise the power sector.	N	The EU legislation on these issues will bring more certainty.
Other remarks				
58.	1	Appropriate signals on power plant location/dispatching decisions. Regulated return on investment should reflect the regulatory and market uncertainties. Give TSO sufficient resources to finance infrastructure projects compatible with EU and national objectives.	NA	-
59.	1	There should be a consultation process prior proposing any changes to market rules.	Y	This statement will be considered for the GGP.
60.	1	Smart meters would facilitate the integration of distributed generation or gas production.	Y/N	Only if the TSOs have access to metering data.
61.	1	Decommissioning of large combustion plants and ousting of nuclear generation capacity in some countries may create a tense situation not yet visible in electricity market prices. Regulators should decide the desired level of generation adequacy and if deemed necessary, take measures to secure this level.	N	The 3 rd Package does not oblige Member States to grant the competency of SoS to the NRAs, the Member States itself may retain competency for this area.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
62.	1	A stakeholder advocates an EU-wide deployment of intra-day market trading with implicit auctioning and gate closure times as close to real time as possible, as well as the application of intra-day wind power forecasting for low reserve requirements.	Y	NRA's are working on the progressive integration of European energy markets under the impetus of the European Commission.
63.	1	There might be a risk, that absolute consistency across all regions may hamper consumer interests due to different preconditions in the different regions.	NA	-
Q2: Do you observe any barriers for investing in new generation capacity? If yes, please list and explain them?				
64.	2	In a general manner, two respondents underline the uncertainty and non-uniformity of the regulatory framework and long-term policy as barriers.	Y	The non-uniformity is being smoothed due to the implementation of detailed rules, e.g. 3 rd Package, and as a result certainty is increasing. Furthermore, general targets at European level were set out in the 'Green Package'.
65.	2	Other respondents point out as a barrier the absence of a clear energy policy, national restrictions on efficient generation technologies, and uncertain and lengthy permit procedures, as well as volatile legislative and political support combined with uncertain trends in generation fuel type.	Y	In general, energy policy is clearer today, what is more, the most crucial goals have been set. We agree that the permitting procedures are time-consuming. Although preferred generation fuel types are known, long-term targets presented in the 'Green Package' have provided some direction.
66.	2	- Costs and duration of authorisation procedures, - Too little support from politicians and authorities, - Risks regarding regulatory environment.	Y/N	We agree that the cost and duration of procedures is a great burden. Risks regarding the regulatory framework are a consequence of policy. However, supports in the form of endowments for renewables are offered.
67.	2	It gets more and more difficult to meet the strict legal requirements at EU level.	Y	This statement will be considered for the GGP.
68.	2	Additional risks due to political and regulatory uncertainty compared to other kinds of capital intensive industry. E.g. the very distinct national scope of the renewables targets (and consequently the incentives to reach them) and the EU scope of the electricity market create uncertainty on how the rules will be, when the new plant comes into operation.	Y/N	Goals resulting from the 'Green Package' should be achieved by 2020 and the present support/ endowments are implemented to achieve these targets.
Market structure and prices				
69.	2	Regarding the structure of the market, a stakeholder finds that the existence of dominant market players in several markets constitutes a barrier for investing in new generation capacity.	Y	The 3 rd Package legislation is being introduced to promote competitive markets. Greater competition might be achieved through larger cross-border exchange in electricity.
70.	2	They also defend the need to have progress towards unbundling, so that new entrants can easily access the market while dominant market players reduce their market share.	Y	The 2 nd and 3 rd Energy Packages contained rules to address unbundling issues.
71.	2	A respondent points out the risk of regulatory intervention into electricity markets.	Y	This statement will be considered for the GGP.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
72.	2	Other barriers that are pointed out: unpredictable market parameters, post 2012 and in particular post 2020, and unstable environmental policies: no carbon targets beyond 2020, uncertainty about a support scheme for RES.	Y	We agree that unspecified carbon targets beyond 2020 might create some barriers. Unknown market parameters regarding CO ₂ allowance auctions could also bring uncertainty, although ETS legislation exists. Generation capacity investments require a long-term perspective to envisage market parameters. This applies not only to renewable energy sources but also to thermal, nuclear power plants.
