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Pilot Framework Guidelines on Electricity Grid Connection
ERGEG Public Consultation

Comments by Alstom Grid

General Issues

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

   In addition to the issues identified in the Initial Impact Assessment (E09-ENM-18-03), we stress that the diversity in national requirements and also the rapid rate of change in connection requirements have in certain cases led to a knowledge gap: it is a challenge for the involved personnel to remain up to date with several, ever changing national regulations. This is worsened when such information is not broadly shared or when documents have to be purchased.

   Overall the burden of adapting to changing and / or too specific grid codes leads to additional delays in any planning or design work (in turn resulting in additional costs).

   It should also be emphasised that unclear or incomplete connection requirements lead to a massive uncertainty for developers and planners, especially of RES: the open interpretation of rules can lead to unforeseen costs.

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?

   Project lifetimes for generation connection from initial studies until authorisation have proven to be in the order of 12…36 months. For the whole industry, changes in regulation before the authorisation is given implies additional costs and delays. The timescale should rather be 24 months or more. Alternatively, transitional regimes could be used.

   Also, the communication of changes in connection requirements can in certain cases be improved by increasing the notice period and the overall communication effort.

   This also depends on the extent to which the adopted network code requirements differ with the existing member state network. Probably implementation should be similar to that of EU Directives with targets and implementation dates provided in accordance with member state circumstances.

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

Interim regimes imply a higher number of changes. As argued above, the number and rate of changes should be minimised and the notice period should be as long as reasonable. This makes a one step change towards EU-wide harmonised requirements (possibly with a longer implementation timescale) more favourable.

In all cases, the harmonisation should at the final stage be across the EU. In exceptional cases, dependent on member state circumstances there may be a need for area based interim stages.

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?
   –This should be decided by TSOs or regulators. The requirements should apply to all existing grid users irrespectively. A timeline for compliance similar to environmental directives (SO2, NOx, etc) should be set dependent on existing circumstances and the level of change being introduced. The pertaining grid user should bear such costs – possibly over a guaranteed connection access period contract.

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?

   The purpose of this consultation is to harmonise approaches within Europe. Introducing distinctions between generator type reduces the impact of harmonisation and inevitably introduces issues with "boundaries" of said generator types. Definitions of "distributed", "responsive", etc. will be challenged by technical progress, market behaviour, etc.

Implementation

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

   This would reduce uncertainties and risks. At the outset probably no further specifics need to be considered. As experience is gained then the need to act further or not in this regard may become apparent.

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

The anticipated benefits include improved supply chain, standardisation of solutions, confidence in investment and project delivery.

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

   By the voltage level to which they connect, e.g. 50 kV and above. This should eliminate the arbitrary aspect of any MW limit and focus on grid related issues.

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?

   Alstom Grids equipment does and will comply with any standards used and required by its customers. Any non-standardised data and communication requirements will be costly and risky.

About Alstom

Alstom is a global leader in the world of power generation, power transmission and rail infrastructure and sets the benchmark for innovative and environmentally friendly technologies. Alstom builds the fastest train and the highest capacity automated metro in the world, provides turnkey integrated power plant solutions and associated services for a wide variety of energy sources, including hydro, nuclear, gas, coal and wind, and it offers a wide range of solutions for power transmission, with a focus on smart grids. The Group employs 96,500 people in more than 70 countries, and had sales of over € 23 billion in 2009/10.

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