

June 2009

Response to Draft Guidelines of Good Practice on Electricity Grid Connection and Access (E08-ENM-09-03)

1. IFIEC supports ERGEG's attempt to harmonise rules for grid connection and access across Europe. IFIEC members have experienced differences between countries and grid operators in the past and welcome a common approach in the future. In this response we will address the consultation questions mentioned by ERGEG in the consultation paper. Also we have some specific remarks regarding the guidelines.
2. Because the 3rd package has not yet been adopted/implemented, we understand that the proposed guidelines do not yet refer to the roles and responsibilities of the Agency, ENTSO-E and European representative organisations like IFIEC Europe. However we believe that these organisations have an important role to play when it comes to harmonising the rules on electricity grid connection and access.

Question 1

Do you agree with the problems these GGP are trying to solve – are there other problems that should be addressed within grid connection and access not yet included in these guidelines?

3. Regulation for connections and access to electricity grids is very important to protect grid users - like industrial customers - from the monopoly inherent to system operators (TSOs and DSOs). It is remarkable that the issue of regulating the monopoly of system operators, in order to protect the grid users, is not mentioned in paragraph 1.1. In this perspective we remark that the harmonisation process should be focussed on achieving the highest level of protection available in Member States, or if possible even better. The harmonization process should avoid reducing the level of protection that grid users already have in the current (national) regulatory schemes. Harmonising to a lower level is not acceptable for IFIEC.
4. Another objective, which is lacking, is the establishment of common minimum specifications at EU level. For example:
 - what level of power quality can grid users expect from the TSO/DSO?
 - what rights do grid users have regarding planned and unplanned interruptions?
 - what information is the TSO/DSO obliged to give to the grid users?.
5. In the proposed guidelines TSOs and DSOs are free to set the terms and conditions themselves. This will not result in a harmonised set of connection and access rules on the EU level. We believe that rules regarding connections and access should not be set by the TSOs and DSOs themselves. Regulators provide a general scheme and minimum standards for protection of grid users and the security of the system, and where possible grid users and system operators agree the applicable terms and conditions in bilateral contracts.
6. Also the guidelines do not address the problem related to scarcity of transport capacity and the need to have enough reserve capacity. In many cases, TSOs and DSOs refuse or delay connection and access to the grid, with the argument that there is a lack of capacity in the grid. According to TSOs/DSOs they have to invest in the grid first and therefore the new grid user will have to pay for these investments. This is a barrier for effective access to the grid. This issue is lacking in the draft guidelines.

7. The guidelines do not address the issue that electricity production units, which are integrated in industrial processes (like CHP production units or production units running on industrial gases). These cannot be operated in the same way as stand alone power plants, which are dedicated and designed only for the production of electricity. The difference lies in the technical design and operation. When the TSO/DSO, for example, demands actions from such a production unit related to stabilising the system, this could interfere drastically with the industrial production process. In some cases it is not possible to follow the demands from the TSO/DSO, other than with great costs and possibly harmful effects to the environment (e.g. flaring).
8. We support the objective to harmonise regulation in order to prevent technical problems or lack of co-ordination which could result in blackouts or other disruptive events in the power system. Also we support transparent, effective and non-discriminatory grid connection and access.

Question 2

Do these guidelines address the problem - will they lead to more transparent, effective and non-discriminatory grid connection and access?

9. Some issues related to the grid are not addressed by ERGEG; some examples were mentioned above (# 3-6). Therefore we do not believe that the draft guidelines will lead to sufficiently transparent, effective and non-discriminatory grid connection and access. Also because the actual terms and conditions for grid connection and access are not described, we cannot evaluate whether this will improve or reduce transparent, effective and non-discriminatory grid connection and access, either in general or in specific cases.
10. Some issues related to grid connection and access depend on the installations of both the grid operator and grid users. A TSO or DSO might want to reduce its own constraints and costs by imposing very strict specifications on the grid user's installations, making the right of connection ineffective and creating discriminations based on the connection point. The proposed guidelines do not give any comfort to grid users, who are dependent on the grid operator for effective access to the grid. For example: the harmonic injection thresholds to avoid excessive voltage harmonics depend on the grid short-circuit power at the connection point. By keeping the grid too weak, the TSO imposes high costs on grid users to pay to reduce injected harmonics.