73.	2	According to a respondent, the change of market rules and the evolving discussions around them increases market uncertainty and hampers the business case for new generation facilities, in particular those with long lead times.	N	Today market rules are clearer; sufficient principles have been discussed and fixed during public consultation on the draft Framework Guidelines on Capacity Allocation and Congestion Management for Electricity.
74.	2	A number of stakeholders underline that regulated energy prices constitute a barrier for investing in new generation capacity. Regarding the development of liquid wholesale markets, obstacles are that open, competitive and efficient markets cannot coexist with regulated end-user energy prices.	Y	This remark is in line with the call for evidence. CEER has proposed that regulated energy prices should be progressively ended.
75.	2	Price caps and floors weaken the investment signal and should not be artificially smoothed.	Y	This statement will be considered for the GGP. As notes in the call for evidence, price caps and such measures need to be minimised.
76.	2	Energy only markets will probably not be able to cope with highly volatile frameworks with regulatory distortions. Thermal plants will suffer from subsidised renewable energy, and will therefore have fewer fired hours, affecting their reliability. This is especially the case if price caps limit the recovery of investments for this type of power plant.	Y	This statement will be considered for the GGP.
77.	2	According to some respondents, price spikes, even if left to occur freely, may not be sufficient in magnitude and frequency in certain markets to stimulate sufficient investment in flexible and back-up capacity.	Y	We agree that the thermal plants may incur 'costs' caused by general standing targets as RES promotion.
78.	2	A respondent finds that another source of income has to be implemented for the thermal plants that are necessary for network security. Otherwise they are at risk of financial difficulties, and some plants could be decommissioned or mothballed due to an inability to recover their costs (even operational ones).	Y	The interaction of renewable development and network security needs to be studied very carefully. Markets should be designed to facilitate development of renewables and the required conventional backup generation at the same time. As a last resort, extra mechanisms may be considered to ensure provision of sufficient investment (e.g. capacity market). For the moment, some countries are working on implementing their own capacity markets. The implications of these mechanisms on neighbouring countries and on the internal market will have to be studied.
79.	2	High levels of liquidity are crucial for ensuring generation adequacy but the markets are still too illiquid. Vertically integrated firms constrain competition, may dilute investment signals and crowd out smaller, independent players.	Y/N	With the 3 rd Package, liberalisation of European markets is going further.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
Grid reinforcement and plant authorisation procedures				
80.	2	Entry barriers can be caused by a lack of grid investments, developing smaller price areas and therefore difficulties in making market-based investments. Larger price areas have better capability to absorb new investment into generation.	Y	Adequate grid reinforcements as well as grid development are necessary to provide power plant investments. The structural congestion in the transmission network should be reflected in the size of areas.
81.	2	Differences in environmental regulation requirements, as well as authorisation procedures and delays in licensing procedures are one problem. Delays in grid connection and high capacity-based grid tariffs for generation are another problem.	Y	Differences in regulatory requirements should be eliminated. Additionally, the rules regarding authorisation and licensing procedures should be harmonised. Moreover the problems concerning grid connection should be solved more rapidly.
82.	2	Diverse environmental requirements across Member States as well as plant authorisation procedures create distortions and act as a barrier to investment.	Y	
83.	2	- Time-consuming authorisation and permit procedures which could even postpone investment. - Delays in grids and power plants authorisation procedures create significant obstacles for investors. - Local opposition.	Y	Comments are in line with the CEER call for evidence. Planning and licensing/authorisation process should be simplified as much as possible. Public acceptance could be encouraged by fostering stakeholder interest in the project.
84.	2	Uncertain and lengthy permitting procedures, licensing new grid infrastructure.	Y	Permitting procedures/licensing referring to grid investments should be simpler and shorter. Furthermore, the general rules of permit issue should be clarified to avoid uncertainty. Transparent planning and granting procedures with public consultation at an early stage would also help to raise public acceptance.
85.	2	Delays to planning consent for transmission infrastructure and generation projects.	Y	This statement will be considered for the GGP.
86.	2	Availability of grid infrastructure and time scale for grid investments.	Y	Grid infrastructure needs to be developed and new investments shall be considered. Grid infrastructure investments should be appropriately dealt with to be simultaneously managed alongside generation projects.
87.	2	A very general barrier is the lack of adequate transmission network capacity.	Y	This statement will be considered for the GGP.
