

ENTSO-E response to the public consultation on the ERGEG Draft Guidelines for Good Practice on Electricity Grid Connection and Access

Brussels, 2 June 2009

ENTSO-E and its members welcome the opportunity to comment on the Guidelines for Good Practice (GGP) on Electricity Grid Connection and Access prepared by ERGEG. The following comments are structured into the sections “Context”, “Scope of the draft GGP”, “Specific Comments” and “Proposal for Joint Next Steps”. This latter proposal suggests a way forward on a particularly important and urgent part of the broad scope of grid connection and access.

Context

ENTSO-E notes that the consultation comes at a time when the 3rd package proposed by the European Commission has reached its final stage in the European legislative process. One of the key issues in this package concerns European network codes in various areas, among them network connection rules.

The process to develop these codes is precisely defined in Article 6 of the Draft Regulation for access to the network for cross-border exchanges in electricity and repealing Regulation - 1228/2003; it includes the production by the Agency for the Cooperation of Energy Regulators of framework guidelines on which the Agency shall formally consult ENTSO-E and other relevant stakeholders. Then, pursuant to the same article, ENTSO-E shall submit network codes in line with the framework guidelines to the Agency.

Considering this process, ENTSO-E would appreciate more details about the objectives of the consulted draft GGP and the timing of the consultation, having understood that ERGEG sees the draft GGP as a background paper for the later drafting work by the once established Agency on framework guidelines leading to more specific network codes.

It remains however unclear to which extent the current consultation will effectively contribute to the framework guidelines to be developed later by the Agency, as well as the exact scope of relevant network codes.

Nevertheless, ENTSO-E doubtlessly sees in this consultation initiative by ERGEG positive features of a test procedure, and in this context ENTSO-E provides in the following general comments on the draft GGP as a first preliminary view of ENTSO-E on the content of framework guidelines related to network connection rules.

Scope of the draft GGP

The scope of the draft GGP and their objectives are not entirely clear: although the title of the draft GGP is referring to grid connection and access, ERGEG mentions that the draft GGP must “minimize the impact of disturbances in European power systems”. ERGEG also

questions whether the draft GGP addresses the issue of "transparent effective and non-discriminatory grid connection and access".

These two objectives (grid security versus grid connection and access) are different and should be dealt with in separate documents. The reason is that the harmonization of grid access codes should produce added value for both market parties and grid operators, including TSOs, since codes are ultimately to facilitate safe and secure operation of grids. The proposed guideline not only addresses issues related to the connection itself, but also to modes of system operations (e.g. exchange of information between TSO and DSO, ancillary services) which may have far reaching implications. A clear separation of the scope of connection-related vs. operations-related guidelines and codes is needed.

In order to clarify the scope of the draft GGP, especially such key concepts which are not defined in the Directive or in the Regulation should be defined, such as Connection, Access and rTPA.

ENTSO-E would suggest the following definitions:

"Connection": the technical equipment between a defined reference point in the grid ("the connection point") and a defined reference point at the site of the grid users (the "interface point") of which the maintenance and operation is part of the regulated TSO activity.

"Access": the right of a grid user to use his Connection for injecting/withdrawing energy from the grid by free commercial relation with suppliers or buyers active in the market, in accordance with article 31 of the Directive and article 14 of the Regulation.

"rTPA": the tariff mechanism for Access to the grid, governed by article 31 of the Directive and article 14 of the Regulation

ENTSO-E opines that the draft GGP should clarify that access cannot be simply named a *right* of wholesale market parties to use a given interconnector or grid element since this *right* may indeed be granted subject to allocation mechanisms according to article 16 of the Regulation. Such mechanisms – if applied - are not within the scope of a Grid Code on access since this activity follows market-based rules; they should be dealt with in a different guideline and network code.

ENTSO-E's experience shows that this issue is a common source of misunderstanding with market parties so that ENTSO-E recommends this point to be addressed in the envisaged framework guidelines.

Specific Comments

The following specific comments do not intend to go into details of the proposed draft GGP. ENTSO-E believes and therefore suggests that – building on the fruitful experience with previous ERGEG consultations - a direct meeting between ERGEG and ENTSO-E would be the most efficient way to correlate the following comments – and additional detailed questions or corrections on technical issues – to the various text sections of the draft GGP.

- The draft GGP provides a good overview on the relevant requirements to be set up and to be considered by the different stakeholders to contribute to secure operations of power transmission and distribution grids in relation to grid connection and access. The draft

GGP provides a general approach to the relevant issues, and in general delegates the responsibilities and the detailed definitions and execution to the involved parties in an appropriate way.

