

Grid Code Harmonisation for SEM

Planning Code Modifications EirGrid Grid Code PC and PCA

Consultation Version 1

The tracked changes below detail the proposed modifications to the Planning Code as a result of the SEM.

PC PLANNING CODE

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PC PLANNING CODE

PC.1 INTRODUCTION

Development of the **Transmission System** will arise for a number of reasons including, but not limited to:

- (a) development on a **User System** already connected to the **Transmission System**;
 - (b) the introduction of a new **Connection Site** or the **Modification** of an existing **Connection Site** between a **User System** and the **Transmission System**;
 - (c) changing requirements for electricity transmission facilities due to changes in factors such as **Demand**, **Generation**, technology reliability requirements, and/or environmental requirements; and
 - (d) a development on the Northern Ireland (NI) System ;
- ~~(d)(e)~~ the cumulative effect of a number of such developments referred to in (a), (b), ~~(c)~~ and ~~(ed)~~ by one or more **Users**.

Accordingly, the development of the **Transmission System** may involve work:

- (a) at a new or existing **Connection Site** where **User's Plant** and/or **Apparatus** is connected to the **Transmission System**;
- (b) on new or existing transmission circuits or other facilities which join that **Connection Site** to the remainder of the **Transmission System**; and
- (c) on new or existing transmission circuits or other facilities at or between points remote from that **Connection Site**.

The time required for the planning and subsequent development of the **Transmission System** will depend on the type and extent of the necessary work, the time required for obtaining planning permission and wayleaves, including any associated hearings, and the degree of complexity in undertaking the new work while maintaining satisfactory security and quality of supply on the existing **Transmission System**.

PC.2 OBJECTIVES

The objectives of the **Planning Code** are to provide for:

- (a) **TSO/User** interaction in respect of any proposed development on the **User System** that may impact on the performance of the **Transmission System** or the direct connection with the **Transmission System**;
- (b) the supply of information required by the **TSO** from **Users** in order for the **TSO** to undertake the planning and development of the **Transmission System** in accordance with the **Transmission Planning Criteria** and relevant standards; ~~and~~
- (c) the supply of information required by the **TSO** from **Users** in order for the **TSO** to participate in the co-ordinated planning and development of both the **Transmission System** and the **NI System**; and
- ~~(e)~~(d) the supply of information required by the **TSO** for the purposes of the **Forecast Statement**.

PC.3 SCOPE

The **Planning Code** applies to the **TSO** and to the following **Users**:

- (a) **Generators** and **Generator Aggregators** with **Registered Capacity** greater than ~~40MW;~~ 2 MW
- (b) all **Generators** connected to the **Transmission System**;
- (c) **Distribution System Operator**;
- (d) **Transmission Asset Owner**; and
- (e) **Demand Customers** including both **Dispatchable Demand Customers** and **Demand Side Unit Aggregators** with **Registered Capacity** greater than ~~4~~ MW.

The above categories of **User** will become bound by the **Planning Code** prior to generating, distributing or consuming electricity, as the case may be, and references to the various categories (or to the general category) of **User** should, therefore, be taken as referring to a prospective **User** in that role as well as to **Users** actually connected.

PC.4 PLANNING PROCEDURES FOR CONNECTION

PC.4.1 Information

Users and prospective **Users** of the **Transmission System** are able to assess opportunities for connecting to, and using, the **Transmission System**, through:

- (a) the statement, prepared by the **TSO**, enabling prospective **Users** to assess for each of the seven succeeding years, the opportunities available for connecting to and using the **Transmission System** and to assess those parts of the **Transmission System** most suited to new connections and transport of further quantities of electricity;
- (b) a **Connection Offer** by the **TSO** to enter into or amend a **Connection Agreement**; and
- (c) published **Use of System Tariffs**.

PC.4.2 Application for Connection

PC.4.2.1 **Users** proposing a new **Connection Site** or **Modification** of an existing **Connection Site** shall send an application form to the **TSO**.

PC.4.2.2 The application form to be submitted by a **User** when making an application for a **Connection Offer** shall include:

- (a) a description of the **Plant** and/or **Apparatus** to be connected to the **Transmission System** or, as the case may be, of the **Modification** relating to the **User's Plant** and/or **Apparatus** already connected to the **Transmission System**, each of which shall be termed a "**User Development**" in the **Planning Code**;
- (b) the relevant data as listed in the **Planning Code** Appendix; and
- (c) the desired **Connection Date** and **Operational Date** of the proposed **User Development**.

PC.4.2.3 The application form for a **Connection Offer** shall be sent to the **TSO** as more particularly provided in the connection offer process documentation.

