The Single Electricity Market (SEM)

Trading and Settlement Code

Version 1.2

Draft Legal Text

Consultation Document

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1. INTRODUCTION AND INTERPRETATION

INTRODUCTION

1.1 The Single Electricity Market ("SEM") was developed by the Commission for Energy Regulation and the Northern Ireland Authority for Energy Regulation pursuant to a Memorandum of Understanding dated 23 August 2004 and the subsequent All-Island Energy Market Development Framework agreed in November 2004 between Noel Dempsey TD, the Minister for Communications, Marine and Natural Resources and Barry Gardiner MP, the Minister with Responsibility for Enterprise, Trade and Investment in Northern Ireland. The Code was developed as part of the process of establishing the SEM and constitutes the trading arrangements and Trading and Settlement Code for the SEM pursuant to section 23 of the Northern Ireland (Miscellaneous Provisions) Act 2006 and section (9BA(1) of the Electricity Regulation Act 1999. The SEM incorporates the Pool for trading between participating generators and suppliers. It is also a condition of the Market Operator Licences that the Market Operator shall establish and at all times maintain in force a code which

1. sets out the terms of the trading and settlement arrangements for the sale and purchase of wholesale electricity in the Pool; and
2. is designed to facilitate the achievement of the objectives set out in paragraph 1.3 below.

1.2 This Code sets out the trading and settlement rules and procedures for participation in the Pool.

Code Objectives

1.3 The aim of the Code is to facilitate the achievement of the following objectives:

1. to facilitate the efficient discharge by the Market Operator of the obligations imposed upon it by its Market Operator Licence;
2. to facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;
3. to facilitate the participation of electricity undertakings engaged in the generation, supply or sale of electricity in the trading arrangements under the Single Electricity Market;
4. to promote competition in the electricity wholesale market;
5. to provide transparency in the operation of the Single Electricity Market;
6. to ensure no undue discrimination between persons who are parties to the Single Electricity Market Trading and Settlement Code; and
7. to promote the short-term and long-term interests of consumers of electricity with respect to price, quality, reliability, and security of supply of electricity.

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Appendices and Agreed Procedures

1.7 The Appendices and the Agreed Procedures, as may be amended or modified, shall be construed as and form part of this Code and shall be subject to the terms of the Code. The Agreed Procedures set out the detail of procedures to be followed by Parties in performing obligations and functions under the Code.

1.8 A full list of Agreed Procedures is set out at Appendix L.

INTERPRETATION

Interpretation

1.9 In this Code, the following interpretations shall apply unless the context requires otherwise:

1. the Table of Contents, and any indexes and headings in the Code are for ease of reference only and do not form part of the contents of this Code and do not and shall not affect its interpretation;
2. words in the singular shall include the plural and vice versa and the masculine gender shall include the feminine and neuter;
3. the word “including” and its variations are to be construed without limitation;
4. any reference to any legislation, primary or secondary, in this Code includes any statutory interpretation, amendment, or modification, re-enactment or consolidation of any such legislation and any regulations or orders made thereunder and any general reference to any legislation includes any regulations or orders made thereunder;
5. any references to Sections, paragraphs, Appendices and Agreed Procedures are references to Sections, paragraphs, Appendices and Agreed Procedures of this Code as amended or modified from time to time in accordance with the provisions of this Code ;
6. any reference to another agreement or document, or any deed or other instrument is to be construed as a reference to that other agreement, or document, deed or other instrument as lawfully amended, modified, supplemented, substituted, assigned or novated from time to time;
7. any reference to a day, month or year is to be construed as a reference to a calendar day, month or year as the case may be except where provided otherwise;
8. any reference to a time is to be construed as a reference to the time prevailing in Belfast;
9. where any obligation is imposed on any Party pursuant to this Code and is expressed to require performance within a specified time limit that obligation shall, where appropriate, continue to be binding and enforceable after that time limit if the Party fails to perform that obligation within that time limit (but without prejudice to all rights and remedies available against that person by reason of that person’s failure to perform within the time limit);
10. zero is to be treated as a positive, whole number;

11. capitalised words and phrases, acronyms, abbreviations and subscripts have the meaning given to them in the Glossary;

12. Where a specified period, including without limitation any particular number of days, must elapse or expire from or after the giving of a notice or issue or making available of a document before an action may be taken or by which an action is required to be taken, then unless explicitly stated otherwise, the day on which the notice is given or issued or the document is made available shall not be counted in the reckoning of the period.

13. a reference to a "person" includes any individual, partnership, firm, company, corporation (statutory or otherwise), joint venture, trust, association, organisation or other entity, in each case and whether or not having separate legal personality;

14. references to a Participant shall be construed as a reference to the relevant Party in its capacity as registrant of the relevant Units. Any obligation expressed to be on a Party shall, where appropriate, be construed as an obligation on that Party in respect of each of its Participants.

15. where the Code requires data to be published by the Market Operator, it shall be made publicly available (which, for the avoidance of doubt means available to all members of the public and not only to Parties) in a format that readily lends itself to processing by standard computer and analysis tools, through an easily accessible public interface and the terms "publish", "publication" and "published" shall be construed accordingly;

16. diagrams in the Agreed Procedures are for illustrative purposes only and shall not override, or be used to interpret, the text of the Code;

17. where the Code requires the Market Operator to publish information and no timeline is specified for such publication, it shall be required to publish such information as soon as reasonably practicable; and

18. in the event of any conflict between algebraic formulae and English language text in Sections 4 to 6, the algebraic formula shall apply, save in the case of manifest error in the algebraic formula.

2. LEGAL AND GOVERNANCE

GOVERNING LAW

2.1 This Code and any disputes arising under, out of, or in relation to the Code shall be interpreted, construed and governed in accordance with the laws of Northern Ireland.

JURISDICTION

2.2 Subject to the provisions relating to the Dispute Resolution Process, the Parties hereby submit to the exclusive jurisdiction of any of the Courts of Ireland or Northern Ireland for all disputes arising under, out of, or in relation to the Code.

TERM

2.3 The Code shall commence on the Commencement Date and shall have no fixed duration.

PRIORITY

2.4 In the event of any conflict between any Party's obligation pursuant to any Legal Requirements and the Code, such conflict shall be resolved according to the following order of priority:

1. requirements under Applicable Laws;
2. any applicable requirement, direction, determination, decision, instruction or rule of any Competent Authority;
3. applicable Licence;
4. Grid Code applicable to the relevant Unit concerned;
5. Metering Code applicable to the relevant Unit concerned;
6. this Code (subject to paragraph 2.5 below).

2.4A If and for so long as a Party complies with the Legal Requirements set out in paragraph 2.4.1 to 2.4.5, it will not be in breach of its obligations under the Code which are in conflict with any of the Legal Requirements taking priority over the Code.

2.4B Until such time as such conflict is resolved through the Modifications Process or otherwise, the applicable obligations under the Legal Requirements set out in paragraphs 2.4.1 to 2.4.5 shall prevail over the provisions of the Code for each Party or Unit in relation to which they are in conflict.

2.5 It is not intended that there be any inconsistency or conflict between the Sections, Appendices or Agreed Procedures of the Code. However, in the event of any inconsistency or conflict, such inconsistency shall be resolved in the following order of priority:

1. Sections,
2. Appendices, and
3. Agreed Procedures.

2.5A The provisions of paragraph 2.5 shall be subject to any express provision to the contrary in the Code.

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PARTIES AND ACCESSION

2.6 A person may only become a Party to the Code in accordance with the terms of the Code.

2.7 The Market Operator, the System Operators, the Distribution System Operators, the Transmission Asset Owners and the Meter Data Providers shall be Parties and shall be the original signatories to the Framework Agreement.

2.8 Any person that is at the relevant time an adhering party to the Framework Agreement, in accordance with and subject to the Accession Process outlined below, shall be a Party to the Code.

2.9 A person may not participate in the Pool unless it is a Party and registers Units for the purposes of participating in the Pool.

Accession Process

2.10 In order to become a Party, a person (the "Applicant") must complete and sign an application form which shall be in the form set out in Agreed Procedure 1 ("Participant and Unit Registration and Deregistration") and send it to the Market Operator. The application form specifies all conditions which the Applicant must meet to become a Party which include that the Applicant shall;

1. pay the Accession Fee; and
2. execute the Accession Deed when provided to adhere to the Framework Agreement.

2.10A The Accession Fee shall be non-refundable except where an application is rejected on the basis that the Regulatory Authorities instruct the Market Operator that the Applicant should not be permitted to accede to the Code, notwithstanding that all other conditions would otherwise be complied with.

2.11 Where the Market Operator receives an application form from an Applicant, it must within 10 Working Days of receiving the application send a notice to the Applicant informing the Applicant of any further information or clarification which is required in relation to the application or where the application is incomplete. The Market Operator shall provide details of what clarification is required or where the application is incomplete.

2.12 If the Market Operator does not receive the clarification or the additional information required within 20 Working Days of the Applicant having been informed by the Market Operator of the need for such clarification, the Applicant shall be deemed to have withdrawn the application. An Applicant may request additional time to provide any clarification or additional information and the Market Operator shall not unreasonably withhold consent to any such request.

2.13 On receipt of a completed application form and any clarification or additional information requested by the Market Operator and provided that the Applicant fulfils the conditions for accession specified in the application form, the Market Operator shall within 10 Working Days of final receipt of all required information in the Accession Process provide the Applicant with an Accession Deed. The Applicant shall be required to submit an executed Accession Deed within 20 Working Days of receipt. An Applicant may request additional time to submit an executed Accession Deed and the Market Operator shall not unreasonably withhold consent to any such request, provided that the date of submission of the executed Accession Deed shall be earlier than the effective date specified in the Accession Deed.

2.14 Following execution of an executed Accession Deed in accordance with paragraph 2.13, the Applicant shall become a Party on the date specified in the Accession Deed.

2.14A The Market Operator shall publish the fact of the accession of each new Party to the Code.

DE MINIMIS PARTICIPATION

2.15 A Party shall register, or shall procure the registration by an Intermediary of, every Generator it is licensed or authorised to operate which has Maximum Export Capacity greater than or equal to the De Minimis Threshold and which is covered by a single Connection Agreement as a Generator Unit under the Code.

2.16 A Party shall register, or shall procure the registration of, every Generator it is licensed or authorised to operate which is not covered by a Connection Agreement but which is located on a Contiguous Site having an overall Maximum Export Capacity greater than or equal to the De Minimis Threshold, as a Generator Unit under the Code.

2.17 A Party may register, or procure the registration of, any Generator which it owns or ultimately legally controls and which is covered by a single Connection Agreement, or is located on a Contiguous Site which does not have a Connection Agreement, which has Maximum Export Capacity less than the De Minimis Threshold, as a Generator Unit under the Code.

2.18 Demand Side Units shall not be required to be registered under paragraph 2.15 or 2.16.

Participation and Registration of Units

2.19 In order for a Party to participate in the Pool in respect of any Unit, a Party must register that Unit in accordance with the registration procedure provided for in paragraphs 2.20 to 2.76.

2.20 An Applicant may submit an application to register Units prior to becoming a Party provided that the Applicant has returned a completed First Participation Information Notice and that registration of Units shall not take effect until the Applicant has become a Party.

2.21 On registration of a Unit, a Party shall become the Participant in respect of that Unit.

2.22 A Party (or an Applicant as applicable) shall apply to register any Units by completing a Participation Notice in respect of such Units which shall include:

1. whether the Unit concerned is a Generator Unit or Supplier Unit;
2. if the Unit is a Generator Unit, details of the Trading Site to which that Unit shall be registered;
3. the Currency Zone of the Unit
4. the name address and contact details (including email and fax) of the Participant to which the Unit is to be registered;
5. the billing address of the Participant;
6. full details of the bank account to which amounts payable by the Market Operator to that Participant shall be paid;
7. the proposed date on which the Party intends that trading by that Unit in the Pool is to commence, which date shall be no earlier than 20 Working Days from the date the Participation Notice is sent to the Market Operator in accordance with paragraph 2.23;
8. the Communications Channels which the Participant designates pursuant to paragraph 3.4 for use in respect of that Unit;
9. evidence of compliance with metering requirements;
10. evidence that all necessary Connection Agreements are in place, valid and effective;
11. evidence that all necessary Use of System Agreements are in place, valid and effective;
12. evidence that the Party holds a valid Licence (including an authorisation or exemption) to generate or supply electricity in the relevant Jurisdiction(s) (as appropriate) and details of all other Licences (including authorisations or exemptions relevant to the SEM);
13. VAT details for all relevant Jurisdictions;
14. the participation capacities which the Party (or Applicant) has or intends to have and the effective date from which it has or intends to have such capacity;
15. the identity of any other Party which is an Affiliate of that Party;
16. in the case of a Generator Unit, where no Trading Site Supplier Unit exists or is proposed, the identity of the Participant that it is intended shall record the Associated Supplier Unit;
17. initial Default Data, that may be used by the Market Operator in relation to that Unit pursuant to paragraphs 3.48 – 3.49 to 3.75; and
18. such other Registration Data as may be required by the Market Operator pursuant to Appendix B and Agreed Procedure 1 “Participant and Unit Registration and Deregistration”.

2.23 The Market Operator shall publish details of the Participation Fees for registration of Units and a Party (or an Applicant as applicable) shall send the required Participation Fees with the Participation Notice to the Market Operator. The Market Operator shall specify the components of the Participation Fee that will apply in respect of each Participation Notice. If a Participation Notice is withdrawn or rejected, the market Operator shall refund those elements of the Participation Fee for which it has no incurred costs.

2.23A The Market Operator shall refund the relevant Participation Fee in its entirety if the Regulatory Authorities direct that the Party (or Applicant, as applicable) should not be permitted to register the relevant Unit or Units.

2.24 On or prior to its first application to register a Unit, a Party (or Applicant, as applicable) shall complete and return a First Participation Information.

2.25 Where a Party (or an Applicant, as applicable) applies to register Units in more than one Currency Zone or in a different Currency Zone than its currently registered Units, it shall register as a separate Participant for Units for each Currency Zone.

2.26 In the event that a Party (or an Applicant, as applicable) does not apply to register as a separate Participant in relation to Units where those Units are located in different Currency Zones, it shall be automatically deemed to be a separate Participant in respect of those Units located in each Currency Zone for the purposes of the Code. The Market Operator shall in such circumstances notify the Participants of the requisite Participation Fees and the Party (or Applicant, as applicable) shall, within 5 Working Days, pay the requisite Participation Fees for each deemed Participant.

2.27 A Party (or an Applicant as applicable) shall not register as more than one Participant save as provided for in paragraph 2.25, or as permitted with the prior written consent of the Regulatory Authorities. Any such consent must be submitted with the relevant Participation Notice.

2.28 Where the Market Operator receives a Participation Notice from a Party (or an Applicant, as applicable) it must, within 10 Working Days of receiving the Participation Notice, send a notice to the Party (or Applicant, as applicable) informing it of any further information or clarification which is required in relation to the Participation Notice or where the Participation Notice is incomplete. The Market Operator will provide details of what clarification is required or where the Participation Notice is incomplete.

2.29 If the Market Operator does not receive the clarification or the additional information required from the Party (or the Applicant as applicable) within 20 Working Days of having been informed by the Market Operator of the need for such clarification or additional information, the Party (or the Applicant as applicable) shall be deemed to have withdrawn the Participation Notice and the Market Operator shall refund the Participation Fees. An Applicant may request additional time to submit any clarification or additional information and the Market Operator shall not unreasonably withhold consent to any such request.

2.30 On receipt of a Participation Notice, the Participation Fees and any additional clarification or information requested by the Market Operator from a Party (or an Applicant, as applicable) within the timelines provided for in paragraph 2.29, the Market Operator shall within 5 Working Days send a notice to the Party (or Applicant as applicable) informing the Party (or Applicant as applicable) of any conditions for registration of each Unit the subject of the Participation Notice from the following list as applicable:

1. the amount of Credit Cover required to be put in place by the proposed Participant prior to the Effective Date in respect of each Unit calculated with effect from the Effective Date;

2. any qualification requirements pursuant to Agreed Procedure 3 “Communication Channel Qualification” for the Participant’s designated Communications Channels for that Unit;

3. the requirement for the satisfactory provision of the Registration Data set out in Agreed Procedure 1 “Participant and Unit Registration and Deregistration” (if not already provided); and

4. the requirement that the relevant facilities are Connected to the Distribution System or Transmission System.

2.30A If a Party fails to satisfy any of the conditions for participation specified by the Market Operator under paragraphs 2.30.2 to 2.30.4 within 20 Working Days of being notified of such conditions by the Market Operator, its Participation Notice (or such shorter period as specified by the Market Operator) shall be deemed to be withdrawn and the Market Operator shall refund the relevant portion of the Participation Fees. An Applicant may request additional time to satisfy any of the conditions under paragraph 2.30 and the Market Operator shall not unreasonably withhold consent to any such request.

2.30B The Market Operator shall be entitled to share Registration Data received from a Party with the System Operators and the Meter Data Providers for the purpose of processing registration and facilitating participation in respect of the relevant Units. All Parties shall co-operate with and provide such assistance as the Market Operator requests for these purposes.

2.31 Notwithstanding any date specified by the Party (or Applicant as applicable) in its Participation Notice, registration of Units shall not become effective until such time as the Market Operator specifies that the Party concerned:

1. has supplied all information required and satisfied all such conditions as notified to the Party (or Applicant, as applicable) pursuant to paragraphs 2.30.2 to 2.30.4;

2. has paid the Participation Fees; and

3. is not otherwise in breach of the Code or the Framework Agreement.

2.32 Where the conditions specified in paragraph 2.31 have been achieved by the Party (or Applicant) concerned, the Market Operator shall issue a Commencement Notice to the Participant. The Commencement Notice shall specify the Effective Date on which registration of the Units concerned shall take effect, provided that the Required Credit Cover has been put in place prior to the Effective Date.

2.32A Where a Party (or Applicant, as applicable) has not put in place the Required Credit Cover before the Effective Date specified in a Commencement Notice, the Effective Date shall be deferred until the day after the Required Credit Cover is put in place, provided that such date is within twelve months of the Effective Date specified in the relevant Commencement Notice, otherwise the Participation Notice shall be deemed to have been withdrawn and the Participation Fee shall not be refunded in whole or in part.

2.32B Units shall be deemed registered for the purposes of the Pool from the Effective Date in accordance with paragraph 2.31A.

2.32C A Participant may commence trading in respect of a Unit on or after the relevant Effective Date. For that purpose, a Party (or Applicant, as applicable) may, prior to the Effective Date, submit data in respect of trading

for the Effective Date and any subsequent date in accordance with the Code.

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2.34 The Market Operator shall publish the fact of the registration of each new Participant and the registration of each new Unit to a Participant. The Market Operator will maintain and publish a current list of Parties, Participants and each of their Units.

2.35 Parties or Participants may apply to change registration details of Units by application to the Market Operator pursuant to Agreed Procedure 1 "Participant and Unit Registration and Deregistration", provided that if a Party applies to reduce the number of Meter Point Registration Numbers registered to any of its Supplier Units, it must comply with the terms of the applicable Metering Code in respect of that Unit.

2.36 Intentionally blank

Registration as Price Maker Generator Unit or Price Taker Generator Unit

2.37 Save as provided in paragraphs 2.38 to 2.40 below, a Party (or Applicant, as applicable) registering a Generator Unit shall register such Unit as a Price Maker Generator Unit.

2.38 Parties may apply for registration of Generator Units which have Priority Dispatch for their entire capacity and which are Variable or Predictable Generator Units as either:

1. A Price Maker Generator Unit; or
2. A Price Taker Generator Unit.

2.39 A Party or Applicant registering an Autonomous Generator Unit shall register such Unit as a Price Taker Generator Unit.

2.40 Parties which have registered Units that have Priority Dispatch as Variable Generator Units or Predictable Generator Units may change the status of such Unit(s) as Price Taker Generator Units or Price Maker Generator Units by application to the Market Operator, giving at least 28 days notice in advance in pursuant to Agreed Procedure 1 "Participant and Unit Registration and Deregistration"".

Wind Power Units

2.40A A Party (or Applicant, as applicable) shall, on registration of a Generator Unit, specify if the Unit is a Wind Power Unit.

Transmission Loss Adjustment Factors

2.40B On the registration of any new Supplier Unit or Generator Unit, the relevant System Operator shall provide to the Market Operator, subject to prior approval of the Regulatory Authorities, a set of Transmission Loss Adjustment Factors for that Unit for the necessary set of Trading Periods.

REGISTRATION OF ERROR SUPPLIER UNIT

2.41 One Error Supplier Unit shall be registered in each Jurisdiction.

2.42 In each Jurisdiction, the Party that is required pursuant to its Licence to register an Error Supplier Unit shall register the Error Supplier Unit, or procure the registration of the Error Supplier Unit by an Intermediary, in accordance with the Code.

2.43 Where the Participant in respect of an Error Supplier Unit is suspended (and such suspension relates to the Error Supplier Unit) or terminated in accordance with the Code, or otherwise Deregisters, or ceases to participate in respect of the Error Supplier Unit, then the System Operator for the Jurisdiction for which the Error Supplier Unit concerned is registered shall temporarily assume the responsibilities of the Participant in respect of that Error Supplier Unit for an initial period of 2 months from the date of suspension, Deregistration, termination or cessation and the original Participant in respect of the Error Supplier Unit shall cooperate with the System Operator's requirements in this regard.

REGISTRATION OF TRADING SITE

2.44 Any Party registering a Generator Unit shall register such Generator Unit as part of a Trading Site except as provided for in Section 5.

2.45 Each Trading Site shall include at least one Generator Unit and may include a single Trading Site Supplier Unit which must be within the same Trading Site.

2.46 Subject to paragraph 2.47, each Unit within a registered Trading Site must be registered to the same Participant.

2.47 If a Party registering a Trading Site does not register a Trading Site Supplier Unit to that Trading Site, then on the first registration of a Generator Unit to that Trading Site, the Party registering the Generator Unit shall notify the Market Operator of the identity of the Participant who it is intended shall record an Associated Supplier Unit to the Trading Site. The Associated Supplier Unit may be registered to a different Participant than the other Units in the Trading Site. No Unit can be both (i) an Associated Supplier Unit and (ii) either a Trading Site Supplier Unit or an Error Supplier Unit.

2.48 On registration of a Trading Site, the Party registering the Trading Site shall register a Netting Generator unit for that Trading Site to the same Participant as registers the Generator Unit(s) for that Trading Site.

2.48A Where there is more than one Meter Point Registration Number or more that one Generator Unit at a generation site, such generation site may be registered as more than one Trading Site, each such Trading Site having either one Trading Site Supplier Unit registered by the same Participant as registers the Generator Unit, or one Associated Supplier Unit recorded to each Trading Site.

2.48B Where there is one Meter Point Registration Number and more than one Generator Unit at a generation site, and the generation site is, as permitted under 2.48A, registered as more than one Trading Site, the MPRN will be registered to only one such Trading Site, and the Trading Site Supplier Unit or the Associated Supplier Unit for that Trading Site will contain demand related to the generation site Meter Point Registration Number. Each other Trading Site Supplier Unit and Associated Supplier Unit registered or recorded to a Trading Site within the same generation site shall contain no demand for the purposes of that Trading Site.

2.48C Where there is more than one Meter Point Registration Number or more than one Generator Unit at a generation site, and such generation site is registered as more than one Trading Site, each such Trading Site will have a separate registered Netting Generator Unit.

Generator Unit with Non-Firm Access

2.48D A Generator Unit has Non-Firm Access where it operates under a Connection Agreement which provides for a Firm Access Quantity which is less than the Maximum Export Capacity of the relevant site. As part of the Registration Process for such Generator Units, the Firm Access Quantity of Trading Site s (FAQSst) shall be recorded. No Netting Generator Unit shall be deemed to have Non-Firm Access.

2.48E If a Party registering a Trading Site, which contains a Generator Unit with Non-Firm Access, does not register a Trading Site Supplier Unit to that Trading Site, the Associated Supplier Unit recorded to the Trading Site shall include only the Demand contained within that Trading Site and such Associated Supplier Unit shall be known as a "Unique Associated Supplier Unit".

2.48F Where a generation site is, as permitted under paragraph 2.48A, registered as more than one Trading site, and any Generator Unit on any such Trading Site has Non-Firm Access, the Firm Access Quantity of Trading Site s, FAQSst will be recorded for all such Trading Sites so that together they sum to the Firm-Access Quantity of the Generator Units on the generation site, the FAQSst allocated appropriately to the Generator Units for which the Non-Firm Access applies.

Registration of an Interconnector

2.49 A Party (or an Applicant, as applicable) may register an Interconnector in accordance with the procedure for registration of Units and the additional requirements set out in the following paragraphs. The Party registering the Interconnector shall be deemed to be the Interconnector Administrator for the purposes of the Code.

2.50 For each Interconnector, the Interconnector Administrator may be the Interconnector Owner or another person. Where the Party (or Applicant, as applicable) applying to register an Interconnector is not the Interconnector Owner, the Party (or Applicant, as applicable) shall provide a valid and continuing form of authority from the Interconnector Owner, authorising the Party (or Applicant, as applicable) to register the Interconnector.

2.51 The Party (or Applicant, as applicable) applying to register an Interconnector shall provide the Interconnector Registration Data in its Participation Notice.

2.52 The Interconnector Registration Data shall comprise:

3. the Aggregate Import Capacity;

4. the Aggregate Export Capacity;

5. the Participant in respect of the Interconnector Error Unit.

2.53 The Interconnector Administrator shall determine the Interconnector Unit Import Capacity Holding and Interconnector Unit Export Capacity Holding for each Interconnector Unit and shall be responsible for maintaining the Interconnector Registration Data.

2.54 Where the Interconnector Administrator is, in relation to the Interconnector, suspended or terminated under the Code or otherwise ceases to participate in respect of the Interconnector, then the System Operator for the Jurisdiction in which the relevant Interconnector Units are located shall temporarily assume the responsibilities of the Interconnector Administrator under the Code for a maximum of 2 months from the date of such suspension, termination or cessation ("the Interconnector Administrator Grace Period") and the previous Interconnector Administrator shall co-operate with the System Operator's requirements in this regard.

2.55 If the Interconnector Administrator has not resumed participating in accordance with the Code and a new Interconnector Administrator is not registered during the Interconnector Administrator Grace Period, the Market Operator shall Deregister the Interconnector as and from the expiry of the Interconnector Administrator Grace Period.

Interconnector Residual Capacity Unit

2.56 For each Interconnector, there shall be an Interconnector Residual Capacity Unit.

2.57 The System Operator for the Jurisdiction in which the Interconnector is connected shall register the Interconnector Residual Capacity Unit in accordance with paragraphs 2.20 to 2.36.

2.58 An Interconnector Residual Capacity Unit may not form part of any Trading Site and shall not be classified either as a Price Maker or as a Price Taker.

Interconnector Error Unit

2.59 For each Interconnector, there shall be an Interconnector Error Unit. The Interconnector Administrator shall ensure that the Interconnector Error Unit is, at all times, registered to a Participant in the Jurisdiction in which the Interconnector is located in accordance with paragraphs 2.20 to 2.36.

2.60 For each Interconnector, the Interconnector Administrator shall register the Interconnector Error Unit, or shall procure the registration of the Interconnector Error Unit to a Participant in accordance with paragraphs 2.20 to 2.36.

2.61 An Interconnector Error Unit may not form part of any Trading Site.

2.62 Where the Participant in respect of an Interconnector Error Unit is, suspended or Deregistered (in relation to the Interconnector Error Unit) terminated under the Code or otherwise ceases to participate in respect of the Interconnector Error Unit, then the System Operator for the Jurisdiction for which that Unit is registered shall temporarily assume the responsibilities of the Participant in respect of the Interconnector Error Unit for a maximum of 2 months from the date of such suspension, Deregistration, Termination or cessation (the "Interconnector Error Unit Grace Period") and the previous Participant in respect of the Interconnector Error Unit shall co-operate with the System Operator's requirements in this regard.

2.63 Upon the occurrence of the events provided for in paragraph 2.62, where the Interconnector Administrator is not the Participant in respect of the Interconnector Error Unit, the Interconnector Administrator shall be obliged to register, or procure the registration by another Party of, the Interconnector Error Unit during the Interconnector Error Unit Grace Period.

2.64 If the Participant in respect of the Interconnector Error Unit has not resumed participating and a new Participant in respect of the Interconnector Error Unit is not registered during the Interconnector Error Unit Grace Period and the Interconnector Administrator declines or is unable to be the Participant in respect of the Interconnector Error Unit, the Market Operator shall Deregister the Interconnector as and from the expiry of the Interconnector Error Unit Grace Period.

Interconnector Unit

2.65 A Party (or Applicant, as applicable), being an Interconnector User, may apply for registration of an Interconnector Unit in relation to the relevant Interconnector in accordance with paragraphs 2.20 to 2.36 and subject to paragraph 2.66.

2.66 Interconnector Units may not form part of any Trading Site.

2.67 If an Interconnector is automatically Deregistered under paragraphs 2.55 or 2.64, each Party's Interconnector Units registered on that Interconnector shall be automatically Deregistered.

Intermediaries

2.68 Any Party may nominate an Intermediary to register any Unit, with the exception of the Interconnector Residual Capacity Unit, which that Party is itself entitled or required to register under the Code, as set out below.

2.69 The Intermediary must be a Party to the Code provided that an Applicant may submit an application to register Units as an Intermediary prior to becoming a Party if the Applicant has returned a completed First Participation Information notice, and that registration of Units shall not take effect until the Applicant has become a Party.

2.70 An Intermediary may register any Units in accordance with the participation procedure in paragraphs 2.20 – 2.36 provided that:

1. the Regulatory Authorities have consented to the registration of the relevant Units by the Intermediary; and

2. the nominating Party has submitted an executed Form of Authority.

2.71 The Intermediary will be considered for the purposes of the Code to be the Participant for any Units registered to the Intermediary in accordance with the Code.

2.72 The Regulatory Authorities may specify a time period for which the Intermediary may participate.

2.73 An Intermediary and its nominating Party shall be jointly and severally liable for the purposes of the liabilities and obligations of the Intermediary in relation to that Party's Units under the Code.

2.74 If at any time a Party intends to revoke its appointment of an Intermediary, it must inform the Market Operator in writing of such intention at least Fifty (50) Working Days in advance of the date on which such revocation is intended to take effect. Revocation may only take effect if the Market Operator has consented to such revocation in accordance with paragraph 2.75.

2.75 The Market Operator shall consent to the revocation of an Intermediary in respect of any Units registered to it if either:

1. the Party which owns or ultimately controls the relevant Units enters into or procures another Party to enter into a Deed of Assignment in the form set out in Appendix S with the Intermediary in which it or such other Party agrees to become the Participant for the relevant Units and assumes all past, existing and future rights, obligations and liabilities of the Intermediary in respect of those Units; and

2. the Party which owns or controls the relevant Units or such other Party as the owner or legal controller of the Units has procured pursuant to sub-paragraph 2.75.1 (i) satisfaction of such conditions for participation as may be specified by the Market Operator pursuant to paragraphs 2.30 to 2.31.

OR

3. the Intermediary Deregisters any of the Units or Terminates voluntarily, or is Terminated or Deregistered in respect of any or all of the Units. In such event, the Party which owns or controls the relevant Units must specify that it or another Party will become the Participant in relation to the relevant Units and satisfy paragraphs 2.30 to 2.31.

2.76 Where an Intermediary ceases participating in respect of any Units otherwise than in accordance with paragraph 2.75, the Party which nominated such Intermediary shall be required itself, or to procure another Party, to register the Units and become a Participant in respect of those Units in accordance with paragraph 2.75 unless the Units fall below the De Minimis Threshold.

VOLUNTARY DEREGISTRATION OF UNITS

2.77 A Party may voluntarily deregister any Units registered in its name pursuant to the following paragraphs and Agreed Procedure 1 “Participant and Unit Registration and Deregistration.”

2.77A A Party shall notify the Market Operator and the Regulatory Authorities of its intention to deregister any Units at least 60 days in advance of its intended date of Deregistration, using the appropriate form for Deregistration set out in Agreed Procedure 1 “Participant and Unit Registration and Deregistration.”

2.77B Where the Party applying for Deregistration complies with the procedures set out in Agreed Procedure 1 “Participant and Unit Registration and Deregistration”, the Market Operator shall permit the Deregistration of Units subject to the following requirements:

1. all amounts due and payable by the relevant Party pursuant to the Code in respect of the relevant Unit(s) and participation in the Pool up to and including the date of termination shall have been paid in full; and

2. in the case of Deregistration of Supplier Unit(s), the provisions of the applicable Metering Code have been complied with.

2.77C The Deregistration of any Unit(s) pursuant to paragraph 2.77 shall only take effect on such terms and conditions as the Market Operator, acting reasonably, shall determine (“Deregistration Consent Order”) and the relevant Party shall comply with the terms and conditions of such Deregistration Consent Order.

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MARKET OPERATOR

2.79 The Market Operator shall perform its obligations, functions and powers as provided for in this Code in accordance with all Legal Requirements.

2.80 The Market Operator shall not unfairly discriminate between any Parties to the Code in exercising its rights and powers and performing its functions and obligations.

2.81 Save as provided for by law, or under this Code, no undertaking(s) licensed to be the Market Operator, may participate in the Pool as a Participant (including an Intermediary) and the Market Operator shall not be the counterparty or act as principal in any sale and purchase of electricity in the Pool.

2.82 The Market Operator may not assign any of its obligations, functions or powers under this Code to any person. The Market Operator may not enter into any agreement to subcontract or delegate any of its obligations, functions or powers under this Code which has a cumulative or aggregated value of €50,000 or more without the prior written consent of the Regulatory Authorities which shall not be unreasonably withheld or delayed.

2.83 The Regulatory Authorities shall be entitled to direct a Modification to the Code to change the definition of the Market Operator at any time. The definition of the Market Operator under this Code may not be amended save in accordance with this paragraph.

2.84 Save as otherwise provided for in this Code, where any calculation is required to be performed or made under the Code it shall be made or performed or procured by the Market Operator.

2.84A The Market Operator shall be responsible for procuring the performance of all the runs of the EPUS Software required under the Code.

2.84B If at any time there is more than one person licensed to act as Market Operator, each of the persons licensed to act as Market Operator shall be jointly and severally liable in performing the role of licensed Market Operator under this Code.

2.84C The Market Operator shall develop and maintain a Disaster Recovery Plan in respect of the Isolated Market System and all automated and manual data held by the Market Operator in relation to its functions and obligations under the Code. The Market Operator shall test the Disaster Recovery Plan for approval at least 4 months prior to the start of each year and shall make such changes as it reasonably considers necessary for the effective operation of the Disaster Recovery Plan.

2.84D The Market Operator is authorised by all Parties and Participants to exercise the rights granted to it under, and shall perform its obligations pursuant to, the Code.

COSTS OF MARKET OPERATOR

2.85 The costs and expenses of the Market Operator shall be recovered both through (i) the Accession Fees and Participation Fees and (ii) the Market Operator Charge as calculated pursuant to Section 6.

OBLIGATIONS ON PARTIES

2.86 Each Party shall comply with all Legal Requirements, the Code and the Framework Agreement in exercising its rights and powers and performing its functions and obligations under the Code.

2.87 Without prejudice to the generality of paragraph 2.86, no Party shall, either directly or indirectly, on its own or in conjunction with any other Party or person, obstruct the proper and orderly functioning of the Pool.

2.87A In acceding to the Code and in consideration of each Party enjoying the benefit of continuing to be a Party to the Code, each Party agrees that the Market Operator shall have the right, as the entity appropriate to enforce the provisions of the Code, to sue any other Party to recover any Shortfall or Unsecured Bad Debt under the Code.

2.88 Without prejudice to any other provision of the Code or the Framework Agreement, each Party :

1. shall perform all its rights, functions and obligations under the Code with the degree of care and to the standard expected of a Prudent Industry Operator and in accordance with Prudent Electric Utility Practice;

2. shall comply with all Legal Requirements that are required to be complied with and procure, comply with and maintain all consents, permissions, licences and Licences (and the conditions attaching to any exemptions) required to be obtained to participate in the SEM or to be a Party to the Code;

3. acknowledges that its being a Party to the Code and, where applicable, its participation in the Pool in accordance with the terms of the Code and its participation in any transactions provided for and contemplated by any of the foregoing is with a full understanding of its material terms and risks and it is capable of assuming those risks;

4. shall pay all fees, levies, charges and other payments arising under the Code as they become due;

5. shall ensure that save as expressly permitted otherwise, any information or data it is required to submit to the Market Operator, Market Auditor or any other person, or to maintain, as required by virtue of being a Party or Participant shall be true, valid, correct, complete and accurate at the time it is given and, save as expressly provided otherwise, while it is maintained and, where appropriate, it shall keep the Market Operator informed of any mistakes or omissions in, corrections or updates to any information or data which it has submitted to Market Operator, the Market Auditor or any other person;

6. shall ensure that any information or data it is required to submit to the Market Operator, Market Auditor or any person as required by virtue of being a Party or Participant will be submitted in a timely manner to enable the Market Operator, Market Auditor or such other person to perform their obligations and functions arising pursuant to the Code; and

7. shall co-operate with and provide all reasonable assistance to the Market Operator on request for the purposes of the Market Operator performing its functions and obligations under the Code.

MARKET AUDIT, CONSULTATION AND INFORMATION SHARING

2.89 The Regulatory Authorities will appoint a person or firm as Market Auditor every three years for a three year term, such appointment to take effect from the date specified by the Regulatory Authorities.

2.90 Where the appointment is terminated or the Market Auditor resigns before the expiry of the three year term, the Regulatory Authorities shall appoint a person or firm to fulfil the role of Market Auditor on a temporary basis pending the appointment by the Regulatory Authorities of a person or firm as Market Auditor for a three year term. The three year term of the person or firm next so appointed as Market Auditor shall commence from their date of appointment.

2.91 The Market Auditor shall conduct an audit of the Code, its operation and implementation and the operations, trading arrangements procedures and processes under the Code at least once a year.

2.92 The annual period covered by the audit shall be 1 January to 31 December annually unless the terms of reference specify a different period.

2.93 The Regulatory Authorities shall consult with Parties on the terms of reference for the audit at least 10 weeks in advance of the commencement of the audit.

2.94 The Regulatory Authorities shall specify annually the precise terms of reference for the audit 4 weeks in advance of the commencement of each year of the audit or audit period, if different, and shall publish the terms of reference before the commencement of the audit.

2.95 The Market Auditor shall of good repute with the appropriate experience to enable it to carry out the audit with the appropriate level of expertise, care, skill and diligence.

2.96 The Market Auditor, pursuant to these provisions and such terms of reference as the Regulatory Authorities shall specify, shall:

1. report to the Regulatory Authorities at such reasonable intervals as the Regulatory Authorities shall specify in the terms of reference during the course of the audit;

2. deliver its Audit Report to the Regulatory Authorities in draft form prior to it being finalised;

3. deliver its Audit Report in final form to the Regulatory Authorities within 4 weeks of delivering its draft audit;

4. meet with the Regulatory Authorities at the request of the Regulatory Authorities at any time during the Market Auditor's engagement. The Regulatory Authorities will, in any event, require the Market Auditor to attend a meeting with it within 6 weeks of its delivery of the Audit Report in final form. Nominated representatives of the Market Operator and the Modifications Committee shall be entitled to attend such meeting.

2.97 Each Party shall provide without charge to the Market Auditor in a timely manner such information as is reasonably required by the Market Auditor to enable the Market Auditor to comply with its functions and obligations and

terms of reference for the purposes of conducting the audit and preparing and finalising the Audit Report. This is subject to any obligations of confidentiality which the relevant Party claims are owed to any third parties which prevent disclosure of the information required. In such circumstances, the relevant Party shall be obliged to explain the nature of the obligations of confidentiality, the information to which they apply and to demonstrate to the satisfaction of the Regulatory Authorities that it has used its best endeavours to obtain a clearance from the third party to whom the obligation of confidentiality is owed to release the information required to the Market Auditor.

2.98 The Market Auditor shall be entitled to make recommendations in its Audit Report. The Regulatory Authorities may direct implementation of any recommendation of the Market Auditor and shall consult with the Market Operator and the Modifications Committee before so doing. Any recommendation which the Regulatory Authorities direct to implement by way of an amendment of the Code shall be deemed to be an approved Modifications Proposal and shall be published accordingly by the Market Operator.

2.99 The Market Operator shall arrange for the publication of the Audit Report in final form in accordance with the provisions of the Code upon its delivery in accordance with paragraph 2.96.3 subject to any confidentiality obligations under paragraphs 2.312 to 2.318.

2.100 Each Party shall keep complete, accurate and up to date records whilst a Party to the Code and, where applicable, of its participation in the Pool for a minimum period of 3 years from the date of creation of such records.

2.101 The fees and costs of the Market Auditor shall be paid by the Market Operator and shall constitute part of the Market Operator's budgeted costs and expenses.

Information Sharing

2.102 The Market Operator shall report to the Regulatory Authorities in writing on a monthly basis or at such other intervals as the Regulatory Authorities may reasonably request. The Market Operator shall publish such reports. The reports shall set out in reasonable detail:

1. information about the performance by the Market Operator of its rights, powers, functions and obligations under the Code; and

2. facts and statistics relating to the performance by the Parties of their rights, functions and obligations under the Code.

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2.104 Subject to Applicable Laws, each Party shall allow the Regulatory Authorities on reasonable notice and at reasonable times access to inspect and copy any records relating to the Party's obligations and functions under the Code and, where applicable, its participation in the Single Electricity Market.

2.105 Subject to paragraphs 2.312 to 2.318 concerning Confidential Information, where information is provided by any Party to the Market Auditor or the Market Operator pursuant to the Code, the Market Auditor and the Market Operator shall have the right, without charge, to use, make available, copy, adapt and deal with such data or other information for the purposes of

exercising their rights and performing their powers, functions and obligations under the Code (and, in the case of the Market Auditor, its terms of reference) but for no other reason.

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MODIFICATIONS

2.108 Modifications shall be processed in accordance with paragraphs 2.109 to 2.206 and Agreed Procedure 12 “Modifications Committee Operation”.

2.109 The objective of the Modifications Committee is to progress Modification Proposals with a view to better facilitating the achievement by the Code of the Code Objectives

Functions of the Modifications Committee

2.110 The functions of the Modifications Committee are to facilitate the Modifications Process by:

1. co-ordinating the resources of Parties to facilitate the development and processing of a Modification Proposal;
2. assessing Modification Proposals and the impact of any Modification Proposals for the Pool having regard to the Code Objectives;
3. further developing Modification Proposals which are not rejected as being spurious;
4. working up the detail of Modification Proposals;
5. consulting on Modification Proposals as required;
6. compiling reports and making recommendations on Modification Proposals to the Regulatory Authorities; and
7. making any appropriate changes to Agreed Procedures.

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2.113 A Member elected or appointed to represent a particular type of Participant shall represent the interests of the type of Participant it is elected or appointed to represent.

Constitution of the Modifications Committee and Voting Rules

2.114 The Modifications Committee shall consist of:

1. one member nominated by the Commission and one member nominated by NIAER;
2. at least nine and no more than fifteen further members appointed as follows, such persons to include at all times:
    a. at least three (3) Members nominated by or elected in respect of Generation Participants;
    b. at least three (3) Members nominated by or elected in respect of Supply Participants;
    c. one Member appointed by the Market Operator;

d. one Member appointed by each of the System Operators; and

e. one Member appointed by each of the Meter Data Providers (to the extent not already represented).

2.114A Unless directed otherwise by the Regulatory Authorities and subject to paragraphs 2.114B and C, there shall at all times be an equal number of persons nominated by or elected in respect of Generation Participants and persons nominated by or elected in respect of Supply Participants on the Modifications Committee.

2.114 B If the Regulatory Authorities determine at any time that any particular type of Participant is not adequately represented on the Modifications Committee, the Regulatory Authorities may seek nominations from relevant Participants and then appoint a person from such nominations to represent that type of Participant. Such a person shall be a voting member of the Modifications Committee and shall be appointed for an initial term of two years. A member appointed in accordance with this paragraph 2.114B shall not be deemed to be a representative of Generation Participants or Supply Participants for the purposes of paragraph 2.114 or 2.114C.

2.114C The Regulatory Authorities may from time to time stipulate the minimum or maximum representation for Supply Participants and Generation Participants.

2.115 The total number of members of the Modifications Committee shall be not less than eleven (11) persons and not more than seventeen (17) persons.

2.116 Save as expressly provided otherwise, only members appointed or elected to represent Nominating Participants shall be entitled to vote at any Meeting and those members shall have one vote each. Those members who are appointed by, and to represent, the Commission, NIAER, System Operators, Meter Data Providers and the Market Operator shall not have any vote.

2.117 The Market Operator shall make available to the Modifications Committee a fulltime Secretariat. None of the Secretariat's personnel shall be a member of the Modifications Committee.

2.118 The Market Operator shall be responsible for performance by the Secretariat of its functions necessary for the proper functioning of the Modifications Process under the Code.

2.118A Agreed Procedure 12 "Modifications Committee Operation" sets out the rules for the Quorum of the Modifications Committee and the voting rules. No decision or recommendation of the Modifications Committee can be reached without a Quorum. Voting will be by simple majority, with the Chairperson casting the deciding vote in the event of a tied vote.

Chairperson

2.119 The Modifications Committee shall have a chairperson and vice-chairperson who shall be elected from the voting members of the Modifications Committee by the voting members of the Modifications Committee. Such election shall take place as the first item of business at the first Meeting of the Modifications Committee and thereafter whenever a vacancy arises. On election at that first meeting, the chairperson shall then take the chair of the Meeting. In the event of a tie for the election of the chairperson or vice-chairperson at the first Meeting, a subsequent ballot or ballots shall take place until a chairperson and vice-chairperson are elected.

2.120 The term of appointment for the chairperson and the vice-chairperson shall be one year.

2.121 In the event that the chairperson cannot attend a meeting or chair a meeting for its entirety for any reason, the vice-chairperson shall take his or her place as the chairperson of the meeting.

2.122 In the event that the chairperson retires, resigns or is removed from the Modifications Committee, or otherwise becomes unavailable to act as chairperson of the Modifications Committee, the vice-chairperson shall take his or her place for the remainder of the term for which that person was appointed chairperson and a new vice-chairperson shall be elected from the voting members of the Modifications Committee by the voting members of the Modifications Committee.

2.123 The chairperson will chair meetings of the Modifications Committee and seek to ensure the efficient organisation and conduct of the functions of the Modifications Committee pursuant to the Code.

Nomination of Participant Members

2.124 Each Nominating Participant may put forward one nominee and an alternate for that nominee for appointment to the Modifications Committee at such times as may be notified by the Regulatory Authorities in the case of the initial Modifications Committee and thereafter at such times as may be notified by the then existing Modifications Committee.

Nominations of Other Members

2.125 The Commission, NIAER, the Market Operator, each of the System Operators and each of the Meter Data Providers shall each nominate one member and an alternate member for appointment to the initial Modifications Committee at such time as the Regulatory Authorities may specify for the purposes of the establishment of the initial Modifications Committee. Thereafter, the Commission, NIAER, the Market Operator, each of the System Operators and each of the Meter Data Providers shall each nominate one member and alternate member for appointment to the Modifications Committee at such times as the then existing Modifications Committee may notify.

Appointment of Initial Modifications Committee

2.126 The initial Modifications Committee shall be established at a time specified by the Regulatory Authorities. The Regulatory Authorities shall publish the names of the members of the Modifications Committee at least 8 weeks before the establishment date it proposes for the initial Modifications Committee.

2.127 The nominees of the Commission, NIAER, the Market Operator, System Operators and Meter Data Providers shall be automatically appointed to the initial Modifications Committee.

2.128 The Regulatory Authorities shall appoint members and alternate members to the initial Modifications Committee from nominees put forward by the Nominating Participants.

Duration of Appointment

2.128A The members of the Modifications Committee and their alternate members shall each serve for the respective terms as follows:

1. Each of the initial members appointed by, and to represent, the Commission, the Market Operator, the Northern Ireland System Operator and one Meter Data Provider shall each have an initial term of one year. Thereafter, each member appointed by the foregoing shall be appointed for a term of two years.

2. Each of the initial members appointed by, and to represent, the NIAER, the System Operator for Ireland and the remaining Meter Data Providers shall each have an initial term of two years. Thereafter each member appointed by the foregoing shall be appointed for a term of two years.

3. Every second initial member appointed following nomination by the Nominating Participants shall have an initial term of one year. All other remaining initial members appointed following nomination by the Nominating Participants shall have an initial term of two years.

4. New members elected by Nominating Participants or appointed by the Regulatory Authorities pursuant to paragraph 2.114B shall each serve for a term of two years.

Appointment of Subsequent Members

2.129 On the termination of the appointment or the removal of any member of the Modifications Committee who is a nominee of any of the Market Operator, the System Operators or the Meter Data Providers, that person shall be replaced in the same manner as the appointment of the initial nominee under paragraphs 2.126 to 2.127.

2.130 The Commission and the NIAER shall be entitled to replace any member nominated by the Commission or the NIAER (as representatives of the Commission and the NIAER) at any time by giving notice to the Secretariat and with effect from the date specified in such notice.

2.130A At least 8 weeks prior to the expiry of any person's membership of the Modifications Committee, the existing Modifications Committee shall:

1. where that person is a member appointed by the Commission, NIAER, Market Operator, the System Operators or the Meter Data Providers, notify the relevant party that is required to appoint a new member and new alternate member;

2. where that person is a member appointed in respect of Generation Participants or Supply Participants, request the Secretariat to arrange an election in accordance with paragraph 2.131.

2.131 Prior to the expiry of membership of any initial or subsequent Nominating Participant member, the Secretariat shall arrange a Nominating Participant Election to fill that vacancy in accordance with such of the following steps as are necessary:

1. relevant Nominating Participants shall be requested to propose new nominees and alternates for election;

2. each Nominating Participant shall be entitled to vote to elect members from the Participant nominees in accordance with paragraphs 2.131 to 2.137.

3. nominating Supply Participants shall be entitled to vote to elect a member from the persons nominated by them;

4. nominating Generation Participants shall be entitled to vote to elect a member from the persons nominated by them;

5. the number of nominees with the most votes from Supply Participants but not exceeding three in number, shall be appointed to the Modifications Committee to replace any retiring, terminated or removed Supply Participant member;

6. the number of nominees with the most votes from Generation Participants but not exceeding three in number, shall be appointed to replace any retiring, terminated or removed Generation Participant;

7. the constitution of the Modifications Committee shall, unless agreed otherwise by the Regulatory Authorities, continue to comply with paragraphs 2.114 to 2.114C; and

8. the detailed form of the election shall be determined by the initial Modifications Committee subject to approval by the Regulatory Authorities.

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2.133 Elections shall take place, where practicable, not later than 4 weeks prior to the date of expiry of the membership of any one or more of the elected nominee(s) to replace such persons on the Modifications Committee.

2.134 In the event that a nominee of any Nominating Participant is elected, the person put forward as an alternate to that nominee shall automatically be deemed to be that person's alternate member.

2.135 The Modifications Committee may at any time stipulate that an outgoing member who is a nominee of Generation Participants or Supply Participants must be replaced in any election with a nominee of Generation Participants or Supply Participants respectively in order to preserve the requisite constitution of the Modifications Committee in accordance with paragraph 2.114 or as may be stipulated from time to time by the Regulatory Authorities pursuant to paragraph 2.114B or 2.114C.

2.136 Members who have previously served on the Modifications Committee may be re-appointed or re-elected to the Modifications Committee provided that they have not at any time been removed from the Modifications Committee or otherwise ceased to be eligible in accordance with paragraph 2.142.

2.137 If for any reason the procedures set out in paragraphs 2.13 to 2.133 do not result in a sufficient number of Nominating Participant members, the Regulatory Authorities shall appoint members in accordance with paragraph 2.128.

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2.140 Membership of the Modifications Committee shall automatically terminate at the end of a member's term unless such termination would leave the Modifications Committee with less than 13 members, in which case the term of membership may be extended until a replacement member is appointed or elected to the Modifications Committee.

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Resignation and Removal of Members of the Modifications Committee

2.142 Any member may be removed during his or her term by the majority decision of the Modifications Committee (subject to veto by the Regulatory Authorities) if that person:

1. ceases to be in a position to represent those Supply Participants or Generation Participants from which the member was nominated;
2. is or becomes of unsound mind or is, or otherwise becomes incapable of performing the functions of a member of the Modifications Committee;
3. has been, or is, in the reasonable opinion of the majority of the other members of the Modifications Committee, engaged in conduct which is inconsistent with or detrimental to being a member of the Modifications Committee; or
4. fails to discharge the obligations of a member of the Modifications Committee.

2.143 A member may resign on giving at least 5 weeks' notice in writing to the Secretariat which shall convey the notice to the Market Operator.

2.144 A member nominated by the Commission or the NIAER may be removed at any time by the Commission or the NIAER respectively and replaced in accordance with paragraph 2.130.

Alternate Members of the Modifications Committee

2.145 An alternate member shall be appointed to the Modifications Committee only as provided for in the Code.

2.146 Should a member be removed, resign or retire from the Modifications Committee, the alternate member shall take the place of that member on the Modifications Committee for the remainder of that member's term.

2.147 In the circumstances set out in paragraph 2.146, a new alternate member shall be appointed by the person who nominated the original member.

2.148 If any member is unable to attend a meeting of the Modifications Committee, the alternate member shall be entitled to take the place of the member in that meeting.

Meetings of the Modifications Committee

2.149 The Modifications Committee shall have a Meeting at least once every 2 months.

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2.151 The Modifications Committee acting through the Secretariat, shall set the date of each Meeting and, where possible, shall publish such date at least two weeks in advance.

2.152 Any person may attend Meetings of the Modifications Committee in an observatory capacity where that person has informed the Secretariat to the Modifications Committee in advance and the Secretariat has confirmed that person's attendance in accordance with Agreed Procedure 12 "Modifications Committee Operation". Where space is limited, attendance of non-members may be limited on a first come first served basis.

Costs of the Modifications Committee

2.153 The costs of the Secretariat, Meetings and all other costs of the Modifications Committee shall be included as costs and expenses of the Market Operator for the purposes of the Code pursuant to paragraph 6.99.

2.154 Members of the Modifications Committee shall not be entitled to remuneration or expenses.

Who Can Propose Modifications to the Code and Requirement for Draft Text

2.155 Modification Proposals to the Code can be proposed by any person including the Market Operator and the Regulatory Authorities. Any Modification Proposal shall be submitted to the Secretariat.

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2.157 Any person raising a Modification Proposal shall ensure that their proposal is clear and substantiated with appropriate detail, including how it furthers the Code Objectives, to enable it to be considered by the Modifications Committee.

2.158 Each Modification Proposal shall include draft text of the relevant provision of the Code as amended by the Modifications Proposal.

Overall Timeline for the Development of the Modification Recommendation Report

2.159 Save as expressly provided otherwise, the Modifications Committee shall produce a Modification Recommendation Report in respect of each Modification Proposal.

2.159A The Modification Recommendation Report shall be submitted to the Regulatory Authorities within eight months of receipt of a Modification Proposal unless such period is extended with the consent of the Regulatory Authorities.

Procedure for Developing Proposals

2.160 The Secretariat shall, as soon as practicable after receipt of a Modification Proposal, publish a notice containing the relevant Modification Proposal ("Proposal Notice").

2.161 A Modification Proposal shall be considered by the Modifications Committee at the next appropriate Meeting in accordance with Agreed Procedure 12 "Modifications Committee Operation".

2.162 The person making a Modification Proposal or its representative shall be entitled to present the Modification Proposal at the Meeting at which it is to be initially considered.

2.163 At the Meeting where it first considers a Modification Proposal, the Modifications Committee shall first determine whether the Modification Proposal is spurious in accordance with paragraphs 2.168 to 2.169.

2.164 The Modifications Committee may decide to modify or combine Modification Proposals. Modified or combined Modification Proposals shall reference the original Modification Proposals.

2.165 The Modifications Committee may specifically invite appropriate persons, such as Participants, the Market Operator, the System Operators, industry

groups, customer representatives or other persons to express their opinions on any Modification Proposal, including providing an impact analysis, in the manner provided for in Agreed Procedure 12 “Modifications Committee Operation”.

2.165A Parties invited to assist the Modifications Committee under paragraph 2.165 will, make available reasonable resources to respond to such request by the Modifications Committee.

2.165B The Modifications Committee may hold a public consultation in relation to a Modification Proposal. Where there is a public consultation, a minimum consultation period of 10 Working Days from the date of publication of the relevant consultation paper shall be provided.

2.166 In working up detail of a Modification Proposal, the Modifications Committee shall have due regard to comments and submissions received during the consultation process.

2.167 The Modifications Committee may contract consultants, experts or advisers at reasonable cost to advise the Modifications Committee regarding any Modification Proposal, including the preparation of an impact analysis report. Any reasonable costs incurred by the Modifications Committee in connection with this shall form part of the costs of the Secretariat.

Spurious Proposals

2.168 A Modification Proposal shall be deemed to be spurious if, inter alia, it is clearly contrary to the Code Objectives or does not further the Code Objectives. If the Modifications Committee reasonably considers a Modification Proposal to be spurious, it shall reject such Modification Proposal.

2.169 Any decision of the Modifications Committee under paragraph 2.168 to reject a Modification Proposal must set out the reasons for the decision in writing and provide them to the person making the Modification Proposal and the Regulatory Authorities.

2.169A The Regulatory Authorities reserve the right to veto any decision of the Modifications Committee that a proposal is spurious and in such event, the relevant Modification Proposal must be processed by the Modifications Committee in accordance with the Code.

Urgent Modifications

2.170 Any person submitting a Modification Proposal may mark it as “Urgent”. A person submitting a Modification Response rated “Urgent” shall submit the Modification Proposal to the Secretariat and the Regulatory Authorities.

2.171 The Secretariat shall, as soon as possible on receipt of a Modification Proposal which is marked “Urgent” forward it to the Regulatory Authorities who shall determine whether or not it shall be treated as an Urgent.

2.172 A Modification Proposal shall be determined to be Urgent by the Regulatory Authorities where, if not made, it can reasonably be anticipated that the event or circumstance with which the Modification Proposal is concerned would imminently:

1. threaten or prejudice safety, security or reliability of supply of electricity; or

2. unduly interfere with, disrupt or threaten the operation of the Single Electricity Market;

3. or if a Modification is required to correct an obviously material error or inconsistency in the Code.

2.172A If the Regulatory Authorities determine that a Modification Proposal is Urgent under paragraph 2.172, the Modifications Committee shall convene an Emergency Meeting.

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2.174 If the Secretariat or the Modifications Committee considers that any of the criteria in paragraph 2.171 apply in respect of any Modification Proposal that has not been marked "Urgent" by the person submitting the Modification Proposal, the Secretariat shall promptly submit the Modification Proposal to the Regulatory Authorities for consideration in accordance with paragraph 2.171.

2.175 In the event that a Modification Proposal is deemed to be Urgent, the Modifications Committee shall propose the procedure and timetable to be followed in making a recommendation in respect of the Urgent Modification which may fast-track the normal processes provided for in this Code. The Regulatory Authorities shall have the right to veto or direct amendments to the procedure and timetable proposed by the Modifications Committee within 2 Working Days of any such proposal by the Modifications Committee.

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Alternative Proposals

2.182 If any Party does not agree with a Modification Proposal to the Code, it may propose an alternative Modification Proposal, which if received in sufficient time may be considered in conjunction with, or in substitution for, the initial Modification Proposal.

2.183 Intentionally blank.

Contents and Form of the Final Modification Recommendation Report

2.184 The Modifications Committee shall make the determination for the Final Modification Recommendation by majority vote of voting members of the Modifications Committee. The Modifications Committee shall send the Final Modification Recommendation as part of the Final Recommendation Report in relation to the Modifications Proposal to the Regulatory Authorities as soon as practicable after the determination.

2.184A The Modifications Committee shall recommend to the Regulatory Authorities the adoption of such Modifications Proposals as it concludes will better facilitate achievement of the Code Objectives.

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2.186 The Final Modification Recommendation of the Modifications Committee shall be part of the Final Recommendation Report which shall include:

1. the determination of the Modifications Committee on whether or not the Modification Proposal should be adopted;
2. the reasons for such determination;
3. where the Modifications Committee is in favour of the proposal, a draft of the text of the proposed Modification;
4. the original draft of the Modification Proposal;
5. any dissenting opinions of members of the Modifications Committee;
6. a copy the Market Operator's opinion on the Modification;
7. the views of any respondents submitted during the consultation process (including any views of persons invited to give opinions or experienced consultants contracted to provide advice pursuant to paragraph 2.178;
8. an assessment of the impact of the Modification Proposal including in relation to the Code, any Ancillary Code Documents, any Legal Requirements, any other codes relating to the operation of the SEM (including the Grid Codes and the Metering Codes) or any other relevant matter;
9. an assessment, where the Modifications Committee deems appropriate, of any alternative Modification Proposal proposed by any person;
10. a draft of the specific changes that it is proposed would be necessary to make to the Code if the Modification Proposal would be accepted;
11. proposed timescales for implementation; and
12. a cost/resource requirements assessment.

No Recommendation or Decision by Modifications Committee

2.187 In the event that the Modifications Committee is unable make a determination in respect of a Modification Proposal within the timeframes set out in paragraph 2.159 the matter shall be referred to the Regulatory Authorities. This referral shall detail the proposal and the information referred to in paragraphs 2.186 (with the exception of sub-paragraph 2.186.1 to 2.186.3 and 2.186.11 to 2.186.12). In such event, the Regulatory Authorities shall either make a binding decision in accordance with paragraph 2.189, or shall extend the applicable time-limit for the Modifications Committee under paragraph 2.159.

2.187A In the event that the Modifications Committee does not issue a determination in respect of a Modification Proposal within the timeframes set out in paragraph 2.159 and does not refer the matter to the Regulatory Authorities under paragraph 2.188, the Regulatory Authorities shall either make a binding decision in accordance with paragraph 2.189, or shall extend the applicable time-limit for the Modifications Committee under paragraph 2.159.

Decision of Regulatory Authorities

2.188 Following receipt of a the Final Recommendation Report created by the Modifications Committee, the Regulatory Authorities shall decide whether to:

1. direct a Modification in accordance or otherwise with the Final Modification Recommendation of the Modifications Committee;
2. reject the Final Modification Recommendation of the Modifications Committee; or
3. direct the Modifications Committee that further work is required in respect of the Modification Proposal concerned in the Final Modification Recommendation, extending the 8 month timeline if necessary.

2.189 The Regulatory Authorities shall make their decision under paragraph 2.188 in relation to a Modification Proposal as soon as reasonably practicable following receipt of the Final Modification Report or for the purposes of paragraphs 2.187 and 2.187A.

2.190 If approved by the Regulatory Authorities, the Modification shall become effective 2 Working Days after the date of the decision of the Regulatory Authorities or such other date as may be specified by the Regulatory Authorities in its decision.

2.191 Once any Modification has been made, the Market Operator will be required to implement the change, including making the necessary changes to systems and processes with effect from the date provided for pursuant to paragraph 2.190. The Market Operator shall publish the decision of the Regulatory Authorities promptly on its receipt.

Modifications of Agreed Procedures

2.192 If at a Meeting at which any Agreed Procedure Modification Proposal is considered, a unanimous determination is made by the Modifications Committee, which, for the purposes of this paragraph, shall be required to be by the vote of all members except the Regulatory Authorities' representatives, in respect of the Agreed Procedure Modification Proposal including, where the decision is to adopt the Agreed Procedure Modification Proposal, the text of the relevant Agreed Procedure Modification, the decision of the Modifications Committee shall be final and binding, provided that the Regulatory Authorities shall have a right to veto any such decision within 2 days of the decision being made.

2.193 In the event that the Modifications Committee makes a determination to modify an Agreed Procedure in accordance with paragraph 2.192, the Modification shall be made to the relevant Agreed Procedure in the form determined by the Modifications Committee. The Modifications Committee shall notify the Regulatory Authorities of this and the Agreed Procedure Modification shall become effective on a date specified by the Modifications Committee.

2.194 If the Modifications Committee does make a determination in relation to a an Agreed Procedure Modification Proposal in accordance with paragraph 2.192 at the relevant Meeting, the Secretariat shall send the Agreed Procedure Modification Proposal to the Regulatory Authorities for determination and the Regulatory Authorities shall:

1. direct a Modification in accordance or otherwise with the Agreed Procedure Modification Proposal; or
2. reject the Agreed Procedure Modification Proposal; or
3. direct the Modifications Committee that further work is required in respect of the Agreed Procedure Modification Proposal.

2.194A The Regulatory Authorities shall make a decision in relation to an Agreed Procedure Modification Proposal as soon as reasonably practicable on receipt.

2.195 Any Modification of Agreed Procedures shall be published by the Market Operator within 2 Working Days after approval by the Modifications Committee or the Regulatory Authorities as the case may be.

2.196 Any proposal to introduce a new Agreed Procedure shall not be an Agreed Procedure Modification Proposal but shall constitute a Modification Proposal and be dealt with accordingly pursuant to paragraphs 2.160 to 2.169 and 2.176 to 2.191.

Information about the Modifications Process

2.197 The Market Operator shall publish information relating to the Modifications Process and the status of each Modification Proposal and Agreed Procedure Modification Proposal subject to the confidentiality provisions set out in paragraphs 2.312 to 2.318.

2.198 The Market Operator shall provide for a website location or other similar means of publication to be available to the Secretariat and the Modifications Committee for the Modifications Process.

2.199 The Market Operator shall publish notices submitted to it by the Modifications Committee as soon as practicable after receipt of such notices and in any event within 2 Working Days after receipt of such notices.

2.200 The Modifications Committee shall submit a quarterly report to the Regulatory Authorities including the progress and status of Modification Proposals. These reports shall be published by the Market Operator as soon as practicable on receipt.

2.201 Any Modification shall be published by the Market Operator within 2 Working Days after approval by the Regulatory Authorities.

Intellectual Property Issues Associated With Modification Proposals

2.202 Each Party submitting a Modification Proposal shall be deemed to have irrevocably licensed any Intellectual Property Rights or other rights to, and to have waived any moral rights in, the content, form or other aspect of the Modification Proposal and such licence and waiver shall be a precondition to the valid submission of a Modification Proposal.

2.203 Each person who is not a Party and submits a Modification Proposal shall be required to irrevocably licence any Intellectual Property Rights or other rights to and waive any moral rights in the content, form or other aspect of the Modification Proposal and such licence and waiver shall be a precondition to the acceptance of a Modification Proposal.

2.204 A form for Modification Proposals shall be made available on the website provided for the Modifications Committee and such form shall include a

licence of Intellectual Property Rights, and waiver of moral rights in respect of the content, format or other aspects of the proposal.

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No Retrospective Effect

2.206 For the avoidance of doubt, a Modification shall have effect as and from the date specified by the Regulatory Authorities or, where applicable, the Modifications Committee and in no event shall that date be earlier than the date on which the Modification is approved by the Regulatory Authorities, or, where applicable,, the Modifications Committee. Under no circumstances shall Modifications have retrospective effect.

DEFAULT, SUSPENSION AND TERMINATION

Default

2.207 The following sections on default, suspension and termination shall apply in respect of Default by any Party other than the Market Operator.

2.208 A Party shall be in Default where it is in breach of any provision of the Code or the Framework Agreement.

2.209 A Party shall notify the Market Operator immediately upon becoming aware of any circumstance that will give rise to a Default and upon the occurrence of a Default.

Default Notice

2.210 On becoming aware of a Default in relation to a Party, the Market Operator shall issue to the Defaulting Party a Default Notice specifying the Default.

2.211 Intentionally blank

2.212 The Market Operator shall specify in a Default Notice:

1. the nature of the Default;
2. if the Default is capable of remedy, the time from the date of the Default Notice within which the Defaulting Party is required to remedy the Default;
3. any other action which the Market Operator may require the Defaulting Party to take in respect of the Default.

2.212A The Defaulting Party must comply with the Default Notice.

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Suspension

2.215 In the event that:

1. a Credit Call is made and a Participant's Credit Cover Provider fails to meet such demand within the timeframe as provided for in paragraph 6.33D; or
2. a Participant fails at any time to provide the Required Credit Cover as specified under this Code and in accordance with the timeframe as

provided for in Section 6 and Agreed Procedure 9 “Credit Management”;

then, notwithstanding paragraph 2.217 and subject to paragraph 2.216, the Market Operator shall at the same time as or following the issue of the Default Notice to the Defaulting Party in respect of such Default, issue a Suspension Order in respect of all of the relevant Participant’s Units. A Suspension Order issued under this paragraph 2.215 shall have immediate effect, save as expressly provided under paragraph 2.220A.

2.216 A Suspension Order shall not be issued under paragraph 2.215 solely by reason of the failure of the Participant to have its Credit Cover in place under paragraph 2.215.2 during the two days permitted for replenishment of Credit Cover under paragraph 6.140 or during the 10 days permitted to acquire a new Credit Cover Provider under paragraph 6.136E.

2.217 The Market Operator may, with the prior written approval of the Regulatory Authorities, issue a Suspension Order in respect of all or any of a Party’s Units where:

1. it becomes unlawful for a Party to comply with any of its obligations under the Code;
2. it becomes unlawful for a Party’s Credit Cover Provider to comply with any of its Credit Cover obligations;
3. a Legal Requirement necessary to enable a Party or its Credit Cover Provider to fulfil its obligations and functions under the Code is amended or revoked in whole or in part so as to prevent a Party or its Credit Cover Provider from fulfilling its obligations and functions under the Code;
4. a Party or its Credit Cover Provider suspends or ceases to carry on its business, or any part of its business which is relevant to its activities under the Code;
5. a Party’s Credit Cover Provider ceases to be eligible for the purposes of the Code to be able to provide the Credit Cover and the Party has not acquired a new Credit Cover Provider within 10 Working Days as required under paragraph 6.136E;
6. a Party enters into or takes any action to enter into an arrangement or composition with its creditors (except in the case of a solvent and bona fide reconstruction or amalgamation);
7. a Party’s Credit Cover Provider enters into or takes any action to enter into an arrangement or composition with its creditors (except in the case of a solvent and bona fide reconstruction or amalgamation);
8. a receiver, manager, receiver and manager, administrative receiver, examiner or administrator is appointed in respect of a Party or its Credit Cover Provider or any of their respective assets, or a petition is presented for the appointment of an examiner or administrator, or a petition is presented or an order is made or a resolution is passed for the dissolution of, winding up of or appointment of a liquidator to a Party or its Credit Cover Provider, or a liquidator, trustee in bankruptcy or other similar person is appointed in respect of a Party or its Credit Cover Provider, or any steps are taken to do any of the foregoing or any event analogous to any of the foregoing happens in any jurisdiction;

9. a Party or its Credit Cover Provider is dissolved or struck off;

10. a Party or its Credit Cover Provider is unable to pay its debts for the purposes of section 214 of the Companies Act, 1963 (Ireland), Article 103 (1) or (2) of the Insolvency Order (Northern Ireland) 1989, or Section 123 (1) or (2) of the Insolvency Act 1986 (England and Wales) (as applicable) or if any voluntary arrangement is proposed in relation under Article 14 of the Insolvency Order (Northern Ireland) 1989, or section 1 of the Insolvency Act 1986 (England and Wales), or for the purpose of any similar or analogous legislation under the laws of any jurisdiction. For the purposes of this paragraph 2.217.10, Section 213 of the Companies Act, 1963 shall have effect as if for "£60,000" there was substituted "€100,000" and Article 103 of the Insolvency Order (Northern Ireland) and section 123 of the Insolvency Act, 1986 (England and Wales) shall have effect as if for "£750" there was substituted "£60,000" or such higher figure as the Market Operator may specify from time to time;

11. a Party which is required to be licensed has its Licence revoked in whole or in part or amended, so as to prevent the Party from fulfilling its obligations and functions under the Code;

12. a Party has committed 3 Defaults within a period of 20 Working Days;

13. a Party has committed a Default and has failed for a period of 20 consecutive days, or such longer period as may be set out in the relevant Default Notice, to comply with the terms of such Default Notice.

2.218 Intentionally blank

2.219 Where the Market Operator issues a Suspension Order, the Market Operator shall at the same time send a copy of the Suspension Order to the Regulatory Authorities, the System Operators and the relevant Distribution System Operators and publish the Suspension Order.

Effect of Suspension Order

2.220 Where the Market Operator issues a Suspension Order, the Suspension Order shall, subject to paragraph 2.220A, specify the Units to which the Suspension Order shall apply, the date and time from which the suspension will take effect and the terms of the suspension.

2.220A A Suspension Order in respect of a Supplier Unit shall be expressed to take effect no earlier than the end of the Supplier Suspension Delay Period, to allow for the transfer of the relevant Units to the Supplier of Last Resort.

2.221 When a Suspension Order takes effect, the Units to which the Suspension Order applies shall be suspended from the Pool until such time as the Market Operator publishes a notice stating that:

1. the Suspension Order has either been lifted or will be lifted (specifying date and time);

2. the participation of the relevant Party in the Pool has been terminated, or the relevant Units have been Deregistered, in each case in accordance with the Code;

participation of such Units in the Pool may resume but only in accordance with such restrictions as specified in the notice.

2.221A A Suspension Order shall not affect the continuing obligation, of any Party whose Units have been suspended, to maintain the Required Credit Cover in respect of all of its Units.

2.222 Without prejudice to the generality of paragraphs 2.220 to 2.221, a Suspension Order may suspend or restrict any or all of a Party's Units. The Market Operator shall, while a Suspension Order is in place, be entitled to do any act, matter or thing to give effect to the Suspension Order including, without limitation:

1. rejecting any Commercial Offer Data submitted by the relevant Party;
2. making a Credit Call;
3. withholding the payment of any amounts otherwise due to the relevant Party under the Code;
4. cancelling any Settlement Reallocation Agreement, or rejecting any Settlement Reallocation Request, to which the relevant Party is a party; or
5. requesting the Regulatory Authorities and System Operators or any other person to take such measures as the Market Operator, acting reasonably, decides are appropriate to give effect to the Suspension Order.

2.223 The Market Operator shall remove the Suspension Order if the relevant Party remedies the Default giving rise to the Suspension Order, or the circumstances giving rise to the Suspension Order no longer apply.

2.224 Where any Suspension Order is removed by the Market Operator, the Market Operator shall notify this to the Regulatory Authorities, the System Operators and the relevant Distribution System Operators where appropriate and shall publish a notice that the Suspension Order has been lifted.

2.225 The Party that has registered the Units to which a Suspension Order applies must comply with the Suspension Order.

Termination and Deregistration

2.226 The Market Operator may with the prior written approval of the Regulatory Authorities issue a Termination Order where a Party is in breach of a Suspension Order, or has not remedied a Default or taken such action as required by the Market Operator within the timeframe specified in the Suspension Order.

