

Compliance Process – Note regarding Embedded Generation (Discussion proposals by National Grid)

Introduction

Following on from the first meeting of the Working Group, National Grid took an action to develop, amongst other things, a process for dealing with embedded generation, and in particular for resolving the compliance assessment difficulties which have been drawn to National Grid's attention by Distribution Network Operators (DNO). National Grid wishes to outline its intended strategy for consideration by the Working Group in respect of embedded generation, and this note highlights its proposals. The Working Group is asked to consider and endorse the proposals made such that National Grid can develop drafting on this basis. Whilst not discussed within this note, it is recognised by National Grid that the management of the proposed strategy may have resource implications in respect of which it will need to give due consideration.

Background

Grid Code compliance assessment in respect of embedded generation can be split into two categories:

1. Embedded generation where the generator has entered into a Bilateral Embedded Generation Agreement (BEGA) or where the generator has entered into a Bilateral Embedded Licence Exempt Large Agreement (BELLA); or
2. Embedded generation where the generator is a Licence Exempt Embedded Medium Power Station (LEEMPS) and has no contractual interface with National Grid.

It is intended to treat embedded DC Converter Stations in the same way (depending upon whether or not they have a bilateral agreement with National Grid) as Generators, although the rest of this note does not explicitly refer to them.

Common Principles

Certain aspects of compliance assessment are common to all types of embedded generation. It is important for there to be clarity over which aspects of compliance assessment the Grid Code addresses and which it does not.

Embedded generators do not directly connect to the GB Transmission System. All interface requirements are therefore a matter to be addressed between the embedded generator and the relevant network owner.

The Grid Code, in relation to embedded generation, is only of relevance in assessing compliance of the Generating Unit/Power Park Module performance. As such Grid Code compliance assessment is only one step in the process of commissioning embedded generation.

Paragraph 6.5 of CUSC prevents DNOs from energising the connection between its system and embedded generation until certain conditions have been achieved. These conditions vary depending upon the size and whether or not the embedded generation has a contractual interface with National Grid. These provisions of the CUSC may require amendment to clarify the fact that:

1. Grid Code compliance assessment is concluded after the interface between the distribution system and the embedded generation is energised; and

2. Synchronization of an embedded generating unit/power park module to any network must not occur prior to the issue by National Grid of an ION to the appropriate party (see below for more details).

A further common point to note in respect of all embedded generation is that any ION issued only deals with Grid Code compliance assessment and any embedded generator will still need to meet all the relevant DNOs' requirements before energising and/or synchronizing.

Compliance assessment in respect of embedded generation other than LEEMPS

It is proposed that Grid Code compliance assessment for embedded generation other than LEEMPS will be comparable to the process outlined for directly connected generation, with the exception of the assessment of the interface energisation which is largely to be addressed between DNOs and the embedded generator.

Proposal in respect of LEEMPS in terms of Grid Code compliance assessment

At present there are a number of obligations on DNOs in respect of LEEMPS, principally in terms of assessing compliance, with which the DNOs are uncomfortable. National Grid understands that the DNOs preferred position is simply to be the "conduit" between National Grid and the LEEMPS, but otherwise to have no further role in respect of assessing compliance. The main obligations on DNOs in respects of LEEMPS are in the Grid Code, principally in the Planning Code, the Connection Conditions and in OC5. They reflect that the DNOs are to enforce the obligations on the LEEMPS through the Distribution Code and any agreement it has with the embedded generators.

This note aims to identify a mechanism whereby the DNO remains the sole contractual interface with the LEEMPS. The Grid Code requirements as currently imposed in relation to LEEMPS remain, but National Grid actually undertakes the compliance assessment in respect of such requirements in place of the DNO. This would have the benefit of ensuring that compliance assessment is undertaken by the party with the relevant expertise, whilst ensuring that the principle of the "One Stop Shop" is maintained so far as possible.

- **Grid Code Changes**

The Grid Code would be changed to provide that National Grid could have an arrangement with a DNO such that National Grid undertook the compliance assessment against the Connection Conditions in place of the DNO. The Grid Code obligations in the planning code, connection conditions and operating code 5 would remain largely as they are currently drafted but this additional point would be included.

The requirement on National Grid to undertake this role would be at the election of the relevant DNO. The Grid Code would specify that the election would take place as part of the Statement of Works process under CUSC (see below).

- **Distribution Code**

The Distribution Code provisions would need to be amended to reflect the fact that the compliance assessment could either be done by the DNO or by National Grid. Consideration should also be given as to whether the detailed compliance assessment process being drafted into the Grid Code should be referred to in the Distribution Code to make it clear that LEEMPS will follow the detailed processes.

- **CUSC and DCUSA**

The CUSC provisions regarding the Statement of Works process at Paragraph 6.5 will need amending to enable the DNO to elect whether or not it wishes National Grid to undertake the compliance assessment in its place.

Once such an election had been made there should be no ability for either National Grid or the DNO to change its mind (unless both agree).

As the LEEMPS and National Grid have no contractual relationship to provide both the LEEMPS and National Grid with appropriate liability protection the provisions of the CUSC and the DCUSA would need to be amended to reflect that the liability protections contained within such documents would be conferred on National Grid (in the case of the DCUSA) and on the generator (in the case of the CUSC) in relation to the assessments to be undertaken of the LEEMPS compliance. This is utilizing a legal mechanism known as the Contract Rights Third Parties Act which was used to deal with the liabilities of non-contracting parties in Scotland as part of the BETTA process.

If this proposal for LEEMPS is agreed, it would then follow that an equivalent to the Grid Code compliance assessment process relevant to embedded generation with either a BEGA or BELLA would be applied in respect of LEEMPS. Although in the case of LEEMPS the production of IONs and FONs would be addressed to the relevant Distribution Network Operator, and copied to the relevant LEEMPS. Once the DNO elects that National Grid are to undertake the Grid Code compliance assessment activities in its place, the role transfers to National Grid and all correspondence (except IONs and FONs) relating to compliance assessment against the Connection Conditions in the Grid Code would be directly between the LEEMPS and National Grid. All other Grid Code requirements in respect of Planning Code data exchange would remain the responsibility of the DNO.

Conclusions & Recommendations

The Working Group is asked to consider and provide comments by Monday 2nd June 2008 upon the proposals in this note. In particular as to whether or not there is support for the proposal that National Grid (at the election of the DNO) carries out the compliance assessment obligations in place of the DNO in respect of the obligations under the Connection Conditions of the Grid Code.

**National Grid
19th May 2008**