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By email: consultation2011E05@acer.europa.eu

15<sup>th</sup> September 2011

Dear Sir, Dear Madam

## Ref: ACER Public Consultation on Framework Guidelines on System Operation

Centrica welcomes the opportunity to contribute to this consultation by ACER on the draft framework guidelines on system operation. This response is on behalf of the Centrica group of companies excluding Centrica Storage Limited.

Please find attached our detailed response to this public consultation.

If any element of our response is unclear or you require further detail of any of our comments or suggestions, please do not hesitate to contact me.

Yours sincerely, Carys Rhianwen

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## **ACER Public Consultation on Framework Guidelines on System Operation**

#### Introduction

This paper is on behalf of Centrica in response to the 15 July 2011 consultation issued by ACER on its draft Framework Guidelines on System Operation.

Centrica is a leading participant in electricity and natural gas markets in Great Britain, with some - primarily wholesale trading - activities in neighbouring North West European countries. The company is engaged in the competitive sectors of the electricity sector: through its subsidiary British Gas in the retail sector, and through Centrica Energy in the electricity generation and wholesale trading markets. Within the generation sector our activities include gas fired generation, renewable generation primarily through the development of renewable wind energy and nuclear generation through a joint venture with EDF. Centrica is also present in gas and power markets in certain North American markets.

Centrica supports the responses submitted to this consultation by the AEP and Eurelectric. This Centrica response draws out the main elements from our company's viewpoint.

This response is non-confidential and we are happy for ACER to publish it alongside other responses received.

The development of European network codes as required from the Third Package will be an important step in the development of the European internal energy market.

This response is structured in three parts. In the first part we provide some general comments on the ACER documents. In the second section we provide answers to the specific questions raised by ACER in its consultation. In the third section we provide suggested textual amendments to the certain parts of the text of the draft framework guidelines issued for consultations.

- I. General Comments
- II. ACER Questions on the Draft Framework Guidelines
- III. Textual Amendments to the Draft Framework Guidelines

#### I. General Comments

We welcome the following elements in the draft Framework Guidelines (FG):

- More detailed work on the definitions than in previous guidelines. This we believe will greatly assist in ensuring a consistent interpretation by all stakeholders irrespective of nationality or market background. It is important that the definitions are carried through consistently into the final European Network Code (ENC). It is also important that terminology is consistent across the various ENC topics.
- The format of the document is clear and an improvement over the connection FG.



There are however a number of areas where we believe the FG would benefit from re-drafting:

- We believe that the FG should be written at a principles level, without being too prescriptive. This is particularly important given the difficulty in changing EU legislation, which is what the binding ENC will ultimately be. Flexibility is needed to be able to adapt to future developments as well as regional and national implementation of the rules.
- Rules should be harmonised where there are economic benefits, and not 'as far as technically possible' irrespective of costs.
- Further on the issue of harmonisation, more clarity is needed about at what level harmonisation should be established: pan-European or synchronous level.
- As the system operation code will determine the scope of some other code areas, ACER needs to ensure that it is written in such a way that it does not lessen the flexibility required within other topic areas.
- Meanwhile the FG for system operation must be consistent with the principles set for connection and balancing guidelines. System operation and connection should be underpinned by the relevant network security standard.
- In section 4.1 of the Initial Impact Assessment (IIA) it states "network codes .... are not intended to replace the necessary national codes for non-cross-border issues". Nonetheless it is clear from the draft FG that this will inevitably occur, although to what extent is not entirely clear at this stage. The statement in the IIA is therefore misleading.
- We recognise that certain elements need to be pursued in light of a cost benefit analysis. It is not however clear from the document who (ACER, ENTSO-E or indeed the local TSO) is obliged to undertake this analysis nor whether there should be an approval process in place to ensure consistency across the EU. This urgently needs to be clarified within the FG. ACER has not thus far presented a complete cost benefit analysis on system operation, either in the FG or IIA. The IIA does contain a diagrammatic schema for a cost benefit analysis (section 4.3.4), but it is not clear whether this is supposed to form the basis of a model or not. This diagram shows benefits stacked on the left versus costs on the rights, in a qualitative form. However this does nothing to indicate the relative magnitude between the two, nor attempt to quantify them Indeed, the IIA also lays out the principle that a cost benefit analysis can only be done after the event (section 4.3) which in our opinion could be very dangerous principle on which to introduce regulatory change.
- We do not believe that enough emphasis is placed on facilitating market integration and market competition nor on the use of market based mechanisms, for example in the procurement of ancillary services from network users by the TSO.
- There should be greater involvement of system users in the development of these rules. This should not be limited to opportunities to respond to a single consultation by ACER on the FG and another by ENTSO-E on the ENC. System users should be more involved in agreeing market related rules based on self dispatch rather than simply reacting to a TSO 'issuing instructions' in a central dispatch model. In this statement we would interpret system operators as encompassing generators, suppliers, distribution system operators and traders, all of whom must engage with the TSO via the system operation code.