Effect of Termination Order

2.227 Where the Market Operator issues a Termination Order, the Termination Order shall specify the time and date from which the Termination or Deregistration will take effect and the terms of the Termination or Deregistration.

2.228 Intentionally blank

2.229 Where the Market Operator issues a Termination Order, the Market Operator shall at the same time send a copy of the Termination Order to the Regulatory Authorities, the System Operators and the relevant Distribution System Operators and shall publish the Termination Order in accordance with the Code.

Voluntary Termination

2.230 Subject to paragraph 2.231 below, a Party may apply at any time to cease to be a Party.

2.231 A Party shall give at least 90 Working Days notice in writing to the Market Operator (with a copy to the System Operators and the Regulatory Authorities) of its intention to cease being a Party and shall specify the time and date upon which it wishes the Termination to take effect..

2.231A Voluntary Termination shall have the effect of Deregistration of all of a Party's Units.

2.232 Following receipt of a request for Voluntary Termination, the Market Operator shall issue a Voluntary Termination Consent Order if the relevant Party has complied with the following conditions:

1. all amounts due and payable by the relevant Party pursuant to the Code have been paid in full;
2. any outstanding Default by the relevant Party of the Code which is capable of remedy has been remedied;
3. the written consent of the Regulatory Authorities has been obtained; and
4. if the Party has registered Supplier Units, the terms of any applicable Metering Code have been complied with in relation to the Deregistration or transfer of those Supplier Units

2.232A The Voluntary Termination shall take effect on and from the date specified by the Market Operator in the Voluntary Termination Consent Order so long as, at that date, the relevant Party remains in compliance with the conditions set out in paragraph 2.232.

2.233 The Market Operator, the System Operators, the Transmission Asset Owners, the Distribution System Operators and the Transmission System Operators and the Meter Data Providers shall not be permitted to terminate their participation in the Single Electricity Market except where so required by the Regulatory Authorities.

Consequences of Termination

2.234 When a Party is Terminated, then:

1. the Party must stop all trading in the Pool at the time and date specified in the Termination Order or the Termination Consent Order; and
2. the Party must maintain any applicable Required Credit Cover for a period of 14 months after the Termination Date or the Voluntary Termination Date as applicable.

2.235 Any Termination of any Party will not affect the accrued rights or obligations of any Party which arose out of or which relate to any act or omission prior to the date of such Termination ("Relevant Date") and including:

1. payment of any amount which was or becomes payable under the Code in respect of any period before the Relevant Date (including in relation to any material dispute regarding an event before the Relevant

Date even if the Notice of Dispute is given after that Relevant Date); and

2. any outstanding breach by it of the Code or Framework Agreement.

2.236 A Party shall continue to be liable after its Termination in respect of any obligation under the Code for a period of 7 years or any longer period specified under any Applicable Law.

2.237 Any provisions of this Code which expressly or by implication are intended to commence or continue in effect on or after Termination of a Party shall continue to bind a Terminated Party.

2.238 For the avoidance of doubt, a Terminated Party shall continue to be bound by the Dispute Resolution Process in respect of any Disputes arising following its Termination.

2.238A Following a Termination, the relevant Party shall maintain any applicable Required Credit Cover for a period of 14 months after the Termination.

Consequences of Deregistration

2.238B Where any of a Participant's Units are Deregistered in accordance with the provisions of this Code, whether voluntarily or otherwise:

1. the Participant must stop all trading in the Pool in respect of the relevant Units at the time and date specified in the Termination Order or the date specified in the Deregistration Consent Order; and

2. the Participant must maintain any applicable Required Credit Cover in respect of the relevant Units for a period of 14 months after the Termination Date or the date specified in the Deregistration Consent Order.

DISPUTE RESOLUTION

Preliminaries

2.239 A "Dispute" means any claim, dispute or difference of whatever nature between any of the Parties howsoever arising under, out of or in relation to the Code or the Framework Agreement in respect of which (i) one Party has served a Notice of Dispute; or (ii) a Notice of Dispute is deemed to have been served under paragraph 2.248. A Dispute includes any Settlement Dispute.

2.240 A Notice of Dispute may be served on any number of Parties. Where the Market Operator reasonably determines that the resolution of a Disputed Event will impact a third Party who has not been served a Notice of Dispute, the Market Operator will inform that third Party of the existence, nature and progress of the Dispute, while maintaining the confidentiality of the Disputing Parties.

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2.243 Subject to the rules concerning the commencement of Settlement Disputes set out in paragraph 2.248, a Dispute is deemed to exist when one Party notifies another Party or Parties in writing of the Dispute by way of a Dispute

Notice within 28 days of that Party having become aware of the Disputed Event and in any event within 2 years of the Disputed Event having occurred.

2.244 The Notice of Dispute shall briefly set out the nature of the Dispute (including the Disputed Event(s)) and the issues involved. A copy of the Notice of Dispute shall be sent to the Market Operator and, where the Market Operator is a party to the Dispute, to the Regulatory Authorities.

2.245 Intentionally blank

2.246 The provisions set out in this Dispute Resolution Process shall not prejudice or restrict the Market Operator's entitlement to seek interim or interlocutory relief directly from the appropriate Court or Courts with jurisdiction pursuant to paragraph 2.2.

2.247 The obligations of the Parties under the Code (including payment of any invoice amounts by the Invoice Due Date) shall not be affected by reason of the existence of a Dispute, save for as provided for in any determination of the DRB or a Court.

Settlement Disputes

2.248 In the event that the Market Operator does not resolve a Settlement Query within the timeframes set out in paragraph 6.62, or does not resolve a Data Query within the Data Verification Period in accordance with paragraph 6.50, the Settlement Query or Data Query, as appropriate, shall automatically become a Settlement Dispute and the Notice of Dispute shall be deemed to have been issued on the date on which the Market Operator was required to issue its determination in respect of the Settlement Query or Data Query.

2.249 Subject to the determination of a Court, the Market Operator shall be liable for all costs in connection with a Settlement Dispute arising by operation of paragraph 2.248.

2.250 In the event that a Party is dissatisfied with the Market Operator's determination in respect of a Settlement Query or Data Query, the Party that raised the Settlement Query or Data Query may raise a Dispute by issuing a Notice of Dispute to the Market Operator within 5 Working Days of receipt of the Market Operator's determination.

2.251 A matter which is described as a Settlement Query or Data Query under Section 6 shall not be raised as a Dispute save in accordance with paragraph 2.248 or 2.250.

Objectives of the Dispute Resolution Process

2.252 It is intended that the Dispute Resolution Process set out in or implemented in compliance with the Code and described in detail in the following paragraphs should to the extent possible:

1. be simple, quick and inexpensive;
2. preserve or enhance the relationship between the Disputing Parties;
3. resolve and allow for the continuing and proper operation of the Code and the Pool having regard to the Objectives of the Code;
4. resolve Disputes on an equitable basis in accordance with the provisions of the Code having regard to the Objectives of the Code;

5. take account of the skills and knowledge that are required for the relevant procedure; and

6. encourage resolution of Disputes without formal legal representation or reliance on legal procedures.

Dispute Resolution Board

2.253 Where a Notice of Dispute has been served in accordance with paragraph 2.243,2.248, or 2.250 a representative of each of the Disputing Parties, each with authority to resolve the Dispute, must meet within 10 Working Days of the date of the Notice of Dispute to seek in good faith to resolve the Dispute. The Disputing Parties shall negotiate in good faith and attempt to agree a resolution.

2.254 If the Disputing Parties are unable to reach agreement within a further period of 10 Working Days of meeting in accordance with paragraph 2.253, the Dispute may within a further period of 20 Working Days be referred by any Disputing Party to a Dispute Resolution Board ("DRB") by way of notice in writing to the other Disputing Party or Parties ("Referral Notice") unless expressly provided otherwise in the Code. The Disputing Party shall immediately send a copy of the Referral Notice to the Market Operator (or to the Regulatory Authorities where the Market Operator is a Disputing Party), and the Market Operator shall forward the Referral Notice to the chairperson of the Panel referred to in paragraph 2.257. The Referral Notice shall state that it is given under this section and identify the relevant Dispute and Notice of Dispute.

2.255 The Disputing Parties may mutually agree in writing with the written consent of the Market Operator (or the Regulatory Authorities where the Market Operator is a Disputing Party) to extend the period for negotiation or any other time period set out in the Dispute Resolution Process.

2.256 Referral of a Dispute to a DRB in accordance with the Dispute Resolution Process and compliance with the provisions set out herein is a pre-condition to the entitlement to refer a Dispute to Court.

2.257 The DRB shall be comprised of either a sole member or three members and shall be appointed from a panel of available DRB members established and maintained by the Market Operator with the prior approval of the Regulatory Authorities ("the Panel").

2.258 The Panel shall consist of no less than 10 members at all times. The Regulatory Authorities shall from time to time nominate a member of the Panel to act as chairperson of the Panel. The identity of the members of the Panel and the chairperson shall be published by the Market Operator. The chairperson shall be responsible for nominating the member(s) of the DRB if the parties to a Dispute fail to agree on the composition of the DRB from the members of the Panel. The members of the DRB so appointed shall be independent of any Disputing Party of any dispute on which they shall be called to deliberate. The Regulatory Authorities shall appoint a replacement chairperson immediately on the position of chairperson being vacated on a permanent basis for any reason.

2.259 The chairperson shall nominate a vice-chairperson from time to time to perform the chairperson's function in the event of the latter's unavailability. The Market Operator shall with the prior approval of the Regulatory

Authorities nominate further members to the Panel from time to time as may be necessary to fill any vacancies and to maintain the membership of the panel at 10 members. Subject to paragraph 2.260, there shall be no restriction on the ability or entitlement of the chairperson or vice-chairperson to act as a member of a DRB by virtue of holding those positions.

2.260 The Panel shall include suitably qualified experts from relevant disciplines who:

1. are experienced in and familiar with alternative dispute resolution procedures which do not involve litigation; and/or
2. have an understanding of the electricity industry or have the ability quickly to acquire such an understanding.

2.261 Intentionally blank

2.262 Where there are no more than two Disputing Parties, the Disputing Parties may agree within 10 Working Days of date of receipt by the Receiving Party of the Referral Notice to establish a sole member DRB or a three member DRB. If the Disputing Parties to a Dispute agree to establish a sole member DRB, they shall agree to appoint the sole DRB member within a further 5 Working Days. If the Disputing Parties agree on a three member DRB, then each Disputing Party will within a further period of 5 Working Days nominate one member of the Panel to the DRB and the two members so appointed will appoint the third member.

2.263 In the event the Disputing Parties do not within the relevant period agree on:

1. the number of members of the DRB then the chairperson of the Panel will within a further period of 10 Working Days of a request by any or all of the Disputing Parties determine the number of members of the DRB and appoint the appropriate number from the Panel; or
2. if having agreed a sole member DRB, the identity of the sole member then the chairperson of the Panel will within a further period of 10 Working Days of a request by any or all of the Disputing Parties appoint the sole member from the Panel.

then, the chairperson of the Panel will within a further period of 10 Working Days of a request by any or all of the Disputing Parties determine the number of members of the DRB and appoint the appropriate number from the Panel or, in the case of the appointment of a sole member DRB, appoint the sole member from the Panel. In making any such determination and appointment, the chairperson will take account of the complexity of the Dispute as set out in the Dispute Notice and the range of issues which may be relevant.

2.264 In the event that the Disputing Parties agree upon a three member DRB but a Disputing Party concerned fails to make a nomination from the Panel then the chairperson, upon notification of the failure, shall make the necessary nomination from the Panel within 10 Working Days of notification that there has been a failure by one Disputing Party to make a nomination.

2.265 Where there are more than two Disputing Parties to any Dispute then the DRB shall be appointed by the chairperson unless all Disputing Parties have, within 10 Working Days of the date of receipt by the counter-Parties of the Referral Notice, agreed the composition of the DRB both as to the

number of members which shall be either one or three and as to the identity of member(s) to be selected from the Panel. On notification that the 10 Working Day period has expired without such agreement, the chairperson shall (a) determine whether a sole member or three member DRB is appropriate and; (b) appoint the member or members of the DRB from the Panel, and shall notify the Disputing Parties. In making any such determination and appointment, the chairperson will take account of the complexity of the Dispute as set out in the Notice of Dispute and the range of issues which may be relevant.

2.266 The agreement between the Disputing Parties and either the sole member DRB or each of the three members of a three member DRB shall incorporate by reference the Dispute Resolution Agreement contained in Appendix O to the Code, with such amendments as are agreed between them.

2.267 Each Disputing Party shall be responsible for paying a proportionate and equal share of the remuneration of the DRB in respect of the Dispute involving them. Each Party to the DRB procedure shall bear its own costs of the procedure.

2.268 Without prejudice to paragraph 2.267, the DRB may make a decision as to costs in any Dispute which shall be binding on the Disputing Parties.

2.269 In the event any member of a DRB declines to act or is unable to act as a result of death, disability, incapacity, resignation or termination of appointment, the chairperson of the Panel or, where the chairperson of the Panel is the member affected, the vice-chairperson of the Panel shall appoint a replacement within 5 Working Days of notification of the relevant event. Such appointment shall be final and binding.

2.270 The appointment of any member of the DRB may be terminated by unanimous agreement of the Disputing Parties. Should this occur, paragraph 2.269 shall apply.

2.271 Disputing Parties shall continue to perform all of their obligations and functions as required by the Code including, for the avoidance of doubt, fulfilling any payment obligations as payment falls due.

Obtaining the DRB's Decision

2.272 For the purpose of paragraph 2.254, a Dispute is deemed to be referred to the DRB as of the date of the receipt of the Referral Notice by the Market Operator.

2.273 Disputing Parties shall promptly make available to the DRB all such additional information as they consider appropriate or as the DRB may require for the purposes of making a decision on such Dispute. The DRB may request any information it considers relevant.

2.274 The DRB shall be entitled to determine the applicable procedure including the manner and the timing of any written submissions and any oral hearings. In determining the applicable procedure, the DRB shall have regard to the considerations set out in paragraph 2.252 above and to the Code Objectives as well as the number of Disputing Parties. The DRB shall not act as arbitrator(s).

2.275 The DRB shall give its decision within (i) 30 Working Days after the appointment of the DRB where there are no more than two Disputing Parties; (ii) 40 Working Days after the appointment of the DRB where there

are more than two Disputing Parties; or (iii) such other period as may be proposed by the DRB and approved by the Disputing Parties. Such decision shall be in writing and give reasons, state that it is given under this paragraph 2.275 and be consistent with the Code. The decision shall be binding on all Disputing Parties, who shall promptly give effect to it unless and until it shall be revised in an amicable settlement pursuant to paragraph 2.279. The Parties shall continue to proceed to comply with the Code in all respects.

2.276 If any Disputing Party is dissatisfied with the DRB's decision, then that Party may, within 15 Working Days after receiving the decision, give notice to the other Disputing Party or Parties and the DRB in writing of its dissatisfaction. If the DRB fails to give its decision within the relevant period set out in paragraph 2.275, then any Disputing Party may, within 15 Working Days after such period has expired, give notice to the other Disputing Party or Parties and the DRB in writing of its dissatisfaction.

2.277 A notice of dissatisfaction referred to in paragraph 2.276 shall state that it is given under paragraph 2.276, shall set out the Dispute and the reason(s) for dissatisfaction. Except as stated in paragraph 2.282, no Disputing Party shall be entitled to commence any Court proceedings of whatever nature in relation to or in connection with a Dispute unless a notice of dissatisfaction has been given in accordance with paragraph 2.276.

2.278 If the DRB has given its decision on a Dispute to the Disputing Parties and no notice of dissatisfaction has been given by any Disputing Party within 15 Working Days after the date of the DRB's decision, then the decision shall be final and binding upon all Disputing Parties.

Amicable Dispute Settlement

2.279 Where notice of dissatisfaction has been given under paragraph 2.276 above, the Disputing Parties shall attempt to settle the dispute amicably before the commencement of any court proceedings may take place. However, unless both Parties agree otherwise Court proceedings may be commenced on or after the twenty first Working Day after the day on which notice of dissatisfaction was given, even if no attempt at amicable settlement has been made.

Court Proceedings

2.280 Unless settled amicably, any Dispute in respect of which the DRB's decision (if any) has not become final and binding may only be finally settled by Court proceedings.

2.281 A Disputing Party may, in the proceedings before any Court having jurisdiction, adduce evidence or raise arguments not previously put before the DRB in the course of its consideration of the Dispute or included in the notice of dissatisfaction given by that Party. Any decision of the DRB shall be admissible as evidence in any Court proceedings.

Failure to Comply with DRB's Decision

2.282 In the event that:

1. no Disputing Party has given notice of dissatisfaction within the period stated in paragraph 2.276; and
2. the DRB's related decision (if any) has become final and binding; and

3. a Disputing Party fails to comply with this decision,

then any other Disputing Party may take such action as it deems necessary, including the commencement of court proceedings, to enforce the relevant DRB Decision. There shall be no mandatory reference to the Dispute Resolution Board or requirement to refer the matter to amicable settlement in respect of such a reference.

SUPPLIER OF LAST RESORT

2.281A The Market Operator shall take steps to ensure that in the event of the Suspension of any Supplier Unit, all demand sites, final customers or consumers represented within each such Supplier Unit will be treated as registered to the Supplier of Last Resort for the Jurisdiction in which that Unit is connected, with effect from the date of Suspension of the relevant Unit.

2.281B Where, by operation of 2.282A, demand sites, final customers or consumers represented within more than one of a Party's Units, all of which are connected in a single Jurisdiction, are treated as registered to the Supplier of Last Resort for that Jurisdiction, the demand of all such persons shall be incorporated within a single Unit that is treated as registered by the Supplier of Last Resort.

LIMITATION OF LIABILITY

2.283 No Party shall be liable to any other Party for loss arising from any breach of the Code or the Framework Agreement other than for loss resulting directly from such breach (but without prejudice to any other provision of the Code which excludes or limits liability in respect of any breach for loss directly resulting from such breach) and which was reasonably foreseeable as not unlikely to occur in the ordinary course of events from such breach in respect of:

1. physical damage to the property of any other Party or its officers, employees, or agents; and/or
2. the liability (in law) of any other such Party to any other person for loss in respect of physical damage to the property of such other person.

2.284 Intentionally blank.

2.284A Intentionally blank.

2.285 No Party shall in any circumstances be liable to any other Party in respect of any Default for:

1. loss of profits, loss of income, loss of contract, loss of anticipated savings, loss of investment return, loss of goodwill, loss of use, or loss of reputation; or
2. any indirect or consequential loss or any incidental or special damages (including punitive damages); or
3. loss resulting from the liability of any other Party to any other person howsoever and whensoever arising save as provided in paragraph 2.284.2 and 2.286.

2.286 The limitations of liability set out in the preceding paragraphs are without prejudice to any provision of the Code which provides for an indemnity, or which provides for any Party to make a payment to another.

2.287 Nothing in the Code or the Framework shall limit or exclude the liability of any Party for death or personal injury or fraudulent misrepresentation resulting from the negligence of such Party or any other liability which cannot be limited or excluded under Applicable Laws.

2.288 All terms, conditions, warranties and representations implied pursuant to Sections 13 to 15 of the Sale of Goods Act, 1893 and Section 39 of the Sale of Goods and Supply of Services Act, 1980 (Ireland) and Sections 13 to 15 of the Supply of Goods Act, 1979 (United Kingdom) and Sections 2 to 5 and 7 to 10 of the Supply of Goods and Services Act, 1982 (United Kingdom) are excluded to the fullest extent permitted by law.

2.289 Intentionally blank.

2.290 The rights and remedies of the Parties pursuant to the Code and the Framework Agreement as set out therein are, save as expressly provided otherwise, cumulative and are in exclusion of all other substantive (but not procedural) rights or remedies express or implied whether provided by common law, statute, tort, in equity or otherwise by law. Without prejudice to the foregoing and paragraph 2.302 (Waiver), each Party to the fullest extent permitted by law:

1. waives any rights or remedies; and
2. releases each other Party from any duties, liabilities, responsibilities or obligations

arising or provided by common law, statute, tort, in equity or otherwise by law in respect of the Code.

2.291 Without prejudice to the preceding paragraph 2.290, where any provision of the Code or decision of the DRB provides for any amount to be payable by a Party upon or in respect of that Party's Default, each Party agrees and acknowledges that the remedy conferred by such provision or decision is exclusive of and is in substitution for any remedy in damages in respect of such Default or the event or circumstance giving rise thereto.

2.292 Nothing in this Code relating to limitation on liability shall prevent or restrict any Party from enforcing any obligation owed to it under or pursuant to the Code in accordance with the provisions of the Code and subject to such limitation on liability.

2.293 Save as expressly provided otherwise in the Code, nothing in paragraphs 2.283 to 2.290 shall apply to or restrict the exercise or enforcement of any rights or remedies which one Party may have against another Party or person pursuant to any other agreement besides the Code and the Framework Agreement.

2.294 For the purposes of paragraphs 2.283, 2.284 and 2.287, references to a "Party" includes any of its Participants, officers, employees or agents, and each Party shall hold the benefit of those paragraphs for itself and as trustee and agent for its officers, employees and agents.

2.295 Intentionally blank.

2.296 Each of paragraphs 2.283 to 2.294 shall be construed as a separate and severable contract term, and shall remain in full force and effect and shall

continue to bind the Parties even if a Party ceases to be a Party to the Code or the Code is terminated.

FORCE MAJEURE

2.297 For the purposes of this Code, "Force Majeure" means any event beyond the reasonable control of the Affected Party and which could not have been reasonably prevented or the consequences of which could not have been prevented by Prudent Electric Utility Practice and which is not due to the act, error, omission, breach, default or negligence of the Affected Party, its employees, agents or contractors and which has the effect of preventing the Affected Party from complying with its obligations under this Code, and including, without limitation:

1. acts of terrorism;
2. war (declared or undeclared), blockade, revolution, riot, insurrection, civil commotion, invasion or armed conflict;
3. sabotage or acts of vandalism or criminal damage;
4. natural disasters and phenomena, including extreme weather or environmental conditions, fire, meteorites, the occurrence of pressure waves caused by aircraft or other aerial devices travelling at supersonic speeds, impact by aircraft, volcanic eruption, explosion, including nuclear explosion, radioactive or chemical contamination or ionising radiation;
5. nationwide or industry wide strikes, lockouts or other industrial actions or labour disputes provided that such occurrence is not limited to the Affected Party and/or its suppliers, contractors, agents or employees;
6. the enactment, making, or coming into effect of any Legal Requirement;

or other events beyond the Affected Party's reasonable control and which could not be reasonably be expected to comply with in accordance with Prudent Electric Utility Practice provided that Force Majeure shall not include:

7. any inability (however caused) of an Affected Party to pay any amounts owing under the Code and/or a lack of funds or Credit Cover;
8. mechanical or electrical breakdown or failure of machinery, plant or systems owned or operated by a Party

other than where such events arise as a result of the circumstances in sub-paragraphs 1-6 above.

2.298 Subject to the following paragraphs 2.299 to 2.301, when an Affected Party is rendered wholly or partially unable to perform all or any of its obligations under the Code by reason of Force Majeure, the Affected Party's relevant obligations under this Code shall be suspended and the Affected Party shall be relieved from liability in respect of such obligations provided that such liability and suspension shall be of no greater scope and of no longer duration than is required by the Force Majeure.

2.299 In the event of the Affected Party being unable to perform all or any of its obligations under this Code by reason of Force Majeure:

1. the Affected Party shall notify the Market Operator of the circumstances of Force Majeure, identifying the nature of the event, its

expected duration and the particular obligation(s) affected to enable the Market Operator to assess whether Force Majeure applies;

2. if the Market Operator finds that the conditions in paragraph 2.97 are satisfied, it shall notify all Parties that the Affected Party is subject to Force Majeure;

3. the Affected Party shall furnish reports at such intervals as the Market Operator may reasonably request in respect of the circumstance of Force Majeure during the period of Force Majeure;

4. no obligations of any Party that arose before the Force Majeure and which can reasonably be expected to be performed are excused as a result of Force Majeure;

5. on the occurrence of the Force Majeure, the Affected Party shall consult with the Market Operator as to how best to give effect to the obligations of the Affected Party under this Code so far as is reasonably practicable during the period of Force Majeure;

6. the Affected Party shall use all reasonable efforts to remedy and mitigate the consequences of any Force Majeure to enable it to resume full performance of its obligations under the Code insofar as such is practicable during any Force Majeure; and

7. the Affected Party shall resume full performance of its obligations under the Code on cessation of any Force Majeure and shall provide the Market Operator with written notice to that effect without delay.

2.300 The Affected Party shall be relieved from liability only for so long as and to the extent that the occurrence of Force Majeure and/or the effects of such occurrence could not be overcome by measures which the Affected Party might reasonably be expected to take as a Prudent Industry Operator with a view to continuing or resuming performance of its obligations as appropriate. Notwithstanding the foregoing, Force Majeure shall not relieve any Affected Party from any liability to make any payments due under the Code save to the extent that any failure to pay is caused by Force Majeure affecting all reasonable means of payment in which event on the cessation of the Force Majeure event, the Affected Party shall pay Interest on any amounts due from the Payment Due Date to the actual date of payment.

2.301 Where the any of the Market Operator is affected by Force Majeure, the Market Operator shall immediately inform the Regulatory Authorities of such. Where the Market Operator is affected by an event of Force Majeure:

1. no obligations of any Party that arose before the Force Majeure and which can reasonably be expected to be performed are excused as a result of Force Majeure;

2. the Market Operator in consultation with, and where required by, the Regulatory Authorities, shall do all acts to mitigate the consequences of the Force Majeure to enable it to resume the full performance of its functions and obligations under the Code;

3. the Market Operator shall resume full performance of its obligations under the Code on cessation of any Force Majeure and shall inform the Regulatory Authorities of this; and

4. the Market Operator shall be relieved of its obligations only for so long as and to the extent that the occurrence of the Force Majeure and/or

its effects could not be overcome by measures which the Market Operator might reasonably be expected to take acting prudently with a view to continuing or resuming performance of its obligations as appropriate.

2.302 No failure to exercise, nor any delay in exercising, on the part of any Party hereto any right or remedy under the Code or the Framework Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy prevent any further or other exercise thereof or the exercise of any other right or remedy under the Code or the Framework Agreement.

SEVERANCE

2.303 Each of the provisions of the Code and the Framework Agreement is severable. If at any time any provision or part of a provision of the Code or the Framework Agreement is or becomes illegal, invalid or unenforceable in any respect for the purposes of any Applicable Law or by the decision of any Competent Authority, the legality, validity or enforceability of the remaining provisions (in whole or in part) of the Code or the Framework Agreement shall not in any way be affected or impaired thereby.

THIRD PARTY BENEFICIARIES

2.304 Subject to paragraph 2.305, a person who is not a Party shall not have the right (whether under the Contracts (Rights of Third Parties) Act 1999, or otherwise) to enforce any provision of the Code or the Framework Agreement, and the Code and the Framework Agreement shall not be construed as granting rights to or creating any duty to, or standard of care with reference to, or any liability to, any person who is not a Party.

2.305 Where rights are granted to the Regulatory Authorities or the Market Auditor pursuant to the Code or the Framework Agreement, the Parties confirm and acknowledge that the Regulatory Authorities, or the Market Operator, as applicable, shall be entitled to enforce the rights granted to them under the Code as against any other party to the Code by virtue of the contracts (Rights of Third Parties) Act, 1999.

2.305A Subject to any express rights which the Regulatory Authorities have under the Code and to any rights, powers or functions of the Regulatory Authorities under Applicable Laws, where a person who is not a party to the Code has a right to enforce any provisions of the Code pursuant to paragraph 2.305, the Parties may vary or terminate the Code in accordance with its provisions and without requiring the consent of that person.

2.306 Except where expressly provided, the Code and the Framework Agreement shall not be interpreted or construed as creating an association, agency, joint venture or partnership between the Parties and nothing in the Code or the Framework Agreement shall give any Party the right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or to be an agent or representative of, or otherwise to bind, any other Party.

ASSIGNMENT

2.307 Except with the prior written consent of the Regulatory Authorities, or as otherwise expressly provided herein, a Party shall not assign or transfer or purport to assign or transfer all or any of its rights or obligations under the

Code or the Framework Agreement. Any request to assign or transfer any or all of a Party's rights under the Code or the Framework Agreement shall be notified to the Market Operator and shall be subject to the consent of the Regulatory Authorities. In giving consent under this paragraph, the Regulatory Authorities may impose such conditions as they determine are necessary for the purposes of the proper functioning of the Pool.

2.308 A Party may authorise a Data Processing Entity to submit Data in respect of one or more of its Units as provided for in Section 3, provided that each Party shall always remain liable at all times for fulfilling its obligations under the Code.

2.309 Save as expressly provided herein, a Participant may not subcontract its rights or obligations under the Code.

ENTIRE AGREEMENT

2.310 The Code and the Framework Agreement together constitute the whole and only agreement between the Parties relating to the subject matter hereof and supersede all prior representations, arrangements, understandings and agreements between the Parties (whether written or oral) relating to the subject matter hereof. Each Party warrants to the others that, in entering into this Agreement, it has not relied on any representation, arrangement, warranty, understanding, or agreement not expressly laid out or referred to in the Code or the Framework Agreement. Nothing in this pragarph shall operate so as limit or exclude any liability of any one of the Parties to any other Party in respect of fraduelent misrepresentation

PUBLICATION OF THE CODE

2.311 The Market Operator shall at all times publish the current, effective version of the Code. The published version of the Code shall be amended to reflect any Modifications as soon as such Modifications take effect. The date of publication of the complete amended version of the Code shall not affect the date of coming into effect of the relevant Modification. The Market Operator shall also publish at all times a list of pending Modifications which have been approved (if any) but have not yet come into effect.

CONFIDENTIAL INFORMATION

2.312 Confidential Information means, in relation to any Party, information which is designated in writing by that Party as "confidential information", or which would be considered as being confidential by its nature, and which is disclosed in connection with the Code, the Framework Agreement or the disclosing Party's activities in connection with the Code provided that Confidential Information shall not include:

1. the existence of and terms of the Code or the Framework Agreement; and
2. Data Records or items which are at the relevant time required to be published in accordance with Appendix K.

2.313 For the purpose of this section, a "Recipient Party" is any Party which receives, acquires possession or control of, or otherwise becomes aware of Confidential Information of another Party. A "Disclosing Party" is any Party by whom the Confidential Information is disclosed.

2.314 Each Recipient Party shall keep confidential any Confidential Information relating to any Disclosing Party and shall:

1. use the Confidential Information only for the purpose of performing its obligations under the Code and for no other purpose whatsoever;
2. not at any time disclose, reveal, or otherwise disseminate the Confidential Information to any person or Party whatsoever or to permit any person or Party any form of access to the Confidential Information without the prior written consent of the Disclosing Party;
3. treat and safeguard as private and confidential all Confidential Information received at any time keeping it and treating it with the same care as any Prudent Industry Operator would be expected to exercise;
4. not use the Confidential Information, or permit or assist a third party to use the Confidential Information, to procure a commercial advantage over, or an advantage which is in any way likely to be prejudicial, whether directly or indirectly to, the Disclosing Party or to its business, goodwill or reputation;
5. not use the Confidential Information or permit or assist a third party to use the Confidential Information to attract management, employees, advisors, agents, representatives, consultants, contractors, sub-contractors or customers away from the Disclosing Party.

Exceptions

2.315 The obligations set out in paragraph 2.314 do not apply to:

1. information which at the time of disclosure to the Receiving Party is within the public domain;
2. information which comes into the public domain other than by reason of a breach of the Code or of any, Legal Requirement by the Recipient Party; or
3. information which was lawfully within the possession of the Recipient Party prior to its being furnished to it by or on behalf of the Disclosing Party as evidenced by the written records of the Recipient Party or the sworn evidence of an officer of the Recipient Party, provided that the source of such information was not bound by a confidentiality agreement or any other obligation of secrecy in respect thereof.

Permitted Disclosures

2.316 Nothing in paragraph 2.314 shall prevent the disclosure of Confidential Information by a Recipient Party:

1. to any lending or other financial institution proposing to provide or arrange the provision of finance or Credit Cover to the Recipient Party, where and to the extent that the disclosure of such Confidential Information is reasonably required for the purposes of the provision or arrangement of such finance or Credit Cover, and provided that the person to whom the Confidential Information is disclosed is bound by confidentiality provisions equivalent to those in paragraph 2.314;
2. as may be required by the regulations of any recognised stock exchange on which the share capital of the Recipient Party (or any

parent or affiliated undertaking of the Recipient Party) is or is proposed to be from time to time listed or dealt in, and the Recipient Party shall, if reasonably practicable prior to making the disclosure, and in any event as soon as reasonably practicable thereafter, supply the Disclosing Party with a copy of such disclosure or statement and details of the persons to whom the Confidential Information is to be, or has been, disclosed. Where a copy of such disclosure or statement has been supplied prior to making the disclosure, the Disclosing Party may give comments on that disclosure or statement to the Recipient Party;

3. as may be required to comply with Legal Requirements of the Recipient Party;

4. as may be necessary in relation to an application by any person for a connection to or use of the Transmission System or Distribution System in accordance with Section 34 of the Energy Regulation Act, 1999 in Ireland or with the Northern Ireland Grid Code or for use of an Interconnector Unit;

5. as may be required by the DRB or a Court having competent jurisdiction; or

6. as may be otherwise agreed in writing by the Disclosing Party prior to disclosure by the Recipient Party.

2.317 The confidentiality obligations set out in paragraphs 2.314 to 2.316 shall continue to apply to any Terminated Party in respect of Confidential Information which came into its possession while it was a Party.

FREEDOM OF INFORMATION ACTS

2.318 All Parties confirm and acknowledge that notwithstanding that any data submitted to the Market Operator, the System Operators and/or the Regulatory Authorities under this Code may be classified as Confidential Information, it may be subject to disclosure in accordance with the provisions of the Freedom of Information Act 1997 and 2003 (Ireland) and/or the Freedom of Information Act, 2000 (Northern Ireland) where applicable. All Parties shall be entitled to mark clearly that information which they consider to be a trade secret, commercially sensitive or confidential but acknowledge that this does not bind the Market Operator, any System Operator or the Regulatory Authorities nor guarantee that any such described information will not be subject to disclosure under the Freedom of Information Acts.

DATA PROTECTION

2.319 Intentionally blank

2.320 Without prejudice to the generality of any other provision of this Code, each Party shall comply with applicable requirements of Data Protection Legislation in respect of any Personal Data which it Processes in the course of its activities in connection with the Code. All Parties shall use their reasonable endeavours to enter into any contract necessary to legitimise the Processing of Personal Data under Data Protection Legislation.

2.321 Each Party (“Indemnifying Party”) shall indemnify each other Party and the Regulatory Authorities in respect of any loss or liability howsoever arising

incurred by that Party, or the Regulatory Authorities, as appropriate, as a result of a breach of preceding paragraph 2.320 by the Indemnifying Party.

NOTICES

2.322 Paragraphs 2.323 to 2.333 apply to Notices which shall, for the avoidance of doubt, include:

1. Default Notices;
2. Suspension Orders;
3. Termination Orders;
4. Dispute Notices (including Settlement Disputes) and the current status of each;
5. Referral Notices;
6. Emergency notifications;
7. Notices of Dissatisfaction;
8. Force Majeure Notice.

Notice to Other Parties

2.323 Any Notices required to be given for the purposes of the Code shall be given in writing unless otherwise specified in the Code.

2.324 Any Notice required to be given in writing may be in the form of a letter delivered by hand, or sent by pre-paid registered post (airmail if overseas), fax or email.

2.325 Notices in writing shall be addressed and sent to the receiving Party at the address, fax number or email address specified by the receiving Party for the purposes of the receipt of Notices under the Code or such other address, fax number or email address as the receiving Party may from time to time specify by notice given in writing in accordance with this Section to the Party giving the notice.

2.326 Notices shall be marked for the attention of the representative of the receiving Party specified for the purpose of receipt of Notices or such other person as may be notified by the receiving Party to the Sending Party in accordance with the provisions of this Section.

2.327 Any Notice given by fax or email shall be confirmed by forwarding a copy of the same by pre-paid registered post (airmail if overseas) provided that failure to receive such confirmation shall not prejudice effective receipt of the notice under the following paragraph 2.328.

2.328 Any Notice in writing shall be deemed to have been received:

1. in the case of delivery by hand, when delivered; or
2. in the case of prepaid registered post, on the second Working Day following the day of posting or, if sent from another jurisdiction other than Northern Ireland or Ireland, on the fifth Working Day following the day of posting; or
3. in the case of fax, at 5pm on the Working Day on which the Notice was sent as evidenced by a fax transmission report of the sending Party showing that the Notice has been transmitted; or

4. in the case of email when the email enters the receiving Party's IT system.

2.329 Each Party shall, on registration, specify at least one postal address, fax number, and email address and one representative for the service of Notices in writing and may amend such details by notifying the relevant Market Operator representative in writing.

2.330 A Party may specify different addresses (including email addresses) or fax numbers and representatives for the purposes of Notices of different kinds or relating to different matters.

Notice to the Regulatory Authorities

2.331 Any Notice to the Regulatory Authorities shall be in writing (which for the purposes of this paragraph shall not include email) and shall be addressed:

1. in respect of matters relating to a particular Unit or Participant, to the relevant Regulatory Authority at such address or number and marked for the attention of such person as that Regulatory Authority may publish; and

2. in respect of other matters, to each Regulatory Authority, or to such single address as may be published by the Regulatory Authorities for the purposes of the joint receipt of notifications under the SEM.

2.332 Notices to the Regulatory Authorities shall be effective upon actual receipt.

Market Operator Notices

2.333 Notices which are required to be published by the Market Operator shall be published on its website within any applicable timeframes set out in this Code.

3. DATA AND INFORMATION SYSTEMS

GENERAL

Introduction and Interpretation

3.1 This Section 3 sets out rules relating to the systems and procedures for the communication of Data Transactions by a Party to the Market Operator and by the Market Operator to one or more Parties and the rules and principles for the publication by the Market Operator of data relating to the trading arrangements in the Pool.

3.2 A Party (other than the Market Operator) may nominate an authorised Data Processing Entity, in accordance with Agreed Procedure 1 "Participant and Unit Registration and Deregistration", to do any or all of the following tasks for and on behalf of any of the Party's Participants: (i) submit Data Transactions; (ii) to raise Data Queries or Settlement Queries on Settlement Statements; or (iii) to view but not modify Unit data or Unit Settlement Statements.

3.2A A Data Processing Entity's Isolated Market Systems shall be required to comply with the requirements set out in the Code and to pass Communication Channel Qualification as described in the relevant provisions of Agreed Procedure 3 "Communication Channel Qualification". A Party shall at all times remain liable for performance of and compliance with the Code by its Data Processing Entity.

3.2B An obligation on a Party or Participant (except the Market Operator) in relation to the submission of Data Transactions shall, where that Party has nominated a Data Processing Entity, include an obligation to procure that it shall be done by the relevant Data Processing Entity.

3.2C Where the Code requires data forming part of a Data Transaction to be "submitted", it must be submitted in accordance with the applicable rules for submission of Data Transactions as set out in Section 3 and Appendices B to J.

3.2D Where the Market Operator is required to "issue", "submit" or "send" data to a Party, then unless otherwise specified, this requirement shall be met under Communication Channels 2 and 3 if the Market Operator sends the data to the relevant Party, or makes the data available in a manner which is accessible by the relevant Party and notifies the Party that the data is available.

DATA COMMUNICATION CHANNELS

Communication Channels Types

3.3 The Market Operator shall establish and maintain three distinct Communication Channels, as more particularly described in Agreed Procedure 3 "Communication Channel Qualification":

1. Type 1 Channel, meaning a channel for the sending and receipt of Data Transactions in writing by hand, by delivery or by fax ;
2. Type 2 Channel" meaning a channel for the sending of Data Transactions by either (i) the Sending Party manually providing the Data Transaction to the IT system of the Receiving Party, or (ii) the

Receiving Party manually obtaining the Data Transaction from the IT system of the Sending Party; and

3. Type 3 Channel meaning a channel for the sending of Data Transactions by automated communication from the IT system of the Sending Party to the IT system of the Receiving Party

3.4 Each Participant must designate, by Notice to the Market Operator, one or both of the Type 2 Channel and the Type 3 Channel for each of its Units.

3.5 Intentionally blank

3.6 Intentionally blank

3.7 Agreed Procedure 4 "Data Transaction Submission and Validation" sets out the specific rules relating to validation, authentication, non-repudiation and decimal place precision of Data Transactions.

Obligation of Parties to Maintain a Functional Interface to the Communication Channels

3.8 A Party or Participant must meet any requirements as specified pursuant to paragraph 2.30.2 to use a Communication Channel.

3.9 Subject to paragraph 3.11, a Participant must remain qualified for each Communication Channel which it designates for any of its Units in accordance with Agreed Procedure 3 "Communication Channel Qualification" for the duration of its participation in the Pool.

3.10 The Market Operator may temporarily suspend a Participant's use of a particular Channel either entirely, or for Data Transactions related to a specific Unit on a specific Channel, where the Market Operator reasonably determines, as provided for in Agreed Procedure 3 "Communication Channel Qualification", that the Participant's communications over that Channel materially fail to meet the standards in Agreed Procedure 3 "Communication Channel Qualification" or Agreed Procedure 5 "Data Storage and IT Security". In such an event, the Market Operator shall immediately contact the affected Participant to explain the reason for the suspension, and shall take steps with the Participant to resolve the issue.

3.11 A Party may apply to change its designated Communication Channel(s) for any of its Participants or Units in accordance with Agreed Procedure 1 "Participant and Unit Registration and Deregistration", provided that it continues to designate at least one of Type 2 Channel and Type 3 Channel for each Unit. No such change shall take effect without the Market Operator's prior written consent which shall not be unreasonably withheld or delayed.

3.12 The Market Operator shall provide technical and operational advice to Parties in relation to the Communication Channels and the interfaces to those Communication Channels. This is more particularly detailed in Agreed Procedure 11 "Market System Operation, Testing, Upgrading, and Support".

3.13 Intentionally blank

Obligation on Parties to Maintain IT Security

3.14 Parties shall ensure that their interfaces for Type 2 and Type 3 Channels shall comply with the IT security requirements set out or referenced in Agreed Procedure 5 "Data Storage and IT Security".

3.15 Intentionally blank.

Specific IT Security Obligations on the Market Operator

3.16 The Market Operator shall put in place and maintain procedures for the security of the Market Operator's entire Isolated Market System in accordance with Agreed Procedure 5 'Data Storage and IT Security'.

3.16A Notwithstanding the requirements of the Modifications Process, no document required to be published in connection with the process of modifying Agreed Procedure 5 'Data Storage and IT Security' shall contain a level of detail such that its publication could reasonably be expected to compromise the implemented security of the Market Operator's entire Isolated Market System.

Obligation on Parties during Testing and Upgrading of Isolated Market Systems and Communication Channels

3.17 The Market Operator shall co-ordinate and facilitate testing of the Market Operator's Isolated Market Systems and its interfaces to Communication Channels as described under Agreed Procedure 11 "Market System Operation, Testing, Upgrading, and Support".

3.18 The Market Operator shall provide reasonable prior notice to all affected Parties of any proposed testing, upgrading or down-time of the Market Operator's Isolated Market System or the Market Operator's interfaces to the Communication Channels.

3.19 The Market Operator shall, where practicable, schedule testing, upgrading or down-time of the Market Operator's Isolated Market System or its interfaces to the Communication Channels in consultation with Parties under Agreed Procedure 11 "Market System Operation, Testing, Upgrading, and Support". The Market Operator will endeavour to reasonably minimise the impact of the testing or down-time of the Market Operator's Isolated Market System on Parties. The Market Operator will ensure that the scheduled testing or down-time will not preclude Settlement and will not preclude Offers being submitted before Gate Closure for any Trading Day.

3.20 Despite paragraph 3.19, scheduled Market Operator Isolated Market System down-time will not constitute failure by the Market Operator to fulfil its obligations under the Code where:

1. the down-time is of reasonable duration, and
2. the procedure of notification under paragraph 3.18 was followed by the Market Operator.

3.21 All Parties shall facilitate the co-ordination of testing and upgrading of the Communication Channels and the Market Operator's Isolated Market Systems as and when requested by the Market Operator in connection with a proposed event of which notice has been given pursuant to paragraph 3.18.

3.22 Any Party proposing to undertake any such testing or upgrading work shall inform the Market Operator of this in advance. The Market Operator shall be entitled to issue instructions in relation to the undertaking of any such work for the purposes of the proper operation of the Pool, and the Party concerned shall comply with such instructions. Each Party shall ensure that any testing or upgrading of its own Isolated Market System is undertaken at a time and in a manner so as to minimise any adverse effect for any other

Party's Isolated Market System or the use by any other Party of any Communication Channel.

Data categories and Data Transactions

3.23 Intentionally blank

3.24 The requirements and procedures relating to Data Transactions are more particularly described in Appendices B-J and Agreed Procedure 4 "Data Transaction Submission and Validation".

3.25 For each Data Transaction, the Sending Party may assign it an identifier in accordance with Agreed Procedure 4 "Data Transaction Submission and Validation" that shall be stored by the Receiving Party to assist the Sending Party in identifying the Data Transaction.

3.26 For each Data Transaction for which the Market Operator is the Receiving Party, it shall assign it a unique identifier in accordance with Agreed Procedure 4 "Data Transaction Submission and Validation" and shall store such identifier to enable it to uniquely identify the Data Transaction.

3.27 In the event that a Data Transaction is wrong or defective, the Sending Party shall, after becoming aware of the error or defect, re-submit that Data Transaction within any applicable timelines.

3.28 On request by a Sending Party, the Market Operator shall, within the timelines provided for pursuant to Agreed Procedure 4 "Data Transaction Submission and Validation", identify, or shall facilitate identification by that Sending Party of, the Accepted data for that Party or any of its Units, for any particular Trading Period.

3.29 Intentionally blank

3.30 Intentionally blank

SUBMISSION, VALIDATION AND REJECTION OF CENTRAL MARKET SYSTEM DATA

3.31 Parties and Participants shall, where applicable, submit CMS Data Transactions in accordance with the Code.

3.32 Intentionally blank

3.33 Intentionally blank

3.34 Subject to paragraphs 3.58 to 3.75 (concerning Communication and System Failures), the Sending Party shall send a CMS Data Transaction using either the Type 2 Channel or Type 3 Channel.

3.35 A CMS Data Transaction shall be deemed to be received by the Market Operator when it enters the Market Operator's Isolated Market System via a valid, functioning Type 2 Channel or Type 3 Channel, or by such other means as permitted under paragraphs 3.58 to 3.75.

3.36 On receipt of a CMS Data Transaction, the Market Operator shall send a Confirmation Notice to the Sending Party using the same Communication Channel used by the Sending Party. The time of receipt and sufficient information to enable the Sending Party to identify the Data Transaction shall be set out in the Confirmation Notice.

3.37 If the Sending Party does not receive a Confirmation Notice within one minute, then:

1. for CMS Data Transactions in Appendix C (Commercial Offer Data or Technical Offer Data), the Sending Party may, but shall not be obliged to, contact the Market Operator by calling the Market Operator helpdesk as described subject to Agreed Procedure 7 “Emergency Communications”; or
2. for CMS Data Transactions in Appendices E (System Operator Data and Interconnector Administrator Data) or G (Metered Data), the Sending Party must contact the Market Operator by calling the Market Operator helpdesk as described in Agreed Procedure 7 “Emergency Communications”,

in order to establish whether or not its CMS Data Transaction has been received.

3.38 The Market Operator shall be under no obligation to pursue any Party that has not submitted any particular CMS Data Transaction and shall have no liability in respect of any CMS Data Transaction which it has not received under paragraph 3.35, or which contains defective or incorrect data.

3.39 The Market Operator shall in respect of each CMS Data Transaction received by it prior to the deadlines set out in Appendix C, E and G (as applicable), process the CMS Data Transaction to determine whether it is valid in accordance with Agreed Procedure 4 “Data Transaction Submission and Validation”. The Market Operator shall validate a Data Transaction if the conditions set out in Agreed Procedure 4 “Data Transaction Submission and Validation” are satisfied in respect of that Data Transaction and shall reject the Data Transaction if such conditions are not so satisfied.

3.40 Following the processing of a CMS Data Transaction under paragraph 3.39, the Market Operator shall send a Validation Notice or a Rejection Notice to the Sending Party using the same Communication Channel as that used by the Sending Party to send the Data Transaction and in accordance with Agreed Procedure 4 “Data Transaction Submission and Validation”. The Market Operator shall specify in any Rejection Notice the reasons for the Rejection.

3.41 The Market Operator may send both a Confirmation Notice and a Validation Notice or Rejection Notice in respect of a CMS Data Transaction in a single communication provided that it satisfies the timelines provided for pursuant to Agreed Procedure 4 “Data Transaction Submission and Validation” for issuance of each of the Confirmation Notice and the Validation Notice or Rejection Notice.

3.41A If a Sending Party receives a Confirmation Notice but does not receive a Validation or Rejection Notice within the timeline provided for pursuant to Agreed Procedure 4 “Data Transaction Submission and Validation” then:

1. for CMS Data Transactions subject to Appendix C (Commercial Offer Data or Technical Offer Data), the Sending Party may, but shall not be obliged to, contact the Market Operator by calling the Market Operator helpdesk as described in Agreed Procedure 7 “Emergency Communications”; and
2. for CMS Data Transactions subject to Appendices E (System Operator Data) or G (Metered Data), the Sending Party must contact the Market

Operator by calling the Market Operator helpdesk as described in Agreed Procedure 7

in order to establish whether the Party's CMS Data Transaction has been Validated or Rejected.

3.42 Save as expressly provided otherwise, for each Participant, Unit and Trading Period, and each relevant category of CMS Data Transaction, the Market Operator shall be obliged to use, for all purposes set out in the Code, only the most recently received CMS Data Transaction of that category that has been Validated.

3.42A The Market Operator shall use a CMS Data Transaction as required by paragraph 3.42 regardless of whether or not it has issued a Confirmation Notice or Validation Notice to the Sending Party in respect of that CMS Data Transaction, or whether that CMS Data Transaction was validated prior to or following Gate Closure for the relevant Trading Day.

3.43 Where two or more Data Transactions are received contemporaneously, the Market Operator may use the procedures provided for in Agreed Procedure 4 "Data Submission and Validation" to determine the deemed order of receipt of the Data Transactions.

3.44 Intentionally blank

3.45 Notwithstanding paragraph 3.42, the Market Operator shall not use, for any purpose set out in the Code, any CMS Data Transaction specified in Appendix C (Commercial Offer Data or Technical Offer Data) that is received by the Market Operator after Gate Closure for the Trading Day to which such CMS Data Transaction relates.

3.46 Intentionally blank

3.47 Intentionally blank

CMS DATA TRANSACTION DEFAULT OFFER PROCESSES AND MARKET PROCEDURES

Updating and Use of Default Data

3.48 Parties shall review and update the Default Data provided as part of the registration process regularly, and at least once per quarter, to seek to ensure that the Default Data for each of the Party's Participants reflects the average operational marginal costs and capabilities of the each of the Participant's Units.

3.49 If for a particular Participant, Unit and Trading Period, in relation to any one of the CMS Data Transactions listed in Appendix C (Commercial Offer Data or Technical Offer Data), either:

1. no CMS Data Transaction has been received by the Market Operator by Gate Closure for that Trading Day, or, in the event of a General Communication Failure or General System Failure, such later time as permitted under Agreed Procedure 7; or
2. none of the CMS Data Transactions received prior to Gate Closure for that Trading Day, or, in the event of a Limited Communication Failure, General Communication Failure or General System Failure, such later time as permitted under Agreed Procedure 7, meets the requirements to be Validated by the Market Operator,

then the Market Operator shall use the relevant Default Data for all purposes set out in the Code in respect of that Participant, Unit and Trading Day.

3.50 Intentionally blank

3.51 Intentionally blank

3.52 Intentionally blank

3.53 Intentionally blank

Market Operator Queries of Submitted Validated Data

3.53A The Market Operator may at any time query Commercial Offer Data or Technical Offer Data (such data to be referred to as "Queried Data" for the purposes of this paragraph 3.53a and paragraph 3.53B) it has received from a Party if the Data Record and field-level values in that CMS Data Transaction appear pursuant to Prudent Electric Utility Practice to be materially incorrect, or the Market Operator reasonably expects that such values as submitted will cause the EPUS Software to fail to solve. This discretion of the Market Operator does not in any way diminish the responsibility of each Party to submit complete accurate and up-to-date data.

3.53B If the Market Operator raises a query pursuant to paragraph 3.53A after Gate Closure for the relevant Trading Day and the Sending Party agrees that the Queried Data was erroneous, the Market Operator shall use the default Commercial Offer Data or default Technical Offer Data, as appropriate, for the relevant Unit for that Trading Day. If the Sending party does not agree, the Market Operator shall use the Queried Data.

System Operator Market Data Transactions, Interconnector, Administrator Transactions and Meter Data Transactions

3.54 The Market Operator shall not estimate or substitute System Operator Market Data Transactions, Interconnector Administrator Transactions or Meter Data Transactions except as required when Administered Settlement is in effect.

3.55 If for a particular Trading Period, in relation to any one of the CMS Data Transactions listed in Appendix E (System Operator and Interconnector Administrator Market Data Transactions) or Appendix G (Meter Data Transactions) either:

1. no such Data Transaction has been received by the Market Operator before the applicable deadline; or
2. none of the Data Transactions received prior to the applicable deadline meets the requirements to be Validated by the Market Operator,

then, all calculation by the Market Operator of System Marginal Prices, Market Schedule Quantities, Trading Charges, Trading Payments, and Settlement, for the Billing Period or Capacity Period to which the relevant data relates shall be deferred until the valid data is provided to and accepted by the Market Operator, unless Administered Settlement is in effect.

3.56 In the event that a circumstance of the type set out in paragraph 3.55.1 arises due to a communications failure or any error affecting the System Operator, Interconnector Administrator, or Meter Data Provider outside of the Market Operator's Isolated Market System, the System Operator,

Interconnector Administrator or Meter Data Provider will comply with Agreed Procedure 7 “Emergency Communications” to submit the required Data Transaction to the Market Operator within 2 Working Days of the specified submission deadline in the Code.

3.57 Intentionally blank

3.57A Intentionally blank

COMMUNICATION AND SYSTEM FAILURES

3.58 As soon as is practicable following any General Communication Failure, General System Failure, or EPUS Failure, the Market Operator shall take all practicable measures to maintain and, where necessary, restore its Isolated Market System and the Communications Channels under its control.

3.58A Agreed Procedure 7 “Emergency Communications” sets out the methods of communication to be used for Data Transactions, and any permitted derogations from the required timelines for submission of Data Transactions, which shall apply during a Communications Failure.

Limited Communication Failure

3.59 As soon as a Party becomes, or should have become, aware of the commencement of a Limited Communication Failure, that Party shall notify the Market Operator of the Limited Communication Failure using another valid means of communication, other than the failed Communication Channel(s), as provided for pursuant to Agreed Procedure 7 “Emergency Communications”.

3.60 During the Limited Communication Failure, the affected Party shall use the methods of communication, other than the failed Communication Channel(s), as provided for pursuant to Agreed Procedure 7 “Emergency Communications”.

3.61 A Limited Communications Failure shall not affect the obligations of any Party to submit data.

3.62 No Party or Participants shall be entitled to reimbursement of costs or expenses incurred in connection with using alternative communication methods during a Limited Communication Failure.

General Communication Failure

3.63 When the Market Operator becomes, or should reasonably have become, aware of a General Communication Failure, the Market Operator shall inform Parties of the General Communication Failure using the methods of communication provided for pursuant to Agreed Procedure 7 “Emergency Communications”.

3.64 During a General Communication Failure, Parties and Participants shall use the methods of communication provided for pursuant to Agreed Procedure 7 “Emergency Communications” until the General Communication Failure ceases.

3.65 Intentionally blank.

3.66 Notwithstanding paragraph 3.58, in the event of a General Communication Failure, the Market Operator shall act prudently and reasonably to prioritise Data Transactions necessary for the calculation of System Marginal Prices, Market Schedule Quantities, Trading Charges, Trading Payments, and

Settlement in the event that some of its obligations under the Code cannot be reasonably fulfilled due to the nature of the General Communication Failure.

3.67 Intentionally blank.

3.68 No Party or Participant shall be entitled to reimbursement of costs or expenses incurred in connection with using alternative communication methods in case of a General Communication Failure.

3.69 Intentionally blank

General System Failure

3.70 When the Market Operator becomes, or should reasonably have become, aware of a General System Failure, the Market Operator shall inform Parties of the General System Failure using the communication provided for pursuant to Agreed Procedure 7 "Emergency Communications"

3.70A During a General System Failure, Parties shall use the methods of communication provided for pursuant to Agreed Procedure 7 "Emergency Communications" until the General System Failure ceases.

3.71 During a General System Failure, all calculation by the Market Operator of Trading Charges and Trading Payments, and Settlement shall be deferred, unless Administered Settlement is in effect.

3.72 In the event of a General System Failure, the Market Operator must restore the Market Operator's Isolated Market System to working order according to the timelines and standards provided for pursuant to Agreed Procedure 11 "Market System Operation, Testing, Upgrading, and Support".

3.72A No Party or Participant shall be entitled to reimbursement of costs or expenses incurred in connection with using alternative communication methods in case of a General System Failure.

Reporting of General Communication Failures, General System Failures and EPUS Failures

3.73 The Market Operator shall commission an externally audited report in accordance with the timelines provided for pursuant to Agreed Procedure 11 "Market System Operation, Testing, Upgrading, and Support" in the event of any General Communication Failure, General System Failure or EPUS Failure (including failure to produce the Indicative Market Schedule) where such failure materially affects Participants. The purpose of any such report is to investigate and identify the cause of the failure and to assess the resulting response to that failure of all Parties. The Market Operator shall provide the report to the Regulatory Authorities.

3.74 During any General Communications Failure, General Systems Failure or EPUS Failure, the Market Operator will keep Parties updated of the best estimate of when the Market Operator's Isolated Market System will be operational again following the General Communication Failure, General System Failure, or EPUS Failure, as provided for pursuant to Agreed Procedure 7 "Emergency Communications".

3.75 Unless indicated otherwise by the Market Operator, a General Communications Failure, General System Failure or EPUS Failure shall not affect the obligations of any Party to submit data. As soon as a Party becomes, or should have become, aware of any such failure, that Party shall use another valid means of communication other than the failed

Communication Channel(s) as provided for pursuant to Agreed Procedure 7 “Emergency Communications”.

METER DATA REQUIREMENTS

3.76 Each Meter Data Provider shall provide meter registration identification, estimation, substitution, aggregation, communication and storage services as provided for in the Metering Code or Grid Code (as applicable) for the installed meters of categories of electricity generating units and electricity consuming units identified under the relevant Meter Data Provider’s Licence.

3.77 Each Meter Data Provider shall submit to the Market Operator, where required under its Licence, the Data Transactions defined in Appendix G in accordance with the timelines provided for in Agreed Procedure 16 “Metered Data Provision” to the standards specified in the Metering Code or Grid Code as applicable.

3.77A Parties who register Generator Units requesting a Unit Classification that is not Autonomous, must have SCADA installed at the Generator to permit real-time monitoring of Generator Unit availability and delivery.

3.77B Parties who register Generator Units must have Interval Metering installed at the Generator to meter Active Power generation.

3.77C All Active Power Demand aggregated by a Metered Data Provider into Trading Site Supplier Unit or an Associated Supplier Unit for a Trading Site that contains a Generator Unit with Non-Firm Access must have Interval Metering installed.

3.77D All Active Power Demand or Active Power generation aggregated by a Metered Data Provider to any other Supplier Units not listed in paragraph 3.77C may utilise standard consumption profiles to derive half-hourly metered values in place of Interval Metering.

3.77E During the Registration process described in Agreed Procedure 1 “Participant and Unit Registration and Deregistration”, the Metered Data Provider or the System Operator are required to inform the Market Operator if a Unit does not fulfil its metering or operational requirements for requested Unit Classification or registration.

3.78 If a Party does not have adequate metering installed in respect of any of its Units under paragraph 3.77B or 3.77C or appropriate equipment to permit real-time monitoring of Generator Unit availability by the System Operator under paragraph 3.77A to facilitate Settlement under the rules of the Code without further netting, aggregation or estimation rules, the Meter Data Provider will determine, subject to accuracy, practicality and cost, in consultation with the affected Party, and subject to the prior written approval of the Regulatory Authorities, the appropriate bespoke netting, aggregation, or estimation rules to allow for Settlement of that Unit under the Code.

3.79 Where such netting and estimation rules under paragraph 3.78 are determined by the Regulatory Authorities to be inaccurate or impractical following any information and advice provided by the Meter Data Provider, the Regulatory Authorities may restrict Unit Classification under the Code for that Generator Unit until the appropriate metering equipment or equipment to permit real-time monitoring of Generator Unit availability under paragraph 3.77A is installed in accordance with the timeframes provided for in the Metering Code or Grid Code as applicable.

3.80 The Meter Data Providers shall facilitate the resolution of any Data Query, Settlement Query, or Dispute raised under the Code, so that data shall comply with standards specified in the Metering Code or Grid Code as applicable.

3.81 Parties that have registered Units must facilitate Meter Data Providers in fulfilling their obligations under the Metering Code or Grid Code as appropriate regarding the installation, commissioning, calibration, maintenance, testing, inspection, security, repair, reading of and access to energy meters.

3.81A Metered Data Providers are required to submit to the Market Operator, where appropriate under their Licences, the Transactions as described in Agreed Procedure 1 "Participant and Unit Registration and Deregistration".

DATA PUBLICATION

3.82 Where the Market Operator is required to publish information under the Code, the Market Operator shall publish the information in accordance with paragraphs 1.9.15 and 1.9.17 and as provided for pursuant to Agreed Procedure 6 "Data Publication". Agreed Procedure 6 "Data Publication" sets out details of the procedures for publication of data by the Market Operator under the Code.

Items and Data Record Publication

3.83 The Market Operator shall publish any Data Records required to be published pursuant to Appendix K in accordance with the timelines set out in Appendix K.

3.84 The Market Operator shall not publish any Confidential Information.

3.85 Intentionally blank

3.86 Intentionally blank

Code Publication

3.87 The Market Operator will keep published at all times the latest version of the Code and any pending Modifications as provided for pursuant to Agreed Procedure 6 "Data Publication".

Forecast Publication Rationale

3.88 The Market Operator shall publish Demand Forecasts and Aggregated Wind Generation Forecasts and the assumptions behind the production of those forecasts using the data most recently submitted by the System Operators to the Market Operator at the time of publication.

3.89 The Market Operator shall publish Forecasts of Loss of Load Probability in accordance with the timelines provided for pursuant to Agreed Procedure 6 "Data Publication" using the data submitted to it by the System Operator.

Updating Publications

3.90 Notwithstanding Appendix K or any provision of this Code, where any published data has been updated and this has been notified to the Market Operator within any applicable deadlines, the Market Operator will update the published data within the timelines provided for pursuant to Agreed Procedure 6 "Data Publication" where the data is still relevant.

NUMERICAL ROUNDING OF CALCULATIONS AND PUBLICATIONS

3.91 The Market Operator shall use a consistent numerical rounding of all published quantities in accordance with the following rules:

1. All energy variables will be expressed in MWh to three decimal places;
2. All power variables will be expressed in MW to three decimal places;
3. All Currency variables (excluding exchange rates) will be expressed in euro or in sterling as appropriate, and to two decimal places;
4. All parameters, ratios, factors, discounts, premiums, currency exchange rates, rates, and proportions used in calculations shall be published to the same number of decimal places as that used in calculations; and
5. For the purpose of calculations, the following time variables will be used: Trading Period, Trading Day, Settlement Day, Billing Period, Week, Capacity Period, month, or year as appropriate.
6. Within a Trading Period, time shall be expressed to the nearest second; and
7. For clarity, all time periods start on the hour or half hour.

3.92 Without prejudice to paragraph 3.91, the Market Operator shall not round any variable, quantity, parameter, volume, ratio, factor, discount, premium, rate, or proportion during calculation other than that automatically arising from the limitations of its IT systems.

3.93 The level of computational precision and the method of computational rounding that shall be employed by the Market Operator's IT systems are set out in more detail in Agreed Procedure 5, "Data Storage and IT Security".

Obligation on the Market Operator to Retain Market Data

3.94 The Market Operator shall, in relation to each Trading Day, store, for the period of seven years commencing on that Trading Day, at least one copy of all Data Transactions and Accepted Data in a safe and secure environment and in a form which shall enable re-calculation or reproduction of any Settlement Statement by the Isolated Market System.

Obligation on the Market Operator to Maintain Market Re-Run Facilities

3.95 The Market Operator shall, in relation to each Settlement Day, maintain, for the period of two years commencing on the date of the last timetabled Settlement Rerun for that Settlement Day, the ability to perform a Settlement Re-Run for that Settlement Day.

3.96 The Market Operator shall, in relation to each Settlement, maintain, for the period of seven years (or such longer period as shall be necessary to comply with the requirements of the relevant VAT Authority) commencing on the date of that Settlement, the ability to manually perform any Resettlement required as a result of a decision of a Dispute Resolution Board or of any other Competent Authority, using SMP prices as determined by the Dispute Resolution Board or the relevant Competent Authority.

4. PRICING

4.1 This Section 4 sets out the market rules on pricing relating to Generator Units and Supplier Units. Specific rules relating to pricing for Special Units which apply in addition to, or where appropriate, in place of the rules set out in this Section are set out in Section 5: Categorisation of Units and Rules for Special Units.

4.2 Intentionally blank

4.2A Within this Code, payments or charges may be either positive or negative in accordance with their calculated value except where otherwise stated.

OFFER STRUCTURES

Commercial and Technical Offer Data

4.3 Participants shall submit Commercial Offer Data and Technical Offer Data for each Trading Day for each of the Generator Units registered to that Participant. Commercial Offer Data and Technical Offer Data must be submitted prior to Gate Closure for the Trading Day to which that data relates in accordance with Section 3.

4.4 Each set of Commercial Offer Data and Technical Offer Data shall apply in respect of any Generator Unit for the whole Trading Day.

Commercial Offer Data

4.5 The required Data Records which must be included in Commercial Offer Data are listed in Appendix C: Offer Data Transactions.

4.5A Where any Participant submits any value for a monetary sum as part of the Commercial Offer Data for a Generator Unit, it shall express such sum in the Currency that is relevant to the Currency Zone in which the Generator Unit is registered, provided that where such value is in pounds sterling, the Market Operator shall, for the purposes of all calculations within Sections 4 or 5 within this Code, convert the value to Euro in accordance with paragraph 6.6

4.6 All data items submitted as part of Commercial Offer Data are deemed to apply to levels of Output which are net of Unit Load.

4.7 Commercial Offer Data in respect of a Generator Unit u shall include a minimum of one and a maximum of ten Price Quantity Pairs each comprising a Price (Puhi) and a Quantity (Quhi), where i is the index of that Price Quantity Pair.

4.8 Each Price (Puhi) may be either positive or negative but may not exceed the Market Price Cap (PCAP) or be lower than the Market Price Floor (PFLOOR).

4.9 Intentionally blank

4.10 The Price Quantity Pairs for Generator Unit u in Trading Period h shall be ranked in order of increasing i, and these Prices and Quantities shall each be strictly monotonically increasing and there may not be more than one Price (Puhi) for the same Quantity (Quhi). These relationships are expressed algebraically as follows:

1. Puh(i+1) > Puhi for i = {1,2,…,9}

2. Quh(i+1) > Quhi for i = {1,2,…,9}

4.11 Should any Accepted Quantity (Quhi) exceed the Actual Availability (AAuh) of the Generator Unit in any Trading Period, the EPUS Software will exclude, for that Trading Period, those Price Quantity Pairs which apply entirely to Quantities (Quhi) in excess of the Actual Availability (AAuh). After any such exclusions, should the greatest remaining Quantity (Quhi) be less than the Actual Availability (AAuh), then, for the purposes of the EPUS Software, the Actual Availability (AAuh) will be used in place of the greatest remaining Quantity (Quhi).

4.12 Should any Quantity (Quhi) be less than the Minimum Output (MINOUTuh) in any Trading Period, the EPUS Software will exclude the Price Quantity Pairs which apply entirely to Quantities less than the Minimum Output (MINOUTuh).

4.13 For the calculation of Schedule Production Cost or Dispatch Production Cost, the Price that shall apply at each level of Output shall be determined as follows. For levels of Output less than or equal to Quantity Quh1, Price Puh1 applies. For levels of Output greater than Quantity Quh(i-1) where i>1 and less than or equal to Quantity Quhi, Price (Puhi) applies.

4.14 Intentionally blank

4.15 Commercial Offer Data shall include one No Load Cost which is applicable to all Trading Periods in the Trading Day. The Accepted No Load Cost will be treated as that element of operating cost, expressed as an hourly cost that is invariant with the level of Output and incurred at all times when the level of Output is greater than zero. Commercial Offer Data shall include a minimum of one and a maximum of three Start Up Costs which are applicable to each Trading Period in the Trading Day. In the event that Commercial Offer Data comprises more than one Start Up Cost, each will be identified as relating to a Hot Start, a Warm Start or a Cold Start.

Technical Offer Data

4.16 The required Data Records which must be included within Technical Offer Data are specified within Appendix C: Offer Data Transactions.

4.17 Participants shall use reasonable endeavours to ensure that all data items submitted as part of Technical Offer Data are accurate and reflect the real capabilities of the Generator Unit at the Connection point net of Unit Load and with due regard for the impact of forecast ambient conditions on the Generator Unit.

4.17A Participants shall use reasonable endeavours to ensure that Technical Offer Data (including Default Data) shall be consistent with data which is submitted under the applicable Grid Code in respect of each Unit, provided that Technical Offer Data submitted under this Code shall be net of Unit Load and will first, where appropriate, have been scaled by the appropriate Distribution Loss Adjustment Factor.

4.18 The Forecast Availability Profile shall contain the Participant's forecast of average level of Actual Availability (AAuh), in MW, for the Generator Unit for each Trading Period in the Optimisation Time Horizon. The forecast Actual Availability (AAuh) values may be positive (including zero), but cannot be negative.

4.19 The Forecast Minimum Output Profile shall contain the Participant's forecast of the average level of Minimum Output (MINOUTuh), in MW, for the Generator Unit for each Trading Period in the Optimisation Time Horizon. The forecast Minimum Output (MINOUTuh) values must be zero except as otherwise specified in Section 5.

4.20 The Forecast Minimum Stable Generation Profile shall contain the Participant's forecast of the average level of Minimum Stable Generation (MINGENuh), in MW, for the Generator Unit for each Trading Period in the Optimisation Time Horizon. The forecast Minimum Stable Generation (MINGENuh) values may be positive (including zero) but cannot be negative.

4.21 Intentionally blank

NET OUTPUT FUNCTION

4.21A All values provided by the System Operators, Meter Data Providers and Participants expressed in MW, MW/min or MWh that are used in the EPUS Software or in Settlement or referred to in Sections 4, 5 or 6 of the Code shall be net of Unit Load.

4.22 The Net Output Function is a linear transformation used by the System Operators to convert values relating to gross Unit Output to values that are net of Unit Load.

4.23 The Net Output Function and its application are set out below. If XGu is a quantity gross of Unit Load at the relevant time, then XNu is the quantity net of Unit Load, pertaining to a Generator Unit u at that time, calculated as follows:

$$XNu = ULSu \times XGu - FULu$$

Where

1. FULu is the Fixed Unit Load for Generator Unit u for the relevant time

2. ULSu is the Unit Load Scalar for Generator Unit u for the relevant time

4.24 With the exception of Pumped Storage Units, Interconnector Units, Interconnector Residual Capacity Units, Netting Generator Units and Interconnector Error Units, the results of applying the Net Output Function shall be positive (including zero) and shall be set to zero if negative.

4.25 The values of Fixed Unit Load (FULu) and Unit Load Scalar (ULSu) shall be recorded as part of Unit Registration, such that $FULu \geq 0$ and $0 \leq ULSu \leq 1$.

4.26 The following values will be converted by the relevant System Operator using the Net Output Function to represent values net of Unit Load:

1. Availability, for the determination of values of Availability Profile (APuh);

2. Minimum Output, for the calculation of MINOUTuh;

3. Minimum Stable Generation, for the determination of MINGENuh; and

4. Dispatch Instructions, for the calculation of Dispatch Quantity (DQuh).

TRADING BOUNDARY AND TREATMENT OF LOSSES

4.27 Intentionally blank

4.28 For each Generator Unit and Supplier Unit that is Distribution Connected, all values provided by the System Operators, Meter Data Providers and Participant expressed in MW, MW/min or MWh that are used in the EPUS Software or in Settlement or referred to in Sections 4, 5 or 6 of the Code shall first have been scaled by the appropriate Distribution Loss Adjustment Factor by the submitting Party.

4.29 Intentionally blank

4.30 Intentionally blank

4.31 Within this Code, the term 'Loss-Adjusted' applied to any variable, or the inclusion of letters 'LF' at the end of any variable term denote that a value is to be calculated at the Trading Boundary, through application of the relevant Transmission Loss Adjustment Factor as set out in Section 4, Section 5 and Section 6 of this Code.