Renewable energy sources and CO₂				
88.	2	Regarding the issue of renewable energy source integration, a respondent finds there to be a potential barrier. Legislation can create a barrier for investing in power generation. The large penetration of politically driven RES can alter the energy mix and the market equilibrium, making investments in thermal capacity riskier. Also, there can be barriers between two neighbouring countries that have developed different RES subsidies.	Y	The RES policy is as pointed out, politically driven, and the effect on thermal production as such should be expected.
89.	2	Renewable technologies may distort signals for other technologies – care must be taken that necessary complementary investment in fossil fuels take place or existing power plants do not close earlier than operationally necessary.	Y	This statement will be considered for the GGP. Detailed analysis is necessary before any decision is taken either in generation or in network industry.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
90.	2	According to a stakeholder, since return on investment is recovered over a long period of time, it requires regulatory certainty. The current timeframe for certain renewable and carbon related policies are relatively short (carbon pricing regime, renewable support mechanisms).	Y	We partly agree with this statement. In the case of traditional generation and network investments it is true, but in the case of renewables the return on investment depends on the support mechanisms introduced.
91.	2	One respondent would like to underline that ambitious targets for renewable can affect fixed cost recovery of conventional plants, and thus lead to earlier decommissioning decisions. Also, there is a need for targeted support for investments in low-carbon generation (in particular nuclear), at least in the short term.	Y/N	We agree that attention has to be paid to the effect of supported renewables on other conventional plants. However, further study would be required before targeted support is advocated.
92.	2	Targets and rules must be clear, developed for the long-term, and be announced far in advance (e.g. ETS 2020).	Y	This statement will be considered for the GGP.
93.	2	The lack of an equitable and stable carbon price, applicable at the same level and over a sufficiently long time frame (in the range of 20 years) to all plant technology types, represents a serious barrier to future generation adequacy.	Y	This statement will be considered for the GGP. Uncertainties regarding CO ₂ pricing come in addition to other uncertainties in the decision making process and depend on political decisions; however they are of the same nature as the uncertainties from future electricity prices, fossil fuel prices, taxes and subsidies, etc.
94.	2	For one respondent, uncertainty about CO ₂ regime post-2020 and discussion about the IED directive is also a barrier.	Y	Agree that uncertainty about the future CO ₂ regime could be a barrier for investment.
Concerns regarding the gas sector				
95.	2	Access to gas transport and storage needs to be improved.	Y	This statement will be considered for the GGP.
96.	2	Inadequate competition in gas supply markets and insufficient flexibility in gas procurement hamper investments in gas plants and may therefore have an impact on generation adequacy too.	Y/N	We partly agree with the statement. A lack of competition in the gas supply market could hamper the investments in gas plants and have an impact on power generation. This issue is being investigated by the EU.
97.	2	Specific German problem: lack of adequate access to gas pipelines and gas storage. Unsatisfactory unbundling in electricity sector in Germany.	N	We do not agree with the statement relating to gas and do not see a specific German problem. Adequate access to the transmission system is granted. At some bottlenecks only interruptible capacity can be contracted, interruptions are very rare. A new trading platform for primary capacity (Trac-X) to improve access to gas pipelines was implemented in August 2011. Non-discriminatory access to storage facilities is granted on a negotiated basis. There is no indication of a need for further rules for access to storages.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
98.	2	Section 4.3 of CEER's call for evidence discusses the possibility of a fuel switch in thermal power plants away from gas, as a measure to ensure a stable electricity supply during a potential gas crisis. One respondent drew attention to the fact that modern gas plants are technically not equipped for a fuel switch. In addition to this, both the storage and the use of oil are very expensive and also subject to a range of specific legislation (e.g. Seveso II – Directive). It would be extremely expensive to ensure security of electricity supply by technically equipping gas plants for a potential fuel switch. Instead, they believe that the expansion of gas storage facilities in Europe is the right way forward to secure electricity supply in Europe.	Y/N	We partly agree with the statement. These arguments seem to be consistent. A cost-benefit analysis would be needed.
Other remarks				
99.	2	If one set of low-carbon generation technologies enjoys price certainty up to a certain date, but another set does not enjoy the same certainty, then this is inherently discriminatory, and may lead to society paying more for a given volume of carbon reduction, while enjoying a lower security of supply.	Y	Agree with this. It is a political challenge with different solutions in different countries and it is difficult to see an easy solution.