#### II. ACER Questions on the Draft Framework Guidelines

#### **General Issues**

1. The Initial Impact Assessment (IIA) identifies the following challenges (i) growing amount of distributed generation and variable generation (ii) increasing interdependence of control areas. Are there additional key cross-border challenges that the Framework Guidelines (FGs) and Network Code(s) on System Operation should address?

One other area we believe should be given greater prominence in the FG is market integration, which is the ultimate goal of the EU. This topic is not included in Table 1 which is used to assess the policy approach taken.

The future growth in offshore wind farms will see an increased use of DC transmission lines rather than the onshore AC lines. This will have an impact on system operation and on connection codes, for example in the provision of frequency response by generators which must be recognised.

2. The Framework Guidelines identify a number of actions and requirements to be included in the Network Code(s) as a solution to these challenges. Are the actions and requirements identified in the Framework Guidelines appropriate to solve these challenges?

As stated above, we believe that the FG should state more clearly that market based mechanisms and solutions should be pursued wherever possible, for example in the provision of ancillary services and reserve provisions.

On the subject of information exchange, we believe the FG should be much more specific about the information to be provided by network users to the TSOs. The fundamental data transparency guidelines already envisage fair degree of information exchange. Where additional information is deemed necessary, this should be clearly justified and in this recognise two issues; firstly reflect where information is considered commercially sensitive and secondly the cost of information provision by network users.

There must be consistency in the actions and requirements identified for this code subject with other codes, in particular connections and balancing.

3. Are the proposed levels of harmonisation sufficient to solve these challenges?

We are concerned that the FG does not clearly establish the level of harmonisation; nor whether this should be established at EU or synchronous level. Thus answering this question is not straightforward. For example on page 15 ACER states that the general system operation characteristics are that 'the Network Code shall define common principles, requirements, standards and procedures within the synchronous areas throughout the EU'; the meaning of which is not clear. Another statement should also be revised in our opinion, where ACER states in Table 1 that one of the objectives is 'to apply the same principles for different systems'. To do this would require not only harmonisation but standardisation. Harmonisation should not be seen as an end in itself but as a means to an end, that of market integration. While electricity networks across Europe are inter-dependent (especially where the inter-TSO connectivity is via an AC link), the difference in physical characteristics of the systems is such that a one size fits all would not be efficient nor cost effective.



In our opinion, harmonisation should be aimed at on a principle level, which still allows a degree of differentiation in implementation at national or regional level to accommodate the underlying physical characteristics and needs of the electricity system.

A further consideration is how to ensure adherence to the requirements of harmonisation with neighbouring but different Member States.

4. Should the Framework Guidelines be more specific with regard to areas that need to be harmonised, both across and within synchronous areas?

As stated in our response to question 3, the FG is neither clear nor consistent in how it views this question. This must be revised.

In our opinion, harmonisation – where it is merited for efficiency purposes following a cost benefit analysis – should mainly be at synchronous level basis and not on a pan-European level. Networks are interdependent, but this is mainly on a synchronous level basis. Even then some national and regional differences must be recognised.

This said, there would be benefits for EU wide harmonisation of certain issues, such as definitions of reserve and ancillary service products.

It is essential that the FG not only states the level at which harmonisation should be achieved, but for ACER to give a clear indication as to the degree of harmonisation that is desirable and actually required to control the perceived problem for each subject area.

