

DRAFT ALL ISLAND GRID CODE

SCHEDULING AND DISPATCH CODE NO.1

UNIT SCHEDULING

[Note: Please note that this is not a final draft of SDC2 and that it is still subject to further consideration.]

[Note: Please note that any paragraphs written in italics in the SDCs apply to one jurisdiction only.]

[Note: Please note that the cross-referencing in this section to other sections of the Grid Code has not yet been fully updated ~~since the date of the last GCRP meeting and will need to be updated following the consultation period.~~]

[Note: Please note that the notes which appear in this version of SDC1 are for information only and do not form part of the Grid Code. These notes will not appear in the final versions of SDC1.]

SDC1.1 INTRODUCTION

SDC1.1.1 **SEM** Provisions

- (a) This Scheduling and Dispatch Code No. 1 ("SDC1") forms part of the ~~Common Sections~~ under Common Governance of the **Grid Code**. The ~~Common Sections~~ under Common Governance are those parts of the **Grid Code** which are under common governance in both the **Grid Code** and the **Other Grid Code**.
- (b) The form of this SDC1 is ~~the same as~~ similar to the SDC1 in the **Other Grid Code** ~~except for~~ Differences relate to references to relevant power systems and related terms, ~~and except for those provisions which appear in italic font. The provisions in italic font only apply in relation to this Grid Code and relate to matters which are not appropriate to include in both codes.~~ Where there is a difference between a provision in this Grid Code and an equivalent provision in the Other Grid Code, the wording in question is shaded in grey. In addition, those parts of this SDC1 that are not part of the Other Grid Code are shaded in grey in this SDC1. Differences between the form of this SDC1 and the SDC1 in the Other Grid Code are summarised in Annex 1 to this SDC1.
- (c) This SDC1 ~~needs~~ is intended to work in conjunction with ~~a number of~~ other documents, including the **Trading and Settlement Code ("TSC")**. The provisions of the **Grid Code** and the **Other Grid Code** will take precedence over the **TSC**. The **TSC** is the document under which the principal elements of the market for electricity operate. Every **User** which trades in electricity ~~must~~ above certain minimum thresholds

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shall be a party to the **TSC**. The **Market Operator** is a party to the **TSC**, as is the **TSO** and the **Other TSO**.

- (d) The obligation to submit data in relation to some of the information required to be provided to the **TSO** by this SDC1 may be fulfilled by **Users** where such information submitted under the **TSC** is then provided to the **TSO** by the **Market Operator** under the provisions of the **TSC**, as further provided in this SDC1. The **TSO** may require **Users** to verify or ~~update~~provide revisions to data received by it via the **Market Operator** ~~in that way~~.
- (e) Further provisions dealing with the ~~Common Sections~~ under Common Governance are contained in the **General Conditions**.

SDC1.1.2 SDC1 sets out the procedure for:

- (a) **Availability**: the daily submission by a **User** to the **TSO** of an **Availability Notice** in respect of any of its:
 - (i) ~~CDGUs;~~ [Note: Please note that unless otherwise specified in SDC1, CDGUs include Thermal Plant including (which for the avoidance of doubt comprise, Generating Units subject to Central Dispatch, CCGT Installations, Hydro UnitUnits, Pumped Storage Generators in respect of their Generation (but not Pumped Storage generation (but not Demand) and Dispatchable WFPSs.)]
 - (ii) Pumped Storage Plant Demand;
 - (iii) Interconnector Availability (in the case of the Interconnector Owner) and Price (in the case of an Interconnector User);
 - (iv) Demand Side Units;
 - (v) Generator Aggregators in respect of their Aggregated Generating Units; and
 - (vi) Controllable WFPSs;

[Note: Please note that Controllable WFPSs are not currently subject to Dispatch Instructions but the TSOs can directly control the maximum MW being exported from them. ~~The treatment of Controllable WFPSs in the SDCs is still being considered.]~~]

- ~~(iii) Pumped Storage Generators in respect of their Pumped Storage Plant Demand;~~
- ~~(iv) Interconnectors;~~

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- ~~(v) Demand Side Units;~~
- ~~(vi) Generator Aggregators in respect of their Aggregated Generating Units; and~~
- ~~(vii) Demand Side Unit Aggregators in respect of their Aggregated Demand Side Units.~~

(b) **Technical Parameters:** the daily notification to the TSO of the **Technical Parameters**, in respect of the following **Trading Day**, by each User in a **Technical Parameters Notice**, ~~and~~ notification of Other Relevant Data and notification of other technical data including Ancillary Services/System Support Services capability;

[Note: Please note that "Ancillary Services" will be used in the EirGrid Grid Code and "System Support Services" will be used in the SONI Grid Code.]

(c) **Commercial Offer Data:** the daily notification of **Commercial Offer Data**;

(d) ~~Updates: updates~~ Revisions/Re-declarations: revisions / Re-declarations of such information (other than **Commercial Offer Data** after **Gate Closure**) as provided for this in SDC1;

(e) **Indicative Operations Schedule:** the production and issuing by the TSO of an **Indicative Operations Schedule** the day before the **Trading Day** as a statement of which:

- (i) CDGUs;
- (ii) ~~Controllable WFPs;~~ ~~(iii) Pumped Storage Plant Demand;~~
- ~~(iviii) Interconnectors;~~
- ~~(vii) Demand Side Units;~~
- ~~(vii) Aggregated Generating Units; and/or~~
- ~~(vii) Aggregated Demand Side Unit Units~~
- (vii) Controllable WFPs

may be required.

SDC1.1.3 In this SDC1, the term "**Gate Closure**" shall mean 10.00 hours on the day preceding the relevant **Trading Day** to which the notice relates (D-1).

SDC1.1.4 In respect of PPA Generation the provisions of Appendix B prevail and replace, as stated, the other parts of this SDC1.

SDC1.2 OBJECTIVE

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The objectives of SDC1 are:

- (a) to enable the **TSO₁** in conjunction with the **Other TSO₁** to prepare an **Indicative Operations Schedule** (utilising, amongst other things, a **Merit Order**) by 16.00 hours on the day preceding the relevant **Trading Day** (D-1) to be used in the **Scheduling** and **Dispatch** process for that **Trading Day**;
- (b) to thereby ensure (so far as possible) the integrity of the **Transmission System** and to ensure that the TSO acts in conjunction with the Other TSO so that the Other TSO can ensure the integrity of the Other Transmission System (with the Other TSO having a similar objective);
- (c) to ensure the security and quality of supply in relation to the **Transmission System**; and to ensure that the TSO acts in conjunction with the Other TSO so that the Other TSO can ensure the security and quality of supply in relation to the Other Transmission System (with the Other TSO having a similar objective);
- (d) to ensure that there is sufficient capacity to meet the **Demand electrical power Demand, and thereby in conjunction with the Other TSO to ensure that there is sufficient capacity to meet the demand** on the Island of Ireland at all times and in both cases together with an appropriate margin of reserve. ~~_____ ;~~

~~It is also an objective (e) to publish an Indicative Operations Schedule as provided for in this SDC1.~~

SDC1.3 SCOPE

SDC1 applies to the **TSO** and to the following **Users**:

- (a) **Generators** with regard to their:
CDGUs; and
Controllable WFPs.

~~_____ [Note: As explained above, please note that unless otherwise specified in SDC1, CDGUs include Thermal Plant including CCGT Installations, Hydro Unit, Pumped Storage Generators in respect of their Pumped Storage generation and Dispatchable WFPs.] _____~~
- (b) **Pumped Storage Generators** with regard to their **Pumped Storage Plant Demand**;
- (c) **Interconnector Owners** with regard to their **Interconnectors**;

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- ~~(d) Dispatchable Demand Customers in relation to their Demand Side Units; and~~
- (d) In respect of the submission of Commercial Offer Data under SDC1.4.4.5 only, Interconnector Users in respect of their Interconnector Units;
- (e) Dispatchable Demand Customers in relation to their Individual Demand Site;
- (f) Dispatchable Demand Customers in relation to their Aggregated Demand Sites; and
- (f) Generator Aggregators in respect of their Aggregated Generating Units; and
- ~~(f) Demand Side Unit Aggregators in respect of their Aggregated Demand Side Units.~~

Each of which (other than the TSO) is a "User" under this SDC1.

SDC1.4 PROCEDURE

SDC1.4.1 Availability Notice

SDC1.4.1.1 Requirement

- (a) Each **User** shall, by not later than **Gate Closure** each day, notify the **TSO** by means of an **Availability Notice** (in such form as the **TSO** may reasonably notify from time to time or in the form published on the **TSO** website) of the **Availability** and/or **Demand Reduction** (as the case may be) of each of its :

(i) CDGUs;

(ii) Controllable WFPSs;

(iii) Pumped Storage Plant; Demand;

(iv) Interconnectors ~~or~~ (to be submitted by the Interconnector Owner);

(v) Demand Side Units; or

(vii) Aggregated Generating Units as the case may be.

- (b) A **User** may satisfy this obligation by submitting the data under the **TSC**, unless the **TSO** requires, by notice to the **User**, the data to be submitted to it directly under the **Grid Code**.
- (c) A **Generator Aggregator** ~~and Demand Side Unit Aggregator~~ will satisfy the obligation in this SDC1.4.1.1 by notifying to the **TSO** in an **Availability Notice** in the form described in paragraph (a) above the

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~~Availability or Demand Reduction~~ of its **Aggregated Generating Units** or ~~Aggregated Demand Side Units~~ as the case may be.

SDC1.4.1.2 Content

(a) The **Availability Notice** shall state the :

(i) **Availability** of the relevant:

- **CDGU**; or
- **Controllable WFPSs**; or

(ii) the **Demand Reduction** of the **Demand Side Unit**, or **Pumped Storage Plant Demand**; or

(iii) the **Maximum Import** ~~and Maximum~~ **Export Capacity** of an **Interconnector**;

as the case may be, (including, in the case of a **CCGT Installation**, the **Availability** of each of the **CCGT Modules/CCGT Units** within it) for each ~~trading period~~ **Trading Period** in the following **Optimisation Time Horizon period** (subject to revision under SDC ~~1.4.4.6~~ **1.4.5.1**(a)). The **Availability Notice** submitted in relation to an **Optimisation Time Horizon period** will supersede the previous one in relation to that part of the previous **Optimisation Time Horizon period** which is covered by the new one.

[Note: The term “CCGT Module” applies to the SONI Grid Code and the term “CCGT Unit” will apply to the EirGrid Grid Code.]

(b) ~~Where there is a System Support Services Agreement / Ancillary Services Agreement in place, the Availability Notice shall specify the System Support Services / Ancillary Services which are Available.~~

~~*[Note: Please note that the SONI Grid Code will be referring to System Support Services and the EirGrid Grid Code will be referring to Ancillary Services.]*~~ (c)

In the case of a **Generator Aggregator**, the **Availability Notice** shall state the **Availability** of its **Aggregated Generating Units**.

(d) In the case of a **Demand Side Unit Aggregator**, the **Availability Notice** shall state the **Demand Reduction** of its **Aggregated Demand Side Units** as a whole.

SDC1.4.1.3 Whole Numbers: The **MW** figure stated in the **Availability Notice** ~~must~~ shall be a whole number.