100.	2	Commercial restrictions to cross-border electricity flows are particularly harmful in terms of optimal allocation of generation capacity and consequently for security of electricity supply.	Y	Besides physical restrictions there should ideally be no other limitations in the cross-border flow.
101.	2	Necessary reserve capacity for security of supply should be maintained in the system by allowing a reasonable degree of flexibility in environmental legislation while at the same time safeguarding general environmental goals.	N	The need for flexibility should probably be looked into more closely, but environmental legislation must be respected. On a case by case basis in extreme/very specific situations, this may be worth studying.
102.	2	The range of network charges can vary significantly between projects and should therefore not be subject to specific locational charging regimes. Locational charging disadvantages wind generators in the market.	N	Locational charging for the grid connection (the need for investment and reducing network losses), if decided, should be an element in the evaluation and prioritisation of all new generators. Nonetheless, when deciding on locational charges, locational needs for wind and solar (and other RES) generation technologies should be kept in mind to avoid unfair treatment.
103.	2	In one stakeholder's view it is essential to apply the polluter pays principle to make conventional generating technologies pay the real social (pollution) cost of their activities.	Y	We agree with the principle that the polluters must pay the pollution cost of their activities.
104.	2	A respondent urges all stakeholders to ensure a more efficient deployment in the third phase of the ETS (Emission Trading Scheme), with auctioning modalities put in place which would eventually put a price on pollution and trigger the necessary investments in RES.	NA	-

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
105.	2	Uncertainty surrounding the long-term regulatory framework; generators cannot confidently make “future-proof” investment decisions whilst the goal posts are constantly being moved (NEC directive, carbon framework post-2020, regulatory framework for energy trading).	Y	We agree with this view.
106.	2	Ineffective and volatile domestic locational signals for generators: <ul style="list-style-type: none"> • It discourages renewable generation located in high charging areas, • It encourages earlier closing of existing generation located in high charging areas, • Short term volatility of locational signals introduces uncertainty. 	Y	We agree that locational signals for generators should strive to be clear, consistent and stable in time. However, changing locational signals are an important tool to incentivise generators to exhibit optimal socio-economic behaviour.
107.	2	Disparity in transmission charging regimes across the EU; it encourages “less charging” parallel routes that become congested so that costs are increased.	Y	Transmission charging should ideally be harmonised throughout Europe.
108.	2	Inequitable congestion management rules.	Y	It is important to have fair and efficient congestion management rules; however we would like to highlight that in the last couple of years many improvements have happened in this area.
109.	2	Grid and power plant authorisation procedures should be harmonised at a European level as well as environmental regulation requirements, avoiding distortions and barriers to investment. It should be stressed that the profitability expected by investors, the ones who actually assume the risk of any investment, is based on the existing regulatory framework when the final investment decision is taken. It is of special importance to emphasise that regulatory uncertainties should be minimised, and that necessarily requires a clear and consistent regulatory framework which is stable over time.	Y	Harmonisation might be advantageous. However, realistically this will probably not be achieved in the near future.
110.	2	Conflicts between public and private interests may be expensive and time-consuming. Investments in grid technology may cause extreme costs that lack in the financing of generation capacity.	Y/N	Unclear – the answer depends on the nature of the public and private interests. Coordination between investment and generation is required.
Q3: In case of additional measures for ensuring generation adequacy, what would be the key issues to take into account?				
Market development				
111.	3	If market prices give signals to invest in different types of production, they also give signals to lower electricity demand during strained periods. The market must be left to decide, and the system must not encourage electricity wastage as is the case currently with some subsidy-schemes.	Y/N	For some (industrial) customers it's hard to shape their demand. But energy wastage shouldn't be incentivised.
112.	3	In the coming years, technology will provide more possibilities. Legislation must not hamper development. For example ill-planned subsidies might lead to sub-optimal technology paths.	Y	This statement will be considered for the GGP.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
113.	3	Top-down grid plan for the 2020-2030 period, R&D support for demand response, power storage technologies, smart and super grids, rapid EU-wide market coupling of spot markets and integration of intra-day and balancing markets.	Y	This statement will be considered for the GGP.