4.31A The Loss-Adjusted Metered Generation (MGLFuh) is calculated as follows:

MGLFuh = MGuh x TLAFuh

Where

1. MGuh is the Metered Generation for Generator Unit u in Trading Period h
2. TLAFuh is the Transmission Loss Adjustment Factor for Generator Unit u in Trading Period h

4.31B The Loss-Adjusted Metered Demand (MDLFvh) is calculated as follows:

MDLFvh = MDvh x TLAFvh

Where

1. MDvh is the Metered Demand for Supplier Unit v in Trading Period h
2. TLAFvh is the Transmission Loss Adjustment Factor applied to Supplier Unit v in Trading Period h

4.31C Except for Error Supplier Units, for which the Loss-Adjusted Net Demand (NDLFvh) shall be calculated in accordance with this Section 4 or as amended by Section 5 as appropriate, the Loss-Adjusted Net Demand (NDLFvh) for Supplier Unit v in Trading Period h is calculated as follows:

NDLFvh = NDvh x TLAFvh

Where

1. NDvh is the Net Demand for Supplier Unit v in Trading Period h

2. TLAFvh is the Transmission Loss Adjustment Factor for Supplier Unit v in Trading Period h

4.31D The Loss-Adjusted Market Schedule Quantity Cost Correction (MSQCCLFuh) for Generator Unit u in Trading Period h is calculated as follows:

MSQCCLFuh = MSQCCuh x TLAFuh

Where

1. MSQCCuh is the Market Schedule Quantity Cost Correction for Generator Unit u in Trading Period h calculated in accordance with this Section 4 or Section 5 where relevant

2. TLAFuh is the Transmission Loss Adjustment Factor for Generator Unit u in Trading Period h

4.31E The Loss-Adjusted Dispatch Quantity Cost Correction (DQCCLFuh) for Generator Unit u in Trading Period h is calculated as follows:

DQCCLFuh = DQCCuh x TLAFuh

Where

1. DQCCuh is the Dispatch Quantity Cost Correction for Generator Unit u in Trading Period h calculated in accordance with this Section 4 or as amended by Section 5 where relevant
2. TLAFuh is the Transmission Loss Adjustment Factor for Generator Unit u in Trading Period h

4.31F The Loss-Adjusted Market Schedule Quantity (MSQLFuh) for Generator Unit u in Trading Period h is calculated as follows:

MSQLFuh = MSQuh x TLAFuh

Where

1. MSQuh is the Market Schedule Quantity for Generator Unit u in Trading Period h calculated in accordance with this Section 4 or as amended by Section 5 where relevant
2. TLAFuh is the Transmission Loss Adjustment Factor for Generator Unit u in Trading Period h

4.31G At least four months prior to the start of each year, each System Operator shall provide to the Market Operator, subject to prior approval of the Regulatory Authorities, a complete set of Transmission Loss Adjustment Factors for each Generator Unit and for each Supplier Unit that is registered within its Jurisdiction, for each Trading Period in the year.

4.32 The Transmission Loss Adjustment Factor (TLAFvh) shall be equal to 1 for each Supplier Unit v.

ACTUAL AVAILABILITY, MINIMUM STABLE GENERATION AND MINIMUM OUTPUT

4.33 The System Operators shall each submit daily to the Market Operator the Minimum Stable Generation, Availability and Minimum Output in respect of each Generator Unit registered within its Jurisdiction which is Dispatchable, for the previous Trading Day, based on real-time data [with the possibility of ex-post revisions]. These values shall be net of Unit Load and will, where appropriate, prior to submission have been scaled by the appropriate Distribution Loss Adjustment Factor.

4.33A The Market Operator will calculate values of Minimum Stable Generation (MINGENuh), Availability Profile (APuh) and Minimum Output (MINOUTuh) in respect of each Generator Unit u in each Trading Period h in accordance with Appendix P.

Actual Availability

4.34 The Actual Availability (AAuh) will be calculated by the Market Operator for each Trading Period, as set out below.

Actual Availability for Generator Units with no Non-Firm Access

4.35 For each Generator Unit u with no Non-Firm Access that is not a Netting Generator Unit, the Actual Availability in each Trading Period h (AAuh) is calculated as follows:

AAuh = APuh

Where

1. APuh is the Availability Profile for Generator Unit u in Trading Period h

Actual Availability for Generator Units with Non-Firm Access

4.36 For each Generator Unit u with Non-Firm Access, the Actual Availability in each Trading Period h (AAuh) for use within the EPUS Software is calculated as follows:

Step 1: The Firm Access Quantity for each Generator Unit u in Trading Site s with Non-Firm Access in Trading Period h (FAQuh) is calculated as follows:

$$if \sum_{u in s} APuh = 0 \; then$$

$$FAQuh = 0$$

$$else$$

$$FAQuh = \left(FAQSst + \frac{MDvh}{TPD} \right) \times \frac{APuh}{\sum_{u in s} APuh}$$

Where

1. FAQuh is the Firm Access Quantity of Generator Unit u in Trading Period h

2. FAQSst is the Firm Access Quantity of Trading Site s in each Trading Period h within Trading Day t

3. MDvh in Trading Period h is the Metered Demand for Supplier Unit v where v is the Trading Site Supplier Unit for the Trading Site s, or the Unique Associated Supplier Unit v for the Trading Site s, or otherwise zero.

4. APuh is the Availability Profile for Generator Unit u in Trading Period h

5. summation $\sum_{u\,in\,s}$ is over all Generator Units u in Trading Site s, except the Netting Generator Unit

6. TPD is the Trading Period Duration.

Step 2: The Access Quantity (AQuh) is calculated as follows:

$$AQuh = Min\{APuh, Max\{FAQuh, DQuh\}\}$$

Step 3: The Site Access Quantity (SAQsh) for each Trading Site s which has Generator Units with Non-Firm Access in Trading Period h, is calculated as follows:

$$SAQsh = Min\left\{\sum_{u\,in\,s} APuh, Max\left\{FAQSst + \frac{MDvh}{TPD}, \sum_{u\,in\,s} DQuh\right\}\right\}$$

Step 4: The Actual Availability for each Generator Unit u with Non-Firm Access in Trading Period h (AAuh) is calculated as follows:

$$if \sum_{u\,in\,s} (AQuh - DQuh) = 0 \ then$$

$$AAuh = AQuh$$

$$else$$

$$AAuh = AQuh - \left(\frac{(AQuh - DQuh)}{\sum_{u\,in\,s}(AQuh - DQuh)}\right) \times \left(\sum_{u\,in\,s} AQuh - SAQsh\right)$$

4.37 Intentionally blank

ELIGIBLE AVAILABILITY FOR CAPACITY PAYMENTS

4.38 The values of Eligible Availability (EAuh) for use within the determination of Capacity Payments will be taken from the values of Availability Profile (APuh), which are calculated by the Market Operator from availability data submitted by the relevant System Operator, and which shall relate to the Availability of the Generator Unit without consideration of access limitations.

The Eligible Availability (EAuh) for each Generator Unit u in Trading Period h is calculated as follows:

$$EAuh = APuh$$

Where

1. APuh is the Availability Profile for Generator Unit u in Trading Period h.

4.38A The Loss-Adjusted Eligible Availability (EALFuh) for Generator Unit u in Trading Period h is calculated as follows:

EALFuh = EAuh x TLAFuh

Where

1. EAuh is the Eligible Availability for Generator Unit u in Trading Period h
2. TLAFuh is the Transmission Loss Adjustment Factor for Generator Unit u in Trading Period h

DISPATCH QUANTITY

4.38B The System Operators shall each submit to the Market Operator the Dispatch Instructions and (where appropriate) the associated ramp rates in respect of each Generator Unit registered within its Jurisdiction which is Dispatchable. This information shall be submitted each day to the Market Operator by the System Operators for the previous Trading Day, based on real-time data [with the possibility of ex-post revisions], and values shall be net of Unit Load and shall, where appropriate, first have been scaled by the appropriate Distribution Loss Adjustment Factor.

4.39 The Dispatch Quantity (DQuh) for each Generator Unit u in Trading Period h will be determined by the Market Operator from the Dispatch Instructions submitted by the relevant System Operator in accordance with Appendix P of the Code.

4.40 Intentionally blank

4.41 The Loss-Adjusted Dispatch Quantity for each Generator Unit u in each Trading Period h (DQLFuh) is calculated as follows:

DQLFuh = DQuh x TLAFuh.

Where

1. DQuh is the Dispatch Quantity for Generator Unit u for Trading Period h
2. TLAFuh is the Transmission Loss Adjustment Factor for Generator Unit u in Trading Period h

4.42 Intentionally blank

Maximisation Instructions

4.43 Under the terms of the Grid Codes, a System Operator may issue a Maximisation Instruction in respect of a Generator Unit u for one or more

Trading Periods h. The values for Availability which are submitted to the Market Operator by the System Operator or which are calculated by the Market Operator for that Generator Unit u for those Trading Periods h will not be revised upwards to reflect the Short-Term Maximisation Capability (STMCut) for Generator Unit u within Trading Day t.

4.44 While a Generator Unit is subject to a Maximisation Instruction, the revised Dispatch Quantity (DQ'uh) shall be calculated by the Market Operator as set out below:

$$Under\ a\ Maximisation\ Instruction,$$

$$DQ'uh = Max\left\{DQuh, Min\left\{STMCut, \frac{MGuh}{TPD}\right\}\right\}$$

Where

1. DQ'uh is the revised Dispatch Quantity in respect of Generator Unit u which is under a Maximisation Instruction in Trading Period h

2. DQuh is the initial Dispatch Quantity for Generator Unit u in Trading Period h, as calculated by the Market Operator in accordance with Appendix P

3. TPD is the Trading Period Duration

4. MGuh is the Metered Generation for Generator Unit u in Trading Period h

5. STMCut is the Short-Term Maximisation Capacity for Generator Unit u for the relevant Trading Period h within Trading Day t.

4.45 For the avoidance of doubt, the revised Dispatch Quantity (DQ'uh) may at such times exceed both the Registered Capacity (RCuh) and the Availability Profile (APuh) for the relevant Generator Unit.

4.46 In the event that the revised Dispatch Quantity (DQ'uh) calculated pursuant to paragraph 4.44 exceeds the greatest Accepted Quantity (Quhi), then the revised Dispatch Quantity (DQ'uh) will be used in place of the greatest Accepted Quantity (Quhi) in all other calculations under this Code.

PRICING ALGORITHM

The EPUS Software

4.47 The Market Operator shall perform the Indicative EPUS Software Run for each Trading Day to create the Indicative Market Schedule and indicative values for System Marginal Price for each Trading Period in that Trading Day within one hour of Gate Closure on that Trading Day.

4.47A The Market Operator shall perform the Ex-Post EPUS Software Run for each Trading Day to create the Ex-Post Unconstrained Schedule and the values for System Marginal Price for each Trading Period in that Trading Day by 16:00 on the day after the start of the relevant Trading Day.

4.47B The Market Operator shall additionally perform any Ex-Post EPUS Software Runs as required for Settlement purposes in accordance with the Code.

4.48 The Market Operator shall procure that the EPUS Software operates in accordance with the Code including on the basis of the principles set out below and as further specified within Appendix N.

4.48A Appendix N provides that for the purposes of the EPUS Software, certain values of Actual Availability (AAuh), Minimum Stable Generation (MINGENuh) and Minimum Output (MINOUTuh) shall be forecast values submitted as part of Technical Offer Data, and all references to these values in paragraphs 4.49 to 4.55 shall be construed accordingly.

4.49 When producing a Unit Commitment Schedule or Market Schedule Quantities, the objective of each run of the EPUS Software is to minimise the aggregate sum of Schedule Production Cost over the Optimisation Time Horizon, subject to the following constraints:

1. to schedule Output by Price Maker Generator Units to match, in aggregate, Schedule Demand (as defined within Appendix N for the relevant run of the EPUS Software), in each Trading Period within the Optimisation Time Horizon;

2. to schedule each Price Maker Generator Unit at a level of Output between its Minimum Output (MINOUTuh) and its Actual Availability (AAuh); and

3. to schedule each Price Maker Generator Unit within the additional Technical Capabilities given within its Minimum Stable Generation (MINGENuh) and Technical Offer Data, including without limitation, Ramp Rates, Minimum On Times and Minimum Off Times, with consideration given to the Warmth State.

4.49A The overall objective of that part of the EPUS Software which calculates Uplift is to set the System Marginal Price to reflect the marginal cost of producing or consuming electricity during the Optimisation Time Horizon, subject to balancing the following supplementary objectives and as set out in further detail within Appendix N:

1. energy prices should be reflective of underlying market dynamics; consequently the recovery of Start Up Costs and No Load Costs through SMP should not deviate significantly from the Shadow Prices (termed the Uplift Profile Objective); and

2. the revenue paid through Uplift revenues should be minimised (termed the Uplift Cost Objective).

4.49B The calculation of Uplift is subject to the constraint that the Schedule Operating Costs for each Price Maker Generator Unit during a period of continuous operation should be recovered through SMP within that period of operation, subject to detailed specification within Appendix N.

4.49C The calculation of Uplift requires three input parameters, each of which shall be set four months in advance of each year by the Regulatory Authorities:

1. The Uplift Alpha value α, which governs the importance of the Uplift Cost Objective, such that $0 \leq \alpha \leq 1$;

2. The Uplift Beta value β, which governs the importance of the Uplift Profile Objective, such that $0 \leq \beta \leq 1$ and such that $\alpha + \beta = 1$; and

3. The Uplift Delta value δ, to constrain the overall impact on revenue in each Trading Day t arising from the Uplift calculation, such that $0 \leq \delta \leq 1$.

4.50 For the avoidance of doubt, and with the exception of the treatment of Generator Units with Non-Firm Access, the EPUS Software will not take explicit account of the topology of the Transmission System or any requirements for reserve.

4.50A An Insufficient Capacity Event occurs within a run of the EPUS Software for a Trading Period in which the EPUS Software identifies that the Schedule Demand in that Trading Period cannot be met in full by Price Maker Generator Units. In such circumstances, the balance of Schedule Demand shall be met by a notional generator unit which is not further used in Settlement, in such a way that Market Schedule Quantities can be determined for other Generator Units.

4.50B The EPUS Software produces a Valid EPUS Solution when each of the following conditions is met:

1. the run of the EPUS Software produces the required set of Market Schedule Quantities and System Marginal Prices in accordance with this Code, except for Trading Periods in which an Insufficient Capacity Event has occurred;

2. no Price Maker Generator Unit is scheduled inconsistently with its Technical Capabilities, with the exception that:

   a. where there is no Preceding EPUS Run to determine the starting conditions for a Generator Unit then the Market Operator must employ reasonable endeavours to populate surrogate data that best reflects its understanding of the starting conditions of the Generator Unit at that time;

   b. if Technical Capabilities applying to a Generator Unit within a run of the EPUS Software are incompatible with the initial operating level of that Generating Unit, then the EPUS Software may disregard limits on ramp rates in the first period of the Trading Day for that Generator Unit.

   c. if Technical Capabilities applying to a Generator Unit within a run of the EPUS Software are internally inconsistent so as to allow no possible solution for that Generating Unit, then the EPUS Software may disregard one or more Technical Capability limits as required to allow a solution to be found for that Generator Unit as set out in Appendix N.

Tie-Break Situations

4.51 In the event of a Tie-Break situation which arises when the EPUS Software cannot differentiate between one or more Price Maker Generator Units on the grounds of Schedule Production Cost, the EPUS Software will resolve the order in which Generator Units are scheduled using a systematic process of random selection.

Calculation of SMP

4.52 Using the EPUS Software, the Market Operator shall calculate the System Marginal Price (SMPh) for each Trading Period h on the basis of the objectives outlined above using the methodology further specified in Appendix N.

4.52A The System Marginal Price (SMPh) shall allow the recovery of the Start Up Costs and No Load Costs of Generator Units that are scheduled to generate within that run of the EPUS Software. Over each time interval of continuous operation, lasting one or more Trading Periods, each Generator Unit shall recover the Start Up Costs and No Load Costs that it incurred in that time interval. The System Marginal Price (SMPh) will not necessarily, under all circumstances, allow for the recovery of all of the running costs incurred by scheduled Generator Units.

4.53 For any Trading Period when an Insufficient Capacity Event has occurred within a run of the EPUS Software in accordance with paragraph 4.50A above, then the results of that run of the EPUS Software for that Trading Period shall be determined as follows:

1. the System Marginal Price (SMPh) for that Trading Period h shall be set equal to the Market Price Cap; and

2. the Market Schedule Quantities for each Price Maker Generator Unit shall be as calculated within that run of the EPUS Software.

4.54 In the event that SMP is calculated to exceed the Market Price Cap, SMP in the Trading Period (SMPh) will be set to equal the Market Price Cap (PCAP).

4.55 In the event that SMP is calculated to fall below the Market Price Floor (PFLOOR), SMP in the Trading Period (SMPh) will be set to equal the Market Price Floor (PFLOOR).

DERIVATION OF QUANTITIES USED IN SETTLEMENT

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Trading Sites with a Trading Site Supplier Unit

4.58 Intentionally blank

4.59 The Eligible Netting Quantity (ENQsh) for each Trading Site s with a Trading Site Supplier Unit v in Trading Period h is calculated as follows:

$$ENQsh = Min\left\{\left(\sum_{uins} Min\left\{DQuh, \frac{MGuh}{TPD}\right\}\right), \frac{MDvh}{TPD}\right\}$$

Where

1. DQuh is the Dispatch Quantity in respect of Generator Unit u in Trading Period h

2. MGuh is the Metered Generation for Generator Unit u in Trading Period h

3. MDvh is the Metered Demand of Trading Site Supplier Unit v in Trading Period h

4. TPD is the Trading Period Duration

5. the summation $\sum_{uins}$ is over all Generator Units u in Trading Site s excluding the Netting Generator Unit.

4.59A For a Trading Site Supplier Unit v that is within a Trading Site s, the Net Demand in Trading Period h (NDvh) is calculated as follows:

$$NDvh = MDvh - \left(ENQsh \times TPD\right)$$

Where

1. ENQsh is the Eligible Netting Quantity for each Trading Site s in Trading Period h
2. MDvh is the Metered Demand for Trading Site Supplier Unit v in Trading Period h
3. TPD is Trading Period Duration.

Trading Sites with an Associated Supplier Unit

4.59B The Eligible Netting Quantity (ENQsh) for each Trading Site s with an Associated Supplier Unit v in Trading Period h is calculated as follows:

$$ENQsh = Min\left\{\left(\sum_{uins} Min\left\{DQuh, \frac{MGuh}{TPD}\right\}\right), 0\right\}$$

Where

1. DQuh is the Dispatch Quantity at Generator Unit u in Trading Period h
2. MGuh is the Metered Generation at Generator Unit u in Trading Period h
3. TPD is the Trading Period Duration
4. the summation $\sum_{uins}$ is over all Generator Units u in Trading Site s excluding the Netting Generator Unit.

4.59C For each Supplier Unit v which is an Associated Supplier Unit to one or more Trading Sites s, the Net Demand (NDvh) in Trading Period h is calculated as follows:

$$NDh = MDvh - \left(\sum_{s\,with\,v} (ENQsh \times TPD) \right)$$

Where

1. ENQsh is the Eligible Netting Quantity for each Trading Site s in Trading Period h
2. MDvh is the Metered Demand at Supplier Unit v in Trading Period h
3. TPD is Trading Period Duration
4. the summation $\sum_{s\,with\,v}$ is over all Trading Sites for which the Supplier Unit v is an Associated Supplier Unit

Netting Generator Unit calculations

4.60 For each Netting Generator Unit u' at a Trading Site s (either with a Trading Site Supplier Unit or an Associated Supplier Unit), the Metered Generation (MGu'h), Dispatch Quantity (DQu'h) and Market Schedule Quantity (MSQu'h) in Trading Period h are calculated as follows:

$$MGu'h = -ENQsh \times TPD$$

$$MSQu'h = -ENQsh$$

$$DQu'h = -ENQsh$$

Where

1. ENQsh is the Eligible Netting Quantity for Trading Site s in Trading Period h
2. TPD is the Trading Period Duration

4.61 For each Netting Generator Unit u' at a Trading Site s (either with a Trading Site Supplier Unit or an Associated Supplier Unit), the Eligible Availability (EAu'h) in Trading Period h is calculated as follows:

$$EAu'h = -ENQsh + \sum_{u\,in\,s} \left(Min \left\{ \left(Min \left\{ DQuh, \frac{MGuh}{TPD} \right\} - MINOUTuh \right), 0 \right\} \right)$$

Where

1. ENQsh is the Eligible Netting Quantity for Trading Site s in Trading Period h
2. DQuh is the Dispatch Quantity at Generator Unit u in Trading Period h
3. MGuh is the Metered Generation at Generator Unit u in Trading Period h
4. TPD is the Trading Period Duration

5. MINOUTuh is the Minimum Output for Generator Unit u in Trading Period h

6. the summation $\sum_{uins}$ is over all Generator Units u in Trading Site s excluding the Netting Generator Unit.

4.61A For each Netting Generator Unit u', the Transmission Loss Adjustment Factor (TLAFu'h) is calculated as follows:

$$if \sum_{u\ in\ s} RCu \neq 0\ then$$

$$TLAFu'h = \frac{\left(\sum_{u\ in\ s} TLAFuh \times RCu\right)}{\sum_{u\ in\ s} RCu}$$

$$else\ TLAFu'h = Max\{TLAFuh\}\ \forall u\ in\ s$$

Where

1. TLAFuh is the Transmission Loss Adjustment Factor for Generator Unit u in Trading Period h

2. RCu is the Registered Capacity of Generator Unit u

3. the summation $\sum_{u\ in\ s}$ is over all Generator Units u (not including the Netting Generator Unit) in Trading Site s (to which the Netting Generator Unit is registered)

4. the expression $Max\{TLAFuh\}\ \forall u\ in\ s$ denotes the highest Transmission Loss Adjustment Factor (TLAFuh) of each Generator Unit u in Trading Site s (excluding the Netting Generator Unit) in Trading Period h.

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Actual Output for Generator Units

4.68 For each Generator Unit u in each Trading Period h, the value of Actual Output (AOuh) is calculated as follows:

$$AOuh = \frac{MGuh}{TPD}$$

Where

1. MGuh is the Metered Generation for Generator Unit u in Trading Period h

2. TPD is the Trading Period Duration.

4.68A The Loss-Adjusted Actual Output (AOLFuh) is calculated as follows:

AOLFuh = AOuh x TLAFuh

Where

1. AOuh is the Actual Output for Generator Unit u in Trading Period h
2. TLAFuh is the Transmission Loss Adjustment Factor for Generator Unit u in Trading Period h

Error Supplier Units

4.69 For each Error Supplier Unit v', each of which is associated with a Jurisdiction e, the Loss-Adjusted Net Demand (NDLFv'h) shall be calculated as follows:

$$NDLFv'h = \sum_{uine} MGLFuh - \sum_{vine} MDLFvh + NIJIeh$$

Where

1. $\sum_{uine} MGLFuh$ is the total Metered Generation, Loss-Adjusted, of all Generator Units u within Jurisdiction e excluding Netting Generator Units

2. $\sum_{vine} MDLFvh$ is the total Metered Demand, Loss-Adjusted, of all Supplier Units v within Jurisdiction e excluding the Error Supplier Unit

3. NIJIeh is the Net Inter-Jurisdictional Import to Jurisdiction e in Trading Period h, expressed in MWh, with appropriate adjustment for Transmission Losses.

Net Demand at Supplier Units

4.70 For all Supplier Units v, which are not Error Supplier Units, Trading Site Supplier Units or Associated Supplier Units, the Net Demand in Trading Period h (NDvh) is calculated as follows:

$$NDvh = MDvh$$

Where

1. MDvh is the Metered Demand at Supplier Unit v in Trading Period h.

ENERGY PAYMENTS AND ENERGY CHARGES

Energy Payments for Generator Units

4.71 Intentionally blank

4.72 The Energy Payment (ENPuh) payable in respect of each Generator Unit u for Trading Period h is calculated as follows:

$$ENPuh = TPD \times MSQLFuh \times SMPh$$

Where

1. TPD is Trading Period Duration

2. MSQLFuh is the Loss-Adjusted Market Schedule Quantity for Generator Unit u in Trading Period h

3. SMPh is the System Marginal Price in Trading Period h.

Energy Charges to Supplier Units

4.73 The Energy Charge (ENCvh) recoverable in respect of each Supplier Unit v for Trading Period h is calculated as follows:

$$ENCvh = NDLFvh \times SMPh$$

Where

1. NDLFvh is the Loss-Adjusted Net Demand from Supplier Unit v in Trading Period h

2. SMPh is the System Marginal Price in Trading Period h.

CAPACITY PAYMENTS AND CAPACITY CHARGES

Parameters for the determination of Capacity Payments and Capacity Charges

4.74 At least four months in advance of the first Capacity Period in each year, following determination by the Regulatory Authorities of the following parameters for the determination of Capacity Payments and Capacity Charges, the Market Operator shall publish:

1. Annual Capacity Payment Sum (ACPSy);
2. Capacity Period Payment Sum (CPPSc) in each Capacity Period, such that that the total of Capacity Period Payment Sums over the year is equal to the Annual Capacity Payment Sum (ACPSy);
3. Fixed Capacity Payments Proportion (FCPPy), such that 0 ≤ FCPPy ≤1;
4. Ex-Post Capacity Payments Proportion (ECPPy), such that 0 ≤ ECCPy ≤ (1-FCPPy); and
5. the Annual Capacity Exchange Rate.

Basis for Capacity Payments and Capacity Charges

4.75 Capacity Payments are made in respect of each Generator Unit on the basis of its Loss-Adjusted Eligible Availability in each Trading Period as set out algebraically below.

4.76 Capacity Charges are levied in respect of Loss-Adjusted Net Demand at each Supplier Unit in each Trading Period as set out algebraically below.

4.76A The fixed element of Capacity Payments is dependent on the Forecast Demand (based on the Annual Load Forecast Data) in each Trading Period (FDh). These values are determined prior to the start of the first Capacity Period in each year by the Market Operator and the relevant calculation methodology, the "Function for the Determination of Capacity Payments", is [to be] set out in Appendix M.

4.77 The variable element of Capacity Payments is dependent on the Loss of Load Probability (λh) in each Trading Period h. These values are determined prior to the start of the Capacity Period to which they relate by the Market Operator and the calculation methodology, the "Function for the Determination of Capacity Payments", is [to be] set out in Appendix M.

4.77A The ex-post element of Capacity Payments is dependent on the Ex-Post Loss of Load Probability in each Trading Period, Φh. These values are determined by the Market Operator and the relevant calculation methodology, the "Function for the Determination of Capacity Payments", is [to be] set out in Appendix M.

4.77B Capacity Charges are dependent on the Forecast Demand in each Trading Period h (FDh). These values are determined prior to the start of the first Capacity Period in each year by the Market Operator and the relevant calculation methodology, the "Function for the Determination of Capacity Payments", is [to be] set out in Appendix M.

Calculation of Capacity Payments

4.78 The Capacity Period Payment Sum (CPPSc) is divided into the Capacity Period Fixed Sum (CPFSc), the Capacity Period Variable Sum (CPVSc) and the Capacity Period Ex-Post Sum (CPESc) within each Capacity Period c, using the Fixed Capacity Payments Proportion (FCPPy) and Ex-Post Capacity Payments Proportion (ECPPy):

$$CPFSc = CPPSc \times FCPPy$$

$$CPESc = CPPSc \times ECPPy$$

$$CPVSc = CPPSc \times (1 - (FCPPy + ECPPy))$$

Where

1. CPPSc is the Capacity Period Payment Sum in Capacity Period c
2. FCPPy is the Fixed Capacity Payments Proportion for year y
3. ECPPy is the Ex-Post Capacity Payments Proportion for year y

4.79 For each Trading Period h within the Capacity Period c , a Fixed Capacity Payments Weighting Factor (FCPWFh) is calculated prior to the start of the

first Capacity Period in the year based on the relative values of Forecast Demand (FDh) as follows:

$$if \sum_{h\ in\ c}(FD_h - MinFD_c) > 0 \ \ then$$

$$FCPWFh = \frac{FD_h - MinFD_c}{\sum_{h\ in\ c}(FD_h - MinFD_c)}$$

$$else \ \ FCPWFh = \frac{1}{Number\ of\ Trading\ Periods\ in\ Capacity\ Period}$$

Where

1. FDh is the Forecast Demand for Trading Period h determined by the Market Operator prior to the start of the first Capacity Period in the year

2. MinFDc is the minimum value of FDh in any Trading Period h within Capacity Period c

3. summation $\sum_{h\ in\ c}(FD_h - MinFD_c)$ is over all Trading Periods h in Capacity Period c

4.79A For each Trading Period h within the Capacity Period, a Variable Capacity Payments Weighting Factor (VCPWFh) is calculated prior to the start of the relevant Capacity Period based on the relative values of the Loss of Load Probability in Trading Period h (λh):

$$if \sum_{h\ in\ c}\lambda_h > 0 \ \ then$$

$$VCPWFh = \frac{\lambda_h}{\sum_{h\ in\ c}\lambda_h},$$

$$else \ \ VCPWFh = \frac{1}{Number\ of\ Trading\ Periods\ in\ Capacity\ Period}$$

Where

1. λh is the Loss of Load Probability in Trading Period h determined in accordance with the "Function for the Determination of Capacity Payments" [to be] set out in Appendix M

2. summation $\sum_{h\ in\ c}$ is over all Trading Periods h in Capacity Period c

4.79B For each Trading Period h within the Capacity Period c, an Ex-Post Capacity Payments Weighting Factor (ECPWFh) is calculated based on the relative values of the Ex-Post Loss of Load Probability in Trading Period h (Φh):

$$if \sum_{h\ in\ c} \phi_h > 0 \ \ then$$

$$ECPWFh = \frac{\phi_h}{\sum_{h\ in\ c} \phi_h},$$

$$else \ \ ECPWFh = \frac{1}{Number\ of\ Trading\ Periods\ in\ Capacity\ Period}$$

Where

1. Φh is the Ex-Post Loss of Load Probability in Trading Period h determined in accordance with the "Function for the Determination of Capacity Payments" [to be] set out in Appendix M

2. summation $\sum_{hinc}$ is over all Trading Periods h in Capacity Period c

4.80 For each Trading Period h within the Capacity Period c, a Capacity Payments Price Factor (CPPFh) is calculated to scale Capacity Payments for demand and scheduled generation based on the level of System Marginal Price (SMPh) and the Value of Lost Load (VOLL) as set out algebraically below:

$$CPPFh = Max\left\{\left(\frac{(VOLL - SMPh)}{VOLL}\right),\ 0\right\}$$

Where

1. SMPh is the System Marginal Price in Trading Period h

2. VOLL is the Value of Lost Load

Capacity Payments in Respect of Generator Units

4.81 Capacity Payments will be determined for each Generator Unit in each Trading Period and paid to the relevant Participant as a separate payment in each Capacity Period according to the procedures set out in Section 6.

4.82 The Loss-Adjusted Capacity Payments Eligible Availability (CPEALFuh,) for each Generator Unit u in each Trading Period h is determined as follows:

$$CPEALFuh = TPD \times EALFuh$$

Where

1. TPD is the Trading Period Duration

2. EALFuh is the Loss-Adjusted Eligible Availability for Capacity Payments for Generator Unit u in Trading Period h

Capacity Payments Generation Price Factor

4.83 Capacity Payments for Generator Units are related to SMP and the Price at which the Availability is offered.

4.84 For Generator Units u which submit Prices as part of their Commercial Offer Data, for each Accepted Price Quantity Pair i which is applicable in Trading Period h, the Unscheduled Capacity Offer Quantity (UCOQuhi) and Unscheduled Capacity Offer Price (UCOPuhi) are determined as follows:

$$UCOPuhi = Max\{SMPh, Puhi\}$$

$$UCOQuhi = Min\{EAuh, Max\{Quhi, MSQuh\}\} - Min\{EAuh, Max\{Quh(i-1), MSQuh\}\}$$

Where

1. SMPh is the System Marginal Price in Trading Period h

2. Puhi is the ith Price for Generator Unit u which is applicable in Trading Period h

3. Quhi is the ith Quantity for Generator Unit u which is applicable in Trading Period h

4. Quh(0) is defined as the Minimum Output (MINOUTuh) for Generator Unit u in Trading Period h

5. EAuh is the Eligible Availability for Generator Unit u in Trading Period h

6. MSQuh is the Market Schedule Quantity for Generator Unit u in Trading Period h

4.84A For Generator Units u which are not required to submit Prices as part of their Commercial Offer Data for any Trading Period h, all values of Unscheduled Capacity Offer Quantity (UCOQuhi) and Unscheduled Capacity Offer Price (UCOPuhi) are set to equal zero.

4.85 The Capacity Payments Generation Price Factor (CPGPFuh) is determined for each Generator Unit u in Trading Period h as follows:

$$if \ \ (MSQuh + \sum_i UCOQuhi) \neq 0, then$$

$$CPGPFuh = \frac{\left(\left(MSQuh \times CPPFh\right) + \sum_i \left(UCOQuhi \times Max\left\{ \frac{VOLL - UCOPuhi}{VOLL}, 0 \right\} \right) \right)}{MSQuh + \sum_i UCOQuhi}$$

$$else \ \ CPGPFuh = 0$$

Where

1. MSQuh is the Market Schedule Quantity for Generator Unit u in Trading Period h

2. CPPFh is the Capacity Payments Price Factor for Trading Period h in the Capacity Period c

3. $\sum_{i}$ is a summation over all Accepted Price Quantity Pairs i for Generator Unit u which are applicable in Trading Period h

4. UCOQuhi is the Unscheduled Capacity Offer Quantity for Generator Unit u, for Price Quantity Pair i which is applicable in Trading Period h

5. UCOPuhi is the Unscheduled Capacity Offer Price for Generator Unit u, for Price Quantity Pair i which is applicable in Trading Period h

6. VOLL is the Value of Lost Load

Fixed Capacity Payments Generation Price Calculations

4.86 For each Capacity Period c, the Capacity Period Fixed Generation Scaling Price (CPFGSPc) is calculated as follows:

$$if \sum_{u,h in c}(CPEALFuh \times FCPWFh \times CPGPFuh) > 0 \ \ then$$

$$CPFGSPc = \frac{CPFSc}{\sum_{u,h in c}\left(CPEALFuh \times FCPWFh \times CPGPFuh\right)}$$

$$else \quad CPFGSPc = 0$$

Where

1. CPFSc is the Capacity Period Fixed Sum in Capacity Period c

2. CPEALFuh is the Loss-Adjusted Capacity Payments Eligible Availability for Generator Unit u in Trading Period h

3. FCPWFh is the Fixed Capacity Payments Weighting Factor in Trading Period h

4. CPGPFuh is the Capacity Payments Generation Price Factor for Generator Unit u in Trading Period h

5. the summation $\sum_{u,h in c}$ is a summation over all Generator Units u, and across all Trading Periods h within Capacity Period c

4.86A For each Trading Period h within Capacity Period c, the Fixed Capacity Generation Price (FCGPh) is calculated as follows:

$$FCGPh = FCPWFh \times CPFGSPc$$

Where

1. FCPWFh is the Fixed Capacity Payments Weighting Factor in Trading Period h

2. CPFGSPc is the Capacity Period Fixed Generation Scaling Price in Capacity Period c

Variable Capacity Payments Generation Price Calculations

4.87 For each Capacity Period c, the Capacity Period Variable Generation Scaling Price (CPVGSPc) is calculated as follows:

$$if \sum_{u,h\,in\,c}(CPEALFuh \times CPGPFuh \times VCPWFh) > 0 \;\; then$$

$$CPVGSPc = \frac{CPVSc}{\sum_{u,h\,in\,c}(CPEALFuh \times VCPWFh \times CPGPFuh)}$$

$$else \quad CPVGSPc = 0$$

Where

1. CPVSc is the Capacity Period Variable Sum in Capacity Period c

2. CPEALFuh is the Loss-Adjusted Capacity Payments Eligible Availability for Generator Unit u in Trading Period h

3. VCPWFh is the Variable Capacity Payments Weighting Factor in Trading Period h

4. CPGPFuh is the Capacity Payments Generation Price Factor for Generator Unit u in Trading Period h

5. the summation $\sum_{u,h\,in\,c}$ is a summation over all Generator Units u, and across all Trading Periods h within Capacity Period c.

4.88 For each Trading Period h within Capacity Period c, the Variable Capacity Payments Generation Price (VCGPh) is calculated as follows:

$$VCGPh = VCPWFh \times CPVGSPc$$

Where

1. VCPWFh is the Variable Capacity Payments Weighting Factor in Trading Period h.

2. CPVGSPc is the Capacity Period Variable Generation Scaling Price in Capacity Period c

Ex-Post Capacity Payments Generation Price Calculations

4.88A For each Capacity Period c, the Capacity Period Ex-Post Generation Scaling Price (CPEGSPc) is calculated as follows:

$$if \sum_{u,h\,in\,c}(CPEALFuh \times CPGPFuh \times ECPWFh) > 0 \ \ then$$

$$CPEGSPc = \frac{CPESc}{\sum_{u,h\,in\,c}(CPEALFuh \times ECPWFh \times CPGPFuh)}$$

$$else \quad CPEGSPc = 0$$

Where

1. CPESc is the Capacity Period Ex-Post Sum in Capacity Period c

2. CPEALFuh is the Loss-Adjusted Capacity Payments Eligible Availability for Generator Unit u in Trading Period h

3. ECPWFh is the Ex-Post Capacity Payments Weighting Factor in Trading Period h

4.

5. CPGPFuh is the Capacity Payments Generation Price Factor for Generator Unit u in Trading Period h

6. the summation $\sum_{u,h\,in\,c}$ is a summation over all Generator Units u, and across all Trading Periods h within Capacity Period c

4.88B For each Trading Period h within Capacity Period c, the Ex-Post Capacity Generation Price (ECGPh) is calculated as follows:

$$ECGPh = ECPWFh \times CPEGSPc$$

Where

1. ECPWFh is the Ex-Post Capacity Payments Weighting Factor in Trading Period h

2. CPEGSPc is the Capacity Period Ex-Post Generation Scaling Price in Capacity Period c

Capacity Payments Generation Price Calculations

4.89 The Capacity Payments Generation Price (CPGPh) is calculated for each Trading Period h as follows:

$$CPGPh = (VCGPh + FCGPh + ECGPh) \times CPPFh$$

Where

1. VCGPh is the Variable Capacity Payments Generation Price in Trading Period h

2. FCGPh is the Fixed Capacity Payments Generation Price in Trading Period h

3. ECGPh is the Ex-Post Capacity Payments Generation Price in Trading Period h

4. CPPFh is the Capacity Payments Price Factor in Trading Period h.

Capacity Payments Calculations

4.90 The Capacity Payment (CPuh) for each Generator Unit u in Trading Period h is calculated as follows:

$if\ CPPFh \neq 0\ \ then$

$$CPuh = CPGPh \times CPEALFuh \times \left(\frac{CPGPFuh}{CPPFh} \right)$$

$$else \quad CPuh = CPGPFuh \times CPEALFuh \times (VCGPh + FCGPh + ECGPh)$$

Where

1. CPPFh is the Capacity Payments Price Factor in Trading Period h

2. CPGPh is the Capacity Payments Generation Price in Trading Period h

3. CPEALFuh is the Loss-Adjusted Capacity Payments Eligible Availability for Generator Unit u in Trading Period h

4. CPGPFuh is the Capacity Payments Generation Price Factor for Generator Unit u in Trading Period h

5. VCGPh is the Variable Capacity Payments Generation Price in Trading Period h

6. FCGPh is the Fixed Capacity Payments Generation Price in Trading Period h

7. ECGPh is the Ex-Post Capacity Payments Generation Price in Trading Period h

4.91 The Capacity Period Payment (CPPuc) for each Generator Unit u in each Capacity Period c is calculated:

$$CPPuc = \sum_{h\ in\ c} CPuh$$

Where

1. CPuh is the Capacity Payment for Generator Unit u in Trading Period h

2. the summation $\sum_{h\ in\ c}$ is over all Trading Periods h in Capacity Period c

Capacity Charges

4.92 Capacity Charges will be levied on Supplier Units in each Trading Period according to the procedures set out below.

4.93 Intentionally blank

4.94 For each Capacity Period c, the Capacity Period Demand Scaling Price (CPDSPc) is calculated as follows:

$$if \sum_{v,h\,in\,c}(NDLFvh \times FCPWFh \times CPPFh) \neq 0 \ \ then$$

$$CPDSPc = \frac{CPPSc}{\sum_{v,h\,in\,c}(NDLFvh \times FCPWFh \times CPPFh)}$$

$$else\ CPDSPc = 0$$

Where

1. CPPSc is the Capacity Period Payment Sum in Capacity Period c

2. NDLFvh is the Loss-Adjusted Net Demand of Supplier Unit v in Trading Period h

3. FCPWFh is the Fixed Capacity Payments Weighting Factor in Trading Period h

4. CPPFh is the Capacity Payments Price Factor in Trading Period h

5. the summation $\sum_{v,h\ in\ c}$ is over all Trading Periods h in Capacity Period c and over all Supplier Units v

4.95 Intentionally blank

4.96 The Capacity Payments Demand Price (CPDPh) is calculated for each Trading Period h as follows:

$$CPDPh = FCPWFh \times CPDSPc \times CPPFh$$

Where

1. FCPWFh is the Fixed Capacity Payments Weighting Factor in Trading Period h

2. CPDSPc is the Capacity Period Demand Scaling Price in Capacity Period c

3. 3. CPPFh is the Capacity Payments Price Factor in Trading Period h

Capacity Charge Calculations

4.97 The Capacity Charge (CCvh) for each Supplier Unit v in Trading Period h is calculated as follows:

$$CCvh = CPDPh \times NDLFvh$$

Where

1. CPDPh is the Capacity Payments Demand Price in Trading Period h

2. NDLFvh is the Loss-Adjusted Net Demand at Supplier Unit v in Trading Period h

4.98 The Capacity Period Charge (CPCvc) for each Supplier Unit v in each Capacity Period c is calculated as follows:

$$CPCvc = \sum_{h\ in\ c} CCvh$$

Where

1. CCvh is the Capacity Charge for Supplier Unit v in Trading Period h

2. the summation $\sum_{h\ in\ c}$ is over all Trading Periods h in Capacity Period c

CONSTRAINT PAYMENTS

4.98A A Constraint Payment will apply in respect of a Generator Unit in a Trading Period whenever the Dispatch Operating Cost differs from the Schedule Operating Cost for that Trading Period, as set out algebraically below.

4.98B For the avoidance of doubt, Constraint Payments will apply irrespective of the cause for the difference in Dispatch Operating Cost and Schedule Operating Cost, including, inter alia, the decision of the relevant System Operator to dispatch Generator Units to provide reserve or other ancillary services.

Calculation of the Market and Dispatch Offer Prices

4.99 The calculation of Constraint Payments requires the determination of the Market Offer Price (MOPuh) and the Dispatch Offer Price (DOPuh) for each Generator Unit u in each Trading Period h.

4.100 The Market Offer Price for Generator Unit u in Trading Period h (MOPuh) is determined as follows:

if MSQuh ≤ Quh1, then MOPuh = Puh1,

else MOPuh = Puhi, where i satisfies the equation: Quh(i-1)< MSQuh ≤Quhi

Where

1. MSQuh is the Market Schedule Quantity for Generator Unit u in Trading Period h

2. Puhi is the ith Price Accepted for Generator Unit u applicable to Trading Period h.

3. Quhi is the ith Quantity for Generator Unit u applicable to Trading Period h

4.101 The Dispatch Offer Price for Generator Unit u in Trading Period h (DOPuh) , is determined as follows:

if DQuh ≤ Quh1, then DOPuh = Puh1,

else DOPuh = Puhi, where i satisfies the equation Quh(i-1) < DQuh ≤ Quhi

Where

1. DQuh is the Dispatch Quantity for Generator Unit u in Trading Period h

2. Puhi is the ith Price for Generator Unit u applicable to Trading Period h

3. Quhi is the ith Quantity for Generator Unit u applicable to Trading Period h

4.102 Intentionally blank

4.103 Intentionally blank

Calculation of Constraint Payments to Generator Units

4.104 For the following calculations:

1. MSQLFuh is the Loss-Adjusted Market Schedule Quantity for Generator Unit u in Trading Period h
2. NLCuh is the No Load Cost for Generator Unit u in Trading Period h
3. MOPuh is the Market Offer Price for Generator Unit u in Trading Period h, corresponding to a Market Schedule Quantity of MSQuh, or SMPh for any Generator Unit that does not submit Prices as part of its Commercial Offer Data
4. MNLCuh is the Market No Load Cost calculated as follows:

$$\begin{aligned} &\textit{if } MSQuh > 0 \textit{ then} \\ &\qquad MNLCuh = NLCuh \\ &\textit{else} \quad MNLCuh = 0 \end{aligned}$$

5. MSQCCuh is the Market Schedule Quantity Cost Correction for Generator Unit u in Trading Period h, as determined according to

paragraph 4.106, or zero for any Generator Unit that does not submit Prices as part of its Commercial Offer Data

6. DQLFuh is the Loss-Adjusted Dispatch Quantity for Generator Unit u in Trading Period h

7. DOPuh is the Dispatch Offer Price for Generator Unit u in Trading Period h, corresponding to a Dispatch Quantity of DQuh, or SMPh for any Generator Unit that does not submit Prices as part of its Commercial Offer Data

8. DNLCuh is the Dispatch No Load Cost calculated as follows:

$$\begin{aligned} &if\ DQuh > 0\ then \\ &\qquad DNLCuh = NLCuh \\ &else \quad DNLCuh = 0 \end{aligned}$$

9. DQCCuh is the Dispatch Quantity Cost Correction for Generator Unit u in Trading Period h, as determined according to paragraph 4.107, or zero for any Generator Unit that does not submit Prices as part of its Commercial Offer Data

10. TPD is the Trading Period Duration

11. CONPuh is the Constraint Payment payable to Generator Unit u for Trading Period h

12. DSUCuh is the Dispatch Start Up Cost for Generator Unit u in Trading Period h, calculated in accordance with paragraph 4.108AA

13. MSUCuh is the Market Start Up Cost for Generator Unit u in Trading Period h, calculated in accordance with paragraph 4.108

14. Quh(0) is defined as the Minimum Output (MINOUTuh) for Generator Unit u in Trading Period h

4.105 For each Generator Unit u in each Trading Period h, the Constraint Payments (CONPuh) will be calculated as set out below, and which may be either positive or negative.

$$CONPuh = TPD \times \begin{bmatrix} (DQLFuh \times DOPuh + DNLCuh + DQCCLFuh) \\ -(MSQLFuh \times MOPuh + MNLCuh + MSQCCLFuh) \end{bmatrix} + DSUCuh - MSUCuh$$

4.106 The Market Schedule Quantity Cost Correction (MSQCCuh) for Generator Unit u in Trading Period h is calculated as follows:

1. Let n = the number of Accepted Price Quantity Pairs for Generator Unit u applicable to Trading Period h

2. The integer k is defined as the smallest integer such that Quhk is greater than zero. If Quhn is zero or negative, then k=n+1

3. Let:

$$CCXuhk = 0$$

$$CCXuhn = CCXuh(n+1)$$ (this equation is only required if k=n+1)

$CCXuhj = CCXuh(j-1) + (Puh(j-1) - Puhj) \times Quh(j-1)$, for each
j in the range Max{2,k+1} ≤ j ≤ n in ascending order of j

$CCXuh(j-1) = CCXuhj - (Puh(j-1) - Puhj) \times Quh(j-1)$, for each
j in the range Min{k,n} ≥ j ≥ 2 in descending order of j

if MSQuh ≤ Quh1 then MSQCCuh = CCXuh1

else $MSQCCuh = CCXuhx$,
where x satisfies the equation $Quh(x-1) < MSQuh \leq Quhx$

4. The subscripts x and k are re-set after each value of MSQCCuh is determined. $CCXuhj$ are local variables used for the determination of MSQCCuh

4.107 The Dispatch Quantity Cost Correction (DQCCuh) is calculated as follows:

1. Let n = the number of Accepted Price Quantity Pairs for Generator Unit u applicable to Trading Period h

2. The integer k is defined as the smallest integer such that Quhk is greater than zero. If Quhn is zero or negative, then k=n+1

3. Let:

$CCXuhk = 0$

$CCXuhn = CCXuh(n+1)$ (this equation is only required if k=n+1)

$CCXuhj = CCXuh(j-1) + (Puh(j-1) - Puhj) \times Quh(j-1)$, for each
j in the range Max{2,k+1} ≤ j ≤ n in ascending order of j

$CCXuh(j-1) = CCXuhj - (Puh(j-1) - Puhj) \times Quh(j-1)$, for each
j in the range Min{k,n} ≥ j ≥ 2 in descending order of j

if DQuh ≤ Quh1 then DQCCuh = CCXuh1
else $DQCCuh = CCXuhx$,
where *x* satisfies the equation $Quh(x-1) < DQuh \leq Quhx$

4. The subscripts *x* and *k* are re-set after each value of DQCCuh is determined. $CCXuhj$ are local variables used for the determination of DQCCuh

4.108 The value of Market Start Up Cost (MSUCuh) for a Generator Unit u in Trading Period h will be zero except in those Trading Periods where that Generator Unit has a Market Schedule Start. In such Trading Periods, the Market Start Up Cost (MSUCuh) will be equal to the Accepted Start Up Cost for the relevant Market Schedule Warmth State.

4.108AA The value of Dispatch Start Up Cost (DSUCuh) for a Generator Unit u in Trading Period h will be zero except in those Trading Periods where that Generator Unit has a Dispatch Start. In such Trading Periods, the Dispatch Start Up Cost will be equal to the Accepted Start Up Cost value relating to the Dispatch Warmth State at the time of the Dispatch Start.

MAKE WHOLE PAYMENTS

4.108A Make Whole Payments are intended to make up any difference between the total Energy Payments to a Generator Unit in a Billing Period, and the Schedule Production Cost within that Billing Period (where the difference is arithmetically positive calculated over the Billing Period), as set out algebraically below.

4.109 Make Whole Payments are calculated on a Billing Period basis for each Generator Unit u in Billing Period b, as follows:

$$MWPub = Max\left\{\sum_{h\,in\,b}\left[\left(\begin{array}{c}(MOPuh - SMPh)\times MSQLFuh\\ +\,MNLCuh + MSQCCLFuh\end{array}\right)\times TPD + MSUCuh\right], 0\right\}$$

Where

1. MWPub is the Make Whole Payment for Generator Unit u in Billing Period b

2. MOPuh is the Market Offer Price of Generator Unit u in Trading Period h

3. SMPh is the System Marginal Price for Trading Period h

4. MSQLFuh is the Loss-Adjusted Market Schedule Quantity for Generator Unit u in Trading Period h

5. TPD is the Trading Period Duration

6. MNLCuh is the Market No Load Cost for Generator Unit u in Trading Period h

7. MSQCCLFuh is the Loss-Adjusted Market Schedule Quantity Cost Correction for Generator Unit u in Trading Period h

8. MSUCuh is the Market Start Up Cost for Generator Unit u in Trading Period h

9. the summation $\sum_{h\,in\,b}$ is over all Trading Periods h in Billing Period b.

UNINSTRUCTED IMBALANCES

General Rules for Uninstructed Imbalances

4.110 Uninstructed Imbalances shall be calculated for each Generator Unit. An Uninstructed Imbalance occurs, in a Trading Period, if the Actual Output of such a Generator Unit differs from its Dispatch Quantity in that Trading Period.

4.111 Four months prior to the start of each year, the Market Operator will set and publish, subject to prior approval by the Regulatory Authorities, the following parameters used in the calculation of Uninstructed Imbalances:

1. Engineering Tolerance ENGTOL (where $0 \leq ENGTOL \leq 1$);

2. MW Tolerance MWTOLt for each Trading Day t;

3. System per Unit Regulation parameter UREG;

4. the Discount for Over Generation (DOGuh) for each Generator Unit u in each Trading Period h, such that $0 \leq DOGuh \leq 1$; and

5. the Premium for Under Generation (PUGuh) for each Generator Unit u in each Trading Period h such that $0 \leq PUGuh \leq 1$.

4.112 Intentionally blank

4.112A For each Trading Day, values of Nominal Target System Frequency, (NORFRQh) and Average System Frequency (AVGFRQh) for each Trading Period h in that Trading Day will be submitted to the Market Operator by [one of] the System Operators, by 20:00 on the day after the start of the Trading Day.

Uninstructed Imbalance Tolerances

4.113 The Tolerance Bands for over generation and under generation will be calculated for each Generator Unit for each Trading Period with reference to system frequency and the frequency characteristics of the Generator Unit as set out algebraically below.

4.114 Intentionally blank

4.115 The Engineering Limit (ENGLIMuh), expressed in MW, is calculated for each Generator Unit u for each Trading Period h as follows:

$$ENGLIMuh = Max\left\{\left|DQuh\right| \times ENGTOL, MWTOLt\right\}$$

Where

1. DQuh is the Dispatch Quantity for Generator Unit u in Trading Period h

2. ENGTOL is the Engineering Tolerance

3. MWTOLt is the MW Tolerance for the relevant Trading Period h within Trading Day t

4.116 The Tolerance for Over Generation (TOLOGuh) and Tolerance for Under Generation (TOLUGuh) values are calculated as positive values, expressed in MW for each Generator Unit u for each Trading Period h as follows:

if $AVGFRQh \leq NORFRQh$ *then*

$$TOLOGuh = \left(\frac{(NORFRQh - AVGFRQh) \times RCu}{(UREG \times NORFRQh)} \right) + ENGLIMuh$$

$$TOLUGuh = ENGLIMu$$

else

$$TOLOGuh = ENGLIMuh$$

$$TOLUGuh = \left(\frac{(AVGFRQh - NORFRQh) \times RCu}{(UREG \times NORFRQh)} \right) + ENGLIMuh$$

Where

1. AVGFRQh is the Average Frequency in Trading Period h

2. NORFRQh is the Nominal System Frequency for Trading Period h

3. RCu is the Registered Capacity of Generator Unit u

4. UREG is the System per Unit Regulation parameter

5. ENGLIMuh is the Engineering Limit for Generator Unit u for Trading Period h

Payments to Generator Units for Uninstructed Imbalance

4.117 For the following calculations:

1. DQLFuh is the Loss-Adjusted Dispatch Quantity for Generator Unit u in Trading Period h

2. AOLFuh is the Loss-Adjusted Actual Output from Generator Unit u in Trading Period h

3. TOLOGLFuh is the Loss-Adjusted Tolerance for Over-Generation for Generator Unit u in Trading Period h, such that

$$TOLOGLFuh = TOLOGuh \times TLAFuh$$

4. TOLUGLFuh is the Loss-Adjusted Tolerance for Under-Generation, such that

$$TOLUGLFuh = TOLUGuh \times TLAFuh$$

5. DOGuh is the Discount for Over Generation for Generator Unit u in Trading Period h

6. PUGuh is the Premium for Under-Generation for Generator Unit u in Trading Period h

7. UNIMPuh is the Uninstructed Imbalance payment to Generator Unit u in Trading Period h

8. SMPh is the System Marginal Price in Trading Period h

9. DOPuh is the Dispatch Offer Price for Generator Unit u in Trading Period h

10. TPD is the Trading Period Duration

4.118 The calculation of payments for Uninstructed Imbalances for each Generator Unit u in Trading Period h is as follows:

$$if\ DQLFuh \le AOLFuh \le (DQLFuh + TOLOGLFuh)\ then$$
$$UNIMPuh = TPD \times Min\{SMPh, DOPuh\} \times (AOLFuh - DQLFuh)$$

$$else\,if\ (DQLFuh - TOLUGLFuh) \le AOLFuh < DQLFuh\ then$$
$$UNIMPuh = TPD \times Max\{SMPh, DOPuh\} \times (AOLFuh - DQLFuh)$$

$$else\,if\ AOLFuh > (DQLFuh + TOLOGLFuh)\ then$$
$$UNIMPuh = TPD \times Min\{SMPh, DOPuh\} \times TOLOGLFuh +$$
$$TPD \times [AOLFuh - (DQLFuh + TOLOGLFuh)] \times$$
$$[Min\{DOPuh - DOGuh \times |DOPuh|, SMPh - DOGuh \times |SMPh|\}]$$

$$else\,if\ AOLFuh < (DQLFuh - TOLUGLFuh)\ then$$
$$UNIMPuh = -TPD \times Max\{SMPh, DOPuh\} \times TOLUGLFuh -$$
$$TPD \times [(DQLFuh - TOLUGLFuh) - AOLFuh] \times$$
$$[Max\{DOPuh + PUGuh \times |DOPuh|, SMPh + PUGuh \times |SMPh|\}]$$

IMPERFECTIONS CHARGES

4.118A Two months prior to the start of each year, the Market Operator will set and publish, subject to prior approval by the Regulatory Authorities, the following parameters used in the determination of Imperfections Charges:

1. The Imperfections Price in euro/MWh for year y; and

2. Values of the Imperfections Charge Factor for each Trading Period h in year y.

4.119 The Imperfections Charge is intended to recover the anticipated net payments to Generator Units in respect of Constraint Payments, Uninstructed Imbalances (less Testing Charges for Generator Units), Make Whole Payments and any net imbalance between Energy Payments and Energy Charges over the year, with adjustments for previous years as appropriate.

4.119A The Imperfections Charge (IMPCvh) for each Supplier Unit v in each Trading Period h is calculated as follows:

$$IMPCvh = NDLFvh \times IMPy \times IMPFh$$

Where

1. IMPy is the Imperfections Price for year y

2. NDLFvh is the Loss-Adjusted Net Demand of Supplier Unit v in Trading Period h

3. IMPFh is the Imperfections Charge Factor for Trading Period h.

4.120 The Imperfections Charge Factor (IMPFh) will be set equal to 1 for all Trading Periods.

5. CATEGORISATION OF UNITS AND RULES FOR SPECIAL UNITS

DEFINITIONS AND GENERAL

5.1 Special Units are Generator Units or Supplier Units that are subject to specific conditions as set out in this Section 5. These specific conditions are in addition to, or, where appropriate, in replacement of, the relevant conditions as specified in Section 4 of this Code.

5.2 The extent of application of any specific conditions in this Section 5 to a Unit shall be determined by:

1. the classification of the Unit into a Generic Settlement Class as set out further below, and/or
2. the specific category of the Special Unit concerned.

Classification of Generator Units

Classification as Predictable, Variable or Autonomous

5.3 At registration, each Generator Unit shall be classified as:

1. A Predictable Generator Unit; or
2. A Variable Generator Unit; or
3. An Autonomous Generator Unit.

Classification as Autonomous Generator Unit

5.4 A Generator Unit shall be classified as an Autonomous Generator Unit if the Unit is not Dispatchable.

Classification as Variable Generator Unit

5.5 A Generator Unit shall be classified as a Variable Generator Unit if:

1. the short-term availability of the Generator Unit is unpredictable as a result of its fuel source; and
2. the Generator Unit is a Wind Power Unit or a Run-of-River Hydro Unit; and
3. the Generator Unit is Dispatchable.

Classification as Predictable Generator Unit

5.6 Predictable Generator Units are Generator Units which are Dispatchable and which are not otherwise required to be classified as Variable in accordance with paragraph 5.5.

Generic Settlement Classes for Generator Units

5.7 At Registration, each Generator Unit will be classified as one of the following five Generic Settlement Classes.

1. Predictable Price Maker Generator Unit;
2. Predictable Price Taker Generator Unit;
3. Variable Price Maker Generator Unit;

4. Variable Price Taker Generator Unit; or

5. Autonomous Generator Unit.

5.8 The circumstances under which a Generator Unit may be classified as a Price Maker or Price Taker are set out in paragraphs 2.37 to 2.40.

CONDITIONS APPLYING TO GENERIC SETTLEMENT CLASSES

5.9 Paragraphs 5.10 to 5.31 set out the specific conditions which apply to particular Generic Settlement Classes.

Submission of Data

Submission of Data for Predictable Price Taker Units

5.10 As part of the Technical Offer Data for each Trading Day, for each Predictable Price Taker Generator Unit, Participants shall submit a Nomination Profile.

5.11 A Nomination Profile for a Generator Unit comprises Nominated Quantities (NQuh) in respect of each Trading Period during the Optimisation Time Horizon.

5.12 Nominated Quantities shall be equal to the output intended by the Participant for each of its Generator Units for each Trading Period during the Optimisation Time Horizon.

5.13 The Nominated Quantities in each Trading Period shall be Physically Feasible.

Submission of Data for Variable Price Taker Generator Units

5.14 For Variable Price Taker Generator Units, Participants shall submit Technical Offer Data but not Commercial Offer Data. The Technical Offer Data shall include a Nomination Profile, as set out in paragraphs 5.11 to 5.13.

5.15 For Variable Price Taker Generator Units, the Nominated Quantities shall be the best estimate of the Participant concerned.

Submission of Data for Autonomous Generator Units

5.16 Participants are not required to submit Commercial Offer Data or Technical Offer Data in respect of Autonomous Generator Units under the Code.

Sources of Data Values in Settlement

5.17 Table 1 sets out the source of data values used in Settlement for each of the Generic Settlement Classes under a variety of Dispatch Instructions except for Predictable Price Maker Generator Units.

Table 1 – Source of data for Settlement for each of the Generic Settlement Classes other than Predictable Price Maker Generator Units

Category	Form of Dispatch Instruction	Dispatch Quantity DQuh	Availability Profile APuh	Market Schedule Quantity MSQuh
Autonomous Generator Units	N/A	Actual Output AOuh	Actual Output AOuh	Actual Output AOuh
Variable Price Taker Generator Units	Run	Actual Output AOuh	Actual Output AOuh	Actual Output AOuh
	Unit constrained down in Dispatch Instructions to remain below a level of Output of X MW	Time weighted average of (Real Time Availability when not constrained down below X MW, Min{X MW, Real Time Availability} when constrained down below X MW)	Max {Actual Output AOuh, Time weighted average of Real-Time Availability}	Max {Actual Output AOuh, Time weighted average of Real-time Availability}
Variable Price Maker Generator Units	Run	Actual Output AOuh	Actual Output AOuh	Calculated by the EPUS Software
	Unit constrained down in Dispatch Instructions to remain below a level of Output of X MW	Time weighted average of (Real Time Availability when not constrained down below X MW, Min{X MW, Real Time Availability} when constrained down below X MW)	Max (Actual Output AOuh, Time weighted average of Real-Time Availability)	Calculated by the EPUS Software
Predictable Price Taker Generator Units	Any	As defined in Section 4	As defined in Section 4	Minimum of Nominated Quantity NQuh and Availability Profile APuh

Constraint Payments and Other Payments and Charges

Autonomous Generator Units

5.18 Participants shall not be liable for Uninstructed Imbalance Charges in respect of Autonomous Generator Units.

5.19 Participants shall not receive Constraint Payments or Make Whole Payments in respect of Autonomous Generator Units.

5.20 The value of Minimum Output (MINOUTuh) for each Autonomous Generator Unit including, for the avoidance of doubt, Netting Generator Units, is calculated as follows:

$$MINOUTuh = Min\{AOuh, 0\}$$

Where

1. AOuh is the Actual Output for Generator Unit u in Trading Period h

5.21 For each Autonomous Generator Unit, there is no Market Schedule Quantities required for the Indicative Market Schedule.

Variable Price Taker Generator Units

5.22 Constraint Payments (CONPuh) in respect of each Variable Price Taker Generator Unit u in each Trading Period h are calculated as follows:

$$if\ DQuh < MSQuh\ then$$

$$CONPuh = TPD \times (DQLFuh - MSQLFuh) \times DECPuh$$

$$else\ CONPuh = 0$$

Where

1. TPD is the Trading Period Duration

2. DQLFuh is the Loss-Adjusted Dispatch Quantity for Generator Unit u in Trading Period h

3. MSQLFuh = Loss-Adjusted Market Schedule Quantity for Generator Unit u in Trading Period h

4. DECPuh is the Decremental Price for Generator Unit u in Trading Period h

5.23 For each Variable Price Taker Generator Unit u in each Trading Period h, the Decremental Price (DECPuh) is equal to zero.

5.24 Make Whole Payments do not apply for Variable Price Taker Generator Units.

5.25 For the purpose of calculation of Uninstructed Imbalances, as set out in paragraph 4.110, for Variable Price Taker Generator Units u in Trading Period h, the value of Dispatch Offer Price (DOPuh) is deemed to be equal to the System Marginal Price (SMPh).

5.26 For each Variable Price Taker Generator Unit u, the indicative values of Market Schedule Quantity (MSQuh) for the Indicative Market Schedule for each Trading Period h will equal the Accepted Nominated Quantities. .

Predictable Price Taker Generator Units

5.27 Constraint Payments (CONPuh) in respect of Predictable Price Taker Generator Units u in each Trading Period h are calculated as set out below:

1. where the Dispatch Quantity (DQuh) exceeds the Market Schedule Quantity (MSQuh), Constraint Payments are calculated in accordance with Section 4, and based on the relevant Commercial Offer Data;
2. where the Dispatch Quantity (DQuh) is less than or equal to the Market Schedule Quantity (MSQuh), Constraint Payments are calculated as follows:

$$CONPuh = TPD \times \left(DQLFuh - MSQLFuh\right) \times DECPuh$$

Where

a. TPD is the Trading Period Duration (in hours)

b. DQLFuh is the Loss-Adjusted Dispatch Quantity for Generator Unit u in Trading Period h

c. MSQLFuh is the Loss-Adjusted Market Schedule Quantity for Generator Unit u in Trading Period h

d. DECPuh is the Decremental Price for Generator Unit u in Trading Period h

5.28 For each Predictable Price Taker Generator Unit u in each Trading Period h, Decremental Price (DECPuh) is equal to zero.

5.29 Make Whole Payments do not apply in respect of Predictable Price Taker Generator Units.

5.30 For the purpose of calculation of Uninstructed Imbalances for Predictable Price Taker Generator Units as set out in paragraph 4.110, the value of Dispatch Offer Price (DOPuh) is deemed to be equal to the System Marginal Price (SMPh) for each Generator Unit u in Trading Period h for which AOLFuh ≤ MSQLFuh.

5.31 For each Predictable Price Taker Generator Unit u, the indicative values of Market Schedule Quantity for the Indicative Market Schedule for each Trading Period h will equal the Accepted Nominated Quantities..

INTERCONNECTORS

5.32 Each Interconnector Residual Capacity Unit shall be classified as a Predictable Generator Unit, but shall not be classified either as a Price Maker Generator Unit or as a Price Taker Generator Unit. Further special provisions for Settlement for Interconnector Residual Capacity Units are set out below.

5.33 Each Interconnector Error Unit shall be classified as an Autonomous Generator Unit. Further special provisions for Settlement for Interconnector Error Units are detailed below.

5.33A All values expressed in MW or MWh that relate to imports into the Pool in relation to an Interconnector, Interconnector Units, Interconnector Residual

Capacity Units or Interconnector Error Units shall be positive (including zero).

5.33B All values expressed in MW or MWh that relate to exports from the Pool in relation to an Interconnector, Interconnector Units, Interconnector Residual Capacity Units or Interconnector Error Units shall be negative or zero.

Interconnector Technical Data

5.34 For each Interconnector, the relevant Interconnector Administrator shall be responsible for submitting the Interconnector Technical Data. This includes, without limitation:

1. Interconnector Ramp Rates; and

2. Aggregate Capacity for the Interconnector in each direction of flow, comprising Aggregate Import Capacity and Aggregate Export Capacity.

5.35 For any Trading Day, each Interconnector Administrator shall notify the System Operator of any changes in Interconnector Technical Data.

Interconnector Unit

5.35A For the avoidance of doubt, neither any Interconnector Residual Capacity Unit nor any Interconnector Error Unit is an Interconnector Unit for the purposes of this Code.

5.36 Each Interconnector Unit shall be classified as a Predictable Price Maker Generator Unit. Further special provisions for Settlement for Interconnector Units are set out below.

5.37 Intentionally blank

Available Transfer Capacity

5.37A For each Trading Day for each Interconnector, the relevant System Operator shall by 09:30 on the day prior to Gate Closure for that Trading Day calculate the Available Transfer Capacity (consisting of the Maximum Import Available Transfer Capacity and the Maximum Export Available Transfer Capacity) for each Trading Period and shall submit the resulting values to the Market Operator.

5.37B The Market Operator shall publish such Available Transfer Capacity values for each Trading Day by 10:00 on the day prior to Gate Closure.

5.37C Maximum Import Available Transfer Capacity shall relate to the physical capability of the Interconnector to deliver energy to the Transmission System, and taking account of any further restrictions placed by any relevant agreement or decision by the relevant Regulatory Authority for the terms of access to the Transmission System, but shall not otherwise take consideration of any expected transmission constraints or other aspects of the operation of the Transmission System.

5.37D Maximum Export Available Transfer Capacity shall relate to the physical capability of the Interconnector to off-take energy from the Transmission System, taking account of any further restrictions placed by any relevant agreement or decision by the relevant Regulatory Authority for the terms of access to the Transmission System, but shall not otherwise take

consideration of any expected transmission constraints or other aspects of the operation of the Transmission System.

Interconnector Unit Capacity Holding Data

5.38 For each Trading Day for each Interconnector, the relevant Interconnector Administrator shall submit the Interconnector Unit Capacity Holding Data to the Market Operator by 17:30 on the day prior to Gate Closure for that Trading Day.

5.39 The Interconnector Unit Capacity Holding Data shall comprise for each Interconnector Unit, the Interconnector Unit Import Capacity Holding and the Interconnector Unit Export Capacity Holding for each Trading Period during the Trading Day.

5.40 Intentionally blank

Active Interconnector Unit Capacity Holding

5.41 On receipt of the Interconnector Unit Capacity Holding Data, the Market Operator shall by 19:00 on the same day, calculate and notify each Interconnector User of the Active Interconnector Unit Capacity Holding for its Interconnector Unit(s).

5.42 For each Interconnector Unit, the Active Interconnector Unit Capacity Holding comprises an Active Interconnector Unit Import Capacity Holding and an Active Interconnector Unit Export Capacity Holding for each Trading Period during the Trading Day.

5.43 The Active Interconnector Unit Import Capacity Holding for each Interconnector Unit is equal to the Interconnector Unit Import Capacity Holding except where the Maximum Import Available Transfer Capacity on an Interconnector is smaller in absolute magnitude than the sum of the Interconnector Unit Import Capacity Holdings of all Interconnector Units for that Interconnector, in which case the Active Interconnector Unit Import Capacity Holding for each Interconnector Unit is calculated as the Interconnector Unit Import Capacity Holding scaled pro-rata such that the sum of the Active Interconnector Unit Import Capacity Holdings is equal to the Maximum Import Available Transfer Capacity.

5.44 The Active Interconnector Unit Export Capacity Holding for each Interconnector Unit is equal to the Interconnector Unit Export Capacity Holding except where the Maximum Export Available Transfer Capacity on an Interconnector is smaller in absolute magnitude than the sum of the Interconnector Unit Export Capacity Holdings of all Interconnector Units for that Interconnector, in which case the Active Interconnector Unit Export Capacity Holding for each Interconnector Unit is calculated as the Interconnector Unit Export Capacity Holding scaled pro-rata such that the sum of the Active Interconnector Unit Export Capacity Holdings is equal to the Maximum Export Available Transfer Capacity.

5.45 The procedure for the calculation and notification of Active Interconnector Unit Capacity Holding is laid out in Agreed Procedure 2 “Interconnector Unit Capacity Right Calculations and Dispatch Notification”.

Commercial and Technical Offer Data

5.46 Before Gate Closure on each Trading Day, Interconnector Users shall submit Commercial Offer Data and Technical Offer Data to the Market

Operator for that Trading Day in respect of each of their Interconnector Units.

5.47 Commercial Offer Data for Interconnector Units differs from Commercial Offer Data for other Price Maker Generator Units as follows:

1. Commercial Offer Data is submitted for each Trading Period during the Trading Day, with up to ten Price Quantity Pairs for each Trading Period per Interconnector Unit, where negative Quantities relate to exports from the Pool; and

2. Commercial Offer Data for Interconnector Units shall not include No Load Costs or Start Up Costs.

5.48 Technical Offer Data for Interconnector Units comprises:

1. Maximum Interconnector Unit Import Capacity offered on the Interconnector Unit for each Trading Period in the Optimisation Time Horizon of the Indicative EPUS Software Run; and

2. Maximum Interconnector Unit Export Capacity offered on the Interconnector Unit in each Trading Period in the Optimisation Time Horizon of the Indicative EPUS Software Run

5.49 Intentionally blank

5.50 For each Interconnector Unit in each Trading Period, the Maximum Interconnector Unit Export Capacity shall not exceed in absolute magnitude the Active Interconnector Unit Export Capacity Holding.

5.51 The Maximum Interconnector Unit Export Capacity may be less in absolute magnitude than the Active Interconnector Unit Export Capacity Holding.

5.52 For each Interconnector Unit in each Trading Period, the Maximum Interconnector Unit Import Capacity shall not exceed in absolute magnitude the Active Interconnector Unit Import Capacity Holding.

5.53 The Maximum Interconnector Unit Import Capacity may be less in absolute magnitude than the Active Interconnector Unit Import Capacity Holding.

5.54 The Price Quantity Pairs for each Interconnector Unit in each Trading Period apply within the range set by the Maximum Interconnector Unit Import Capacity and the Maximum Interconnector Unit Export Capacity.

5.55 In the event that no valid Technical Offer Data or Commercial Offer Data is submitted for an Interconnector Unit for a Trading Period in accordance with the Code, the Maximum Interconnector Unit Import Capacity and Maximum Interconnector Unit Export Capacity for the relevant Unit shall be set equal to zero for that Trading Period.

Interconnector Unit Nominations and Modified Interconnector Unit Nominations

5.56 For each Trading Day, the Market Operator shall by 11:00 on the day prior to the start of the Trading Day determine Interconnector Unit Nominations for each Interconnector Unit from the Indicative EPUS Software Run based on the Active Interconnector Unit Capacity Holding, Commercial Offer Data and Technical Offer Data. In calculating the Interconnector Unit

Nominations, the Ramp Rate for each Interconnector Unit will be set to a value of 999.9 MW/min.

5.57 Based on the Interconnector Unit Nominations, the Market Operator shall calculate Modified Interconnector Unit Nominations in accordance with Agreed Procedure 2 "Interconnector Unit Capacity Right Calculations and Dispatch Notifications". These shall be calculated by the Market Operator such that the aggregate of the Ramp Rates for all Interconnector Units on any Interconnector that is implied by the Modified Interconnector Unit Nominations does not exceed the Interconnector Ramp Rate for that Interconnector at any time.

5.58 For each Trading Day, the Market Operator shall by 12:00 on the day prior to the start of the Trading Day submit to each Interconnector User in respect of its Interconnector Units the Modified Interconnector Unit Nominations.

Technical Failures on an Interconnector

5.59 In the event of a technical failure on an Interconnector which causes a reduction in the magnitude of the Available Transfer Capacity (this includes reductions in the absolute magnitude of the Maximum Import Available Transfer Capacity and/or the Maximum Export Available Transfer Capacity) after the time of submission stated in paragraph 5.37A, the procedures detailed in Agreed Procedure 2 "Interconnector Unit Capacity Right Calculation and Dispatch Notification" shall be followed.

5.60 In the case of the event described in paragraph 5.59, then the Modified Interconnector Unit Nominations shall be recalculated and re-issued to each Interconnector User for each of their Interconnector Units by the Market Operator as soon as possible.

5.61 For the avoidance of doubt, each Interconnector User will be responsible for any consequent alteration to the position of its Interconnector Unit(s) in any market outside of the Pool.

SO Interconnector Trades

5.62 Subject to commercial agreement, the System Operator which is the Participant in respect of an Interconnector Residual Capacity Unit shall be entitled under the terms of the Code to make SO Interconnector Trades across the relevant Interconnector in either direction, using any available interconnector capacity which is not allocated to Interconnector Users under the aggregate of the prevailing Modified Interconnector Unit Nominations.