~~*[Note: Please note that although the TSC requires information published by the MO to contain numbers with 3 decimal places, the TSOs are of the opinion that figures contained in an Availability Notice should be in whole numbers. As the units to be scheduled and dispatched under the SDCs will*~~

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~~often be very large and, in any event, need to comply with the 4MW minimum threshold, it will not be necessary nor appropriate to request figures other than in whole numbers.]~~

SDC1.4.1.4 Atmospheric Conditions: In the case of **CDGUs** and ~~or~~ **Controllable WFPSs** which are affected by ambient conditions, an **Availability Notice** submitted by a **Generator** ~~must~~shall be stated ~~at~~as being the **User's** best estimate of the prevailing atmospheric ~~condition~~conditions for the **Trading Period** to which each part of the **Availability Notice** relates.

SDC1.4.2 **Additional Grid Code Availability Notice**

The following items are required to be submitted by each **User** by no later than Gate Closure each day, with the exception of **Aggregators** and **Dispatchable Demand Customers**, direct to the **TSO**, regardless of whether these have to be submitted under the **TSC**. The requirements in SDC1.4.1 in relation to data apply to this SDC1.4.2 as if repeated here.

SDC1.4.2.1 Fuels: In the case where a **CDGU** is capable of firing on different fuels, then the **Generator** ~~must~~shall submit an **Availability Notice** setting out the information in SDC~~1.4.1.2~~1.4.1 above for each fuel for the **CDGU**.

SDC1.4.2.2 **CCGT Availability**:

(a) The **Availability** of each **CCGT Module/CCGT Unit** within each **CCGT Installation**;

[Note: The term "CCGT Module" will apply to the SONI Grid Code and the term "CCGT Unit" will apply to the EirGrid Grid Code.]

~~SDC1.4.2.3~~ **CCGT Installations**:

(ab) In the case of a **CCGT Installation**, the **CCGT Installation Matrix** submitted by the **Generator** ~~under PCA2.3.4 of the Planning Code in Northern Ireland or PC.A4.3 of the Planning Code Appendix in the Republic of Ireland~~ (as may be revised as therein provided) is used and relied upon by the **TSO** as a 'look up table' to determine the number of **CCGT Modules/CCGT Units** within a **CCGT Installation** which will be synchronised to achieve the **MW Output** specified in a **Dispatch Instruction**. When using a **CCGT Installation Matrix** for **Scheduling** purposes, the **TSO** will take account of any updated information on the individual **Availability** of each **CCGT Module/CCGT Unit** contained in an **Availability Notice** submitted by a **Generator** pursuant to this SDC1. The individual **Availability** figures submitted under this SDC1.4.2.2 must be consistent with the **Generator's** submission under the **TSC**.

[Note: Please note that "PCA2.3.4" will be referred to in the SONI Grid Code and "PC.A4.3 of the Planning Code Appendix" will be referred to in the EirGrid Grid Code.]

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[Note: Please note that the standard temperature which will be used as a basis for the CCGT Matrix will be specified in the respective Planning Codes.]

[Note: The term “CCGT Module” will apply to the SONI Grid Code and the term “CCGT Unit” will apply to the EirGrid Grid Code.]

(bc) It is accepted that in cases of change in **MW Output** in response to **Dispatch** instructions issued by the **TSO**, there may be a transitional variance to the conditions reflected in the **CCGT Installation Matrix**. **Each Generator shall notify the TSO as soon as practicable after the event of any such variance.**

(ed) In achieving a **Dispatch instruction** the range or number of **CCGT Modules/CCGT Units** envisaged in moving from one **MW Output** level to the other should not be departed from. ~~Each Generator shall notify the TSO as soon as practicable after the event of any such variance.~~

(e) There is a provision in ~~SDC1.4.4.6~~ **1.4.5** for the **Generator** to revise the **individual Availability of each CCGT Module/CCGT Unit within each CCGT Installations Matrix**, subject always to the provisions of **this SDC1.4.3.21.4.2.2**;

[Note: The term “CCGT Module” will apply to the SONI Grid Code and the term “CCGT Unit” will apply to the EirGrid Grid Code.]

(df) ~~The CCGT Installation Matrix can only be amended~~ **such that the CCGT Installation comprises different CCGT Modules** in accordance with ~~PCA2.3.5 of the SONI Grid Code.~~ **2.3.5.**

[Note: Please note that the above paragraph applies to Northern Ireland only.]

SDC1.4.3 **General Availability Requirements**

~~SDC1.4.3.1~~ **Availability of Generating Units**

The provisions at **SDC1.4.3.1**, **SDC1.4.3.2** and **SDC1.4.3.3** do not apply to **NI-PPA Generation** which is dealt with in Appendix B.1.

[Note: Please note that words in italics above will not be incorporated in the EG Grid Code.]

SDC1.4.3.1 Availability of Generating Units

Each **Generator** and **Generator Aggregator** shall in relation to its **CDGUs** or **Aggregated Generating Units** maintain, repair, operate and fuel the **CDGU** and/or **Controllable WFPS** and/or **Aggregated Generating Unit** as required by **Prudent Operating Practice/Prudent Utility Practice** and any legal requirements applicable to its jurisdiction, with a view to providing the required **System Support Services** ~~in Northern Ireland and/~~ **Ancillary Services** ~~in the Republic of Ireland.~~

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[Note: Please note that the term “Prudent Operating Practice” will be used in the SONI Grid Code whilst the term “Prudent Utility Practice” will be used in the EirGrid Grid Code.]

[Note: Please note that “System Support Services” will be referred to in the SONI Grid Code and “Ancillary Services” will be referred to in the EirGrid Grid Code.]

SDC1.4.3.2 Each Generator, and where relevant each Generator ~~and, where relevant each Generator~~ Aggregator, shall, subject to SDC1.4.3.3, use reasonable endeavours to ensure that it does not at any time declare in the case of ais CDGU, a Controllable WFPS, ~~and/or~~ Aggregated Generating UnitsUnit, the Availability or Technical Parameters at levels or values different from those that the CDGU, Controllable WFPS, and/or an Aggregated Generating UnitsUnit could achieve at the relevant time. The TSO can reject declarations to the extent that they do not meet these requirements.

~~*[Note: Please note that any disputes arising out of this SDC1.4.3.2 should be settled in the same way as any other disputes under the Grid Codes and that it is therefore not necessary to refer to a separate dispute resolution mechanism here.]*~~

SDC1.4.3.3 SDC1.4.3.2 shall not apply to the extent:

- (a) it would require the **Generator** or, where relevant, the **Generator Aggregator** to declare levels or values better than the Registered Capacity and **Technical Parameters** as submitted under the **Planning Code** in respect of a **CDGU**, a **Controllable WFPS** and/or an **Aggregated Generating UnitsUnit**;
- (b) necessary during periods of **Scheduled Outage** ~~in the Republic of Ireland or/~~ **Planned Outage** ~~in Northern Ireland~~ or **Short Term Scheduled Outage** ~~in the Republic of Ireland or/~~ **Planned Maintenance Outage** ~~in Northern Ireland~~ or otherwise with the consent of the TSO;

[Note: Please note that “Scheduled Outage” and “Short Term Scheduled Outage” will be used in the EirGrid Grid Code and “Planned Outage” and “Planned Maintenance Outage” will be used in the SONI Grid Code.]

- (c) necessary while repairing or maintaining the **CDGU**, the **Controllable WFPS** and/or the **Aggregated Generating UnitsUnit** or equipment necessary to the operation of the **CDGU**, the **Controllable WFPS** and/or the **Aggregated Generating UnitsUnit** where such repair or maintenance cannot reasonably, in accordance with **Prudent Operating Practice/Prudent Utility Practice**, be deferred to a period of **Scheduled Outage** ~~in the Republic of Ireland or/~~ **Planned Outage** ~~in Northern Ireland~~ or **Short Term Scheduled Outage** ~~in the Republic of Ireland or/~~ **Planned Maintenance Outage** ~~in Northern Ireland~~;

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[Note: Please note that references to “Prudent Utility Practice”, “Scheduled Outage” and “Short Term Schedule Outage” will be made in the EirGrid Grid Code whereas references to “Prudent Operating Practice”, “Planned Outage” and “Planned Maintenance Outage” shall be made in the SONI Grid Code.]

- (d) necessary to avoid an imminent risk of injury to persons or material damage to property (including the CDGU, the Controllable WFPS and/or the Aggregated Generating UnitsUnit); or
- (e) it is not lawful for the Generator to operate the CDGU, the Controllable WFPS and/or the Aggregated Generating Units.

SDC1.4.3.4 **Availability of Demand Side Units**

(a)

Each Dispatchable Demand Customer shall use reasonable endeavours to ensure that it does not at any time declare ~~its Demand Side Unit Demand Reduction~~ and characteristics at levels or values different from those that the Demand Side Unit could achieve at the relevant time. ~~The TSO can reject declarations to the extent that they do not meet these requirements.~~

~~*[Note: The SONI and EirGrid Grid Codes do not currently refer to the criteria which a TSO will take into account when deciding to reject a declaration. We do not believe that inserting such criteria is necessary and in any event, such a change would not be justified for the purposes of the SEM.]*~~ (b)

~~Each Demand Side Unit Aggregator shall use reasonable endeavours to ensure that it does not at any time declare its~~ the Demand Reduction and ~~the Demand Side Unit~~ characteristics of its Aggregated Demand Side UnitsUnit at levels or values different from those that ~~its Aggregated~~ the Demand Side UnitsUnit could achieve at the relevant time, noting that no Demand Side Unit or Aggregated Demand Side Unit can export Active Power to the NI System / Network. The TSO can reject declarations to the extent that they do not meet these requirements.

[Note: Please note that reference to “NI System” will be made in the SONI Grid Code whereas reference to “Network” will be made in the EirGrid Grid Code.]

SDC1.4.3.5 SDC1.4.3.4 shall not apply to the extent:

- (a) it would require the Dispatchable Demand Customer ~~or, where relevant, the Demand Side Unit Aggregator~~ to declare levels or values better than Registered Capacity and Technical Parameters as submitted under the Planning Code in respect of a Demand Side Unit and/or Aggregated Demand Side Units; ;
- (b) necessary during periods of ~~Scheduled Outage in the Republic of Ireland or/ Planned Outage in Northern Ireland~~ or ~~Short Term Scheduled Outage in the Republic of Ireland or/ Planned Maintenance Outage in Northern Ireland~~ or otherwise with the consent of the TSO;

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[Note: Please note that “Scheduled Outage” and “Short Term Scheduled Outage” will be used in the EirGrid Grid Code and “Planned Outage” and “Planned Maintenance Outage” will be used in the SONI Grid Code.]

- (c) necessary while repairing or maintaining the **Demand Side Unit** ~~and/or the Aggregated Demand Side Units~~ or equipment necessary to the operation of the **Demand Side Unit** ~~and/or the Aggregated Demand Side Units~~ where such repair or maintenance cannot reasonably, in accordance with **Prudent Operating Practice/Prudent Utility Practice**, be deferred to a period of ~~Scheduled Outage in the Republic of Ireland or Planned Outage in Northern Ireland~~ or **Short Term Scheduled Outage in the Republic of Ireland or Planned Maintenance Outage in Northern Ireland**.

[Note: Please note that references to “Prudent Utility Practice”, “Scheduled Outage” and “Short Term Schedule Outage” will be made in the EirGrid Grid Code whereas references to “Prudent Operating Practice”, “Planned Outage” and “Planned Maintenance Outage” shall be made in the SONI Grid Code.]