PC.4.2.4 Data supplied in the application form or data submitted along with the application form which is directly relevant to the application and has been submitted in support of it will be treated as **Preliminary Project Planning Data** until such time as the **Connection Offer** has been made and accepted.

PC.4.3 Connection Offer

PC.4.3.1 A **Connection Offer** shall include, but shall not be limited to, the following:

- (a) details of how the connection is to be made, including details of the **Plant** and **Apparatus** that will be required to implement the connection;
- (b) a description of any **Modification** that the applicant **User** is required to pay for;
- (c) an indication of the **Connection Date** and the **Operational Date**; and
- (d) an estimate of the charges for connection.

PC.4.3.2 Any **Connection Offer** will provide that it must be accepted by the applicant **User** within the period stated in the **Connection Offer**, after which the **Connection Offer** will automatically lapse. Acceptance of the **Connection Offer** shall be effected by execution of the **Connection Agreement** by both parties which renders the connection works relating to that **User Development** committed and binds both parties in accordance with its terms. Within 60 **Business Days** (or such longer period as the **TSO** may agree in any particular case) of acceptance of the **Connection Offer** the **User** shall supply the data pertaining to the **User Development** as listed in the Appendix to this **Planning Code**.

PC.4.3.3 Once a **Connection Offer** has been accepted then all data supplied in the application form and any data submitted along with the application form will be treated as Committed Project Planning Data.

PC.4.4 Complex Connections

PC.4.4.1 The magnitude and complexity of any **Transmission System** development will vary according to the nature, location and timing of the proposed **User Development** which is the subject of the application and it may, in certain circumstances, be necessary for the **TSO** to carry out additional or more extensive system studies to evaluate more fully the impact of the proposed **User Development** on the **Transmission System**. A proposed **User Development** may also require system studies to be carried out to evaluate the impact of the proposed **User Development** on the **NI System**. Where the **TSO** judges that such additional or more extensive studies are necessary the **Connection Offer** may indicate the areas that require more detailed analysis and before such additional studies are carried out, the **User** shall indicate whether it wishes the **TSO** to undertake the work necessary to proceed to make a revised **Connection Offer** within the period allowed or such extended time as the **TSO**, acting reasonably considers is necessary.

PC.4.4.2 To enable the ~~**TSO** to carry out any of the~~ above detailed system studies, ~~the **User** may, at the request of the **TSO**, be required to be carried out,~~ the **TSO** may require the **User** to supply some or all of the data items listed in the Appendix to

this Planning Code as **Committed Project Planning Data** in advance of the normal time-scale, provided that the **TSO** considers that it is relevant and necessary. In the event that such data items are supplied they will be treated as **Preliminary Project Planning Data** submitted in support of the application as outlined in PC.4.2.4.

PC.4.5 Notice Required

Any **User** proposing to de-rate, close, retire, withdraw from service or otherwise cease to maintain and keep available for **Dispatch** in accordance with **Good Industry Practice** any **Generation Unit** or **Generation Units** with **Registered Capacity** greater than 10 MW in aggregate shall give the **TSO** at least 24 calendar months notice of such **action**.

PC.5 SYSTEM PLANNING

PC.5.1 In order for the **TSO** to undertake the planning and development of the **Transmission System**, in accordance with the relevant standards as provided for in **PC.7**, and, where appropriate, to participate in the co-ordinated planning and development of both the **Transmission System** and the **NI System**. the **TSO** will require **Users** to provide data and information on a regular basis. Information received for this purpose will be treated as **System Planning Data**.

PC.5.2 The **TSO** may also require additional data or information from a **User**. Where the **TSO** considers that this information is required then the **User** where reasonable shall submit the information to the **TSO** without delay. Such information may be required so that the **TSO** can:

(a) plan and develop the **Transmission System** in accordance with the relevant standards;

(b) undertake co-ordinated planning and development of both the **Transmission System** and the **NI System**;

~~(b)(c)~~ monitor **Power System** adequacy and **Power System** performance and project future **Power System** adequacy and **Power System** performance; and

~~(e)(d)~~ fulfil its statutory and regulatory obligations.

PC.5.3 In planning for the development of the **Transmission System**, the **TSO** may require an individual **User**, or group of **Users**, to modify or install new **Plant** or **Apparatus**, where the **TSO** can reasonably show that it is prudent or necessary

to do so. A **User** may object on grounds that to modify or install new **Plant** or **Apparatus** as required, in accordance with **Good Industry Practice**, would be technically infeasible. This may include, but shall not be limited to, for example, the installation of **Power System Stabilisers**.

PC.6 DATA

PC.6.1 As far as the **Planning Code** is concerned, there are three relevant types of data; **Preliminary Project Planning Data**, **Committed Project Planning Data** and **System Planning Data**.