- However, in some parts of the draft GGP the responsibilities devoted to the regulators are unclearly formulated and may go beyond the principles which underlie the 3rd package. The draft Regulation assigns to TSOs the responsibility to propose network codes, and asks the Agency to provide reasoned opinions on them, leading – to submission by the Agency of the Code to the European Commission. This division of responsibilities in the 3rd package seems appropriate to us. Thus, the methodologies used to calculate or establish the terms and conditions for connection and access to the grids, and of the connection procedures themselves, should rather not be “fixed” or “elaborated” by the regulators, respectively, but only be approved by them in the sense described above. This division of responsibility also leads us to the concrete proposal for next steps on connection conditions described below.
- The draft GGP should also consider that in some countries the national authorities take part in the processes of setting rules and settling disputes, and that some requirements are included in the national legislation. The relationship between the GGP and national regulations or even national laws governing connection and access needs to be further clarified: Quite a few such national rules do not coincide with parts of the draft GGP. The network code process of the 3rd package presents a more promising basis for harmonising such aspects, and even then, national laws and regulations would need to be adopted, and specific requirements of individual grids may need to be taken into account in certain circumstances.
- The suggested required publication of data and information exchange seems suitable to provide the transparency requested by the market parties. However, some TSO data (such as full grid models) should remain confidential and not be handed over on simple request.. In some cases TSOs data (e.g. short circuit capacity) will remain of indicative value since changing over time according to the given instantaneous network topology.
- As far as the technical framework is concerned, we would like to focus our comments on two main issues :

The level of detail of the framework guidelines:

Framework guidelines should essentially deliver the upper laying “consistency *framework*” for a given subject (e.g. all generators’ connection issues) specifying target *objectives* without anticipating corresponding *solutions*. The more detailed *solutions* are to be worked out by ENTSO-E based on the TSOs’ practical expertise in the respective underlying codes.

In this context, a given framework guideline could cover several network codes (e.g. specific network codes for the connection of wind generation, for other renewable energy sources like solar energy, for the quickly developing small CHP generation, for the DSO level, as well as for all conventional generation sources, but also possibly corresponding market-related codes about the financial impact of grid connection and access on all involved parties).

Network codes could also encompass requirements for merchant lines and for size limits for connection to the transmission grid. They could also address details not suitable for

framework guidelines such as protection coordination, PSS and data for dynamic models.

Accurate definitions in the framework guidelines will also be prerequisites for achieving an efficient harmonization in network codes.

The level of harmonization:

Most of the issues addressed in the consultation paper are already part of national legislation and grid codes. Thus the main challenge will be to harmonize them within the EU market framework.

- The degree of desired harmonisation should be coherent with the impact of a certain requirement on the transmission and distribution system security.
 - For those requirements that will have system-wide impact (e. g. frequency criteria), the highest level of harmonisation should be endeavoured (e. g. common threshold values within a synchronous system).
 - For requirements with regional/local impact a standardisation of methods and principles seems to be sufficient. Single values and parameters may vary and it can even be desirable to have different values to be able to consider regional specifics.
- Practical experience with new network codes will be required for finding the most appropriate way to deal with these two issues of the levels of detail and of harmonization.

Proposal for Joint Next Steps

ENTSO-E would like to take the opportunity of this interesting initiative of ERGEG to introduce the following concrete proposal of next steps to be taken jointly by regulators, ENTSO-E, the Commission and stakeholders. We hope our proposal will open the possibility for entering into the 3rd package-based cooperation and constructive sharing of responsibilities between regulators, TSOs and others, applying their respective core competences and responsibilities for the benefit of European grid users.

In order to demonstrate the efficiency and the practical benefits for the new approaches made possible by the 3rd package's network code processes, and building on discussions with regulators, ENTSO-E proposes to rapidly launch a pilot code development project. It would cover the development of framework guidelines, of the underlying codes themselves, and all necessary consultation and evaluation phases by the TSOs and by the regulators (incl. specific transparency rules). This would be exercised according to the 3rd package processes for the establishment of network codes (the Regulation's Article 6) even before the Agency's tasks are in force. The resulting network code would need to go through the formal steps again after the Agency's tasks are in force, but could pass through them much faster, leading to swift submission to – and passage through – the Commission's Comitology process. This would not only lead to speedier completion of one specific urgent network code, but would also provide a much firmer basis for future swift adoption of network codes building on improved common understanding of the network code establishment process.