Question 3

Please outline your views on the description of the roles and responsibilities set out in Section 3.

11. Paragraph 3.3 and 3.4 do not acknowledge that TSOs and DSOs themselves should be responsible for a good service to their connected customers in terms of power quality, interruptions etc. In general the guidelines should state this responsibility.
12. In paragraph 3.5.1 and 3.6.1 it is specified that generation units and consumption units shall meet the requirements set in the terms and conditions defined by the TSO/DSO and contractually agreed upon. We believe that it is very important that terms and conditions cannot be set by the TSO/DSO without agreement by the grid user.
13. Industrial consumers can deliver ancillary services, for which they should be remunerated by TSOs/DSOs based on contractual agreements. Therefore we support this proposal. In addition, the regulators should only be able to set basic obligations for grid users where these are needed for the security of supply and stability of the system.
14. In paragraph 3.5.2 and 3.6.2 it is specified that generation units and consumption units shall provide all necessary data and information needed by the TSO/DSO to evaluate the access and connection conditions. This obligation for grid users towards TSOs/DSOs is formulated very broadly. It is neither clear what information and data is meant nor what the purpose is for giving extensive information to the TSO/DSO. Can the TSO/DSO demand all information at all times, or only relevant information for secure operation of the grid when there is a new/changed

connection? What is meant by “connection and access conditions”? IFIEC asks ERGEG to change the formulation in order to make clear what sort of information is needed, in what conditions and the purpose of this information.

Question 4

Are the technical framework and general provisions for generation, consumption and DSOs relevant and practical? Is there anything else that should be included / excluded? (Sections 4&5).

15. In paragraph 4.1 the principles of connecting a grid user, and preventing the DSO/TSO charging unspecified/unjustified costs, including reinforcements of the grid, are lacking. At least the costs related to reinforcing the grid should be paid by the DSO/TSO.
16. Paragraph 4.1.3 states that connection contract models should be approved by the regulators. We believe it is good that regulators adapt these models where needed and then approve them. However it is also important that these contract models can only come into effect between a grid user and the relevant TSO/DSO when agreed upon by the grid user. For clarification this could be added to the text.
17. Paragraph 4.2.2 states that system operators design the technical solution for connection. We think that the grid user should be involved in this process, because the technical design (e.g. N-1, location, materials, etc.) can be important for the grid user. The text should be adopted, by including the phrase “in consultation with the consumption unit or generation unit” after “shall”.
18. Paragraph 4.3.1 states that the TSO/DSO provides information on “technical requirements”. The sorts of requirements are mentioned under (1) – (9). However it is not clear from the text who establishes these “technical requirements”. Is this done by the regulator, or contractually agreed upon? In any case the TSO/DSO should not be able to set these “technical requirements” unilaterally. When European standards are set, approved by the Agency, it should be clear that the requirements for grid operators towards its grid users should be harmonised to at least the highest level of protection for grid users.
19. In paragraph 4.3 nothing is stated about the obligation for the TSO/DSO to inform the consumption unit or generation unit as soon as possible about incidents, like interruptions, power dips, transients etc, which could affect the grid user. It is important that TSOs/DSOs have the obligation to inform customers about these incidents as soon as possible, including the measurement data (e.g. wave form), the causes of these incidents and the actions the TSO/DSO is planning to take to correct, to prevent or to reduce the risk of such incidents happening in the future.
20. In paragraph 4.4 nothing is stated about the obligations on the TSO/DSO in case of planned access limitations (e.g. maintenance). TSOs/DSOs should be obliged to agree with the consumption or generation unit about the time and duration of any planned access limitation. This way costs can be reduced, and the maintenance of the grid can be aligned with the maintenance of the industry or generation unit.
21. In many cases in chapter 5, phrases are used like “the TSOs shall set” or “the system operators shall specify” or “TSOs and DSOs shall define”. These phrases are followed by many criteria that are applicable to grid users. This way it seems that the guidelines give the TSOs and DSOs the authority to set, specify or define all kinds of requirements for grid users unilaterally and without any restrictions. For IFIEC, this is not acceptable.
22. Paragraph 5.1 and 5.2 do not take into consideration the situation of industrial grids, where consumption units can be combined with local power production units (e.g. CHP or other back-up production units). Should the public power grid not deliver the specified quality, it is then technically possible to move into a modus of isolated operation. The guidelines should, in these cases, enable disconnection from the public TSO/DSO grid, as soon as the voltage wave suggests that the grid might become unable to supply electricity within the specified quality criteria. Paragraph 5.2.1.6, 5.2.1.7, 5.2.1.9 and 5.2.5.5 should be modified consequently.