Capacity mechanism				
114.	3	Possibly some form of capacity incentive mechanism could be required for investing in flexible backup capacity to balance electricity generation with renewable capacity.	Y	The necessary support mechanism should be analysed ensuring adequate reserve capacity and regulating power “balancing” the increasing – partly unpredictable – renewable ratio.
115.	3	Capacity mechanisms may be necessary, if revenues from the market are not sufficient to cover costs and achieve generation adequacy. Investment in low carbon generation (wind, nuclear) to meet the renewable targets will need to be accompanied by additional capacity remuneration mechanisms to ensure there are sufficient “flexible units” in the system (as back up for renewables) and to create a friendly environment for new investments.	Y/N	Firstly an evaluation is needed as to whether energy generation adequacy can be attained through the market. Capacity markets could be one solution but other options need to be considered as well.
116.	3	Some market models need capacity to function well.	Y	In some European countries capacity markets are being studied.
117.	3	If sufficient revenues cannot be recovered in the energy market to achieve generation adequacy, a fall back solution such as capacity remuneration mechanisms might be required. These mechanisms are generally based on the concept of a two-part price, with one set of revenues paying for energy on a €/MWh basis and another rewarding capacity needed on a €/MW period basis.	Y	Capacity markets could be one fall back solution. There are several ways to organise capacity markets, depending on the problems that are addressed.
118.	3	If a mechanism is introduced it is essential to ensure it is non-discriminatory and complies with market mechanisms. There are examples which don't deliver this, such as lump sum capacity subsidies and locational signals based on nodal prices which are detrimental to liquidity and don't encourage generation investment, as in the US case.	Y/N	A mechanism needs to be well considered.
119.	3	Before Europe decides to use a last resort mechanism to palliate the lack of generation capacity, one respondent would like to be consulted about the nature of the mechanism.	NA	Some Member States are currently thinking of implementing a capacity market. These initiatives remain for the moment at national level. Capacity market issues at a European level should be discussed within the drafting of the GGP.
120.	3	On “last resort mechanism”: it should be neither the call for tender by a Member State the directive foresees, nor the creation of a capacity market. One respondent stated it is able to propose a much better mechanism.	NA	-

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
121.	3	At this point in time, a stakeholder has strong reservations about making decisions on capacity payments or capacity markets. They lead to additional subsidy needs for other types of generation and thereby distort the energy market in the long-run. Capacity remuneration removes incentives to develop demand response and energy storage which are cost efficient tools to safeguard system stability. The implementation of such mechanisms on a national scale would create distortions in neighbouring countries, and be counter-productive for common European electricity market development.	Y/N	We agree that implementing a capacity mechanism at national level may create distortions which should be avoided. Nonetheless, a possible capacity mechanism could include features to foster the development of demand response and storage.
122.	3	Avoid capacity mechanisms in order to remain as close as possible to liberalised energy market design.	Y/N	CEER will work on evaluating the consequences of the capacity markets that will be implemented in some European countries.
Interconnections				
123.	3	Increase interconnection capacity where necessary and create short term/balancing markets to allow them to operate freely.	Y	This statement will be considered for the GGP.
124.	3	Interconnections must be promoted, especially for peripheral countries facing specific security of supply situation. They have to secure supply mainly through their own means and have to be more cautious when dealing with investments in the infrastructure necessary for future supply (e.g. France-Spain).	Y	This statement will be considered for the GGP.
125.	3	The development of cross-border trade with a balancing market extended beyond national boundaries could represent a strong incentive for the development of an adequate level of generation capacity, located where it is more cost effective. Coordination between TSOs on relevant issues (e.g. security margin calculation etc.) can be beneficial as a point of reference for the development of an efficient electricity generation system, open to cross border trade.	Y	This statement will be considered for the GGP. Regarding cross-border balancing: the Framework Guidelines on electricity balancing under elaboration by ACER deals with this topic.
126.	3	New interconnection capacity will be constructed where it has merchant value, but the setting of arbitrary targets for regulated capacity regardless of market value/need/price differential signals would probably represent an uneconomic investment. It would also undermine the case for merchant interconnection projects that may currently be under assessment.	Y	We fully concur that interconnection investment should reflect market needs as well as merchant value.
