



Energy Networks Association – ENA

**Response to ERGEG's Pilot Framework Guidelines on Electricity Grid Connection
24 September 2010**

Energy Networks Association (ENA) is funded by the major licensed electricity and gas transmission and distribution companies in the UK. We welcome this opportunity to comment on ERGEG's Draft Pilot Framework Guideline for electricity grid connection.

ENA welcomes the work that ERGEG has done in setting out a framework which can then be used by ENTSO-E as the basis for detailed rules on a number of EU grid connection network codes, (the first of which on wind generation is already underway), is a progressive move towards the ultimate goal of more compatible grid codes across the European energy market.

KEY MESSAGES:

- We recognise the importance of harmonising the requirements for the connection of all grid users of the transmission and distribution networks at the European level, although, in the short term, it may be more pragmatic to aim for harmonisation at the regional level.
- Harmonisation standardisation and interoperability must, however, have regard to the economic and technical limitations of each network.
- We support the development of standardised minimum requirements for the connection for grid users as outlined in the draft framework guideline. Generation facilities connected to the transmission and distribution networks must contribute to safe system operation.
- In our view, the Framework Guidelines should indeed specify uniform criteria for connection, based on the technical characteristics of the generator, the actions to be taken by the generators when dealing with disturbances, and the requirements and incentives concerning ancillary services etc.
- All stakeholders must be effectively involved in the consultation process. This will allow a smoother transition to a new network code.
- It is very important that any new or substantially revised network standard should demonstrate proper socio-economic benefits in order to justify the compliance costs for the TSOs and DSOs and all users.

Transmission and Distribution Networks

The "Real-time information sharing", "Special requirements for critical grid situations" and any other exchange of information needed for the operation of the grids, should be included in this section of the framework guideline.

The term "grid" is used in the Scope section of the document in the context of the Transmission grid only. It is also said that the code "will be applied by electricity transmission System Operators" without any reference to DSOs. But in other parts of the framework guideline, the term grid is used ambiguously referring to both the Transmission Grid and the Distribution Grid (for example paragraph 3.3.1., should clarify if "connecting a consumption unit to the grid" means only the Transmission grid or the Distribution grid as well.). The document should clarify when the term "grid" refers to the Transmission Network, and when it is the Distribution Network.

In paragraph 3.2.1 it says that "The network code(s) shall set out necessary requirements and procedures to be followed by DSOs when connecting distributed generation to the grid.", in paragraph 3.2.3, that "The DSO should be assigned the responsibility for transposing the

requirements set by the TSO (or DSO)...” and in paragraph 3.2.4 that “The network code(s) shall set the requirement for DSOs to execute (...) the instructions given by the TSO.”

This wording implies that the DSO, as network operator, is a mere executor of the TSO’s decisions and instructions, which ignores the DSO’s own key responsibilities for operating the distribution network, under its own obligations and the terms of its own distribution code.

It is essential that the framework guideline makes it clear whether there are to be different guidelines for connection and access to the transmission and distribution networks, or if this pilot guideline is intended to apply to both networks, in which case the DSO must be given its proper status as a network operator.

ANSWERS TO SPECIFIC QUESTIONS IN THE CONSULTATION

General issues

1. Are there additional major problem areas or further policy issues that should be addressed within the Grid Connection Framework Guideline?

The scope of the draft Grid Connection Framework Guidelines generally seem to be comprehensive, but we would comment that: the roles of TSOs and DSOs should be clearly set out.

the issue of impact assessments and cost-benefit calculations is only briefly addressed in section 1.1 in connection with existing installations. It should be stated in the Framework Guidelines that impact assessments and cost benefit calculations should be obligatory in a much broader number of cases for any network code, which substantially revises or changes existing standards or especially introduces new ones. Standards should only be changed or newly introduced if a clear socioeconomic benefit can be demonstrated.

2. What timescale is needed to implement the provisions after the network code is adopted? Is 12 months appropriate or should it be shorter or longer?

It is hard to answer without the detailed requirements being known.

We believe that some aspects of the code could require a significant time to introduce fully – say up to five years – and that others can only be introduced when significant capital expenditure is made either on the network itself or on customers’ capital equipment (eg generating plant).

3. Should harmonisation of identified issues be across the EU or, perhaps as an interim, by synchronous area?

From a technical point of view, it is only the synchronous area that matters.

In principle we support the harmonisation of the connection requirements for generators optimally at the European level, although in the short term it may be more pragmatic to aim for harmonisation at the regional level, at the level of ERGEG’s regional initiatives.

It is important that the common European network code fulfils the common minimum standards necessary, but also allows for some flexibility in order to respond to national or synchronous areas’ specificities.

Grid users related aspects

4. Should the requirements apply to existing grid users? How should it be decided? To which existing users should the requirements apply? How should timelines for transitional periods be set? Who should bear any costs of compliance?

We consider that the requirements should apply to existing grid users. However, any requirement that drives significant costs must be subject to a detailed cost benefit analysis if it is intended to be implemented immediately. Otherwise such changes can be introduced when material alterations to the relevant plant or equipment are undertaken, irrespective of ownership. This is the principle that already applies in GB at both transmission and distribution level.

If the relevant Network Operator (not just TSO) can make the case, subject to impact assessment etc, and backed by the Regulator, then changes must be made, and paid for by the owner of the assets in question.

5. The framework guideline identifies intermittent generation, distributed generation and responsive demand as requiring specific grid connection guidelines. Is it appropriate to target these different grid users? How should the requirements for intermittent generation, distributed generation and responsive demand differ from the minimum requirements? Is there a need for more detailed definition / differentiation of grid users?

Yes. The GB arrangements already make these distinctions, albeit implicitly in some cases. We recognise that the changing pattern of demand and generation means that more development of codes for such usage is required.

We believe the document is correct to suggest specific grid connection guidelines for large scale intermittent generation, distributed generation, and responsive demand. Intermittent and distributed generation can present the grid with some challenges. Accordingly the standards for intermittent and distributed generation should be close to the minimum requirements. Deviations from these standards should be possible, to take account of technical feasibility and cost.

A flexible solution must be found to allow the generators to obtain certain services such as the delivery of primary reserves on the market instead of more costly installations at its own generation unit.

With regards to flexible demand, it is complementary to intermittent generation, and accordingly should be facilitated as much as possible.

Implementation

6. Is it necessary to be more specific regarding verification, compliance and reinforcement?

There will need to be specific criteria for compliance, verification and enforcement.

7. What are the key benefits and types of costs (possibly with quantification from your view) of compliance with these requirements?

The key benefits are those deriving from an efficient and co-ordinated system.

Co-ordination is the key, and the codes should ensure it is achieved most efficiently.

The overall benefit is that general requirements will ensure equal terms for producers operating in the same market. This should increase system security and decrease overall costs. It should also facilitate easier investment decision making concerning new installations, as industry will only need to comply with one standard.

8. How should significant generation and consumption units be defined?

These units should be defined by simple thresholds specific to the synchronous area.

The thresholds might be different for demand and generation, but must be certain and enforced.

9. For what real-time information is it essential to improve provisioning between grid users and system operators? Do you envisage any problems such greater transparency? What are the costs (or types of costs) and benefits you would see associated with this?

Each additional requirement needs to be cost justified. Before requiring additional transparency a cost-benefit analysis should be made and the confidentiality of data must be ensured.

In GB the interactions between grid users and system operators have been defined and refined in the Grid and Distribution Codes for 20 years. Again, any change to these arrangements will need to be cost justified.

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