5. Should the Framework Guidelines require the development of common rules for System Operation between synchronous areas

As stated above, we believe that harmonisation should focus on the synchronous areas. As more interconnection is built between synchronous areas, greater coordination of systems, and hence system rules, will be needed in certain areas. These would include topics such as scheduling, emergency reserves etc. The aim should be to bring as much capacity as possible to the market whilst ensuring system security.

6. Considering the current arrangements of the system operation rules and procedures throughout the EU, what would be an appropriate level of detail for the Network Code(s) on System Operation?

As stated above, we believe that the FG and ENC should focus on harmonisation of principles, and avoid excessive prescription. While the final objective is integration of European energy markets, it must be recognised that not all markets are the same – they have different physical characteristics as well as different levels of liberalisation and competition. In the interest of efficiency and cost effectiveness, the code development process should recognise that this is not a single step process but a journey whereby the rules are gradually revised as markets and system interconnectivity needs arise.

For the purpose of system operation, the FG and ENC should be flexible and allow national code interpretative differences unless there are clear benefits for network security and cross border trade.



Any proposals to raise the level of existing code standards (contained within the operational handbooks of the various synchronous levels) should be subject to ex ante full cost benefit analysis.

7. What key benefits and types of cost would you expect for compliance with these requirements? Please quantify from your point of view.

The key benefits include greater reliability of supply, facilitation of market integration and increased ability to accommodate the growth of renewable generation.

The costs of compliance for system users will depend very much on the level of detail contained in the ENC and how much this differs with existing national code requirements. If demands are very onerous on system users such as generators, then the costs will be significant. Thus it is very important that cost benefit analysis is carried out when requirements extend beyond those in place currently. Operational security rules must recognise the associated costs and not simply 'be aligned as far as technically possible throughout the EU' as ACER states on page 17 of the FG. This would not be in the interest of customers or system users, and could impact future investment levels.

This also reinforces the benefit of using market based solutions wherever possible, as this tends to be more cost effective for the market as a whole.

8. Should the Framework Guidelines be more precise on organisational aspects of operational security, in particular with regard to security assessment?

Operational security must be considered from a number of perspectives. This is not only a technical issue but also a regulatory and market issue. Thus TSOs should not only be required to maintain security of the network but also to maximise the capacity available to the market.

A more consistent approach to assessing system security and calculating reliability margins would be beneficial in the FG. We would expect the common grid model referred to in the FG to be consistent with that put in place under the capacity allocation and congestion management code, although this is not clear.

## **Specific Issues**

9. Are the implications for significant grid users clear and relevant?

First of all the definition of significant grid user is not sufficiently clear in the FG, nor who will develop this further to enable individual users to be identified as significant or not. Nor is it clear whether the definition and selection process/model is equal to that to be used in the connections code.

As we are expecting the full implications of the significant gird user to be clear until the ENC is drafted and this definition enhanced/explained, it is not fully possible to assess whether the implications for significant grid users are indeed relevant.



#### 10. Are the roles and responsibilities sufficiently addressed?

We do not believe that at this stage the FG has sufficiently clarified the roles and responsibilities of all parties concerned. Furthermore we believe that the FG gives too much freedom for ENTSO-E to instruct system users of their roles and responsibilities within the ENC rather than encouraging a more bilateral or even multilateral discussion. The FG must recognise the benefit of market solutions rather than a central dispatch system, and hence the developmental role that should be played by market participants in establishing commercial rules other than solely being directed by the TSO.

As well as system users and TSOs, the FG should also provide more clarity on the roles and responsibilities of the regulatory authorities, ACER and national regulatory authorities.

11. Are the individual provisions under Scope & Objectives, Criteria, Methodology & Tools, Roles & Responsibilities, Information Exchange and Implementation Issues, associated to the particular topic, adequate? Should there be any additional elements?

One general comment we would make is that the FG would benefit from a greater demonstration of the understanding of the risks associated with implementing these codes and the associated change management requirements of each topic.

Below we have grouped our comments according to the topic subjects as established in the FG.

## **General System Operation Characteristics**

As previously stated, we are of the opinion that the FG should be re-written to reflect the self dispatch model system and to require any new and additional information requirements from the TSO to be justified. As currently drafted, the information exchange elements appear to suggest a central dispatch model whereby the TSO unilaterally determines information criteria to be supplied by system users.