Market efficiency and monitoring				
127.	3	Before thinking about additional measures the existing market barriers should be removed to let the free market work, thus future demand may be satisfied through price mechanisms in a cost-optimised manner.	Y	We agree to reduce/eliminate market barriers. The co-existence of market-based prices and cost-optimised price mechanisms is questionable.
128.	3	Electricity prices should be passed through to consumers and remaining tariffs should be removed, especially those set below the market price.	Y	CEER has proposed that regulated tariffs should be progressively phased out. Regulated tariffs do not reflect wholesale market conditions which can be detrimental to investment in generation capacity.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
129.	3	Monitoring of price spikes (within transparency) by an independent European authority would be welcomed.	N	We do not agree with this statement, the energy, competition and/or financial authorities can do these monitoring activities.
130.	3	Increase competition by giving equal opportunities for new entrants.	Y	This statement will be considered for the GGP. Reducing barriers to entry is essential for a liquid and efficient wholesale market.
131.	3	Harmonise, simplify and accelerate permitting procedures in a stable, long-term regulatory environment.	Y	This statement will be considered for the GGP.
132.	3	Grid reinforcement is also essential for generation adequacy.	Y	This statement will be considered for the GGP. Grid reinforcement might be necessary to allow power plants to generate at their maximum and transport electricity from generators to customers.
133.	3	Grant visibility on closing and replacement plans for existing power plants.	Y	This statement will be considered for the GGP. It is difficult to assess generation capacity and take decisions on necessary investment without a clear overview of existing capacity and replacement plans.
134.	3	Each Member State must monitor generation capacity to avoid structural deficits between offer and demand.	Y	This statement will be considered for the GGP.
135.	3	Minimise administratively determined elements.	Y	This statement will be considered for the GGP.
136.	3	In accordance to Directive 2005/89, encourage a wholesale market framework with regard to balancing supply and demand.	Y	This statement will be considered for the GGP. ACER is developing the Framework Guidelines on Electricity Balancing to help the integration of the balancing markets in Europe.
137.	3	The administrative burden for data collection needs to be addressed. Significant reporting requirements for TSOs are already in place. Any extension should be justified with a demonstration of the market benefits and the party best placed for the publication should also be identified.	Y/N	We partly agree, as there are different degrees of transparency and market monitoring across Europe. There is a need for further market integrity and transparency which REMIT and the other market integrity proposals from the European Commission aim to address.
138.	3	Publish at European scale a bi-annual study for future load/demand curve and gaps for future generation capacity, grid evolution and planned power plant building to allow visibility for base load, semi base and peak generation investments.	Y	This statement will be considered for the GGP.
139.	3	A stakeholder defends the need for coordination and streamlining of authorisation procedures at a European level as a means to guarantee a level playing field for market players operating in different markets and to favour the prompt realisation of investments in generation capacity, together with grid upgrade.	Y	Coordination and shortening of authorisation procedures is needed. We would add that project promotion to improve local acceptance is also important and would facilitate investment.
140.	3	The impact of support schemes on prices should be transparent and published for each Member State.	Y	This statement will be considered for the GGP. CEER is currently looking at the impact of non-harmonised support schemes and whether they affect investment patterns.
141.	3	Well-functioning electricity markets should be able to deliver security of supply and generation adequacy by themselves in a fair, transparent and non-discriminatory framework, guaranteeing sufficient revenues to the generators.	Y	This statement will be considered for the GGP.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
Locational signals				
142.	3	A stakeholder finds that locational signals should be compatible, and if possible harmonised, at EU level, even if careful consideration of the impacts must also take place.	Y	This statement will be considered for the GGP.
143.	3	According to one respondent, locational signal are over-estimated: there are physical reasons having load centres located separately from production.	Y/N	Locational signals can facilitate efficient use and development of the transmission system and ensure a “level playing field for all types of generation”. However, before applying locational signals, careful analysis and consideration of their impact on investment decisions is needed.
144.	3	A respondent believes that there is currently no need for additional measures. However, if any, they must be coordinated, transparent and ensure a level playing field for all generators locally and across the EU. Also, there should be no incorporation of locational signals in generation adequacy methodology because they discourage investment and distort trading.	Y/N	We party agree with this statement. However, as explained above there are benefits for investment by introducing locational signals.
