GC 0103
The introduction of harmonised Applicable Electrical Standards in GB to ensure compliance with the EU Connection Codes

Garth Graham, for SSE Generation Ltd.

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Background (1)

- ***What***

  - The Grid Code will need to be amended to set out the new EU standards to which impacted Users will need to comply with.

  - This will be a combination of completely new requirements inserted into the Grid Code, or adjustments / continuation / removal of corresponding existing GB requirements to line up with, and not be more stringent than, the requirements in the new EU Network Codes/ Guidelines.

Background (2)

- ***Why***

  - Guidance from BEIS and Ofgem was to apply the new EU requirements within the existing GB regulatory frameworks. This would provide accessibility and familiarity to GB parties, as well as putting in place a robust governance route to apply the new requirements in a transparent and proportionate way.

  - This modification needs to be undertaken in timely manner to ensure impacted Users are aware of their compliance obligations - particularly in relation to procurement of equipment, testing and operational requirements. This modification is also therefore, critical to facilitate/demonstrate Member State compliance to these three EU Connection Network Codes (RfG, DCC and HVDC).

Background (3)

- ***How***

  - With the support of the industry, we will use this modification to finalise the solution to apply the EU Connection Codes requirements, before consulting with the wider industry and submitting to Ofgem for a decision.

Why Change (1)

- This Proposal is one of a number of Proposals which seek to implement relevant provisions of a number of new EU Network Codes/Guidelines which have been introduced in order to enable progress towards a competitive and efficient internal market in electricity.
- The RfG, DCC and HVDC EU Network Codes were drafted to facilitate greater connection of renewable generation; improve security of supply; and enhance competition to reduce costs for end consumers, across EU Member States.
- These three codes specifically set harmonised technical standards for the connection of new equipment for generators, demand, and HVDC systems (including DC-Connected Power Park Modules respectively).

Why Change (2)

- The electrical standards contain the technical specifications, policies and procedures that must be complied with by all Users connected to or seeking connection to the electrical system.
- Currently there are multiple versions of the electrical standards within GB and this is set to grow in the future with the introduction of CATOs.
- These differences and inconsistencies in the current electrical standards within GB cause difficulty for Users as it takes time and effort to check connection designs against each (different) set. In addition, costs may vary based on these differences which can hinder investment decisions. Users also feel that there is a lack of transparency in the justification for the regional variations and the governance of the change process is inefficient and unclear.

Why Change (3)

- These items, when combined with the implementation of the three EU Network Codes means that there is now a need for a single harmonised GB electrical standards to ensure that the obligations within those EU Network Codes are met.
- Given that the obligations in these EU Network Codes apply to ‘New’ Users only (and not to ‘Exiting’ Users) it is proposed that the single harmonised GB electrical standards introduced by this proposal would be known as the ‘*Applicable Electrical Standards*’ and would not be more stringent than the requirements in the EU Network Codes/ Guidelines.

Solution (1)

- It is proposed with this Proposal that a joint GCRP/DCRP Workgroup be set-up to review the current electrical standards and the potential solutions with a view to creating a single harmonised set of electrical standards, to be known as the '*Applicable Electrical Standards*', to be applied to all 'New' connections to the GB electrical system depending on whether they are generation, demand or HVDC.
- '*Applicable Electrical Standards*' would be incorporated into the Grid Code and any subsequent changes to them would, for the avoidance of doubt, be subject to public consultation and NRA (Ofgem) approval.
- Following the creation of the '*Applicable Electrical Standards*' the Grid Code and the Distribution Code would need to be amended appropriately to achieve consistent application across the Transmission and the Distribution systems.

Solution (2)

- The technical requirements in the RfG, for example, are incremental; building up from Type A to Type B then Type C and finally Type D.
- Similarly, depending on further Workgroup deliberation, it is possible (probable?) that the '*Applicable Electrical Standards*' will likewise be incremental in the context of generation. For example, it would seem that there would be no need for the Type A related '*Applicable Electrical Standards*'; although this would be required for a Type B (plus C and D) generator.

Justification against Applicable Objectives (i)

- **To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity;**
  - **<u>Positive</u>**
  - The proposed solution will allow the System Operator / Distribution Network Operators to efficiently apply the EU Network Code/ Guidelines requirements to the Users of the system through the National Industry Codes.

Justification against Applicable Objectives (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);**
  - **<u>Positive</u>**
  - The proposed solution will assist the Users of the Transmission and the Distribution system during the connection process.
  - A single harmonised set of electrical standards will also help enable competition in the construction of connection assets as, at the moment, it is not clear what standard CATO's should use.
  - A common set of standards will also provide a level playing field between generators in different parts of GB compared to the current situation in which a generator in, say, Carlisle has different connection requirements and standards to one in, say, Glasgow and yet another set for one located in, say, Inverness.

Justification against Applicable Objectives (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;**
  - **<u>Positive</u>**
  - The creation of a harmonised set of standards would ensure that changes to standards are managed in a controlled, open and transparent manner and ensure that where a clear action to improve a standard is discovered, it can be applied across the country at the same time.

Justification against Applicable Objectives (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;**
  - **<u>Positive</u>**
  - The EU Connection Codes derive from the Third Energy Package legislation which is focused on delivering security of supply; supporting the connection of new renewable plant; and increasing competition to lower end consumer costs.
  - This proposal ensures that harmonised rules for grid connection for power-generating modules, demand and HVDC assets are set out in order to provide a clear legal framework for grid connections, facilitate Union-wide trade in electricity, ensure system security, facilitate the integration of renewable electricity sources, increase competition and allow more efficient use of the network and resources, for the benefit of consumers.
  - Furthermore, this modification ensures GB compliance with EU legislation in a timely manner and does so in a way that is not more stringent than EU law permits.

Justification against Applicable Objectives (v)

- **To promote efficiency in the implementation and administration of the Grid Code arrangements.**
  - **<u>Positive</u>**
  - Applying harmonised rules for grid connection for power-generating modules, demand and HVDC assets reduces the administrative costs and burden for Users (in being able to seek connection on the basis of a uniform approach) and the System Operator (when assessing compliance) in the administration of the Grid Code arrangements.

Governance

- Given materiality, complexity and wide-ranging impact of the changes proposed in this Modification, we believes that self-governance or fast track governance arrangements are not appropriate in this case.

- We believe that Urgency is required for this proposal.

Urgency

- Taken account of the Ofgem urgency criteria, we believe the issues we have set out in this Grid Code Modification proposal to be linked to an **imminent issue**, which is date related, that if not urgently addressed may cause (i) a **significant commercial impact** on parties, consumers and other stakeholder(s); and (ii) a party to be in breach of relevant **legal requirements**.
- The detailed reasoning for each of these three items are set out in the proposal.