

## **GUIDANCE NOTE 2**

03 March 2011 – valid until 02 March 2012

### **ENGINEERING RECOMMENDATIONS G83 AND G59**

The Distribution Code Review Panel has reviewed the application of G83 and G59 for the cases of small scale wind turbines.

G83 should apply to wind turbines of less than 16A per phase, and G59 to wind turbines of greater than 16A per phase. The Distribution Code Review Panel is aware that there is no formal annex for wind in G83, but is also aware that the majority of small wind turbines in this size range are connected through inverters that are type tested for the connexion of photovoltaic generation.

Until G59 was re-issued as G59/2 in August 2010 it was common practice for DNOs to connect small scale wind turbines in accordance with G83.

Recognizing the efforts now being made by small wind turbine manufacturers and developers to establish type tested designs for use in GB, both under G59 and G83, the Distribution Code Review Panel has agreed that:

- For all small scale generating equipment of up to 16A per phase, it is permissible to connect to the general requirements of G83 provided this is through an inverter that has been type tested in accordance with G83 for another technology in G83, such as PV.
- For all small scale generating equipment of more than 16A per phase and up to 17kW (50kW three phase) it is permissible to connect under the specific relaxation allowed in Section 6.2 of G59 provided that both the connexion is through an inverter type tested in accordance with G83 and the high frequency setting of the protection in the type tested inverter is set to 51.5Hz with a time delay of no more than 0.5s. All other requirements of G59 apply in full.

Note that although this issue was raised by installers of small scale wind, the guidance above is generic to all technologies.

The interpretation of G83 and G59 in this Guidance Note is valid for applications or notifications made up until 02 March 2012.