145.	3	A stakeholder does not support this proposal since, considering existing situations, such mechanisms have not shown their efficiency in terms of maximisation of the collective benefit. Indeed, power plant localisation choices integrate additional or superior constraints (acceptability, administrative procedures, technical, and social matters etc.). Nevertheless this stakeholder considers that transmission system operators should have at their disposal legal means (such as calls for tenders) when an issue related to localisation of power plants arises.	N	With reference to the signals guiding the location of designed power plants we still support strengthening the signals, which seems to be reasonable especially when this kind of activity could reveal any barriers previously. As the respondent mentioned, the selection of probable power plant location is connected with a lot of additional constraints but we find strengthening the signals guiding the power plants location, highly efficient.
Other remarks				
146.	3	In the near future, we think that EU capacity adequacy concerns will mainly be related to lack of flexibility, rather than to lack of capacity in quantitative terms.	Y	We agree that as the amount of intermittent generation resources increases, there will be an increasing need for flexible units. A well-functioning electricity market should be able to deliver adequate generation to meet demand. Any additional measures, including capacity mechanisms, should be carefully considered to ensure that they don't lead to market distortion.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
147.	3	Any mechanism should be judged against the following high-level criteria: <ul style="list-style-type: none"> - Strong commitment towards an open, transparent and competitive wholesale European energy market through market integration (e.g. market coupling); - Effectiveness in incentivising the required investment; - Consistency with the EU ETS (by allowing the EU ETS to continue to function as an important means of incentivising low carbon investment); - Technology neutrality – in the sense that Government should not seek to pick technology winners or to second-guess the market. There may nonetheless be a case for specific support (e.g. banding) for new and untried or immature technologies or where more learning is needed, to achieve a long-term societal benefit; - No discrimination against existing generation capacity in favour of new build. This could further distort the market; - Collateral policies (i.e. financial regulation reform) should not deter investment decisions. 	Y	This statement will be considered for the GGP.
148.	3	Long-term bilateral contracts between consumers and generators should be promoted, as well as powerful cogeneration units.	Y	Long-term contracts could stabilise future cash flows of generators, reduce the cost of capital and incentivise investment. However, long-term contracts can weaken competition in retail and wholesale markets, increase barriers to entry and also have a negative impact on liquidity.
149.	3	Ensure that the mechanisms adopted at national level do not distort the functioning of an integrated European market and support its achievement. One stakeholder draws attention to the fact that since this issue falls under the principle of subsidiarity, it is desirable to seek greater harmonisation of rules for further market integration, with initiatives such as those developed by the "target model" of the "Project Coordination Group" in the frame of the regional Initiatives launched by ERGEG.	Y	CEER shares the opinion on adopting any extra measures at national and at European level, which should be taken into consideration. Only if the support is deemed to be a necessity should the measures be introduced, and in this event sufficient precautions should be taken. Negative impacts should be avoided. Furthermore, any support should be adopted only when it plays an essential part in ensuring security of supply. We believe that the main goal is to achieve harmonisation of the rules across Member States in order to integrate their electricity markets.
150.	3	Member State's energy systems have particular characteristics such as natural and renewable resource endowments that should be taken into consideration when developing policies at European level, supporting market adequacy to allow each Member State to effectively use the resources it has available.	Y	We agree that in creating rules which are aimed to support generation capacity investment at European level, we should pay attention to the natural resources and renewable endowments of each Member State to determine requirements and incentives for investments in power generation.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
151.	3	European energy regulators should recognise that the apparently higher wind energy costs have to be compared with the opportunity to plan the economic future of Europe on the basis of known and predictable costs. In this regard wind energy provides a domestic energy source, which is not only fossil fuel free, but also free from any economic risk emerging from fuel and carbon price volatility as experienced in recent years.	NA	-
152.	3	A stakeholder considers the upgrading of the transmission network essential for the exploitation of possible new generation sites as well as for guaranteeing load balancing between areas of excessive production and areas with energy reservoirs (pump storage hydropower plants). Stability in environmental standards and requirements, such as practical standards for fish ways and residual flow, is crucial in order to provide potential investors with planning reliability.	Y	This statement will be considered for the GGP.
153.	3	Coherent market arrangements should be developed, but policy makers should avoid "constant tinkering" with market designs as this may hinder customer interests.	Y	Creating a stable regulatory framework for investment is essential and can facilitate investment in generation supply.