5.63 SO Interconnector Trades must be conducted after Gate Closure and after the calculation of the Modified Interconnector Unit Nominations in accordance with paragraph 5.57. For each Interconnector *l* in each Trading Period h, the relevant System Operator shall submit data to the Market Operator no later than 10:00 on the day following the Trading Day of the relevant Trading Period as follows:

1. SO Interconnector Import Price (SIIPlh) which is the volume-weighted average price for each Trading Period for SO Interconnector Trades which are for import to the Pool (or zero if there are no such trades);

2. SO Interconnector Export Price (SIEPlh) which is the volume-weighted average price for each Trading Period for SO Interconnector Trades which are for export from the Pool (or zero if there are no such trades);

3. SO Interconnector Import Quantity (SIIQIh) which is the time-weighted average quantity for each Trading Period (expressed as a positive number in MW) of SO Interconnector Trades which are for import to the Pool (or zero if there are no such trades); and

4. SO Interconnector Export Quantity (SIEQIh) which is the time-weighted average quantity for each Trading Period (expressed as a negative number in MW) of SO Interconnector Trades which are for export from the Pool (or zero if there are no such trades).

5.64 Agreed Procedure 2 "Interconnector Unit Capacity Right Calculations and Dispatch Notifications" shall provide that, in the event of a revision to Available Transfer Capacity in accordance with paragraph 5.59, the Modified Interconnector Unit Nominations for each Interconnector Unit shall be revised to the minimum extent necessary, taking account of any SO Interconnector Trades which are in the opposite direction to the aggregate of the Modified Interconnector Unit Nominations, but discounting any SO Interconnector Trades which are in the same direction as the aggregate of the Modified Interconnector Unit Nominations.

Dispatch Quantities

5.65 For each Interconnector Unit u, the Dispatch Quantity (DQuh) shall be set equal to the Modified Interconnector Unit Nomination for each Trading Period h.

5.66 For each Interconnector Residual Capacity Unit u' in each Trading Period h, the Dispatch Quantity (DQu'h) shall be set equal to the sum of SO Interconnector Export Quantity (SIEQIh) and the SO Interconnector Import Quantity (SIIQIh) for that Interconnector in that Trading Period.

5.67 The Dispatch Quantity for the Interconnector Error Unit shall be set equal to zero.

5.68 In the derivation of the Dispatch Quantity values (DQuh), imports to the Pool are positive and exports from the Pool are negative.

Actual Availability and Minimum Output

Values for Indicative EPUS Software Runs

5.68A For each Interconnector Unit u in each Trading Period h, the Actual Availability (AAuh) used as an input to each Indicative EPUS Software Run shall be the minimum in absolute magnitude of the Active Import Capacity Holding and the Maximum Interconnector Unit Import Capacity expressed as a positive number, or zero if either the Active Export Capacity Holding or the Maximum Interconnector Unit Export Capacity is equal to zero.

5.68B For each Interconnector Unit u in each Trading Period h, the Minimum Output (MINOUTuh) used as an input to each Indicative EPUS Software Run shall be the minimum in absolute magnitude of the Active Export Capacity Holding and the Maximum Interconnector Unit Export Capacity expressed as a negative number, or zero if either the Active Export Capacity Holding or the Maximum Interconnector Unit Export Capacity is equal to zero.

Values for Ex-Post EPUS Software Runs

5.69 For each Interconnector Unit u in each Trading Period h, the Actual Availability (AAuh) used as an input to each Ex-Post EPUS Software Run is calculated as follows:

$if\ DQuh \geq 0\ then$

$$AAuh = DQuh$$

$else$

$$AAuh = 0$$

Where:

1. DQuh is the Dispatch Quantity for Interconnector Unit u in Trading Period h

5.70 For each Interconnector Unit u in each Trading Period h, the Minimum Output (MINOUTuh) used as an input to each Ex-Post EPUS Software Run is calculated as follows:

$if\ DQuh \geq 0\ then$

$$MINOUTuh = 0$$

$else$

$$MINOUTuh = DQuh$$

Where:

1. DQuh is the Dispatch Quantity for Interconnector Unit u in Trading Period h

Market Schedule Quantities

5.71 Each Interconnector Unit u shall be included in the EPUS Software as a Predictable Price Maker Generator Unit.

5.72 The Market Schedule Quantity (MSQuh) for each Interconnector Unit u in Trading Period h shall be calculated using the EPUS Software. In the calculation of the Market Schedule Quantity values, (MSQuh), the ramp rate for each Interconnector Unit will be set to a value of 999.9 MW/min.

5.73 The Market Schedule Quantity (MSQu'h) for each Interconnector Residual Capacity Unit u' in Trading Period h shall be set equal to zero.

5.74 The Market Schedule Quantity (MSQu''h) for each Interconnector Error Unit u'' in Trading Period h shall be set equal to zero.

5.75 Intentionally blank

Metered Quantities

5.76 The Metered Generation (MGuh) for each Interconnector Unit u and for each Interconnector Residual Capacity Unit u' (MGu'h) in each Trading Period h is calculated as follows:

$$MGuh = DQuh \times TPD$$

$$MGu'h = DQu'h \times TPD$$

Where

1. DQuh is the Dispatch Quantity for Interconnector Unit u in Trading Period h

2. DQu'h is the Dispatch Quantity for the Interconnector Residual Capacity Unit u' in Trading Period h

3. TPD is the Trading Period Duration

5.77 The Metered Generation (MGu"h) for each Interconnector Error Unit u" in each Trading Period h is calculated as follows:

$$MGu''h = IMGlh - \left(\sum_{u\ in\ l} DQuh + DQu'h \right) \times TPD$$

Where

1. IMGlh is the Interconnector Metered Generation for Interconnector l in Trading Period h

2. $\sum_{u\ in\ l} DQuh$ is the sum of the Dispatch Quantities for each Interconnector Unit u within each Interconnector l in Trading Period h

3. DQu'h is the Dispatch Quantity for the Interconnector Residual Capacity Unit u' in Trading Period h

4. TPD is the Trading Period Duration

5.78 Intentionally blank

Interconnector Capacity Payments

5.79 Intentionally blank

5.80 The Eligible Availability (EAuh) used to determine Capacity Payments for each Interconnector Unit u in each Trading Period h will be equal to the Dispatch Quantity (DQuh).

5.81 The Eligible Availability (EAu'h) for each Interconnector Residual Capacity Unit u' in each Trading Period h will be equal to the Dispatch Quantity (DQu'h).

5.82 The Eligible Availability (EAu"h) for the Interconnector Error Unit u" shall be set as follows:

$$EAu''h = \frac{MGu''h}{TPD}$$

Where

1. MGu''h is Metered Generation for Interconnector Error Unit u" in Trading Period h

2. TPD is the Trading Period Duration

Other Payments for Interconnector Residual Capacity Units

5.82A The Constraint Payments for each Interconnector Residual Capacity Unit u' in each Trading Period h (CONPu'h) are calculated as follows:

$$CONPu'h = (SIEPlh \times SIEQlh + SIIPlh \times SIIQlh) \times TPD \times TLAFu'h$$

Where

1. SIEPlh is the SO Interconnector Export Price for the relevant Interconnector l for Trading Period h

2. SIEQlh is the SO Interconnector Export Quantity for the relevant Interconnector l for Trading Period h

3. SIIPlh is the SO Interconnector Import Price for the relevant Interconnector l for Trading Period h

4. SIIQlh is the SO Interconnector Import Quantity for the relevant Interconnector l for Trading Period h

5. TPD is the Trading Period Duration

6. TLAFu'h is the Transmission Loss Adjustment Factor for Interconnector Residual Capacity Unit u'

5.82B There shall be no Make Whole Payments or Uninstructed Imbalances for Interconnector Residual Capacity Units.

Other Payments for Interconnector Error Units

5.82C For the purposes of calculating Uninstructed Imbalances in accordance with paragraph 4.118, for each Interconnector Error Unit u'' in each Trading Period h, all values of Dispatch Offer Price (DOPu''h) shall be set to equal System Marginal Price (SMPh).

5.82D There shall be no Make Whole Payments or Constraint Payments for Interconnector Error Units.

5.83 Intentionally blank

ENERGY LIMITED GENERATOR UNITS

General

5.83A Save as provided in paragraph 5.84, a Generator Unit may not be categorised as an Energy Limited Generator Unit, and the additional Technical Offer Data Records listed in paragraph 5.85 shall not be submitted in relation to it.

5.84 A Hydro-electric Generator Unit shall be categorised as an Energy Limited Generator Unit if it is:

1. subject to a physical Energy Limit; and
2. a Price Maker Generator Unit

5.84B For the purposes of the Code, an Energy Limit may only apply to a single Generator Unit and Participants shall not submit any data in relation to any Energy Limit that would or may apply to more than a single Generator Unit.

Offering and Scheduling

5.85 For each Energy Limited Generator Unit for each Trading Day, Participants shall submit as part of their Technical Offer Data additional Data Records which are used within the EPUS Software to calculate the Market Schedule Quantity for the Energy Limited Generator Unit. These parameters are:

1. the Energy Limit;
2. the Energy Limit Start;
3. the Energy Limit Stop; and
4. the Energy Limit Factor.

5.86 The Energy Limit shall not exceed the total energy that the plant is physically capable of generating during the Energy Limit Period (in MWh).

5.86A In accordance with the relevant Grid Code, a System Operator may accept a revised declaration of the Energy Limit of an Energy Limited Generator Unit from the plant operator for operational purposes. In this event, the relevant System Operator shall submit the revised Energy Limit to the Market Operator and this will replace the Energy Limit submitted by the Participant as part of its Technical Offer Data, provided that no such revised declaration will be Accepted after 20:00 on the relevant Trading Day for the purposes of this Code.

5.86B For each Trading Day, the Energy Limit Factor shall be multiplied by the Energy Limit to give a value which shall be used by the Market Operator in the EPUS Software to limit the total Market Schedule Quantity of the relevant Energy Limited Generator Unit in the set of Trading Periods that fall within the Ending Overlap Optimisation Period.

5.86C The relevant Participant shall submit an Energy Limit Factor of 0.25 for each Energy Limited Generator Unit.

5.87 The Market Schedule Quantity for each Energy Limited Generator Unit shall be as determined by the EPUS Software based on the physical parameters of the Energy Limited Generator Unit, including the Energy Limit, the Energy Limit Period and the Energy Limit Factor, and shall be Physically Feasible.

5.88 Subject to the physical capability of the plant, the Energy Limit used by the EPUS Software to calculate the Ex-Post Unconstrained Schedules shall be the greater of:

1. the Energy Limit; and
2. the sum of the Actual Output values AOuh in each Trading Period h in the Trading Day for the Energy Limited Generator Unit u.

5.89 Intentionally blank

Capacity Payments

5.90 The Eligible Availability of each Energy Limited Generator Unit in each Trading Period shall be determined in accordance with the calculations set out below.

5.90A The Interim Eligible Availability (IEAuh) for each Energy Limited Generator Unit u in Trading Period h shall be determined according to the following procedure:

Given λh and Iφh, maximise:

$$\sum_{h\ in\ t}\left[IEAuh\times\left\{\left(\frac{VCPWFh\times CPVSc}{\left(VCPWFh\times CPVSc\right)+\left(IECPWFh\times CPESc\right)}\right)\times\left(\lambda h\right)+\left(\frac{IECPWFh\times CPESc}{\left(VCPWFh\times CPVSc\right)+\left(IECPWFh\times CPESc\right)}\right)\times\left(I\phi h\right)\right\}\right]$$

subject to the following conditions:

1. $$\sum_{h\,in\,t} IEAuh \le \left(\frac{SELut}{TPD}\right)$$

2. $$\forall h : IEAuh \ge Max\left\{MSQuh, 0\right\}$$

3. $$\forall h : IEAuh \le APuh$$

Where:

1. VCPWFh is the Variable Capacity Payments Factor in Trading Period h

2. CPVSc is the Capacity Period Variable Sum in Capacity Period c

3. IECPWFh is the Interim Ex-Post Capacity Payment Weighting Factor in Trading Period h and is equal to $\frac{I\phi h}{\sum_{hinc} I\phi h}$

4. CPESc is the Capacity Period Ex-Post Sum in Capacity Period c

5. λh is the Loss of Load Probability value determined as part of the Capacity Payment calculations to provide a capacity weighting in each Trading Period h and is determined in accordance with Appendix M

6. Iφh is the Interim Ex-Post Loss of Load Probability value determined as part of the Capacity Payment calculations to provide a capacity weighting in each Trading Period h and is determined in accordance with Appendix M

7. SELut is the Accepted Energy Limit for Energy Limited Generator Unit u in Trading Day t expressed in terms of generation

8. TPD is the Trading Period Duration

9. MSQuh is the Market Schedule Quantity for Energy Limited Generator Unit u in Trading Period h

10. APuh is the Availability Profile for Energy Limited Generator Unit u in Trading Period h

11. $\sum_{h \in t}$ is a summation over all Trading Periods h in Trading Day t

5.90B The Eligible Availability (EAuh) for each Energy Limited Generator Unit u for each Trading Period h shall be determined according to the following procedure:

Given λh and Φh, maximise:

$$\sum_{h \in t}\left[EAuh \times \left\{\begin{array}{l}\left(\frac{VCPWFh \times CPVSc}{(VCPWFh \times CPVSc)+(ECPWFh \times CPESc)}\right)\times(\lambda h)\\ +\left(\frac{ECPWFh \times CPESc}{(VCPWFh \times CPVSc)+(ECPWFh \times CPESc)}\right)\times(\phi h)\end{array}\right\}\right]$$

subject to the following conditions:

1. $\sum_{h \in t} EAuh \leq \left(\frac{SELut}{TPD}\right)$

2. $\forall h : EAuh \geq Max\ \{MSQuh, 0\}$

3. $\forall h : EAuh \leq APuh$

Where

1. VCPWFh is the Variable Capacity Payments Factor in Trading Period h

2. CPVSc is the Capacity Period Variable Sum in Capacity Period c

3. ECPWFh is the Ex-Post Capacity Payment Weighting Factor in Trading Period h

4. CPESc is the Capacity Period Ex-Post Sum in Capacity Period c

5. λh is the Loss of Load Probability value determined as part of the Capacity Payment calculations to provide a capacity weighting in each Trading Period h and is determined in accordance with Appendix M

6. Φh is the Ex-Post Loss of Load Probability value determined as part of the Capacity Payment calculations to provide a capacity weighting in each Trading Period h and is determined in accordance with Appendix M

7. SELut is the Accepted Energy Limit for Energy Limited Generator Unit u in Trading Day t expressed in terms of generation

8. TPD is the Trading Period Duration;

9. MSQuh is the Market Schedule Quantity for Energy Limited Generator Unit u in Trading Period h

10. APuh is the Availability Profile for Energy Limited Generator Unit u in Trading Period h

11. $\sum_{hint}$ is a summation over all Trading Periods h in Trading Day t

PUMPED STORAGE

General

5.91 Intentionally blank

5.92 Each Pumped Storage Unit shall be settled as a Generator Unit irrespective of whether its net output in any Trading Period is positive or negative.

5.93 Pumped Storage Units shall not be registered as part of any Trading Site.

5.94 Pumped Storage Units shall be classified as Predictable Price Maker Generator Units.

Offering and Scheduling

5.95 Notwithstanding this classification, Price Quantity Pairs, Start Up Costs or No Load Costs shall not be submitted by a Participant or Accepted by the Market Operator for Pumped Storage Units.

5.96 The Market Schedule Quantity for each Pumped Storage Unit shall be generated by the EPUS Software based on its Actual Availability (AAuh), Minimum Output (MINOUTuh), Minimum Stable Generation (MINGENuh), its Technical Offer Data and its Commercial Offer Data, and shall be Physically Feasible.

5.97 Each Participant shall submit additional Data Records in the Commercial Offer Data and Technical Offer Data, in respect of each of its Pumped Storage Units. These additional Data Records are:

Commercial Offer Data

1. Target Reservoir Level at the end of the Trading Day;

2. Pumped Storage Cycle Efficiency (PSCEut), submitted as a single value for each Trading Day to apply to all Trading Periods h within that Trading Day t;

3. Target Reservoir Level Percentage, in the range between 0 and 200 (percent) inclusive;

Technical Offer Data

4. Maximum Reservoir Storage Capacity (PSMAXLut) expressed in terms of generation (MWh) for each Pumped Storage Unit u within Trading Day t; and

5. Minimum Reservoir Storage Capacity (PSMINLut) expressed in terms of generation (MWh) for each Pumped Storage Unit u within Trading Day t.

5.97A Values of the Forecast Minimum Output Profile submitted as part of Technical Offer Data shall be equal to the expected pumping capability for Pumped Storage Unit u in Trading Period h.

5.97B Values of the Forecast Availability Profile submitted as part of Technical Offer Data shall be equal to the expected generation availability for Pumped Storage Unit u in Trading Period h.

5.97C For each run of the EPUS Software, the Target Reservoir Level shall be used as a lower limit for the reservoir level at the end of the Trading Day and the EPUS Software shall (where feasible) schedule each Pumped Storage Unit such that the reservoir level at the end of the Trading Day is greater than or equal to the submitted Target Reservoir Level.

5.97D For each run of the EPUS Software, the Target Reservoir Level Percentage shall be multiplied by the Target Reservoir Level to derive a lower limit for the reservoir level at the end of the Optimisation Time Horizon and the EPUS Software shall (where feasible) schedule each Pumped Storage Unit such that the reservoir level at the end of the Optimisation Time Horizon is greater than or equal to the resultant reservoir level.

5.97E The relevant Participant shall submit a Target Reservoir Level Percentage of 50% for each Pumped Storage Unit.

5.98 For each run of the EPUS Software, the reservoir level at the start of the Optimisation Time Horizon will be taken from the results at the same time that were produced by the Preceding EPUS Run.

Energy Settlement

5.99 The Market Schedule Quantities will be positive when the Pumped Storage Unit is scheduled to generate and negative when the Pumped Storage Unit is scheduled to pump.

Constraint Payments and Charges

5.100 There shall be no Constraint Payments or Make Whole Payments in respect of Pumped Storage Units.

5.101 Each Pumped Storage Unit u shall be subject to Uninstructed Imbalances, and for these purposes the value of Dispatch Offer Price for each Pumped Storage Unit u in each Trading Period h (DOPuh) shall be equal to the System Marginal Price (SMPh).

Capacity Payments for Pumped Storage Units

5.102 Capacity Payments for each Pumped Storage Unit shall be based on its Eligible Availability in each Trading Period, adjusted for losses, and determined in accordance with the algebraic formulation set out below and in Section 4.

5.103 The Interim Eligible Generation Availability (IEGAuh) for each Pumped Storage Unit u in Trading Period h shall be determined according to the following procedure:

Given λh and $I\varphi h$, maximise

$$\sum_{h\ in\ t}\left[IEGAuh\times\left\{\begin{array}{l}\left(\dfrac{VCPWFh\times CPVSc}{\left(VCPWFh\times CPVSc\right)+\left(IECPWFh\times CPESc\right)}\right)\times\left(\lambda h\right)\\+\left(\dfrac{IECPWFh\times CPESc}{\left(VCPWFh\times CPVSc\right)+\left(IECPWFh\times CPESc\right)}\right)\times\left(I\phi h\right)\end{array}\right\}\right]$$

subject to the following conditions:

1. $$\sum_{hin\,t}IEGAuh\le Max\left\{\left(\sum_{h\,in\,t}\left(Max\ \left\{MSQuh,0\right\}\right)\right),\left(\frac{PSMAXLut-PSMINLut}{TPD}\right)\right\}$$

2. $$\forall h:IEGAuh\ge Max\ \left\{MSQuh,0\right\}$$

3. $$\forall h:IEGAuh\le APuh$$

Where:

1. VCPWFh is the Variable Capacity Payments Factor in Trading Period h

2. CPVSc is the Capacity Period Variable Sum in Capacity Period c

3. IECPWFh is the Interim Ex-Post Capacity Payment Weighting Factor in Trading Period h and is equal to $\dfrac{I\phi h}{\sum_{hinc}I\phi h}$

4. CPESc is the Capacity Period Ex-Post Sum in Capacity Period c

5. λh is the Loss of Load Probability value determined as part of the Capacity Payment calculations to provide a capacity weighting in each Trading Period h and is determined in accordance with Appendix M

6. Iφh is the Interim Ex-Post Loss of Load Probability value determined as part of the Capacity Payment calculations to provide a capacity weighting in each Trading Period h and is determined in accordance with Appendix M

7. MSQuh is the Market Schedule Quantity for Pumped Storage Unit u in Trading Period h

8. PSMAXLut is the Maximum Storage Capacity for Pumped Storage Unit u in Trading Day t

9. PSMINLut is the Minimum Storage Capacity for Pumped Storage Unit u in Trading Day t

10. TPD is the Trading Period Duration

11. APuh is the Availability Profile for Pumped Storage Unit u in Trading Period h

12. $\sum_{h\,in\,t}$ is a summation over all Trading Periods h in Trading Day t

5.103A The Interim Eligible Availability (IEAuh) for Pumped Storage Unit u in each Trading Period h shall be determined according to the following formula:

$$\forall h : IEAuh = IEGAuh + Min\{MSQuh, 0\}$$

Where

1. MSQuh is the Market Schedule Quantity for Pumped Storage Unit u in Trading Period h

2. IEGAuh is the Interim Eligible Generation Availability for Pumped Storage Unit u in Trading Period h

5.104 The Eligible Generation Availability (EGAuh) for each Pumped Storage Unit u in Trading Period h shall be determined according to the following procedure:

Given λh and Φh, maximise

$$\sum_{h\,in\,t}\left[EGAuh\times\left\{\begin{array}{l}\left(\dfrac{VCPWFh\times CPVSc}{(VCPWFh\times CPVSc)+(ECPWFh\times CPESc)}\right)\times(\lambda h)\\ +\left(\dfrac{ECPWFh\times CPESc}{(VCPWFh\times CPVSc)+(ECPWFh\times CPESc)}\right)\times(\phi h)\end{array}\right\}\right]$$

subject to the following conditions:

1. $$\sum_{hint} EGAuh \le Max\left\{\left(\sum_{h\,in\,t}(Max\ \{MSQuh, 0\})\right), \left(\frac{PSMAXLut - PSMINLut}{TPD}\right)\right\}$$

2. $$\forall h : EGAuh \ge Max\ \{MSQuh, 0\}$$

3. $$\forall h : EGAuh \le APuh$$

Where

1. VCPWFh is the Variable Capacity Payments Factor in Trading Period h

2. CPVSc is the Capacity Period Variable Sum in Capacity Period c

3. ECPWFh is the Ex-Post Capacity Payment Weighting Factor in Trading Period h

4. CPESc is the Capacity Period Ex-Post Sum in Capacity Period c

5. MSQuh is the Market Schedule Quantity for Pumped Storage Unit u in Trading Period h

6. PSMAXLut is the Maximum Storage Capacity for Pumped Storage Unit u in Trading Day t

7. PSMINLut is the Minimum Storage Capacity for Pumped Storage Unit u in Trading Day t

8. TPD is the Trading Period Duration

9. λh is the Loss of Load Probability for Trading Period h determined in accordance with Appendix M and is a value determined as part of the Capacity Payment calculations to provide a capacity weighting in each Trading Period

10. Φh is the Ex-Post Loss of Load Probability for Trading Period h determined in accordance with Appendix M and is a value determined as part of the Capacity Payment calculations to provide a capacity weighting in each Trading Period

11. APuh is the Availability Profile for Pumped Storage Unit u in Trading Period h.

12. $\sum_{h \in t}$ is a summation over all Trading Periods h in Trading Day t

5.104A Eligible Availability (EAuh) for each Pumped Storage Unit u in Trading Period h shall be determined according to the following formula:

$$\forall h : EAuh = EGAuh + Min\{MSQuh, 0\}$$

Where

1. MSQuh is the Market Schedule Quantity for Pumped Storage Unit u in Trading Period h

2. EGAuh is the Eligible Generation Availability for Pumped Storage Unit u in Trading Period h.

5.105 In the calculation of Capacity Payments for Pumped Storage Generator Units as set out from paragraph 4.85, there is deemed to be a single Price Quantity Pair i applicable for any excess of Eligible Availability over Market Schedule Quantity. All required values of Unscheduled Capacity Offer Price (UCOPuhi) and Unscheduled Capacity Offer Quantity (UCOQuhi) (where i is limited to 1), which are used in the calculation of the Capacity Payments Generation Price Factor in paragraph 4.85, are set out in the following paragraphs.

5.106 Intentionally blank

5.107 The Pumped Storage Unscheduled Capacity Daily Price (PSUCDPut) is calculated as follows:

$$if\ PSCEut = 0\ then$$

$$PSUCDPut = PCAP$$

$$else$$

$$if\ MSQuh \geq 0\ \forall h\ in Trading\ Day\ t\ then$$

$$PSUCDPut = Min\left\{\left(\frac{SMPh}{PSCEut}\right) : \forall h\ in Trading\ Day\ t\right\}$$

$$else$$

$$PSUCDPut = Max\left\{\left(\frac{SMPh}{PSCEut}\right) : \forall h\ in Trading\ Day\ t\ where\ MSQuh < 0\right\}$$

Where

1. PSCEut is the Pumped Storage Cycle Efficiency for Pumped Storage Unit u for the relevant Trading Period h within Trading Day t

2. PCAP is the Market Price Cap

3. MSQuh is the Market Schedule Quantity for Pumped Storage Unit u in Trading Period h

4. SMPh is the System Marginal Price in Trading Period h.

5.107A For the purposes of the summation $\sum_i$ within the equation in paragraph 4.85, i is limited to 1, and therefore only a single value of Unscheduled Capacity Offer Price (UCOPuhi) and Unscheduled Capacity Offer Quantity (UCOQuhi) is required within that equation for each Pumped Storage Unit u in each Trading Period h.

5.108 The value of the Unscheduled Capacity Offer Price (UCOPuhi) (where i =1) for each Pumped Storage Unit u for each Trading Period h during Trading Day t is calculated as follows:

$$UCOPuhi = Max\{SMPh, PSUCDPut\}\ \ where\ i = 1$$

Where

1. SMPh is the System Marginal Price in Trading Period h

2. PSUCDPut is the Pumped Storage Unscheduled Capacity Daily Price for Pumped Storage Unit u in Trading Day t.

5.109 The value of the Unscheduled Capacity Offer Quantity (UCOQuhi) (where i = 1) for each Pumped Storage Unit u for each Trading Period h during Trading Day t is calculated as follows:

$$UCOQuhi = Max\{(EAuh - MSQuh), 0\}\ where\ i = 1$$

Where

1. EAuh is the Eligible Availability for Pumped Storage Unit u in Trading Period h
2. MSQuh is the Market Schedule Quantity for Pumped Storage Unit u in Trading Period h.

PRIORITY DISPATCH

5.110 In the event of a Tie-Break, Price Maker Generator Units which have Priority Dispatch for their entire capacity shall take precedence in the allocation of Market Schedule Quantities over other Price Maker Generator Units, in accordance with Appendix N.

AUTOPRODUCERS

General

5.111 An Autoproducer Site is a Demand Site where demand is not solely for the purposes of generation, but which contains one or more Generator Units none of which are Demand Side Units.

5.112 The Units which form part of an Autoproducer Site are eligible to be registered as a Trading Site.

5.113 Intentionally blank

5.114 If all of the Generator Units which form part of an Autoproducer Site are Autonomous Generator Units, the Autoproducer Unit may be registered as a single Autonomous Generator Unit as part of a Trading Site with an Associated Supplier Unit.

5.115 Save as provided in paragraph 5.114, each Autoproducer Site must have separate metering for its import energy quantity and export energy quantity. Generator Units and Supplier Units shall be registered separately for the purposes of a Trading Site (including a Netting Generator Unit) where applicable.

5.116 Generation and Demand at an Autoproducer Unit shall be treated such that the Generator Unit Commercial Offer Data and Technical Offer Data shall be submitted net of Unit Load and independent of the related Demand.

DEMAND SIDE UNITS

5.117 Subject to paragraph 5.120 below, a Party may register a Demand Side Unit associated with a Demand Site or Demand Sites.

5.118 A Party is not obliged to register any Demand Side Unit with any Demand Site.

5.119 Subject to the terms of the Grid Code, a single Demand Side Unit may be associated with a number of Demand Sites provided that those Demand Sites comprise one single Supplier Unit and that those Demand Sites are within the same Currency Zone. The combined Demand Side Unit shall for all purposes under the Code be treated as a single Demand Side Unit.

5.120 To qualify for registration as a Demand Side Unit, a Demand Site must meet each of the following criteria:

1. the Demand Site shall house a final customer or consumer;

2. the Demand Site shall have the technical and operational capability to deliver Demand Reduction in response to Dispatch Instructions from the System Operator in accordance with the Grid Codes or Distribution Code; and

3. the Demand Site shall have appropriate equipment to permit real-time monitoring of delivery by the System Operator.

5.121 For each Demand Side Unit, a Party (or Applicant) shall register as part of a single Trading Site in accordance with the provisions set out in paragraphs 2.44 to 2.48:

1. the Demand Side Unit;

2. a single Supplier Unit (which is a Trading Site Supplier Unit, with which the Demand Reduction is associated); and

3. a Netting Generator Unit.

5.122 The Netting Generator Unit shall not be associated with any physical meter and shall be classified as an Autonomous Generator Unit in all respects except as set out below.

5.123 Each Demand Side Unit shall be classified as a Predictable Price Maker Generator Unit.

5.124 Participants shall submit Commercial Offer Data and Technical Offer Data for each of their Demand Side Units in respect of its offered Demand Reduction.

5.125 As part of the Technical Offer Data for a Demand Side Unit, the Forecast Availability Profile of each Demand Side Unit at each time is equal to the offered level of Demand Reduction.

5.126 The Transmission Loss Adjustment Factor (TLAFuh) for each Demand Side Unit shall be equal to 1.

Offering and Scheduling

5.126A The required Data Records which must be included in Commercial Offer Data for Demand Side Units are listed in Appendix C: Offer Data Transactions, and no other Commercial Offer Data Records shall be submitted for these Units.

5.126B Commercial Offer Data submitted for a Demand Side Unit u does not include No Load Costs and for the purposes of calculations under this Code all values of No Load Cost (NLCuh) for Demand Side Units u shall be zero.

5.126C Commercial Offer Data submitted for each Demand Side Unit u includes a single Shut Down Cost and no Start Up Costs, and for the purposes of calculations under this Code all values of Start Up Cost (SUCuh) for Demand Side Units u shall be taken from the relevant Accepted values of Shut Down Cost.

Technical Offer Data

5.126D The required Data Records which must be included within Commercial Offer Data for Demand Side Units are specified within Appendix C: Offer Data

Transactions, and no other Technical Offer Data Records shall be submitted for these Units.

Quantities

5.127 The Net Demand (NDvh) at the Trading Site Supplier Unit v with which the Demand Reduction is associated in Trading Period h shall be determined according to the formula below:

$$NDvh = MDvh$$

Where

1. MDvh is the Metered Demand for Trading Site Supplier Unit v in Trading Period h.

5.128 The Market Schedule Quantity at the Netting Generator Unit u' for Trading Period h is set to equal the negative of the Dispatch Quantity at the Demand Side Unit u:

$$MSQu'h = -DQuh\,.$$

5.129 The Dispatch Quantity (DQu'h) and the Metered Generation (MGu'h) at the Netting Generator Unit u' for Trading Period h are calculated as follows:

$$DQu'h = MSQu'h$$

$$MGu'h = MSQu'h \times TPD$$

Where

1. MSQu'h is the Market Schedule Quantity at Netting Generator Unit u' for Trading Period h

2. TPD is the Trading Period Duration

Compliance with Dispatch Instructions

5.130 Demand Reduction at the Demand Site shall be delivered in accordance with any Dispatch Instruction which is in line with the Actual Availability and the relevant parts of its Technical Offer Data. Verification of compliance with Dispatch Instructions shall take place in accordance with the terms of the relevant Grid Code.

5.131 For each Demand Side Unit u in Trading Period h, the Metered Generation (MGuh) is deemed to equal the Dispatch Quantity:

$$MGuh = DQuh\ xTPD$$

Where

1. DQuh is Dispatch Quantity for Generator Unit u in Trading Period h

2. TPD is the Trading Period Duration

5.132 Intentionally blank

GENERATOR UNITS UNDER TEST

5.133 Generator Units may be granted the status of Under Test for a limited period by the relevant System Operator under the terms of the relevant Grid Code.

5.133A Autonomous Generator Units, Pumped Storage Units, Interconnector Units and Interconnector Residual Capacity Units may not be granted the status of Under Test for the purposes of this Code.

5.133B In order for a Generator Unit to have Under Test status under this Code, a Participant shall specify a Unit Under Test Start Date and a Unit Under Test End Date [as part of its Technical Offer Data]. The submission of this data shall constitute an application for Under Test status.

5.133C The Market Operator shall award the Generator Unit Under Test status under this Code for the period between the Unit Under Test Start Date and the Unit Under Test End Date, subject to verification with the relevant System Operator that the Generator Unit shall be Under Test under the terms of the relevant Grid Code at all times between the Unit Under Test Start Date and the Unit Under Test End Date.

5.134 In respect of Generator Units Under Test, Participants shall submit Technical Offer Data and Commercial Offer Data. This does not affect the requirement to submit any data under the terms of the Grid Code.

5.135 The Commercial Offer Data for Generator Units Under Test shall include a Nomination Profile (as described in paragraphs 5.11 to 5.13). The Nomination Quantities within the Nomination Profile shall reflect the required pattern of operation which the System Operator shall take into consideration in determining the Dispatch Instructions but will not be used in Settlement.

5.136 Within the Commercial Offer Data for Generator Units Under Test Price Quantity Pairs, Start Up Costs or No Load Costs do not apply.

Testing Tariffs

5.137 The schedule of Testing Tariffs is intended to permit different levels of charges to be levied for Generator Units of different sizes and at different test phases.

5.138 The schedule of Testing Tariffs and the detailed tariff methodology will be published annually by the Market Operator and is subject to the prior approval by the Regulatory Authorities.

Charges for Generator Units Under Test

5.139 Generator Units which are Under Test will incur a Testing Charge for each unit of output, expressed in euro/MWh.

5.140 The Testing Charge applicable to each Generator Unit for each Trading Period (TCHARGEuh) is calculated as follows:

$$TCHARGEuh = Max\{MGLFuh, 0\} \times TTARIFFuy$$

Where

1. TTARIFFuy is the Testing Tariff applicable to Generator Unit u in year y, as set out in the schedule of Testing Tariffs

2. MGLFuh is the Loss-Adjusted Metered Generation for the Generator Unit Under Test u for Trading Period h

Settlement of Generator Units Under Test

5.141 The Dispatch Quantity (DQuh) for Generator Units Under Test u in Trading Period h shall be calculated in accordance with the Dispatch Instructions issued by the System Operator (as for Predictable Price Taker Generator Units).

5.142 The Market Schedule Quantity for Generator Unit u in Trading Period h (MSQuh) shall be determined from the Dispatch Quantity as follows:

$$MSQuh = DQuh$$

Where

1. DQuh is Dispatch Quantity for Generator Unit u in Trading Period h

5.143 Generator Units Under Test shall not be considered for Constraint Payments (since DQuh ≡ MSQuh).

5.144 For the purposes of Uninstructed Imbalances for Generator Units Under Test as set out in paragraph 4.117, the value of Dispatch Offer Price (DOPuh) is deemed to be equal to System Marginal Price (SMPh).

5.144B Make Whole Payments (MWPub) for Generator Units u which are Under Test in any Trading Period h within a Billing Period b shall be set to zero.

5.145 The Eligible Availability (EAuh) for use in the calculation of Capacity Payments for Generator Units Under Test is calculated as follows:

$$EAuh = Min\left\{\frac{MGuh}{TPD}, DQuh\right\}$$

Where

1. MGuh is Metered Generation for Generator Unit u for Trading Period h

2. TPD is the Trading Period Duration

3. DQuh is Dispatch Quantity for Generator Unit u for Trading Period h

6. FINANCIAL AND SETTLEMENT

GENERAL

Settlement Items

6.1 The Market Operator shall carry out or procure settlements in accordance with the Code of the following amounts:

1. Trading Payments due to Participants in respect of their registered Generator Units for each Billing Period;

2. Trading Charges payable by Participants in respect of their registered Supplier Units for each Billing Period;

3. Capacity Payments due to Participants in respect of their registered Generator Units for each Capacity Period;

4. Capacity Charges payable by Participants in respect of their registered Supplier Units for each Capacity Period;

5. Charges due to or payable by Participants for Currency Cost for the relevant Billing Period;

6. Charges due to or payable by Participants for Currency Cost for the relevant Capacity Period;

7. Charges payable by Participants in respect of their registered Generator Units for Unsecured Bad Energy Debt;

8. Charges to Participants in respect of their registered Generator Units for Unsecured Bad Capacity Debt;

9. Settlement Reallocations due to or payable by Participants for each relevant Billing Period;

10. Settlement Reallocations due to or payable by Participants for each relevant Capacity Period;

11. Market Operator Charges payable by Participants in respect of their registered Generator Units and registered Supplier Units for each year;

12. Market Operator Charges payable by Participants in respect of their Supplier Units for each Billing Period for recovery of the operating costs of the Market Operator.

Currency

6.2 All Settlement information and cash flows shall be initially calculated in euro (€).

6.3 All settlements, including resettlements, will be offered in euro (€) or pounds sterling (£) depending on the Jurisdiction of the Participant in respect of its Unit(s).

6.4 The Market Operator shall, in relation to each Trading Day, publish a Trading Day Exchange Rate between euro (€) and Pounds Sterling (£) at 08:00 on the preceding Trading Day.

6.5 Intentionally blank

6.6 For each Participant using pounds sterling as the Settlement Currency, all Settlement calculations on a Settlement Day or a Billing Period basis shall be included in Settlement Statements after being converted to pounds sterling using the relevant Trading Day Exchange Rate. Similarly, all data values that are submitted in pounds sterling shall be converted by the Market Operator to euro using the relevant Trading Day Exchange Rate, and the euro value shall be used for all calculations within this Code.

6.7 For each Participant using pounds sterling as the Settlement Currency, all Settlement calculations on a Capacity Period basis shall be included in Settlement Statements after being converted to pounds sterling using the Annual Capacity Exchange Rate.

6.8 The Market Operator shall endeavour to minimise the Currency Costs insofar as is practicable within the Pool.

6.9 The Currency Costs shall be due to or payable by all Participants in the respective Billing and Capacity Periods in proportion to their gross financial participation in the market as set out in paragraph 6.94 and 6.98.

Banking Arrangements

6.10 Intentionally blank

6.11 Intentionally blank

6.12 Intentionally blank

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6.23A Intentionally blank

6.23B The Market Operator shall contract with the SEM Bank for the provision of the banking services required pursuant to the Code.

6.23C The Market Operator shall establish and operate in accordance with the Code:

1. a euro SEM Trading Clearing Account at a branch of the SEM Bank in Ireland; and
2. a pounds sterling SEM Trading Clearing Account at a branch of the SEM Bank in Northern Ireland,

to and from which all Trading Payments calculated in accordance with the Code are to be made.

Each SEM Trading Clearing Account shall be an interest bearing account.

6.23D The Market Operator shall establish and operate in accordance with the Code:

1. a euro SEM Capacity Clearing Account at a branch of the SEM Bank in Ireland; and
2. a pounds sterling SEM Capacity Clearing Account at a branch of the SEM Bank in Northern Ireland,

to and from which all Capacity Payments calculated in accordance with the Code are to be made.

Each SEM Capacity Clearing Account shall be an interest bearing account.

6.23E.1 A Participant may at any time provide a cash deposit as part of its Required Credit Cover as permitted pursuant to paragraph 6.136B. Where a Participant decides to provide such a cash deposit, then such Participant shall establish and maintain an SEM Collateral Reserve Account with the SEM Bank in each Currency Zone in which the Participant has a registered Unit.

6.23E.2 The SEM Collateral Reserve Account in relation to each relevant Participant shall contain the cash element of that Participant's Posted Credit Cover on the following terms:

1. the SEM Collateral Reserve Account shall be in the name of the Market Operator;
2. the Participant and the Market Operator shall have irrevocably instructed the SEM Bank to make payment against the sole instruction of the Market Operator in accordance with the Bank Mandate.

6.23F.1 The SEM Trading Clearing Accounts and the SEM Capacity Clearing Accounts shall be established and maintained in the name of the Market Operator. The cash in and rights relating to each SEM Trading Clearing Accounts, the SEM Capacity Clearing Accounts and each SEM Collateral Reserve Account opened shall be held on trust without obligation to invest in accordance with the provisions of this section 6. The Market Operator shall not commingle any funds standing to the credit of the SEM Trading Clearing Accounts, the SEM Capacity Clearing Accounts or any SEM Collateral Reserve Account with its own personal or any other funds. This is without prejudice to the Market Operator's rights to transfer funds as between the euro and pounds sterling SEM Trading Clearing Accounts and SEM Capacity Clearing Accounts respectively for the purposes of Settlement.

6.23F.2 Notwithstanding paragraph 6.23F.1, the Market Operator shall be entitled to make payments into and out of the SEM Trading Clearing Accounts for the purpose of settling any Balancing Costs.

6.23F.3 No Party or Participant shall enter into any arrangements which assign or charge or purport to assign or charge any interest any Party or Participant may have in any SEM Trading Clearing Account, SEM Capacity Clearing Account or SEM Collateral Reserve Account.

6.23G.1 The Market Operator shall procure that an electronic funds transfer (EFT) facility with the SEM Bank is provided and made available to all Participants for the payment and receipt of all amounts due under the Code and for the payment of the Market Operator Charge.

6.23G.2 Unless expressly permitted otherwise by the Market Operator, all Participants shall use the EFT facility procured by the Market Operator for this purpose.

6.23G.3 In procuring the establishment of the EFT facility, the Market Operator shall use its reasonable endeavours to ensure that the use of the facility does not impose unreasonable restrictions on the Participants' normal banking arrangements.

6.23H Each Participant shall give to the Market Operator in accordance with the registration requirements set out in Section 2 details of the bank account or bank accounts to which the Market Operator is instructed to make payments pursuant to the Code to such Participant and shall provide to the Market Operator such further information in relation to such bank account or bank accounts as the Market Operator may reasonably request. Each Participant shall establish and maintain such a bank account in each Currency Zone in which the Participant has a registered Unit. Where a Participant changes the bank account or bank accounts to which payments are made pursuant to the Code it shall inform the Market Operator and provide details of the new bank account or bank accounts. The Market Operator shall not be responsible for any loss to any Party where the Market Operator has not been informed by the relevant Party of any change in bank account details.

6.23I Intentionally blank

6.23J The Market Operator shall maintain detailed ledger accounts of all funds held in the SEM Trading Clearing Accounts, SEM Capacity Clearing Accounts and all other bank accounts held by it at the SEM Bank showing all monies paid in and paid out in respect of each Participant and, where requested by a Participant, the Market Operator shall provide full details of all such payments and funds in relation to such Participant only and shall keep all information in respect of each Participant confidential. Notwithstanding the foregoing, the Market Operator shall be entitled to disclose any information or data in relation to any SEM Trading Clearing Account, SEM Capacity Clearing Account or SEM Collateral Reserve Account held at the SEM Bank to the Market Auditor or relevant tax authority where required or where otherwise required by law.

Establishment of Trusts

6.23K The Market Operator shall hold all funds in the SEM Trading Clearing Accounts and the SEM Capacity Clearing Accounts and such rights as may from time to time be vested in it with regard to payments due and owing by Participants or with regard to the provision of Credit Cover by each Participant including:

1. all monies from time to time standing to the credit of each SEM Trading Clearing Account and each SEM Capacity Clearing Account relating to any Trading Period;
2. all rights of the Market Operator to call for payment of amounts owing under the Code or to make a Credit Call;
3. the Letters of Credit and all rights to, and monies representing, any proceeds therefrom up to the amount of any applicable Shortfall; and
4. any interest receivable in respect of any amounts due pursuant to the Code relating to any Trading Period,

on trust for SEM Creditors in accordance with their individual respective proportionate entitlements as they arise in accordance with the Code. Upon termination of the said trust any residual balance after satisfaction of the entitlement of all SEM Creditors shall be held for all Participants in accordance with their individual respective proportionate entitlements as they arise in accordance with the Code.

6.23L The respective rights of the SEM Creditors to the assets held by the Market Operator on trust in the SEM Trading Clearing Accounts and the SEM Capacity Clearing Accounts as set out in paragraphs 6.23C and 6.23D respectively shall be determined in accordance with the Code and in accordance with the following principles:

1. the extent of each SEM Creditor's individual rights shall be deemed to consist of the aggregate of the claims (to the extent not paid or otherwise settled) of such SEM Creditor in respect of each Trading Period; and
2. the assets referred to in paragraph 6.23K above shall be deemed to consist of a series of funds, each fund representing the rights or monies owed, paid, held or otherwise attributable to each Trading Period in relation to Trading Payments and Capacity Payments.

6.23M The Market Operator shall hold the SEM Collateral Reserve Assets in respect of each Participant that establishes and maintains an SEM Collateral Reserve Account on trust as follows:

1. at any time when no amounts owed by any such Participant are overdue, on trust to repay (subject to and in accordance with paragraphs 6.33) to that Participant the monies, together with any interest accrued on such monies, held in the relevant SEM Collateral Reserve Account as part of that Participant's Posted Credit Cover; and
2. with automatic effect as soon as any amount owed by a Participant becomes overdue, such amount of the monies deposited in the relevant SEM Collateral Reserve Account by such Participant as is equal to the overdue amount in respect of the relevant Participant on trust for the SEM Creditors on the same basis as set out in paragraph 6.23K above.

6.23N Each Participant which remits funds for the credit of a relevant SEM Collateral Reserve Account agrees that none of the remittances shall be repayable (or capable of being repaid), except where provided otherwise in accordance with the provisions of the Code, until such Party has ceased to be a Party to the Code and has paid in full all amounts actually or

contingently owed by it to any SEM Creditor or the Market Operator pursuant to the Code.

6.23O Each Participant with an SEM Collateral Reserve Account undertakes not to seek withdrawal of any funds to which it may otherwise be entitled in the relevant SEM Collateral Reserve Account except in the circumstances permitted by paragraph 6.23P. The Market Operator shall reject any purported notice of withdrawal not complying with this paragraph 6.23O and the Bank Mandate.

6.23P Notwithstanding paragraphs 6.23N and 6.23O, if a Participant is not in default in respect of any amount owed to an SEM Creditor, then:

1. the Market Operator shall transfer monthly to the relevant Participant the interest credited to the relevant SEM Collateral Reserve Account unless the Participant requests otherwise;
2. the Market Operator shall transfer to such Participant within 2 Working Days after a written request from such Participant (exclusive of the day of request) any amount of the balance which exceeds the amount which such Participant has agreed to maintain in the relevant SEM Collateral Reserve Account from time to time in accordance with this section 6 and the Bank Mandate;
3. the Participant shall be entitled to change the composition of its Posted Credit Cover in satisfying the Required Credit Cover provided any reduction in any amount standing to the credit of the relevant SEM Collateral Reserve Account does not result in a breach of the Required Credit Cover.

6.23Q Intentionally blank

6.23R Each Party waives any right it might otherwise have to set off against any obligation owed to the Market Operator, the SEM Bank or any other Party claims such Party may have to or in respect of any monies standing to the credit of the relevant SEM Trading Clearing Account, SEM Capacity Clearing Account and SEM Collateral Reserve Account as applicable.

6.23S Intentionally blank

6.23T The provisions of section 10(2)(c) of the Trustee Act, 1893 shall not apply to any change in the identity of the Market Operator.

6.23U Provided that the Market Operator carries out its duties honestly under the Code no Party shall have any claim against the Market Operator for breach of trust or fiduciary duty arising solely out of any discrepancy between payments actually made in respect of any Billing Period or Capacity Period and the entitlement to Parties to receive payments in respect of the same Billing Period or Capacity Period.

DESCRIPTION OF TIMELINES

Settlement Day

6.24 All Settlement of Trading Payments and Trading Charges are based on a Settlement Day which is defined as one day commencing at 00:00.

6.25 The terminology “SD+xWD” means during the Working day which ends x Working Days after the end of the Settlement Day.

Billing Period

6.25A All Trading Payments and Trading Charges shall be aggregated on a Billing Period basis which is defined as one Week commencing at 00:00 on Sunday.

6.25B The terminology "BP+*x*WD" means during the Working Day which ends *x* Working Days after the end of the Billing Period.

6.26 For the purposes of this Section 6, the terminology "BP+xM" means during the last Month which ends x Months after the end of the Billing Period.

Capacity Period

6.27 All Capacity Payments and Capacity Charges shall be aggregated on a Capacity Period basis which is defined as one Month commencing at 00:00 on the first day of the Month.

6.28 The terminology "CP+*x*WD" means during the Working Day which ends *x* Working Days after the end of the Capacity Period.

6.29 For the purposes of this Section 6, the terminology "CP+*x*M" means during the Month which ends x Months after the end of the Capacity Period.

Settlement Calendar

6.29A The Market Operator shall publish four months prior to the start of each year a Settlement Calendar for all days in the coming which shall include the following information:

1. details of Working and Non-Working Days;
2. details of:
    a. when Preliminary Settlement Statements due (for each type of Settlement statement as defined in Appendix U);
    b. when Initial Settlement Statements due (for each type of Settlement statement as defined in Appendix U);
    c. the Actual Exposure Period for Billing Periods expressed as calendar days relevant to the Working Day;
    d. the Actual Exposure Period for Capacity Periods expressed as calendar days relevant to the Working Day;
    e. the Undefined Exposure Period for Billing Periods expressed as calendar days relevant to the Working Day;
    f. the Undefined Exposure Period for Capacity Periods expressed as calendar days relevant to the Working Day;
    g. each Invoice issue date (for each type of Invoice);
    h. the Invoice Due Date (for each type of Invoice);
    i. the Self-Billing Invoice issue date (for each type of Self Billing Invoice);
    j. the Self Billing Invoice Due Date (for each type of Self Billing Invoice);
    k. the Timetabled M+4 Settlement Reruns for relevant Settlement Period; and

l. the Timetabled M+13 Settlement Reruns for relevant Settlement Period.

Invoice and Self Billing Invoices

6.30 Invoices and Self Billing Invoices for Trading Payments and Trading Charges shall be produced in accordance with the following:

1. Preliminary Settlement Statements for Trading Payments and Trading Charges shall, in respect of each Settlement Day in a Billing Period, be produced and issued to all Participants in respect of their Units by 17:00 on Settlement Day + 1WD.
2. The Data Verification Period for Trading Payments and Trading Charges commences at the time of issue of the Preliminary Settlement Statements and ends at 17:00 on Settlement Day + 4WD.
3. Initial Settlement Statements shall be issued to all Participants in respect of its Units by 12:00 on Settlement Day + 5WD.
4. Invoices and Self Billing Invoices for Trading Payments and Charges shall be issued to all Participants in respect of its Units by 12:00 on BP+5 WD.
5. Make Whole Payments shall be calculated on a Billing Period basis as part of Settlement for the last day of the Billing Period.
6. Payments and charges in respect of Settlement Reallocations shall be calculated as part of Settlement for the last day of the Billing Period.

6.31 Intentionally blank

6.32 Invoicing and Self Billing Invoices for Capacity Payments and Capacity Charges shall be produced in accordance with the following:

1. Preliminary Settlement Statements for Capacity Payments and Capacity Charges shall, in respect of each Capacity Period, be produced and issued to all Participants in respect of their Units by 17:00 on CP+1WD.
2. The Data Verification Period for Capacity Payments and Capacity Charges commences at the time of issue of the Preliminary Settlement Statements and ends at 17:00 on CP+4WD.
3. Initial Settlement Statements, Invoices and Self Billing Invoices for Capacity Payments and Capacity Charges shall, in respect of each Capacity Period, be produced and issued to all Participants in respect of their Units by 12:00 on CP+5WD.

6.33 Payment shall be in accordance with the following:

1. Each Preliminary Settlement Statement, Initial Settlement Statement, Invoice and Self Billing Invoice will be based on the data then available to the Market Operator at the time of its production.
2. Each Invoice and Self Billing Invoice shall include the amount of all applicable charges and payments.
3. Any invoiced Participant shall pay each Invoice in full by paying the amount due into the SEM Trading Clearing Account or SEM Capacity Clearing Account as applicable for full value by the Invoice Due Date.

The Invoice Due Date is 12:00, 3 Working Days after the Invoice is issued.

4. The Market Operator shall, subject to the provisions of the Code, pay each Self Billing Invoice to any Participant who is an SEM Creditor by paying the amount due from the SEM Trading Clearing Account or SEM Capacity Clearing Account as applicable to the SEM Creditor's designated bank account or bank accounts for full value by the Self Billing Invoice Due Date except as otherwise provided for in the Code. The Self Billing Invoice Due Date is 17:00, 4 Working Days after the Self Billing Invoice is issued.

6.33A Default Interest shall apply to any Shortfall.

6.33B If the Market Operator fails to pay pursuant to the Code (except as otherwise provided for in the Code) the full amount owing pursuant to a Self Billing Invoice for full value by the Self Billing Invoice Due Date, then Interest shall accrue on the amount outstanding in accordance with the Code and the Market Operator shall pay any such Interest from its own resources which shall be a cost of the Market Operator.

6.33C If any invoiced Participant fails to pay an Invoice in full in accordance with paragraph 6.33.3, then the Participant is in Shortfall and the Market Operator shall forthwith make a Credit Call on the Participant's Posted Credit Cover for payment of the Shortfall. The Market Operator shall identify the Trading Periods to which the Shortfall relates in making any Credit Call.

6.33D Despite the making of a Credit Call by the Market Operator, if the Participant meets any Shortfall either through its own funds, its Posted Credit Cover, or a combination of the foregoing within [one Working Day] of the Invoice Due Date having arisen, the Settlement shall continue to proceed in accordance with the Code.

6.33E If the Shortfall is not paid in full within [one Working Day] of the Invoice Due Date, then:

1. the Shortfall shall become an Unsecured Bad Debt for the purposes of this Code and all Participants agree that the Market Operator shall be entitled to take all necessary action to recover any Unsecured Bad Debt on behalf of Participants consequently incurring loss and to deal with any recovered monies in accordance with the Code. Any such action of the Market Operator to recover the Unsecured Bad Debt shall not be subject to the Dispute Resolution Process;

2. the Market Operator shall withhold, deduct or set-off payment of any amount due pursuant to the Code to any Participant of a Defaulting Participant Group until the Unsecured Bad Debt has been recovered in full in relation to the Defaulting Party;

3. paragraphs 6.33F-L shall apply as appropriate.

6.33F.1 The Shortfall or the Unsecured Bad Debt as applicable shall be deemed to be a debt owing by the defaulting Participant to all Participants affected thereby pro-rated according to their individual respective proportionate entitlements in the Shortfall or the Unsecured Bad Debt concerned.

6.33F.2 Where a Participant has an Unsecured Bad Debt then, without prejudice to the Market Operator's rights or obligations under the Code and

notwithstanding any other provisions of the Code, the Market Operator shall procure that each Self Billing Invoice affected by such Unsecured Bad Debt shall be adjusted by a reduction in the amount payable to each Participant pro-rated to the individual respective proportionate entitlement of each Participant (excepting any Participant of a Defaulting Participant Group the subject of any withholding, deduction or set-off under paragraph 6.33E.2 until the Unsecured Bad Debt has been recovered in full and any Self Billing Invoices issued to them shall, until such event, be adjusted to zero) in the applicable funds available in the SEM Trading Clearing Accounts or SEM Capacity Clearing Accounts as applicable for payment of the relevant Unsecured Bad Debt and the Market Operator shall issue the appropriate adjusted Self Billing Invoices ("Adjusted Self Billing Invoices") to the applicable Participants ("the Reduced Participants"). The Market Operator shall pay each Adjusted Self Billing Invoice in accordance with the Code.

6.33G Where the Market Operator partially or fully recovers any Unsecured Bad Debt, the Market Operator shall procure the payment of any such monies into the SEM Trading Clearing Account or SEM Capacity Clearing Account as applicable. Then, the Market Operator, shall issue an appropriate re-adjusted Self Billing Invoice ("Re-adjusted Self Billing Invoice") to each Reduced Participant for an amount pro-rated to the individual respective proportionate entitlement of each Reduced Participant in the amount of the relevant Unsecured Bad Debt recovered with the issue of the Self Billing Invoices for the then next immediate Billing Period or Capacity Period (excepting, where the Unsecured Bad Debt has not been fully recovered any Participant of a Defaulting Participant Group the subject of any withholding, deduction or set-off under paragraph 6.33E.2 until the Unsecured Bad Debt has been recovered in full and any Self Billing Invoices issued to them shall, until such event, be adjusted to zero). The Market Operator shall pay each such Re-adjusted Self Billing Invoice in accordance with the Code.

6.33I Intentionally blank

6.33J Where the Market Operator takes any action (including court proceedings) to recover the Unsecured Bad Debt, all reasonable costs and expenses associated with any such action shall form part of the Market Operator Budget for the purpose of calculating the Market Operator Charge for the next year or period following in accordance with the Code.

6.33K Paragraphs 6.117 to 6.118 shall apply in relation to the recovery of any Unsecured Bad Energy Debt. Paragraphs 6.121 to 6.122 shall apply in relation to the recovery of Unsecured Bad Capacity Debt.

6.33L Intentionally blank

6.33M If any payments made by the Market Operator pursuant to any Self Billing Invoice, Adjusted Self Billing Invoice or Re-adjusted Self Billing Invoice or otherwise pursuant to the Code to any Participant do not correspond exactly with their respective payment entitlements established in accordance with the Code, then:

1. in the case of overpayment by the Market Operator, the Participant receiving any such overpayment shall pay back the difference between the amount of the payment received and the actual amount due to the Market Operator on becoming aware of the overpayment or, in any event, in accordance with the Code on the issue of an Invoice by the Market Operator to the Participant concerned for the relevant amount. Any Participant receiving any overpayment shall be obliged

to notify the Market Operator of this on becoming aware of such detailing, where possible, the amount and date of the overpayment and details of any Self Billing Invoice pursuant to which it was made. As soon as the Market Operator becomes aware of the overpayment, the Market Operator shall notify the Participant detailing, where possible, the amount and date of the overpayment and details of any Self Billing Invoice pursuant to which it was made and issue on Invoice for the relevant amount;

2. in the case of underpayment to any Participant by the Market Operator not otherwise permitted pursuant to any other provision of the Code, the Market Operator shall pay the difference between the amount of the payment received and the actual amount due with Default Interest to the Participant concerned on becoming aware of the underpayment or on being notified of the underpayment by the Participant concerned. The Market Operator shall then issue a Self Billing Invoice to the Participant concerned for the relevant amount with applicable Interest and pay it to the Participant in accordance with the Code. Any Participant receiving any underpayment shall notify the Market Operator of this on becoming aware of such detailing, where possible, the amount and date of the underpayment and details of any Self Billing Invoice pursuant to which it was made. The Market Operator shall notify any Participant receiving an underpayment on becoming aware of such detailing, where possible, the amount and date of the underpayment and details of any Self Billing Invoice pursuant to which it was made.

6.33N If any payments made by any Participant pursuant to any Invoice or otherwise pursuant to the Code do not correspond exactly with their respective payment obligations established in accordance with the Code, then

1. in the case of overpayment by the relevant Participant, the Market Operator shall pay back the difference between the amount of the payment and the actual amount due to the relevant Participant on becoming aware of the overpayment or on being notified of the underpayment by the Participant concerned. The Market Operator shall then issue a Self Billing Invoice to the Participant concerned for the relevant amount with applicable Interest and pay it to the Participant in accordance with the Code. Any Participant making any overpayment shall notify the Market Operator of this on becoming aware of such detailing, where possible, the amount and date of the overpayment and details of any Invoice pursuant to which it was made. The Market Operator shall notify any Participant making an overpayment on becoming aware of such detailing, where possible, the amount and date of the overpayment and details of any Invoice pursuant to which it was made.

2. in the case of underpayment by any Participant to the Market Operator, paragraphs 6.33C-L shall apply.

6.33O Any Participant making any underpayment or anticipating that it will be making an underpayment in respect of any Invoice shall be obliged to notify the Market Operator of this on becoming aware that full payment of any Invoice will not be made by the Invoice Due Date detailing, where possible, the amount and date of the underpayment and details of any Invoice to which it relates.

6.33P Subject to paragraphs 6.23N, 6.33E, 6.33F.2, 6.33G, 6.33M and 6.33N, all payments under this section 6 shall be made on the basis that a Participant shall only be entitled to claim reimbursement of an overpayment made by it (whether to or through the Market Operator) to another Party if, and then only to the extent that the aggregate amounts paid by the Participant in respect of the relevant Payment Due Date exceed the total amounts payable by that Participant or any relevant Participant Group member to SEM Creditors in respect of that Payment Due Date together with all amounts (if any) overdue by that Participant in respect of periods prior to the relevant Payment Due Date.

6.33Q Notwithstanding paragraph 6.23K, if:

1. a payment is received by the Market Operator under a Letter of Credit after a sum has been withdrawn from a SEM Collateral Reserve Account (where applicable) to make good (in whole or in part) a Shortfall or Unsecured Bad Debt; and
2. the aggregate of the amounts paid out of that SEM Collateral Reserve Account and paid under the Letter of Credit exceeds the Shortfall or Unsecured Bad Debt,

then any excess paid over the Shortfall or Unsecured Bad Debt shall be remitted with any applicable Interest by the Market Operator to the relevant Participant's bank account or bank accounts.

Settlement Reruns

6.34 The objective of all Settlement Reruns is to adjust the financial positions of Participants to reflect any differences between meter data used for Settlement and any updated Meter Data received from the Meter Data Providers in accordance with the Code for the Billing Period or Capacity Period concerned. This Meter Data will consist of a complete updated set of metered data for the relevant Billing Period or Capacity Period.

6.35 There will be two Timetabled Settlement Reruns for each Billing Period. The first Timetabled Settlement Rerun shall take place in the fourth month after the Billing Period (BP+4M) and the second Timetabled Settlement Rerun shall take place in the 13th month after the Billing Period (BP+13M). The Market Operator shall publish the precise date and time of these in advance in the Settlement Calendar.

6.36 There will be two Timetabled Settlement Reruns for each Capacity Period. The first Timetabled Settlement Rerun shall take place in the fourth month after the Capacity Period (CP+4M) and the second Timetabled Settlement Rerun shall take place in the 13th month after the Capacity Period (CP+13M). The Market Operator shall publish the precise date and time of these in advance in the Settlement Calendar.

6.37 Each Settlement Rerun Statement must include the data from the previous Settlement Statement relating to the relevant Billing or Capacity Period and any revised values for all Trading Periods where these values are different.

6.38 Each Settlement Rerun Statement will be in the same format as the Initial Settlement Statement with the addition of a flag to indicate the revised values.

6.39 The Market Operator shall be entitled to undertake Settlement Reruns as provided for in the Code in addition to the Timetabled Settlement Reruns.

6.40 Intentionally blank

6.41 When a Settlement Rerun results in any change to any amount payable under the Code, the Market Operator shall issue adjusted Invoices and Self Billing Invoices and payment shall be made in accordance with paragraph 6.33.

Data Verification Period

6.42 A Participant may raise a Data Query of any Settlement Item included in the Preliminary Settlement Statement by giving notice to the Market Operator during the Data Verification Period.

6.43 The duration of the Data Verification Period is set out in paragraph 6.30.2 for Trading Payments and Trading Charges and is set out in 6.32.2 for Capacity Payments and Capacity Charges.

QUERIES TO SETTLEMENT DATA

Data Queries

6.44 The Market Operator will use reasonable endeavours to resolve all Data Queries within 3 Working Days of the issue of the Preliminary Settlement Statement.

6.45 A Data Query must be resolved by the Market Operator within 10 Working Days after the Data Query is filed. Where the Market Operator requests any assistance from any Participant to resolve a Data Query, that Participant shall assist the Market Operator in dealing with the Data Query concerned.

6.46 The Market Operator will procure that (i) SMP and Market Schedule Quantities will be recalculated, and (ii) a Settlement Rerun will then be undertaken, in the event that the Market Operator in resolving a Data Query determines that:

1. Commercial Offer Data or Technical Offer Data has been applied incorrectly; or
2. Actual Availability or Dispatch Quantity has been calculated incorrectly.

6.47 The Market Operator will procure that (i) SMP and Market Schedule Quantities will be recalculated, and (ii) a Settlement Rerun will then be undertaken, in the event that the Market Operator in resolving a Data Query determines that:

1. Metered Generation has been applied incorrectly; or
2. Market Schedule Quantity has been calculated incorrectly,

and that the correct application or calculation of any such amount would require it to change by more than the Settlement Recalculation Threshold.

6.48 The Market Operator will procure that the Ex-Post Loss of Load Probability Φ will be recalculated in the event that the Market Operator in resolving a Data Query determines that Metered Generation has been applied incorrectly, and that the correct application would require a change by more than the Settlement Recalculation Threshold.

6.49 The Market Operator will procure that Capacity Payments and Capacity Charges will be recalculated in the event that the Market Operator in resolving a Data Query determines that:

1. Commercial Offer Data or Technical Offer Data has been applied incorrectly; or

2. any of Eligible Availability, Dispatch Quantity, Market Schedule Quantity, SMP or Ex-Post Loss of Load Probability Φ has been calculated incorrectly.

6.50 Any Data Queries that are not raised before the end of the Data Verification Period will be dealt with under the Settlement Queries process in accordance with paragraphs 6.55 to 6.62. If the Market Operator does not resolve the Data Query within the Data Verification Period, then it shall be deemed to give rise to a Settlement Dispute unless the Party concerned agrees to give the Market Operator more time to resolve the Data Query not exceeding 10 Working Days.

6.51 If a Data Query is outstanding at the end of the Data Verification Period, the Initial Settlement Statement will be issued by the Market Operator with a flag indicating the values affected by the outstanding Data Query.

6.52 Any changes to Settlement resulting from the resolution by the Market Operator of a Data Query that was not processed prior to the production of the Initial Settlement Statement will fall into one of the two following categories:

1. Change to Settlement Items with Low Materiality;

2. Change to Settlement Items with High Materiality.

6.53 In the event that there is a change to Settlement Items with Low Materiality, the Market Operator will procure that the revised corrected input data will be used for the relevant Settlement Period for which Final Settlement has not occurred, and Settlement will then wait for the next Timetabled Settlement Rerun.

6.53A In the event that there is a change to Settlement Items with Low Materiality resolved after the final Timetabled Settlement Rerun, the Market Operator will procure that an additional Settlement Rerun for the relevant Settlement Period will then be performed.

6.54 In the event that there is a change to Settlement Items with High Materiality, the Market Operator will procure that the revised corrected input data will be corrected for the relevant Settlement Period and an additional Settlement Rerun for that Settlement Period will then be performed.

Settlement Queries

6.55 Before raising a Settlement Dispute in respect of the matters set out in paragraphs 6.56 and 6.57, a Participant must raise a Settlement Query in respect of the matters set out in paragraphs 6.56 and 6.57.

6.56 A Participant may raise a Settlement Query in respect of the application of Metered Generation, or the calculation of any of the following amounts:

1. Metered Demand;

2. Net Demand;

3. Eligible Availability; or

4. Actual Availability.

6.57 Despite any other provision of the Code, a Participant may raise a Settlement Query in the event of any difference between a Settlement Item on the Preliminary Settlement Statement and the same item on the Initial Settlement Statement, without the Participant having filed a Data Query in relation to that Settlement Item.

6.58 Any changes to Settlement resulting from a Settlement Query will be placed into one of the two following categories:

1. Change to Settlement Items with Low Materiality;
2. Change to Settlement Items with High Materiality.

6.59 In the event that there is a change to Settlement Items with Low Materiality, the Market Operator will procure that the revised corrected data will be used for the relevant Settlement Period for which Final Settlement has not occurred, and Settlement will then wait for the next Timetabled Settlement Rerun.

6.59A In the event that there is a change to Settlement Items with Low Materiality resolved after the final Timetabled Settlement Rerun, the Market Operator will procure that an additional Settlement Rerun for the relevant Settlement Period will then be performed.

6.60 In the event that there is a change to Settlement Items with High Materiality, the Market Operator will procure that the revised corrected data will be used for the relevant Settlement Period and a Settlement Rerun for that Settlement Day shall then be performed.

6.61 A Participant is entitled to file a Settlement Query at any time before 17:00 on the 5th Working Day after the last Timetabled Settlement Rerun.

6.62 A Settlement Query must be resolved by the Market Operator within one month after the Settlement Query is raised. If the Market Operator does not resolve the Settlement Query within that period, then it shall be deemed to give rise to a Settlement Dispute unless the Party concerned agrees to give the Market Operator more time to resolve the Settlement Query not exceeding 10 Working Days.

Settlement Disputes

6.63 Subject to paragraph 6.55, a Settlement Dispute can be raised by a Participant in respect of an Initial Settlement Statement insofar as it relates to Trading Payments and Trading Charges after the Initial Settlement Statements for Trading Payments and Trading Charges are issued to relevant Participants.

6.64 Subject to paragraph 6.55, a Settlement Dispute can be raised by a Participant in respect of capacity, after the Initial Settlement Statements for Capacity Payments and Capacity Charges are issued to relevant Participants.

6.64A A Settlement Dispute shall also arise where a Data Query has not been resolved within the period provided for pursuant to paragraph 6.50 or where a Settlement Query has not been resolved within the period provided for pursuant to paragraph 6.62.

6.65 The Market Operator will procure that (i) SMP and Market Schedule Quantities will be recalculated, and (ii) a Settlement Rerun will then be

undertaken, in the event that as a result of an Upheld Dispute it is determined that:

1. Commercial Offer Data or Technical Offer Data has been applied incorrectly; or
2. Actual Availability or Dispatch Quantity has been calculated incorrectly.

6.66 The Market Operator will procure that (i) SMP and Market Schedule Quantities will be recalculated, and (ii) a Settlement Rerun will then be undertaken, in the event that as a result of an Upheld Dispute it is determined that:

1. Metered Generation has been applied incorrectly; or
2. Market Schedule Quantity has been calculated incorrectly,

and that the correct application or calculation of any such amount would require it to change by more than the Settlement Recalculation Threshold.

6.67 The Market Operator will procure that Capacity Payments and Capacity Charges will be recalculated in the event that as a result of an Upheld Dispute it is determined that the Metered Generation has been applied incorrectly, and that the correct application would require a change by more than the Settlement Recalculation Threshold.

6.68 The Market Operator will procure that Capacity Payments and Capacity Charges will be recalculated in the event that as a result of an Upheld Dispute it is determined that:

1. Commercial Offer Data or Technical Offer Data has been applied incorrectly; or
2. any of Eligible Availability, Dispatch Quantity, Market Schedule Quantity, Net Demand, SMP or Ex-Post Loss of Load Probability Φ has been calculated incorrectly.

6.69 In accordance with the Dispute Resolution Process, Upheld Disputes will be placed into one of two categories:

1. Upheld Dispute with Low Materiality;
2. Upheld Dispute with High Materiality.

6.70 In the event that an Upheld Dispute with Low Materiality is resolved, the Market Operator will procure that the revised corrected data will be used for the relevant Settlement Period for which Final Settlement has not occurred, and Settlement will then wait for the next Timetabled Settlement Rerun.

6.71 In the event that an Upheld Dispute with Low Materiality is resolved after the final Timetabled Settlement Rerun, the Market Operator will procure that an additional Settlement Rerun for the relevant Settlement Period will then be performed within the timeframe directed by a Competent Authority (which shall for these purposes include the Dispute Resolution Board) as a result of the Dispute Resolution Process.

6.72 In the event of an Upheld Dispute with High Materiality, the Market Operator will procure that the revised corrected data will be used for the relevant Settlement Day and an additional Settlement Rerun for the relevant Settlement Day will then be performed within the timeframe directed by a Competent Authority (which shall for these purposes include the Dispute Resolution Board) as a result of the Dispute Resolution Process.

CONSEQUENCES

6.73 Any payment due under the Code by any Party or Participant shall continue be due and payable in accordance with its terms (including as to timing) notwithstanding (i) any Data Queries, Settlement Queries or Settlement Disputes in respect of such payments or (ii) any Shortfall, Unsecured Bad Debt, Default, Suspension, Deregistration or Termination arising in relation to any such Party or Participant.

6.74 Where the resolution of a Settlement Query or Settlement Dispute requires a Settlement Rerun, such Settlement Rerun will only be carried out in relation to the Settlement Day(s) that are the subject of the Settlement Query or Settlement Dispute.

6.75 Where the resolution of a Settlement Query or Settlement Dispute raised by a Participant requires a Settlement Rerun, the result of that Settlement Rerun shall be applied to all Participants.

DAILY CALCULATION OF PAYMENTS TO GENERATOR UNITS

6.76 The following paragraphs set out the provisions for calculation of applicable daily payments to Generator Units.

Payments for Energy

6.77 The Total Energy Payments for Energy (ENPUud) to Generator Unit u for Settlement Day d are calculated as follows:

$$ENPUud = \sum_{h\ in\ d} ENPuh$$

Where

1. ENPuh is the Energy Payment due to Generator Unit u for Trading Period h;
2. $\sum_{h\ in\ d}$ is a summation over all Trading Periods h in Settlement Day d.

Payments for Constraints

6.78 The Constraint Payments (CONPUud) made to Generator Unit u for Settlement Day d are calculated as follows:

$$CONPUud = \sum_{h in d} CONPuh$$

Where

1. CONPuh is the Constraint Payment made to Generator Unit u for Trading Period h
2. $\sum_{h\ in\ d}$ is a summation over all Trading Periods h in Settlement Day d.

Payments for Uninstructed Imbalances

6.79 The Total Uninstructed Imbalance Payments (UNIMPUud) made to Generator Unit u for Settlement Day d are calculated as follows:

$$UNIMPUud = \sum_{h in d} UNIMPuh$$

Where

1. UNIMPuh is the Uninstructed Imbalance Payment for Unit u in Trading Period h;
2. $\sum_{h\,in\,d}$ is a summation over all Trading Periods h in Settlement Day d.

Testing Charges

6.80 Intentionally blank

6.81 The Testing Charges (TCHARGEud) to MO discretion Generator Unit u for Settlement Day d are calculated as follows:

$$TCHARGEud = \sum_{hind} TCHARGEuh$$

Where

1. TCHARGEuh is the Testing Charge to a Generator Unit u in Trading Period h;
2. $\sum_{h\,in\,d}$ is a summation over all Trading Periods h in Settlement Day d.

