## Annex 9: Proposed Legal Text Changes Post CAC

Definition consulted on as part of Code Administrator Consultation:

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|---|---|
| **Internal Voltage Source** or **IVS** | For a **GBGF-S**, a real magnetic field, that rotates synchronously with the **System Frequency** under normal operating conditions, which as a consequence induces an internal voltage (which is often referred to as the Electro Motive Force (EMF)) in the stationary generator winding that has a real impedance.<br><br>In a **GBGF-I**, switched power electronic devices are used to produce a voltage waveform, with harmonics, that has a fundamental rotational component called the **Internal Voltage Source (IVS)** that rotates synchronously with the **System Frequency** under normal operating conditions.<br><br>For a **GBGF-I** there must be an impedance ~~with only real physical values~~, between the **Internal Voltage Source** and the **Grid Entry Point** or **User System Entry Point**.<br><br>For the avoidance of doubt, the impedance between the **Internal Voltage Source** and the **Grid Entry Point** or **User System Entry Point** could be virtual, real, or a combination of the two.<br><br>~~For the avoidance of doubt, a virtual impedance, is not permitted in **GBGF-I.**~~ |

During the Code Administrator Consultation, a respondent suggested that the definition should be amended as follows, to remove a comma after a section of deleted text:

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|---|---|
| **Internal Voltage Source** or **IVS** | For a **GBGF-S**, a real magnetic field, that rotates synchronously with the **System Frequency** under normal operating conditions, which as a consequence induces an internal voltage (which is often referred to as the Electro Motive Force (EMF)) in the stationary generator winding that has a real impedance.<br><br>In a **GBGF-I**, switched power electronic devices are used to produce a voltage waveform, with harmonics, that has a fundamental rotational component called the **Internal Voltage Source (IVS)** that rotates synchronously with the **System Frequency** under normal operating conditions.<br><br>For a **GBGF-I** there must be an impedance ~~with only real physical values,~~ between the **Internal Voltage Source** and the **Grid Entry Point** or **User System Entry Point**.<br><br>For the avoidance of doubt, the impedance between the **Internal Voltage Source** and the **Grid Entry Point** or **User System Entry Point** could be virtual, real, or a combination of the two.<br><br>~~For the avoidance of doubt, a virtual impedance, is not permitted in **GBGF-I.**~~ |