Additional concerns				
154.		Measures to foster investment in the transmission network and interconnections should be established at EU level. Market monitoring is crucial. System adequacy forecasts must help to identify problems regarding generation adequacy at national and EU level. TSOs are responsible for forecasting the overall evolution of demand, plan development of transmission network, including interconnections and connect generation plants to the grid. TSOs are allowed to have access to information to make forecasts. A crucial issue is the accuracy and precision of information. Some issues include: over-optimistic generation forecasts, unclear time plans, unknown factors in forecasts (assumptions on introduction of electric vehicles, energy efficiency measures).	Y	This statement will be considered for the GGP.
155.		The current electricity market in the UK is unlikely to secure the investment required to decarbonise the UK electricity sector by 2030 in an efficient manner and at least cost to consumers.	NA	The remark is outdated. (See electricity market reform white paper published in July 2011).
156.		Renewable energy will be at the core of the development in generation as the market moves gradually away from the traditional model.	Y	We agree that the significance of renewable energy will increase in the future, however, traditional energy generation will not lose its importance though its role and operation mode will change.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
157.		New legislative and regulatory initiatives may alter the market signals and impact future investment choices, but it is essential they do not jeopardise future security of supply.	Y	This statement assumes that the market can handle the issues of new investments in the energy sector; however, there is no economic evidence of it. So legislative and regulatory initiatives may alter the market signals, but on the other hand they can have a positive impact on SoS. As the same respondent mentions later, the right balance is necessary.
158.		The call for evidence presents diversity as meritorious in its own right. A stakeholder does not agree with that: the measurement of security of supply characteristics is multidimensional and yet critical to understanding generation adequacy. It could include risks associated with price, delivery (especially, and critically, the reliability of deliverability at time of peak demand), as well as the more usual peak margin assessment of energy supply vs. peak demand.	Y/N	A sufficient level of generation adequacy has to include diversity, in order to offer sufficient flexibility and reduce the global risk. This does not exclude other factors to be considered like the more usual peak margin assessment of energy supply vs. peak demand.
159.		The proposal of the draft consultation document to publish information on power plants with time horizons exceeding three years must be viewed with great caution. Indeed, beyond three years, regulatory and political uncertainties exist and could impact the quality of the information delivered. Therefore in order to avoid this difficulty, a respondent is in favour of sticking to the three year time horizons.	Y	We support this point of view about an improvement of information transparency and publishing the non-confidential data, making it available to all market participants. First of all it would give an opportunity to industrial players to admit that their behaviour is utterly competitive, secondly the authorities being far better informed would introduce necessary changes in market rules. Moreover the time range of presented information should potentially be extended. We assume that three year time horizons could be insufficient for investors to deal with their assessments about future investments in power generation and for regulators to assess future generation capacity. Furthermore we believe that the time horizons should be lengthened in order to provide any signals which remain far better than none. However CEER understand that the presented information should be reliable enough to become a basis for further foresight.
160.		Other distortions, that alter the generation mix by artificially limiting price signals for investments, that should be removed: - Electricity import bans across European borders hampering European market integration, mainly when there are interconnections with hours in which we can see capacity unallocated and high price spreads between both markets. - Some compulsory Virtual Power Plants that oblige some companies to sell their products at a price, which is unrelated to the market.	NA	These two cases represent particular situations that have to be managed between the parties concerned. They are not relevant regarding the scope of the GGP on generation adequacy.
161.		Difficulties and delays in the process of authorisation.	Y/N	This is a very common statement. In certain cases/certain regions/countries it can be true, but in other cases not, so we partly agree.

#	Q ^{stn} #	Respondents' views	CEER's comment	Explanation
162.		Interconnectors will be crucial – not only for electricity, but also for gas.	Y/N	We partly agree with this statement. There is a need for proper, detailed analysis of the future capacity situation (new developments, generation mix, reserves, etc.) and network developments (domestic networks are crucial as well) in each region. And according to this analysis the stakeholders can decide (there is no huge increase in demand in Europe, and the present network is adequate for it, of course the flow pattern can change).
163.		Transparency is a prerequisite for any large-scale investment decisions.	NA	It is not clear what exactly the statement means. Transparency regarding the details of generation investment, market prices, subsidies of renewable, etc.?