Issues Arising from the Authority's Decision on Grid Code Consultation D/07

Paper by National Grid

Background

1. NGET presented a paper to the May 2007 GCRP discussing the provision of frequency response from Generators, in particular issues associated with the initial delay in provision of primary and high frequency response from wind farms. The paper described NGET's view that the Grid Code should be modified to clarify the requirements and considered three alternative wordings. One of these options, based on a maximum delay in provision of two seconds but with longer delays being accepted at NGET's discretion, was recommended and the paper sought the agreement of the GCRP for industry consultation on this option. The GCRP agreed to this and the consultation (D/07) was held in August 2007 following a further period in which GCRP members were invited to send in their comments.

2. On the basis of comments on the consultation proposals, the discussion during the May GCRP, and separate discussions between NGET and Generators and manufacturers, NGET held an industry meeting in November 2007 to further discuss the issues. At this meeting NGET proposed an alternative option: to modify the Grid Code requirements to allow a delay of up to two seconds with NGET having no discretion to deem longer delays compliant. The removal of NGET's discretionary power was in response to comments received. NGET also agreed to instigate further industry work involving GCRP members and their delegates to investigate alternative arrangements for providing the frequency response necessary for system security, taking into account overall efficiency.

3. NGET submitted the D/07 report to OFGEM in January 2008 recommending that the Grid Code be modified as above, noting that the wording may be further modified following the industry work.

4. OFGEM rejected the proposed Grid Code modifications for a number of reasons, including lack of industry support.

Current position

5. Based on the discussions with and responses received on D/07 from a number of Generators, it is NGET's view that there will continue to be significant differences in interpreting the requirements across the industry. NGET is required to assess the compliance with the requirements of the Grid Code of Generators both connected to and connecting to the transmission system on an ongoing basis, and believes that it is beneficial to the whole industry to establish the assessment criteria that will be applied, to ensure both consistency and visibility.

Compliance criteria

6. The criteria used by NGET until now have been included in the Guidance Notes for Generators. They are pragmatic, based on the capabilities of most plant currently connected.

7. These are:

   - Where the initial delay is less than two seconds, this will be deemed compliant and NGET will work with the Generator to minimise any control delays
   - Where the initial delay is greater than two seconds but reflects the physical plant capability, this will be deemed compliant
   - Where the initial delay is greater than two seconds and NGET believes that it can be reduced, NGET will work with the Generator to minimise the delay. If, in NGET's view, the delay is not minimised, the Generator will be deemed non-compliant

Future compliance assessment

8. It is NGET's view that OFGEM's decision to reject the proposals of the D/07 report does not imply that OFGEM do not support NGET's interpretation of the Grid Code requirements and its approach, described above, to assessing compliance with these requirements. Based on NGET's understanding of the capability of generating plant including wind farms, and the system need for frequency response, NGET believe that it is appropriate to continue to apply the above criteria. Should alternative Grid Code requirements be identified in the future the compliance criteria will be changed accordingly.

Work on identifying alternative arrangements

9. As discussed previously there is industry agreement that work should be undertaken to identify whether alternative arrangements for the provision of frequency response can be identified. This work may require consideration by other industry groups, particularly the BSSG. The work will need to take into account all aspects of frequency response, as alternative primary response arrangements may impact on them. NGET propose that a joint GCRP/BSSG working group is established to investigate arrangements for the provision of frequency response, taking account of system needs and overall efficiency.

Recommendations

10. The GCRP is invited to:

    - Agree to the establishment of a joint GCRP/BSSG working group that will write terms of reference aimed at investigating and making recommendations for arrangements for the provision of frequency response, taking account of system needs and overall efficiency.

- Note that NGET will continue to assess the compliance of Generators with the Grid Code requirements for Frequency Response provision as described above.