Grid Code Review Panel
Relevant Electric Standards

Date Raised: 05/03/2014

GCRP Ref: pp14/18

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Summary

At the November GCRP 2013, National Grid presented paper reference pp13/64 outlining its proposals for updating the Relevant Electrical Standards (RES). Since that time, National Grid has undertaken a complete revision of the RES with a view to addressing the issues raised in paper pp13/64.

The proposed version of the RES has been updated to:-

- Ensure they are fully consistent with National Grid's Technical Specifications.
- Ensure that, if the proposed version of the RES is approved, the generic technical appendices (Appendix F) refer only to the RES versions of the Technical Specifications rather than National Grid's Technical Specifications (NGTS).
- Ensure whenever an NGTS is updated there is a corresponding update to the Relevant Electrical Standards.
- Include requirements (for example Dynamic System Monitoring and Ancillary Services Monitoring) which have previously not been included.

Under GC.11.3 of the General Conditions of the Grid Code, Panel members have 20 Business Days to raise objections to, or concerns with, an Electrical Standards Proposal. Given the nature and timing of the proposed changes, the Panel is asked to agree to allow 20 Business Days following the March 2014 GCRP for comments to be raised.

Users Impacted

All User's with a direct connection to the National Electricity Transmission System.

High

Transmission Owners, Directly connected Generators, Directly Connected Customers Distribution Network Operators, Interconnectors.

Description & Background

Section CC.6.2.1.2 of the Grid Code refers to the technical specifications that applies to User's equipment located within National Grid's busbar protection zone at the Connection Point. In summary, this defines that where User's Plant and Apparatus connects directly to the National Electricity Transmission System, the technical specifications that apply within the NGET busbar protection zone shall be defined in the Bilateral Agreement.

Historically, any equipment specifications that National Grid required of the User were specified through National Grid's Technical Specifications (NGTS's) which were specified in the Bilateral Connection Agreement. The disadvantage of this approach being that National Grid's Technical Specifications were not subject to the Grid Code Governance

process.

To address this concern, the key NGTS's were placed into one common document – referred to as the Relevant Electrical Standards (RES).

The advantage of this approach being that the RES would be subject to the full governance process of the Grid Code, but equally the standards would refer to the technical specifications that National Grid require of User's plant without including other factors required specifically for National Grid such as maintenance and health and safety requirements.

Following the publication of the RES in 2005, the Bilateral Connection Agreements were changed such that references to National Grid's Technical Specifications where replaced by references to the Relevant Electrical Standards (RES).

As time has elapsed, some of National Grid's Technical Specifications have been updated and these changes have not been subsequently incorporated into the published version of the RES. To address this concern, National Grid has made reference to some of the NGTS's in the Bilateral Connection Agreements either where the current RES is out of date or where the NGTS was not originally specified in the RES in 2005 (for example Dynamic System Monitoring).

For connections in Scotland, the specifications would either reference the Scottish Electrical Standards (eg for primary plant type issues) or the Relevant Electrical Standards (for issues such as Dynamic System Monitoring or Ancillary Services Monitoring).

Solution

The solution falls into four parts:-

1) The Relevant Electrical Standards have been updated and are fully consistent with National Grid's Technical Specifications.

2) The format of the Relevant Electrical Standards has been substantially reviewed. This now comprises of four sections i) Part 1 - Introduction, ii) Part 2 – Administration iii) Part 3 General Requirements and iv) Part 4 – Specific Requirements. It should be noted that Part 4 comprises of individual documents which will be accessed by separate links (eg Substations – TS 2.01(RES)) but they still remain under the umbrella of the RES and its corresponding governance.

3) Assuming the proposed version of the Relevant Electrical Standards are approved the generic technical appendices (Appendix F) will be updated so they refer only to the RES rather than NGTS's. The Bilateral Agreement will state which version of the RES applies.

4) Ensure that in future whenever an NGTS is updated there is a corresponding update to the Relevant Electrical Standards.

Assessment against Grid Code Objectives

The proposed changes to the Grid Code better facilitate the following Grid Code Objectives:-

(i) ***to permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;***

Provides greater clarity to User's with a direct connection to the National Electricity Transmission System.

(ii) ***to facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity);***

Provides a level playing field to Users connected directly to the Transmission System and the technical specifications of the equipment they need to supply.

(iii) ***subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole;*** and

Improved security is enhanced through a common set of specifications and standards.

(iv) ***to efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency.***

Achieved through satisfying the latest and most up to date standards which are subject to the full governance process.

Impact & Assessment

Impact on the National Electricity Transmission System (NETS)

None

Impact on Greenhouse Gas Emissions

None

Impact on core industry documents

None

Impact on other industry documents

The Relevant Electrical Standards and future Bilateral Connection Agreements.

Supporting Documentation

Have you attached any supporting documentation Yes

If Yes, please provide the title of the attachment:

a) Issue 2 of the Relevant Electrical Standards
b) Amendments Record
c) RES Specific requirements document

Recommendation

The Grid Code Review Panel is invited to:

Consider and provide comments on the revised version of the Relevant Electrical

Standards within 20 Business Days following the March 2014 Grid Code Review Panel. In accordance with GC.11.3 of the Grid Code, if no objections are raised within 20 Business Days following the March 2014 GCRP meeting, then it shall be deemed approved pursuant to the Electrical Standards procedure, and NGET shall make the change to the relevant Electrical Standard.