PC.6.1.1 These three types of data, which relate to differing levels of confidentiality, commitment and validation, are described below.

PC.6.1.2 **Preliminary Project Planning Data** and **Committed Project Planning Data** relate to the data required from a **User** at various stages during the process for introduction of a new **Connection Site** or **Modification** of an existing **Connection Site** as outlined in **PC.4**, and more specifically in the application form for a Connection or Modification. **System Planning Data** relates to the data that must be submitted at regular periods by all **Users**, or other such data or information as requested by the **TSO** under **PC.6**

PC.6.2 An existing **User** proposing a new **Connection Site** will need to supply data both in an application for a **Connection Offer** and under the **Planning Code** in relation to that proposed new **Connection Site** and such information will be treated as **Preliminary Project Planning Data** or **Committed Project Planning Data** (as the case may be), but the data an existing User supplies under the **Planning Code** relating to its existing **Connection Sites** will be treated as **System Planning Data**

PC.6.3 Preliminary Project Planning Data

PC.6.3.1 At the time the **User** applies for a **Connection Offer** but before such an offer is made by the **TSO**, the data relating to the proposed **User Development** will be considered as **Preliminary Project Planning Data**. This data will be treated as confidential within the scope of the provisions relating to confidentiality in the **TSO** policy on confidentiality. The **TSO** may disclose **Preliminary Project Planning Data** to the **Other TSO**.

The following information shall be published on the TSO website:

- (i) User's name (legal and project name);
- (ii) User's contact details;
- (iii) User's date of completed application;
- (iv) Status of application, for example in-progress or issued;
- (v) Specific location, including grid co-ordinates;
- (vi) the Registered Capacity applied for; and
- (vii) Interacting group where applicable.

PC.6.3.2 **Preliminary Project Planning Data** contains such data as may be reasonably required by the TSO to evaluate the connection application/ as outlined in PC.4.2 and, if applicable, any other data directly relevant to, and submitted in support of, the application.

PC.6.4 **Committed Project Planning Data**

PC.6.4.1 Once the **Connection Offer** has been formally accepted by the prospective **User**, the data relating to the **User Development**, already submitted as **Preliminary Project Planning Data**, and any subsequent data required by the TSO under this **Planning Code**, will become **Committed Project Planning Data**. This data, together with other data held by the TSO and the Other TSO relating to the **Transmission System** and the NI System, will form the basis from which new applications by any **User** will be considered and from which planning of the **Transmission System** and power system analysis will be undertaken. Accordingly, **Committed Project Planning Data** will not be treated as confidential to the extent that the TSO is obliged:

- (a) to use it in the preparation of the **Forecast Statement** and in any further information given pursuant to the **Forecast Statement**;
- (b) to use it when considering and/or advising on applications (or possible applications) of other **Users** (including making use of it by giving data from it, both orally and in writing, to other **Users** making an application (or considering or discussing a possible application) which is, in the TSO's view, relevant to that other application or possible application);
- (c) to use it for the TSO planning purposes and to use it when participating in co-ordinated planning and development of both the Transmission System and the NI System; and
- ~~(d) under the terms of an **Interconnection Agreement** to pass it on as part of system information on the **Power System**.~~

- (d) the TSO may disclose it to the Other TSO for the purposes of consideration of developments on the NI system.

PC.6.5 To reflect different types of data, **Preliminary Project Planning Data** and **Committed Project Planning Data** are themselves divided into those items of Data which:

- (a) will always be forecast, known as **Forecast Data**;
- (b) upon connection become fixed (subject to any subsequent changes), known as **Registered Data**; and
- (c) relate to **Plant** and/or **Apparatus** which upon connection will become **Registered Data**, but which prior to connection will be an estimate of what is expected, known as **Estimated Registered Data**.

PC.6.6 **System Planning Data**

PC.6.6.1 The **Planning Code** requires that, as soon as is practical, and not later than the **Operational Date** all data requirements as stated in the Appendix to the Planning Code, not previously requested by the **TSO** and supplied by the **User**, will be submitted by the **User** to the **TSO**. This will include confirming any estimated values assumed for planning purposes or, where practical, replacing them by validated actual values and by updated estimates for the future and by updating forecasts for **Forecast Data** items such as **Demand**.

PC.6.6.2 The **Planning Code** requires that **Users** submit to the **TSO**, each year, the **System Planning Data** as listed in section PC.A3.3 of the Appendix to the Planning Code. This data should be submitted by calendar week 9 of each year and should cover each of the ten succeeding years (and in certain instances the current year). Where from the date of one submission to the/a subsequent date submission there is no change in the data to be submitted for any given year, instead of resubmitting the data, a **User** may submit a written statement that there has been no change from the data submitted the previous time, pertaining to the particular year specified.