## **Topic 1 - Operational Security**

The reference to 'bulk transmission networks' is unclear. The FG should aim to use consistent and defined terminology to ensure understanding.

As mentioned in our introductory comments, it is not clear who is responsible for carrying out the cost benefit analysis referred to here.

We believe that there should be more detailed links to security of supply rules in this section. The FG should also be clearer as to who defines the different steps and associated rules of system security operations.

## Topic 2 - Operational Planning and Scheduling

We do not believe that it is sufficiently clear what is meant by 'performing security analyses' and would encourage ACER to explain this in more detail in the FG.



It is not clear at what level the specific reliability margins are to be crafted. Given the cross border nature of the ENC, then a degree of coordination should take place, as referred to in response to question 8.

Planned outages by the TSO and network users should be organised through a cooperative model. The TSO should not be permitted to veto generator/consumer plans out of hand. Similarly a TSO should not be permitted to enforce a network outage on users with little warning and no commercial risk.

It is implied that TSOs can reserve cross border capacity for balancing purposes. This would limit the amount of capacity available for the market and weaken associated signals. We believe that the maximum capacity possible is available to the market. Any concerns about managing emergencies should be addressed in topic 5.

Under implementing issues, there is reference to 'overlapping issues shall be managed' which recognises that linkages exist with other network code subjects. In our opinion, the governance of the whole code process including the inter-relationships between the different subjects should be addressed through an overarching governance and change management process. This should be led by ACER as the author of the various FG and coordinated with all market participants.

# <u>Topic 3 – Load-Frequency Control</u>

Whilst harmonisation of definitions and principles would be beneficial, it must nonetheless be recognised that there are physical differences between synchronous areas.

Greater recognition is needed within this section of market based solutions, as has previously been referred to in this response.

## **Topic 4 – Staff Training and Certification**

It is correct to include a requirement that there is adequate staff training in place; however we question whether the prescriptive nature is a step too far.

We believe that as long as the TSO can demonstrate that its training programme is equal to the principles laid out in the code, that independent certification is unnecessary and would simply add costs. Similarly the 'train the trainer' process should be principles based and not a further requirement to fund an outside, independent programme.

The reference to 'TSO shall also have appropriate knowledge of market effects' should more clearly explained. System operation is a technical judgement first and foremost, the basic requirement being to pick from the cheapest first when calling generation to meet demand etc. Market awareness of decisions could be beneficial but this needs to be better defined.

When referring to qualifications and staff requirements, there must be recognition that the main target of these rules are control room staff, whilst of course recognising that all staff need to be trained to a certain level.



#### **Topic 5 – Emergency and Restoration**

We agree with the proposals for common principles in emergency plans and in protection settings. We would welcome common definitions of security standards and operating states across Europe given the interconnectedness of many systems and hence risks to cross-border flows of any large scale emergency.

For the benefit of cross border coordination, we believe that ACER should be involved in overseeing TSO plans, and not only the national regulatory authorities. There must also be recognition of the role of national governments in ensuring security of supply.

12. Could you foresee any other relevant New Applications which should be mentioned in these Framework Guidelines?

For the purpose of ensuring the codes are flexible enough to accommodate new applications and market developments, it should not be too technology specific.

Other new applications to consider could include active power storage technologies e.g batteries, compressed air etc

#### III. Textual Amendments to the Draft Framework Guidelines

Below we have raised a few questions on the definitions included in the FG, which would benefit from new definitions or amendments to the text.

- It would be useful to state that all definitions are additional to what is in the third package legislation.
- "Significant generation" is this the same as significant grid user or different?
- "blackout" this is mentioned in a number of places, but with no definition. How extensive in terms of time length and geographic coverage does a blackout have to be to be so defined?
- "bulk transmission networks and power systems" (p17) such a colloquial term should be avoided in the FG in favour or more defined 'high voltage transmission'. Furthermore it must be recognised that the voltage level differs between different TSOs.
- Controllable generation (p21) this is also referred to in the connection code, but the definition remains unclear. As mentioned throughout this response, we are in favour of a self-dispatch system and market based mechanisms, which would not be consistent with the notion of controllable generation.
- Load characterisation (p21) this is not entirely clear, but could refer to significant consumer. A clarification would be beneficial.