Payments to Generator Units on a Daily Basis

6.82 The Total Payments (DAYPUud) made to Generator Unit u for Settlement Day d are calculated as follows:

$$DAYPUud = ENPUud + CONPUud + UNIMPUud - TCHARGEud$$

Where

1. ENPUud is the Total Energy Payment made to Generator Unit u for Settlement Day d;
2. CONPUud is the Constraint Payment made to Generator Unit u for Settlement Day d;
3. UNIMPUud is the Total Uninstructed Imbalance Payment made to Generator Unit u for Settlement Day d;
4. TCHARGEUud is the Testing Charge to each Generator Unit u for Settlement Day d;

6.82A The Total Energy Payment (DAYPDd) made to all Generator Units for Settlement Day d are calculated as follows:

$$DAYPDd = \sum_{u} DAYPUud$$

Where

1. DAYPUud is the Total Payments made to Generator Unit u for Settlement Day d;
2. $\sum_{u}$ is a summation over all Generator Units.

Invoice payments for energy in respect of Generator Units

6.83 The Invoice Energy Payments (IEPpb) to Participant p for its registered Generator Units for Billing Period b are calculated as follows:

$$IEPpb = \sum_{u\,in\,p}\sum_{d\,in\,b} DAYPUud + \sum_{u\,in\,p} MWPub - \sum_{a\,in\,p}\sum_{d\,in\,b}\sum_{h\,in\,d} SSREAaph$$

Where

1. DAYPUud is the total of all Payments excluding Capacity Payments made to Generator Unit u for Settlement Day d;
2. SSREAaph is the Settlement Reallocation Energy Amount for Participant p for its registered Generator Units for Trading Period h defined in Settlement Reallocation Agreement a;
3. MWPub is the Make Whole Payment for Generator Unit u in Billing Period b;
4. $\sum_{u\,in\,p}$ is a summation over all Generator Units u registered to Participant p;
5. $\sum_{a\,in\,p}$ is a summation over all Settlement Reallocation Agreements a registered to Participant p in respect of its registered Generator Units;
6. $\sum_{d\,in\,b}$ is a summation over Settlement Days d in Billing Period b;
7. $\sum_{h\,in\,d}$ is a summation over Trading Periods h in Settlement Day d.

DAILY CALCULATION OF CHARGES TO SUPPLIER UNITS

6.84 The following paragraphs set out the provisions detailing the component of charges to Supplier Units made on a daily basis. It does not include non-daily charges (Capacity Payments).

Charges for Energy

6.85 The Total Energy Charges for Energy (ENCVvd) on Supplier Unit v for Settlement Day d are calculated as follows:

$$ENCVvd = \sum_{h\,in\,d} ENCvh$$

Where

1. ENCvh is the Energy Charge on Supplier Unit v for Trading Period h;
2. $\sum_{h\,in\,d}$ is a summation over all Trading Periods h in Settlement Day d.

Charges for Imperfections

6.86 The Total Imperfections Charges (IMPCVvd) on Supplier Unit v for Settlement Day d are calculated as follows:

$$IMPCVvd = \sum_{h in d} IMPCvh$$

Where

1. IMPCvh is the Imperfections Charge on Supplier Unit v for Trading Period h;
2. $\sum_{h in d}$ is a summation over all hours h in day d.

Charges on Supplier Units on a Daily Basis

6.87 The Total Energy Charges (DAYCVvd) on Supplier Unit v for Settlement Day d are calculated as follows:

$$DAYCVvd = ENCVvd + IMPCVvd$$

Where

1. ENCVvd is the Total Energy Charge on Supplier Unit v for Settlement Day d;
2. IMPCVvd is the Total Imperfections Charge on Supplier Unit v for Settlement Day d;

6.87A The Total Energy Charges (DAYCDd) made to all Supplier Units for Settlement Day d are calculated as follows:

$$DAYCDd = \sum_{v} DAYCVvd$$

Where

1. DAYCVvd is the Total Charge on Supplier Unit v for Settlement Day d;
2. $\sum_{v}$ is a summation over all Supplier Units v.

Invoice Calculations for Energy in Respect of Supplier Units

6.88 The Invoice Energy Charges (IECpb) to Participant p for its registered Supplier Units in Billing Period b are calculated as follows:

$$IECpb = \sum_{v in p} \sum_{d in b} DAYCVvd - \sum_{a in p} \sum_{d in b} \sum_{h in d} SSREAaph$$

Where

1. DAYCVvd is the Total Charge (Unit) excluding Capacity Charges on Supplier Unit v for Settlement Day d;
2. SSREAaph is the Settlement Reallocation Energy Amount for Participant p for its registered Supplier Units for Trading Period h defined in Settlement Reallocation Agreement a;
3. $\sum_{a in p}$ is a summation over all Settlement Reallocation Agreements a registered to Participant p for its registered Supplier Units;

4. $\sum_{v in p}$ is a summation over all Supplier Units v registered to Participant p;

5. $\sum_{d in b}$ is a summation over Settlement Days d in Billing Period b;

6. $\sum_{h in d}$ is a summation over Trading Periods h in Settlement Day d

Invoice Calculations for Capacity in Respect of Generator Units

6.89 The Invoiced Capacity Payments (ICPpc) to Participant p for its registered Generator Units for Capacity Period c are calculated as follows:

$$ICPpc = \sum_{u in p} CPPuc - \sum_{a in p} \sum_{d in c} \sum_{h in d} SSRCAaph$$

Where

1. CPPuc is the Capacity Period Payment for a Generator Unit u in Capacity Period c;
2. SSRCAaph is the Settlement Reallocation Capacity Amount for Participant p for its registered Generator Units for Trading Period h defined in Settlement Reallocation Agreement a;
3. $\sum_{u in p}$ is a summation over all Generator Units u registered to Participant p;
4. $\sum_{a in p}$ is a summation over all Settlement Reallocation Agreements a registered to Participant p for its registered Generator Units;
5. $\sum_{d in c}$ is a summation over Settlement Days d in Capacity Period c;
6. $\sum_{h in d}$ is a summation over Trading Periods h in Settlement Day d.

Invoice Calculations for Capacity in Respect of Supplier Units

6.90 The Invoiced Capacity Charges (ICCpc) to Participant p for its registered Supplier Units for Capacity Period c are calculated as follows:

$$ICCpc = \sum_{v in p} CPCvc - \sum_{a in p} \sum_{d in c} \sum_{h in d} SSRCAaph$$

Where

1. CPCvc is the Capacity Charge to a Supplier Unit v in Capacity Period c;
2. SSRCAaph is the Settlement Reallocation Capacity Amount for Participant p for its registered Supplier Units for Trading Period h defined in Settlement Reallocation Agreement a;
3. $\sum_{v in p}$ is a summation over all Supplier Units v registered to Participant p;

4. $\sum_{a \text{ in } p}$ is a summation over all Settlement Reallocation Agreements a registered to Participant p for its registered Supplier Units;

5. $\sum_{d \text{ in } c}$ is a summation over Settlement Days d in Capacity Period c;

6. $\sum_{h \text{ in } d}$ is a summation over Trading Periods h in Settlement Day d.

RECOVERY OF THE BILLING PERIOD CURRENCY COST

6.91 The recovery of the Billing Period Currency Cost will be calculated according to the provisions set out in the paragraphs below.

6.92 The Participants will be paid using the Trading Day Exchange Rate for the relevant Trading Day.

6.93 The Initial Settlement Statements will be produced applying the Trading Day Exchange Rate for the relevant Trading Day for the Participants trading in pounds sterling (£).

6.94 The Billing Period Currency Charges (BPCCpb) to Participant p for the relevant Billing Period b are calculated as follows:

$$if\ \left(DAYPDd + DAYCDd\right) \neq 0\ \ then$$

$$BPCCpb = \sum_{d \text{ in } b}\left(\frac{BPCd}{\left(DAYPDd + DAYCDd\right)}\right) \times \left(\sum_{u \text{ in } p} DAYPUud + \sum_{v \text{ in } p} DAYCVvd\right)$$

$$else\ BPCCpb = 0$$

Where

1. BPCd is the Billing Period Currency cost for the relevant Settlement Day d as set out in more detail in Agreed Procedure 15 “Invoicing”;
2. DAYPDd is the Total of all Payments made to all Generator Units for Settlement Day d;
3. DAYCDd is the Total of all Charges on all Supplier Units for Settlement Day d;
4. DAYPUud is the Total of all Payments, excluding Capacity Payments, made to Generator Unit u for Settlement Day d;
5. DAYCVvd is the Total of all Charges on Supplier Unit v for Settlement Day d;
6. $\sum_{v \text{ in } p}$ is a summation over all Supplier Units v registered to Participant p;
7. $\sum_{u \text{ in } p}$ is a summation over all Generator Units u registered to Participant p;
8. $\sum_{d \text{ in } b}$ is a summation over Settlement Days d in Billing Period b.

RECOVERY OF THE CAPACITY PERIOD CURRENCY COST

6.95 The recovery of the Capacity Period Currency Cost will be calculated according to the provisions set out in the paragraphs below.

6.96 The Participants will be paid using the Annual Capacity Exchange Rate for the relevant Trading Day.

6.97 The Initial Settlement Statements will be produced applying the Annual Capacity Exchange Rate for the relevant Trading Day for the Participants trading in pounds sterling (£).

6.98 The Capacity Period Currency Charges (CAPCCpc) to Participant p for the relevant Capacity Period c are calculated as follows:

$$if \left(\sum_{c} CPPuc + CPCvc \right) \neq 0 \ \ then$$

$$CAPCCpc = \sum_{d\,in\,c} \left(\frac{CAPCc}{\sum_{p} \left(\sum_{u\,in\,p} CPPuc + \sum_{v\,in\,p} CPCvc \right)} \right) \times \left(\sum_{u\,in\,p} CPPuc + \sum_{v\,in\,p} CPCvc \right)$$

$$else\ CAPCCpc = 0$$

Where

1. CAPCc is the Capacity Period Currency Cost for the relevant Capacity Period c as set out in more detail in AP15;
2. CPPuc is the Capacity Payment for a Generator Unit u for Capacity Period c;
3. CPCvc is the Capacity Charge to a Supplier Unit v for Capacity Period c;
4. $\sum_{v\,in\,p}$ is a summation over all Supplier Units v registered to Participant p;
5. $\sum_{u\,in\,p}$ is a summation over all Generator Units u registered to Participant p;
6. $\sum_{d\,in\,c}$ is a summation over Settlement Days d for Capacity Period c;
7. $\sum_{p}$ is a summation over all Participants p.

MARKET OPERATOR CHARGE

6.99 The budgeted revenues, costs and expenses of the Market Operator ("the Market Operator Budget") shall be submitted by the Market Operator to the Regulatory Authorities for approval six months before the commencement of each year or other period which the Regulatory Authorities shall approve in writing in advance of the commencement of the period to which they relate. The Market Operator Budget shall apply for the next year or for such other

period as the Regulatory Authorities may specify and shall, as so approved, be recovered from Participants as a levy via the Market Operator Charge.

6.100 The Market Operator Charge will comprise (i) a Fixed Market Operator Generator Charge and a Fixed Market Operator Supplier Charge applicable to Participants as appropriate, and (ii) a Variable Market Operator Charge applicable to all Participants in respect of their Supplier Units as appropriate. The Fixed Market Operator Generator Charge shall be a charge applied to each Generator Unit (MOAUCuy) and the Fixed Market Operator Supplier Charge shall apply for each Supplier Unit (MOAVCvy) (either "the Fixed Market Operator Charge" as applicable). The Variable Market Operator Charge shall be a charge in respect of each unit of Net Demand at Supplier Units, and is based on a Variable Market Operator Price (VMOPy) expressed in euro/MWh.

6.101 Intentionally blank

6.102 The Market Operator Charge will include provision for any under-recovery or over-recovery in respect of the previous year or period or years or periods to which the provision relates.

6.102A The Market Operator shall issue the applicable Fixed Market Operator Charge Invoice to each Participant within one month before the commencement of each year or the period to which the Fixed Market Operator Charge relates.

6.102B The Market Operator shall issue the applicable Variable Market Operator Charge Invoice to each Participant each Billing Period during the year or the period to which the Variable Market Operator Charge relates.

6.102C The Market Operator shall establish and maintain with the SEM Bank a euro bank account and a pounds sterling bank account in its name and each called "the Market Operator Charge Account". All payments due pursuant to the issue of the Fixed Market Operator Charge Invoices and Variable Market Operator Charge Invoices shall be paid by Participants into this account according to the Currency Zone of its registered Units. The Market Operator Charge Account shall be an interest bearing account.

6.102D Each Participant shall pay the Fixed Market Operator Charge including the applicable VAT within [28] days of the issue of the Fixed Market Operator Charge Invoice.

6.102E Each Participant shall pay the Variable Market Operator Charge including the applicable VAT within [3] days of the issue of the Variable Market Operator Charge Invoice.

6.102F Interest shall accrue on any overdue payments in accordance with paragraphs 6.128.

Fixed Market Operator Charge to All Participants

6.103 The Invoiced Fixed Market Operator Annual Charge (IMOACpy) to Participant p for Year y in respect of its Units will be calculated as follows:

$$IMOACpy = \sum_{v \text{ in } p} MOAVCvy + \sum_{u \text{ in } p} MOAUCuy$$

Where

1. MOAVCvy is the Invoiced Fixed Market Operator Charge (Supplier Unit) for Year y for Supplier Units applicable to all Participants;

2. MOAUCuy is the Fixed Market Operator Charge (Generator Unit) for Year y for Generator Units applicable to all Participants;

3. $\sum_{v \text{ in } p}$ is a summation over all Supplier Units v registered to Participant p;

4. $\sum_{u \text{ in } p}$ is a summation over all Generator Units u registered to Participant p.

6.104 Intentionally blank

Variable Market Operator Charge

6.105 The Variable Market Operator Charge (VMOCpb) for Participant p in respect of its Supplier Units in Billing Period b will be calculated according to the following formulae:

$$VMOCpb = VMOPy \times Max\left\{\left[\sum_{v \text{ in } p}\sum_{h \text{ in } b} NDLFvh\right],\ 0\right\}$$

Where

1. VMOPy is the Variable Market Operator Price for Year y;

2. NDLFvh is the Loss Adjusted Net Demand from Supplier Unit v for Trading Period h;

3. $\sum_{h \text{ in } b}$ is a summation over Trading Periods h for Billing Period b;

4. $\sum_{v \text{ in } p}$ is a summation over all Supplier Units v registered to Participant p.

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RECOVERY OF UNSECURED BAD ENERGY DEBT

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6.117 The cost of Unsecured Bad Energy Debt is charged to all Participants (other than that whose Default has given rise to the relevant Unsecured Bad Debt) as set out below.

6.118 The Unsecured Bad Debt Energy Charge (UBDECpb) to Participant p for Billing Period b for its registered Generator Units will be calculated as follows:

$$if \left(\sum_{p} \left[Max\left\{ \sum_{u\,in\,p} \left(MWPub + \sum_{d\,in\,b} DAYPUud \right), 0 \right\} \right] \neq 0 \right) then$$

$$UBDECpb = \left(\frac{UBEDb}{\sum_{p} \left[Max\left\{ \sum_{u\,in\,p} \left(MWPub + \sum_{d\,in\,b} DAYPUud \right), 0 \right\} \right]} \right) \times Max\left\{ \sum_{u\,in\,p} \left(MWPub + \sum_{d\,in\,b} DAYPUud \right), 0 \right\}$$

$$else\ UBDECpb = 0$$

Where

1. UBEDb is the actual amount of Unsecured Bad Energy Debt for a Billing Period b;
2. DAYPUud is the total of all Payments made to Generator Unit u for Settlement Day d and is zero for any Generator Unit registered to a Participant in a Defaulting Participant Group ;
3. MWPub is the Make Whole Payment in respect of Generator Unit u in Billing Period b and is zero for any Generator Unit registered to a Participant in a Defaulting Participant Group;
4. $\sum_{u\,in\,p}$ is a summation over all Generator Units u registered to Participant p;
5. $\sum_{d\,in\,b}$ is a summation over Settlement Days d for Billing Period b;
6. $\sum_{p}$ is a summation over all Participants.

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6.120 Intentionally blank

RECOVERY OF UNSECURED BAD CAPACITY DEBT

6.121 The cost of Unsecured Bad Capacity Debt is charged on Participants (other than that whose Default has given rise to the relevant Unsecured Bad Debt) as set out below.

6.122 The Unsecured Bad Debt Capacity Charge (UBDCCpc) to Participant p in Capacity Period c for its registered Generator Units will be calculated as follows:

$$if \left[\sum_{p} \left(Max\left\{ \left(\sum_{u\,in\,p} CPPuc \right), 0 \right\} \right) \neq 0 \right] then$$

$$UBDCCpc = \left(\frac{UBCDc}{\sum_{p} \left(Max\left\{ \left(\sum_{u\,in\,p} CPPuc \right), 0 \right\} \right)} \right) \times Max\left\{ \left(\sum_{u\,in\,p} CPPuc \right), 0 \right\}$$

$$else\ UBDCCpc = 0$$

Where

1. UBCDc is the actual amount of Unsecured Bad Capacity Debt for a Capacity Period c;
2. CPPuc is the Capacity Payment for a Generator Unit u for Capacity Period c and is zero for any Generator Unit registered to a Participant in a Defaulting Participant Group;
3. $\sum_{u\,in\,p}$ is a summation over all Generator Units u registered to Participant p;
4. $\sum_{p}$ is a summation over all Participants p.

6.123 Intentionally blank

RECOVERY OF UNPAID MARKET OPERATOR CHARGE

6.124 Intentionally blank

6.125 The Market Operator's claim against any Participant relating to any overdue Market Operator Charge shall rank pari passu with the claims of any other Party in for any Shortfall or Unsecured Bad Debt.

6.126 The Market Operator shall factor into the Market Operator Budget for the next year or relevant period any overdue or unpaid Market Operator Charges.

6.127 Intentionally blank.

INTEREST PAYMENT

6.128 Where any payment under the Code is overdue, Interest shall accrue from the relevant Payment Due Date until the date of actual payment in full of the overdue amount by remittances for full value, such interest to accrue daily and both before and after any judgment.

6.129 Where the overdue amount is Unsecured Bad Debt, Default Interest shall accrue from the relevant Payment Due Date until the date of actual payment in full of the Unsecured Bad Debt by remittances for full value, such interest to accrue daily and both before and after any judgment.

6.130 The income from or cost of interest on the Market Operator Charge Accounts will form part of the Market Operator Budget for the purpose of calculating the Market Operator Charge for the next year or relevant period.

6.131 Where any Self Billing Invoice or Invoice is required to be re-issued due to a Settlement Rerun or is an adjusted or Re-adjusted Self Billing Invoice arising pursuant to paragraphs 6.33F and 6.33G as applicable, then Interest shall apply on the difference between the amount received or paid pursuant to the relevant prior Settlement and the amount due or payable pursuant to the Settlement Rerun accruing from the Payment Due Date applicable to the relevant prior Settlement up until the date of the issue of the applicable Invoice or Self Billing Invoice.

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CREDIT COVER

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6.135 Each Participant shall comply with its obligation to provide the Required Credit Cover calculated in relation to it and notified to it by the Market Operator in accordance with the Code.

6.136 The Market Operator shall calculate the Required Credit Cover for each Participant as provided for pursuant to the provisions set out in paragraphs 6.168-6.171 and as provided for pursuant to Agreed Procedure 9 "Credit Management".

6.136A Intentionally blank

6.136B Each Participant must maintain its Credit Cover with a Credit Cover Provider. The acceptable forms of Credit Cover which Participants can post are:

1. an irrevocable standby Letter of Credit which:
    a. shall be issued by a Credit Cover Provider fulfilling the Bank Eligibility Requirements set out in paragraph 6.136C below;
    b. shall be in the form attached in Appendix A, and;
    c. shall be capable of being paid out on within [one Working Day] following a Credit Call;
2. cash held in a SEM Collateral Reserve Account as provided for in paragraph 6.23.

6.136C A Credit Cover Provider shall be a Bank which must:

1. hold a banking licence in Ireland under Section 9 of the Central Bank Act 1971 (Ireland) or be authorised by the FSA to take deposits, under the Banking Act 1987 (Northern Ireland) or be otherwise authorised to provide banking services in Ireland or the United Kingdom; and,

either,

2. be a Clearing Bank in either Jurisdiction with:
    a. a long term debt rating of not less than A (Standard & Poors) or A2 (Moody's Investors Service Inc.); or
    b. Total Balance Sheet Assets of not less than €1,000 million,

or

3. be an international bank that is approved by the relevant regulatory authority and which has a branch in the relevant location (Dublin

and/or Belfast) and complies with paragraph 6.136C 2 b.

6.136D If a bank is a subsidiary, then its parent company must have a credit rating of not less than A (or AA) (Standard & Poors) or A2 (or AA2) (Moody's Investors Service Inc.) or Total Balance Sheet Assets of not less than €10,000 million.

6.136E If a Participant's Credit Cover Provider is no longer qualified to issue or hold Credit Cover, the Participant shall re-Post the Required Credit Cover with a Bank or a subsidiary of a Bank that satisfies the requirements in paragraph 6.136C within 10 Working Days. This period shall not form part of the Settlement Risk Period.

6.137 Each Participant shall post the Required Credit Cover in its designated Currency. The Trading Day Exchange Rate for the day of the calculation will be used to calculate the Required Credit Cover.

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6.140 If the Market Operator, following a Credit Call, draws down any amounts from the Participant's Posted Credit Cover, such that the Posted Credit Cover no longer meets the Participant's notified Required Credit Cover, the Participant shall within 2 Working Day fully re-establish the Required Credit Cover and shall notify the Market Operator on doing this.

6.141 Credit Cover is subject to the following conditions:

1. a Participant's Posted Credit Cover shall be available for draw down by the Market Operator making a Credit Call on a Participant's Credit Cover Provider as provided for in the Code and shall continue to remain in place until such time as all amounts due in respect of the Participant concerned under the Code have been paid in full;
2. the Market Operator, but not any Party or Participant, has the right to deduct from or set off against a Participant (or any Member of a Defaulting Participant Group) any outstanding claims and liabilities of that Participant or those Participants against any amounts owing pursuant to any Invoice under the Code without the prior consent of any such Participant concerned;
3. the Participant cannot reduce the amount of the Posted Credit Cover below the Required Credit Cover calculated by the Market Operator and notified to the Participant in accordance with the Code;
4. a Participant shall notify the Market Operator at least one Working Day in advance of all changes to its Posted Credit Cover;
5. in the event of Suspension or Termination of a Participant or Deregistration of a Participant's Units, the Participant's applicable Required Credit Cover shall remain in place in accordance with the Code until all amounts due by the Participant concerned under the Code have been paid in full.

6.142 The Market Operator shall calculate the level of Required Credit Cover in accordance with the Code to cover a Participant's actual and potential payment liabilities in respect of its Units and participation in the Pool at any time. A Participant's Required Credit Cover shall be calculated to cover:

1. its Actual Exposure (credit exposure resulting from Invoices that have been issued but not yet paid, and from amounts in Settlement Statements for which no Invoice has been issued); and
2. its Undefined Potential Exposure (potential exposure resulting from accrued obligations that have not yet been included in any Settlement Statement and future obligations which would be likely to have been accrued before a Participant is suspended from trading in the SEM for Default).

6.143 Intentionally blank

6.144 The Market Operator shall determine:

1. the Actual Exposure Period for a Billing Period (the period from the issuing of the last Invoice for energy to the end of the most recent Trading Period included in any Settlement Statement relating to Billing Period charges);
2. the Actual Exposure Period for a Capacity Period (the period from the issuing of the last Invoice for capacity to the end of the most recent Trading Period included in any Settlement Statement relating to Capacity Period charges);
3. the Undefined Exposure Period for a Billing Period (the period from the end of the most recent Trading Period included in any Settlement Statement relating to Billing Period charges, until the time at which the Participant can be removed from incurring further liability or, where that time is not on a Working Day, the first Working Day thereafter); and,
4. the Undefined Exposure Period for a Capacity Period (the period from the end of the most recent Trading Period included in any Settlement Statement relating to Capacity Period charges, until the time at which the Participant can be removed from incurring further liability or, where that time is not a Working Day, the first Working Day thereafter).

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PARAMETERS FOR THE DETERMINATION OF REQUIRED CREDIT COVER

6.147 The Market Operator shall determine and publish four months prior to the start of each year, subject to the prior written approval of the Regulatory Authorities, the following parameters relating to the calculation of the Required Credit Cover:

1. the Fixed Credit Requirement;
2. the Historical Assessment Period for the Billing Period;
3. the Historical Assessment Period for the Capacity Period;
4. the Analysis Percentile Parameter;
5. the Credit Cover Adjustment Trigger; and
6. the maximum level of the Warning Limit.

MONITORING OF CREDIT COVER

6.148 The Market Operator shall recalculate the Required Credit Cover for each Participant every Working Day and shall send to each Participant the results of its recalculation of that Participant's Required Credit Cover by 17:00 on that Working Day as provided for pursuant to the rules in the paragraphs 6.168-6.171 and Agreed Procedure 9 "Credit Management".

6.149 Intentionally blank

6.150 The daily calculation of the Required Credit Cover will be based on the available data for the Settlement Risk Period up to the Settlement Day on which the calculations are made.

6.151 Intentionally blank

6.152 Where the daily recalculation of Required Credit Cover determines that additional Credit Cover is necessary, the Market Operator will notify the relevant Participant by 17:00 on the same Working Day of this and the amount of additional Credit Cover required to be posted to satisfy its Required Credit Cover. The Participant shall

1. post the additional necessary Credit Cover by 17:00 on the second Working Day thereafter; and
2. pay any outstanding Invoices, or
3. procure that additional Settlement Reallocations are submitted and are accepted by the Market Operator that reduce the Participant's Required Credit Cover, as issued by the Market Operator for that Trading Day, below the Posted Credit Cover level.

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6.163 The Market Operator shall provide the Participant with a Warning Notice on any Working Day when the ratio of Posted Credit Cover to Required Credit Cover is at the Participant's Warning Limit. The maximum value for the Warning Limit shall be set by the Regulatory Authorities in writing in advance of each year and this shall operate as the default Warning Level for all Participants where the Market Operator fails to provide one. Any Participant may require the Market Operator to set a lower Warning Limit for it.

6.164 Where a Participant reasonably expects that compared with the four most recent Billing Periods:

1. the total metered quantities with respect to its Supplier Units will increase by more than the Credit Cover Adjustment Trigger for any of the next four Billing Periods; or

2. the total quantity of Settlement Reallocation amounts which the Participant is credited with will decrease by more than the Credit Cover Adjustment Trigger for any of the next four Billing Periods;

then it shall inform the Market Operator as soon as reasonably possible. Such a Participant shall be an Adjusted Participant.

6.164A Each Adjusted Participant shall provide additional information to the Market Operator as provided for pursuant to Agreed Procedure 9 "Credit Management" to enable the Market operator to calculated revised values of Required Credit Cover in accordance with this section 6.

CALCULATIONS FOR REQUIRED CREDIT COVER

6.165 For the purposes of Credit Cover monitoring and calculations:

1. a Participant is a New Participant from the commencement of their participation; and,

2. a Participant ceases to be a New Participant when the length of time between the commencement of their participation and the last Trading Period covered in the most recent Settlement Statement issued for that Participant is greater than the length of time covered by the Historical Assessment Period.

6.166 A Participant is an Adjusted Participant where the Participant notifies the Market Operator of a change in circumstances pursuant to paragraph 6.164. A Participant ceases to be an Adjusted Participant when the length of time between their notification as set out in paragraph 6.164 and the last Trading Period covered in the most recent Settlement Statement issued for that Participant is greater than the length of time covered by the Historical Assessment Period.

6.167 Intentionally blank

Calculations for the Actual Exposure Period in respect of Supplier Units

6.168 The Actual Supplier Exposure (ASEpf) for Participant p in respect of their Supplier Units for the Actual Exposure Period f is calculated as follows:

$$ASEpf = \left(\sum_{b \text{ in } f} \left(IECpb + VMOCpb \right) + \sum_{c \text{ in } f} ICCpc \right) + \left(\sum_{d \text{ in } \theta} \left(\sum_{v \text{ in } p} DAYCVvd - \sum_{a \text{ in } p} \sum_{h \text{ in } d} SSREAaph \right) \right) + \left(\sum_{d \text{ in } q} \left(\sum_{v \text{ in } p} \sum_{h \text{ in } d} CCvh - \sum_{a \text{ in } p} \sum_{h \text{ in } d} SSRCAaph \right) \right)$$

Where:

1. IECpb is the Invoice Energy Charge for Participant p for its registered Supplier Units in Billing Period b applicable if the relevant Billing Period Invoice is issued but not paid;

2. VMOCpb is the Invoiced Market Operator Charge for Participant p in Billing Period b for its registered Supplier Units applicable if the relevant Billing Period Invoice is issued but not paid;

3. ICCpc is the Invoiced Capacity Charge for Participant p for its registered Supplier Units for Capacity Period c applicable if the relevant Capacity Period Invoice is issued but not paid;

4. DAYCVvd is the Total of all Charges on Supplier Unit v for Settlement Day d;

5. SSREAaph is the Settlement Reallocation Energy Amount for Participant p for its registered Supplier Units for Trading Period h defined in Settlement Reallocation Agreement a;

6. CCvh is the Capacity Charge for Supplier Unit v in Trading Period h;

7. SSRCAaph is the Settlement Reallocation Capacity Amount for Participant p for its registered Supplier Units for Trading Period h defined in Settlement Reallocation Agreement a;

8. $\sum_{b \text{ in } f}$ is a summation over all Billing Periods b that are invoiced but not paid in Actual Exposure Period f;

9. $\sum_{c \text{ in } f}$ is a summation over all Capacity Periods c that are invoiced but not paid in Actual Exposure Period f;

10. $\sum_{d \text{ in } \theta}$ is a summation over all Settlement Days d of the un-invoiced Billing Period θ;

11. $\sum_{h \text{ in } d}$ is a summation over Trading Periods h in Settlement Day d;

12. $\sum_{a \text{ in } p}$ is a summation over all Settlement Reallocation Agreements registered to Participant p in respect of its registered Supplier Units;

13. $\sum_{d \text{ in } q}$ is a summation over all Settlement Days d of the un-invoiced Capacity Period q;

14. $\sum_{v \text{ in } p}$ is a summation over Supplier Units registered to Participant p.

Calculations for the Actual Exposure Period in respect of Generator Units

6.168A The Actual Generator Exposure (AGEpf) for Participant p in respect of their Generator Units in the Actual Exposure Period f is calculated as follows:

$$AGEpf = \left(\sum_{b \text{ in } f} (IEPpb) + \sum_{c \text{ in } f} ICPpc \right) + \left(\sum_{d \text{ in } \theta} \left(\sum_{u \text{ in } p} DAYPUud - \sum_{a \text{ in } p} \sum_{h \text{ in } d} SSREAaph \right) \right) + \left(\sum_{d \text{ in } q} \left(\sum_{u \text{ in } p} \sum_{h \text{ in } d} CPuh - \sum_{a \text{ in } p} \sum_{h \text{ in } d} SSRCAaph \right) \right)$$

Where:

1. IEPpb is the Invoice Energy Payment for Energy to Participant p for its registered Generator Units in Billing Period b applicable if the relevant Billing Period Invoice is issued but not paid;
2. ICPpc is the Invoiced Capacity Payment to Participant p for its registered Generator Units for Capacity Period c applicable if the relevant Capacity Period Invoice is issued but not paid;
3. DAYPUud is the Total of all Payments to Generator Unit u for Settlement Day d;
4. SSREAaph is the Settlement Reallocation Energy Amount for Participant p for its registered Generator Units for Trading Period h defined in Settlement Reallocation Agreement a;
5. CPuh is the Capacity Payment for Generator Unit u in Trading Period h;
6. SSRCAaph is the Settlement Reallocation Capacity Amount for Participant p for its registered Supplier Units for Trading Period h defined in Settlement Reallocation Agreement a;
7. $\sum_{b \text{ in } f}$ is a summation over all Billing Periods b that are invoiced but not paid in Actual Exposure Period f;
8. $\sum_{c \text{ in } f}$ is a summation over all Capacity Periods c that are invoiced but not paid in Actual Exposure Period f;
9. $\sum_{d \text{ in } \theta}$ is a summation over all Settlement Days d of the un-invoiced Billing Period θ;
10. $\sum_{h \text{ in } d}$ is a summation over Trading Periods h in Settlement Day d;
11. $\sum_{a \text{ in } p}$ is a summation of all Settlement Reallocation Agreements a registered to Participant p in respect of its registered Generator Units;
12. $\sum_{d \text{ in } q}$ is a summation over all Settlement Days d of the un-invoiced Capacity Period q;

13. $\sum_{v in p}$ is a summation over all Supplier Units registered to Participant p.

CALCULATIONS OF REQUIRED CREDIT COVER FOR THE UNDEFINED EXPOSURE PERIOD

6.168B The Undefined Exposure calculations are dependent on whether a Participant is a New or an Adjusted Participant or a Standard Participant.

6.168C The Undefined Exposure for each New or Adjusted Participant shall be based on the product of its Credit Assessment Volume and the Credit Assessment Price.

Calculation of the Undefined Energy Price

6.168D The sum of the System Marginal Prices (USMPg) for each Trading Period h in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g is calculated as follows:

$$USMPg = \sum_{d in \gamma} \sum_{h in d} SMPh$$

Where

1. SMPh is the System Marginal Price for Trading Period h;
2. $\sum_{d in \gamma}$ is a summation over all Settlement Days d in Historical Assessment Period for Billing Periods γ relevant to the Working Day of calculation;
3. $\sum_{h in d}$ is a summation over Trading Periods h in Settlement Day d.

6.168E The count of all System Marginal Prices (SMPHAPg) in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g is calculated as follows:

$$SMPHAPg = Count\left(SMPh : \forall_{h in \gamma} \right)$$

Where

1. SMPh is the System Marginal Price for Trading Period h;
2. $Count\left(SMPh : \forall_{h in \gamma} \right)$ is the count of all System Marginal Prices in the Historical Assessment Period for Billing Periods γ;
3. $\sum_{h in \gamma}$ is a summation over all Trading Periods h in the Historical Assessment Period for Billing Periods γ;

6.169 The mean value of System Marginal Prices (UMSMPg) in the Historical Assessment Period for Billing Periods to be applied for the Undefined Exposure Period g is calculated as follows:

$$\overline{UMSMPg} = \frac{USMPg}{SMPHAPg}$$

Where

1. USMPg is the sum of all SMP values in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g;
2. SMPHAPg is the count of all System Marginal Prices in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g.

6.169A The standard deviation of the System Marginal Price (SDSMPg) in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g is calculated as follows:

$$SDSMPg = \sqrt{\frac{SMPHAPg \sum_{\mu=1}^{\mu=SMPHAPg} (SMP\mu)^2 - \left(\sum_{\mu=1}^{\mu=SMPHAPg} SMP\mu \right)^2}{SMPHAPg \times (SMPHAPg - 1)}}$$

Where

1. SMPHAPg is the count of all System Marginal Prices in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g;
2. SMPμ is the value of SMP within the Historical Assessment Period n;
3. $\sum_{\mu=1}^{\mu=SMPHAPg}$ is the sum over all the values of System Marginal Price in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g;
4. μ is a variable used as a counter over all the Trading Periods h within the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g.

6.169B The Undefined Energy Price (UEPg) for Undefined Exposure Period g is calculated as follows:

$$UEPg = (\overline{UMSMPg} + AnPP(SDSMPg)$$

Where:

1. UMSMPg is the mean value of System Marginal Prices in the Historical Assessment Period for Billing Periods γ applied for the Undefined Exposure Period g;
2. AnPP is the Analysis Percentile Parameter function in effect to determine the amount that must be added to the mean value in order that the required percentage of values shall fall below that value. The details of this function are defined in Agreed Procedure 9: Credit Risk Management;

3. SDSMPg is the standard deviation of the values of System Marginal Prices in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g.

Calculations of the Estimated Capacity Price

6.169C The sum of the Capacity Payments Demand Prices (UCPDPg) in the Historical Assessment Period for Capacity Periods ρ to be applied for the for the Undefined Exposure Period g is calculated as follows:

$$UCPDPg = \sum_{d\ in\ \rho} \sum_{h\ in\ d} CPDPh$$

Where

1. CPDPh is the Capacity Payments Demand Price for Trading Period h,
2. $\sum_{d\ in\ n}$ is a summation over all Settlement Days d in the Historical Assessment Period for Capacity Periods ρ;
3. $\sum_{h\ in\ d}$ is a summation over Trading Periods h in Settlement Day d.

6.169D The count of all Capacity Payments Demand Prices (CPDPHAPg) in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g is calculated as follows:

$$CPDPHAPg = Count\left(CPDPh : \forall_{h\ in\ \rho} \right)$$

Where

1. CPDPh is the Capacity Payments Demand Price for Trading Period h;
2. $Count\left(CPDPh : \forall_{h\ in\ \rho} \right)$ is the count of all the Capacity Payments Demand Prices in the Historical Assessment Period for Capacity Periods ρ;
3. $\sum_{h\ in\ \rho}$ is a summation over all Trading Periods h in Historical Assessment Period for Capacity Periods ρ.

6.169E The mean value of the Capacity Payments Demand Prices (UMCPDPg) in the Historical Assessment Period for Capacity Periods to be applied for the Undefined Exposure Period g is calculated as follows:

$$\overline{UMCPDPg} = \frac{UCPDPg}{CPDPHAPg}$$

Where

1. CPDPHAPg is count of all Capacity Payments Demand Prices in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g;

2. UCPDPg is the sum of all Capacity Payments Demand Prices in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g.

6.169F The standard deviation of the Capacity Payments Demand Prices (SDCPDPg) in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g is calculated as follows:

$$SDCPDPg = \sqrt{\frac{CPDPHAPg \sum_{\mu=1}^{\mu=CPDPHAPg} (CPDP\mu)^2 - \left(\sum_{\mu=1}^{\mu=CPDPHAPg} CPDP\mu \right)^2}{CPDPHAPg \times (CPDPHAPg - 1)}}$$

Where

1. CPDPHAPg is count of all Capacity Payments Demand Prices in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g;
2. CPDPμ is the value of Capacity Payments Demand Price within the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g;
3. $\sum_{\mu=1}^{\mu=CPDPHAPg}$ is the sum over all the values of System Marginal Price in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g;
4. μ is a variable used as a counter over all the Trading Periods h within the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g.

6.169GThe Estimated Capacity Price (ECPg) for the Undefined Exposure Period g is calculated as follows:

$$ECPg = (\overline{UMCPDPg} + AnPP(SDCPDPg)$$

Where:

1. UMCPDPg is the average Capacity Payments Demand Price in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g;
2. AnPP is the Analysis Percentile Parameter function in effect to determine the amount that must be added to the mean value in order that the required percentage of values shall fall below that value. The details of this function are defined in Agreed Procedure 9: Credit Risk Management;
3. SDCPDPg is the standard deviation of the values of Capacity Payments Demand Prices in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g.

6.169H The Credit Assessment Price (CAPg) for the Undefined Exposure Period g is calculated as follows:

$$CAPg = (UEPg + Max\{VMOP(y), VMOP(y-1)\} + Max\{IMP(y), IMP(y-1)\} + ECPg)$$

Where:

1. UEPg is the Undefined Energy Price for Undefined Exposure Period g;
2. VMOPy is the Variable Market Operator Price for the year set by the Regulatory Authorities;
3. IMPy is the Imperfections Price for the Year y;
4. ECPg is the Estimated Capacity Price for the Undefined Exposure Period g.

Calculations for the Undefined Exposure Period for a New or Adjusted Participant in respect of its Supplier Units

6.170 The Credit Assessment Volume for a New or Adjusted Participant p (CAVSph) will be a forecast of Demand in respect of a New or Adjusted Participant's Supplier Units based upon information provided by the Participant and used in the calculation of the Participant's Required Credit Cover in accordance with paragraph 6.164.

6.170A The Undefined Supplier Exposure (UPESpg) for each New or Adjusted Participant p in respect of its Supplier Units for the Undefined Exposure Period g is calculated as follows:

$$UPESpg = CAPg \times \sum_{h\,in\,g} CAVSph$$

Where

1. CAPg is the Credit Assessment Price for the Undefined Exposure Period g;
2. CAVph is the Credit Assessment Volume for the Trading Period h;
3. $\sum_{h\,in\,g}$ is a summation over Trading Periods h in Undefined Exposure Period g.

Calculations for the Undefined Exposure Period for a New or Adjusted Participant in respect of its Generator Units

6.170B The Credit Assessment Volume for a New or Adjusted Participant p (CAVGph) will be forecast of Output in respect of a the Participant's Generator Units based upon information provided by the Participant and used in the calculation of the Participant's Required Credit Cover in accordance with paragraph 6.148.

6.170C The Undefined Exposure (UPEGpg) for each New or Adjusted Participant in respect of its Generator Units for the Undefined Exposure Period g is calculated as follows:

$$UPEGpg = CAPg \times \sum_{h\,in\,g} CAVGph$$

Where

1. CAPg is the Credit Assessment Price for the Undefined Exposure Period g;
2. CAVGph is the Credit Assessment Volume for the Trading Period h;

3. $\sum_{h \text{ in } g}$ is a summation over Trading Periods h in Undefined Exposure Period g.

Calculations for the Undefined Exposure Period for a Standard Participant in respect of its Supplier Units

6.170D Where the Participant is a Standard Participant, the Participant's Undefined Exposure in respect of its Supplier Units will be calculated as one calculation for the Billing Period values and one calculation for the Capacity Period values according to the procedures set out in the following paragraphs.

Calculations in respect of Billing Period Charges

6.170E The Billing Period Settlement value (BSVSpg) in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Supplier Units is calculated as follows:

$$BSVSpg = \sum_{d \text{ in } \gamma} \left(\left(\sum_{v \text{ in } p} DAYCVvd \right) + \left(VMOPy \times \sum_{v \text{ in } p} \sum_{h \text{ in } d} NDLFvh \right) \right)$$

Where

1. DAYCVvd is the Total of all Charges on Supplier Unit v for Settlement Day d;
2. VMOPy is the Variable Market Operator Price for Year y;
3. NDLFvh is the Loss Adjusted Net Demand from Supplier Unit v for Trading Period h;
4. $\sum_{d \text{ in } \gamma}$ is a summation over all Settlement Days d in the Historical Assessment Period for Billing Periods γ;
5. $\sum_{h \text{ in } d}$ is a summation over Trading Periods h in Settlement Day d;
6. $\sum_{v \text{ in } p}$ is a summation over all Supplier Units registered to Participant p.

6.170F The count of all Billing Period payments and charges (BPSHAPpg) in the Historical Assessment Period for Billing Periods γ to be applied for Participant p in the Undefined Exposure Period g is calculated as follows:

$$BPSHAPpg = Count\left(DAYCVvd : \forall_{d \text{ in } \gamma} \right)$$

Where

1. DAYCVvd is the Total of all Charges on Supplier Unit v for Settlement Day d.
2. $Count\left(DAYCVvd : \forall_{d \text{ in } \gamma} \right)$ is the count of all the Charges on Supplier Unit v in the Historical Assessment Period for Billing Periods γ;

3. $\sum_{d \text{ in } \gamma}$ is a summation over all Settlement Days d in Historical Assessment Period for Billing Periods γ.

6.170G The mean of the Billing Period Settlement Sum (BXSVSpg) in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Supplier Units is calculated as follows:

$$\overline{BXSVSpg} = \frac{BSVSpg}{BPSHAPpg}$$

Where

1. BPSHAPpg is the count of all Billing Period payments and charges in the Historical Assessment Period for Billing Periods γ to be applied for Participant in the Undefined Exposure Period g;
2. BSVSpg is the Billing Period Settlement Value in the Historical Assessment Period for Billing Periods γ to be applied for Undefined Exposure Period g for Participant p in respect of its Supplier Units.

6.170H The standard deviation of the Billing Period Settlement sum (BSDSVSpg) in the Historical Assessment Period for Billing Periods γ to be applied for Undefined Exposure Period g for Participant p in respect of its Supplier Units is calculated as follows:

$$BSDSVSpg = \sqrt{\frac{BPSHAPpg \sum_{\eta=1}^{\eta=BPSHAPpg} \left(\left((DAYCVv\eta) + \left(VMOPy \times \sum_{h \text{ in } \eta} NDLFvh \right) \right)^2 - \left(\sum_{\eta=1}^{\eta=BPSHAPpg} (DAYCVv\eta) + \left(VMOPy \times \sum_{h \text{ in } \eta} NDLFvh \right) \right)^2 \right)}{BPSHAPpg \times (BPSHAPpg - 1)}}$$

Where

1. BPSHAPpg is the count of all Billing Period payments and charges in the Historical Assessment Period for Billing Periods γ to be applied for Participant p in the Undefined Exposure Period g;
2. DAYCVvd is the Total of all Charges on Supplier Unit v for Settlement Day d;
3. VMOPy is the Variable Market Operator Price for Year y;
4. NDLFvh is the Loss-Adjusted Net Demand from Supplier Unit v for Trading Period h;
5. $\sum_{\eta=1}^{\eta=BPSHAPpg}$ is the sum over all the Billing Period Settlement values in the Historical Assessment Period for Billing Periods γ;
6. $\sum_{h \text{ in } \eta}$ is a summation over Trading Periods h in Settlement Day μ

7. ŋ is a variable used as a counter over all the Settlement Days d within the Historical Assessment Period for Billing Periods γ.

6.170I The Billing Period Undefined Potential Exposure (BUPESpg) in the Historical Assessment Period for Billing Periods γ to be applied for Participant p in respect of its Supplier Units for the Undefined Exposure Period g is calculated as follows:

$$BUPESpg = \left(\overline{BXSVSpg} + AnPP(BSDSVSpg)\right)$$

Where

1. BXSVSpg is the mean of the Billing Period Settlement Sum in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Supplier Units u;
2. AnPP is the Analysis Percentile Parameter function in effect to determine the amount that must be added to the mean value in order that the required percentage of values shall fall below that value. The details of this function are defined in Agreed Procedure 9 “Credit Risk Management”;
3. BSDSVSpg is the standard deviation of the Billing Period in the Historical Assessment Period for Billing Periods γ to be applied for Undefined Exposure Period g for Participant p in respect of its Supplier Units.

Calculations in respect of Capacity Charges

6.170J The Capacity Period Settlement Value (CSVSpg) in the Historical Assessment Period for Capacity Periods ρ for the Undefined Exposure Period g for Participant p in respect of its Supplier Units is calculated as follows:

$$CSVSpg = \sum_{d\ in\ \rho}\left(\sum_{v\ in\ p}\ \sum_{h\ in\ d} CCvh\right)$$

Where

1. CCvh is the Capacity Charge for Supplier Unit v in Trading Period h;
2. $\sum_{d\ in\ \rho}$ is a summation over all Settlement Days d in Historical Assessment Period for Capacity Periods ρ;
3. $\sum_{h\ in\ d}$ is a summation over Trading Periods h in Settlement Day d
4. $\sum_{v\ in\ p}$ is a summation over all Supplier Units registered to Participant p.

6.170K The count of Capacity Period Charges (CPSHAPpg) in the Historical Assessment Period for Capacity Periods ρ to be applied for Participant p in the Undefined Exposure Period g is calculated as follows:

$$CPSHAPpg = Count\left(CCvh : \forall_{h\ in\ \rho}\right)$$

Where

1. CCvh is the Capacity Charge for Supplier Unit v in Trading Period h;
2. $Count\left(CCvh : \underset{h\,in\,\rho}{\forall}\right)$ is the count of all Capacity Charges for Supplier Units in Historical Assessment Period for Capacity Periods ρ;
3. $\sum_{h\,in\,\rho}$ is a summation over all Trading Periods h in Historical Assessment Period for Capacity Periods ρ.

6.170L The mean of the Capacity Period Settlement Sum (CXSVSpg) in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Supplier Units is calculated as follows:

$$\overline{CXSVSpg} = \frac{CSVSpg}{CPSHAPpg}$$

Where

1. CPSHAPpg is the count of Capacity Period Charges in the Historical Assessment Period for Capacity Periods ρ to be applied for Participant p in the Undefined Exposure Period g;
2. CSVSpg is the Capacity Period Settlement Value in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Supplier Units.

6.170M The Capacity Period standard deviation (CSDSVSpg) in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p respect of its Supplier Units is calculated as follows:

$$CSDSVSpg = \sqrt{\frac{CPSHAPpg \sum_{\mu=1}^{\mu=CPSHAPpg} (CCv\mu)^2 - \left(\sum_{\mu=1}^{\mu=CPSHAPpg} CCv\mu\right)^2}{CPSHAPpg \times (CPSHAPpg - 1)}}$$

Where

1. CPSHAPpg is the count of Capacity Period Charges to be applied for Participant p in the Undefined Exposure Period g;
2. CCvh is the Capacity Charge for Supplier Unit v in Trading Period h
3. $\sum_{\mu=1}^{\mu=CPSHAPpg}$ is the sum over all values of the Capacity Period Settlement Values in the Historical Assessment Period for Capacity Periods ρ;
4. μ is a variable used as a counter over all the Trading Periods h within the Historical Assessment Period for Capacity Periods ρ.

6.170N The Capacity Period Undefined Potential Exposure (CUPESpg) in the Historical Assessment Period for Capacity Periods ρ to be applied for

Participant p in respect of its Supplier Units for the Undefined Exposure Period g is calculated as follows:

$$CUPESpg = \left(\overline{CXSVSpg} + AnPP(CSDSVSpg)\right)$$

Where

1. CXSVSpg is the mean of the Capacity Period Settlement Sum in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p;
2. AnPP is the Analysis Percentile Parameter function in effect to determine the amount that must be added to the mean value in order that the required percentage of values shall fall below that value. The details of this function are defined in Agreed Procedure 9 "Credit Management";
3. CSDSVSpg is the Capacity Period standard deviation in the Historical Assessment Period for Capacity Periods ρ to be applied for Undefined Exposure Period g for Participant p in respect of its Supplier Units.

Total Undefined Exposure

6.170O The Undefined Potential Exposure (UPESpg) in the Historical Assessment Periods to be applied for Undefined Exposure Period g for Participant p in respect of its Supplier Units is calculated as follows:

$$UPESpg = BUPESpg + CUPESpg$$

Where

1. BUPESpg is the Billing Period Undefined Potential Exposure in the Historical Assessment Period for Billing Periods γ to be applied for Undefined Exposure Period g for Participant p in respect of its Supplier Units;
2. CUPESpg is the Capacity Period Undefined Potential Exposure in the Historical Assessment Period for Capacity Periods ρ to be applied for Undefined Exposure Period g for Participant p in respect of its Supplier Units.

Calculations for the Undefined Exposure Period for a Standard Participant in respect of its Generator Units

6.170P Where the Participant is a Standard Participant, the Participant's Undefined Exposure in respect of its Generator Units will be calculated according to the procedures set out in the following paragraphs.

Calculations in respect of Billing Period Payments

6.170Q The Billing Period Settlement value (BSVUpg) in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units is calculated as follows:

$$BSVUpg = \sum_{d \text{ in } \gamma}\left(\sum_{u \text{ in } p} DAYPUud\right)$$

Where

1. DAYPUud is the Total of all Payments on Generator Unit u for Settlement Day d;

2. $\sum_{d\ in\ \gamma}$ is a summation over all Settlement Days d in the Historical Assessment Period for Billing Periods γ;

3. $\sum_{u\ in\ p}$ is a summation over all Generator Units registered to Participant p.

6.170R The count of all Billing Period payments and charges for Generator Units (BPUHAPpg) in the Historical Assessment Period for Billing Periods γ to be applied for Participant p in the Undefined Exposure Period g is calculated as follows:

$$BPUHAPpg = Count\left(DAYPUud : \forall_{d\ in\ \gamma} \right)$$

Where

1. DAYPUud is the Total of all Payments on Generator Unit u for Settlement Day d;

2. $Count\left(DAYPUud : \forall_{d\ in\ \gamma} \right)$ is the count of all the Payments to a Generator Unit u in the Historical Assessment Period for Billing Periods γ;

3. $\sum_{d\ in\ \gamma}$ is a summation over all Settlement Days d in the Historical Assessment Period for Billing Periods γ.

6.170S The mean of Billing Period Settlement Sum (BXSVUpg) in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units is calculated as follows:

$$\overline{BXSVUpg} = \frac{BSVUpg}{BPUHAPpg}$$

Where

1. BPUHAPpg is the count of all Billing Period payments and charges in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units;

2. BSVUpg is the Settlement Value for Billing Period in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units.

6.170T The standard deviation of the Billing Period Settlement sum (BSDSVUpg) in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units is calculated as follows:

$$BSDSVUpg = \sqrt{\frac{BPUHAPpg \sum_{\eta=1}^{\eta=BPUHAPpg} (DAYPUu\eta)^2 - \left(\sum_{\eta=1}^{\eta=BPUHAPpg} DAYPUu\eta \right)^2}{BPUHAPpg \times (BPUHAPpg - 1)}}$$

Where

1. BPUHAPpg is the count of all Billing Period payments and charges in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units;
2. DAYPUud is the Total of all Payments on Generator Unit u for Settlement Day d;
3. $\sum_{\eta=1}^{\eta=BPUHAPpg}$ is the sum over all values of the Capacity Period Settlement Values in the Historical Assessment Period for Billing Periods γ;
4. η is a variable used as a counter over all the Settlement Days d within the Historical Assessment Period for Billing Periods γ.

6.170U The Billing Period Undefined Potential Exposure (BUPEGpg) in the Historical Assessment Period for Billing Periods γ to be applied for Undefined Exposure Period g for Participant p in respect of its Generator Units is calculated as follows:

$$BUPEGpg = \left(\overline{BXSVUpg} + AnPP(BSDSVUpg) \right)$$

Where

1. BXSVUpg is the mean of Billing Period Settlement Sum for Billing Periods in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units;
2. AnPP is the Analysis Percentile Parameter function in effect to determine the amount that must be added to the mean value in order that the required percentage of values shall fall below that value. The details of this function are defined in Agreed Procedure 9: Credit Risk Management;
3. BSDSVUpg is the standard deviation of the Billing Period Settlement Sum values in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units.

Calculations in respect of Capacity Payments

6.170V The Capacity Period Settlement value (CSVUpg) in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units is calculated as follows:

$$CSVUpg = \sum_{d\ in\ \rho} \left(\sum_{u\ in\ p} \sum_{h\ in\ d} CPuh \right)$$

Where

1. CPuh is the Capacity Payment for Generator Unit u in Trading Period h;
2. $\sum_{d \text{ in } \rho}$ is a summation over all Settlement Days d in the Historical Assessment Period for Capacity Periods ρ;
3. $\sum_{h \text{ in } d}$ is a summation over Trading Periods h in Settlement Day d
4. $\sum_{u \text{ in } p}$ is a summation over all Generator Units registered to Participant p.

6.170W The count of all Capacity Period payments and charges for Generator Units (CPUHAPpg) in the Historical Assessment Period for Capacity Periods ρ to be applied for Participant p in the Undefined Exposure Period g is calculated as follows:

$$CPUHAPpg = Count\left(CPuh : \underset{h \text{ in } \rho}{\forall}\right)$$

Where

1. CPuh is the Capacity Payment for Generator Unit u in Trading Period h;
2. $Count\left(CPuh : \underset{h \text{ in } \rho}{\forall}\right)$ is the count of all the Capacity Payments to a Generator Unit u in the Historical Assessment Period for Capacity Periods ρ;
3. $\sum_{h \text{ in } \rho}$ is a summation over all Trading Periods h in Historical Assessment Period for Capacity Periods ρ.

6.170X The mean of Capacity Period Settlement Sum (CXSVUpg) in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units is calculated as follows:

$$\overline{CXSVUpg} = \frac{CSVUpg}{CPUHAPpg}$$

Where

1. CSVUpg is the Capacity Period Settlement Value in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units;
2. CPUHAPpg is the count of all Capacity Period payments and charges in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units.

6.170Y The Capacity Period standard deviation Settlement sum (CSDSVUpg) in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units is calculated as follows:

$$CSDSVUpg = \sqrt{\frac{CPUHAPpg \sum_{\mu=1}^{\mu=CPUHAPpg} (CPu\mu)^2 - \left(\sum_{\mu=1}^{\mu=CPUHAPpg} CPu\mu \right)^2}{CPUHAPpg \times (CPUHAPpg - 1)}}$$

Where

1. CPuμ is the Capacity Payment for Generator Unit u in Trading Period μ;
2. CPUHAPpg is the count of all Capacity Period payments and charges in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units;
3. $\sum_{\mu=1}^{\mu=CPUHAPpg}$ is the sum over all values of the Capacity Period Settlement Values in the Historical Assessment Period for Capacity Periods ρ;
4. μ is a variable used as a counter over all the Trading Periods h within the Historical Assessment Period for Capacity Periods ρ.

6.170Z The Capacity Period Undefined Potential Exposure (CUPEGpg) for Participant p in respect of its Generator Units is calculated as follows:

$$CUPEGpg = \left(\overline{CXSVUpg} + AnPP(CSDSVUpg) \right)$$

Where

1. CXSVUpg is the Capacity Period mean of Daily Settlement Sum in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units;
2. AnPP is the Analysis Percentile Parameter function in effect to determine the amount that must be added to the mean value in order that the required percentage of values shall fall below that value. The details of this function are defined in Agreed Procedure 9: Credit Risk Management;
3. CSDSVUpg is the Capacity Period standard deviation in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units.

Total Undefined Exposure

6.170ZA The Undefined Potential Exposure in the Historical Assessment Periods to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units is calculated as follows:

$$UPEGpg = BUPEGpg + CUPEGpg$$

Where

1. BUPEGpg is the Billing Period Undefined Potential Exposure in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in the Billing Period in respect of its Generator Units;
2. CUPEGpg is the Capacity Period Undefined Potential Exposure in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units.

CALCULATIONS OF REQUIRED CREDIT COVER FOR PARTICIPANTS

6.171 The Required Credit Cover (RCCSpr) for each Participant p in respect of its Supplier Units in respect of the Settlement Risk Period r is calculated as follows:

$$RCCSpr = \max\left\{0, ASEpf + UPESpg - \sum_{a\,in\,p}\sum_{h\,in\,n}\left(SSREAaph + SSRCAaph\right) + VATpr\right\}$$

Where:

1. ASEpf is the Actual Exposure for Participant p in respect of its Supplier Units for the Actual Exposure Period f;
2. UPESpg is the Undefined Potential Exposure in the Historical Assessment Periods to be applied for the Undefined Exposure Period g for Participant p in respect of its Supplier Units;
3. SSREAaph is the Settlement Reallocation Energy Amount for Participant p for its registered Supplier Units for Trading Period h defined in Settlement Reallocation Agreement a;
4. SSRCAaph is the Settlement Reallocation Capacity Amount for Participant p for its registered Supplier Units for Trading Period h defined in Settlement Reallocation Agreement a;
5. [VATpr is the applicable VAT charge for the Participant p in Settlement Risk Period r;]
6. $\sum_{a\,in\,p}$ is a summation of all Settlement Reallocation Agreements a registered to Participant p in respect of its registered Units;
7. $\sum_{h\,in\,n}$ is a summation over all Trading Periods h in Historical Assessment Period n compromising the Historical Assessment Periods for both Billing Periods and Capacity Periods.

6.171A The Required Credit Cover (RCCGpr) for each Participant p in respect of its Generator Units in respect of the Settlement Risk Period r is calculated as follows:

$$RCCGpr = Max\left\{0, \left(\left(AGEpf + UPEGpg - \sum_{a\,in\,p}\sum_{h\,in\,n}\left(SSREAaph + SSRCAaph\right)\right)x(-1)\right)\right\} + VATpr$$

Where:

1. AGEpf is the Actual Exposure for Participant p in respect of its Generator Units for the Actual Exposure Period f;
2. UPEGpg is the Undefined Potential Exposure in the Historical Assessment Periods to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units;
3. SSREAaph is the Settlement Reallocation Energy Amount for Participant p for its registered Generator Units for Trading Period h defined in Settlement Reallocation Agreement a;
4. SSRCAaph is the Settlement Reallocation Capacity Amount for Participant p for its registered Generator Units for Trading Period h defined in Settlement Reallocation Agreement a;
5. [VATpr is the applicable VAT charge for the Participant p in Settlement Risk Period r;]
6. $\sum_{a\,in\,p}$ is a summation of all Settlement Reallocation Agreements a registered to Participant p in respect of its registered Units;
7. $\sum_{h\,in\,n}$ is a summation over all Trading Periods h in Historical Assessment Period n compromising the Historical Assessment Periods for both Billing Periods and Capacity Periods.

6.171B A Participant in respect of its Generator Units shall always post at a minimum the Fixed Credit Requirement as Required Credit Cover.

6.171C The Required Credit Cover (RCCpr) for each Participant p in respect of its Units in respect of the Settlement Risk Period r is calculated as follows:

$$RCCpr = RCCSpr + RCCGpr + \sum_{v\,in\,p} FRCSy + \sum_{u\,in\,p} FRCGy$$

Where:

1. RCCSpr is the Required Credit Cover for each Participant p in respect of its Supplier Units in respect of the Settlement Risk Period r;
2. RCCGpr is the Required Credit Cover for each Participant p in respect of its Generator Units in respect of the Settlement Risk Period r;
3. FCRSy is the Fixed Credit Requirement for Year y for a Participant in respect of its Supplier Unit.
4. FCRGy is the Fixed Credit Requirement for Year y for a Participant in respect of its Supplier Unit.
5. $\sum_{v\,in\,p}$ is a summation over all Supplier Units registered to Participant p.
6. $\sum_{u\,in\,p}$ is a summation over all Generator Units registered to Participant p.

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CALLING IN CREDIT COVER

6.175A Where the Market Operator exercises its right to make a Credit Call on a Participant's Posted Credit Cover in accordance with the Code, the Market Operator:

1. shall be entitled to draw down on the Letter of Credit or the SEM Collateral Reserve Account (where applicable) in whatever order, proportion or combination it decides; and

2. shall, where practicable, notify the Participant that it is making the Credit Call on the Participant's Credit Cover Provider or Credit Cover Providers as applicable.

6.175B Where the Market Operator draws down any amounts from the Participant's Posted Credit Cover, the Participant shall within 2 Working Day fully re-establish at minimum the Required Credit Cover as calculated and notified to it in accordance with paragraph 6.148 and comply with paragraph 6.152.

6.175C Intentionally blank

SETTLEMENT REALLOCATION

6.176 A Settlement Reallocation Agreement is an agreement between two Participants (which, for the avoidance of doubt, may be the same Participant) and the Market Operator, under which the Market Operator credits to the Participant, referred to as the Credited Participant, with positive amounts in respect of one or more Trading Periods within the relevant Settlement Period, in consideration of matching negative amounts debited against the the Participant, referred to as the Debited Participant, in respect of the same Trading Period(s). Agreed Procedure 10 "Settlement Reallocation" sets out the processes for the requesting of, recording and termination of Settlement Reallocations.

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6.179 A Settlement Reallocation Agreement only becomes valid where the intended Debited Participant lodges or procures the lodgement of a Settlement Reallocation Request with the Market Operator.

6.180 Each Settlement Reallocation Data Transaction shall be included on the Settlement Statements issued to the Credited Participant and the Debited Participant in respect of the Trading Period to which that Settlement Reallocation Data Transaction relates.

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6.182 Settlement Reallocation is offered based on Trading and Capacity Payments.

6.183 The amount included in a Settlement Reallocation Agreement for Energy is:

1. SSREAaph which is the Settlement Reallocation Energy Amount for Participant p for its registered Units for Trading Period h defined in

Settlement Reallocation Agreement a.

6.184 The amount included in a Settlement Reallocation Agreement for Capacity Payment is:

1. SSRCAaph which is the Settlement Reallocation Capacity Amount for Participant p for its registered Generator Units for Trading Period h defined in Settlement Reallocation Agreement a.

6.185 A Settlement Reallocation Agreement shall relate to Settlement Reallocation in one Currency only.

6.186 The Trading Day Exchange Rate applicable on the day on which the relevant Invoice is issued will be used in calculating Settlement Reallocation Amounts.

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6.189 A Participant may not request or enter into a Settlement Reallocation Agreement as a Debited Participant in respect of its registered Generator Units that covers more than the payment that it expects to receive under the Code in respect of such Generator Units.

6.190 A Participant may not request or enter into a Settlement Reallocation Agreement as a Debited Participant in respect of its Supplier Units.

6.191 A Settlement Reallocation Agreement shall be cancelled if a cancellation request is lodged with the Market Operator on behalf of both Participants prior to 17:00 on the second Working Day after the end of the first Billing Period or Capacity Period to which the Settlement Reallocation Agreement relates. No cancellation request shall take effect if:

1. the Credited Participant is, at the time of the proposed cancellation, in default of any payment due under the Code; or
2. its cancellation would cause the Required Credit Cover of the Credited Participant to exceed its Posted Credit Cover.

IMPLEMENTATION OF ADMINISTERED SETTLEMENT

General Principles in the Event of Administered Settlement

6.192 In implementing Administered Settlement, the Market Operator shall, insofar as reasonably practicable, adopt the following principles:

1. make use of all available data, and limit to the maximum extent possible the use of estimated values;
2. operate within the Settlement timescales, and be subject to the query and Settlement Dispute provisions as set out in Section 6;
3. seek results which are as close as possible to those which would have been calculated under the normal Settlement processes;
4. obtain the prior written approval of the Regulatory Authorities for the detailed calculations and methodology used; and
5. publish details of the calculations and methodology used as soon as possible thereafter.

Estimation of Data in the Event of Administered Settlement

6.193 To the extent necessary, the Market Operator may estimate any Settlement data in the event of Administered Settlement.

Administered Settlement in the Event of EPUS Failure

6.194 In the event of EPUS Failure for a Trading Day, the Market Operator will calculate an Administered Schedule for all Trading Periods for the Trading Day.

6.195 An Administered Schedule comprises Administered Prices for each Trading Period and Administered Quantities for each Generator Unit for each Trading Period.

6.196 In creating an Administered Schedule, the objective of the Market Operator is to reproduce, to the greatest degree possible, the results that would have been determined by the EPUS Software.

6.197 The SMP value for each Trading Period in the Trading Day (SMPh) will be set to equal the relevant Administered Price.

6.198 The Market Schedule Quantity value for each Generator Unit for each Trading Period for the Trading Day (MSQuh) will be set to equal the relevant Administered Quantity value.

6.199 All Settlement calculations will be made using these values for SMP and Administered Schedule Quantities.

6.199A In the event of Administered Settlement resulting from EPUS Failure, then once the EPUS Failure is corrected, the Market Operator shall procure that Settlement Reruns will be undertaken as soon as reasonably possible in respect of the relevant Trading Periods and that revised Settlement Statements, Invoices and Self Billing Invoices in respect of the relevant Billing Period or Periods shall be issued to Participants.

Administered Settlement in the event of Electrical System Collapse

6.200 In the event of Electrical System Collapse, Administered Settlement will be implemented using values as follows

$$MSQuh = \frac{MGuh}{TPD} \qquad for\ all\ Generator\ Units\ u$$

$$DQuh = MSQuh \qquad for\ all\ Generator\ Units\ u$$

$$EAuh = MSQuh \qquad for\ all\ Generator\ Units\ u$$

$$NDvh = MDvh \qquad for\ all\ Supplier\ Units\ v$$

$$\phi h = 0$$

Where

1. MSQuh is the Market Schedule Quantity for Generator Unit u for Trading Period h
2. MGuh is the Metered Generation for Generator Unit u for Trading Period h (MWh)
3. EAuh is the Eligible Availability for Generator Unit u for Trading Period h (MW of average power)

4. DQuh is the Dispatch Quantity for Generator Unit u for Trading Period h (average MW)

5. DQu'h is the Dispatch Quantity for the Interconnector Residual Capacity Unit u' for Trading Period h (average MW)

6. MDvh is the Metered Demand for Supplier Unit v for Trading Period h

7. NDvh is the Net Demand for Supplier Unit v for Trading Period h

8. Φ h is the Ex-Post Loss of Load Probability

9. TPD is the Trading Period Duration (in hours).

6.200A In the event of Electrical System Collapse, prior to the calculations set out in paragraph 6.200, relevant values of Metered Generation (MGuh) for Interconnector Units, Interconnector Residual Capacity Units and Interconnector Error Units must first be calculated as specified in paragraphs 5.76 to 5.78

6.200B In the event of Electrical System Collapse, prior to the calculations set out in paragraph 6.200, relevant values of Metered Generation (MGuh) for Netting Generator Units must first be set to equal zero.

6.201 The System Marginal Price SMPh is set to equal the highest Market Offer Price (MOPuh) for any Generator Unit for which the Market Schedule Quantity is greater than zero, the Market Offer Price being calculated from Commercial Offer Data Submitted prior to Electrical System Collapse.

Management of Taxes and VAT

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6.203 All Invoices and Self Billing Invoices shall include VAT at the appropriate rate for the Participant concerned as more particularly set out below.

6.204 All Participants shall indemnify and keep indemnified the Market Operator, its officers, employees and agents against any liability which the Market Operator may incur as a result of the failure of any Participant to pay or account for any VAT due on any Invoice or Self Billing Invoice.

6.205 If any Participant shall fail properly to pay or account for any amount of VAT payable or receivable by it, that person shall indemnify and keep indemnified each non-defaulting Participant, (on an after tax basis, but taking account of any tax relief available to the relevant Participant, as the case may be) against any liability which such non-defaulting Participant shall incur consequently.

6.206 In relation to each Self Billing Invoice, the Market Operator shall include as a separate item an amount of VAT to be declared by the relevant Participant as output VAT for the purposes of that Participant's VAT return, which amount shall take account of the amount of electricity deemed to have been subject to a cross border supply.

6.207 The Market Operator shall keep records of all Self Billing Invoices issued to Participants and shall, bi-monthly for each Participant to which Self Billing Invoices were issued in the relevant period compare the amounts of electricity deemed to have been subject to a cross border supply to the amounts of electricity actually subject to a cross border supply. The Market Operator shall, in respect of each Participant, calculate the difference (if any) between the amounts of electricity deemed to have been subject to a

cross border supply in the relevant period and the amounts of electricity actually subject to a cross border supply in that relevant period and shall, where applicable, include in the next Self Billing Invoice issued to the relevant Participant an amount (which may be either a positive or negative amount) of VAT to be declared by the relevant Participant as either an increase or a reduction in output VAT for the purposes of that Participant's VAT return.

6.208 In relation to each Invoice, the Market Operator shall include as a separate item an amount of VAT payable by the relevant Participant in respect of such Invoice which amount shall take into account the amount of electricity deemed to have been subject to a cross border supply.

6.209 The Market Operator shall keep records of all Invoices issued to Participants and shall, bi-monthly for each Participant to which Invoices were issued in the relevant period, compare the amounts of electricity deemed to have been subject to a cross border supply to the amounts of electricity actually subject to a cross border supply. The Market Operator shall, in respect of each Participant, calculate the difference (if any) between the amounts of electricity deemed to have been subject to a cross border supply in the relevant period and the amounts of electricity actually subject to a cross border supply in that relevant period and shall, where applicable, include in the next Invoice issued to the relevant Participant an amount (which may be either a positive or negative amount) of VAT to be declared by the relevant Participant as either an increase or a reduction in output VAT for the purposes of that Participant's VAT return.

6.210 The Market Operator shall retain records of all amounts of VAT included in all Self Billing Invoices and all Invoices together with records of all amounts of electricity deemed to be subject to a cross border supply and actually subject to a cross border supply and shall, upon request, make such information available to the Revenue Authorities and shall cooperate in any investigation by the either Revenue Authority relating to the settlement of the SEM or any aspect of it.

[Note: This suggested treatment of VAT for the purposes of the SEM is subject to the approval of the relevant revenue authorities in both Northern Ireland and the Republic of Ireland and is therefore included here for illustrative purposes and is subject to further change and alteration.]

7. TRANSITIONAL ARRANGEMENTS

GENERAL

Purpose

7.1 This Section 7 sets out or refers to provisions, or parts of provisions of the Code which shall apply in place of or shall amend, add to or otherwise change existing Code paragraphs during the Transition Period and in some cases immediately following the Market Start Date, until otherwise specified by the Regulatory Authorities.

References to each year

7.2 Any reference in the Code to any thing being or requiring to be done prior to the start of a year, shall, during the Transitional Period, be deemed to mean prior to the Market Start Date. Where a particular period prior to the start of a year is specified, this shall be deemed to refer to the relevant period prior to the Market Start Date, or such other period as may be determined by the Regulatory Authorities.

Establishment of the Dispute Resolution Panel

7.3 The Panel shall be established by the Market Operator on or before the Market Start Date in accordance with paragraphs 2.257 to 2.260.

THIS SECTION WILL BE FURTHER DEVELOPED IN LINE WITH THE WORKSTREAM FOR TRANSITIONAL ARRANGEMENTS

GLOSSARY

Accepted	means, in relation to data, that data which the Market Operator is required to use under Section 3 of the Code either because (i) it is the most recently received Validated Data Transaction or or (ii) the Market Operator is required to use Default Data in accordance with Section 3.
Accession	means becoming a Party to the Code in accordance with the Accession Process
Accession Deed	means the agreement pursuant to which an Applicant becomes a party to the Framework Agreement and, consequently, becomes bound by the Code, and which shall be in the form set out in Appendix V.
Accession Fee	means a fee to be paid to the Market Operator by each Applicant for Accession to the Code to cover the Market Operator costs incurred in assessing the application, as approved by the Regulatory Authorities.
Accession Process	means the Accession Process set out at paragraphs 2.6 to 2.14.
Active Interconnector Unit Capacity Holding	means the Active Interconnector Unit Import Capacity Holding and the Active Interconnector Unit Export Capacity Holding for each Interconnector Unit after scaling to Available Transfer Capacity (ATC).
Active Interconnector Unit Capacity Holding Data	means the set of data submitted by the Market Operator to the Interconnector Administrator and individually to Interconnector Users detailing the feasible Interconnector Unit Capacity Holding scaled to the ATC. The associated Data Transaction is detailed in Appendix E.
Active Power	means the product of voltage and the in-phase component of alternating current measured in units of Watts and standard multiples thereof.
Actual Dispatch	means the Actual Power produced by a Generator Unit in accordance with a Dispatch Instruction.
Actual Exposure	means the credit exposure resulting from Invoices that have been issued but not yet paid, and from amounts in Settlement Statements for which no Invoice has yet been issued.
Actual Exposure Period	means the period from the issuing of the last Invoice for Trading Charges to the end of the most recent Trading Period included in any Settlement Statement relating to Trading Charges
Adjusted Participant	means, in relation to the calculation of Required Credit Cover, a Participant as described in paragraph 6.164
Adjusted Self Billing Invoice	means an Self Billing Invoice issued to a SEM Creditor following the default of a Participant in relation it its payment of an Invoice and a call on that Participant's credit cover.