23. In paragraph 5.2 a distinction should be made between production units which are integrated in industrial processes (like CHP production units or production units running on industrial gases) and stand alone power plants (see #6 for more explanation).
24. Paragraph 5.2.1.8 states that generation units “shall be designed to withstand the mechanical stresses associated with any kind of faults occurring in the transmission of distribution network”. This obligation goes too far and is technically and economically not feasible.
25. In paragraph 5.3.5 and 5.4.3 possibilities for load shedding are mentioned. In these paragraphs it is not always clear from the text which rules are meant for voluntary load shedding (as an ancillary service) and which are meant as a mandatory load shedding operation (as a last resort option to prevent the system from collapsing). There should be a clear difference between these two types of load shedding.
26. Some industrial plants may offer instantaneous load-shedding as ancillary service to save the grid. The guidelines must distinguish between the load-shedding of a part of the load by voluntary consumers, as opposed to the load-shedding of, progressively, all consumers, during the emergency plan. Chapter 5.3.5 and 5.4.3 should be modified to integrate this difference.
27. In emergency situations, the forced curtailment of industrial load may be required but adequate compensation should be paid by the system operator for this service, either in the form of a lower interruptible tariff or a fixed payment per curtailment.
28. System operators should be incentivised to develop the least-cost solution to maintain secure supply and not just to favour generation solutions. For example, in the UK, industrial consumers provide frequency control demand management for the grid in competition to generators, but this is only mentioned in paragraph 5.2 and not in paragraph 5.3.
29. Paragraph 5.3.3.6 states that the system operator may disconnect an installation “every time it does not respect the established emission limits”. This measure is disproportional. Disconnecting an installation will result in huge costs, whereas it is possible that the costs of crossing an emission limit are very low or even zero. Disconnection should only be possible when crossing emission limits results in the immediate threat for the safe operation of the grid or other grid users.

Question 5

How would the implementation of these GGP affect your business / market – what would the impacts be?

30. The regulation of connection and access to the electricity grid greatly affects the position of industrial energy consumers. In our answers above, it is clear what some of these effects could be. To sum up, some important impacts are:
 - The operational conditions of the electricity delivered to the site are often crucial for the production processes of consumption units, e.g. power quality and reliability of the grid;
 - Consumption units pay for the costs of the grid;
 - The effect of these rules on industrial grids are not clear, but could be great if they prevent the manager of an industrial consumption unit designing the grid in way that is best suited for the production processes involved.

Thus, the industry businesses could be heavily affected by these guidelines. Therefore we ask you to very deeply evaluate the need of each requirement placed on consumption units.

Question 6

We note that respondents to the consultation on the Implementation of the 3rd Package asked for certain areas, such as priority access for renewables, to be dealt with by ERGEG GGP. Priority access has not been covered by these particular guidelines, however, regulators welcome further input on this and other relevant issues.

31. We agree that priority access to renewables should not be included in these guidelines, as this is a political rather than technical issue. However the addition of more intermittent generation from wind power coupled with the retirement of base load generation units will pose greater challenges for balancing the grids in the future. This should be taken into account before less predictable generation is connected.