- (d) necessary to avoid an imminent risk of injury to persons or material damage to property (including the ~~Demand Side Unit and/or the Aggregated Demand Side Unit~~);
- (e) it is not lawful for the **Dispatchable Demand Customer** ~~or Demand Side Unit Aggregator~~ to reduce its **Demand** or to operate its **Demand Side Unit**, ~~and/or the Aggregated Demand Side Units~~.

SDC1.4.3.6 Changes in Availability:

- (a) Increasing: If a **Generator**, a **Generator Aggregator**, or a **Dispatchable Demand Customer** ~~or a Demand Side Unit Aggregator~~ in respect of a **CDGU**, an Aggregated Generating Units Unit, a **Demand Side Unit** or Aggregated Pumped Storage Plant in relation to Demand Side Units, issues an **Availability Notice** increasing (from zero or otherwise) ~~or decreasing~~ the level of **Availability** or **Demand Reduction** from a specified time, such notice shall be construed as meaning that:
- (i) in the case of a **CDGU** and/or **Aggregated Generating Units Unit**, the **CDGU** and/or **Aggregated Generating Units Unit** ~~is/are~~ capable of being synchronised to the **Transmission System** and/or **Distribution System** at that specified time; or increasing its MW Output at that specified time as the case may be;
 - (ii) in the case of a **CDGU** which is an **Open Cycle Gas Turbine**, the **CDGU** is capable of being started at that specified time; or

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(iii) in the case of a Demand Side Unit, the Demand Side Unit and/or Aggregated Demand Side Units, the Demand Side Unit and/or Aggregated Demand Side Units is/are is capable of ~~reducing~~ delivering subsequent Demand Reduction(s) at that specified time.

(b) If a **Generator** or, where relevant a **Generator Aggregator** in respect of a **Controllable WFPS**, issues an **Availability Notice** increasing (from zero or otherwise) or decreasing the level of **Availability** from a specified time, such notice shall be effective from the **Trading Period** following the specified time.

SDC1.4.3.7 ~~If at any time when~~ Decreasing: When a **CDGU** and/or **Controllable WFPS** is **Synchronised** to the **System** the **Generator** ~~issues~~ may have occasion to issue an **Availability Notice** decreasing the level of **Availability** of the **CDGU** and/or **Controllable WFPS** from a specified time, ~~such~~ Such notice shall be construed as meaning that the **CDGU** and/or **Controllable WFPS** is capable of maintaining **Load** at the level of the prevailing **Availability** until the time specified in the notice, ~~and thereafter~~ Thereafter, the CDGU and/or Controllable WFPS shall be capable of maintaining **Load** to the level which would have been achieved if a **Dispatch Instruction** had been given to reduce the **Load**, ~~This would have occurred~~ with effect from the specified time, at the maximum **De-Loading Rate** and/or ~~Ramp-Up or Ramp-Down Rate~~ declared for the **CDGU** and/or **Controllable WFPS** as a **Technical Parameter** at such time down to the level of **Availability** specified in the new **Availability Notice**.

SDC1.4.3.8 If an **Interconnector Owner** in respect of an **Interconnector** issues an **Availability Notice** increasing (from zero or otherwise) or decreasing the level of **Availability** on the Interconnector as a whole from a specified time, such notice shall, subject to SDC1.4.4.6 1.4.5.1(a), be effective immediately following the specified time.

SDC1.4.4 **Technical and Commercial Data Requirements**

Additional provisions in relation to PPA Generation are contained in Appendix B2, which supplement and/or replace the provisions in this section SDC1.4.4.

[Note: This sentence applies to the SONI Grid Code only.]

SDC1.4.4.1 **Technical Parameters**

(a) (i) By not later than **Gate Closure**, each **User** shall in respect of each:

- **CDGU**;
- **Controllable WFPS**;
- **Aggregated Generating Units, Unit**;
- **Pumped Storage Plant Demand, Demand Side Unit**;
- **Interconnector**; and/or **Aggregated**

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- Demand Side Units, Unit,

submit to the TSO a **Technical Parameters Notice** in such form as the TSO may reasonably notify to each **User** or in the form published on the TSO website from time to time, containing the **Technical Parameters** to apply for the following **Trading Day**.

(ii) A **User** may satisfy this obligation by submitting the data under the **TSC**, unless the TSO requires, by notice in writing to the **User**, the data to be submitted to it under the **Grid Code**.

(iii) If there is a change to the data submitted under the **TSC**, the **User** ~~must~~shall notify the TSO. ~~[Note: See related provisions on Standing Technical Offer Data under SDC1.4.4.7 (a)]~~

(b) Flexibility:

- (i) In the case of any **Technical Parameters** as to which the ~~Generator and/or Generator Aggregator~~User should, acting in accordance with **Prudent Operating Practice/Prudent Utility Practice**, have some flexibility either in the revision itself or in the time at which the revision is to take effect the TSO may, acting reasonably, suggest an amended data figure and/or an amended time at which the data figure is to take effect.
- (ii) Insofar as it is able to do so without breaching any obligations regarding confidentiality contained either in the **TSO Licence** or in any agreement, the TSO shall notify the ~~Generator and/or Generator Aggregator~~User of the reasons for such flexibility request in such degree of detail as the TSO considers reasonable in the circumstances.
- (iii) If the ~~Generator and/or Generator Aggregator~~User agrees to such suggestion (such agreement not to be unreasonably withheld) the ~~Generator~~User shall use reasonable endeavours to accommodate such suggestion and submit a revised **Technical Parameters Notice** accordingly. In any event, the TSO may require such further information on the revision as is reasonable and the ~~Generator and/or Generator Aggregator~~User ~~must~~shall give the TSO such information as soon as reasonably practicable.

A User shall notify the TSO as soon as it becomes aware, acting in accordance with Prudent Operating Practice/Prudent Utility Practice, that any of the data submitted under SDC1.4.4.1 changes.

SDC1.4.4.2 **Additional Grid Code Characteristics Notice**

The following items are required to be submitted by each **User**, with the exception of **Aggregators**, direct to the TSO:

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- (a) Individual **CCGT Module/CCGT Unit** data equivalent to the data required for a **CCGT Installation**. It ~~must~~**shall** also show any revisions to the **Technical Parameters** for each of the **CCGT Modules/CCGT Units** within it.

[Note: The term “CCGT Module” applies to the SONI Grid Code and the term “CCGT Unit” will apply to the EirGrid Grid Code.]

- (b) **Different Fuels:** In the case where a **CDGU** is capable of firing on different fuels, then the **Generator** ~~must~~**shall** submit an **Additional Grid Code Characteristics Notice** in respect of ~~each~~**any additional** fuel for the ~~NI PPA CDGU (or fuel in the case of a CDGU other than a NI PPA CDGU)~~**CDGU**, each containing the information set out in SDC1.4.4.1 above for each fuel and each marked clearly to indicate to which fuel it applies.
- (c) **Export Adjustment Factors** applied **by the User in submitting data and to be applied by the TSO in issuing Dispatch Instructions and otherwise in calculations relating to instructions in relation to the relevant Plant and/or Apparatus,** between the **Generator Terminals** and the **Connection Points**.
- (d) In the case of **Interconnector Owners**, **Interconnector** data, including but not limited to the **Availability** of **Interconnector Filters**.
- (e) In the case of **an** **Interconnector**, the **Maximum Import Capacity** and the **Maximum Export Capacity**.
- (f) In relation to **each** **Demand Side Units and Aggregated Demand Side Units**~~Unit~~, the **Demand Profile** and the **Initial Demand Reduction Time**.

- ~~(g) In the case of NI PPA Generation, the requirement for a Generator to submit a Technical Parameters Notice to the TSO under SDC1.4.4.1 (a) also includes a requirement to provide any revisions to the Technical Parameters compared with the Contracted Technical Parameters.~~

- (g) Where there is a System Support Services Agreement / Ancillary Services Agreement in place, the System Support Services / Ancillary Services which are Available.**

[Note: Please note that the SONI Grid Code will be referring to System Support Services and the EirGrid Grid Code will be referring to Ancillary Services.]

~~**[Note: Please note that the above paragraph applies to Northern Ireland only.]**~~

- (h) The parameters listed in Appendix A Part 2 of SDC1.**

~~SDC1.4.4.3 Reserve capability:~~

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(a) ~~In the Republic of Ireland a)~~ **A Generator ~~must~~shall** submit to the TSO the **Operating Reserve** capabilities for each category of **Operating Reserve** defined in OC4.6.3 for each of its **CDGUs** for each **Trading Period**.

[Note: Please note that the above paragraph only applies to the ~~Republic of Ireland~~EirGrid Grid Code only.]

A User shall notify the TSO as soon as it becomes aware, acting in accordance with *Prudent Operating Practice/Prudent Utility Practice*, that any of the data submitted under SDC1.4.4.2 changes.

SDC1.4.4.3 Reserve capability:

(ba) A **Generator ~~must~~or Generator Aggregator shall** notify the TSO as soon as it becomes aware, acting in accordance with **Prudent Operating Practice/~~Prudent Utility Practice~~**, if any of its **CDGUs** and/or **Controllable WFPSs** **or Aggregated Generating Units (or associated Power Station Equipment)** is unable to meet the reserve capability (as contained in a **Sustained Load Diagram in the relevant System Support Services Agreement and** submitted pursuant to the Planning Code ("PC") ~~in Northern Ireland or the Ancillary Services Agreement in the Republic of Ireland~~), whether that is due to a defect in the **CDGU** and/or **Controllable WFPS** **and/or Aggregated Generating Units** or in its associated **Power Station Equipment** submitted pursuant to the PC ~~in Northern Ireland or the Ancillary Services Agreement in the Republic of Ireland~~.

Such notification **must**shall be made by submitting a **Technical Parameters Notice** in relation to **Sustained Response Capability**. *[Note: Clarify meaning]* In accordance with the **Generator's** obligations under SDC1.4.3.2 and paragraphs 1 and 2 of Appendix B to this SDC1, such **Reserve Characteristics** may only be amended (without the TSO's consent) in the event of a defect in or failure of a **CDGU** and/or **Controllable WFPS** **and/or Aggregated Generating Units** or any associated **Power Station Equipment**. *[Note: Please note that the above paragraph in italics only applies to Northern Ireland]*

(eb) A change following such notification will only take effect for so long as it takes, acting in accordance with **Prudent Operating Practice/~~Prudent Utility Practice~~**, for the relevant **CDGU** and/or **Controllable WFPS** **and/or Aggregated Generating Units** or associated **Power Station Equipment** to be repaired and such repair **must**shall re-instate the reserve capability to its previous level or to such other level as the TSO may, acting in accordance with **Prudent Operating Practice/~~Prudent Utility Practice~~**, agree, taking into account the provisions of SDC1.4.4.4(a), and the **Generator** **must**shall then submit a **Technical Parameters Notice** re-declaring the reserve capability accordingly. The **Generator** **must**shall advise the TSO of the nature of any such defect or failure and of the **Generator's** best estimate, acting as a reasonable and

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prudent Generator, of the time it will take to effect the repair to restore the Reserve Characteristics to their former level.

[Note: Please note that the above paragraphs in italics only apply to the SONI Grid Code.]