Administered Price	means the System Marginal Price proposed by the Market Operator and approved by the Regulatory Authorities in advance under circumstances of Administered Settlement.
Administered Quantity	means the Market Schedule Quantity proposed by the Market Operator and approved by the Regulatory Authorities under circumstances of Administered Settlement.
Administered Schedule	means a schedule which sets out administered prices for each Trading Period and Administered Quantities for each Generator Unit in each Trading Period in the event of Administered Settlement.
Administered Settlement	means the process of setting an Administered Price or an Administered Schedule as set out in Section 6 of the Code.
Affected Party	means a Party, other than the Market Operator, affected by Force Majeure as more particularly set out in paragraph 2.297.
Affiliate	means in relation to any Party, any holding company or subsidiary or any subsidiary of a holding company of the relevant Party, in each case within the meaning of section 155 of the Companies Act 1963 (Ireland) for a Party which is a company registered in Ireland, and section 4 of the Companies (Northern Ireland) Order 1986 (Northern Ireland) for a Party which is company registered in Northern Ireland.
Aggregate Capacity	means the Registered Capacity for all Interconnector Units for a given Interconnector, comprising Aggregate Import Capacity and Aggregate Export Capacity.
Aggregate Export Capacity	means the declared total ability of an Interconnector to export power from the Pool.
Aggregate Import Capacity	means the declared total ability of an Interconnector to import power into the Pool.
Aggregated Wind Generation Forecast	means a projection of the Output produced by Wind Power Units for each Trading Period in the two Trading Days as forecast by the System Operators. The forecast will be scaled for Distribution Losses such that it equals the demand measured at the Trading Boundary. The associated Data Transaction is detailed in Appendix E.
Agreed Procedure Modification Proposal	means any Modification Proposal which relates solely to a modification of an Agreed Procedure and not to any other part of the Code.
Agreed Procedure(s)	means the detailed procedures to be followed by Parties in performing their obligations and functions under the Code.
Ancillary Code Document	means a document which is ancillary to the Code and which is approved by either or both of the Regulatory Authorities or the Market Operator relating to the Pool.

Analysis Percentile Parameter	means the percentage degree of statistical confidence that Actual Exposures, once determined for each Participant, will fall below the estimate of Undefined Potential Exposure. The Analysis Percentile Parameter is proposed each year by the Market Operator and approved by the Regulatory Authorities.
Annual Capacity Exchange Rate	means the exchange rate between pounds sterling and euro for calendar year y+1 set proposed annually by the Market Operator and approved by the Regulatory Authorities
Annual Capacity Payment Sum	means the sum in euro proposed each year by the Market Operator and approved by the Regulatory Authorities to form the basis for the calculation of capacity payments and charges in each Capacity Period in calendar year y+1.
Annual Load Forecast Data	means the full demand forecast for the Single Electricity Market which describes the demand forecast for each Trading Period in calendar year y+1. The forecast will reflect the demand measured at the Trading Boundary and so will be adjusted for Transmission Losses and where appropriate for Distribution Losses and where appropriate for the Output of Distribution Connected generation. The forecast is calculated by the Market Operator from information provided by the System Operators. The associated Data Transaction is detailed in Appendix E.
Appendix	means an Appendix to the Code
Applicable Laws	means any legislation, statutory instrument, regulation, or order as is applicable to a Party.
Applicant	means a person wishing to accede to the Code as provided for and set out in paragraphs 2.6 to 2.14.
Associated Supplier Unit	means a Supplier Unit recorded to a Trading Site where the Demand of that Supplier Unit that is settled on a gross basis with the Generator Units on that Trading Site under the rules specified in the Code.
Audit Report	means the report prepared following the Market Audit by the Market Auditor
Autonomous Generator Unit	means a Generator Unit that is not Dispatchable by the relevant System Operator.
Autoproducer Site	means a Demand Site, where the demand is not solely for the purpose of generation which contains one or more Generator Units which are not Demand Side Units.
Autoproducer Unit	means a Generator Unit within an Autoproducer Site, as described in paragraphs 5.111 to 5.116.

Availability	means a Generator Unit's capability in MW to deliver Active Power or a Demand Side Unit's capability of reducing the Active Power consumed on the Trading Site.
Availability Profile	means the arithmetic average Availability for each Trading Period within the Trading Day for each Generator Unit, calculated as described in Appendix P.
Available Transfer Capacity	means the available transfer capacity (consisting of the Maximum Export Available Transfer Capacity and the Maximum Import Available Transfer Capacity) for each Interconnector.
Bad Debt	means a debt which will not be or may not be paid.
Bad Market Operator Debt	means any Unsecured Bad Debt that relates to the Variable Market Operator Charge or Invoiced Market Operator Annual Charge.
Balancing Cost	means a cost to the Market operator as specified in paragraph 6.108.
Bank	means a holder of a relevant Banking Licence issued under Section 9 of the Central Bank Act 1971 in Ireland or an undertaking regulated by the Financial Services Authority to take deposits under the Banking Act 1987 in the United Kingdom or any clearing bank approved in the European Union.
Bank Mandate	means the instructions form relating to the terms on which the cash in a SEM Collateral Reserve Account will be held.
Banking Licence	means a licence issued under Section 9 of the Central Bank Act 1971 in Ireland or an undertaking regulated by the Financial Services Authority to take deposits under the Banking Act 1987 in the United Kingdom or any clearing bank approved in the European Union.
BETTA	means the British Electricity Trading and Transmission Arrangements as may be varied or supplemented from time to time.
Billing Period Currency Cost	means the cost incurred by, or the benefit to, the Market Operator that is based on the difference in Currency rates between Gate Closure and the actual payment of Invoices and Self Billing Invoices.
Billing Period or BP	means a period of one week, commencing on Sunday at 00:00.

Block Load Cold	means the amount of power that Generator Units instantaneously put onto the Transmission System when Synchronised during a Cold Start
Block Load Hot	means the amount of power that Generator Units instantaneously put onto the Transmission System when Synchronised during a Hot Start
Block Load Warm	means the amount of power that Generator Units instantaneously put onto the system when Synchronised during a Warm Start
Capacity Charge	means the Charge to Supplier Units in respect of the Active Power consumed by their Supplier Unit(s).
Capacity Payment	means the payments to Generator Units on the basis of their Eligible Availability
Capacity Period	means one calendar month, starting on midnight on the first calendar day of each month
Capacity Period Currency Cost	means the cost incurred by, or the benefit to, the Market Operator based on the difference in Currency rates between the annual determination of capacity costs in respect of Capacity Payments and Charges and the actual payment of Invoices and Self Billing Invoices.
Capacity Period Payment Sum	means, in relation to any Capacity Period, that part of the Annual Capacity Payment sum for a particular Year that shall apply in the specified Capacity Period in that Year. Capacity Period Payment Sums are proposed annually by the Market Operator and approved by the Regulatory Authorities for each Capacity Period in each Year.
Charge	means a charge levied on a Participant
Classification	means the process of classification of Special Units into one of the categories defined in Section 5: Special Units.
Clearing Bank	means a Bank that uses a central clearing house in all its dealings with other Banks.
CMS Data Transaction	is a Data Transaction made by a Party or Participant in accordance with Appendices C, E and G.
Code	means this Trading and Settlement Code including the Agreed Procedures and Appendices and Ancillary Code Documents as amended from time to time or otherwise modified in accordance with the Code;
Code Objectives	means the objectives of the Code as set out in paragraph 1.3.
Cold Start	means any Synchronisation of a Generator Unit that has previously not been Synchronised for a period of time equal to or longer than its Accepted Warm Cooling Boundary. This data is provided within the submission of Technical Offer Data as described in Appendix C.
Combined Heat and Power Generator Unit or CHP Unit	means a Generator Unit which is a combined heat and power plant and produces both heat and Active Power
Commencement Date	means the commencement date of the Code as established [pursuant to xxx]
Commencement Notice	means the notice issued by the Market Operator as set out in paragraph 2.32.

Commercial Offer Data	means a Data Transaction including, without limitation, Price Quantity Pairs, Nomination Profiles, Start Up Costs and No Load Cost submitted to the Market Operator for each Trading Day for each Generator Unit. The associated Data Transactions are detailed in Appendix C.
Commission or Commission for Energy Regulation or CER	means the Commission for Energy Regulation as established pursuant to the Electricity Regulation Act, 1999 or any successor body.
Communication Channel	means one of three methods of transferring data contained in Data Transactions as detailed in paragraph 3.3.
Competent Authority	means the Irish Government and Her Majesty's Government, the Cabinet of the Northern Ireland Assembly (where not prorogued), the Department for Communications, Marine and Natural Resources, Her Majesty's Department for Trade and Industry, the Commission, NIAER, the Irish Competition Authority, the Office for Fair Trading of the United Kingdom, the Competition Commission of the United Kingdom, the Competition Appeals Tribunal of the United Kingdom or any national or supra-national authority, department, minister, court, tribunal or public or statutory person being of a public nature of Ireland, the United Kingdom or of the European Union (including the European Commission, the European Parliament and the European Courts of First Instance and of Justice) and any international or supranational body, with power and competence to make binding decisions, awards, rulings, judgments or decisions.
Confidential Information	has the meaning given in paragraph 2.312.
Confirmation Notice	means a communication from the Market Operator issued on receipt of a CMS Data Transaction.
Connected	means where the Generator Unit or a Supplier Unit as applicable is connected to a Transmission System or Distribution System and "Connection" shall be construed accordingly.
Connection Agreement	means in Ireland, the agreement between a Participant and a Transmission System Operator or Distribution System Operator as appropriate specifying terms an 'conditions for a Generator's connection to the Transmission System or Distribution System and physical and technical parameters for that Connection; in Northern Ireland, the agreement between a Participant and a Transmission System Owner Distribution System Operator as appropriate specifying terms and conditions for generator's connection to the Transmission System or Distribution System and physical and technical parameters for that Connection.
Consent	shall have the same meaning ascribed thereto in the Data Protection Legislation.

Constraint Payments	means payments that are determined in accordance with Sections 4 and 5 based upon the difference between operational costs based upon Market Schedule Quantity and Dispatch Quantity.
Contiguous Operation Period	mean a set of Trading Periods in which a Price Maker Generator Unit has a Market Schedule Quantity constantly greater than zero within the period spanned by the Optimisation Time Horizon and the most recent Valid EPUS Solution for the preceding Trading Day or Days
Contiguous Site	means one or more buildings or structures occupied or used by a person for production or consumption of electricity where each building or structure is adjacent to, or contiguous with the other building or structure and containing adequate metering to define the complete electrical export or import of that contiguous site
Credit Assessment Volume	means a forecast of Output or Demand in respect of a New or Adjusted Participant's Supplier or Generator Units based upon information provided by the Participant and used in the calculation of the Participant's Required Credit Cover.
Credit Assessment Price	means a price proposed annually by the Market Operator and approved by the Regulatory Authorities and used in the calculation of Required Credit Cover for a Party under the Code.
Credit Call	means the issue of a request to a Participant's Credit Cover Provider to draw down all or part of a Participant's Posted Credit Cover.
Credit Cover	means the credit cover required of and provided by a Participant in a form which meets the requirements set out in Section 6.
Credit Cover Adjustment Trigger	means the parameter proposed by the Market Operator annually and approved by the Regulatory Authorities and used by a Participant to determine when it should report to the Market Operator expected future changes in its total metered quantities or in its total Settlement Reallocations such that it should be designated an Adjusted Participant.
Credit Cover Provider	means either the providers of a Participant's Letters of Credit or the SEM Bank as provider of the Participant's SEM Collateral Reserve Account or all of them as appropriate..
Credit Data	means credit data is the description of all Participants' Credit Cover obligations Issued by the Market Operator to Participants. The associated Data Transaction is detailed in Appendix H.
Credited Participant	means the Participant that will be credited with a positive amount in respect of an agreed Trading Period as part of a Settlement Reallocation Agreement.
Cross Border Supply	means any electricity generated in one Jurisdiction and consumed in the other Jurisdiction

Cross-Jurisdiction Power Flow	means the total of the average MW per Trading Period flow between Northern Ireland and Ireland for each cross-jurisdiction transmission line. Such flows shall be considered to be positive in the direction from Northern Ireland to Ireland. The associated Data Transaction is detailed in Appendix G.
Currency	has the meaning ascribed thereto in paragraph 1.4 and "Currencies" shall be construed accordingly.
Currency Cost	means the Billing Period Currency Cost or the Capacity Period Currency Cost or both, as the context requires.
Currency Zone	means the Jurisdiction in which a Unit has its Export Point.
Daily Calculation	means the calculation of Required Credit Cover that is done each Working Day.
Data Controller	shall have the meaning set out in applicable Data Protection Legislation
Data Processing Entity	means a person that submits Data Transactions on a Participant's behalf as provided for in Section 3 of the Code.
Data Protection	means defined in applicable Data Protection Legislation
Data Protection Legislation	means the Data Protection Acts, 1988 and 2003 (Ireland) and the Data Protection Act, 1998 (United Kingdom) and, in each case, all regulations, statutes and instruments made thereunder, as may be amended from time to time and any other legislation having effect in Ireland or Northern Ireland which implements Directive 95/46/EC and any amendment or replacement thereto.
Data Query	means a query made by a Participant in relation to one or more Settlement Items in an Preliminary Settlement Statement in accordance with paragraph 6.xx.
Data Record	means a set of data fields containing field-level information within a Data Transaction complying to field-level rules.
Data Subject	shall have the meaning set out in applicable Data Protection Legislation
Data Transaction	means a communication made by a Party to the Market Operator, or by the Market Operator to a Party, which is of a type set out in any of Appendices B-J, and which is made in accordance with the provisions of Appendices B-J and Agreed Procedure 4 "Data Transaction Submission and Validation"
Data Verification Period	means the period when Participants have the opportunity to query any data included on the Preliminary Settlement Statement in accordance with paragraphs 6.30 and 6.32
De Minimis Threshold	means a Maximum Export Capacity of 10 MW.
Debited Participant	means the Participant that will be credited with a negative amount in respect of a particular Trading Period as part of a Settlement Reallocation Agreement

Deed of Assignment	means the form of Deed of Assignment in the form set out in Appendix S.
Default	means any breach by a Party of any provision of the Code or the Framework Agreement.
Default Data	means the standing Commercial Offer Data and Technical Offer Data provided by a Participant on registration of each of its Units, as updated from time to time in accordance with the Code.
Defaulting Participant	means a Participant which has not paid an Invoice by the due date and in respect of which a Credit Call has produced a sum which does not cover the Shortfall.
Defaulting Participant Group	Means in relation to a Defaulting Participant, the other Participants of the Party of which it is a Participant and all the Participants of any Affiliate of that Party.
Default Interest	means interest due on late payments under the Code as described in 6.128 and will be at the rate prevailing for the time being under the European Communities (Late Payment in Commercial Data Transactions) Regulations, 2002 (Ireland) unless otherwise specified by the Market Operator and approved by the Regulatory Authorities.
Default Notice	means a Notice issued by the Market Operator specifying a Default by a Party to the Code.
Default Offer Process	means a process provided by the Market Operator to create Commercial Offer Data and/or Technical Offer Data for a Trading Day where no valid Commercial Offer Data or Technical Offer Data was submitted by the Participant in accordance with the Code.
Defaulting Party	means a Party that is in Default.
Demand	means the consumption of Active Power
Demand Control	shall have the meaning set out in the relevant Grid Code
Demand Forecast	means a projection of Demand
Demand Reduction	means a controlled reduction in consumption at a Demand Site as a Demand Side Unit, under instruction from the System Operator
Demand Side Unit	means a Demand Site which complies with the criteria set out in paragraph 5.120 and is so registered by a Participant. A Demand Side Unit is classified as a Generator Unit under the Code.
Demand Site	means a single premises of a final customer connected to the Transmission System or Distribution System.
Deregistration	means the process whereby a Unit, or, in the case of Deregistration of all of its Units, a Participant, ceases to be registered for the purposes of participation in the Pool, and "Deregistered" shall be construed accordingly.
Deregistration Consent Order	has the meaning set out in paragraph 2.77C
Disclosing Party	has the meaning set out in paragraph 2.313.

Discount for Over-Generation	means a factor by which prices applied in respect of a Generator Unit which over generates by more than the Tolerance Band shall be reduced. The Discount for Over-Generation is proposed annually by the Market Operator subject and approved by the Regulatory Authorities.
Dispatch Instruction	means an instruction given by the System Operator to a Generator Unit or the Generator's approved representative for the scheduling of a Generator Unit or for changes to the output manner of operation of a Generator Unit in accordance with the Grid Code
Dispatch Production Cost	means the implied cost incurred by a Generator Unit, as determined from the Accepted Price Quantity Pairs, No Load Costs and Start Up Costs and any other relevant Commercial Offer Data and Technical Offer Data, of Output in accordance with Dispatch Instructions or Dispatch Quantities, as applicable.
Dispatch Quantity	is the Active Power production consistent with the Dispatch Instructions issued by the System Operator, calculated for a Generator Unit by the Market Operator in accordance with Appendix P. Dispatch Quantities are net of Unit Load and are prior to adjustment for Transmission Losses. Dispatch Quantities for Distribution Connected Generator Units are adjusted for Distribution Losses in accordance with paragraph 4.28.
Dispatch Warmth State	means the calculated Warmth State (being Cold, Warm or Hot) of a Generator Unit at any point in time consistent with the Dispatch Instructions for that Generator Unit at preceding times and the definitions of Cold Start, Warm Start and Hot Start.
Dispatch Start	means, in any Trading Period h where the Dispatch Instructions for a Generator Unit require it to change its level of Output from a value less than or equal to zero MW of Active Power to a value greater than zero MW, the Generator Unit has a Dispatch Start in that Trading Period h. Otherwise the Generator unit has no Dispatch Start in the Trading Period. A Generator Unit may have only one Dispatch Start within a Trading Period.
Dispatchable	means, in relation to a Generator Unit, the ability of the Generator Unit to receive and act upon an instruction given by the System Operator to the Participant's approved contact person or location to change the output or manner of operation of the Generator Unit in accordance with the relevant Grid Code
Dispute	means a dispute as set out in paragraph 2.239
Dispute Resolution Agreement	means the agreement in the form set out in Appendix O.
Dispute Resolution Board or DRB	means the dispute resolution board established pursuant to paragraphs 2.253 to 2.265
Dispute Resolution Process	means the process of resolving Disputes as specified in the Code.

Disputed Event	means the earliest of any event, circumstance, claim, difference, Default, assertion of right or entitlement, or denial of right or entitlement in relation to which a Party seeks to raise a Dispute.
Disputing Party	means any Party to a Dispute
Distribution Code	means, in Ireland, the distribution code as defined in Section 2(1) of the ERA; and means, in Northern Ireland, the Grid Code as it pertains to the Distribution System in Northern Ireland
Distribution Connected	means a Generator Unit or Supplier Unit connected to the Distribution System
Distribution Losses	means losses that are incurred (or avoided) on the Distribution System as electricity is transported to (or from) the relevant boundary of the Transmission System and the Distribution System from (or to) the relevant point of connection to the Distribution System for the Generator Unit or Supplier Unit.
Distribution System	means, in Ireland, all electric lines and any other electric plant which the Distribution System Operator may, with the approval of the Commission specify as being part of the DSO's distribution system, and includes any electric plant, transformers and switchgear which is used for conveying electricity to final customers.; and means, in Northern Ireland, the Distribution System owned and/or operated by the Distribution System Operator.
Distribution System Operator	means, in Ireland, the operator for the time being of the Distribution System as specified in the Distribution Code from time to time; and means, in Northern Ireland, the operator for the time being of the Distribution System as specified in the Northern Ireland Grid Code from time to time
Dwell Time	Means, or each Dwell Time Trigger Point, the duration at which the Generator Unit must remain at that Dwell Time Trigger Point.
Dwell Time Trigger Point	means a constant MW level at which a Generator Unit must remain while ramping up or down between Minimum Stable Generation and Maximum Generation.
Ending Optimisation Overlap Period	means, for any given Optimisation Time Horizon and the associated run of the EPUS Software, that part of the Optimisation Time Horizon which falls within the second Trading Day of the Optimisation Time Horizon,
Effective Date	means the date on which the registration of Units to a Participant becomes effective, as specified in a Commencement Notice issued by the Market Operator, or as deferred in accordance with paragraph 2.32A.

Electrical System Collapse	means the situation existing when all generation has ceased in part of the Transmission System and there is no electricity supply such that Black Start procedures as set out in the Grid Code are initiated.
Eligible Availability	means the level of Availability of a Generator Unit that is used for the determination of Capacity Payments in respect of the Unit
Emergency	means an urgent, non-standard event where normal procedures and processes may not apply or be viable and which may have severe effects for the Single Electricity Market as defined by the Regulatory Authorities
Emergency Notifications	means notification of an Emergency situation.
Energy Charges	means any charges to be made by or to a Participant in respect energy purchased during a Billing Period calculated as the product of SMP and the relevant quantity.
Energy Limit	means an upper limit on the amount of energy that can be generated by an Energy Limited Generator Unit
Energy Limit Factor	means a factor between zero and one, which is applied to the Energy Limit for use within the EPUS Software in calculating the scheduled Output of Energy Limited Generator Units in the period between the end of the Trading Day and the end of the Optimisation Time Horizon
Energy Limit Period	means the time period between the Energy Limit Start and the Energy Limit Stop
Energy Limit Start	means 06:00 on the Trading Day, and shall be submitted as such
Energy Limit Stop	means 06:00 on the next Trading Day, and shall be submitted as such
Energy Limited Generator Unit	means a Generator Unit with a limit on the energy it can deliver over the Trading Day
Energy Limited Generator Unit Technical Characteristics Data	means data submitted after the Trading Day by the System Operators in accordance with Appendix E identifying the redeclared Energy Limit for Energy Limited Generator Units.
Energy Payment	means any payment to be made to a Participant in respect of a Billing Period for energy sold by that Participant in the relevant Billing Period, being the product of SMP and the relevant quantity.
Engineering Tolerance	means a tolerance proposed by the Market Operator and approved by the Regulatory Authorities used in the calculation of Uninstructed Imbalances. The Engineering Tolerance is the percentage tolerance within which a Generating Unit is deemed to be operating in accordance with its Dispatch Instruction.
EPUS Failure	means the failure of the EPUS Software to produce a Valid EPUS Solution.

EPUS Software	means the software used to determine Market Schedule Quantities for each Price Maker Generator Unit and to determine the System Marginal Price for each Trading Day.
Error Supplier Unit	means a Supplier Unit used to ensure that Generation and Demand in each Jurisdiction (allowing for losses and net transfers between Jurisdictions) match in quantity
Escrow Account or SEM Collateral Reserve Account	means a trust account that is held in the payee's name for a specific purpose. The money in the escrow account is held by a third party, who collects, holds and disburses the funds according to an agreement between the other parties.
Euribor	means the percentage rate per annum determined by the Banking Federation of the European Union for such period(s) as the Market Operator may reasonably determine and displayed on the appropriate page of the Telerate screen.
Euro	means the Currency in the Republic of Ireland.
Export Point	means the nominal commercial point of entry to the Transmission System of the Active Power generated at a Transmission of Distribution Connected site.
Ex-Post Capacity Payments Proportion	means the proportion of the Annual Capacity Period Sum to be distributed into Trading Periods in the relevant Year based on the ex-post Loss of Load Probability (φ) for each Trading Period, determined at the end of the relevant Capacity Period. The Ex-Post Capacity Payments Proportion is determined annually by the Regulatory Authorities.
Ex-Post Capacity Settlement Meter Data	means Meter Data as provided by the relevant Meter Data Provider including all Price Taker Metered Generation and Demand; on a half-hourly MWh basis for every Trading Period during a given Capacity Period. The associated Data Transaction is detailed in Appendix G.
Ex-Post EPUS Software Run	means a run of the EPUS Software to produce the Ex-Post Unconstrained Schedule.
Ex-Post Unconstrained Schedule or EPUS	means the Ex-Post Unconstrained Schedule for a Trading Day which will comprise the Market Schedule Quantities (MSQuh) for each Trading Period in the Trading Day for each Generator Unit u.
Extraordinary Meeting	means an extraordinary meeting of the Modifications Committee as set out in paragraph 2.150.
Final Modification Recommendation	means a recommendation by the Modifications Committee in relation to a Modification Proposal which is submitted to the Regulatory Authorities for approval as part of a Modification Recommendation Report
Final Settlement	means the last Timetabled Settlement Rerun for a Trading Day.

Firm Access	means the maximum export capacity as determined in a Connection Agreement.
First Participation Information Notice	means a notice to be submitted by a Party (or applicant, as applicable) with or prior to that Party's first Participation Notice for its first registration of a Unit or Units, in the form set out in Agreed Procedure 1 "Participant and Unit Registration and Deregistration".
Fixed Capacity Payments Proportion	means the proportion of the Annual Capacity Period Sum to be distributed into Trading Periods in the relevant year based on Forecast Demand (FDh) for the year. The Fixed Capacity Payments Proportion is determined annually by the Regulatory Authorities.
Fixed Credit Requirements	means the minimum Credit requirement for any Participant in respect of its each of its Generator Units and separately in respect of each of its Supplier Units. The Fixed Credit Requirements are proposed annually by the Market Operator and approved by the Regulatory Authorities.
Fixed Market Operator Charge	means either of the fixed annual components (in respect of Generator Units and Supplier Units) of the Market Operator Charge. The fixed Market Operator Charge is intended to recover those parts of the Market Operator costs which are relatively fixed and not dependent on the level of activity in the Pool.
Force Majeure	means circumstance of force majeure for the purposes of the Code as set out in paragraph 2.297.
Form of Authority	means a form of authority in the form set out in Appendix R.
Four Day Load Forecast	means the demand forecast for each Trading Period in the next four Trading Days as forecast by the System Operators. The forecast will be scaled for Distribution Losses such that it equals the demand measured at the Trading Boundary. The associated Data Transaction is detailed in Appendix E.
Framework Agreement	means the agreement (including any Accession Deed) under which a person becomes bound by the Code
Freedom of Information Acts	means the Freedom of Information Acts 1997 and 2003 and the Freedom of Information Act 2000.
Function for the Determination of Capacity Payments	means the methodology by which the Market Operator calculates the basis for the fixed, variable and ex-post elements of Capacity Payments, approved by the Regulatory Authorities and set out in Appendix M
Gate Closure	means, for a Trading Day, 10:00 on the last full calendar day prior to that Trading Day

General Communication Failure	means a period during which the Market Operator's Isolated Market System is operational but the normal communication interfaces between each other Party (other than the System Operators or the Meter Data Providers) and the Market Operator are unavailable, leading to a failure of all such Parties to comply with the data Submission requirements.
General System Failure	means a period during which the Market Operator's Isolated Market System is unable, under normal operation, to process data as required under the Code and such inability has caused the Market Operator to fail to meet any applicable deadline under the Code for (i) calculation or publication of the System Marginal Price or any component thereof for any Trading Period, or (ii) Settlement of any Unit for any Billing Period , or (iii) calculation, or publication of Capacity Payments, or the issuance of a Settlement Statement for Capacity Payments and Charges for any Capacity Period.
Generation	means the production of Active Power.
Generation Forecast	Means a projection of Generation
Generation Participant	means, in Section 2, Participants who have registered Generator Units other than Interconnector Error Units, Interconnector Residual Capacity Units or Demand Side Units.
Generator	means a power plant or any similar apparatus that generates electricity (including all related equipment essential to its functioning as a single entity) with capabilities for delivering energy to the Transmission System or Distribution System and which is Connected to the Transmission System or Distribution System.
Generator Unit	means a Generator, or other item of plant capable of being Dispatched, registered by a Participant under the Code. For the purposes of the Code a Generator Unit may be any one of the following types, without limitation: Demand Side Unit, Energy Limited Generator Unit, Interconnector Unit, Interconnector Error Unit, Interconnector Residual Capacity Unit, Netting Generator Unit, Pumped Storage Unit, Run-of-River Hydro Unit or Wind Power Unit
Generator Unit Capacity Settlement Statement **(Data Transaction)**	is a Data Transaction detailed in Appendix F.
Generator Unit Self Billing Invoices **(Data Transaction)**	is a Data Transaction detailed in Appendix F.
Generator Unit Energy Settlement Statement **(Data Transaction)**	is a Data Transaction is defined in Appendix F.

Generator Unit Technical Characteristics Data	means data submitted after the Trading Day by the System Operators in accordance with Appendix E identifying the technical characteristics of a Generator Unit including Actual Availability, Minimum Stable Generation and Minimum Output.
Generator Unit Under Test Notice	is a Data Transaction detailed in Appendix J.
Generic Settlement Class	Means the settlement categories specified in accordance with paragraph 5.7.
Generic Settlement Statement **(Data Transaction)**	is a Data Transaction detailed in Appendix F.
Glossary	means this Glossary, including the List of Variables and the List of Subscripts.
Grid Code	means the Ireland Grid Code, Northern Ireland Grid Code or both, as the context requires.
High Materiality	means an amount over 50,000 euro (or the sterling equivalent based on the applicable Trading Day Exchange Rate) in respect of a single Participant.
Historical Assessment Period	means a period of days prior to the day of the issue of the latest relevant Settlement Statement over which a statistical analysis of a Participant's incurred liabilities, separately in respect of its Generator Units and Supplier Units, shall be undertaken in order to support the forecasting of future liabilities for that Participant. A Historical Assessment Period is proposed by the Market Operator each year for Trading Payments and Charges and for Capacity Payments and Charges and approved by the Regulatory Authorities.
Hot Cooling Boundary	the period of time, which must be less than that defined by the Warm Cooling Boundary, post de-Synchronisation of a Generator Unit after which the Generator Unit's Warmth State transfers from being Hot to being Warm.
Hot Start	means any Synchronisation of a Generator Unit that has previously not been Synchronised for a period of time shorter than its Accepted Hot Cooling Boundary. This data is provided within the submission of Technical Offer Data as described in Appendix C.
Hydro-electric Generator Unit	means a Generator Unit connected to a hydro turbine which is driven by the controlled flow of water from a reservoir.
Imperfections Charge	means a charge applied in respect of each Supplier Unit in each Trading Period based upon the Loss Adjusted Net Demand at that Supplier Unit and the Imperfections Price. The Imperfections Charge is intended to recover the payments in respect of Constraints, Uninstructed Imbalances (less Testing Charges for Generator Units) over each Billing Period and any net differences between Energy Payments and Energy Charges.

Imperfections Price	means the price applied to the Loss Adjusted Net Demand in respect of each Supplier Unit to determine the Imperfections Charge. The Imperfections Price is proposed each year by the Market Operator and approved by the Regulatory Authorities.
Indemnifying Party	has the meaning set out in paragraph 2.321.
Indicative EPUS Software Run	means a run of the EPUS Software to produce the Indicative Market Schedule.
Indicative Market Schedule or IMS	means the Indicative Market Schedule for a Trading Day, which will comprise the Market Schedule Quantities for each Trading Period in the Trading Day for each Generator Unit, except Autonomous Generator Units for which no values are required.
Indicative Operations Schedule	Schedule as determined by the System Operators taking system constraints and reserve requirements into account and published day-ahead to give indicative MW outputs for the Trading Day, including Interconnector flows and pumped storage operation
Preliminary Settlement Statement	means the settlement statement sent to the Participants before the Initial Settlement Statements are calculated, to allow the Participants to quality check their data that is going to be used in the calculation of the Initial Settlement Statements
Initial Settlement Statement	means the settlement statements that are issued for invoicing.
Instruction Profiling	means the process used by the Market Operator to convert Dispatch Instructions into Dispatch Quantities
Insufficient Capacity Event	has the meaning set out in paragraph 4.50A.

Intellectual Property Rights	means all rights to and relating to copyright (including moral rights), patents, inventions (patentable or otherwise), registered or unregistered designs, trade marks and service marks whether registered or unregistered, and all applications for registration of any of the foregoing, topography rights, semi conductor rights, format and presentation rights, trade secrets, know-how, rights of confidence, all rights relating to database protection, and any other intellectual or industrial property rights of whatsoever nature, whether similar to those described above or otherwise and whether existing or prospective throughout the world;
Interconnector	means electric lines and electric plant used solely for conveying electricity from outside both Jurisdictions directly to or from a substation or converter station in either Jurisdiction.
Interconnector Administrator	means the Interconnector Owner, or a person appointed by the Interconnector Owner, who registers an Interconnector in accordance with paragraphs 2.49 to 2.53 and its successors.
Interconnector Administrator Grace Period	means the period specified in paragraph 2.54
Interconnector Error Unit	means, in relation to an Interconnector, a registered Generator Unit to which Uninstructed Imbalances relating to that Interconnector shall be allocated for Settlement purposes.
Interconnector Error Unit Grace Period	means the period specified in paragraph 2.63.
Interconnector Owner	means any person who owns or legally controls under contract or at law an Interconnector
Interconnector Ramp Rate	means the aggregate Ramp Rate for Interconnector Units on an Interconnector
Interconnector Registration Data	means a set of data related to the Registration of an Interconnector and the Parties responsible for the Interconnector Error Unit and the Interconnector Residual Capacity Unit. The associated Data Transaction is detailed in Appendix E.
Interconnector Residual Capacity Unit	means, in relation to an Interconnector, a registered Generator Unit which is used for Settlement or for the utilization of residual or unused capacity relating to the relevant Interconnector by the relevant System Operator.
Interconnector Technical Data	means, for each Interconnector, the Interconnector technical data which is submitted as part of the Technical Offer Data and includes, but is not limited to, Interconnector Ramp Rates, Aggregate Capacity for each Interconnector in either direction of flow.

Interconnector Unit	means a Unit registered by an Interconnector User associated with the relevant Interconnector.
Interconnector Unit Capacity Holding	means the quantity of Interconnector capacity made available for an Interconnector Unit.
Interconnector Unit Capacity Holding Data	means data relating to Interconnector Unit Capacity Holding by each Interconnector Unit for the relevant Interconnector provided by the Inerconnector Administrator to the Market Operator. The associated Data Transaction is detailed in Appendix E.
Interconnector Unit Export Capacity Holding	The quantity of Interconnector export capacity made available for an Interconnector Unit.
Interconnector Unit Import Capacity Holding	The quantity of Interconnector import capacity made available for an Interconnector Unit.
Interconnector Unit Nomination	means a Quantity nominated for import or export for an Interconnector Unit as calculated within the Indicative Market Schedule.
Interconnector Unit Nomination Modifications (Data Transaction)	is a Data Transaction detailed in Appendix D.
Interconnector User	means a person who has contracted for the ability to acquire rights to capacity on the relevant Interconnector.
Interest	means interest paid on the deposits in the euro and pounds sterling SEM Trading Clearing Account, SEM Capacity Clearing Account and SEM Collateral Reserve Account as appropriate
Intermediary	means the Participant appointed by a Party or another Participant for the purposes of registration of some or all of that Party's or Participant's Units and participation in the Pool and as more particularly provided for in paragraphs 2.68 to 2.76.
Intermediary Nomination (Data Transaction)	is a Data Transaction detailed in Appendix B.
Intermediary Revocation	is a Data Transaction detailed in Appendix B.
Invoice	means the statement of the payments required to be made to the relevant account in the SEM Bank by a Participant in respect of the trading activities of that Participant in the SEM.
Invoice Due Date	means the date and time before which the payment specified in an Invoice, in accordance with its terms, must be made.
Ireland	means Ireland established by Bunreacht na hÉireann, 1937;

Ireland Grid Code	means the grid code as defined in section 2(1) of the ERA that applies to the transmission system in Ireland, that was prepared by the transmission licensee (ESBNG) and approved by the regulatory authority CER under the Electricity Regulation Act 1999, and which from time to time may be revised, amended or replaced on instruction from the regulatory authority in accordance with the respective licence.
Isolated Market System	means the IT systems (including without limitation the hardware, software and internal communication network) used for the purpose of a Party's participation in the Pool and which are within the total control of that Party or that Party's Data Processing Entity.
Issue	means a Data Transaction is Issued by a Sending Party to a Receiving Party when it leaves the Sending Party's Isolated Market System via a functioning Communication Channel
Jurisdiction	means Ireland or Northern Ireland or both as appropriate
Legal Requirement	means any requirement under Applicable Laws, any applicable Licence, any applicable Grid Code or Metering Code or any requirement, direction, determination, decision, instruction or rule of any Competent Authority.
Letter of Credit	means an unconditional and irrevocable standby letter of credit, demand guarantee or charge bond in the form set out in Appendix A.
Licence	means an electricity generation licence or an electricity supply licence, transmission system operation licence, distribution system operator licence or transmission system owner licence as the context may require, granted by the Regulatory Authorities pursuant to Section 14 of the ERA or Section 10 of the Electricity (Northern Ireland) Order 1992 and "Licensee" shall be construed accordingly.
Limited Communication Failure	means a period during which one or more Parties or Participants, but not all Parties or Participants and not the Market Operator, a System Operator or Meter Data Provider, fail to comply with the data submission requirements because of a technical, communication or IT systems error outside the Market Operator's Isolated Market System
Load Up Break Point Cold	means the break point which defines the shared MW boundary between the two Loading Rates Cold. The first Loading Rate Cold applies from 0 MW to the Load Up Break Point Cold, the second Loading Rate Cold applies from the Load Up Break Point Cold to the end point of the Start Up period, which should be set equal to Minimum Stable Generation.

Load Up Break Point Hot	means the break point which defines the shared MW boundary between the two Loading Rates Hot. The first Loading rate applies from 0 MW to the Load Up Break Point Hot, the second Loading Rate Hot applies from the Load Up Break Point Hot to the end point of the Start Up period, which should be set equal to Minimum Stable Generation.
Load Up Break Point Warm	means the break point which defines the shared MW boundary between the two Loading Rates Warm. The first Loading Rate Warm applies from 0 MW to the Load Up Break Point Warm, the second Loading Rate Warm applies from the Load Up Break Point Warm to the end point of the Start Up period, which should be set equal to Minimum Stable Generation.
Loading Rate Cold	means the rate at which a Generator Unit increases Output from zero to Minimum Stable Generation when it is instructed to Cold Start.
Loading Rate Hot	means the rate at which a Generator Unit increases Output from zero to the Minimum Stable Generation when it is instructed to Hot Start.
Loading Rate Warm	means the rate at which a Generator Unit increases Output from zero to Minimum Stable Generation when it is instructed to Warm Start.
Loss-Adjusted	applied to any variable, or the inclusion of letters 'LF' at the end of any variable term denote that a value is to be calculated at the Trading Boundary, through the application of the relevant Transmission Loss Adjustment Factors in accordance with this Code.
Loss of Load Probability or LOLP	means the probability that there will be insufficient generation to meet the demand in the Pool. Two varieties of LOLP are determined as part of the Capacity Payments calculation: λ determined ex-ante and φ determined ex-post, both calculated as set out in Appendix M.
Low Materiality	means an amount below 50000 euro (or sterling equivalent based on the relevant Trading Day Exchange Rate) in respect of a single Participant.
Maintenance Schedule (Data Transaction)	is a Data Transaction detailed in Appendix J.
Make Whole Payment	means a payment in respect of each Generator Unit, designed to make up any difference between the total Energy Payments to the Generator Unit in a Billing Period and the Schedule Production Cost for that Generator Unit for each Trading Period within the Billing Period (where the difference is arithmetically positive calculated over the Billing Period) as set out in paragraph 4.109.
Market Auditor	means the person at any time appointed to performing the Market Audit in accordance with paragraph 2.89.
Market Operator	means EirGrid Limited and SONI Limited with their rights, powers, functions, obligations and liabilities under this Code being joint and several.

Market Operator Budget	means (once approved by the Regulatory Authorities) the annual proposal of the Market Operator to the Regulatory Authorities, setting out its planned expenditure for the next year, which will form the basis for the calculation of the Market Operator Charge
Market Operator Charge	means a charge levied on Participants intended to recover the costs and expenses of the Market Operator which shall be calculated pursuant to paragraphs 6.99 to 6.106.
Market Operator Charge Account	means the either or both, as the context may require, of the accounts set up by the Market Operator in the SEM Bank to receive payments by Participants in response to invoices issued by the Market Operator for the Market Operator Charge.
Market Operator Licence	means the licence(s) issued to the person or persons acting as Market Operator from time to time.
Market Price Cap	means the price determined by the Regulatory Authorities as the maximum permitted value for the System Marginal Price (SMP) determined by the EPUS Software for any Trading Period.
Market Price Floor	means the price determined by the Regulatory Authorities as the minimum permitted value for the System Marginal Price (SMP) determined by the EPUS Software for any Trading Period
Market Schedule Quantity	means the Active Power production for a Generator Unit as determined by the EPUS Software in the Indicative Market Schedule initially and in the Ex-Post Unconstrained Schedule subsequently. Market Schedule Quantities are net of Unit Load and are prior to adjustment for Transmission Losses. Market Schedule Quantities for Distribution Connected Generator Units are after adjustment for Distribution Losses in accordance with paragraph 4.28
Market Schedule Start	means that for any Trading Period h in which a Generator Unit has a Market Schedule Quantity greater than zero MW and in the preceding Trading Period (h-1) that Unit has a Market Schedule Quantity less than or equal to zero MW, the Generator Unit has a Market Schedule Start in Trading Period h. Otherwise the Generator Unit has no Market Schedule Start in the Trading Period.
Market Schedule Warmth State	means the calculated Warmth State (being Cold, Warm or Hot) of a Generator Unit at the start of a Trading Period consistent with the Market Schedule Quantities for that Generator Unit in preceding Trading Periods and the definitions of Cold Start, Warm Start and Hot Start.
Market Start Date	means the date of SEM go-live, as determined by the Regulatory
Maximisation Instruction	means an instruction of that name issued by a System Operator in accordance with the applicable Grid Code.

Maximum Export Capacity	means the maximum export capacity of a site as defined under the site's Connection Agreement or equivalent.
Maximum Export Available Transfer Capacity	means the maximum Available Transfer Capacity for Export out of the Pool for the relevant Interconnector. as set out in 5.37D.
Maximum Import Capacity	means the maximum import capacity of a site as defined under the sites Connection Agreement or equivalent.
Maximum Import Available Transfer Capacity	means the maximum Available Transfer Capacity for Import into the Pool for the relevant Interconnector. r as set out in 5.37C.
Maximum Interconnector Unit Export Capacity	means the upper limit of export an Interconnector Unit is declaring as part of its Technical Offer Data.
Maximum Interconnector Unit Import Capacity	means the upper limit of import an Interconnector Unit is declaring as part of its Technical Offer Data.
Meeting	means a meeting of the Modifications Committee and shall include, where the context so permits or requires, an Extraordinary Meeting.
Meter Data	means data obtained from a metering system, including the processed data or substituted data that is used for settlement and for network purposes
Meter Data Provider	means the licensed person with responsibility for submitting Meter Data to the Market Operator in the form and under the timelines specified in the Code, to the standards indicated in the Metering Code or Grid Code as appropriate, and facilitating the resolution of Data Queries, Settlement Queries and Disputes.
Metered Generation	means the Active Power produced by a Generator Unit at the Export Point.
Metering Code	means, for Ireland, the code of that name prepared by the Distribution System Operator(s) and approved by the Commission, as from time to time revised, amended, supplemented or replaced with the approval of or at the instance of the Regulatory Authorities and for Northern Ireland, the subset of the Northern Ireland Grid Code pertaining to meter reading, Meter Data processing and Meter Data communications or for Ireland the "Retail Market Design" and for Northern Ireland the "Market Registration Code" as appropriate.
Metering Point Registration Number or MPRN	means the Meter Point Registration Number as defined in the applicable Metering Code.
Minimum Off Time	means the minimum time that a Generator Unit must remain producing no Active Power commencing at the time when it first stops producing Active Power.

Minimum On Time	means the minimum time that must elapse from the time a Generator Unit is instructed to Start Up before it can be instructed to shut down
Minimum Output	means the minimum level of Output at which a Unit may operate, which is zero except as otherwise specified in the Code.
Minimum Stable Generation	means the level of minimum sustainable Output in accordance with the Grid Code which the unit is capable of producing
Modification	means a modification, revision, amendment, supplementation, extension, consolidation or replacement to the provisions of the Code which is accepted and implemented in accordance with paragraphs 2.155 to 2.206 and which shall, for the avoidance of doubt, include a modification of or addition to the Agreed Procedures.
Modification Proposal	means any proposal to modify the Code which is submitted to the Modifications Committee in accordance with the Modifications Process.
Modification Proposal Notice **(Data Transaction)**	is a Data Transaction detailed in Appendix J
Modification Recommendation Report	means a report created by the Modifications Committee and sent to the Regulatory Authorities containing the Final Modification Recommendation on a Modification Proposal, and all supporting detail to aid the Regulatory Authorities' decision on the Modification Proposal developed by the Modifications Committee.
Modifications Committee	means the committee established from time to time for the purpose of processing Modification Proposals in accordance under paragraphs 2.114 to 2.148.
Modifications Process	means the process of submitting, assessing and accepting or rejecting Modification Proposals in accordance with paragraphs 2.155 to 2.206.
Modifications Website	means the website referred to in paragraph 2.198.
Modified Interconnector Unit Nomination	means Interconnector Unit Nominations modified by the Interconnector Administrator.
Monitoring	means the monitoring of Posted Credit Cover by the Market Operator, through the Daily Calculation of the Required Credit Cover that will be based on the best available data for the Settlement Risk Period up to and including the Settlement Day in which the calculations are made.

Monthly Load Forecast	means the demand forecast for each Trading Period in the next Month and the following twelve Months as forecast by the System Operators. The forecast will be scaled for Distribution Losses such that it equals the demand measured at the Trading Boundary. The associated Data Transaction is detailed in Appendix E.
Moody's Investor Services Inc.	means the credit rating agency of that name.
MW Tolerance	means the tolerance proposed annually by the Market Operator, and approved by the Regulatory Authorities and used in the calculation of Uninstructed Imbalances. This is the tolerance value in MW within which a Generating Unit is deemed to be complying with its Dispatch Instruction, before consideration of frequency response.
Net Output Function	has the meaning set out in paragraph 4.22.
Netting Generator Unit	is a notional Generator Unit registered by a Participant under the Code to facilitate Settlement of a Trading Site. This does not physically exist and has no meter associated with it and shall be treated under the Code as an Autonomous Generator Unit save as otherwise stated.
New Participant	means in relation to the calculation of Required Credit Cover, a Participant for which the available historic data covers a period shorter than the Historic Assessment Period
Nominal Frequency	means the nominal average system frequency for each Trading Period which is determined by the System Operator ex-ante every day and used in the calculation of Uninstructed Imbalances. Nominal Frequency will normally have a value of 50.00Hz plus or minus 0.05Hz.
Nominating Participant	means, for the purposes of paragraphs 2.114 to 2.148 in relation to the Modifications Committee, a Party which is a Participant excluding the System Operators and is therefore allowed to nominate Party nominees to the Modifications Committee
Nomination Profiles	has the meaning set out in paragraph 5.11..
Non-Firm Access	has the meaning set out in paragraph 4.2.
Northern Ireland	means Northern Ireland established by the Government of Ireland Act, 1920;

Northern Ireland Authority for Energy Regulation or NIAER	means the Northern Ireland Authority for Energy Regulation or more commonly known as the Office for the Regulation of Electricity and Gas of Northern Ireland established under Article 3 Part II of the Energy (Northern Ireland) Order 2003 or any successor body;
Northern Ireland Grid Code	means the grid code at any time existing as required to be prepared by the entity licensed to operate the Northern Ireland Transmission System under its Licence as may be amended from time to time.
Notice	means any communication required to be given by a Party or to the Regulatory Authorities under the Code or the Framework Agreement but shall not include Data Transactions to the extent that specific rules for communication of Data Transactions are set out in Section 3 and Appendices B-J. Any reference to a "notification" to be given under the Code shall be deemed to be a "Notice".
Notice of Dispute	means a Notice specifying what is disputed, when the Dispute commences, and the Parties of the Dispute.
Offer Data	means Commercial Offer Data and/or Technical Offer Data as appropriate.
Optimisation Time Horizon	means the thirty hour period starting at 06:00 on the Trading Day
Output	means Active Power produced by a Generator Unit
Panel	means the panel for dispute resolution selected in accordance with paragraphs 2.262 to 2.265.
Participant	Means a Party or business division of a Party which at the relevant time has been designated as, or deemed to be, the "Participant" in relation to any Units which have been registered accordance with the Code.
Participant and/or Unit Deregistration **(Data Transaction)**	is a Data Transaction detailed in Appendix B. .
Participant and/or Unit Detailed Information Registration **(Data Transaction)**	is a Data Transaction is detailed in Appendix B.
Participant and/or Unit Detailed Information Request **(Data Transaction)**	is a Data Transaction detailed in Appendix B.
Participant and/or Unit Finalisation Registration **(Data Transaction)**	is a Data Transaction detailed in Appendix B.

Participant and/or Unit Registration (Data Transaction)	is a Data Transaction detailed in Appendix B.
Participation Fee	means a fee to be paid to the Market Operator in respect of any application in a Participation Notice to register a Unit as approved by the Regulatory Authorities to cover the costs of the Market Operator in the administration of each registration request. The level and breakdown of the Participation Fee shall be proposed by the Market Operator and approved by the Regulatory Authorities each year.
Participation Notice	means the notice referred to in paragraph 2.22 which a Party must issue to apply to register a Unit in the name of a Participant.
Party	Party means any person who is a party to the Framework Agreement and is thereby bound by the Code, and shall include its successors and permitted assigns;
Payment Due Date	means the date and time before which any sum due for payment under the Code must, pursuant to its terms, or the direction of any Competent Authority, be paid.
Personal Data	has the meaning set out in the Data Protection Legislation.
Physically Feasible	means levels of Output which are physically feasible for a Generator Unit based on its Technical Capabilities
Pool	means the gross pool for trading between Participants in the SEM.
Pounds sterling	means the Currency of Northern Ireland
Posted Credit Cover	means at any time the total amount of Credit Cover lodged with the Market Operator by a Participant whether posted in euro or in pounds sterling or both and whether in the form of Letters of Credit or of a deposit in a SEM Collateral Reserve Account.
Preceding EPUS Run	means, for any given Optimisation Time Horizon and the associated run of the EPUS Software, the most recent Valid EPUS Solution which relates to the Optimisation Time Horizon starting one Trading Day earlier.
Predictable Generator Unit	means a Generator Unit with predictable Availability which is Dispatchable , and can include all types of generator, except Wind Plants and Run-of River Hydro Units that are considered as being Unpredictable Generator Units.
Predictable Price Maker Generator Unit	means a Predictable Generator Unit which is a Price Maker
Predictable Price Taker Generator Unit	means a Predictable Generator Unit which is a Price Taker
Premium for Under-Generation or PUG	means a premium used for determining charges to Generator Units that are liable for Uninstructed Imbalance Charges.

Price Maker Generator Unit	means a Generator Unit that is Dispatchable and may be a Variable Price Maker or a Predictable Price Maker Generator Unit as set out in paragraphs 2.37 to 2.40.
Price Quantity Pairs	Prices and Quantities for Generator Units as part of Commercial Offer Data
Price Taker Generator Unit	A Generator Unit that may be a Variable Price Taker or a Predictable Price Taker Generator Unit as set out in paragraphs 2.37 to 2.40..
Priority Dispatch	means priority dispatch as afforded under governing legislation in either Jurisdiction.
Processing	As defined in applicable Data Protection Legislation and the term "Processes" shall be construed accordingly.
Profiled Dispatch and Interconnector Residual Capacity	means set of data describing the Dispatch Instructions and the System Operator trades on an Interconnector, sent to the Market Operator by the System Operator. The associated Transaction is detailed in Appendix E.
(Data Transaction)	
Proposal Notice	means the notice of a Modification Proposal to be published by the Market Operator in accordance with paragraph 2.160.
Prudent Electric Utility Practice	means those standards, practices, methods and procedures conforming to safety standards and Legal Requirements which are attained by exercising that degree of skill, care, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced operator in Europe engaged in the same type of undertaking under the same or similar circumstances;
Prudent Industry Operator	means an operator engaged in the electric utility industry which performs in accordance with Prudent Electric Utility Practice;
Pumped Storage Cycle Efficiency	means the ratio of Demand relative to Generation for a Pumped Storage Unit
Pumped Storage Unit	means a Generator Unit within a pumped storage plant where a fluid is pumped to a storage container when in pumping mode and the fluid's flow back is used to drive a turbine which powers a generator when in generating mode.
Ramp Rate	means the rate of increase or the rate of decrease in Active Power produced by a Generator Unit
Reduced Participant	means a Participant, other than a member of a Defaulting Participant Group, which has received an Adjusted Self Billing Invoice in respect of the allocation of Unsecured Bad Debt as described in paragraph 6.33F 2.
Real Time Availability	Real Time Availability for a Variable Generator Unit is provided by the System Operator and is expressed as a series of point values in MW.
Re-adjusted Self Billing Invoice	means a Self Billing Invoice issued to a Participant, which has received an Adjusted Self Billing Invoice, following the recovery of all or part of an Unsecured Bad Debt

Receiving Party	means the initial intended recipient of a Data Transaction from another Party
Referral Notice	means a Notice from a Party to the Dispute Resolution Board as set out in paragraph 2.254.
Registered Capacity	means the maximum Active Power in MW that a Generator Unit can deliver on a sustained basis at the Export Point.
Registrant	means a Party who registers a Generator Unit or Supplier Unit.
Registration Data	means registration data as set out in Appendices B-J except where otherwise specified in the Code.
Regulatory Authorities	means the NIAER and the Commission and the term "Regulatory Authority" shall be construed accordingly to mean any one of them as the context admits or requires;
Rejected	means, in relation to a CMS Data Transaction, that the Data Transaction has been rejected by the Market Operator in accordance with the Code following the Validation process and the terms "Reject" and "Rejection" shall be construed accordingly.
Rejection Notice	means a notice sent by the Market Operator to the Sending Party specifying that the Data Transaction concerned is invalid and has been rejected by the Market Operator.
Renewable Generator Unit	means a Generator Unit that produces electricity from a renewable fuel where such fuel categories are stipulated under legislation
Required Credit Cover	means the required credit cover for each Participant which is intended to cover the expected potential unpaid payment commitments to the Pool over the Settlement Risk Period
Resettlement	means the same as Settlement Re-run. As an adjective it refers to any financial quantity or data input required for Resettlement
Revenue Authorities	means H. M. Revenue and Customs and the Office of Revenue Commissioners and the term "Revenue Authority" shall mean either one of them
Run-of-River Hydro Unit	means a Generator Unit that uses the flow of the river to drive its hydro turbine and produce electricity
SCADA	Supervisory Control and Data Acquisition equipment as described under the relevant Grid Code.
Schedule Production Cost	means the implied cost incurred by a Generator Unit, as determined from the Accepted Price Quantity Pairs, No Load Costs and Start Up Costs and and other relevant Commercial Offer Data and Technical Offer Data, of Output in accordance with the Market Schedule Quantity.
Secretariat	means the full time secretariat provided by the Market Operator to support the Modifications Committee.
Section	means a Section of the Code.

Self Billing Invoice	means an invoice prepared by the Market Operator on behalf of a Participant in respect of amounts payable to that Participant for Trading Payments or Capacity Payments due to that Participant.
Self Billing Invoice Due Date	means the date and time before which the payment specified in a Self Billing Invoice must be paid
SEM Bank	means the Bank with which the Market Operator has contracted for the provision of banking services required pursuant to the Code.
SEM Capacity Clearing Account	means the account or accounts in the name of the Market Operator (holding as trustee on the trusts set out in Section 6) with the SEM Bank to and from all Capacity Payments and Charges are made.
SEM Collateral Reserve Account	means an account established by a Participant in the name of the Market Operator pursuant to Section 6 for the purpose of comprising part or all of the Participant's Posted Credit Cover.
SEM Collateral Reserve Assets	means the aggregate of: (1) amounts from time to time credited to the SEM Collateral Reserve Account(s); (2) amounts which any Participant, where applicable, is from time to time obliged to pay to the credit of their respective Collateral Reserve Accounts; and (3) interest receivable on the SEM Collateral Reserve Account(s).
SEM Creditor	means a Participant to which payments are due under the Code.
Sending Party	means the Party that initially sends a Data Transaction.
SEM Trading Clearing Account	means the account or accounts in the name of the Market Operator (holding as trustee on the trusts set out in Section 6) with the SEM Bank to and from all Trading Payments and Charges are made.
Servicer	has the meaning set out in paragraph 6.172.
Settlement	means financial settlement of the Pool, through determination of trading-related payments, charges, fees and costs, detailed in Self Billing Invoices and Invoices Issued by the Market Operator to Participants.
Settlement Calendar	means a calendar published annually by the Market Operator as set out in paragraph 6.29A.
Settlement Day	means a 24 hour period starting from 00:00 each day.
Settlement Dispute	means any Dispute which arises out of a failure to resolve a Settlement Query in accordance with paragraphs 6.55 to 6.62 or a Data Query in accordance with paragraphs 6.44 to 6.54.
Settlement Item	means any payment, charge, cost or fee listed in a Settlement Statement.
Settlement Period	means Billing Period or Capacity Period or both of them as the context may require.

Settlement Query	means a query raised by a Party in accordance with paragraphs 6.55.
Settlement Reallocation	means an instrument that can be used by Participants (which may be the same Party) to reduce the amount of Required Credit Cover by entering a Settlement Reallocation Agreement
Settlement Reallocation Agreement	means an agreement undertaken with the consent of two Participants (which may be the same Participant) and the Market Operator, under which the Market Operator credits one Participant, hereafter named Debited Participant, with a positive amount in respect of a agreed Trading Period, in consideration of a matching negative trading amount debited to the other Participant, hereafter named Credited Participant, in respect of the same Trading Period
Settlement Reallocation Data Transaction	is a Data Transaction detailed in Appendix I
Settlement Reallocation Request	means a request by the Debited Participant to the Market Operator to put in place a Settlement Reallocation Agreement between itself and the Credited Participant.
Settlement Recalculation Threshold	means a percentage of change in Metered Generation or Market Schedule Quantity or λ or φ in a Trading Day that results from an Upheld Dispute or the settlement of a Data Query or a Settlement Query which will result in the Market Operator re-running the EPUS Software or re-calculating the Loss of Load Probability, as appropriate. The Settlement Recalculation Threshold shall be proposed by the Market Operator from time to time and approved by the Regulatory Authorities.
Settlement Rerun	means a rerun of Settlement for a given Settlement Period when new data are available.
Settlement Rerun Statement	means a Settlement Statement in respect of a Settlement Rerun.
Settlement Risk Period	means the total period covered by the Actual Exposure Period and the Undefined Potential Exposure.
Settlement Statement	means a defined data set that incorporates a set of variables used to calculate all payments and charges to a Participant in respect of its Supplier and Generator Units for a given Billing or Capacity Period.
Shadow Price	means a component of the System Marginal Price for each Trading Period, calculated by the EPUS Software as the marginal cost (excluding Start Up Costs and No Load Costs) of meeting Schedule Demand taking account of all constraints and limitations used within that run of the EPUS Software except those constraints used solely in the calculation of Uplift.
Shortfall	has the meaning set out in paragraph 6.109.
Single Electricity Market or SEM	means the wholesale all-island single electricity market established and governed pursuant to [insert legislative provisions] and the Code.

SO Interconnector Trade	means a trade conducted across an Interconnector by the SO, after the calculation of Interconnector Unit Nominations, using the Interconnector Residual Capacity Unit
Soak Time Cold	means, for each Soak Time Trigger Point Cold, the duration at which the Generator Unit must remain at that Soak Time Trigger Point Cold during a Cold Start.
Soak Time Hot	means, for each Soak Time Trigger Point Hot, Soak Time Hot is the duration at which the Generator Unit must remain at that Soak Time Trigger Point Hot during a Hot Start.
Soak Time Trigger Point Cold	means a constant MW level at which a Generator Unit must remain while loading up between zero MW and Minimum Stable Generation after a Cold Start.
Soak Time Trigger Point Hot	means a constant MW level at which a Generator Unit must remain while loading up between zero MW and Minimum Stable Generation after a Hot Start.
Soak Time Trigger Point Warm	means constant MW level at which a Generator Unit must remain while loading up between zero MW and Minimum Stable Generation after a Warm Start
Soak Time Warm	means, for each Soak Time Trigger Point Warm, the duration at which the Generator Unit must remain at that Soak Time Trigger Point Warm during a Warm Start.
Special Unit	means a Generator Unit or Supplier Unit that is subject to special treatment in accordance with the rules for Special Units set out in Section 5. The Units concerned are Interconnector Units, Energy-limited Generator Units, Pumped Storage Units, Autoproducer Units (including CHP), Generator Units under test and Demand Side Units.
Standard & Poors	means the credit rating agency known by that name, a division of McGraw-Hill Companies Inc.
Standard Participant	Means in relation to the calculation of Required Credit Cover, a Participant that is neither an New Participant nor an Adjusted Participant
Starting Optimisation Overlap Period	means, for any given Optimisation Time Horizon and the associated run of the EPUS Software, that part of the Optimisation Time Horizon that was included in the Optimisation Time Horizon of the Preceding EPUS Run,
Start Up	means the process of bringing a Generator Unit to a Synchronised state, from a Cold, Warm or Hot (non-synchronised) state
Start Up Costs	means the costs associated with Start Up
Supplier	means a Participant licensed to supply electricity under Section 14(1)(b), (c) or (d) or Section 14(2) of the ERA or section 10 of the Electricity (Northern Ireland) Order 1992.

Supplier of Last Resort	means, in relation to Ireland, the person designated as supplier of last resort under the European Communities (Internal Market In Electricity) Regulations, 2005 (S.I. 60/2005) and, in relation to Northern Ireland, [to be defined].
Supplier Suspension Delay Period	means a period commencing at the time of issue of any Suspension Order in respect of a Supplier Unit; the minimum period before such an Order shall take effect. The duration of the Supplier Suspension Delay Period shall be determined by the Regulatory Authorities from time to time
Supplier Unit	means the Unit comprising the aggregated metered consumption of one or more Generators or Demand Sites which are not Generator Units, or. For the purposes of the Code any of the following: Associated Supplier Unit, Trading Site Supplier Unit and Error Supplier Unit.
Supplier Unit Capacity Settlement Statement Data Transaction	is a Data Transaction detailed in Appendix F.
Supplier Unit Energy Settlement Statement Data Transaction	is a Data Transaction detailed in Appendix F.
Supplier Unit Invoices Data Transaction	is a Data Transaction is defined in Appendix F.
Supply Participant	means, in Section 2, a Participant who has registered Supplier Units except Error Supplier Units.
Suspension	means the process whereby the Market Operator suspends a Party from trading in the Pool in respect of some or all of its registered Units in accordance with a Suspension Order issued under paragraphs 2.215 to 2.217.
Suspension Order	means an order from the Market Operator to a Party in accordance with paragraphs 2.215 or 2.217 stating that its participation in respect of any or all of its Units will be suspended in accordance with the terms of the Suspension Order.
Synchronised	means the condition where a Generator Unit is preparing to connect and produce energy on the Transmission System in accordance with a Dispatch Instruction or its Market Schedule Quantity, so that the frequencies and phase relationships of that Generator Unit or Interconnector, as the case may be and the system to which it is connected are identical. Synchronisation will be similarly interpreted.

System Characteristics Data	means data submitted after the Trading Day by the System Operators in accordance with Appendix E identifying the Average System Frequency and the Nominal System Frequency.
System Marginal Price or SMP	means the price at which one MW of electricity is sold under the Code in any given Trading Period, as calculated in accordance with Sections 4 and 5.
System Operator Commercial Offer Data	is a Data Transaction detailed in Appendix D.
(Data Transaction)	
System Operator Interconnector Registration	is a Data Transaction detailed in Appendix D.
(Data Transaction)	
System Operator Market Data Transactions	are Data Transactions detailed in Appendix E
System Operator Participant and/or Unit Deregistration	is a Data Transaction detailed in Appendix D.
(Data Transaction)	
System Operator Participant and/or Unit Detailed Information Registration	is a Data Transaction detailed in Appendix D.
(Data Transaction)	
System Operator Participant and/or Unit Registration	is a Data Transaction detailed in Appendix D.
(Data Transaction)	
System Operator Registration and/or Unit Commencement Notice	is a Data Transaction detailed in Appendix D.
(Data Transaction)	
System Operator Settlement Statement	is a Data Transaction detailed in Appendix F.
(Data Transaction)	
System Operator Technical Offer Data	is a Data Transaction detailed in Appendix D.
(Data Transaction)	

System Operators	means the organisations responsible at any given time for operation of the Transmission Systems and scheduling and dispatching generation, being SONI Limited (a body corporate registered in Northern Ireland under company number NI038715), in its capacity as the holder of a transmission licence granted under Article 10(1)(b) of the Electricity (Northern Ireland) Order 1992; and Eirgrid (a company formed under regulation 34 of the Republic of Ireland legislation known as the European Communities (Internal Market in Electricity) Regulations 2000) in its capacity a holder of the licence granted, under Section 14(1)(e) of the Republic of Ireland Electricity Act.
System Parameters (Data Transaction)	is a Data Transaction detailed in Appendix E.
System per Unit Regulation	means a parameter, proposed annually by the Market Operator and approved by the Regulatory Authorities, which is used in the calculation of the tolerances for over- and under-generation used in the determination of Uninstructed Imbalance Payments.
Target Reservoir Level	is part of the Commercial Offer Data for a Pumped Storage Generator Unit and means the target level of the reservoir for the beginning of the Trading Day as described in paragraph 5.97C
Target Reservoir Level Percentage	is part of the Commercial Offer Data for a Pumped Storage Generator Unit and means a percentage between 0% and 200%, which is multiplied by the Target Reservoir Level to a value of that target for the end of the Optimisation Time Horizon for use in the EPUS Software.
Technical Capability	means the technical capabilities of a Generator Unit based on, as appropriate, either (1) Technical Offer Data submitted in accordance with Appendix C or (2) Generator Unit Technical Characteristics Data (and, where appropriate, Energy Limited Generator Unit Technical Characteristics Data) submitted in accordance with Appendix E
Technical Offer Data	means data submitted by Gate Closure in accordance with Appendix C, identifying the real capabilities of a Generator Unit or Interconnector including without limitation Registered Capacity, Availability Profile, Ramp Rates, Minimum On and Off Times, Minimum Output, Maximum Output and Minimum Stable Generation consistent with values submitted under the relevant Grid Code.
Termination	means the termination of a person's status as a Party in accordance with paragraphs 2.226 or 2.232A, and "Terminate" and "Terminated Party" shall be construed accordingly
Termination Date	means the date upon which a Termination takes effect in accordance with paragraph 2.227.
Termination Order	means an order from the Market Operator to a Party pursuant to paragraph 2.227 stating that the Party will be Terminated, or that any or all of its Units will be Deregistered

Testing Charge	means a charge in respect of a Generator Unit Under Test in accordance with the Testing Tariff.
Testing Tariff	Means the tariff proposed by the System Operators and approved by the Regulatory Authorities for each Generator Unit each Year with the intent of recovering the costs imposed on the operation of the transmission system by a Generator Unit under test.
Tie-Break	means the situation which arises when the EPUS Software cannot differentiate between one or more Generator Units on the grounds of Schedule Production Cost. The EPUS Software will resolve the order in which Generator Units are scheduled using a systematic process of random selection.
Timetabled Settlement Rerun	means a Settlement Rerun carried out in accordance with the timeline specified in Section 6
Tolerance Band	means an interval in MW around the Dispatch Quantity for that Generator Unit in that Trading Period within which a Generator Unit is charged for (or paid for, as appropriate) Uninstructed Imbalances at SMP when Metered Generation is within that Tolerance Band.
Total Balance Sheet Assets	means the sum of current and long-term assets set out in the published accounts of the company.
Trading Charges	means all charges required to be made in respect of a Supplier Unit during a Trading Period and comprise Energy Charges and Imperfections Charges
Trading Day	means a 24-hour period containing forty eight 30-minute trading periods, except on the clock change days in spring and autumn when the Trading Day will last for 23 and 25 hours respectively. The first trading period of the trading day commences at 06:00
Trading Day Exchange Rate	means the exchange rate between Pounds Sterling and euro for the next Trading Day set at 08:00 the day before the Trading Day. The Trading Day Exchange Rate is based upon the rules of setting the Trading Day Exchange Rate defined in the banking agreement between the Market Operator and the SEM Bank.
Trading Payments	means payments to Participants in respect of their Generator Units over a Billing Period. Such payments will comprise Energy Payments, Constraint Payments, Uninstructed Imbalance Payments and Make Whole Payments less any Testing Charges
Trading Period	means a thirty minute period beginning on each hour or half-hour
Trading Site	means one or more Generator Units and at most one Trading Site Supplier Unit of which all Generator Units are covered by a single Connection Agreement, or in the event that no Connection Agreement exist, all such Units are located on a Contiguous Site, or as described in paragraphs 2.44 to 2.48C.

Trading Site Supplier Unit	means a Supplier Unit that contains only the Demand within a Trading Site, and is settled on a net basis against the Generator Units on that Trading Site under the rules specified in the Code.
Transition Period	means the period from [xxx] to [xxx] during which the transitional provisions set out in Section 7 shall apply.
Transmission Asset Owner	means, at any given time, the Transmission System owner licensed under section 14(1)(g) (inserted by Regulation 32) of the Act of 1999 in Ireland and the Transmission Owner licensed under Article 10(1)(b) of the Electricity (Northern Ireland) Order 1992 in Northern Ireland.
Transmission Connected	means connected electrically to Transmission System
Transmission Loss Adjustment Factor or TLAF	means the factor, proposed by the relevant System Operator and approved by the Regulatory Authorities for each Unit in each Trading Period to adjust the Output or demand of that Unit for the effect of Transmission Losses.
Transmission Losses	means losses that are incurred on the Transmission System as electricity is transported from Generator Units' Export Points to the Trading Boundary.
Transmission Network	means the network as specified in the Grid Code
Transmission System	means, in respect of Ireland, a system which consists wholly or mainly of high voltage lines and electric plant and which is used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another or to or from any Interconnector or to final customers, but shall not include any such lines which may from time to time, with the approval of the Commission, specify as being part of the Distribution System and shall not include any Interconnector ; and means, In respect of Northern Ireland, a system which consists wholly or mainly of high voltage lines and electrical plant and is used for conveying electricity from a generating station to a substation; from one generating station to another; from one substation to another; to a substation in Northern Ireland. from a place outside Northern Ireland.; or from a substation in Northern Ireland. to a place outside Northern Ireland but should not include any Interconnector. "Transmission System for the Ireland" and "Transmission System for Northern Ireland" shall be construed accordingly.
Type 1 Channel	means the type of Communication Channel defined in paragraph 3.3 as a Type 1 Channel and more particularly described in Agreed Procedure 3 "Communication Channel Qualification"
Type 2 Channel	means the type of Communication Channel defined in paragraph 3.3 as a Type 2 Channel and more particularly described in Agreed Procedure 3 "Communication Channel Qualification"
Type 3 Channel	means the type of Communication Channel defined in paragraph 3.3 as a Type 3 Channel and as more particularly described in Agreed Procedure 3 "Communication Channel Qualification"

Undefined Exposure Period	means, for any Working Day, the period from the latest Trading Day for which results have been published in a Settlement Statement, in the case of Trading Charges exposure and from the last Trading Day in the latest Invoice for Capacity Charges in the case of Capacity Charges, in each case to the point in time when, following payment default, a Participant's Units could be suspended. Such periods are published in the Settlement Calendar.
Undefined Potential Exposure	means the potential credit exposure resulting from accrued obligations that have not yet been included in any Settlement Statements and from future obligations which would be likely to have accrued before a Participant's Units could be Suspended from trading in the Pool for payment default.
Under Test	means the under test status accorded to certain Generator Units by the relevant System Operator in accordance with the relevant Grid Code. Under Test in accordance with the Code is subject to the requirements both that the Market Operator has verified the status with the relevant System Operator and that the relevant Unit is so permitted as set out in paragraph 5.133A.
Uninstructed Imbalance	means the difference between Dispatch Quantity and Actual Output of Generator Unit
Uninstructed Imbalance Payment	means a payment in respect of Generator Units when Actual Output differs from the Dispatch Quantity by an amount greater than the Tolerance Band. Such payments may be positive or negative.
Unit	means a Generator Unit or Supplier Unit or all of them, as the case may be.
Unit Commitment Schedule	means a schedule determined by each run of the EPUS Software prior to the calculation of Market Schedule Quantities, and denotes, for each Price Maker Generator Unit, whether or not it will be scheduled to generate in each Trading Period in the Optimisation Time Horizon.
Unit Load	Electricity Demand by Generator Unit
Unit Registration	means registration of a Unit in accordance with Section 2.
United Kingdom	means the United Kingdom of Great Britain and Northern Ireland established pursuant to the Act of Union, 1800 and reconstituted by the Government of Ireland Act, 1920 and the Republic of Ireland Act, 1949
Unique Associated Supplier Unit	means an Associated Supplier Unit that includes only the Demand of the Trading Site to which it is recorded. Unique Associated Supplier Units are required at Trading Sites which contain Generators that have Non-Firm Access in order to facilitate the calculation of the Actual Availability of those Generator Units.
Unsecured Bad Capacity Debt	means an Unsecured Bad Debt that has arisen based on a Shortfall arising from non-payment of Capacity Charges.

Unsecured Bad Debt	means a debt which arises as a result of the events set out in paragraph 6.110 and including Unsecured Bad Energy Debt and Unsecured Bad Capacity Debt. For the avoidance of doubt, this definition applies only for the purposes of the Code, and is not intended to imply that any particular sum is a "bad debt" within the meaning of this expression in any financial or accounting definition, standard or practice.
Unsecured Bad Energy Debt	means Unsecured Bad Debt that has arisen based on a Shortfall arising from non-payment of Energy Charges.
Upheld Dispute	means a Dispute becomes an Upheld Dispute when the Dispute Resolution Board or other Competent Authority has resolved the Dispute in accordance with the Dispute Resolution Process and has determined that Settlement Items have changed as a result of the Dispute.
Uplift	means a component of the System Marginal price for each Trading Period which is calculated to reflect the Start Up Cost and No Load Cost elements of Schedule Production Cost for each Price Maker Generator Unit (excluding Pumped Storage Units) in each Contiguous Operation Period, as set out in Appendix N.
Uplift Alpha (α)	means a parameter used in the calculation of Uplift to determine the importance of the Uplift Cost Objective. The value of Uplift Alpha lies between 0 and 1 (inclusive).
Uplift Beta (β)	means a parameter used in the calculation of Uplift to determine the importance of the Uplift Profile Objective. The value of Uplift Beta lies between 0 and 1 (inclusive) and $\alpha + \beta = 1$.
Uplift Delta (δ)	means a parameter used in the calculation of Uplift to cap the overall impact on Energy Payments arising from Uplift in each Trading Day compared with the minimum level. The value of Uplift Delta lies between 0 and 1 (inclusive).
Uplift Cost Objective	means that part of the Uplift algorithm as set out in 4.49A
Uplift Profile Objective	means that part of the Uplift algorithm as set out in 4.49A
Urgent	means in relation to a Modification Proposal, that it has been designated to be Urgent and will be therefore treated with a fast-track Modifications Process.
Use of System Agreements	means a form of agreement between a Participant and either the Distribution System Operator or the Transmission System Operator, as appropriate, for the use of their network in respect of any or all of the Participant's Units.
Valid EPUS Solution	has the meaning laid out in paragraph 4.50B.
Validated	means, in relation to a Data Transaction, that the Data Transaction has been determined by the Market Operator to be valid.