Notwithstanding the fact that the European Commission, the Agency and also ENTSO-E will – according to their tasks and mandates received from the 3rd package – prioritize issues across all types of needed network codes, one of the most promising and urgent areas for such a pilot code development would concern the wind generator interface: Identifying and developing European rules harmonizing Grid Code requirements particularly relevant to

interfacing wind generators to transmission networks across Europe. Thereby, the sequence of developing a framework guideline first and elaborating the technical code based hereon has to be maintained. The urgency of harmonising wind generator interface rules is the perception of many TSOs, the European Commission, stakeholders, regulator experts, and of the European Wind Integration Study (EWIS). The available EWIS outputs can provide a valuable starting point for these codes. Wind generation connection is also, of course, a relatively new issue and a very important part of the scope of the current ERGEG consultation on grid connection and access.

Compared to the present situation of having wind-generator-to-network interfacing requirements specific to each member state, there are a number of benefits that would result from harmonisation across Europe:

- Common standards would facilitate adoption of best practices across Europe and thereby facilitate the achievement of policy goals (i.e. with respect to security/quality of supply, economic efficiency and environmental objectives).
- Manufacturers and developers of wind turbine generators would be able to reduce costs by standardising the design of wind generator equipment, protection and controls (rather than needing to meet the specific requirements of each member state).
- Wind generation developers and network operators would benefit from lower costs of interfacing standardised turbines (i.e. reduced costs in connection design, commissioning/compliance testing and implementing operational requirements).
- A European harmonisation mechanism for grid code *structures* and harmonisation of technical content would increase transparency and bring benefits to every affected party. With *structures*, we mean that all EU Member states would have a wind power grid code that uses the same format and definitions including the requirement for criteria to relate to the point of common coupling between a wind park and the network.

Difficulties associated with such harmonisation include the need to address specific network characteristics, for example due to characteristics resulting from legacy equipment. Also, wind generator connection includes a number of complex issues (technology standards etc.) which will represent challenges during the development of such a network code. Although we expect these challenges can be overcome by applying the formal Agency and ENTSO-E steps in the network code procedure, all parties will need to pay special attention to appropriate handling of technical complexities in the pilot code context.

Since the impact of divergent Grid Code requirements is high for the wind power industry, we expect that the wind power industry (manufacturers and operators) will participate very actively in the consultation processes on such a pilot network code, promoting their legitimate interests and also their needs for clear, comprehensive as well as non-discriminatory rules.

Conclusion

ENTSO-E appreciates the initiative of ERGEG to draft guidelines on connection and access to electricity grids, as a preparation to the framework guidelines that will be established, in the context of the 3rd Package, once the Agency is set up.

ENTSO-E considers it of crucial importance to achieve a clearer definition of the scope of proposed guidelines (e.g. versus underlying network codes), as well as unequivocal definitions of some of the key concepts used therein.

At the current consultation stage and bearing in mind the transitional phase the sector is currently going through due to the still to be implemented 3rd package specially referring to the Agency, ENTSO-E notes with regard to the different national legislations that often obligations of the relevant market participants do not yet correspond to the roles and responsibilities as envisaged in the draft GGP. Therefore a part of the network code development and enforcement process will need to encompass more precisely these roles and responsibilities of the relevant governmental and regulatory entities.

The proposed pilot network code project aims at exercising early both the foreseen *interlaced procedures* between all entities involved (European Commission, the Agency, ENTSO-E, stakeholders) and the resulting *acceptance* of possible solutions as to how the urgent target of a European harmonization of grid connection access rules for wind generation can be achieved. The main reason for this concrete suggestion for a pilot code is that wind generator interfaces and connection rules are one very important part of the broad access and connection topics that are addressed in the current ERGEG consultation. Access and connection include many different aspects, and appear too voluminous and perhaps too complex for a pilot network code endeavour. However, wind generator interfaces create the newest and greatest challenges for the TSOs, especially considering the rapid increase in offshore and onshore wind energy foreseen in the European energy policy. These are additional reasons for our suggestion of progressing jointly over the coming months with this important part of the access and connection theme.

Despite the special attention such a pilot code would receive, work in the Agency and in ENTSO-E on other priority network code issues could continue in parallel. Within the area of network connection rules, a question to resolve early in the proposed pilot cooperation between ERGEG, ENTSO-E and others concerns the consistency of wind generation network interfaces with the interfaces for other types of generation, including conventional power stations and micro- and renewable generation at distribution level. Different scopes of a framework guideline on one hand, and of possibly several detailed network codes on the other hand, present one option to handle such consistency questions that can be considered at the beginning of the pilot project.