SDC1.4.4.4 **Other Relevant Data**

- (a) By not later than **Gate Closure** each day, each **GeneratorUser** in respect of each of its ~~CDGUs and/or Controllable WFPS, and each Pumped Storage Generator in respect of Pumped Storage Plant Demand~~**Plant**, shall in respect of the following **Trading Day** submit to the TSO in writing in the form set out on the TSO website or in such other form as the TSO may reasonably notify to each ~~Generator or Pumped Storage Generator~~**User** from time to time), details in relation to the following **Trading Day** of any newly arisen special factors, including abnormal risk to loss, which in the reasonable opinion of the ~~Generator or Pumped Storage Generator~~**User** may have a material effect on the likely **MW Output or Demand Reduction** of such **Generating UnitPlant** (including, for a **CCGT Installation** in relation to each of the **CCGT Modules/CCGT Units** therein) ~~or Pumped Storage Plant Demand as the case may be.~~ The notice ~~must~~**shall** be consistent with the ~~Generator's and Pumped Storage Generator~~**User's** obligations under SDC1.4.3.2. ~~The~~**For the avoidance of doubts, the** provisions of this paragraph also apply to **Interconnector Owners** in relation to their **Interconnector Filters**.

[Note: The term "CCGT Module" will apply to the SONI Grid Code and the term "CCGT Unit" will apply to the EirGrid Grid Code.]

- (b) Where a **CDGU** is capable of firing on different fuels, then the **Generator** ~~must~~**shall** submit details in respect of each fuel for the **CDGU**. Each set of details ~~must~~**shall** contain the information set out in (a) above for each fuel and each ~~must~~**shall** be marked clearly to indicate to which fuel it applies.

A User shall notify the TSO as soon as it becomes aware, acting in accordance with *Prudent Operating Practice/Prudent Utility Practice*, that any of the data submitted under SDC1.4.4.4 changes.

SDC1.4.4.5 **Commercial Offer Data**

- (a) Each:
- ~~- Generator~~**;**
 - ~~- Pumped Storage Generator~~**;**
 - ~~- Interconnector Owner~~**User;**
 - ~~- Dispatchable Demand Customer~~**;** and
 - ~~- Generator Aggregator and Demand Side Unit Aggregator~~**;**

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- (b) In the event that the TSO submits a **Post Event Notice** under ~~OC11 of the SONI Grid Code / OC10 of the EirGrid Grid Code~~ in relation to any part of the period covered by the **Availability Notice** at any time after submission of the **Availability Notice**, the **User** shall be deemed to have submitted a revised **Availability Notice** consistent with such **Post Event Notice**.

[Note: Please note that the SONI Grid Code will be referring to "OC11" whilst the EirGrid Grid Code will be referring to "OC10".]

-
- (c) The revisions to the **Availability Notice** may include revisions of the levels of **Availability** in the **CCGT Installation Matrix** reflecting the revised **Availability**. ~~The TSO shall, insofar as it is reasonably able, take account of such revisions in the preparation of the Indicative Operations Schedule.~~

[Note: Please note that once the amendments to the Grid Codes are finalised, each Grid Code will only make cross-references to its own sections.]

- (ed) **Additional Availability Notice:** A **User** may, subject to SDC~~1.4.3.2, 1.4.3~~ and to the provisions of this SDC1, make revisions to the **Additional Grid Code Availability Notice** submitted to the TSO under SDC1.4.2 at any time after the submission of the **Additional Grid Code Availability Notice** in accordance with its obligations to make the Unit **Available** under SDC~~1.4.3.1 to SDC1.4.3.3~~ 1.4.3 and *Appendix B to this SDC1* by submission by the Electronic Interface of a revised **Additional Grid Code Availability Notice**. The Notice shall be in the form set out on the TSO website or in such other form as the TSO may reasonably notify each **User** from time to time.

[Note: The wording in italic will apply to the SONI Grid Code only.]

SDC1.4.5.2 Technical Parameters and Additional Grid Code Characteristics

- (da) **Technical Parameters:** If any of the data submitted to the TSO under SDC~~1.4.4.1 to 1.4.4.1, SDC1.4.4.3 and~~ SDC1.4.4.4 changes, a **User** ~~must~~shall, subject to SDC~~1.4.3.2, 1.4.3~~, (in the case of data submitted under SDC1.4.4.1 by means of a **Technical Parameters Notice**) make revisions to such data ~~and must~~. The User shall notify the TSO of any revisions to any previously revised data by submitting by the Electronic Interface a revised **Technical Parameters Notice** in the form set out on the TSO website or in such other form as the TSO may reasonably notify to each **User** from time to time, ~~and~~. The User must notify the TSO of any new Other Relevant Data of which it becomes aware at any time after any original submission, in writing. ~~The TSO shall, insofar as it is reasonably able, take account of such revisions or notifications. The provisions of SDC1.4.3.2 shall apply to revisions under this paragraph to data submitted under SDC1.4.4.1 to SDC1.4.4.4.~~
- (eb) **Additional Grid Code Characteristics:** A **User** may make revisions to the **Additional Grid Code Characteristics Notice** submitted to the TSO

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under SDC1.4.4.2 at any time after the submission of the **Additional Grid Code Characteristics Notice** by ~~submission of~~ submitting by Electronic Interface a revised ~~such notice.~~ The **Additional Grid Code Characteristics Notice**. The notice shall be in the form set out on the TSO website or in such other form as the TSO may reasonably notify to each User from time to time.

- (f) **Energy Limits for Hydro Units:** A ~~User~~ Generator in respect of its Hydro Units shall resubmit **Energy Limits** on the **Trading Day** regardless of whether the **Energy Limits** have changed since **Gate Closure**. Revised **Energy Limits for Hydro Units** may be submitted at any time up until 18.00 hours on the **Trading Day** in writing per unit basis.

SDC1.4.5.3 The TSO shall, insofar as it is reasonably able, take account of such revisions or notifications submitted under SDC1.4.5 for Scheduling and Dispatch purposes.

~~SDC1.4.4.7~~
SDC1.4.6

- (a) **Defaults:**
- (i) Insofar as any data submitted or deemed to have been submitted on any particular day in any **Availability Notice**, **Technical Parameters Notice**, or notice of **Other Relevant Data** or any revision thereto is inconsistent with any other data in any other such notice, then the applicable data that is required to be submitted pursuant to the TSC and which is known as the **Standing Technical Offer Data**, and/or the most recently submitted **Additional Grid Code Availability Notice** and **Additional Grid Code Characteristics Notice** which, if substituted for the inconsistent data, would make the data in such notices consistent, shall apply for the next following **Trading Day**. In the case of an Interconnector Owner, failure to submit an Availability Notice, Technical Parameters Notice or notice of Other Relevant Data will result in the TSO assuming a value of zero.

~~*[Note: Please note that the default provisions do not work for interconnectors. This is to be considered further from a Grid Code perspective and may require a change to the TSC.]*~~

- (ii) Insofar as an **Availability Notice** is not submitted, the **User** shall be deemed to have submitted an **Availability Notice** by **Gate Closure** stating that the **Availability** of the relevant **CDGU**, **Controllable WFPS**, **Demand Side Unit** and/or the **Aggregated Generating Units** for the whole of the following **Trading Day** will be the level of **Availability** and **Operating Mode** declared in respect of the ~~applicable **Standing Technical Offer Data**.~~ final Trading Period of the current Trading Day or any other values that the TSO may reasonably deem appropriate.

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[Note: Please note that the words in italic apply to the EirGrid Grid Code only.]

- (iii) Insofar as not submitted or revised, the applicable **Standing Technical Offer Data** for **Technical Parameters** shall apply for the next following **Trading Day**.
 - (iv) Insofar as not submitted or revised, the last notice relating to **Other Relevant Data** to have been submitted shall apply for the next following **Trading Day**.
 - (v) In respect of **Hydro Units**, the **Energy Limit** that applied to the previous **Trading Day** will be used.
- (b) As a general requirement, the **User mustshall** ensure that the data in any **Availability Notice**, **Technical Parameters Notice**, or notice of any ~~other relevant data~~ Other Relevant Data or any revision thereto is consistent with its obligations under SDC1.4.3.2 and SDC1.4.3.4.

~~SDC1.4.4.8~~ ~~(a)~~ 1.4.7 Telephone Submission:

- (a) Where this SDC1 requires a **User** to submit a notice, it may instead of submitting it in writing, submit the information required in such a notice (which information mustshall be supplied in full) by telephone subject to the **TSO's** prior consent (identifying unambiguously the type of notice which is thereby being submitted).
- (b) The individual who is giving the notice by telephone on behalf of the **User mustshall** firstly specify the time at which the notice is being given, then identify himself and ask the individual receiving the notice on behalf of the **TSO** also to identify himself. The information required by the notice shall then be given, including (without limitation) the identity of the **CDGU**, **Controllable WFPS**, **Aggregated Generating UnitsUnit**, **Pumped Storage Plant**, ~~Demand Side Units~~ and **Aggregated Demand Side UnitsUnit** in question.
- (c) The notice mustshall then be confirmed by facsimile transmission or by any ~~other~~ electronic means as agreed with the **TSO** as soon as possible thereafter (and in any event be sent to the **TSO** within 2 hours). Where a facsimile is so sent by way of confirmation, it shall state clearly that it is in confirmation of a notice already given by telephone and mustshall state the exact time at which the notice was given by telephone.

~~SDC1.4.5~~ 1.4.8 Compilation of the Indicative Operations Schedule

~~SDC1.4.5.1~~ 1.4.8.1 An **Indicative Operations Schedule** will be compiled daily by the **TSO** in conjunction with the Other TSO as further provided in this SDC1.4.8 as a statement of which **CDGUs** and/or **Controllable WFPS** and/or transfers across any **Interconnector** and/or **Demand Side Units** and/or Pumped Storage Plant Demand and/or **Aggregated Generating Units** ~~and/or Aggregated Demand Side~~

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Units may be required to operate and their expected **MW Output** for the next following **Trading Day**.

SDC1.4.5.2 1.4.8.2 **Merit Order**

Subject as provided below, a **Merit Order** will be compiled by the **TSO** (in conjunction with the **Other TSO**) for each **Trading Day** from the Price Quantity Pairs, Start-Up Cost, Shutdown Cost and No-Load Cost (which together shall be known as the “Price Set”) and, subject as provided in this SDC1, used to determine which **CDGU, Controllable WFPS, Pumped Storage Plant Demand tranche, Demand Side Unit, Aggregated Generating Units, Aggregated Demand Side Units Unit** or **Interconnector tranche** to **Schedule and Dispatch** in relation to their **Price Sets**. The **Merit Order** will be on the ~~terms~~**basis** of ascending prices so that the **CDGU, Controllable WFPS, Pumped Storage Plant Demand tranche, Demand Side Unit, Aggregated Generating Units, Aggregated Demand Side Units Unit** **Price Set** or **Interconnector tranche Price Set** at the head of the **Merit Order** will be that which, ~~once committed,~~ has the lowest **Incremental Price per MWh, and that at the foot of the Merit Order shall be the one with the highest Incremental Price per MWh**. Each **CDGU, Controllable WFPS, Pumped Storage Plant Demand tranche, Demand Side Unit, Aggregated Generating Units, Aggregated Demand Side Units** and/or **Interconnector tranche** shall appear in the **Merit Order** for each **Price Set** submitted. ~~———— [Note: Please note that the approach taken regarding the Merit Order is consistent with the current SONI and GB Grid Codes as well as the TSC.] ————~~

SDC1.4.5.3 1.4.8.3 In compiling the **Indicative Operations Schedule** in conjunction with the **Other TSO**, the **TSO** will take account of and give due weight to the following factors (and the equivalent factors on the **Other Transmission System** ~~which~~ will be ~~looked at~~**so treated** separately by the **Other TSO**): [See Viridian comment (32).]