Validation Notice	means a notice sent by the Market Operator to the Sending Party specifying that the Data Transaction concerned is valid and has been accepted by the Market Operator.
Value Added Tax or VAT	means in respect of Ireland: the value added tax chargeable under the provisions of the Irish Value Added Tax Act, 1972 (as amended) or any substitute or replacement tax on the supply of goods or services and in respect of N.I. the Value Added Tax Act 1994.
Value of Lost Load or VOLL	means the value that the Regulatory Authorities determine represents the end customer's willingness to be lose supply. The Value of Lost Load is used in the determination of Capacity Payments.
Variable Generator Unit	means a Wind Power Unit or a Run-of-River Hydro Unit that is Dispatchable, where the short-term availability of the Generator Unit is unpredictable as a result of its fuel source.
Variable Market Operator Price	means the Unit price at which the Market Operator Charge is levied on Participants. The Variable Market Operator Price is proposed annually by the Market Operator and approved by the Regulatory Authorities.
Variable Price Maker Generator Unit	means a variable Generator Unit which is a Price Maker
Variable Price Taker Generator Unit	means a Variable Generator Unit which is a Price Taker
Voluntary Termination	means the voluntary Termination of a Party at its own request and in accordance with paragraphs 2.230 to 2.233..
Voluntary Termination Consent Order	means an order from the Market Operator to a Party pursuant to paragraph 2.232
Voluntary Termination Date	means the date upon which a Voluntary Termination takes effect in accordance with paragraphs 2.232A
Warm Cooling Boundary	means the period of time, which must be greater than that defined by the Hot Cooling Boundary, post de-Synchronisation of a Generator Unit after which the Generator Unit's Warmth State transfers from being Warm to Cold.
Warm Start	means any Synchronisation of a Generator Unit that has previously not been Synchronised for a period of time equal to or longer than its Accepted Hot Cooling Boundary but shorter than its Accepted Warm Cooling Boundary.
Warmth State	means either cold, warm, or hot, as defined under the timeframes since last de-Synchronisations for Cold Start, Warm Start or Hot Start respectively.

Warning Limit	means that when a Participant's Required Credit Cover reaches the percentage of its Posted Credit Cover specified in its Warning Limit, the Market Operator will issue a warning of that fact to the Participant. The maximum level of the Warning Limit will be proposed annually by the Market Operator and approved by the Regulatory Authorities. An individual Participant my reduce its Warning Limit, but may not increase it above the maximum approved by the Regulatory Authorities.
Week	means seven days.
Wind Power Unit	means a Generator Unit generating electricity from wind energy.
Working Day or WD	means 9am-5pm period on a weekday which is not a public holiday or bank holiday in Ireland or Northern Ireland.
Year	Means calendar year

LIST OF SUBSCRIPTS

In the Code the names of defined variables (which are shown in capitals) are (where necessary) followed by lower case "subscripts" which show the entity or entities to which the variable relates. The meaning of those "subscripts" are shown in Table 1. Where there is more than one "subscript", the variable concerned has more than one dimension; that is, it relates to more than one entity. For example the "subscript" uh would show that the variable concerned represented the value that applies to a Generator Unit u in a Trading Period h. Similarly, the variable MWP in Table 2 below, has the subscripts u and b showing that it represents the value of the Make Whole Payment for Generator Unit u in Billing Period b.

a	Settlement Reallocation Agreement
b	Billing Period
c	Capacity Period
d	Settlement Day
e	Jurisdiction
f	Actual Exposure Period
g	Undefined Exposure Period
h	Trading Period
i	Number of a Price Quantity Pair
j	Directional Indicator (Import/Export)
k	temporary use for the Bid/offer pair under consideration for cost calculations Solely within Appendix N: the Contiguous Operation Period
l	Interconnector
m	Month
n	Used to denote an integer value – not used as a subscript
o	Not used
p	Participant
q	Uninvoiced Capacity Period
r	Settlement Risk Period
s	Trading Site
t	Trading Day
u	Generator Unit

v	Supplier Unit
w	Warmth State (Hot/Warm/Cold)
x	temporary subscript in relation to Constraint Payments in Section 4
y	Year (calendar year)
z	Optimisation Time Horizon Uninvoiced Billing Period (only in Section 6)
γ	Historical Assessment Period for Billing Periods
η	counter variable for all Settlement Days within the Historical Assessment Period
μ	counter variable for all Trading Periods within the Historical Assessment Period.
ρ	Historical Assessment Period for Capacity Periods
θ	Uninvoiced Billing Period

LIST OF VARIABLES, APPLICABLE SUBSCRIPTS AND UNITS

In this List of Variables, applicable subscripts and units, the description of the variables applies except where expressly provided otherwise in the Code.

Name	Term	Subscripts	Units	Description
Actual Availability	AA	uh	MW	Actual Availability from Generator Unit u in Trading Period h, expressed as average MW over the period (ex post)
Annual Capacity Payment Sum	ACPS	Y	€	Annual Capacity Payment Sum payable to Generator Units and recovered from Supplier Units in each Year y
Aggregate Export Capacity	AEC	uh	MW	Maximum export capacity for Interconnector Unit u in Trading Period h.
Actual Generator Exposure	AGE	pf	€	Actual exposure for Participant p in respect of their Generator Units
Aggregate Import Capacity	AIC	uh	MW	Maximum import capacity for Interconnector Unit u in Trading Period h.
Analysis Percentile Parameter	AnPP		%	AnPP is the parameter to determine the percentage of credit risk that should be covered by the Required Credit Cover in relation to the Undefined Exposure Period
Actual Output	AO	uh	MW	Actual Output from Generator Unit u in Trading Period h, expressed as average MW over the period
Loss- Adjusted Actual Output	AOLF	uh	MW	Loss-adjusted Actual Output from Generator Unit u in Trading Period h, expressed as average MW over the period
Availability Profile	AP	uh	MW	Availability in MW of Unit u in Trading Period h, calculated ex post, on basis of average real time physical availability of the Unit
Access Quantity	AQ	uh	MW	Access Quantity for Unit u in Trading Period h, as determined in Section 4 paragraph 4.42
Actual Supplier Exposure	ASE	pf	€	Actual exposure for Participant p in respect of their Supplier Units
Available Transfer Capacity	ATC	lh	MW	Available Transfer Capacity on an Interconnector l in Trading Period h
Average Frequency	AVGFRQ	H	hz	Average System Frequency in Trading Period h, used in the determination of Uninstructed Imbalances
Billing Period Currency Cost	BPC	D	€	The cost or benefit that is created in respect of each Trading Day based upon the difference between currency rates between the time of data creation and the payment of Invoices and Self Billing Invoices.

Name	Term	Subscripts	Units	Description
Billing Period Currency Charge	BPCC	pb	€	The charge made to Participant p for Billing Period b to recovery the Billing Period Currency cost
Count of Billing Period Payments and Charges	BPSHAP	pk	number	The count of all Billing Period payments and charges in respect of Participant p in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g
Count of Billing Period Payments and Charges	BPUHAP	pk	number	The count of all Billing Period payments and charges for Generator Units in respect of Participant p in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g
Standard Deviation of Billing Period Settlement Sum (Supplier)	BSDSVS	pk	€	The standard deviation of the Billing Period Settlement sum in the Historical Assessment Period for Billing Periods γ to be applied for Undefined Exposure Period g for Participant p in respect of its Supplier Units
Standard Deviation of Billing Period Settlement Sum (Generator)	BSDSVU	pk	€	The standard deviation of the Billing Period Settlement sum in the Historical Assessment Period for Billing Periods γ to be applied for Undefined Exposure Period g for Participant p in respect of its Generator Units
Billing Period Settlement Value	BSVS	pk	€	The Billing Period Settlement Value in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g for Participant p in respect of its Supplier Units
Billing Period Settlement Value	BSVU	pk	€	The Billing Period Settlement value in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period for Participant p in respect of its Generator Units
Billing Period Undefined Potential Exposure (Supplier)	BUPES	pk	€	The Billing Period Undefined Potential Exposure in the Historical Assessment Period for Billing Periods γ to be applied for Participant p in respect of its Supplier Units for the Undefined Exposure Period g
Billing Period Undefined Potential Exposure (Generator)	BUPEG	pk	€	The Billing Period Undefined Potential Exposure in the Historical Assessment Period for Billing Periods γ to be applied for Participant p in respect of its Generator Units for the Undefined Exposure Period g
Mean Billing Period Settlement Sum	BXSVS	pk	€	The mean of the Billing Period Settlement Sum in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g

Name	Term	Subscripts	Units	Description
Mean of Billing Period Settlement Sum	BXSVU	pk	€	The mean of Billing Period Settlement Sum in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period for a Participant in respect of its Generator Units
Credit Assessment Price	CAP	k	€/MWh	The Credit Assessment Price for the Undefined Exposure Period g
Capacity Period Currency Cost	CAPC	c	€	The cost of currency movements related to Capacity Period c
Capacity Period Currency Charge	CAPCC	pc	€	The charge made to Participant p for Capacity Period c to recovery the Capacity Period Currency cost
Credit Assessment Volume (Generator Unit)	CAVG	ph	MWh	The Credit Assessment Volume for the Supplier Units of a New or Adjusted Participant p will be based on forecast values from the Participant
Credit Assessment Volume (Supplier Unit)	CAVS	ph	MWh	The Credit Assessment Volume for the Supplier Units of a New or Adjusted Participant p will be based on forecast values from the Participant
Capacity Charge	CC	vh	€	Capacity Charge for Supplier Unit v in Trading Period h
Credit Forecast Demand	CFD	vh	MWh	A forecast of demand for Supplier Unit v in Trading Period h for the purposes of credit calculations
Carried Forward Cost Recovery	CFCR	ukt	€	is the Carried Forward Cost recovery for Generator Unit u in Contiguous Operation Period k from the first Trdaing Day to the next.
Interconnector Unit Export Capacity Holding	CHE	uh	MW	Contracted export capacity holding for Interconnector Unit u in Trading Period h
Interconnector Unit Active Export Capacity Holding	CHEA	uh	MW	Export Capacity Holding after adjustment for ATC for Interconnector Unit u in Trading Period h
Interconnector Import Capacity Holding	CHI	uh	MW	Contracted import capacity holding for Interconnector Unit u in Trading Period h
Interconnector Unit Active Import Capacity Holding	CHIA	uh	MW	Import Capacity Holding after adjustment for ATC for Interconnector Unit u in Trading Period h

Name	Term	Subscripts	Units	Description
Constraint Payment	CONP	uh	€	Constraint Payment due to Generator Unit u in respect of Trading Period h. In general a Constraint Payment will apply, in respect of a Trading Period, whenever the operating cost of delivering the Dispatch Quantity for a Generator Unit differs from the corresponding operating cost of delivering the Market Schedule Quantity
Constraint Payment (Unit)	CONPU	u,d	€	Total Constraint Payment made to a Participant in respect of a Generator Unit u in respect of Settlement Day d
Capacity Payment	CP	uh	€	Capacity Payment for Generator Unit u in Trading Period h
Capacity Period Charge	CPC	vc	€	Capacity Period Charge for Supplier Unit v in Capacity Period c
Capacity Payments Demand Price	CPDP	h	€/MWh	The price for demand capacity payments in Trading Periods h in Capacity Period c
The count of all Capacity Payments Demand Prices	CPDPHAP	k	number	The count of all Capacity Payments Demand Prices in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g
Capacity Period Demand Scaling Factor	CPDSF	c	factor	is a factor used in the calculation of Capacity Charges as set out in 4.94
Capacity Period Demand Scaling Price	CPDSP	c	€/MWh	A scaling factor calculated to ensure that aggregate variable charges for Supplier Units equal the Capacity Period Variable Sum in each Capacity Period
Capacity Payments Eligible Availability	CPEA	uh	MWh	The availability of a Generator Unit u that is eligible for capacity payments in Trading Period h, before adjustment for transmission losses, in MWh
Capacity Period Ex-Post Generation Scaling Factor	CPEGSP	c	Factor	Used in the calculation of Capacity Payments as set out in 4.88A
Capacity Period Ex-Post Sum	CPES	c	€	The part of the Capacity Period Payment Sum in each Capacity Period that is paid under the ex-post methodology
Capacity Period Fixed Generation Scaling Factor	CPFGSP	c	Factor	Used in the calculation of Capacity Payments as set out in 4.86
Capacity Period Fixed Sum	CPFS	c	€	The part of the Capacity Period Payment Sum in each Capacity Period that is paid under the fixed methodology
Capacity Payments Generation Price	CPGP	h	€/MWh	The price for generation capacity payments in Trading Periods h in Capacity Period c

Name	Term	Subscripts	Units	Description
Capacity Payments Generation Price Factor	CPGPF	uh	Factor	Adjustment factor to capacity payments to generation related to SMP and Offer Prices
Capacity Period Generation Scaling Price	CPGSP	c	€/MWh	A scaling factor calculated to ensure that aggregate variable payments for Generator Units equal the Capacity Period Variable Sum in each Capacity Period
Capacity Period Payment	CPP	uc	€	Capacity Period Payment for Generator Unit u in Capacity Period c
Capacity Payments Price Factor	CPPF	h	Factor	Adjustment factor to capacity payments to demand and scheduled generation related to SMP
Capacity Period Payment (Generator Unit)	CPPGU	uc	€	Capacity Period Payments payable in Capacity Period c to Generator Unit u
Capacity Period Charge (Supplier Unit)	CPPRC	vc	€	Capacity Period Charge in Capacity Period c to Supplier Unit u
Capacity Period Payment Sum	CPPS	c	€	Capacity Period Payment Sum payable to Generator Units and recovered from Supplier Units in each Capacity Period c
Capacity Period Variable Generation Scaling Price	CPGVSP	c	€	Is a variable used in the Calculation of Capacity Payments as set out in paragraph 4.87
Count of Capacity Period Charges (Supplier)	CPSHAP	pk	Number	The count of the number of Capacity Period Charges for a Participant p's Supplier Units in the Historical Assessment period for Capacity Periods ρ for the Undefined Exposure Period g
Count of Capacity Period Charges Generator)	CPUHAP	pk	Number	The count of the number of Capacity Period Charges for a Participant p's Generator Units in the Historical Assessment period for Capacity Periods ρ for the Undefined Exposure Period g
Capacity Period Variable Sum	CPVS	c	€	The part of the Capacity Period Payment Sum in each Capacity Period that is paid under the variable methodology
Cost of Running	CR	ukt	€	is the Cost of Running for each Price Maker Generator Unit in that part of the Contiguous Operation Period g, which falls in the first Trading Day t of the Optimisation Time Horizon.
Capacity Period Standard Deviation of Settlement Sums (Supplier)	CSDSVS	pk	€	The Capacity Period standard deviation in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period k for a Participant p respect of its Supplier Units

Name	Term	Subscripts	Units	Description
Capacity Period Standard Deviation of Settlement Sums (Generator)	CSDSVU	pk	€	The Capacity Period standard deviation in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for a Participant p respect of its Generator Units
Capacity Period Settlement Value (Supplier)	CSVS	pk	€	The Capacity Period Settlement Value in the Historical Assessment Period for Capacity Periods ρ for the Undefined Exposure Period g for Participant p in respect of its Supplier Units
Capacity Period Settlement Value (Generator)	CSVU	pk	€	The Capacity Period Settlement Value in the Historical Assessment Period for Capacity Periods ρ for the Undefined Exposure Period g for Participant p in respect of its Generator Units
Capacity Period Undefined Potential Exposure (Generator)	CUPEG	pk	€	undefined potential exposure for a Participant p in respect of Capacity Charges in relation to its Generator Units in the Undefined Exposure Period g
Capacity Period Undefined Potential Exposure (Supplier)	CUPES	pk	€	undefined potential exposure for a Participant p in respect of Capacity Charges in relation to its Supplier Units in the Undefined Exposure Period g
Mean of the Capacity Period Settlement Sum (Supplier)	CXSVS	pk	€	The mean of the Capacity Period Settlement Sum in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Supplier Units
Mean of the Capacity Period Settlement Sum (Generator)	CXSVU	pk	€	The mean of the Capacity Period Settlement Sum in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g for Participant p in respect of its Generator Units
Total Charge (Daily)	DAYCD	d	€	Total of all Charges on all Suppliers in respect of Settlement Day d
Total Charge (Unit)	DAYCV	vd	€	Total of all Charges on Supplier Unit v in respect of Settlement Day d
Total Payments (Daily)	DAYPD	d	€	Total of all Payments made to all Units in respect of Settlement Day d
Total Payments (Unit)	DAYPU	ud	€	Total of all Payments made to Unit u in respect of Settlement Day d
Decremental Price	DECP	uh	€/MWh	Decremental Price used in the calculation of Constraint Payments for Price Taker Generator Units
Distribution Loss Adjustment Factor	DLAF	vh; uh	Factor	Distribution loss adjustment factor (determined ex ante)

Name	Term	Subscripts	Units	Description
De Minimis Threshold	DMT	y	MW	De minimis level for mandatory participation to the SEM
Dispatch No Load Cost	DNLC	uh	€/hour	DNLCuh=NLCuh if the Unit is scheduled on by the System Operator in Trading Period h, otherwise DNLCuh=0
Discount for Over-Generation	DOG	uh	Proportion	Parameter used in the calculation of Uninstructed Imbalance payments in the event of over-generation above the Tolerance Band, where 0 <= DOGuh <=1
Dispatch Offer Price	DOP	uh	€/MWh	Dispatch Offer Price of Generator Unit u in Trading Period h, equal to last Puhi corresponding to Dispatch Quantity
Dispatch Quantity	DQ	uh	MW	Dispatch quantity for Generator Unit u in Trading Period h (average power)
Dispatch Quantity (revised)	DQ'	uh	MW	revised Dispatch Quantity, applicable when a Maximisation Instruction is issued by the SO
Dispatch Quantity Cost Correction	DQCC	uh	€/hour	Dispatch Quantity cost correction used in the calculation of Constraint Payments
Dispatch Start Up Costs	DSUC	uh	€	Dispatch Start Up Cost for Generator Unit u in Trading Period h
Eligible Availability	EA	uh	MW	Eligible availability for Capacity Payments, expressed in average MW, for Generator Unit u in Trading Period h
Ex-Post Capacity Payment Generation Price	ECGP	h	€/MWh	Used in the calculation of Capacity Payments as set out in 4.88B
Estimated Capacity Price	ECP	k	€/MWh	The Estimated Capacity Price (ECPk) for the Undefined Exposure Period g
Ex-Post Capacity Payments Weighting Factor	ECPWF	h	Factor	Used in the calculation of Capacity Payments as set out in 4.79B
Eligible Generation Availability	EGA	uh	MW	Eligible availability for generation mode of Pumped Storage Units
Energy Limit Period	ELP	ut	hours	The period of time over which the Energy Limit applies in respect of an Energy Limited Generator Unit u
Energy Charges	ENC	vh	€/MWh	The Energy Charge recoverable in respect of Suplier Unit v in Trading Period h
Energy Charge (Unit)	ENCV	vd	€	Total Energy Charge on Supplier Unit v in respect of Settlement Day d
Engineering Limit	ENGLIM	uh	MW	Derived tolerance value used in calculation of Uninstructed Imbalances
Engineering Tolerance	ENGTOL		Scaler %	Engineering Tolerance used in calculation of Uninstructed Imbalances
Energy Payments	ENP	uh	€/MWh	The Energy Payment payable to Generator Unit u in Trading Period h

Name	Term	Subscripts	Units	Description
Energy Payment (Unit)	ENPU	ud	€	Total Energy Payment made to Generator Unit u in respect of Settlement Day d
Eligible Netting Quantity	ENQ	sh	MW	Quantity eligible for net treatment at a Trading Site
EPUS Schedule Production Cost	ESPC	uh	€	EPUS Schedule Production Cost, calculated for use within the EPUS Software in accordance with Appendix N.
Firm Access Quantity (Unit)	FAQ	uh	MW	The Capacity in MW, net of Unit Load, for Unit u, that has firm access (deep connection) to the Transmission System, as agreed between the Registrant and the System Operator. Firm Access Quantity for Unit u in Trading Period h, represents lower bound on EPUS Availability.
Firm Access Quantity (Site)	FAQS	st	MW	Firm Access Quantity for Site s in Trading Day t, represents lower bound on EPUS Availability (the Capacity in MW, net of Unit Load, for Unit u, that has firm access (deep connection) to the Transmission System, as agreed between the Registrant and the System Operator
Fixed Capacity Demand Price	FCDP	c	€/MWh	The fixed price element of demand capacity charges in Capacity Period c prior to adjustment for CPPF
Fixed Capacity Payments Generation Price	FCGP	c	€/MWh	The fixed price element of generation capacity payments in Capacity Period c prior to adjustment for CPGPF as set out in 4.86 A
Fixed Capacity Payments Weighting Factor	FCPWF	h	factor	Used in the Calculation of Capacity Payments as set out in paragraph 4.79
Fixed Credit Requirement (Generator Unit)	FCRG	y	€	The fixed portion of the Required Credit Cover for Participants for their Generator Unit as determined by the Market Operator, and approved by the Regulatory Authorities set annually ex ante for a Year y
Fixed Credit Requirement (Supplier Unit)	FCRS	y	€	The fixed portion of the Required Credit Cover for Participants for their Supplier Units as determined by the Market Operator, and approved by the Regulatory Authorities set annually ex ante for a Year y
Fixed Unit Load	FUL	u	MW	value denoted FULu is the Fixed Unit Load such that FULuh $\geq$ 0 and is recorded as part of Unit Registration.
Forecast Demand	FD	h	MW	Forecast of demand in Trading Period h based on the Annual Load Forecast Data
Contingency Factor (Generator Unit)	GCF	y	Scalar	A factor to adjust the Required Credit Cover for Generators for contingencies as determined by the Market Operator, and approved by the Regulatory Authorities set annually ex ante for a Year y

Name	Term	Subscripts	Units	Description
Invoice Capacity Charge	ICC	pc	€	Invoiced Capacity Charge to a Participant p in respect of its registered Supplier Units for Capacity Period c
Invoice Capacity Payment	ICP	pc	€	Invoiced Capacity Payment to a Participant p in respect of its registered Generator Units for Capacity Period c
Invoice Energy Charge	IEC	pb	€	Charge to each Participant p in respect of its Supplier Units for Energy and for a Billing Period b
Invoice Energy Payment	IEP	pb	€	Payment to each Participant p in respect of its Generator Units for Energy and for a Billing Period b
Interconnector Metered Generation	IMG	lh	MWh	Interconnector Metered Generation (import positive, export negative) for Interconnector l in Trading Period
Market Operator Operating Costs Annual Charge	IMOAC	py	€	Invoice Market Operator Annual Charge for operating cost for a given Year y for a Participant p in respect of their Supplier Units and Generator Units
Imperfections Price	IMP	y	€/MWh	Imperfections Price, proposed ex-ante for each by the Market Operator and approved by the Regulatory Authorities
Imperfections Charge	IMPC	vh	€	Imperfections Charge on Supplier Unit v in respect of Trading Period h
Imperfections Charge (Unit)	IMPCV	vd	€	Total Imperfections Charge on Supplier Unit v in respect of Settlement Day d
Imperfections Charge Factor	IMPF	h	Factor	Imperfections Charge Factor for Trading Period h
Loss Factor Adjustment	LF			These letters, appended to any variable name, indicate that the variable has been adjusted for ex ante losses, so that the quantity is measured at the Trading Boundary
Metered Demand	MD	vh	MWh	Metered demand in Trading Period h for Supplier Unit v after adjustment for Distribution Losses
Metered Generation	MG	uh	MWh	Metered generation for Generator Unit u in Trading Period h
Minimum Stable Generation	MINGEN	uh	MW	Minimum sustainable Output level for Unit u for Trading Period h
Minimum Off Time	MINoff	ut	hours	Minimum Off Time for Generator Unit u for Trading Day t
Minimum On Time	MINon	ut	hours	Minimum On Time for Generator Unit u for Trading Day t
Minimum Output	MINOUT	uh	MW	Minimum output of Generator Unit u in Trading Period h, net of Unit Demand

Name	Term	Subscripts	Units	Description
Minimum Value of Uplift	MINUPL	h	€/MWh	is the minimum value of Uplift for each Trading Period h, that satisfies the relevant constraints, as calculated in paragraph N.23.
Market No Load Cost	MNLC	uh	€/hour	In EPUS, MNLCuh=NLCuh if the Unit u is scheduled on in Trading Period h, otherwise MNLCuh=0
Fixed Annual Market Operator Operating Cost (Generator Unit)	MOAUC	uy	€	The fixed annual fee for Market Operator operating cost for a given Year y for Generator Units u applicable to all Participants as forecast by the Market Operator, and approved by the Regulatory Authorities
Fixed Annual Market Operator Operating Cost (Supplier Unit)	MOAVC	vy	€	The fixed annual fee for Market Operator operating cost for a given Year y for Supplier Units v applicable to all Participants as forecast by the Market Operator, and approved by the Regulatory Authorities
Market Offer Price	MOP	uh	€/MWh	Market Offer Price of Unit u in Trading Period h, equal to last Puhi in schedule
Market Schedule Quantity	MSQ	uh	MW	Market Schedule Quantity, for Unit u in Trading Period h (average power level during Trading Period)
Market Schedule Quantity Cost Correction	MSQCC	uh	€/hour	Market Schedule cost correction used in the calculation of Constraint Payments
Loss Factor Adjusted Market Schedule Quantity Cost Correction	MSQCCLF	uh	€/hour	Loss factor adjusted Market Schedule cost correction used in the calculation of Constraint Payments
Market Schedule Start Up Costs	MSUC	uh	€	EPUS Start Up Cost for Unit u in Trading Period h
Make Whole Payment	MWP	ub	€	Make whole payment made in each Billing Period b to Generator Unit u
MW Tolerance	MWTOL	t	MW	Parameter for Trading Day t used in calculation of Uninstructed Imbalances
Net Demand	ND	vh	MWh	Net Demand in Trading Period h of Supplier Unit v
Net Inter-jurisdictional Import	NIJILF	eh	MWh	Total net import to a Jurisdiction from the other Jurisdiction in the SEM, across all relevant points of connection, with appropriate adjustment for Transmission Losses at each point
No Load Cost	NLC	uh	€/hour	The element of operating cost, expressed in €/hour, submitted as part of Commercial Offer Data, that is invariant with the level of unit output and incurred at all times when the level of output is greater than zero.
Nominal System Frequency	NORFRQ	h	hz	Nominal System Frequency. Will normally have a value of 50.00 ± 0.05 Hz.

Name	Term	Subscripts	Units	Description
Nominated Quantity	NQ	uh	MW	The Nominated Quantity of Output for a Price Taker Generator Unit in Trading Period h
Price	P	uhi	€/MWh	ith price Accepted for Unit u in respect of Trading Period h
Market Price Cap	PCAP		€/MWh	Market Price Cap as determined by the Regulatory Authorites, the maximum allowed level for SMP or for Prices
Market Price Floor	PFLOOR		€/MWh	Market Price Floor as determined by the Regulatory Authorites, the minimum allowed level for SMP or for Prices
Pumped Storage Cycle Efficiency	PSCE	ut	Proportion	The ratio between the gross electrical energy consumed to pump a given quantity of water from the lower reservoir to the upper reservoir and the net electrical energy sent out through the release of that quantity of water from the upper reservoir to the lower reservoir through the turbine-generators.
Maximum Reservoir Storage Capacity	PSMAXL	ut	MWh	Maximum energy storage capacity for Pumped Storage Unit u in Trading Day t, expressed in terms of generation capability
Minimum Reservoir Storage Capacity	PSMINL	ut	MWh	Minimum energy storage capacity for Pumped Storage Unit u in Trading Day t, expressed in terms of generation capability
Pumped Storage Reservoir Level	PSTREL	uh	MWh	Reservoir level at Trading Period h
Target Reservoir Level	PSTRL	ut	MWh	Reservoir level at a predefined Trading Period for Pumped Storage Unit u for Trading Day t
Pumped Storage Unscheduled Capacity Daily Price	PSUCDP	ut	€/MWh	Price used to determine capacity payments for Pumped Storage Units for any unused generation capacity
Premium for Under-Generation	PUG	uh	Proportion	Parameter used in the calculation of Uninstructed Imbalance Payments in the event of Under-Generation below the Tolerance Band, where 0 <= PUGuh <=1
Quantity	Q	uhi	MW	ith quantity Accepted for Unit u in respect of Trading Period h
Registered Capacity	RC	u	MW	Registered Capacity of Unit u
Required Credit Cover	RCC	pr	€	Required Credit Cover for each Participant p in respect of all its Units in the Settlement Risk Period r
Required Credit Cover (Generating Unit)	RCCG	pr	€	The Required Credit Cover in respect of the Settlement Risk Period r for each Participant p in respect of its Registered Generating Units

Name	Term	Subscripts	Units	Description
Required Credit Cover (Supplier Unit)	RCCS	pr	€	The Required Credit Cover in respect of the Settlement Risk Period r for each Participant p in respect of its Registered Supplier Units
Ramp Down Rate	RDR	uw	MW/min	Ramp Down Rate for Warmth State w for Generator Unit u
Minimum Value of Energy Payments	REVMINt	t	€	is the minimum value of Energy Payments to relevant Generator Units in Trading Day t that satisfies the relevant constraints as calculated in N.23.
Ramp Up Rate	RUR	uw	MW/min	Ramp Up Rate for Warmth State w for Generator Unit u
Site Access Quantity	SAQ	sh	MW	Site Access Quantity for Trading Site s in Trading Period h
Standard deviation of the aggregated Capacity Payments Demand Prices	SDCPDP	k	€/MWh	The standard deviation of the aggregated Capacity Payments Demand Prices in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g
The standard deviation of the System Marginal Price	SDSMP	k	€/MWh	The standard deviation of the System Marginal Price (k) in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g
Energy Limit	SEL	ut	MWh	The maximum limit for the accumulated energy output for an Energy Limited Generator Unit u in Trading Day t
SO Interconnector Export Price	SIEP	lh	€/MWh	Volume-weighted average price, for each Trading Period, of SO Interconnector Trades which are for export from the SEM, for each Interconnector
SO interconnector Export Quantity	SIEQ	lh	MW	Time-weighted average quantity for each Trading Period (expressed as a negative number in MW) of SO Interconnector Trades which are for export from the SEM, for each Interconnector
SO Interconnector Import Price	SIIP	lh	€/MWh	Volume-weighted average price, for each Trading Period, of SO Interconnector Trades which are for import to the SEM, for each Interconnector
SO interconnector Import Quantity	SIIQ	lh	MW	Time-weighted average quantity for each Trading Period (expressed as a positive number in MW) of SO Interconnector Trades which are for import to the SEM, for each Interconnector
System Marginal Price	SMP	h	€/MWh	System Marginal Price in Trading Period h
The count of all System Marginal Prices	SMPHAP	k	number	The count of all SMPs in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g
System Operator Balancing Charge Factor	SOBCF	e	factor	This is the System Operator Balancing Charge Factor set ex ante forecast of annual demand for each System Operator in their jurisdiction

Name	Term	Subscripts	Units	Description
System Operator Balancing Charge	SOC	d	€	Charge on the SOs in respect of Settlement Day d (if negative, this becomes a Payment to the SOs)
Shadow Price	SP	h	€/MWh	Shadow Price component of SMP, determined by the EPUS Software
Settlement Reallocation Capacity Amount	SSRCA	aph	€	This is the Settlement Reallocation Capacity Amount for a Participant p in respect of its registered Generator Units for a given Trading Period h defined in Settlement Reallocation Agreement a
Settlement Reallocation Energy Amount	SSREA	aph	€	This is the Settlement Reallocation Energy Amount for a Participant p in respect of its registered Generator Units for a given Trading Period h defined in Settlement Reallocation Agreement a
Start Cost for Uplift	STC	ukt	€	is the Start Cost to be recovered from Uplift for Generator Unit u in that part of the Contiguous Operation Period g that falls within the first Trading day of the Optimisation Time Horizon
Short-term Maximisation Capability	STMC	ut	MW	Maximum Output capability of Generator Unit u in Trading Dat t; this may be greater than the Registered Capacity
Start Up Cost	SUC	uh	€	Start Up Cost for Unit u for Trading Period h
Testing Charge	TCHARGE	uh	€/MWh	Testing Charge applicable to Generator Unit in each Trading Period
Testing Charge (Unit)	TCHARGEU	ud	€	The Testing Charge applicable to Generator Unit u for each Settlement Day d
Total Demand Forecast	TDF	y	MWh	Ex ante forecast of total market demand in Year y
Transmission Loss Adjustment Factor	TLAF	Uh, vh	Factor	Transmission Loss-Adjustment Factor (determined ex ante) applicable to Unit u in Trading Period h. Transmission Loss-Adjustment factors are as calculated by the relevant System Operator
Tolerance For Over-Generation	TOLOG	uh	MW	Tolerance for over-generation (Unit u, Trading Period h) as determined by the System Operators and approved by the Regulatory Authorities
Tolerance For Under-Generation	TOLUG	uh	MW	Tolerance for under-generation (Unit u, Trading Period h) as determined by the System Operators and approved by the Regulatory Authorities
Trading Period Count	TPCOUNT	t	number	The number of Trading Periods that are within the first trading Day of an Optimisation Time Horizon.
Trading Period Duration	TPD		hours	Trading period duration in hours (equal to 0.5 which defines a half hour Trading Period)
Testing Tariff	TTARIFF	uy	€/MWh	The Testing Tariff applicable to each testing Generator Unit u in Year y as proposed by the System Operator and approved by the Regulatory Authorities

Name	Term	Subscripts	Units	Description
Unsecured Bad Capacity Debt	UBCD	c	€	The actual cost/amount of Unsecured Bad Capacity Debt in a Capacity Period c
Unsecured Bad Debt Capacity Charge	UBDCC	pb	€	The Unsecured Bad Debt Capacity Charge to a Participant p in respect of its registered Generator Units in the relevant Capacity Period c
Unsecured Bad Debt Energy Charge	UBDEC	pb	€	The Unsecured Bad Debt Energy Charge to Participant p in respect of its registered Generator Units in the relevant Billing Period b
Unsecured Bad Energy Debt	UBED	b	€	The actual cost/amount of Unsecured Bad Energy Debt in a Billing Period b
Unscheduled Capacity Offer Price	UCOP	uhi	€/MWh	Offer Price used in the calculation of Capacity Payments Price Factor
Unscheduled Capacity Offer Quantity	UCOQ	uhi	MW	Offer Quantity used in the calculation of Capacity Payments Price Factor
The sum of the Capacity Payments Demand Prices	UCPDP	k	€/MWh	The sum of the Capacity Payments Demand Prices (UCPDPk) in the Historical Assessment Period for Capacity Periods ρ to be applied for the for the Undefined Exposure Period g
Undefined Energy Price	UEP	k	€/MWh	The Undefined Energy Price for Undefined Exposure Period g
Generator Unit Start Point	UKSTART	uk	number	is the sequence number of the Trading Period in the Optimisation Time Horizon (where 1 is the first Trading Period in the Optimisation Time Horizon) in which the Contiguous Operation Period for Generator Unit u commences, provided that Contiguous Operation Period starts within the first Trading Day of the Optimisation Time Horizon; such that $1 \leq UKSTARTuk \leq TPCOUNTt$.
Generator Unit Stop Point	UKSTOP	uk	number	is the sequence number of the Trading Period in the Optimisation Time Horizon (where 1 is the first Trading Period in the Optimisation Time Horizon) in which the Contiguous Operation Period for Generator Unit u ends, or the sequence number of the last Trading Period within the Optimisation Time Horizon if the Contiguous Operation Period starts within the first Trading Day of the Optimisation Time Horizon and continues to the end of the Optimisation Time Horizon; such that $UKSTOPuk \geq UKSTARTuk$.
Unit Load Scalar	ULS	u	Proportion	value denoted ULSu is the Unit Load Scalar such that 0 <= ULSuh <= 1 and is recorded as part of Unit Registration
Mean Value of Capacity Payments Demand Prices	UMCPDP	k	€/MWh	The mean value of the Capacity Payments Demand Prices in the Historical Assessment Period for Capacity Periods ρ to be applied for the Undefined Exposure Period g

Name	Term	Subscripts	Units	Description
The mean value of aggregated SMP	UMSMP	k	€/MWh	The mean value of aggregated SMP in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g
Uninstructed Imbalance Payment	UNIMP	uh	€	Uninstructed Imbalance payment to Participants in respect of Generator Unit u in Trading Period h
Uninstructed Imbalance Payment (Unit)	UNIMPU	ud	€	Total Uninstructed Imbalance Payment for Unit u in respect of Settlement Day d
Undefined Potential Exposure (Supplier)	UPES	pk	€	The undefined potential Supplier Exposure for each New or Adjusted Participant p in respect of its Supplier Units for the Undefined Exposure Period g
Undefined Generator Exposure	UPEG	pk	€	The Undefined Generator Exposure for each New or Adjusted Participant p in respect of its Generator Units for the Undefined Exposure Period g
Uplift	UPLIFT	h	€/MWh	A component of SMP for each Trading Period which is calculated to reflect the Start Up and No Load Cost components of Schedule Production Cost for each Price Maker Generator Unit
System per Unit Regulation	UREG			System per unit regulation parameter, used in the calculation of Uninstructed Imbalance tolerances
Sum of SMP	USMP	k	€/MWh	The sum of the SMPs for each Trading Period h in the Historical Assessment Period for Billing Periods γ to be applied for the Undefined Exposure Period g
Variable Capacity Payments Demand Price	VCDP	h	€/MWh	The variable price for demand capacity payments in Trading Periods h in Capacity Period c as set out in 4.88
Variable Capacity Generation Price	VCGP	h	€/MWh	The variable price for generation capacity payments in Trading Periods h in Capacity Period c
Variable Capacity Payments Weighting Factor	VCPWF	h	Factor	Capacity Payment Weighting Factor for Trading Period h
Variable Market Operator Charge	VMOC	pb	€	The Invoice Market Operator Charge for a Participant p in the relevant Billing Period b in respect of its registered Supplier Units
Variable Market Operator Price	VMOP	y	€	The Variable Market Operator Price for a given Year y
Value of Lost Load	VOLL		€/MWh	Estimate for the value that consumers would place on a unit of non-delivered electricity
Uplift Alpha	α	None	Factor	Uplift Alpha parameter value used in the calculation of Uplift to determine the importance of the cost objective

Name	Term	Subscripts	Units	Description
Uplift Beta	β	None	Factor	Uplift Beta parameter value used in the calculation of Uplift to determine the importance of the profile objective
Uplift Delta	δ	None	Factor	Uplift Delta parameter value used in the calculation of Uplift to constrain the overall cost
Loss of Load Probability	λ	h	Probability	The probability that there will be insufficient available generation capacity to meet demand (calculated using ex-ante data) for each Trading Period h, calculated in accordance with the Function for the Determination of Capacity Payments
Ex-post Loss of Load Probability	φ	h	Probability	The probability that there will be insufficient available generation capacity to meet demand (calculated using ex-post data) for each Trading Period h, calculated in accordance with the Function for the Determination of Capacity Payments
Interim Ex-post Loss of Load Probability	$I\varphi$	h	Probability	The probability that there will be insufficient available generation capacity to meet demand (calculated using ex-post data) for each Trading Period h, calculated in accordance with the Function for the Determination of Capacity Payments

APPENDIX A: STANDARD LETTER OF CREDIT

A.1 This appendix contains a standard template for a Letter of Credit..

MARKET OPERATOR EURO/STERLING IRREVOCABLE STANDBY LETTER OF CREDIT TEMPLATE

Applicant: ……..

Issuing bank: ……..

Advising bank/SEM Bank: …….

Beneficiary: The Market Operator under the SEM Trading and Settlement Code being a joint venture between EirGrid plc and SONI Limited and trading as AIME (the "Beneficiary")

Dear Sirs,

We, the Issuing Bank, hereby issue our irrevocable Standby Letter of Credit No……. by order of …….. (applicant), for a maximum total amount of EUR/Sterling……. (in words……) which expires at our counters on [insert date] subject to extension as described below.

This irrevocable Standby Letter of Credit is available by payment at sight against presentation to the Advising Bank of the following document:

A Beneficiary statement worded as follows:

We, the Market Operator under the SEM Trading and Settlement Code (the "Beneficiary") hereby state that [insert applicant's name] is in default of its financial trading commitments under for the purposes of paragraph 6.33C of the SEM Trading and Settlement Code to which the applicant is a party and as a result we hereby claim ……..[insert amount being claimed] under Standby Letter of Credit number……... issued by ……[insert name of Issuing Bank]. Payment in respect of this claim shall be effected immediately to [insert relevant account details]. We confirm that the signatory(ies) to this statement are empowered to sign and make this claim on behalf of the Beneficiary.

Additional conditions:

1. Partial drawings are allowed.
2. The expiry date of this Standby Letter of Credit will automatically be extended for a period of one calendar year from its current or any future expiry date unless we serve notice by SWIFT to the Advising Bank not less than one calendar month before the current or any future expiry date that this Standby Letter of Credit will not automatically be extended and will expire on its then current expiry

date. The date of transmission of any such SWIFT notice will be deemed to be the date that notice is served.

3. The Beneficiary's statement must be made on original letterhead paper of the Beneficiary and signed on its behalf.

Upon receipt of the signed Beneficiary statement in compliance with the above conditions the Advising Bank will promptly notify us by SWIFT of receipt of such Beneficiary statement and inform us of the relevant details of such Beneficiary statement.

Provided such notice is received by us no later than 14.00 hrs on any weekday on which banks are open for business in Dublin or Belfast, we shall make payment under this Standby Letter of Credit for same day value on that day in accordance with such notice and shall confirm payment by notifying the Advising Bank by SWIFT.

Where we, the Issuing Bank are also the Advising Bank, we may revise the above notification requirements as appropriate provided that this shall in no way affect the obligation on us to make payment under this Standby Letter of Credit.

All opening bank charges are for the account of the applicant.

All advising/paying bank charges are for the account of the applicant.

Upon receipt of credit complying documents we shall cover you as per your instructions.

Except where otherwise expressly stated, this Standby Letter of Credit is subject to Uniform Customs and Practice for Documentary Credits latest version on the date of the issuance of this Standby Letter of Credit [MOST RECENT VERSION TO BE INSERTED].

We the Issuing Bank hereby waive any right to set off against any amounts payable under this Standby Letter of Credit any claims we may have against the Beneficiary.

[GOVERNING LAW AS APPLICABLE]

Yours faithfully,

Issuing bank

……..

……

APPENDIX B: REGISTRATION DATA CATEGORY

B.1 This Appendix B outlines the detailed Data Record requirements for the Data Transactions for Unit Registration and Party Termination by Participants, and the high-level Data Transaction Submission protocols.

B.2 The Data Transactions in the Registration and Termination Data Transaction Category are:

1. Participant and/or Unit Registration
2. Participant and/or Unit Detailed Information Request
3. Participant and/or Unit Detailed Information Registration
4. Participant and/or Unit Finalisation Registration
5. Participant and/or Unit Commencement Notice
6. Participant and/or Unit Deemed Withdrawn Notice
7. Intermediary Nomination
8. Intermediary Revocation
9. Participant and/or Unit Deregistration
10. Interconnector Registration
11. Suspension Notice
12. Termination Notice

B.3 Each Data Record in this Appendix which contains Currency amounts will be in the Participant's designated Currency.

B.4 There are no Default Rules for Participant Registration Data Transactions.

DATA TRANSACTIONS AND THEIR DATA RECORDS

Participant and/or Unit Registration

B.5 The Data Records for Participant and/or Unit Registration are described in Table 2a, and the Submission Protocol in Table 2b.

Table 2a - Participant and/or Unit Registration Data Records

Responsible Party / Applicant as applicable
Reference number
Intermediary (Yes / No) – If yes, for which Party
Unit Type (and sub-category)
Participant Name
Currency Zone
Billing Address
Proposed Effective Date
Trading Site (and other associated Units)

Table 2b - Participant and/or Unit Registration Submission Protocol

Sender	All Parties / Applicant
Recipient	Market Operator
Number of Data Transactions	One per Unit
First Submission time	As available
Last Submission time	Before market participation
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Data validation process	None

Participant and/or Unit Detailed Information Request

B.6 The Data Records for Participant and/or Unit Detailed Information Request are described in Table 3a, and the Submission Protocol in Table 3b.

Table 3a - Participant and/or Unit Detailed Information Request Data Records

Responsible Party / Applicant
Participant Registration number
Unit Type (and sub-category)
Participant Name

Table 3b - Participant and/or Unit Detailed Information Request Submission Protocol

Sender	Market Operator
Recipient	Responsible Party / Applicant
Number of Data Transactions	One per Unit
First Submission time	On receipt of Participant Registration Data Transaction
Last Submission time	10 Working Days after receipt of Participant Notice
Permitted frequency of resubmission	Once
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Data validation process	None

Participant and/or Unit Detailed Information Registration

B.7 The Data Records for Participant and/or Unit Detailed Information Registration are described in Table 4a, and the Submission Protocol in Table 4b.

Table 4a - Participant and/or Unit Detailed Information Registration Data Records

Data Item	Applies to…
Party Name	All Parties
Participant Name	All Participants
Currency Jurisdiction	All Participants
FAQSst (nominal)	All Generator Units
FULuh (nominal)	All Generator Units
ULSuh (nominal)	All Generator Units
DLFuh (nominal)	All Generator Units
RCu (nominal)	All Generator Units
Meter Point Registration Number	All Generator Units
Priority Dispatch	All Generator Units
Generic Settlement Class	All Generator Units
Associated Interconnector	Interconnector Unit
Credit Cover details	All Participants
Supplier Code	All Supplier Units
Proposed Communication Channels	All Units
Trading Site	All Units
Dispatchable Quantity	Demand Side Units

Table 4b - Participant and/or Unit Detailed Information Registration Submission Protocol

Sender	Responsible Party / Applicant
Recipient	Market Operator
Number of Data Transactions	One per Unit, or per change of Generator Unit Classification
First Submission time	On receipt of Participant and Unit Detailed Information Request Data Transaction
Last Submission time	20 Working Days after receipt of Participant and Unit Detailed Information Request Data Transaction
Permitted frequency of resubmission	As available
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Does MO retain a master archive copy of the data?	Yes
Are all data Submissions required	Yes
Data validation process	None

Participant and/or Unit Finalisation Registration

B.8 The Data Records for Participant and/or Unit Finalisation Registration are described in Table 5a, and the Submission Protocol in Table 5b.

Table 5a - Participant and/or Unit Finalisation Registration Data Records

Responsible Party
Participant Registration number
Final Credit Cover details
Final Connection Agreement Details
Any further detail required under Agreed Procedure 1 “Participant and Unit Registration and Deregistration”

Table 5b - Participant and/or Unit Finalisation Registration Submission Protocol

Sender	Responsible Party / Applicant
Recipient	Market Operator
Number of Data Transactions	One per Unit
First Submission time	On receipt of Participant and Unit Detailed Information Request Data Transaction
Last Submission time	20 Working Days after receipt of Participant and Unit Detailed Information Request Data Transaction
Permitted frequency of resubmission	As available
Valid Communication Channels	Type 1 (manual)
Data validation process	None

Participant and/or Unit Commencement Notice

B.9 The Data Records for are described Participant and/or Unit Commencement Notice in Table 6a, and the Submission Protocol in Table 6b.

Table 6a - Participant and/or Unit Commencement Notice Data Records

Responsible Party
Reference number
Commencement Time and Date
Unit Name
Confirmed unit market identification

Table 6b - Participant and/or Unit Commencement Notice Submission Protocol

Sender	Market Operator
Recipient	Responsible Participant
Number of Data Transactions	One per Unit
First Submission time	As available
Last Submission time	Before Market Participation
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Data validation process	None

Participant and/or Unit Deemed Withdrawn Registration

B.10 The Data Records for Participant and/or Unit Deemed Withdrawn Registration are described in Table 7a, and the Submission Protocol in Table 7b.

Table 7a - Participant and/or Unit Deemed Withdrawn Registration Data Records

Responsible Party
Reference number
Unit Name
Reason for Deemed Withdrawal of Request (including Classification change)

Table 7b - Participant and/or Unit Deemed Withdrawn Registration Submission Protocol

Sender	Market Operator
Recipient	Responsible Participant
Number of Data Transactions	One per Unit, or as required for Deemed Withdrawn Classification Change Request
First Submission time	As available
Last Submission time	As available
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual)
Data validation process	None

Intermediary Nomination

B.11 The Data Records for Intermediary Nomination are described in Table 8a, and the Submission Protocol in Table 8b.

Table 8a - Intermediary Nomination Data Records

Responsible Party
Proposed Intermediary
Regulatory Approval
Form of Authority

Table 8b - Intermediary Nomination Submission Protocol

Sender	Responsible Party
Recipient	Market Operator
Number of Data Transactions	One per Intermediary
First Submission time	As available
Last Submission time	As available
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual)
Data validation process	None

Intermediary Revocation

B.12 The Data Records for Intermediary Revocation are described in Table 9a, and the Submission Protocol in Table 9b.

Table 9a - Intermediary Revocation Data Records

Responsible Party
Intermediary
Alternate Party
Regulatory Approval
Form of Authority

Table 9b - Intermediary Revocation Submission Protocol

Sender	Responsible Party
Recipient	Market Operator
Number of Data Transactions	One per Intermediary Nomination
First Submission time	As available
Last Submission time	As available
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual)
Data validation process	None

Participant and/or Unit Deregistration

B.13 The Data Records for Participant and/or Unit Deregistration are described in Table 10a, and the Submission Protocol in Table 10b.

Table 10a - Participant and/or Unit Deregistration Data Records

Participant and/or Unit Deregistration Data Records
Responsible Party
Intermediary (Yes / No)
Date of Deregistration
Affected Participant
Unit

Table 10b - Participant and/or Unit Deregistration Submission Protocol

Sender	Responsible Party
Recipient	Market Operator, System Operators, Distribution System Operators
Number of Data Transactions	One per Participant / Unit
First Submission time	As available
Last Submission time	90 Working Days before the proposed Participant Deregistration Date
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual)
Data validation process	None

Interconnector Registration

B.14 The Data Records for Interconnector Registration are described in Table 11a, and the Submission Protocol in Table 11b.

Table 11a - Interconnector Registration Data Records

Interconnector Registration Data Records
Responsible Party
Aggregate Import Capacity
Aggregate Export Capacity
Participant in respect of the Interconnector Residual Capacity Unit
Participant in respect of the Interconnector Error Unit

Table 11b - Interconnector Registration Submission Protocol

Sender	Responsible Party / Applicant
Recipient	Market Operator, System Operators, Distribution System Operators
Number of Data Transactions	One per Interconnector
First Submission time	As available
Last Submission time	As available
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual)
Data validation process	None

Suspension Notice

B.15 The Data Records for Suspension Notice are described in Table 11c and the Submission Protocol in Table 11d.

Table 11c Suspension Notice Data Records

Responsible Party
Date of Suspension

Table 11d - Suspension Notice Submission Protocol

Sender	Market Operator
Recipient	Responsible Participant
Number of Data Transactions	One per Participant
First Submission time	Within Two Days
Last Submission time	Within Two Days
Permitted frequency of resubmission	None
Valid Communication Channels	Type 1 (manual)
Data validation process	None

Termination Notice

B.16 The Data Records for Termination Notice are described in Table 11e and the Submission Protocol in Table 11f.

Table 11e - Termination Notice Data Records

Responsible Party
Date of Termination

Table 11f - Termination Notice Submission Protocol

Sender	Market Operator
Recipient	Responsible Participant
Number of Data Transactions	One per Participant
First Submission time	Within Two Days
Last Submission time	Within Two Days
Permitted frequency of resubmission	None
Valid Communication Channels	Type 1 (manual)
Data validation process	None

APPENDIX C: OFFER DATA TRANSACTIONS

C.1 This Appendix C outlines the detailed Data Record requirements for the Offer Data Transactions and the relevant high-level Data Transactions Submission protocols.

C.2 The Data Transactions in the Offer Data Transactions Category are:

1. Commercial Offer Data

2. Technical Offer Data

C.3 Each Data Record in this Appendix which contains Currency amounts will be in the Participant's designated Currency.

C.4 Default Rules for Offer Data will comply with the principles in paragraph 3.48 to paragraph 3.57 of the Code. The defaulting rules will be described in Agreed Procedure 4 "Data Transaction Submission and Validation".

DATA TRANSACTION AND ITS DATA RECORDS

Commercial Offer Data Transaction

C.5 The Data Records for Commercial Offer Data Transaction are described in Table 12a, and the Submission Protocol in Table 12b.

Table 12a - Commercial Offer Data Records

Data	Comments	Applies to
Trading Day		All Generator Units, except Variable Price Taker Generator Units and Autonomous Generator Units
Price Quantity Pairs	Minimum of one, maximum of ten, to apply equally to every Trading Period in the Optimisation Time Horizon	Price Maker Generator Units and Predictable Price Taker Generator Units, except Interconnector Units and Pumped Storage Units
Price Quantity Pairs	Minimum of one, maximum of ten pairs for each Trading Period during the Trading Day per Interconnector Unit, where negative Quantities relate to exports from the Pool	Interconnector Units only
Nomination Profile		Predictable Price Taker Generator Units and Generator Units Under Test
Target Reservoir Level at 06:00 D+1		Pumped Storage Units only
No Load Costs		All Price Maker Generator Units and Predictable Price Taker Generator Units, except Interconnector Units, Demand Side Units, Pumped Storage Units and Generator Units Under Test
Start Up Costs	Minimum of one, maximum of three (specifying which applies to each type of start)	All Price Maker Generator Unit and Predictable Price Taker Generator Units, except Interconnector Units, Demand Side Units and Pumped Storage Units
Shut Down Cost	A single shut down cost	Demand Side Units only

Data	Comments	Applies to
Pumped Storage Cycle Efficiency	One value per Trading Day, to apply to all Trading Periods within that Trading Day	Pumped Storage Units only
Target Reservoir Level Percentage	One value per Trading Day	Pumped Storage Units only

Table 12b - Commercial Offer Submission Protocol

Sender	All Participants that have Registered Generator Units that are not all Autonomous Generator Units and/or all Variable Price taker Generator Units
Recipient	Market Operator
Number of Data Transactions	Each non-Autonomous Generator Unit or non-Variable Price Taker Generator Unit for each Trading Day
First Submission time	As available 28 Days in advance of Gate Closure
Last Submission time	Gate Closure
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 2 (human to computer) Type 3 (computer to computer)
Data validation process	Agreed Procedure 4 “Data Transaction Submission and Validation”

Technical Offer Data Transaction

C.6 The Data Records for Technical Offer Data Transaction are described in Table 13a, and the Submission Protocol in Table 13b.

Table 13a - Technical Offer Data Records

Variable	Applies to	Frequency of Submission
Minimum On Time	All Generator Units, except Autonomous Generator Units and Demand Side Units	Evergreen
Minimum Off Time	All Generator Units, except Autonomous Generator Units and Demand Side Units	Evergreen
Synchronous Start Up Time Hot	All Generator Units, except Autonomous Generator Units and Demand Side Units	Evergreen
Synchronous Start Up Time Warm	All Generator Units, except Autonomous Generator Units and Demand Side Units	Evergreen
Synchronous Start Up time Cold	All Generator Units, except Autonomous Generator Units and Demand Side Units	Evergreen
Time to Synchronise	All Generator Units, except Autonomous Generator Units	Evergreen
Ramp up rates and breakpoints, dependent on warmth state	All Generator Units, except Autonomous Generator Units	Evergreen
Block Load Cold	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Block Load Hot	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Block Load Warm	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen

Variable	Applies to	Frequency of Submission
Deload Break Point	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Deloading Rate 1	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Deloading Rate 2	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Dwell Time 1	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Dwell Time 2	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Dwell Time 3	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Dwell Time Trigger Point 1	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Dwell Time Trigger Point 2	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Dwell Time Trigger Point 3	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
End Point of Start Up Period	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Load Up Break Point Cold (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen

Variable	Applies to	Frequency of Submission
Load Up Break Point Cold (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Load Up Break Point Hot (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Load Up Break Point Hot (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Load Up Break Point Warm (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Load Up Break Point Warm (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Loading Rate Cold (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Loading Rate Cold (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Loading Rate Cold (3)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Loading Rate Hot (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Loading Rate Hot (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Loading Rate Hot (3)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen

Variable	Applies to	Frequency of Submission
Loading Rate Warm (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Loading Rate Warm (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Loading Rate Warm (3)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Minimum Generation	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Maximum Generation	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Down Break Point 1	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Down Break Point 2	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Down Break Point 3	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Down Break Point 4	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Down Rate 1	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Down Rate 2	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen

Variable	Applies to	Frequency of Submission
Ramp Down Rate 3	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Down Rate 4	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Down Rate 5	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Up Break Point 1	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Up Break Point 2	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Up Break Point 3	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Up Break Point 4	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Up Rate 1	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Up Rate 2	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Up Rate 3	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Ramp Up Rate 4	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen

Variable	Applies to	Frequency of Submission
Ramp Up Rate 5	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Cold (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Cold (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Trigger Point Cold (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Trigger Point Cold (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Hot (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Hot (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Trigger Point Hot (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Trigger Point Hot (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Warm (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Warm (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen

Variable	Applies to	Frequency of Submission
Soak Time Trigger Point Warm (1)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Soak Time Trigger Point Warm (2)	All Generator Units except Autonomous Generator Units and Demand Side Units	Evergreen
Hot Cooling Boundary	All Generator Units except Autonomous Generator Units and Demand Side Units	
Warm Cooling Boundary	All Generator Units except Autonomous Generator Units and Demand Side Units	
Under Test Start Date	Generator Units Under Test only	As required, at least 5 Working Days prior to the Under Test Start Date
Under Test End Date	Generator Units Under Test only	As required, at least 5 Working Days prior to the Under Test Start Date
Forecast Availability Profile for each Trading Period in the Optimisation Time Horizon	All Generator Units, except Autonomous Generator Units	Each Trading Day
Forecast Minimum Output Profile for each Trading Period in the Optimisation Time Horizon	All Generator Units, except Autonomous Generator Units	Each Trading Day
Forecast Minimum Stable Generation Profile for each Trading Period in the Optimisation Time Horizon	All Generator Units, except Autonomous Generator Units	Each Trading Day
Nomination Profile	Variable Price Taker Generator Units only	Each Trading Day
Maximum Reservoir Capacity	Pumped Storage Units only	Evergreen
Minimum Reservoir Capacity	Pumped Storage Units only	Evergreen
Pumping capacity	Pumped Storage Units only	Evergreen

Variable	Applies to	Frequency of Submission
(other relevant technical parameters)	All Generator Units except Autonomous Generator Units	Evergreen
Energy Limit	Energy Limited Generator Units only	Evergreen, but no more than one value for each Trading Day
Energy Limit Factor	Energy Limited Generator Units only	Evergreen, but no more than one value for each Trading Day
Energy Limit Start	Energy Limited Generator Units only	Evergreen, to be submitted according to the definition in the Glossary
Energy Limit Stop	Energy Limited Generator Units only	Evergreen, to be submitted according to the definition in the Glossary
Max Ramp Down Rate	Demand Side Units only	Evergreen
Max Ramp Up Rate	Demand Side Units only	Evergreen
Minimum Down Time	Demand Side Units only	Evergreen
Maximum Down Time	Demand Side Units only	Evergreen
Aggregate Ramp Rate	Interconnector Administrator only	Each Trading Day
Interconnector Unit Capacity Holding Data	Interconnector Administrator only	Each Trading Day
Maximum Interconnector Unit Import Capacity	Interconnector Units only	Each Trading Day
Maximum Interconnector Unit Export Capacity	Interconnector Units only	Each Trading Day
Short Term Maximisation Capability	All Generator Units except Demand Side Units, Autonomous Generator Units, Interconnector Units, Interconnector Residual Capacity Units, or Interconnector Error Units	Evergreen, but no more than one value for each Trading Day

Table 13b - Technical Offer Submission Protocol

Sender	All Participants that have Registered Generator Units that are not all Autonomous Generator Units
Recipient	Market Operator
Number of Data Transactions	Each non-Autonomous Generator Unit for each Trading Day
First Submission time	As available 28 Days in advance of Gate Closure
Last Submission time	Gate Closure
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 2 (human to computer) Type 3 (computer to computer)
Data validation process	Agreed Procedure 4 “Data Transaction Submission and Validation”

APPENDIX D: MARKET OPERATOR SYSTEM DATA TRANSACTIONS

D.1 This Appendix D outlines the detailed Data Record requirements for the Data Transactions for the Market Operator System Data Transactions, and the relevant high-level Data Transaction Submission protocols.

D.2 The Data Transactions in this Category are:

1. System Operators' Participant and/or Unit Registration
2. System Operators' Participant and/or Unit Detailed Information Registration
3. System Operators' Registration and/or Unit Commencement Notice
4. System Operators' Participant and/or Unit Deregistration
5. System Operators' Interconnector Registration
6. System Operators' Technical Offer Data
7. System Operators' Commercial Offer Data
8. Interconnector Unit Nomination Modifications

D.3 Each Data Record in this Appendix which contains Currency amounts will be in the Participant's designated Currency.

D.4 There are no Default Rules for Market Operator System Data Transactions.

DATA TRANSACTION AND ITS DATA RECORDS

Various Market Operator System Data Transactions

D.5 The Data Records for System Operators' Participant and/or Unit Registration, System Operators' Participant and/or Unit Detailed Information Registration, System Operators' Registration and/or Unit Commencement Notice, System Operators' Participant and/or Unit Deregistration, and/or each System Operators' Interconnector Registration are described in Table 14a, and the Submission Protocol in Table 14b.

Table 14a - Various Market Operator System Data Transactions Data Records

Data Transaction	Identical to…
System Operators' Participant and/or Unit Registration	Table 2a
System Operators' Participant and/or Unit Detailed Information Registration	Table 4a
System Operators' Registration and/or Unit Commencement Notice	Table 6a
System Operators' Participant and/or Unit Deregistration	Table 10a
System Operators' Interconnector Registration	Table 11a

Table 14b - Various Market Operator System Data Transactions Submission Protocol

Sender	Market Operator
Recipient	System Operators
Number of Data Transactions	One per Unit, or per change of Generator Unit Classification
First Submission time	On Submission of Relevant Data Transaction
Last Submission time	By 13:00, the Day before the Trading Day for Operational Units
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Data validation process	None

System Operators' Commercial Offer Data Transactions and System Operators' Technical Offer Data Transactions

D.6 The Data Records for System Operators' Commercial Offer Data Transactions and System Operators' Technical Offer Data Transactions are described in Table 15a, and the Submission Protocol in Table 15b.

Table 15a - System Operators' Commercial Offer Data Transactions and System Operators' Technical Offer Data Transactions

Data Transaction	Identical to…
System Operators' Commercial Offer Data	Table 12a
System Operators' Technical Offer Data	Table 13a

Table 15b - System Operators' Commercial Offer Data Transactions and System Operators' Technical Offer Data Transactions Submission Protocol

Sender	Market Operator
Recipient	System Operators
Number of Data Transactions	One per Unit, or per change of Generator Unit Classification per Trading Period
First Submission time	Every Day, after Gate Closure
Last Submission time	Before 30 minutes after Gate Closure D-1
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Data validation process	None

Interconnector Unit Nomination Modification Data Records

D.7 The Data Records for Interconnector Unit Nomination Modification Data Transaction are described in Table 16a, and the Submission Protocol in Table 16b.

Table 16a - Interconnector Unit Nomination Modification Data Records

Trading Day
Half-hourly Interconnector Modifications totalled across Interconnector Unit for Trading Day

Table 16b - Interconnector Unit Nomination Modification Submission Protocol

Sender	Market Operator
Recipient	System Operators
Number of Data Transactions	One per Interconnector Unit, or per change of Generator Unit Classification per Trading Period
First Submission time	Every Day, after Gate Closure
Last Submission time	Before 2 hours after Gate Closure D-1, or as required in event of technical change to Interconnector capability
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Data validation process	None

APPENDIX E: SYSTEM OPERATOR AND INTERCONNECTOR ADMINISTRATOR MARKET DATA TRANSACTIONS

E.1 This Appendix E outlines the detailed Data Record requirements for the Data Transactions for the System Operators and Interconnector Administrator Market Data Transactions, and the relevant high-level Data Transaction Submission protocols.

E.2 The System Operators and Interconnector Administrator Market Data Transactions Category contains the following Data Transactions:

1. System Parameters
2. Interconnector Available Transfer Capacity
3. Generator Unit Technical Characteristics
4. System Characteristics
5. Limited Energy Generator Unit Technical Characteristics
6. Dispatch Instruction and Interconnector Residual Capacity
7. Annual Load Forecast Data
8. Monthly Load Forecast Data
9. Four Day Load Forecast Data
10. Aggregated Wind Generation Forecast Data
11. Interconnector Unit Capacity Holding
12. Active Interconnector Unit Capacity Holding

E.3 Each Data Record in this Appendix which contains Currency amounts will be in the Participant's designated Currency.

E.4 There are no Default Rules for the System Operators and Interconnector Administrator Market Data Transactions.

DATA TRANSACTION AND ITS DATA RECORDS

System Parameters Data Transaction

E.5 The Data Records for the System Parameters Data Transaction are described in Table 17a, and the Submission Protocol in Tables 17b.

Table 17a - System Parameters Data Transaction Data Records

Transmission Loss Adjustment Factors, TLAFuh

Table 17b - System Parameters Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	Unlimited
First Submission time	As available
Last Submission time	Four Months before start of Year
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 3 (computer to computer)
Process for data validation	None

Interconnector Available Transfer Capacity Data Transaction

E.6 The Data Records for the Interconnector Available Transfer Capacity Data Transaction are described in Table 18a, and the Submission Protocol in Table 18b.

Table 18a - Interconnector Available Transfer Capacity Data Transaction Data Records

Maximum Import Available Transfer Capacity for each Trading Period in Trading Day t
Maximum Export Available Transfer Capacity for each Trading Period in Trading Day t

Table 18b - Interconnector Available Transfer Capacity Data Transaction Submission Protocol

Sender	Relevant System Operator
Recipient	Market Operator
Number of Data Transactions	Unlimited
First Submission time	As available
Last Submission time	No later than 09:30 on D-2
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 2 (human to computer) Type 3 (computer to computer) default
Process for data validation	None

Generator Unit Technical Characteristics Data Transaction

E.7 The Data Records for the Generator Unit Technical Characteristics Data Transaction are described in Table 19a and the Submission Protocol in Table 19b.

Table 19a - Generator Unit Technical Characteristics Data Transaction Data Records

Trading Day (all variables below are for all Trading Periods in this Trading Day)
Query Flag – indicating if the data in this Data Transaction is subject to a Data Query
Estimate of any reduction in demand as a consequence of Demand Control, i.e. load shedding
Ex-Post Loss of Load Probability, Φh
Minute-by-minute values of availability, by Unit ID
Minute-by-minute values of minimum stable generation by Unit ID
Minute-by-minute values of minimum output, by Unit ID

Table 19b - Generator Unit Technical Characteristics Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	Each Generator Unit, each Trading Day
First Submission time	After end of Trading Day
Last Submission time	Before 14:00 the Day after the Trading Day in question As required after Data Query
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Process for data validation	None

System Characteristics Data Transaction

E.7A The Data Records for the System Technical Characteristics Data Transaction are described in Table 19c and the Submission Protocol in Table 19d.

Table 19c - System Characteristics Data Transaction Data Records

Average System Frequency in Trading Period h, AVGFRQh
Nominal System Frequency in Trading Period h, NORFRQh

Table 19d - System Characteristics Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	By Trading Day and Trading Period
First Submission time	After end of Trading Day
Last Submission time	Before 20:00 on the Day after the Trading Day
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Process for data validation	None

Energy Limited Generator Unit Technical Characteristics Data Transaction

E.7B The Data Records for the Energy Limited Generator Unit Technical Characteristics Data Transaction are described in Table 19e and the Submission Protocol in Table 19f.

Table 19e - Energy Limited Generator Unit Technical Characteristics Data Transaction Data Records

Re-declared value of Energy Limit, SELut

Table 19f - Energy Limited Generator Unit Technical Characteristics Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	Each Energy Limited Generator Unit, each Trading Day
First Submission time	After end of Trading Day
Last Submission time	Before 18:00 on Trading Day
Permitted frequency of resubmission	Unlimited

Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Process for data validation	None

Dispatch Instruction and Interconnector Residual Capacity Data Transaction

E.8 The Data Records for the Dispatch Instruction and Interconnector Residual Capacity Data Transaction are described in Table 20a, and the Submission Protocol in Table 20b.

Table 20a - Dispatch Instruction and Interconnector Residual Capacity Data Transaction Data Records

Participant ID (Not submitted for SO Interconnector Trades)
Unit ID
Day
Trading Period
Query Flag – indicating if the data in this Data Transaction is subject to a Data Query
Dispatch Instruction and Ramp Rate associated with that Dispatch Instruction data per Unit ID
Time and Occurrence of any Maximisation Instructions, by Unit
SO Interconnector Import Price (SIIPlh)
SO Interconnector Export Price (SIEPlh)
SO Interconnector Import Quantity (SIIQih)
SO Interconnector Export Quantity (SIEQlh)

Table 20b - Dispatch Instruction and Interconnector Residual Capacity Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	By Trading Day and Trading Period
First Submission time	After end of Trading Day
Last Submission time	Before 14:00 the Day after the Trading Day in question As required after Data Query

Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Process for data validation	None

Annual Load Forecast Data Transaction

E.9 The Data Records for the Annual Load Forecast Data Transaction are described in Table 21a, and the Submission Protocol in Table 21b.

Table 21a - Annual Load Forecast Data Transaction Data Records

Year
Representative load duration curves for high, medium and low demand scenarios for Year + 1
Jurisdiction
Representative series of half-hourly average MW daily load profiles, representing Summer Night Valley, Winter Peak, and a statistical selection of other daily load profiles

Table 21b - Annual Load Forecast Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	Annually
First Submission time	As available
Last Submission time	Four Months before start of Year
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Process for data validation	None

Monthly Load Forecast Data Transaction

E.10 The Data Records for the Monthly Load Forecast Data Transaction are described in Table 22a, and the Submission Protocol in Table 22b.

Table 22a - Monthly Load Forecast Data Transaction Data Records

Month (Indicate by Trading Day, or Trading Period for following Month)
Jurisdiction
Representative load duration curves for high, medium and low demand scenarios for the Month and the following twelve Months
Representative series of half-hourly average MW daily load profiles, representing Weekday, Weekend, and a statistical selection of other daily load profiles

Table 22b - Monthly Load Forecast Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	Monthly
First Submission time	Four Days before the start of Month
Last Submission time	One Day before the start of Month
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Process for data validation	None

Four Day Load Forecast Data Transaction

E.11 The Data Records for the Four Day Load Forecast Data Transaction are described in Table 23a, and the Submission Protocol in Table 23b.

Table 23a - Four Day Load Forecast Data Transaction Data Records

Four Day Load Forecast Data Records
Dates (Indicate by Trading Day and Trading Period for the following 4 Days)
Jurisdiction
Load Forecast for each Trading Period over the following four Trading Days, with statistical confidence intervals

Table 23b - Four Day Load Forecast Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	Daily
First Submission time	As available
Last Submission time	Before 09:30, D-1
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Process for data validation	None

Aggregated Wind Generation Forecast Data Transaction

E.12 The Data Records for the Aggregated Wind Generation Forecast Data Transaction are described in Table 24a, and the Submission Protocol in Table 24b.

Table 24a - Aggregated Wind Generation Forecast Data Transaction Data Records

Dates and Trading Periods
Jurisdiction
Unit
Aggregated Wind Generation Forecast for each Trading Period over the following two Trading Days, with statistical confidence intervals

Table 24b - Aggregated Wind Generation Forecast Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	Daily, as available
First Submission time	As updated
Last Submission time	As updated
Permitted frequency of resubmission	Unlimited, updated 6-hourly
Valid Communication Channels	Type 1 (manual) Type 2 (computer to computer) default
Process for data validation	None

Interconnector Unit Capacity Holding Data Transaction

E.13 The Data Records for the Interconnector Unit Capacity Holding Data Transaction are described in Table 25a, and the Submission Protocol in Table 25b.

Table 25a - Interconnector Unit Capacity Holding Data Transaction Data Records

Trading Day or Trading Periods
Interconnector
Interconnector Unit
Held capacity on the Interconnector on a half-hourly basis

Table 25b - Interconnector Unit Capacity Holding Data Transaction Submission Protocol

Sender	Interconnector Administrator
Recipient	Market Operator
Number of Data Transactions	Daily
First Submission time	After end of all appropriate Interconnector Unit Capacity Holding
Last Submission time	17:30 D-2
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Process for data validation	None

Active Interconnector Unit Capacity Holding Data Transaction

E.14 The Data Records for the Active Interconnector Unit Capacity Holding Data Transaction are described in Table 26a, and the Submission Protocol in Table 26b.

Table 26a - Active Interconnector Unit Capacity Holding Data Transaction Data Records

Trading Day and Trading Periods
Interconnector
Interconnector Unit
Held capacity on the Interconnector on a half-hourly basis scaled to ATC

Table 26b - Active Interconnector Unit Capacity Holding Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Interconnector Administrator and individual Interconnector Users
Number of Data Transactions	One per Interconnector Unit
First Submission time	18:00 D-2
Last Submission time	19:00 D-2
Permitted frequency of resubmission	Once
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer)
Process for data validation	None

APPENDIX F: SETTLEMENT DATA TRANSACTIONS

F.1 This Appendix F outlines the detailed Data Record requirements for the Data Transactions for the Settlement Data Transactions, and the relevant high-level Data Transaction Submission protocols.

