European Regulators Group
for Electricity and Gas (ERGEG)
c/o Council of European Energy Regulators (CEER)
Rue de Titien 28

B-1000 Brussels

28 September 2010

Draft Pilot Framework Guidelines on Electricity Grid Connection

Swissgrid response to public consultation

Dear Sir or Madam,

On behalf of Swissgrid, the Swiss TSO, we are pleased to hereby provide our response to the public consultation on “Draft Pilot Framework Guidelines on Electricity Grid Connection”.

General Issues

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

Answer 1: Integrating the anticipated huge amount of renewable energy sources to reach EU climate targets will increase the demand for reserve resources and other ancillary services dramatically. In order to maintain efficient and secure electricity markets it is inevitable that ancillary services have to be made available across TSO borders. Consequently, it might be requested to harmonise the prequalification criteria, the communication structures for activation and monitoring as well as the products for these services on an European level.

Requirements regarding the construction and dismounting of grid connections are missing. Additionally, general rules regarding the limits of property and responsibility for maintenance would be helpful.

Question 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?

Answer 2: According to our experience a period of 12 months is too short, a corresponding time frame of about 24 months seems to be more appropriate.

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

Answer 3: Various technical standards, e.g. frequency control, have evolved very differently for each synchronous area. Besides historical reasons different system sizes resulted in diverse power/frequency control philosophies. Harmonising these standards could help to improve energy markets, but on the other hand lead to high costs for consumers and TSOs as well. By changing e.g. the criteria for frequency stability, industrial production plants would need to change their electrical drives, control systems, etc. Various industrial commodities are built individually according to the electrical standards of grid operation and grid connection of the different synchronous areas. There-

fore, harmonisation will bring some advantages to future investments, but massive costs for existing equipment.

Grid Users related Aspects

Question 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?

Answer 4: In the long run, all grid users, whether existing or new ones, should be subject to the same rules. However, for the existing ones high financial efforts might be required in order to fully comply. Therefore, corresponding transition periods are required. The timeline should be aligned with the schedules for upgrading and replacing equipment.

The capital expenditures for grid utilities and generation units are long term investments. Each reconstruction of existing utilities will result in high financial efforts. Costs of compliance shall be paid by the owner of the utilities.

Additionally, fast changing provisions could have inhibitive effects on the development of the grid and the building of new generation units.

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?

Answer 5: Due to the fact that the percentage of intermittent and distributed generation is continuously increasing it is considerably important to apply the same requirements to those generation units, too. If classical and old generation units were treated differently (regarding voltage and frequency stability, balancing etc.), this would lead to an increase of ancillary services and could endanger the security of supply. In general, also the new types of generation units can fulfil the greater part of the grid connection requirements for the classical units. However, it might be worth considering the study of new methods and procedures for ensuring the large scale integration of RES while maintaining security of supply.

Implementation

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

Answer 6: Based on our experience, the compliance with the grid connection requirements shall be verified and certified initially and then be monitored on a regular basis. Rules for the withdrawal of a grid connection licence would be helpful. Furthermore, we suggest to introduce higher standards for reserve resource units, as they are vital for system security and needed as backup in case of system disturbances.

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

Answer 7: Due to the new market driven system operation and the multitude of new interfaces between all market players, a careful and secure management of these critical interfaces has to be

ensured. Well defined interfaces and well working cooperation between Generation Companies, Transmission Companies and Distribution Companies are the key elements of system security.

Question 8: How should significant generation and consumption units be defined?

Answer 8: The definition shall be transparent and non-discriminatory based on the size of the unit.

Question 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?

Answer 9: A minimum set of real-time information supplied by grid users shall be defined. Additional real-time information shall be made available to system operators for use in emergency situations only. Each market participant shall send the data regarding his grid connection point at his own costs. Clear and secure data exchange rules shall be defined to ensure confidentiality. Besides the real-time information, system operators need the possibility to interact with grid users in emergency situations i.e. by setting power limits, by controlling energy generation/consumption, and by disconnect units.

If you have any further queries, please do not hesitate to contact us.

Best regards,

Swissgrid Ltd.

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