- (i) **Transmission System** ~~(and in Northern Ireland only~~ **Distribution System)** constraints from time to time, as determined by the **TSO**; [Note: The words in italic apply to the SONI Grid Code only.]
- (ii) Reserve constraints from time to time, as determined by the **TSO**;
- (iii) the need to provide an **Operating Margin** (by using the various categories of reserve as specified in **OC3 of the SONI Grid Code/OC4.6 and CC7.3.1.1 of the EirGrid Grid Code** (as the case may be), as determined by the **TSO** acting in conjunction with the **Other TSO**;

[Note: Please note that the SONI Grid Code will be referring to “OC3” whilst the EirGrid Grid Code will be referring to “OC4.6 and CC7.3.1.1”.]

- (iv) **Transmission System** stability considerations;
- (v) the level of **MW Output** and availability covered by **Non Centrally Dispatched Generating Units**, by **Plant** subject to **Priority Dispatch** and by **Controllable WFPS**;

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(vi) ~~in respect of CDGUs and/or Controllable WFPSs, their Availability,~~ **the Target Reservoir Levels for Pumped Storage** taken against the initial conditions at 0600 hours the previous day;

(vii) **the Energy Limits for Hydro Units** ~~and;~~

(viii) **in respect of all Plant,** the values of their **Technical Parameters** registered under this SDC1 and other information submitted under SDC1.4.4.4;

(~~viii~~x) the **Start-Up PriceCost** of each **CDGU** and/or **Controllable WFPS** **and the Shutdown Cost of each Demand Side Unit;**

(~~viii~~x) the requirements, as determined by the **TSO**, for **Voltage Control** and **Mvar** reserves;

(~~ix~~x) **CDGU** and/or **Controllable WFPS** stability, as determined by the **TSO**;

~~*[Note: The above paragraph is a “lift over” from current Grid Codes provisions, which we believe are sufficient as currently drafted.]*~~

(~~x~~xii) other matters to enable the **TSO** ~~and the Other TSO~~ to meet its **Licence Standards** **and the Other TSO to meet its equivalent;**

(~~x~~xiii) the requirements, as determined by the **TSO** ~~for System Support Services in Northern Ireland and Ancillary Services in the Republic of Ireland and,~~ for maintaining **Frequency Control**;

(~~xii~~xiv) **Monitoring** and/or **Testing** and/or **Investigations** to be carried out, or being carried out, under ~~OC11 of the SONI Grid Code/OC10 of the EirGrid Grid Code~~ (as the case may be), Testing to be carried out, or being carried out, at the request of a User under ~~OC11.8 of the SONI Grid Code/OC8 of the EirGrid Grid Code~~ / **OC8** and/or **Commissioning/Acceptance Testing** under the CC;

[Note: Please note that the SONI Grid Code will be referring to “OC11” and “OC11.8” whilst the EirGrid Grid Code will be referring to “OC10” and “OC8”.]

[Note: Please note that the word “Acceptance” applies to the SONI Grid Code only.]

(~~xiii~~xv) **System Tests, *Operational Tests and Commissioning Tests;***

[Note: Please note that the words in italics apply to the EirGrid Grid Code only.]

(~~xiv~~xvi) the inability of any **CDGU** and/or **Controllable WFPS** to meet its full reserve capability;

(~~xv~~xvii) **Inter-jurisdictional Tie Line** limits;

~~(xvi)~~(xviii) other facts as may be reasonably considered by the TSO to be relevant to the Indicative Operations Schedule;

~~(xvii)~~(xix) the inflexible characteristics as declared by the Generator-Declared Inflexibilities and abnormal risks; ~~(xviii)~~—~~the position of an~~

(xx) losses on the Transmission System and on the Other Transmission System;

(xxi) Nomination Profiles where relevant;

(xxii) requirements within any Constrained Group;

(xxiii) the position of the Interconnector tranches in the unconstrained Indicative Market Schedule;

[Note: Please note that the Schedule referred to above will be fixed, meaning that it cannot change after Gate Closure.]

~~(xix) losses on the Transmission system and on the Other Transmission System;~~

~~(xx) Nomination Profiles where relevant; and~~(xxiv) ~~(xxi)~~ *[in the case of PPA CDGUs any "take or pay" contract for the purchase of fuel to which such a Generator is a party and the terms of which have been agreed by NIE Energy and notified to the TSO and which impact on the TSONIE Energy and/or in the case of a Generator the terms of any other contract to which the TSONIE Energy is a party and which may, in its opinion, be relevant and which is notified to the TSO.]*

[Note: Please note that the above paragraph applies to Northern Ireland the SONI Grid Code only.]

[Note: Please note that consideration is being given to adding a provision stating that the TSO would also take into account Gas management issues when preparing the IOS.]

SDC1.4.5.41.4.8.4 Taking account of and applying the factors referred to in SDC1.4.5.3,1.4.8.3, the Indicative Operations Schedule shall be compiled by the TSO in conjunction with the Other TSO to Schedule such CDGUs, Controllable WFPS, Pumped Storage Plant Demand tranches, Demand Side Units, Aggregated Generating Units, ~~Aggregated Demand Side Units~~ and/or such Interconnector tranches which have been declared Available in an Availability Notice (and the equivalents on the Other Transmission System):

(i) in accordance with the Merit Order, starting with the CDGU, Controllable WFPS, Pumped Storage Plant Demand, Demand Side Units, Aggregated Generating ~~Units, Aggregated Demand Side Units~~ ~~Price-Set~~Unit, and/or such Interconnector tranche Price Set at the head of the Merit Order;

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- (ii) as will in aggregate (after taking into account electricity delivered other than from **CDGUs, Controllable WFPSs, Aggregated Generating Units**, and/or **Interconnector tranches** and variation in **Demand** from **Pumped Storage Plant Demand**, ~~Demand Side Units~~ and ~~Aggregated Demand Side Units~~) be sufficient to match at all times (to the extent possible having regard to the **Availability** or **Demand Reduction** of **CDGUs, Controllable WFPSs, Pumped Storage Plant Demand tranches, Demand Side Units, Aggregated Generating Units, ~~Aggregated Demand Side Units and Interconnectors~~ and Interconnector tranches**) the forecast ~~[System]~~**aggregated Demand** (derived under OC1 of the **Grid Code** and the **Other Grid Code**) together with such margin of reserve as the **TSO** working in conjunction with the **Other TSO** shall consider to be appropriate; and
- (iii) as will in aggregate be sufficient to match minimum forecast **Demand** levels together with a sufficient **Minimum Demand Regulation**.

The taking account of and application of the factors in ~~SDC1.4.5.3~~**1.4.8.3** will mean that, in general, the strict **Merit Order** may not necessarily be followed.

~~SDC1.4.5.5~~**1.4.8.5** After the completion of the **Scheduling** process, but before the issue of **Indicative Operations Schedule**, the **TSO** may consider it necessary to make adjustments to the **MW Output** ~~of~~ **as determined by** the **Scheduling** process. Such adjustments could be made necessary by any of the following factors (and the equivalent factors on the **Other Transmission System** which will be ~~looked at so dealt with~~ separately by the **Other TSO**):

- (a) changes to **Availability** or **Demand Reduction** and/or **Technical Parameters** of **CDGUs** and/or **Controllable WFPS** and/or ~~Generator Aggregators and/or Dispatchable Demand Customers and/or Aggregated Generating Units and/or Demand Side Unit Aggregators, Units~~ notified to the **TSO** after the commencement of the **Scheduling** process;
- (b) changes to ~~System Demand forecast~~**forecasts** on the Island of Ireland;
- (c) changes to wind power forecasts on the Island of Ireland;
- (d) changes to **Transmission System and Distribution System** constraints, emerging from the necessarily iterative process of **Scheduling** and network security assessment;

[Note: Please note that the words in italic apply to the SONI Grid Code only.]

- (e) changes to **CDGU** and/or **Controllable WFPS** requirements following notification to the **TSO** of the changes in capability of a **Generator** to provide a **Special Action** as described in SDC2;
- (f) changes to **CDGU** and/or **Controllable WFPS** requirements within **Constrained Groups**, following re-appraisal of **System Demand** forecasts on the Island of Ireland within that **Constrained Group**;

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- (g) changes to any conditions which in the reasonable opinion of the TSO, would impose increased risk to the **Transmission and Distribution System** and would therefore require an increase in the **Operating Margin**;
- (h) known (or emerging) limitations and/or deficiencies of the **Scheduling** process.

~~[Note: Please note that SDC1.4.5.5 has been amended to reflect required co-operation between both TSOs.]~~

~~SDC1.4.5.6~~
~~SDC1.4.8.6~~

When:

- (a) adverse weather is anticipated;
- (b) there is a high risk to the whole or part of the **Transmission System** and/or the **Other Transmission System**;
- (c) **Demand Control** has been instructed by the TSO; or
- (d) a **Total** or **Partial Shutdown** exists;

these factors may mean that a **CDGU, Controllable WFPS, Pumped Storage Plant Demand, Demand Side Unit, Aggregated Generating Units, Aggregated Demand Side Units Unit** and/or **Interconnector tranche** is/are chosen other than in accordance with the **Merit Order** to a greater degree than would be the case when merely taking into account and giving due weight to the factors listed in ~~SDC1.4.5.3~~ **1.4.8.3** in order to seek to maintain the integrity of the **Transmission System**.

~~SDC1.4.5.7~~ **1.4.8.7**

- (a) The **Synchronising** and **De-Synchronising** times (and, in the case of ~~Demand Side Units and Pumped Storage Plant Demand~~, the relevant effective time) shown in the **Indicative Operations Schedule** are indicative only and it should be borne in mind by ~~Generators and/or Generator Aggregators~~ **Users** that the **Dispatch Instructions** could reflect more or different **CDGU, Aggregated Generating Unit** and/or **Controllable WFPS, Pumped Storage Plant Demand** and/or **Demand Side Aggregate Generating Unit** requirements than in the **Indicative Operations Schedule**. The TSO may issue **Dispatch Instructions** in respect of any **CDGU** and/or **Aggregated Generating Unit, Controllable WFPS, Pumped Storage Plant Demand tranche** or **Demand Side Aggregated Generating Unit** which has not declared an **Availability** or **Demand Reduction** of 0 MW in an **Availability Notice**. **Users** with **CDGUs** and/or **Aggregated Generating Units, Controllable WFPS, Pumped Storage Plant Demand** or **Demand Side Unit must tranche shall** ensure that their units are able to be **Synchronised**, or in the case of **Demand Side Units and Pumped Storage Plant Demand**, used at the times **Scheduled**, but only if so **Dispatched** by the TSO by issue of a **Dispatch Instruction**. ~~Generators and Dispatchable Demand Customers~~ **Users** shall, as part of a revision to the **Technical**

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Parameters, indicate to the **TSO** the latest time at which a **Dispatch Instruction** is required to meet the scheduled **Synchronising** time or in the case of ~~Demand Side Units and Pumped Storage Plant Demand~~, the **Scheduled** relevant effective time.