PC.6.7 **System Planning Data**, together with other data held by the **TSO** and the Other TSO relating to the **Transmission System** and the NI System, will form the basis from which new applications by any **User** will be considered and from which planning of the **Transmission System** will be undertaken. Accordingly, **System Planning Data** will not be treated as confidential to the extent that the **TSO** is obliged:

- (a) to use it in the preparation of the **Forecast Statement** and in any further information given pursuant to the **Forecast Statement**;
- (b) to use it when considering and/or advising on applications (or possible applications) of other **Users** (including making use of it by giving data from it, both orally and in writing, to other **Users** making an application (or considering or discussing a possible application) which is, in the **TSO's** view, relevant to that other application or possible application);
- (c) to use it when participating in co-ordinated planning and development of both the **Transmission System** and the **NI System**:
- ~~(e)(d)~~ to use it for the **TSO** planning purposes; and
- ~~(d) — under the terms of an **Interconnection Agreement** to pass it on as part of system information on the **Power System**.~~
- (e) to disclose it to the **Other TSO** so that it can meet its statutory and legal requirements for the **NI System**.

To reflect the different types of data referred to above **System Planning Data** is itself divided into those terms of data:

- (a) which will always be forecast, known as **Forecast Data**;
- (b) which upon connection become fixed (subject to any subsequent changes), known as **Registered Data**; and
- (c) which relate to **Plant** and/or **Apparatus** which for the purposes of the **Plant** and/or **Apparatus** concerned as at the date of submission are **Registered Data** but which for the ten succeeding years will be an estimate of what is expected, known as **Estimated Registered Data**.

PC.7 PLANNING STANDARDS

PC.7.1 The **TSO** shall apply the **Transmission Planning Criteria** and relevant standards in the planning and development of the **Transmission System**.

PC.7.2 In assessing the technical requirements of a **User's** connection, the **TSO** shall not unfairly discriminate between **Users** of a similar category, location or size although it will not be technically or economically practicable to achieve uniformity of method of connection at all times.

PC.7.3 The **Transmission System Voltage** level at which a **User's System** will be connected and the busbar configuration which a **User's System** uses will depend upon but shall not be limited to the following:

- (a) the size of the **Generation Units** and the number of **Generation Units** comprising the **User's System**;
- (b) consistency with future development of the **Transmission System**;
- (c) proximity to the existing **Transmission System**; and
- (d) the cost of the proposed connection.

PC.7.4 The **Transmission System Voltage** level at which a **Demand Customer** will be connected to the **Transmission System** will depend upon but shall not be limited to the following:

- a) the size of the **MW Demand** at the **Connection Point**;
- b) consistency with future development of the **Transmission System**;
- c) proximity to the existing **Transmission System**.; and
- d) the cost of the proposed connection.

PC.7.5 The **Transmission System Voltage** level at which the **Distribution System Operator** will be connected to the **Transmission System** will depend upon but shall not be limited to the following:

- (a) the size of the **MW Demand** at the **Connection Point**;
- (b) consistency with future development of the **Transmission System**;
- (c) consistency with co-ordinated planning of the **Transmission System** and of the **Distribution System**;
- (d) proximity to the existing **Transmission System**; and
- (e) the cost of the proposed connection.

PC.7.6 The method of connection used may exceed the relevant standards where this is required by the **User** and is acceptable to the **TSO**.

PC.8 VALIDATION AND VERIFICATION OF DATA

PC.8.1 Where a **User** submits data, which in the opinion of the **TSO** is incorrect then the **TSO** may request that that **User** supply such additional information as the **TSO** deems necessary to verify the accuracy of the data.

PC.8.2 Where, following consideration of such information submitted under PC.8.1, the **TSO** maintains, acting reasonably, that the additional information is insufficient to verify the accuracy of the original data then the **TSO** may request that the **User** carry out specific **Tests** to verify the data. Where such a **Test** or **Tests** are requested, they will be subject to the provisions of the relevant operational codes.

PC.8.3 In the event that the data as submitted by the **User** is verified by the **Test** or **Tests** to be correct then all costs reasonably incurred as a result of such **Test** or **Tests** as agreed will be borne in full by the **TSO**.

P.C.8.4 In the event that any of the data items submitted are shown to be incorrect or inaccurate then the **User** will bear the cost of the **Test** in full and the data values as ascertained by the **Tests** will be the values used in the data. If, as a result of the changes to the data arising from the **Test** or **Tests**, the **TSO** have to redo or perform additional system studies then the **User** will also bear the cost reasonably incurred as a result of this additional work.