- (b) The provisions of SDC1.4.5.71.4.8.7(a) shall apply to ~~Generator Aggregators and Demand Side Unit Aggregators~~, subject to Units with the exception that ~~the Synchronising, De-Synchronising and relevant effective times specified in the Indicative Operations Schedule shall be in relation to the Aggregated Generator Units or Aggregated Demand Side Units as a whole as opposed to each unit individually.~~ reference to relevant effective time shall be read as a reference to Initial Demand Reduction Time.

SDC1.4.5.81.4.8.8

Content of Indicative Operations Schedule

The information contained in the **Indicative Operations Schedule** will indicate, where appropriate, on an individual **CDGU**, **Controllable WFPS**, **Pumped Storage Plant Demand**, **Demand Side Unit**, and/or Aggregated Generating Units ~~and/or Aggregated Demand Side Units~~ basis, the period and **Loading** for which it is **Scheduled** during the following **Trading Day**. In the case of a **CDGU** which is capable of firing on two different fuels, it will also indicate the fuel for which it is **Scheduled** during the following **Trading Day**. If no fuel is contained in the **Indicative Operations Schedule**, then the most recently specified fuel shall be treated as having been indicated. ~~Equivalent rules apply to fuels at CDGUs other than NI PPA CDGUs.~~

SDC1.4.5.91.4.8.9

Issue of Indicative Operations Schedule

- (a) The **Indicative Operations Schedule** will be published for access by Users by 1600 hours each day preceding the relevant **Trading Day**, provided that all the necessary information from the **Users** was made available by not later than **Gate Closure**. However, if on any occasion the **TSO** is unable to meet this time, the **TSO** also reserves the right to extend the timescale for the issue of the first **Indicative Operations Schedule** to the extent necessary. Following the issue of the **Indicative Operations Schedule**, the **TSO** may issue revised **Indicative Operations Schedules** up until one hour before the start of the **Trading Day**.
- (b) The **TSO** may issue **Dispatch Instructions** to Users in respect of CDGUs, Controllable WFPSs, Pumped Storage Plant Demand and/or Demand Side Units and/or Aggregated Generating Units and/or Aggregated Demand Side Units [and/or Interconnector] tranches before the issue of the **Indicative Operations Schedule** for the **Trading Day** to which the **Dispatch** instruction relates if the length of **Notice to Synchronise** the relevant **CDGUs** and/or **Controllable WFPSs**, **Pumped Storage Plant Demand** and/or **Demand Side Unit** and/or Aggregated Generating Unit requires the **Dispatch** instruction to be given at that time. When the length of the time required for **Notice to Synchronise** is within 30 minutes of causing the **CDGU** and/or **Controllable WFPSs**, and/or Pumped Storage Plant Demand and/or Demand Side Units to be unable to meet the indicative **Synchronising** time in the **Indicative Operations**

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Schedule or a subsequent indicative **Synchronising** time and no **Dispatch Instruction** has been received, the **Generator** ~~must~~shall inform the **TSO** without delay.

SDC~~1.4.5.10~~1.4.8.10 Regulation

It is a requirement for running the **Transmission System** ~~and **Distribution System**~~ that all **Synchronised CDGUs** and/or **Controllable WFPs** ~~must~~shall at all times be capable of reducing **MW Output** sufficient to allow a sufficient **Regulating Margin** for adequate **Frequency Control**. The **TSO** will monitor the **MW Output** data of the **Indicative Operations Schedule** against forecast of **System Demand** on the Island of Ireland to see whether the level of regulation for any period is insufficient, and may take any shortfall into account in **Scheduling** and **Dispatch**.

SDC~~1.4.5.11~~1.4.8.11 Data Requirements

SDC1 Appendix A Part 1 sets out the **Technical Parameters** for which values are to be supplied by a **User** in respect of each of its **CDGUs** and/or **Controllable WFPs** and/or **Pumped Storage Plant Demand** and/or **Demand Side Units** and/or ~~**Aggregated Demand Side Units** and/or **Aggregated Generating Units**~~ by not later than **Gate Closure** on the day prior to the **Trading Day**.

SDC1 Appendix A Part 2 sets out the additional data items required in respect of an **Additional Grid Code Characteristics Notice**.

SDC1 – APPENDIX A

Generation Scheduling and Dispatch Parameters Part 1. Technical Parameters

[Note: Consideration is being given as to whether the new format has an impact on the SONI DRC section.]

<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hvd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>		<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>			
Block Load Cold	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓	✓	✓	✓	✓					
Block Load Hot	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓	✓	✓	✓	✓					

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<u>Variable</u> <u>Technical</u> <u>Parameter</u>	<u>Applies to</u> <u>CDGU</u>	<u>Control</u> <u>WFPS</u>	<u>DSU</u>	<u>Agg.</u> <u>Gen</u>	<u>Auton</u> <u>o-mous</u> <u>Gen</u>	<u>Pump</u> <u>S</u> <u>Deman</u> <u>d</u>				
	<u>Thermal</u>	<u>Hyd/</u> <u>En Ltd</u>	<u>Disp.</u> <u>WFPS</u>	<u>Pump</u> <u>S Gen</u>	=	<u>Individual</u> <u>Demand</u> <u>Site</u>	<u>Aggregate</u> <u>d Demand</u> <u>Sites</u>		=	=
Block Load Warm	All Generat ing Units, except Autono mous Generat ing Units, Aggreg ated Generat ing Units and Deman d-Side Units ✓	✓	✓	✓	✓					
Demand Profile	Deman d-Side Units only					✓	✓			
Deload Break Point	All Generat ing Units, except Autono mous Generat ing Units, Aggreg ated Generat ing Units and Deman d-Side Units ✓	✓	✓	✓	✓					
<u>Deloading</u> Rate 1	All Generat ing Units,	✓	✓	✓	✓					

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓								
De-loading Rate 2	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓	✓	✓	✓	✓				
Dwell Time 1	All Generating Units, except Autonomous Generating Units, Aggregated	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	Generating Units and Demand-Side Units-✓								
Dwell Time 2	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units-✓	✓	✓	✓	✓				
Dwell Time 3	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units-✓	✓	✓	✓	✓				
Dwell Time Trigger	All	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
Point 1	Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓								
Dwell Time Trigger Point 2	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓	✓	✓	✓	✓				
Dwell Time Trigger Point 3	All Generating Units, except Autonomous Generating	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>		<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>			
					=				=	=
	Units, Aggregated Generating Units and Demand Side Units-✓									
End Point of Start Up Period	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units-✓	✓	✓	✓	✓					
Energy Limit	Energy Limited Generating Units only	✓								
Energy Limit Factor	Energy Limited Generating Units only	✓								
Energy Limit Start	Energy Limited Generating Units	✓								

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>		=	=
Energy Limit Stop	only Energy Limited Generating Units only	✓								
Forecast Availability Profile		All Generating Units except Autonomous Generating Units								
Forecast Minimum Output Profile	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units			✓						✓
Forecast Minimum Stable Generation Profile	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and	✓	✓	✓		✓	✓			

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>		<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>			
	Demand Side Units ✓									
<u>Initial Demand Reduction Time</u>	✓	✓	✓	✓	✓	✓	✓			
Load Up Break Point Cold (1)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓	✓	✓	✓	✓					
Load Up Break Point Cold (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓	✓	✓	✓	✓					
Load Up Break Point Hot (1)	All Generating	✓	✓	✓	✓					

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓								
Load Up Break Point Hot (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓	✓	✓	✓	✓				
Load Up Break Point Warm (1)	All Generating Units, except Autonomous Generating Units, Aggreg	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	ated Generating Units and Demand Side Units-✓								
Load Up Break Point Warm (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units-✓	✓	✓	✓	✓				
Loading Rate Cold (1)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units-✓	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>		<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>			
Loading Rate Cold (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓	✓	✓	✓	✓					
Loading Rate Cold (3)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓	✓	✓	✓	✓					
Loading Rate Hot (1)	All Generating Units, except Autonomous Generating	✓	✓	✓	✓					

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	ing Units, Aggregated Generating Units and Demand-Side Units-✓								
Loading Rate Hot (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units-✓	✓	✓	✓	✓				
Loading Rate Hot (3)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>		<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>			
	Demand Side Units ✓									
Loading Rate Warm (1)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓	✓	✓	✓	✓					
Loading Rate Warm (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓	✓	✓	✓	✓					
Loading Rate Warm (3)	All Generating Units, except	✓	✓	✓	✓					

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>		=	=
	Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units-✓									
Max Ramp Down Rate (must <u>shall</u> be a number greater than zero)	Demand-Side Units only, except Demand-Side Unit Aggregators' Units					✓	✓			
Max Ramp Up Rate (must <u>shall</u> be a number greater than zero)	Demand-Side Units only, except Demand-Side Units represented by a Demand-Side Unit Aggregator					✓	✓			
Maximum Down Time		Demand-Side-Units-only								
Maximum Down Time	Demand-Side Units only,					✓	✓			

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	except Demand Side Units represented by a Demand Side Unit Aggregator								
Maximum Generation	All Generating Units, except Autonomous Generating Units and Demand Side Units								
Maximum On Time	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓	✓	✓	✓	✓				
Maximum Storage	Pumps			✓					

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
Capacity	d Storage Plants only								
Minimum Down Time	Demand Side Units only, except Demand Side Units represented by a Demand Side Unit Aggregator					✓	✓		
Minimum Generation	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓	✓	✓	✓	✓				
Minimum off time	All Generating Units, except Autonomous	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	Generating Units, Aggregated Generating Units and Demand-Side Units-✓								
Minimum on time	All Generating Units, Demand-Side Units, Aggregated Generating Units and Demand-Side Units, except Autonomous Generating Units-✓	✓	✓	✓	✓				
Minimum Storage Capacity	Pumped Storage Plants only			✓					✓
(Other relevant technical parameters)	All Generating Units except Autonomous	✓	✓	✓	✓			✓	

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	Generating Units and Aggregated Generating Units ✓								
Pumping capacity	Pumped Storage Plants only			✓					✓
Ramp Down Break Point 1	All Generating Units, except Autonomous Generating Units and Demand-Side Units ✓	✓	✓	✓	✓			✓	
Ramp Down Break Point 2	All Generating Units, except Autonomous Generating Units and Demand-Side Units ✓	✓	✓	✓	✓			✓	
Ramp Down Break Point 3	All Generating Units,	✓	✓	✓	✓			✓	

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>		<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>			
	except Autonomous Generating Units and Demand Side Units ✓				=				=	=
Ramp Down Break Point 4	All Generating Units, except Autonomous Generating Units and Demand Side Units ✓	✓	✓	✓	✓			✓		
Ramp Down Rate 1	All Generating Units, except Autonomous Generating Units and Demand Side Units ✓	✓	✓	✓	✓			✓		
Ramp Down Rate 2	All Generating Units, except Autonomous Generating	✓	✓	✓	✓			✓		

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>		=	=
	ing Units and Demand Side Units ✓									
Ramp Down Rate 3	All Generating Units, except Autonomous Generating Units and Demand Side Units	✓	✓	✓	✓			✓		
Ramp Down Rate 4	All Generating Units, except Autonomous Generating Units and Demand Side Units ✓	✓	✓	✓	✓			✓		
Ramp Down Rate 5	All Generating Units, except Autonomous Generating Units and Deman	✓	✓	✓	✓			✓		

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>		<u>Individual Demand Site</u>	<u>Aggregate Demand Sites</u>			
	d Side Units ✓									
Ramp Up Break Point 1	All Generating Units, except Autonomous Generating Units and Demand Side Units ✓	✓	✓	✓	✓			✓		
Ramp Up Break Point 2	All Generating Units, except Autonomous Generating Units and Demand Side Units ✓	✓	✓	✓	✓			✓		
Ramp Up Break Point 3	All Generating Units, except Autonomous Generating Units and Demand Side Units ✓	✓	✓	✓	✓			✓		
Ramp Up Break Point 4	All Generating Units, except Autonomous Generating Units and Demand Side Units ✓	✓	✓	✓	✓			✓		

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	ing Units, except Autonomous Generating Units and Demand-Side Units ✓								
Ramp Up Rate 1	All Generating Units, except Autonomous Generating Units and Demand-Side Units ✓	✓	✓	✓	✓			✓	
Ramp Up Rate 2	All Generating Units, except Autonomous Generating Units and Demand-Side Units ✓	✓	✓	✓	✓			✓	
Ramp Up Rate 3	All Generating Units, except Autonomous	✓	✓	✓	✓			✓	

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate Demand Sites</u>	=	=
	Autonomous Generating Units and Demand Side Units ✓								
Ramp Up Rate 4	All Generating Units , except Autonomous Generating Units and Demand Side Units ✓	✓	✓	✓	✓			✓	
Ramp Up Rate 5	All Generating Units , except Autonomous Generating Units and Demand Side Units ✓	✓	✓	✓	✓			✓	
Short Term Maximisation Capability	All Generating Units except Demand Side Units represented by	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>		<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>			
					=				=	=
	a Demand Side Unit Aggregator, Autonomous Generating Units, Aggregated Generating Units, Interconnector Residual Capacity Units, or Interconnector Error Units ✓									
Soak Time Cold (1)	All Generating Units, except Autonomous Generating Units, Generator or Aggregators' Generating Units and Demand	✓	✓	✓	✓					

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	d Side Units ✓								
Soak Time Cold (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓	✓	✓	✓	✓				
Soak Time Hot (1)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units ✓	✓	✓	✓	✓				
Soak Time Hot (2)	All Generating Units, except Autono	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units-✓								
Soak Time Trigger Point Cold (1)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units-✓	✓	✓	✓	✓				
Soak Time Trigger Point Cold (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>		<u>Individual Demand Site</u>	<u>Aggregated Demand Sites</u>			
	Units and Demand Side Units-✓									
Soak Time Trigger Point Hot (1)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units-✓	✓	✓	✓	✓					
Soak Time Trigger Point Hot (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units-✓	✓	✓	✓	✓					
Soak Time Trigger Point Warm (1)	All Generating	✓	✓	✓	✓					

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓								
Soak Time Trigger Point Warm (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓	✓	✓	✓	✓				
Soak Time Warm (1)	All Generating Units, except Autonomous Generating Units, Aggreg	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
	ated Generating Units and Demand Side Units-✓								
Soak Time Warm (2)	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units-✓	✓	✓	✓	✓				
Synchronous Start-Up Time Cold	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units-✓	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>	<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>			
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
Synchronous Start-Up Time Hot	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓	✓	✓	✓	✓				
Synchronous Start-Up Time Warm	All Generating Units, except Autonomous Generating Units, Generator or Aggregators' Generating Units and Demand-Side Units ✓	✓	✓	✓	✓				
Target Reservoir Level Percentage	Pumped Storage Plants only			✓					✓
Start of Restricted Range	All	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>	<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>		
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>	=	=
1	Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓								
End of Restricted Range 1	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand-Side Units ✓	✓	✓	✓	✓				
Start of Restricted Range 2	All Generating Units, except Autonomous Generating	✓	✓	✓	✓				

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<u>Variable Technical Parameter</u>	<u>Applies to CDGU</u>				<u>Control WFPS</u>	<u>DSU</u>		<u>Agg. Gen</u>	<u>Autonomous Gen</u>	<u>Pump S Demand</u>
	<u>Thermal</u>	<u>Hyd/ En Ltd</u>	<u>Disp. WFPS</u>	<u>Pump S Gen</u>	=	<u>Individual Demand Site</u>	<u>Aggregate d Demand Sites</u>		=	=
	Units, Aggregated Generating Units and Demand Side Units-✓									
End of Restricted Range 2	All Generating Units, except Autonomous Generating Units, Aggregated Generating Units and Demand Side Units-✓	✓	✓	✓	✓					

[Note: Consideration is being given to including a list of joint Additional Grid Code characteristics required.]

[Part 2. Additional data items ~~required in an Additional Grid Code Characteristics Notice for SONI only~~ required in an Additional Grid Code Characteristics Notice]

[Note: Please note that this part of the Appendix applies to ~~Northern Ireland~~ the SONI Grid Code only.]

Variable

Time from initiation of a start to achieving

Applies to

CDGUs which are Open Cycle Gas Turbines or

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Variable	Applies to
Dispatched Load	CCGTs
Governor Droop	All CDGUs, except Aggregated Generating Units
Sustained Response Capability	All CDGUs, except Aggregated Generating Units
Two shifting limitation (limitation on the number of Start-ups per Trading Day)	All CDGUs, except Aggregated Generating Units
The MW and Mvar capability limits within which the CDGU is able to operate as shown in the relevant [Generator Performance Chart]	All CDGUs, except Aggregated Generating Units
[Note: Consider whether this chart is need in SDC1. If so, need to consider a definition for this term.]	
Maximum number of on Load cycles per 24 hour period, together with the maximum Load increases involved	All CDGUs, except Aggregated Generating Units
^Maximum number of changes to the Dispatched Fuel per 24 hour period	All CDGUs, except Aggregated Generating Units
Maximum quantity of oil in “ready-use tanks” and associated pipework	All CDGUs, except Aggregated Generating Units
^Maximum number of changes to the Designated Fuel per 24 hour period	All CDGUs, except Aggregated Generating Units
^Minimum notice to change the Designated Fuel .	All CDGUs, except Aggregated Generating Units
Settings of the Unit Load Controller for each CDGU for which a Unit Load Controller is required under CCS1.5.5 of the SONI Grid Code	All CDGUs, except Aggregated Generating Units
Declared Maximisation Capacity	All CDGUs, except Aggregated Generating Units
Time between De-Synchronising different CDGUs in a Power Station which, in the case of Coolkeeragh Power Station only, shall be stated for both paired and single CDGUs .	All CDGUs, except Aggregated Generating Units

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[Part 2. Additional data items required in an Additional Grid Code Characteristics Notice ~~for EirGrid only~~]

[Note: Please note that this part of the Appendix applies to the ~~Republic of Ireland only.~~ EirGrid Grid Code only.]

Table (i)

Variable	Applies to
Declared POR	CDGUs, excluding Dispatchable WFPSs
Declared SOR	CDGUs, excluding Dispatchable WFPSs
Declared TOR1	CDGUs, excluding Dispatchable WFPSs
Declared TOR2	CDGUs, excluding Dispatchable WFPSs
Declared Replacement Reserve	CDGUs, excluding Dispatchable WFPSs
Minimum MW for POR	CDGUs, excluding Dispatchable WFPSs
Minimum MW for SOR	CDGUs, excluding Dispatchable WFPSs
Minimum MW for TOR1	CDGUs, excluding Dispatchable WFPSs
Minimum MW for TOR2	CDGUs, excluding Dispatchable WFPSs
Minimum MW for Replacement Reserve	CDGUs, excluding Dispatchable WFPSs
POR Decrement Rate	CDGUs, excluding Dispatchable WFPSs
SOR Decrement Rate	CDGUs, excluding Dispatchable WFPSs
TOR1 Decrement Rate	CDGUs, excluding Dispatchable WFPSs
TOR2 Decrement Rate	CDGUs, excluding Dispatchable WFPSs
Replacement Reserve Decrement Rate	CDGUs, excluding Dispatchable WFPSs
Governor Droop	CDGUs, excluding Dispatchable WFPSs

Table (ii)

Variable	Applies to
Black Start Capability (yes/no)	CDGUs, excluding Dispatchable WFPSs and Aggregated Generating Units
Declared Reactive Power (Consumption)	CDGUs, excluding Dispatchable WFPSs and Aggregated Generating Units
Declared Reactive Power (Production)	CDGUs, excluding Dispatchable WFPSs and Aggregated Generating Units

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Variable	Applies to
	Aggregated Generating Units
Declared POR	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Declared SOR	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Declared TOR1	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Declared TOR2	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Declared Replacement Reserve	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Minimum MW for POR	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Minimum MW for SOR	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Minimum MW for TOR1	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Minimum MW for TOR2	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Minimum MW for Replacement Reserve	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
POR Decrement Rate	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
SOR Decrement Rate	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
TOR1 Decrement Rate	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
TOR2 Decrement Rate	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Replacement Reserve Decrement Rate	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Governor Droop	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Correction Factor (Mvar Consumption consumption)	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Correction Factor (Mvar Production)	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units
Export Adjustment Factor 1	CDGUs, excluding Dispatchable WFPs and Aggregated Generating Units

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Variable	Applies to
Export Adjustment Factor 2	CDGUs, excluding Dispatchable WFPSs and Aggregated Generating Units
Unit Loss Factor	CDGUs, excluding Dispatchable WFPSs and Aggregated Generating Units

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SDC1 - APPENDIX B

NI-PPA Availability Provisions

4. _____ [\[Note: Please note that this appendix applies to the SONI Grid Code only.\]](#)

[SDC1.B.1](#) [The following paragraphs apply in relation to PPA Generation in place of SDC1.4.3.1 to SDC1.4.3.3.](#)

[SDC1.B.1.1](#) In relation to **NI-PPA Generation**, each **Generator** shall subject always to the terms and conditions of any applicable **Generating Unit Agreement** throughout the term of the **Generating Unit Agreement** relating to a particular **NI-PPA CDGU and/or Controllable WFPS**, maintain, repair, operate and fuel the **CDGU and/or Controllable WFPS** as required by **Prudent Operating Practice** and any legal requirements with a view to providing the **Contracted Capacity** and the **Technical Parameters Contracted GSDPs**, provided that in determining when so to maintain or repair the **CDGU and/or Controllable WFPS**, the **Generator** may have regard to the amount of **Availability Payments** (including reductions in and rebates of **Availability Payments**) which may at any time be earned (or suffered) by it under the relevant **Generating Unit Agreement** and to its obligations under clause 5.1 of the relevant **Power Station Agreement**.

2. [SDC1.B.1.2](#) In relation to **NI-PPA Generation**, the **Generator** shall use reasonable endeavours to ensure that it does not at any time declare by issuing or allowing to remain outstanding an **Availability Notice**, or a **Technical Parameters Notice** which declares the **Availability** or **Technical Parameters** of the **CDGU, Controllable WFPSs and/or Demand Side Units** (including, in the case of a **CCGT Installation**, its **Operating Mode**) at levels or values different from those that the **NI-PPA CDGU, Controllable WFPS and/or Demand Side Unit** could achieve at the relevant time except:-

- (a) during periods of **Planned Outage** or **Short Term Planned Maintenance Outage** or otherwise with the consent of the **TSO**;
- (b) while repairing or maintaining the **NI-PPA CDGU and/or Controllable WFPS** or equipment necessary to the operation of the **NI-PPA CDGU and/or Controllable WFPS** where such repair or maintenance cannot reasonably, in accordance with **Prudent Operating Practice**, be deferred to a period of **Planned Outage** or **Short Term Planned Maintenance Outage**;
- (c) where necessary to avoid an imminent risk of injury to persons or material damage to property (including the **NI-PPA CDGU and/or Controllable WFPS**);
- (d) if it is not lawful for the **Generator** to operate the **NI-PPA CDGU and/or Controllable WFPS**; or
- (e) to the extent that the **Generator** is affected by **Force Majeure** under the **Generating Unit Agreement**;

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provided that nothing in the **Grid Code** shall require the **Generator** to declare levels or values better than **Contracted Capacity** and ~~Technical Parameters in respect of a NI PPA CDGU and/or Controllable WFPS~~ **Contracted GSDPs in respect of a PPA CDGU.**

SDC1.B.1.3 The Generator shall provide the TSO with all information necessary to enable the TSO to implement and apply the above provisions.

SDC1.B.2 The following paragraphs apply in relation to PPA Generation at Kilroot power Station in addition to the other provisions of this SDC1.

3. ~~SDC1.B.2.1~~ In relation to any steam turbine PPA CDGU PPA CDGU at Kilroot Power Station, NIE the TSO may, in respect of any Settlement Trading Period (and/or successive Settlement Trading Periods) give notice (an "Overburn Notice") to the relevant Generator with as much notice as possible and in any event (except in the circumstances specified in (iii) below) not less than 24 hours before the start of such Settlement Trading Period (or the first such period) with the following effect and subject as follows:

(i) the Contracted Capacity (Coal) shall thereby be increased to Overburn Contracted Capacity in respect of such Settlement Trading Period (or periods) following which the Generator shall redeclare the Availability of the CDGU in an Availability Notice (and, for the avoidance of doubt, such increase shall only apply for the Settlement Trading Periods specified in the Overburn Notice);

(ii) the aggregate number of Settlement Trading Periods in any period of 24 hours and in any period of 12 months for which Overburn Notices may be given shall be no greater than the limits set out in paragraph 3 of schedule 1 to the relevant Generating Unit Agreement;

(iii) The TSO will procure that NIE will waive the rebate of Availability Payments for late declaration of Availability under paragraph 13.2 of schedule 2 to the relevant Generating Unit Agreement if the Overburn Notice is issued by NIE the TSO less than 24 hours in advance of the start of the relevant Settlement Trading Period.] ~~[Note: Please note that the provisions above were inserted to reflect legacy arrangements in Northern Ireland currently dealt with in the Power Purchase Arrangements]~~

SDC1.B.3 References to fuel

The following paragraphs apply in relation to PPA Generation and the interpretation of this SDC1.

4.

SDC1.B.3.1 References to "fuel" at SDC1.4.2.1, SDC1.4.4.2 and SDC1.4.4.4(b) shall be read as references to "Designated Fuel". ~~References to "fuel" at SDC1.4.5.8 shall be read as a reference to "Designated Fuel, Declared Fuel or fuel as the case may be".~~

SDC1.B.3.2 The final two sentences of SDC1.4.8.8 shall be read as follows:.

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In the case of a CDGU which is capable of firing on two different Designated Fuels, it will also indicate the Designated Fuel for which it is scheduled during the following Trading Day. If no Declared Fuel and/or, where relevant Designated Fuel is contained in the Indicative Operations Schedule, then the most recently specified Declared Fuel and/or, where relevant, Designated Fuel shall be treated as having been indicated.

SDC1.B.3.3 References to the Price Set in SDC1.4.8.2 shall be construed as in relation to each Designated Fuel or Declared Fuel, as the case may be.

SDC1.B.4 GSDPs

SDC1.B.4.1 The following paragraph applies in relation to PPA Generation in addition to (and in place of) the equivalent provisions of SDC 1.4.4.3.(a).

SDC1.B.4.2 A Generator must notify the TSO as soon as it becomes aware, acting in accordance with Prudent Operating Practice if (whether due to a defect in the CDGU or in its associated Power Station Equipment) any of its CDGUs is unable to meet the Spinning Reserve Capability set out in the Sustained Load Diagram attached to Schedule 8 of the relevant Generating Unit Agreement and submitted pursuant to the PC.

SDC1.B.4.3 In SDC1.4.4.3(a) and (b) the term “reserve capability” shall be construed as “Spinning Reserve Capability”.

SDC1.B.4.4 In relation to PPA Generation the User shall provide in the Technical Parameters Notice any revisions to the GSDPs compared to the Contracted GSDPs.

SDC1.B.5 Metering

SDC1.B.5.1 Save as provided in the relevant Power Station Agreement or Generating Unit Agreement, no financial adjustment shall be made to any payment to be made in respect of a day under a Power Station Agreement or Generating Unit Agreement as a result of identifying any Metering discrepancy in respect of such day unless a dispute is raised in respect of such discrepancy prior to the expiry of the fourteenth Business Day following receipt by the Interested User of the Confirmation Statement in respect of such day or the Meter Reconciliation Statement which identifies such discrepancy.

ANNEX I

Explanatory Note of differences between SDC1 in the SONI Grid Code and EirGrid Grid Code

[Note: Please note that this annex is an explanatory note only and does not form part of the Grid Code. The layout of this explanatory note and the need to provide a narrative for the reason for the differences are being considered further.]

1. General Differences in wording

The table below summarises the general differences in wording between the form of SDC1 in the SONI Grid Code and the form of SDC1 in the EirGrid Grid Code, which appear repeatedly throughout SDC1.

<u>Terms used in SONI Grid Code</u>	<u>Equivalent terms used in EirGrid Grid Code (where different)</u>	<u>Reason</u>
<u>System Support Services</u>	<u>Ancillary Service(s)</u>	<u>The existing arrangements for Ancillary Services and System Support Services are continuing until further notice.</u>
<u>System Support Services Agreement</u>	<u>Ancillary Service(s) Agreement</u>	<u>These agreements will continue to stay in place with their existing names</u>
<u>CCGT Module</u>	<u>CCGT Unit</u>	<u>This is the phrase currently used to describe the individual parts of a Combined Cycle Plant CCGT Module is an important concept in Northern Ireland and is reflected in many other agreements. EirGrid is keeping the phrase CCGT Unit, as it more closely describes the concept of an individual unit and EirGrid has formerly used CCGT Module to describe the whole CCGT Installation.</u>
<u>Prudent Operating Practice</u>	<u>Prudent Utility Practice</u>	<u>Each Code uses a different phrase for this concept.</u>
<u>Planned Outage</u>	<u>Schedule Outage</u>	<u>Each Code uses a different phrase for this concept.</u>
<u>Planned Maintenance Outage</u>	<u>Short Term Scheduled Outage</u>	<u>Each Code uses a different phrase for this concept.</u>

2. Specific differences in wording between equivalent provisions in both Grid Codes

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The table below provides a list of the other specific differences in wording between equivalent provisions of SDC1 in both Grid Codes.

<u>Provision</u>	<u>SONI Grid Code</u>	<u>EirGrid Grid Code</u>	<u>Reason</u>
<u>SDC1.4.2.2(b)</u>	<u>Reference is made to “PCA2.3.4”</u>	<u>Reference is made to “PCA.4.3 of the Planning Code Appendix”</u>	<u>These are the respective requirements for the provision of the CCGT Installation data.</u>
<u>SDC1.4.3.4</u>	<u>Reference is made to “NI System”</u>	<u>Reference is made to “Network”</u>	<u>NI System refers to both the NI Transmission System and NI Distribution System and Network refers to the Ireland Transmission System and Distribution System</u>
<u>SDC1.4.5.1(b)</u>	<u>Reference is made to “OC11”</u>	<u>Reference is made to “OC10”</u>	<u>These are the respective requirements for Testing Monitoring and Investigation</u>
<u>SDC1.4.5.1(d)</u>	<u>Reference is made to a User acting in accordance with its obligations under “SDC1.4.3 and Appendix B to this SDC1”</u>	<u>Reference is made to a User acting in accordance with its obligations under “SDC1.4.3” only</u>	<u>SONI has separate requirements for Availability and Technical Parameter related issues in respect of PPA Generation.</u>
<u>SDC1.4.6(a)(ii)</u>		<u>The EirGrid Grid Code contains the following additional words at the end of the paragraph: “or any other values that the TSO may reasonably deem appropriate”</u>	<u>Difference is due to different requirements in both jurisdictions.</u>
<u>SDC1.4.8.3(i)</u>	<u>Reference is made to the “Transmission System and Distribution System constraints”</u>	<u>Reference is made to the “Transmission System constraints” only.</u>	<u>EirGrid will not be in a position to take Distribution Constraints into</u>

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			<u>account in determining the IOS.</u>
<u>SDC1.4.8.3(iii)</u>	<u>Reference is made to “OC3”</u>	<u>Reference is made to “OC4.6 and CC7.3.1.1”</u>	<u>These are the respective references to Operating Margin.</u>
<u>SDC1.4.8.3(xiv)</u>	<u>Reference is made to “OC11” and then to “OC11.8”</u>	<u>Reference is made to “OC10” and then to “OC8”</u>	<u>These are the respective references to Testing Monitoring and Investigation and Operational Testing.</u>
<u>SDC1.4.8.3(xiv)</u>	<u>Reference is made to “Commissioning/Acceptance Testing”</u>	<u>Reference is made to “Commissioning/Testing”</u>	<u>These are the respective terms used in each Grid Code</u>
<u>SDC1.4.8.3(xv)</u>	<u>Reference is made to “System Tests” only</u>	<u>Reference is made to “System Tests, Operational Tests and Commissioning Tests”</u>	<u>The EirGrid Grid Code definition of System Tests excludes Operational and Commissioning Tests whereas the SONI definition includes them.</u>
<u>SDC1.4.8.5(d)</u>	<u>Reference is made to the “Transmission System and Distribution System constraints”</u>	<u>Reference is made to the “Transmission System constraints” only.</u>	<u>EirGrid will not be in a position to take Distribution Constraints into account in determining the IOS.</u>
<u>SDC1 Appendix A Part 2</u>	<u>Part 2 refers to factors applicable to the SONI Grid Code only</u>	<u>Part 2 refers to factors applicable to the EirGrid Grid Code only</u>	<u>The two System Operators require some data items specific to that system and they are detailed here.</u>

3. Provisions applicable to one Grid Code only

The table below provides a list of the provisions of SDC1 which exist in one Grid Code only.

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<u>Provisions used in SONI Grid Code only</u>	<u>Reason</u>
<u>SDC1.1.4</u>	<u>SONI has extra requirements due to the presence of PPA Generation in Northern Ireland.</u>
<u>SDC1.4.3: Introductory sentence</u>	
<u>SDC1.4.4: Introductory sentence</u>	
<u>SDC1.4.8.3(xxiv)</u>	
<u>SDC1 Appendix B</u>	
<u>SDC1.4.2.2(f)</u>	<u>The CCGT Matrix can be amended in the SONI Grid Code as per a specific requirement in the Planning Code Appendix, whereas the EirGrid Code can be amended as per any Planning Code data.</u>
<u>SDC1.4.4.3</u>	<u>There are differences in how Reserve capabilities are notified to both SONI and EirGrid.</u>

<u>Provisions used in EirGrid Grid Code only</u>	
<u>SDC1.4.4.2 (i)</u>	<u>There are differences in how Operating Reserve capabilities are notified to both SONI and EirGrid.</u>