F.2 The Settlement Data Transactions Category contains the following Data Transactions:

1. Generic Settlement Statement
2. Generator Unit Energy Settlement Statement
3. Generator Unit Capacity Settlement Statement
4. Supplier Unit Energy Settlement Statement
5. Supplier Unit Capacity Settlement Statement
6. Supplier Unit Market Operator Charges Settlement Statement
7. Participant Billing Period Currency Cost Recovery Settlement Statement
8. Participant Capacity Period Currency Cost Recovery Settlement Statement
9. Generator Unit Self Billing Invoices
10. Supplier Unit Invoices
11. System Operators' Settlement Statement
12. Warning Notice

F.3 Each Settlement requires two Data Transactions: a Generic Settlement Data Transaction in Table 27a, and a further Settlement Data Transaction depending on if the Settlement Data Transaction is for a Generator Unit, a Supplier Unit, or a Participant and Relevant System Operator. Settlement Data Transactions are designed to be suitable for both Energy and Capacity Payment.

F.4 Each Data Record in this Appendix which contains Currency amounts will be in the Participant's designated Currency.

F.5 There are no Default Rules for Settlement Data Transactions.

DATA TRANSACTION AND ITS DATA RECORDS

Generic Settlement Statement Data Transaction

F.6 The Data Records for the Generic Settlement Statement Data Transaction are described in Table 27a, and the Submission Protocol in Table 27b. All Settlement Statements require the inclusion of these Data Records. This applies to Preliminary Settlement Statements, Initial Settlement Statements and Re-Run Settlement Statements. All Settlement Statements other than Preliminary Settlement Statements will display data for the current Data Transaction as well as for the previous Data Transaction.

Table 27a - Generic Settlement Statement Data Transaction Data Records

Unique ID for settlement run
Preliminary or Initial or re-run Settlement Flag
Calculation (sequential number of recalculations)
Settlement Day (if applicable)
Trading Period (if applicable)
Billing period/capacity period
Participant ID
Unit ID(s) (if applicable)
Product/variable name (Energy Payment or Charge, Capacity Payment or Charge, Market Operator Charge, Billing Period Currency Cost Recovery Charge or Capacity Currency Cost Recovery Charge)
Settlement Amount for the given product
Amount Estimated (flag)
Rerun (ID from previous run, otherwise blank)

Table 27b - Generic Settlement Statement Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	One Working Day after end of the Settlement Day/Capacity Period
Last Submission time	13 Months plus five Working Days after end of the Settlement Day/Capacity Period
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Generator Unit Energy Statement Data Transaction

F.7 The Data Records for the Generator Unit Energy Statement Data Transaction are described in Table 28a, and the Submission Protocol in Table 28b.

Table 28a - Generator Unit Energy Statement Data Transaction Data Records

Generator Unit Energy Settlement Statement Data Records
Total payment each Settlement Day in Settlement Period (will be filled in for the first line item of the Settlement Day, otherwise blank)
Energy Payment for the Generator Unit
Constraint Payments for the Generator Unit
Uninstructed Imbalance Payments for the Generator Unit
Settlement Reallocation Energy Amount in respect of a Settlement Reallocation Agreement
Charge for Unsecured Bad Energy Debt
Charge for Unsecured Bad Capacity Debt
Metered Generation
Actual Availability
Eligible Availability
Market Schedule Quantity
Dispatch Quantity
System Marginal Price
Unsecured Bad Energy Debt
Unsecured Bad Capacity Debt
Amount from the previous run (one for each item over)
Re-run flag (to indicate if this line item has been rerun or not)
Data status (indication if some of the data is estimated, under administered settlement etc)

Table 28b - Generator Unit Energy Statement Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	One Working Day after end of the Settlement Day
Last Submission time	13 Months plus five Working Days after end of the Settlement Day
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Generator Unit Capacity Settlement Statement Data Transaction

F.8 The Data Records for the Generator Unit Capacity Settlement Statement Data Transaction are described in Table 29a, and the Submission Protocol in Table 29b.

Table 29a - Generator Unit Capacity Settlement Statement Data Transaction Data Records

Total payment each Settlement Day for Capacity Period
Capacity payments for each Trading Period
Charge for Unsecured Bad Energy Debt
Charge for Unsecured Bad Capacity Debt
Settlement Reallocation Capacity Amount in respect of a Settlement Reallocation Agreement
Eligible Availability
Unsecured Bad Energy Debt
Unsecured Bad Capacity Debt
Amount from the previous run (one for each item over)
Re-run flag (to indicate if this line item has been rerun or not)
Data status (indication if some of the data is estimated, under administered settlement etc)

Table 29b - Generator Unit Capacity Settlement Statement Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	One Working Day after end of Capacity Period
Last Submission time	13 Months plus five Working Days after end of the Capacity Period
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Supplier Unit Energy Settlement Statement Data Transaction

F.9 The Data Records for the Supplier Unit Energy Settlement Statement Data Transaction are described in Table 30a, and the Submission Protocol in Table 30b.

Table 30a - Supplier Unit Energy Settlement Statement Data Transaction Data Records

Total charge each Settlement Day in Billing Period
Energy Charge for Supplier Unit
Imperfections Charge for Supplier Unit
Settlement Reallocation Energy Amount in respect of a Settlement Reallocation Agreement
Metered Demand
Net Demand
System Marginal Price
Amount from the previous run (one for each item over)
Re-run flag (to indicate if this line item has been rerun or not)
Data status (indication if some of the data is estimated, under administered settlement etc)

Table 30b - Supplier Unit Energy Settlement Statement Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	One Working Day after end of the Settlement Day
Last Submission time	13 Months plus five Working Days after end of the Settlement Day
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Supplier Unit Capacity Statement Data Transaction

F.10 The Data Records for the Supplier Unit Capacity Statement Data Transaction are described in Table 31a, and the Submission Protocol in Table 31b.

Table 31a - Supplier Unit Capacity Statement Data Transaction Data Records

Total Charge each Settlement Day for Capacity Period
Capacity charges for each Trading Period
Settlement Reallocation Capacity Amount in respect of a Settlement Reallocation Agreement
Net Demand
Amount from the previous run (one for each item over)
Re-run flag (to indicate if this line item has been rerun or not)
Data status (indication if some of the data is estimated, under administered settlement etc)

Table 31b - Supplier Unit Capacity Statement Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	One Working Day after end of Capacity Period
Last Submission time	13 plus five Working Days after end of the Capacity Period
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Supplier Unit Market Operator Charge Statement Data Transaction

F.10A The Data Records for the Supplier Unit Market Operator Charge Statement Data Transaction are described in Table 31c, and the Submission Protocol in Table 31d.

Table 31c - Supplier Unit Market Operator Charge Statement Data Transaction Data Records

Total Charge each Settlement Day for Billing Period
Market Operator Variable Charge
Net Demand
Amount from the previous run (one for each item over)
Re-run flag (to indicate if this line item has been rerun or not)
Data status (indication if some of the data is estimated, under administered settlement etc)

Table 31d - Supplier Unit Market Operator Charge Statement Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	One Working Day after end of Billing Period
Last Submission time	13 Months plus five Working Days after end of the Billing Period
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Billing Period Currency Cost Charge Recovery Statement Data Transaction

F.10B The Data Records for the Billing Period Currency Cost Charge Recovery Statement Data Transaction are described in Table 31e, and the Submission Protocol in Table 31f.

Table 31e - Billing Period Currency Cost Charge Recovery Statement Data Transaction Data Records

Total Charge each Settlement Day for Billing Period
Billing Period Currency Cost (or benefit)
Amount from the previous run (one for each item over)
Re-run flag (to indicate if this line item has been rerun or not)
Data status (indication if some of the data is estimated, under administered settlement etc)

Table 31f - Billing Period Currency Cost Charge Recovery Statement Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	One Working Day after end of Billing Period
Last Submission time	13 Months plus five Working Days after end of the Billing Period
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Capacity Period Currency Cost Charge Recovery Statement Data Transaction

F.10C The Data Records for the Capacity Period Currency Cost Charge Recovery Statement Data Transaction are described in Table 31g and the Submission Protocol in Table 31h.

Table 31g - Capacity Period Currency Cost Charge Recovery Statement Data Transaction Data Records

Total Charge each Settlement Day for Capacity Period
Capacity Period Currency Cost (or benefit)
Amount from the previous run (one for each item over)
Re-run flag (to indicate if this line item has been rerun or not)
Data status (indication if some of the data is estimated, under administered settlement etc)

Table 31h - Capacity Period Currency Cost Charge Recovery Statement Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	One Working Day after end of Capacity Period
Last Submission time	13 Months plus five Working Days after end of the Capacity Period
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Generator Unit Self Billing Invoice Data Transaction

F.11 The Data Records for the Generator Unit Self Billing Invoice Data Transaction are described in Table 32a, and the Submission Protocol in Table 32b

Table 32a - Generator Unit Self Billing Invoice Data Transaction Data Records

Billing or Capacity Period
Payment amount per Generator Unit for relevant billing/capacity period
Currency Cost
Total payment amount

Table 32b - Generator Unit Self Billing Invoice Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	Nine Working Days after end of Billing/Capacity Period or Settlement Re-run
Last Submission time	Nine Working Days after end of Billing/Capacity Period or Settlement Re-run
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Supplier Unit Invoice Data Transaction

F.12 The Data Records for the Supplier Unit Invoice Data Transaction are described in Table 33a, and the Submission Protocol in Table 33b.

Table 33a - Supplier Unit Invoice Data Transaction Data Records

Billing or Capacity Period
Invoice amount per Supplier Unit for relevant billing/capacity period
Currency Cost
Total invoice amount

Table 33b - Supplier Unit Invoice Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	4 (timetabled)
First Submission time	Nine Working Days after end of Billing/Capacity Period or Settlement Re-run
Last Submission time	Nine Working Days after end of Billing/Capacity Period or Settlement Re-run
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

System Operators' Settlement Statement Data Transaction

F.13 The Data Records for the System Operators' Settlement Statement Data Transaction are described in Table 34a, and the Submission Protocol in Table 34b.

Table 34a - System Operators' Settlement Statement Data Transaction Data Records

Total payments to Generator Units (DAYPDd) for day
Total charge on Supplier Units (DAYCDd) for day
System Operators Charge (SOCd) for day

Table 34b - System Operators' Settlement Statement Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants/SO
Number of Data Transactions	4 (timetabled)
First Submission time	One Working Day after end of Billing/Capacity Period
Last Submission time	13 plus five Working Days after end of the Billing/Capacity Period
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Data Queries, Settlement Queries, Settlement Disputes

Warning Notice

F.14 The Data Records for the Warning Notice are described in Table 34c, and the Submission Protocol in Table 34d.

Table 34a - Warning Notice Data Records

Table 34b - Warning Notice Submission Protocol

Sender	Market Operator
Recipient	Relevant Participant
Number of Data Transactions	One per Working Day as required
First Submission time	On relevant Working Day
Last Submission time	On relevant Working Day
Permitted frequency of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	None

APPENDIX G: METER DATA TRANSACTIONS

G.1 The total set of Metered Data Transactions are described in Agreed Procedure 16.

G.2 The timing of all Metered Data Transactions is described in Agreed Procedure 16

DATA TRANSACTION AND ITS DATA RECORDS

G.3 Tables are deliberately blank.

Table 35a

Table 35b

G.4 Tables are deliberately blank.

Table 36a

Table 36b

G.5 Tables are deliberately blank.

Table 37a

Table 37b

G.6 Tables are deliberately blank..

Table 38a

Table 38b

G.7 Tables are deliberately blank.

Table 39a

Table 39b

G.8 Tables are deliberately blank.

Table 40a

Table 40b

G.9 Tables are deliberately blank.

Table 41a

Table 41b

APPENDIX H: CREDIT DATA TRANSACTIONS

H.1 This Appendix H outlines the detailed Data Record requirements for the Data Transactions for Credit Data Transactions, and the relevant high-level Data Transaction Submission protocols..

H.2 Each Data Record in this Appendix which contains currency amounts will be in the Participant's designated Currency.

H.3 There are no Default Rules for Credit Data Transactions.

DATA TRANSACTION AND ITS DATA RECORDS

Credit Data Transaction

H.4 The Data Records for the Credit Data Transaction are described in Table 42a, and the Submission Protocol in Table 42b.

Table 42a - Credit Data Transaction Data Records

Settlement Day
Unique ID
Participant ID
Unit ID(s)
Required Credit Cover Charges for energy in respect of Supplier Units
Required Credit Cover for Imperfection Charges in respect of Supplier Units
Required Credit Cover for Capacity Recovery Charges in respect of Supplier Units
Required Credit Cover for the MO's Operating Cost Recovery Charge in respect of Supplier Units
Fixed Credit Requirement for Participants in respect of their Supplier Units
Required Credit Cover Charges for energy in respect of Generator Units
Required Credit Cover Charges for Capacity Payments in respect of Generator Units
Required Credit Cover Charges for Constraint Payments in respect of Generator Units
Required Credit Cover Charges for Uninstructed Imbalances in respect of Generator Units
Fixed Credit Requirement for Participants in respect of their Generator Units
Total Credit Cover requirement
Posted Credit Cover

Table 42b - Credit Data Transaction Submission Protocol

Sender	Market Operator
Recipient	Participants
Number of Data Transactions	1
First Submission time	As appropriate
Last Submission time	17:00 each Settlement Day
Permitted number of resubmissions	None
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	None

APPENDIX I: SETTLEMENT REALLOCATION DATA TRANSACTIONS

I.1 This Appendix I outlines the detailed Data Record requirements for the Data Transactions for Settlement Reallocation Notice Data Transactions, and the relevant high-level Data Transaction Submission protocols.

I.2 Data Records in this Appendix that contain currency amounts will be in the Participant's designated Currency.

I.3 There are no Default Rules for Settlement Reallocation Notice Data Transactions.

DATA TRANSACTION AND ITS DATA RECORDS

Settlement Reallocation Notice Data Transaction

I.4 The Data Records for the Settlement Reallocation Notice Data Transaction are described in Table 43a, and the Submission Protocols in Table 43b. Note that the database of settlement reallocation contracts will be held by the Market Operator and is outside the scope of the Trading and Settlement Code.

Table 43a - Settlement Reallocation Notice Data Transaction Data Records

Settlement Reallocation Debit Participant ID
Settlement Reallocation Credit Participant ID
Agreement contract ID
Settlement reallocation amount per Trading Period

Table 43b - Settlement Reallocation Notice Data Transaction Submission Protocol

Sender	Debited Participants
Recipient	Market Operator
Number of Data Transactions	1 per Billing Period up to 28 Days before the Settlement Day of the nominated Settlement Period
First Submission time	Up to one Working Day before the issue of the Invoice on which the reallocation is to be included (Billing Period/Capacity Period plus 4 Working Days). **Cancellation** Cancellation by the Debited Participant must be lodged two Workings Days after the completion of the Billing or Capacity Period relevant to the Settlement Reallocation Agreement. Cancellation by the Market Operator can be done at all times (as per the provisions in the Code.
Last Submission time	
Permitted number of resubmissions	Unlimited
Valid Communication Channels	Type 1 (manual) Type 2 (human to computer) Type 3 (computer to computer)
Process for data validation	Handled in settlement reallocation system outside [SEM]

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APPENDIX J: OTHER COMMUNICATIONS

J.1 This Appendix J outlines the detailed Data Record requirements for miscellaneous Data Transactions under the Code not related Notices of Dispute or Emergency Notifications.

J.2 The Other Communications Category contains the following Data Transactions:

1. Generator Unit Under Test Notice
2. Maintenance Schedule
3. Modification Proposal Notice

J.3 Data Records in this Appendix that contain currency amounts will be in the Participant's designated Currency.

J.4 Default Rules, if any, are described in the Protocol for each Data Transaction.

DATA TRANSACTION AND ITS DATA RECORDS

Generator Unit Under Test Notice

J.5 The Data Records for the Generator Unit Under Test Notice Category are described in Table 44a, and the Submission Protocol in Table 44b.

Table 44a - Generator Unit Under Test Notice Data Records

Generator Unit
Date of commencement of test
Date of end of test

Table 44b - Generator Unit Under Test Notice Submission Protocol

Sender	Participant
Recipient	Market Operator
Number of Data Transactions	As required, one per Generator Unit
First Submission time	As available
Last Submission time	At least 5 Days in advance of the start date if commencing test At least 1 Day in advance of the end date if ending test
Permitted numbers of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual)
Process for data validation	None

Maintenance Schedule Data Transaction

J.6 The Data Records for the Maintenance Schedule Data Transaction are described in Table 45a, and the Submission Protocol in Table 45b.

Table 45a - Maintenance Schedule Data Transaction Data Records

Generator Outage Schedule (for the next two months)
Transmission Outage Schedule (for the next two months)

Table 45b - Maintenance Schedule Data Transaction Submission Protocol

Sender	System Operators
Recipient	Market Operator
Number of Data Transactions	Monthly as available, and as updated
First Submission time	As available
Last Submission time	Two Working Days before the start of each Month
Permitted numbers of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual) Type 3 (computer to computer) default
Process for data validation	None

Modification Proposal Notice Data Transaction

J.7 The Data Records for the Modification Proposal Notice Data Transaction are described in Table 46a, and the Submission Protocol in Table 46b.

Table 46a - Modification Proposal Notice Data Transaction Data Records

Proposing Person
Date of Proposal
Old Text
New Text
Rationale for change, with reference to Code Objectives

Table 46b - Modification Proposal Notice Data Transaction Submission Protocol

Sender	Proposing Person
Recipient	Market Modifications Committee and Market Operator
Number of Data Transactions	As required, one per Modification Proposal
First Submission time	As available
Last Submission time	Not applicable
Permitted numbers of resubmission	Unlimited
Valid Communication Channels	Type 1 (manual)
Process for data validation	None

APPENDIX K: DATA PUBLICATION

K.1 A list of data items and their timing of publication is contained in the following Table 47. Procedures around the updating of Publication and the method of Publication are contained in Agreed Procedure 6 "Data Publication".

Table 47 – Data publication list part 1: Updated periodically as required

Time	Item / Data Record	Term	Subscript
Periodically as required			
Within two Days of Modification	The Code and Agreed Procedures	--	--
As updated (at least within two Days of receipt of new proposals)	Modification Proposal Notice Data Transaction (Appendix J)		
As soon as practical after the Proposal Notice	Consultation on Proposal Notice		
As soon as practical but at least within two Days of the relevant Meeting	Responses to Consultation on Proposal Notice		
As soon as practical but at least within eight weeks of the Proposal Notice	Further Information on Proposal Notice		
As soon as practical but at least within four weeks of Proposal Notice or four weeks after the end of the Notice consultation period	Final Modification Recommendation		
As updated (at least within two Days of receipt of decision)	Regulatory Authority decision on Final Modification Recommendation		
As updated (within two Days of application)	Participant and/or Unit Registration Data Transaction (Appendix B)		
As updated (within two Days of a successful application)	Registration and / or Unit commencement notice (Appendix B)		
Within twenty Days of successful application (including a change a Generator Unit's Classification)	Participant and Unit Detailed Information Registration Data Transaction (Appendix B)		
As updated (within two Days of a successful application)	List of Registered Generator Units and Supplier Units		
As updated (at least within two Days of Issue)	Publication of Suspension Notice Data Transaction (Appendix B)		
As updated (at least within two Days of Issue)	Publication of Termination Notice Data Transaction (Appendix B)		
As updated	Generator Unit Under Test Notice Data Transaction (Appendix J)		
As updated	Generic Security Guidelines for Participants Isolated Market Systems		
As updated	Proposed Market Operator Isolated Market System Testing Schedule		
On Demand	Residual Demand Report		

Table 47 – Data publication list part 2: Updated Annually and as required

Time	Item / Data Record	Term	Subscript
Annual			
At least four Months before start of Year at the beginning of the Capacity Period	Annual Capacity Exchange Rate	ACER	
At least four Months before start of Year	Annual Load Forecast		h
At least four Months before start of Year	System Parameters (Appendix E)		
At least four Months before start of Year	Annual Capacity Payment Sum	ACPS	y
At least four Months before start of Year	Market Price Cap	PCAP	--
At least four Months before start of Year	Market Price Floor	PFLOOR	--
At least four Months before start of Year	Value of Lost Load	VOLL	--
At least one Months before start of Year	Fixed annual MO price for Supplier Units	MOAVC	y
At least one Months before start of Year	Fixed annual MO price for Generator Units	MOAUC	Y
At least four Months before start of Year	Ex-ante estimate of the Market Operator's Costs	MOC	Y
At least four Months before start of Year	Capacity Period Payment Sum	CPPS	C
At least four Months before start of Year	Fixed Capacity Payment Proportion	FCPP	y
At least four Months before start of Year	Ex-Post Capacity Payment Proportion	ECPP	Y
At least four Months before start of Year	Parameters for determination of Tolerance bands for over-generation and under-generation	ENGTOL MWTOL UREG	None t None
At least four Months before start of Year	Over-generation Discount for Over Generation and Premium for Under Generation	DOG PUG	uh
At least 1 Week before start of Year	Fixed Capacity Payments Weighting Factor for each Trading Period in the relevant Year	FCPWF	h
4 Weeks before start of Audit	Terms of Reference for Market Operator Audit		
6 Weeks after completion of Audit	Market Operator Audit Report		
Four Months before start of Year	Transmission Loss Adjustment Factors	TLAF	uh
Two Months before start of Year	Imperfections Price	IMP	y
Two Months before start of Year	Imperfections Charge Factor	IMPF	h
Four Months before start of Year	Variable Charge Rate		
Four Months before start of Year	Capacity Auction Results		
Four Months before start of Year	Market Operator Balancing Charge Factor		
Four Months before start of Year	Testing Tariff		uh

Four Months before start of Year	Settlement Calendar

Table 47 – Data publication list part 3: Updated Monthly

Time	Item	Term	Subscript
Monthly			
10:00 one working Day before start of Month	Maintenance Schedule Transaction - Generator Outage Schedule	--	--
10:00 one working Day before start of Month	Maintenance Schedule Transaction - Transmission Outage Schedule		
At 10:00, at least one Working Day before start of Month	Monthly Load Forecast	--	--
At 10:00, at least five Working Days before start of Month	Margin	M	h
At 10:00, at least five Working Days before start of Month	Ex ante Loss of Load Probability for each Trading Period in the relevant Month	λ	h
At 10:00, at least five Working Days before start of Month	Variable Capacity Payments Weighting Factor for each Trading Period in the relevant Month	VCPWF	h
At 10:00, at least one Working Day before start of Month	Settlement Class of each Generator Unit and timetable of any change between Price Taker Generator Unit and Price Maker Generator Unit of vice versa	--	--
At 10:00, at least one Working Day before start of Month	Updates to progress of Modification Proposals		

Table 47 – Data publication list part 4: Updated Daily in Advance of Gate Closure

Time	Item / Data Record	Term	Subscript
Daily, in advance of Gate Closure			
09:30 one Day ahead of Gate Closure	Interconnector Available Transfer Capacity Data Transaction (Appendix E)	--	--
Before 08:00	Trading Day Exchange Rate	--	--
Before 08:00	Interest Rate	--	--
Before 09:30	Four Day Load Forecast	--	--
Before 09:30	Any important updates to Maintenance Schedule(Generator and Transmission) Data Transaction (Appendix J)	--	--
As Available, every six hours	Aggregated Wind Generation Forecast	--	--
Before 09:30	Forecast of Ex-Post Loss of Load Probability for each Trading Period in the forthcoming 31 Trading Days	Φ	h
Before 09:30	Classification of every Generator Unit		

Table 47 – Data publication list part 5: Updated Daily post Gate Closure

Time	Item / Data Record	Term	Subscript
Daily, post gate closure and before Trading Day			
13:00	Technical Offer Data Transactions	--	--

	(Appendix C)		
13:00	Commercial Offer Data Transactions (Appendix C)	--	--
18:00	Interconnector Unit Capacity Holding Data Transaction (Appendix E)	--	--
13:00	Indicative Market Schedule and Indicative System Marginal Prices	--	--
16:00	Indicative Operations Schedule	--	--
16:00 and as updated	Interconnector Unit Nomination Modification Data Transaction (Appendix D)	--	--
17:00 and as updated	Credit Cover Data Transaction (See Appendix H)		

Table 47 – Data publication list part 6: Updated Daily post Trading Day

Time	Item	Term	Subscript
Daily, post Trading Day			
Day after Trading Day at 14:00	Generator Unit Technical Characteristics Data Transaction (See Appendix E)		
Day after Trading Day at 14:00	System Characteristics Data Transaction (See Appendix E)		
Day after Trading Day at 14:00	Energy Limited Generator Unit Technical Characteristics Data Transaction (See Appendix E)		
Day after Trading Day at 14:00	Dispatch Instruction and Interconnector Residual Capacity Data Transaction (See Appendix E)		
Day after Trading Day at 14:00, and as updated	Ex-post price affecting Meter Data (See Appendix G)		
Day after Trading Day at 14:00, and as updated	Preliminary Cross-jurisdiction Power Flow Meter Data Transaction (see Appendix G)		
Day after Trading Day at 14:00, and as updated	Initial Cross-jurisdiction Power Flow Meter Data Transaction (see Appendix G)		
Day after Trading Day at 17:00, and as updated	Tolerances for over or under generation	TOLOGLF TOLUGLF	uh
Day after Trading Day at 14:00, and as updated	Dispatch Offer Price	DOP	uh
Day after Trading Day at 16:00	Preliminary Ex-post Unconstrained Schedule Quantity	MSQ	uh
Four Days after Trading Day at 16:00	Ex-post Unconstrained Schedule Quantity	MSQ	uh
Day after Trading Day at 16:00	Initial Actual Availability	EA	uh
Four Days after Trading Day at 16:00	Actual Availability	EA	uh
Day after Trading Day at 16:00	Preliminary SMPs	SMP	h
Four Days after Trading Day at 16:00	Initial SMPs	SMP	h
Day after Trading Day at 14:00, and as updated	Nominal System Frequency	NORFRQ	h
Day after Trading Day at 14:00, and as updated	Average System Frequency	AVGFRQ	h

Table 47 – Data publication list part 7: Updated on a Billing Period basis, post end of Billing Period

Time	Item	Term	Subscript
Each Billing Period, post end of Billing Period			
Day after end of Billing Period, at 14:00, and as updated	Ex-post Energy Meter Data Transaction (See Appendix G)		
Day after end of Billing Period, at 14:00	Preliminary Energy Payments to Price Taker Generator Units	SMP	uh, vh
Day after end of Billing Period, at 14:00	Preliminary Energy Charges to Supplier Units	SMP	uh, vh
After Billing Period, as required	Settlement Reallocation Data Transaction (See Appendix I)	SMP	uh, vh
Four Days after end of Billing Period, at 14:00	Initial Energy Payments to Generator Units	SMP	uh, vh
Four Days after end of Billing Period, at 14:00	Initial Energy Charges to Supplier Units	SMP	uh, vh
Four Days after end of Billing Period, at 14:00	Energy Resettlement Meter Data (See Appendix G)		
Four Days after end of Billing Period, at 14:00	Resettlement Payments to Price Taker Generator Units	SMP	uh, vh
Four Days after end of Billing Period, at 14:00	Resettlement Charges to Supplier Units	SMP	uh, vh
BP +5 Working Days	Participant Invoice		pb
Published at four and thirteen Months after the end of the trading day.	Re-Settlement Participant Invoice		pb
BP + 5 Working Days	Market Operator Operating Cost Invoice		pb

Table 47 – Data publication list part 8: Updated on a Capacity Period basis, post end of Capacity Period

Time	Item	Term	Subscript
Each Capacity Period, post end of Capacity Period			
Day after end of Capacity Period, at 16:00, and as updated	Ex-post Capacity Settlement Data Transaction (See Appendix G)		
Day after end of Capacity Period, at 16:00	Preliminary Capacity Payments to each Generator Unit and Preliminary Capacity Charges to each Supplier Unit	CP, CPC	uh, vh
Five Days after end of Capacity Period, at 16:00	Initial Capacity Payments to each Generator Unit and Initial Capacity Charges to each Supplier Unit	CP, CPC	uh, vh
Day after end of Capacity Period, at 16:00	Preliminary Ex-Post Capacity Payments Weighting Factor	ECPWF	h
Five Days after end of Capacity Period, at 16:00	Initial Ex-Post Capacity Payments Weighting Factor	ECPWF	h
Five Days after end of Capacity Period, at 16:00	Initial Variable Capacity Payments Weighting Factor	VCPWF	h
Five Days after end of Capacity Period, at 16:00	Initial Ex-Post Margin	EM	h
Five Days after end of Capacity Period, at 16:00	Initial Ex-Post Loss of Load Probability	Φ	h

Five Days after end of Capacity Period, at 16:00	Capacity Resettlement Meter Data Transaction (See Appendix G)		
Five Days after end of Capacity Period, at 16:00	Resettlement Capacity Payments	CPGU, CPPRC	uh, vc

APPENDIX L: LIST OF AGREED PROCEDURES

L.1 This Appendix L of the Code contains all Agreed Procedures associated with the Code.

1. Agreed Procedure for Participant and Unit Registration and Deregistration
2. Agreed Procedure for Interconnector Unit Capacity Right Calculations and Dispatch Notification
3. Agreed Procedure for Communication Channel Qualification
4. Agreed Procedure for Data Transaction Submission and Validation
5. Agreed Procedure for Data Storage and IT Security
6. Agreed Procedures for Data Publication
7. Agreed Procedure for Emergency Communications
8. Intentionally blank
9. Management of Credit Cover and Credit Default
10. Agreed Procedure for Settlement Reallocation
11. Agreed Procedure for Market System Operation, Testing, Upgrading, and Support
12. Agreed Procedure for Modifications Committee Operation
13. Query Generation
14. Dispute Process
15. Invoicing
16. Agreed Procedure for Metered Data Provision

APPENDIX M: DESCRIPTION OF THE FUNCTION FOR THE DETERMINATION OF CAPACITY PAYMENTS

M.1 This Appendix M of the Code [will contain] a description of the Function for the Determination of Capacity Payments.

M.2 [The following changes will be fine-tuned and incorporated into Appendix M (Description of the Function for the Determination of Capacity Payments) in a subsequent release of the T&SC. The changes are included here for completeness to confirm the rules agreed between SEMIT, TSO Readiness and the Regulatory Authorities in relation to the calculation of the ex-post margin.]

DETERMINATION OF CAPACITY MARGINS

M.3 For each Trading Period within the relevant Capacity Period, the Interim Ex-Post Margin (IEMh) used in determining the Interim Ex-Post Loss of Load Probability IΦh shall be determined as follows:

$$IEMh = \left(\sum_{\alpha} (EAuh) + \sum_{\beta} (MSQuh) \right) - \sum_{u} \left(\frac{MGuh}{TPD} \right)$$

Where:

1. IEMh is the Interim Ex-Post Margin for Trading Period h
2. EAuh is the Eligible Availability for Generator Unit u in Trading Period h
3. MSQuh is the Market Schedule Quantity for Generator Units u in Trading Period h
4. MGuh is the Metered Generation for Generator Units u in Trading Period h
5. TPD is the Trading Period Duration
6. $\sum_{\alpha}$ is the summation over all Generator Units eligible to receive Capacity Payments, other than Pumped Storage Units and Energy Limited Generator Units
7. $\sum_{\beta}$ is the summation over all Pumped Storage Units and Energy Limited Generator Units eligible to receive Capacity Payments
8. $\sum_{u}$ is the summation over all Generator Units u eligible to receive Capacity Payments

M.4 For each Trading Period within the relevant Capacity Period, the Ex-Post Margin used in determining the Ex-Post Loss of Load Probability Φh shall be determined as follows:

$$EMh = \left(\sum_{\alpha} (EAuh) + \sum_{\beta} (IEAuh) \right) - \sum_{u} \left(\frac{MGuh}{TPD} \right)$$

Where:

1. EMh is the Ex-Post Margin for Trading Period h
2. EAuh is the Eligible Availability for Generator Unit u in Trading Period h
3. IEAuh is the Interim Eligible Availability for Generator Unit u in Trading Period h
4. MGuh is the Metered Generation for Generator Unit u in Trading Period h
5. TPD is the Trading Period Duration
6. $\sum_{\alpha}$ is the summation over all Generator Units eligible to receive Capacity Payments, other than Pumped Storage Units and Energy Limited Generator Units
7. $\sum_{\beta}$ is the summation over all Pumped Storage Units and Energy Limited Generator Units eligible to receive Capacity Payments
8. $\sum_{u}$ is the summation over all Generator Units u eligible to receive Capacity Payments

M.5 [Further rules will be required to define the Margin (Mh) used in the determination of the Loss of Load Probability λh. These rules are currently the subject of discussion between the TSOs and the RAs and will be the subject of a subsequent Change Request..]

APPENDIX N: INDICATIVE MARKET SCHEDULE AND EX-POST UNCONSTRAINED SCHEDULE

N.1 This Appendix N of the Code contains a description of the algorithm and data inputs used to determine the values for each Trading Period h of System Marginal Price (SMPh), and the values of Market Schedule Quantity (MSQuh) for each Price Maker Generator Unit u that are included within the Indicative Market Schedule and the Ex-Post Unconstrained Schedule.

N.2 Each run of the EPUS Software relates to a single Optimisation Time Horizon. Within this Code, where a run of the EPUS Software is associated with a Trading Day, it means the Trading Day the start of which coincides with the start of the Optimisation Time Horizon.

PRINCIPLES UNDERLYING THE CALCULATION OF SMP

N.3 The System Marginal Price calculated in each Trading Period will cover the marginal cost of meeting the last unit of Schedule Demand (as defined within this Appendix N), including Uplift, taking account of all constraints and limitations used within that run of the EPUS Software.

N.4 Intentionally blank

DATA INPUTS FOR THE EPUS SOFTWARE

N.4A Indicative EPUS Software Runs are run daily by the Market Operator, before the start of the relevant Trading Day, in order to determine indicative values of System Marginal Price, indicative values of Market Schedule Quantity for each Price Maker Generator Unit for use within the Indicative Market Schedule and to determine the Interconnector Unit Nominations.

N.4B Ex-Post EPUS Software Runs are run by the Market Operator, after the end of the relevant Trading Day, in order to determine actual values of System Marginal Price and actual values of Market Schedule Quantity for each Price Maker Generator Unit.

N.4C The data inputs for Indicative EPUS Software Runs, Ex-Post EPUS Software Runs used in Preliminary Settlement and Ex-Post EPUS Software Runs used in Initial Settlement (and subsequent Settlement reruns) differ and the inputs to each are set out below.

N.4D All values relating to Distribution Connected Generator Units or Distribution Connected Supplier Units will have been scaled by the appropriate Distribution Loss Adjustment Factor.

Data inputs for Ex-Post EPUS Software Runs

N.5 For the purposes of Ex-Post EPUS Software Runs, the provisions for data inputs in paragraphs N.6 to N.13 apply.

N.6 Schedule Demand (expressed in MW) to be met by Price Maker Generator Units used in the EPUS Software is calculated as follows

For any Ex-Post EPUS Software Run for the purposes of Initial Settlement: (and any subsequent Settlement re-runs), Schedule Demand is:

1. the Actual Output (AOuh) for all Price Maker Generator Units (for the avoidance of doubt, including derived values of Actual Output for the Interconnector Units and Demand Side Units calculated in accordance

with paragraphs 4.68 and 5.76 respectively, but excluding the Interconnector Residual Capacity Unit);

2. less the summation of all reductions in Output of any Predictable Price Taker Generator Unit, calculated as the difference between:

   a. the minimum of Nominated Quantity (NQuh) and the Availability Profile (APuh) of the Predictable Price Taker Generator Unit; and

   b. the Actual Output (AOuh) of the Predictable Price Taker Generator Unit ,

   with increases in output having the opposite sign;

3. less the summation of all reductions in Output of any Variable Price Taker Generator Unit, calculated as the difference between:

   c. the Availability Profile (APuh) of the Variable Price Taker Generator Unit; and

   d. the Actual Output (AOuh) of the Variable Price Taker Generator Unit ,

   with increases in output having the opposite sign;

4. plus an estimate of any reduction in demand as a consequence of Demand Control as set out in the Grid Codes;

5. plus the Dispatch Quantity of the Interconnector Residual Capacity Unit.

For the Ex-Post EPUS Software Run used for the purposes of Preliminary Settlement, Schedule Demand is as follows:

6. For the first 18 hours of the EPUS Optimisation Time Horizon for the relevant Trading Day, Schedule Demand to be met by Price Maker Generator Units is calculated in accordance with paragraph N.6 parts 1-5 above.

7. For the remaining hours of the EPUS Optimisation Time Horizon, Schedule Demand to be met by Price Maker Generator Units is calculated in accordance with paragraph N.15 below.

N.7 The value for Availability for each Generator Unit in each Trading Period is equal to the Actual Availability (AAuh) as calculated under paragraphs 4.35 to 4.36.

N.8 The value for Minimum Output (MINOUTuh) for each Generator Unit in each Trading Period will be as calculated by the Market Operator under paragraph 4.33A.

N.9 The value for Minimum Stable Generation (MINGENuh) for each Generator Unit in each Trading Period will be as calculated by the Market Operator under paragraph 4.33A.

N.10 Values for Commercial Offer Data for each Generator Unit in each Trading Period will be as submitted for that Trading Period (noting for the avoidance of doubt that the Optimisation Time Horizon spans more than a single Trading Day and that these values may differ within the Optimisation Time Horizon).

N.11 Values for Technical Offer Data for each Generator Unit in each Trading Period other than the Forecast Availability Profile, Forecast Minimum Stable

Generation Profile and Forecast Minimum Output Profile, will be as submitted for that Trading Period (noting for the avoidance of doubt that the Optimisation Time Horizon spans more than a single Trading Day and that these values may differ within the Optimisation Time Horizon).

N.12 Each Ex-Post EPUS Software Run in respect of a Trading Day will take starting conditions from the results of the Preceding EPUS Run. Specifically, the initial conditions at 06:00 on the Trading Day will be taken from the results at the same point in time that were produced by the Preceding EPUS Run that is used in Settlement.

N.13 For the avoidance of doubt, in the event that the EPUS Software is re-run for use in Settlement in respect of a Trading Day, this will not trigger a re-run of the EPUS Software for any subsequent Trading Day.

Data inputs for Indicative EPUS Software Runs

N.14 For the purposes of Indicative EPUS Software Runs, the provisions for data inputs set out in paragraphs N.15 to N.21 apply.

N.15 The values aggregated to comprise Schedule Demand in each Trading Period h will be:

1. Forecast Demand for each Trading Period in the Optimisation Time Horizon(based on the Four Day Load Forecast Data);
2. less Nominated Quantities (NQuh) in respect of each Predictable Price Taker Generator Unit and each Variable Price Taker Generator Unit that is not a Wind Power Unit in accordance with their Accepted Nomination Profiles;
3. less Forecast Generation in respect of each Variable Price Taker Generator Unit that is a Wind Power Unit and each Autonomous Generator Unit that is a Wind Power Unit (based on the Aggregated Wind Generation Forecast);
4. less the Forecast Generation for each Autonomous Generator Unit that is not a Wind Power Unit (based on the Aggregated Autonomous Non-Wind Generation Forecast).

N.16 The value for Availability for each Generator Unit u in each Trading Period h is taken from the Forecast Availability Profile as described in paragraph 4.18.

N.17 The value for Minimum Output (MINOUTuh) for each Generator Unit u in each Trading Period h is taken from the Forecast Minimum Output Profile as described in paragraph 4.19.

N.18 The value for Minimum Stable Generation (MINGENuh) for each Generator Unit u in each Trading Period h is taken from the Forecast Minimum Stable Generation Profile as described in paragraph 4.20.

N.19 Values for Technical Offer Data other than the Forecast Availability Profile, Forecast Minimum Stable Generation Profile and Forecast Minimum Output Profile for each Generator Unit u in each Trading Period h in the Ending Optimisation Overlap Period will be deemed equal to the value for Technical Offer Data Accepted in respect of the equivalent Trading Period for the first Trading Day in the Optimisation Time Horizon.

N.20 Values for Commercial Offer Data for each Generator Unit u in each Trading Period h in the Ending Optimisation Overlap Period will be deemed equal to

the value for Commercial Offer Data Accepted in respect of the equivalent Trading Period for the first Trading Day in the Optimisation Time Horizon.

N.21 Each Indicative EPUS Software Run in respect of a Trading Day will take starting conditions from the Preceding EPUS Run. Specifically, the initial conditions at 06:00 on the Trading Day will be taken from the results at the same point in time that were produced by the Preceding EPUS Run.

OPERATION OF THE EPUS SOFTWARE

N.22 All aspects of the EPUS Software are operated for one Optimisation Time Horizon at a time. Some calculations are only required for the first Trading Day within the Optimisation Time Horizon, and any calculated values that extend beyond this period (i.e. into the Ending Optimisation Overlap Period) will be overwritten by a subsequent run of the EPUS Software for the following Trading Day.

N.23 For each Trading Period h of the Trading Day, the EPUS Software will calculate the profile of System Marginal Prices (SMPh) and the Market Schedule Quantities for each Price Maker Generator Unit as follows:

Step 1

Determine the Unit Commitment Schedule for each Price Maker Generator Unit in each Trading Period in the Optimisation Time Horizon in order to minimise EPUS Schedule Production Cost across the entire Optimisation Time Horizon, while meeting the relevant constraints on the solution;

Step 2

Taking the Unit Commitment Schedule for each Price Maker Generator Unit u as an input and thereby treating Start Up Costs and No Load Costs as invariant, determine for each Trading Period h the Shadow Price (SPh) values and the Market Schedule Quantity (MSQuh) values for each Price Maker Generator Unit u in the Optimisation Time Horizon, in order to minimise EPUS Schedule Production Cost across the entire Optimisation Time Horizon, while meeting the relevant constraints on the solution. For the avoidance of doubt, the values of SPh and MSQuh for all Trading Periods that fall within the Ending Optimisation Overlap Period will be overwritten by a subsequent run of the EPUS Software for the following Trading Day;

Step 3

Calculate the Uplift element of System Marginal Price (UPLIFTh) for each Trading Period h in the first Trading Day of the Optimisation Time Horizon, as set out in paragraphs N.25 to N.38 below; and

Step 4

Calculate System Marginal Price (SMPh) for each Trading Period h in the first Trading Day of the Optimisation Time Horizon as follows:

SMPh = SPh + UPLIFTh

Where

1. SPh is the Shadow Price for Trading Period h
2. UPLIFTh is the Shadow Price for Trading Period h

Calculation of EPUS Schedule Production Cost for use within the EPUS Software

N.24 Within this Appendix N and within the EPUS Software, the EPUS Schedule Production Cost (ESPCuh) for each Price Maker Generator Unit u in Trading Period h is calculated as follows (noting that within the EPUS Software, transmission losses are not explicitly taken into consideration):

$$ESPCuh = \left(\left(MSQuh \times MOPuh\right) + MNLCuh + MSQCCuh\right) \times TPD + MSUCuh$$

Where

1. MSQuh is the Market Schedule Quantity for Generator Unit u in Trading Period h
2. MOPuh is the Market Offer Price of Generator Unit u in Trading Period h
3. MNLCuh is the Market No Load Cost for Generator Unit u in Trading Period h
4. MSQCCuh is the Market Schedule Quantity Cost Correction for Generator Unit u in Trading Period h
5. TPD is the Trading Period Duration
6. MSUCuh is the Market Start Up Cost for Generator Unit u in Trading Period h

CALCULATION OF UPLIFT

N.25 Within this Appendix N and not elsewhere, the following terms apply:

1. subscript k denotes a Contiguous Operation Period;
2. TPCOUNTt is the number of Trading Periods that are within the first Trading Day t of the Optimisation Time Horizon;
3. UKSTARTuk is the sequential number of the Trading Period (where 1 is the first Trading Period in the Optimisation Time Horizon) in which the Contiguous Operation Period k for Generator Unit u commences, provided that the Contiguous Operation Period starts within the first Trading Day of the Optimisation Time Horizon, such that $1 \leq UKSTARTuk \leq TPCOUNTt$; if the Contiguous Operation Period does not commence within the Optimisation Time Horizon under consideration then UKSTARTuk is neither defined nor required;
4. UKSTOPuk is the sequential number of the Trading Period (where 1 is the first Trading Period in the Optimisation Time Horizon) in which the Contiguous Operation Period ends, or the sequential number of the last Trading Period within the Optimisation Time Horizon if the Contiguous Operation Period starts in the first Trading Day in the Optimisation Time Horizon and continues to the end of the Optimisation Time Horizon, such that $UKSTOPuk \geq UKSTARTuk$; if the Contiguous Operation Period does not commence within the Optimisation Time Horizon under consideration then UKSTOPuk is neither defined nor required;
5. STCukt is the Start Cost to be recovered from Uplift for Generator Unit u in that part of Contiguous Operation Period k that falls within the first Trading Day t of the relevant Optimisation Time Horizon;

6. CFCRukt is the Carried Forward Cost Recovery for Generator Unit u in Contiguous Operation Period k from the first Trading Day t to the next;

7. CRukt is the Cost of Running for each Price Maker Generator Unit u in that part of Contiguous Operation Period k which falls in the first Trading Day t of the relevant Optimisation Time Horizon;

8. MINUPLh is the minimum value of Uplift for each Trading Period h that satisfies the relevant constraints, as calculated in paragraph N.37 below;

9. REVMINt is the minimum value of energy payments to relevant Generator Units in Trading Day t that satisfies the relevant constraints, as calculated in paragraph N.37 below.

Procedure to calculate Cost Recovery values

N.26 The procedure to calculate the Cost of Running to be used as the basis for cost recovery is set out below. Each of these calculations is made independently for each Optimisation Time Horizon.

N.27 Paragraphs N.29 to N.35 apply exclusively to Price Maker Generator Units excluding Pumped Storage Units and excluding Interconnector Units.

N.28 The calculation of the Cost of Running (CRukt) for Generator Units which are Pumped Storage Units or Interconnector Units or which are not Price Maker Generator Units is set out in paragraph N.36, and values of Carried Forward Cost Recovery (CFCRukt) and Start Cost (STCukt) for these other Generator Units are neither calculated nor required.

Calculating start costs to be carried forward

Unit starts and stops within the first Trading Day or started in the previous Trading Day

N.29 For an Optimisation Time Horizon, all values of Carried Forward Cost Recovery (CFCRukt) for Generator Units u in Contiguous Operation Period k other than those which start within the first Trading Day and then continue to the second Trading Day of the relevant Optimisation Time Horizon are equal to zero.

Unit starts in the first Trading Day and continues to the Second Trading Day

N.30 For an Optimisation Time Horizon, when a Contiguous Operation Period starts within the first Trading Day and continues beyond the end of that Trading Day, a portion of the Start Up Costs will be allocated to the Trading Day in which the Contiguous Operation Period began and the remainder will be allocated to the next Trading Day, as follows. For each relevant Generator Unit u, for each Contiguous Operation Period k that starts within the first Trading Day of the relevant Optimisation Time Horizon and continues to the second Trading Day within that Optimisation Time Horizon, values of Carried Forward Cost Recovery (CFCRukt) from the first Trading Day t to the next shall be as follows:

$$CFCRukt = \sum_{hink,hint} MSUCuh \times \left(\frac{TPCOUNTt - UKSTARTuk + 1}{UKSTOPuk - UKSTARTuk + 1} \right)$$

Where

1. MSUCuh is the Market Start Up Cost for Generator Unit u in Trading Period h

2. TPCOUNTt, UKSTARTuk and UKSTOPuk are as defined in paragraph N.11 above

3. $\sum_{hink,\ hint}$ is a summation over all Trading Periods h within Contiguous Operation Period k, and within the first Trading Day t in the relevant Optimisation Time Horizon

Calculating start costs to be recovered within each Trading Day

Unit starts and stops in the first Trading Day

N.31 For each relevant Generator Unit, for each Contiguous Operation Period k that both starts and ends within the first Trading Day t of the relevant Optimisation Time Horizon, values of Start Cost (STCukt) are calculated as follows:

$$STCukt = \sum_{hink,hint} MSUCuh$$

Where

1. MSUCuh is the Market Start Up Cost for Generator Unit u in Trading Period h

2. $\sum_{hink,\ hint}$ is a summation over all Trading Periods h within Contiguous Operation Period k, and within the first Trading Day t in the relevant Optimisation Time Horizon

Unit starts in the first Trading Day and continues to the second Trading Day

N.32 For each relevant Generator Unit u, for each Contiguous Operation Period k that starts within the first Trading Day t of the relevant Optimisation Time Horizon and continues to the second Trading Day of that Optimisation Time Horizon, values of Start Cost (STCukt) to be recovered within that part of Contiguous Operation Period k in Trading Day t are calculated as follows:

$$STCukt = \sum_{hink,\ hint} MSUCuh - CFCRukt$$

Where

1. MSUCuh is the Market Start Up Cost for Generator Unit u in Trading Period h

2. CFCRukt is the Carried Forward Cost Recovery for Generator Unit u from the first Trading Day t of Contiguous Operation Period k

3. $\sum_{hink,\ hint}$ is a summation over all Trading Periods h within Contiguous Operation Period k, and within the first Trading Day t in the relevant Optimisation Time Horizon

Unit started in the previous Trading Day

N.33 For each relevant Generator Unit u, for each Contiguous Operation Period k that starts in Trading Day (t-1) immediately before the first Trading Day of the relevant Optimisation Time Horizon and continues to the first Trading Day t in that Optimisation Time Horizon, values of Start Cost (STCukt) to be recovered within that part of Contiguous Operation Period k which falls within Trading Day t are calculated as follows:

$$STCukt = CFCRuk(t-1)$$

Where

1. CFCRuk(t-1) is the Carried Forward Cost Recovery for Generator Unit u from the previous Trading Day (t-1) (in which the Contiguous Operation Period k commenced) to the first Trading Day of the Optimisation Time Horizon t

Unit started before the previous Trading Day

N.34 For an Optimisation Time Horizon, all values of Start Cost (STCukt) for Generator Units in Contiguous Operation Periods k that start earlier than one Trading Day before the start of the relevant Optimisation Time Horizon are equal to zero.

Cost of running

N.35 The Cost of Running (CRukt) for each Price Maker Generator Unit in that part of Contiguous Operation Period k which falls in the first Trading Day t of the relevant Optimisation Time Horizon is calculated as follows:

$$CRukt = \left[\sum_{hink,hint} \left(\left(MSQuh \times MOPuh \right) + MNLCuh + MSQCCuh \right) \times TPD \right] + STCukt$$

Where

1. MOPuh is the Market Offer Price of Generator Unit u in Trading Period h
2. MSQuh is the Market Schedule Quantity for Generator Unit u in Trading Period h
3. MNLCuh is the Market No Load Cost for Generator Unit u in Trading Period h
4. MSQCCuh is the Market Schedule Quantity Cost Correction for Generator Unit u in Trading Period h
5. TPD is the Trading Period Duration

6. STCukt is the Start Cost to be recovered within that part of Contiguous Operation Period k which falls within Trading Day t

7. $\sum_{hink,\ hint}$ is a summation over all Trading Periods h which are within Contiguous Operation Period k, and within the first Trading Day t in the relevant Optimisation Time Horizon

N.36 All values of Cost of Running (CRukt) for Generator Units that are Pumped Storage Generator Units or Interconnector Units or that are not Price Maker Generator Units are equal to zero.

Procedure to calculate Minimum Revenue value

N.37 The Minimum Revenue (REVMINt) for the Trading Day is used to determine an additional constraint on the derivation of Uplift values (UPLIFTh), and is calculated as follows. For each Optimisation Time Horizon, the procedure to calculate the Minimum Revenue (REVMINt) for the first Trading Day t in that Optimisation Time Horizon is set out below, where within this procedure, the following meanings apply:

1. REVMINt is the minimum revenue in Trading Day t that satisfies the relevant constraints
2. MINUPLh is the minimum value of Uplift for each Trading Period h that satisfies the relevant constraints
3. SPh is the Shadow Price for Trading Period h
4. MSQuh is the Market Schedule Quantity for Generator Unit u in Trading Period h
5. TPD is the Trading Period Duration
6. CRukt is the Cost of Running for Generator Unit u in that part of Contiguous Operation Period k which falls in the first Trading Day t of the relevant Optimisation Time Horizon
7. $\sum_{p}$ is a sum over all Participants p
8. $\sum_{uinp}$ is a sum over all relevant Price Maker Generator Units u, excluding Pumped Storage Units and excluding Interconnector Units, registered to Participant p
9. $\sum_{hint}$ is a sum over each Trading Period h in Trading Day t
10. $\forall hink \cap hint$ means for each Trading Period h that is both within Contiguous Operation Period k and within Trading Day t

The procedure is as follows:

Step 1

Minimise:

$\sum_{p}\sum_{uinp}\sum_{hint}\left((MINUPLh + SPh) \times MSQuh \times TPD\right)$ by selecting values of MINUPLh for each Trading Period h in the relevant Trading Day t,

Subject to the following constraints:

1. $\sum_{h in k}\left[\left(MINUPLh + SPh\right)\times MSQuh \times TPD\right] - CRukt \geq 0$ for each Price Maker Generator Unit excluding Pumped Storage Units and excluding Interconnector Units for that part of Contiguous Operation Period k that falls, partly or wholly, within the relevant Trading Day t ; and

2. $MINUPLh \geq 0 \qquad \forall h\, in\, k \bigcap h\, in\, t$

Step 2

Using the set of Minimum Uplift (MINUPLh) values from Step 1 above, the minimum value of energy payments (REVMINt) to relevant Generator Units u in Trading Day t is calculated as follows:

$$REVMINt = \sum_{p} \sum_{u\, in\, p} \sum_{h\, in\, t} \left((MINUPLh + SPh) \times MSQuh \times TPD\right)$$

Procedure to calculate final Uplift values

N.38 For each Optimisation Time Horizon, the final part of the procedure to calculate the Uplift values (UPLIFTh) for the first Trading Day t in that Optimisation Time Horizon is set out below, where within this procedure, the following meanings apply:

1. UPLIFTh is the value of Uplift for Trading Period h
2. REVMINt is the minimum revenue in Trading Day t that satisfies the relevant constraints
3. SPh is the Shadow Price for Trading Period h
4. MSQuh is the Market Schedule Quantity for Generator Unit u in Trading Period h
5. TPD is the Trading Period Duration
6. CRukt is the Cost of Running for Generator Unit u in that part of Contiguous Operation Period k which falls in the first Trading Day t of the relevant Optimisation Time Horizon
7. α is the Uplift Alpha value used in the determination of Uplift to determine the importance of the Uplift Cost Objective;
8. β is the Uplift Beta value used in the determination of Uplift to determine the importance the Uplift Profile Objective;
9. δ is the Uplift Delta value used in the determination of Uplift to cap the overall impact on revenue in each Trading Day t
10. $\sum_{p}$ is a sum over all Participants p
11. $\sum_{u\, in\, p}$ is a sum over all relevant Price Maker Generator Units u, excluding Pumped Storage Units and excluding Interconnector Units, registered to Participant p

12. $\sum_{hint}$ is a sum over each Trading Period h in Trading Day t

13. $\forall h in k \cap h in t$ means for each Trading Period h that is both within Contiguous Operation Period k and within Trading Period t

The procedure is as follows:

Minimise:

$$\alpha \times \left[\sum_{p} \sum_{u in ph int} \sum \left((UPLIFTh + SPh) \times MSQuh \times TPD \right) \right] + \beta \times \left[\sum_{hint} (UPLIFTh)^2 \right]$$

by selecting values of UPLIFTh for each Trading Period h in the relevant Trading Day t,

Subject to the following constraints:

1. $\sum_{hink} \left[(UPLIFTh + SPh) \times MSQuh \times TPD \right] \geq CRukt$ for each Price Maker Generator Unit excluding Pumped Storage Units for that part of Contiguous Operation Period k that falls, partly or wholly, within the relevant Trading Day t ;

2. $UPLIFTh \geq 0 \qquad \forall h in k \cap h in t$; and

3. $\left[\sum_{p} \sum_{u in ph int} \sum \left((UPLIFTh + SPh) \times MSQuh \times TPD \right) \right] \leq \left[(1 + \delta) \times REVMINt \right]$

TIE-BREAK SITUATIONS

N.39 Rules to deal with Tie-Break situations for Price Maker Generator Units within the EPUS Software will follow the principles below:

1. In the allocation of Market Schedule Quantities, Price Maker Generator Units with Priority Dispatch for their entire capacity shall take precedence over Price Maker Generator Units not so identified;
2. within the set of Price Maker Generator Units with Priority Dispatch for their entire capacity, the resolution of any Tie-Break will be random; and
3. within the remaining set of Price Maker Generator Units without Priority Dispatch for their entire capacity, the resolution of any Tie-Break will be random.

APPENDIX O: DISPUTE RESOLUTION AGREEMENT

FORM OF DISPUTE RESOLUTION AGREEMENT

GENERAL CONDITIONS OF DISPUTE RESOLUTION AGREEMENT FOR A THREE MEMBER DISPUTE RESOLUTION BOARD

Words in square brackets should be deleted as appropriate depending on whether there is a one member DRB or a three member DRB.

BETWEEN:-

1. THE DISPUTING PARTIES, REFERRED TO IN ANNEX 1

AND

2. EACH MEMBER OF THE DISPUTE RESOLUTION BOARD, REFERRED TO IN ANNEX 2 ("MEMBER", TOGETHER REFERRED TO AS "THE MEMBERS")

RECITALS

A. The Disputing Parties are adhering parties to the Framework Agreement dated xxx by which they agree to be bound by the terms of the Trading and Settlement Code ("Code") for trading in electricity in the wholesale market in the Single Electricity Market.

B. The Disputing Parties are parties to a Dispute within the meaning of the Code.

C. The Dispute has, in accordance with paragraph 2.254 of the Code, been referred to a [single member / three member] Dispute Resolution Board ("DRB") for resolution.

D. In order to facilitate the resolution of the Dispute by the DRB, the Disputing Parties wish to enter into this Agreement with each of the Members, setting out the terms and conditions upon which each Member is engaged to hear and determine the Dispute.

1. Definitions and Interpretation

1.1 Unless the context requires otherwise, words and expressions which are not otherwise defined in this Dispute Resolution Agreement (including the Recitals) shall have the meanings assigned to them in the Code.

1.2 Where the DRB is comprised of a single member, references to "the Members" shall be construed as references to "the Member" and references to "each Member" shall be construed as references to "the Member".

2. General Provisions

2.1 Each Disputing Party engages each Member to constitute a Dispute Resolution Board to hear and determine the Dispute.
2.2 Each Member accepts that engagement.
2.3 Each Member agrees to hear and determine the Dispute:
2.3.1 in accordance with the Code; and
2.3.2 on the terms and conditions set out in this Agreement.

2.4 This Agreement shall take effect when signed by all parties to this Agreement, on the last date of signature by a party.

2.5 This employment of the Members is a personal appointment. At any time, the Members may give not less than 70 days' notice of resignation to the Market Operator and to the Disputing Parties, and the Dispute Resolution Agreement shall terminate upon the expiry of this period.

2.6 No assignment or subcontracting of the Dispute Resolution Agreement is permitted without the prior written agreement of all the Disputing Parties to it and of the Members.

3. Warranties

3.1 The Members warrant and agree that they are and shall be impartial and independent of the Market Operator and the Disputing Parties. Each Member shall promptly disclose, to each Disputing Party and to the Other Members, any fact or circumstance which might appear inconsistent with his/her warranty and agreement of impartiality and independence.

3.2 When appointing each Member, the Market Operator and the Disputing Parties relied upon the Member's representations that he/she:

either

1. is experienced in and familiar with alternative dispute resolution procedures which do not involve litigation; or

2. has appropriate experience of the electricity industry, or the particular matters the subject of the dispute; and

is familiar with, or shall, prior to the commencement of the hearing of the Dispute, be familiar with, the provisions of the Code.

4. Objectives of the Dispute Resolution Procedure

4.1 It is intended that procedures effected under this Dispute Resolution Agreement should to the extent possible:
(a) be simple, quick and inexpensive;

(b) preserve or enhance the relationship between the Disputing Parties to the Dispute;

(c) preserve and allow for the continuing and proper operation of the Code and Single Electricity Market;

(c) resolve disputes on an equitable basis in accordance with the provisions of the Code;

(d) take account of the skills and knowledge that are required for the relevant procedure; and

(e) encourage resolution of disputes without formal legal representation or reliance on legal procedures.

5. General Obligations of the Members

Each Member shall:

(a) have no interest financial or otherwise in the Disputing Parties, nor any financial interest in the Code except for payment under the Dispute Resolution Agreement;

(b) not previously have been employed as a consultant or otherwise by the any of the Disputing Parties, except in such circumstances as were disclosed in writing to all of the Disputing Parties before they signed the Dispute Resolution Agreement;

(c) have disclosed in writing to the Disputing Parties and the other Members, before entering into the Dispute Resolution Agreement and to his/her best knowledge and recollection, any professional or personal relationships with any director, officer or employee of the Disputing Parties, and any previous involvement in the SEM;

(d) not, for the duration of the Dispute Resolution Agreement, be employed as a consultant or otherwise by any of the Disputing Parties, except as may be agreed in advance in writing by the the Disputing Parties and the other Members;

(e) comply with the paragraphs 2.257 to 2.278 inclusive of the Code;

(f) not while a Member enter into discussions or make any agreement with the Market Operator or the Disputing Parties regarding employment by any of them, whether as a consultant or otherwise, after ceasing to act under the Dispute Resolution Agreement;

(g) ensure his/her availability for all site visits and hearings as are necessary;

(h) be knowledgeable of the Code and all elements of the Dispute by studying all documents received prior to commencement of the hearing of the Dispute; and

(i) treat the details of the DRB's activities and hearings as private and confidential, and not publish or disclose them without the prior written consent of the Disputing Parties and the Other Members.

6. General Obligations of the Disputing Parties

6.1 The Disputing Parties and the Disputing Parties' personnel shall not request advice from or consultation with the Members regarding the Code, otherwise than in the normal course of the DRB's activities under the Code and the Dispute Resolution Agreement, and except to the extent that prior agreement is given by all other Disputing Parties and the other Members. The Disputing Parties shall be responsible for compliance with this provision by the Disputing Parties' personnel.

6.2 The Disputing Parties undertake to each other and to the Members that the Members shall not, except as otherwise agreed in writing by the the Disputing Parties and the Members, be liable for any claims for anything done or omitted in the discharge or purported discharge of the Members' functions, unless the act or omission is shown to be in bad faith.

6.3 The Disputing Parties hereby jointly and severally indemnify and hold each Member harmless against and from claims from which he/she is relieved from liability under the preceding paragraph 6.2.

7. Breach of this Agreement

7.1 The parties acknowledge that the failure by a Disputing Party to comply with a requirement or determination of the Dispute Resolution Board:

7.1.1 does not constitute a breach of this Agreement; but

7.1.2 is a breach of the Code that may be referred to the Market Operator as an alleged breach of the Code, to be dealt with in accordance with the terms of the Code.

8. Payment

8.1 The Members' basis for charging shall be [insert basis for charging].

8.2 The Disputing Parties hereby agree to share the costs of the Members amongst them.

8. Termination

8.1 At any time: (i) the Market Operator and the Disputing Parties may jointly terminate the Dispute Resolution Agreement by giving 21 days' notice to the Members; or (ii) the Members may resign as provided for in Clause 2.

8.2 If the Members fails to comply with the Dispute Resolution Agreement, the Market Operator and the Disputing Parties may, without prejudice to their other rights, jointly terminate it by notice to the Members. The notice shall take effect when received by the Members.

8.3 Any such notice, resignation and termination shall be final and binding on the Market Operator, the Disputing Parties and the Members. However, a notice by the Market Operator or a Disputing Party, but not by both, shall be of no effect.

9. Default of the Members

9.1 If a Member fails to comply with any obligation under Clause 5, he/she shall not be entitled to any fees or expenses hereunder and shall, without prejudice to their other rights, reimburse each of the Market Operator and the Disputing Parties for any fees and expenses received by the Member and the Other Members, for proceedings or decisions (if any) of the DRB which are rendered void or ineffective.

10. Severability

If any part of this Agreement becomes invalid, illegal or unenforceable the parties shall in such an event negotiate in good faith in order to agree the terms of a mutually satisfactory provision to be substituted for the invalid, illegal or unenforceable provision which as nearly as possible gives effect to their intentions as expressed in this Agreement. Failure to agree on such a provision within one month of commencement of those negotiations shall result in automatic termination of this Agreement. The obligations of the parties under any invalid, illegal or unenforceable provision of the Agreement shall be suspended during such a negotiation.

11. Waiver

11.1 The failure of a party to exercise or enforce any right under this Agreement shall not be deemed to be a waiver of that right nor operate to bar the exercise or enforcement of it at any time or times thereafter.

12. Entire Agreement

12.1 This Agreement and, to the extent applicable, the Code, constitute the entire, complete and exclusive agreement between the parties in relation to the subject matter hereof, being the terms of engagement of the Members by the Disputing Parties.

12.2 Each party warrants to the other that, with the exception of the Code, in entering into this Agreement, it has not relied on any representation, arrangement, understanding or agreement (whether written or oral), relating to the subject of this Agreement. Nothing in this paragraph shall operate to exclude any party's liability for fraudulent misrepresentation.

13. Governing Law and Jurisdiction

13.1 Any dispute or claim arising out of or in connection with this Dispute Resolution Agreement shall be governed by the laws of Northern Ireland and the parties submit to the exclusive jurisdiction of any of the Courts of Ireland or Northern Ireland for all disputes arising out of or under this Dispute Resolution Agreement, in accordance with the terms of the Code.

EXECUTED THIS DAY OF

BY

……..

DISPUTING PARTY

…….

DISPUTING PARTY

…

…….

DRB MEMBER

…….

DRB MEMBER

…….

DRB MEMBER

ANNEX 1

ANNEX II

APPENDIX P: PROFILING CALCULATIONS

P.1 [To be drafted.] This Appendix will contain the rules for profiling the following streams of data submitted by the System Operators into values for each Trading Period:

1. Dispatch Instructions to Dispatch Quantities (DQuh);
2. Availability values to Availability Profiles (APuh);
3. Minimum Stable Generation values to Minimum Stable Generation (MINGENuh); and
4. Minimum Output values to Minimum Output (MINOUTuh).

APPENDIX Q: TIMELINES OF DATA ISSUE AND SUBMISSION

Key
S=Submitted by Party to MO **I=Issued by MO to Party** **SM=Submitted by MO to Party**

Time	Data Transaction	Parties	Participant	Interconnector Administrator	Meter Data Provider	System Operator
As required						
After Accession, but in advance of Unit Registration	Participant and Unit Registration	S	S			
As required	Interconnector Registration			S		
10 Working Days after receipt of Participant and/or Unit Registration	Participant and/or Unit Detailed Information Request	I	I			
20 Working Days after receipt of Participant and/or Unit Detailed Information Request, in line with Appendix B.7	Participant and/or Unit Detailed Information Registration		S			
After Accession and before Unit Registration	Participant and/or Unit Finalisation Registration	S	S			
At Unit Registration or later if specified by the Participant	Participant and/or Unit Commencement Notice	I	I	I		
At failure to Register Unit	Participant and/or Unit Deemed Withdrawn Registration	I	I	I		
After Accession, but in advance of Unit Registration	Intermediary Nomination	S				
After Accession, Unit Registration, and Intermediary Nomination	Intermediary Revocation	S				
After Accession and Unit Registration	Participant and/or Unit Deregistration	S				
Within 2 Days after Submission of Participant and/or Unit Registration	System Operator Participant and/or Unit Registration					SM
Within 2 Days after Submission of Interconnector Registration	Interconnector Registration					SM
Within 2 Days after Submission of Participant and/or Unit Detailed Information Registration	Participant and/or Unit Detailed Information Registration					SM
Within 2 Days after Issue of Participant and/or Unit Commencement Notice	Participant and/or Unit Commencement Notice					SM
Within 2 Days after Submission of Participant and/or Unit Deregistration	Participant and/or Unit Deregistration					SM
After Accession and Unit Registration, as required	Settlement Re-allocation Data Transaction		S			
As required	Settlement Reallocation Notice		S			
As required	Generator Unit Under Test Notice					S
As required	Modification Proposal Notice		S			

Key

S=Submitted by Party to MO	I=Issued by MO to Party	SM=Submitted by MO to Party				
Time	**Data Transaction**	**Parties**	**Participant**	**Interconnector Administrator**	**Meter Data Provider**	**System Operator**
Annual						
At least four Months before start of Year	Annual Load Forecast Data Transaction					S
At least four Months before start of Year	System Parameters Data Transaction					S
Monthly						
At least two Working Days before start of Month	Maintenance Schedule Data Transaction					S
At 10:00, at least one Working Day before start of Month	Monthly Load Forecast Data Transaction					S
Daily, in advance of Gate Closure						
Between 28 and 0 Days ahead of Gate Closure	Commercial Offer Data Transaction		S			
Between 28 and 0 Days ahead of Gate Closure	Technical Offer Data Transaction		S			
Three Days ahead of Gate Closure, by 10:30	Four Day Load Forecast Data Transaction					S
One Day ahead of Gate Closure by 09:30	Interconnector Available Transfer Capacity Data Transaction					S
One Day ahead of Gate Closure by 18:00	Interconnector Unit Capacity Holding Data Transaction			S		
One Day ahead of Gate Closure by 19:00	Active Interconnector Unit Capacity Holding Data Transaction		SM	SM		
As available, every 6 hours	Aggregated Wind Generation Forecast Data Transaction					S

Key

S=Submitted by Party to MO **I=Issued by MO to Party** **SM=Submitted by MO to Party**

Time	Data Transaction	Parties	Participant	Interconnector Administrator	Meter Data Provider	System Operator
Daily, post gate closure and before Trading Day						
Within 30 minutes after Gate Closure	System Operator Commercial Offer Data Transaction					SM
Within 2 hours after Gate Closure	Technical Offer Data Transaction					SM
Within 2 hours after Gate Closure	Interconnector Unit Nomination Modification Data Transaction		SM			SM
Daily, during Trading Day						
At 17:00	Credit Data Transaction		I			
Daily, post Trading Day						
Before 14:00 the next Trading Day	Generator Unit Technical Characteristics Data Transaction					S
Before 14:00 the next Trading Day	System Characteristics Data Transaction					S
Before 14:00 the next Trading Day	Energy Limited Generator Unit Technical Characteristics Data Transaction					S
Before 14:00 the next Trading Day	Dispatch Instruction and Interconnector Residual Capacity Data Transaction					S
Each Billing Period, post all Trading Days in Billing Period						
One Working Day after the Settlement Day at 17:00 and five Working Days after the Settlement Day, at 12:00	Generic Settlement Data Transaction + Generator or Supplier Unit Energy Settlement Statement Data Transaction		I			
One Working Day after the Settlement Day at 17:00 and five Working Days after the Settlement Day at 12:00	Generic Settlement Data Transaction + SO Settlement Data Transaction					I
Four and 13 Months + max. 5 Working Days after Billing Period	Generic Settlement Data Transaction + Generator or Supplier Unit Energy Settlement Statement Data Transaction		I			
Four and 13 Months + max. 5 Working Days after Billing Period	Generic Settlement Data Transaction + SO Settlement Data Transaction					I
Nine Working Days at 12:00 after end of Billing Period or Settlement Re-Run	Supplier Unit Invoice Data Transactions		I			

Key

S=Submitted by Party to MO **I=Issued by MO to Party** **SM=Submitted by MO to Party**

Time	Data Transaction	Parties	Participant	Interconnector Administrator	Meter Data Provider	System Operator
Each Capacity Period, post all Trading Days in Capacity Period						
Before 14:00 the next Trading Day, and updated as required	Preliminary Capacity Settlement Meter Data Transaction				S	
One Working Day after Capacity Period at 17:00 and five Working Days after Capacity Period, at 12:	Generic Settlement Data Transaction + Generator or Supplier Unit Capacity Settlement Statement Data Transaction		I			
Four and 13 Months + max. 5 Working Days after Month	Generic Settlement Data Transaction + Generator or Supplier Unit Capacity Settlement Statement Data Transaction		I			
Eight Working Days at 12:00 after end of Capacity Period or Settlement Re-Run	Generator Unit Self Billing Invoice Data Transactions and Supplier Unit Invoice Data Transactions		I			
Nine Working Days at 12:00after end of Capacity Period or Settlement Re-Run	Generator Unit Self Billing Invoice Data Transactions and Supplier Unit Invoice Data Transactions		I			

APPENDIX R: FORM OF AUTHORITY

R.1 To be drafted.

APPENDIX S: DEED OF ASSIGNMENT

S.1 To be drafted.

APPENDIX T: MEMBERSHIP AGREEMENT

T.1 To be drafted.

APPENDIX U: FORM OF SETTLEMENT STATEMENT

U.1 The Market Operator shall ensure that each Participant shall receive separate Settlement Statements as follows:

1. for its Generator Units for Energy Payments;
2. for its Supplier Units for Energy Charges; and
3. for its Supplier Units for Market Operator Charges ; and
4. for its Units in total the Billing Period Currency Cost Recovery; and
5. for its Units in total the Capacity Period Currency Cost Recovery; and
6. for its Generator Units for Capacity Payments; and
7. for its Supplier Units for Capacity Charges.

U.2 Settlement Statements for Energy Payments for Generator Units shall contain inter alia for each Generator Unit u in each Trading Period h, values of:

1. Energy Payments in respect of Generator Units for Billing Period b;
2. Constraint Payments in respect of Generator Units for Billing Period b;
3. Uninstructed Imbalance Payments in respect of Generator Units for Billing Period b;
4. Settlement Reallocation Energy Amount in respect of the Settlement Reallocation Agreement for Billing Period b;
5. Charge for Unsecured Bad Energy Debt for the relevant Billing Period b;
6. Charge for Unsecured Bad Capacity Debt for the relevant Capacity Period c;
7. Metered Generation (MGuh);
8. Actual Availability (AAuh);
9. Eligible Availability (EAuh);
10. Market Schedule Quantity (MSQuh);
11. Dispatch Quantity (DQuh);
12. System Marginal Price (SMPh);
13. Unsecured Bad Energy Debt (UBEDb);
14. Unsecured Bad Capacity Debt (UBCDc).

U.3 Settlement Statements for Energy Charges for Supplier Units shall contain inter alia for each Supplier Unit v in each Trading Period h, values of:

1. Energy Charge in respect of Supplier Units for Billing Period b;
2. Settlement Reallocation Energy Amount in respect of the Settlement Reallocation Agreement for Billing Period b;
3. Imperfections Charges in respect of Supplier Units for Billing Period b.

4. Metered Demand (MDLFvh);

5. Net Demand (NDLFvh);

6. System Marginal Price (SMPh).

U.4 Settlement Statements for Market Operator Charges for Supplier Units shall contain inter alia for each Supplier Unit v in each Trading Period h, values of:

1. The Market Operator Charges in respect of Supplier Units for Billing Period b.

2. Net Demand (NDLFvh);

U.5 Settlement Statements for Currency Cost for all Participants shall contain, inter alia, for each Billing Period b, values of:

1. The total Currency Cost or benefit made to all Participants for Billing Period b;

2. Billing Period Currency cost (or benefit) (BPCd).

U.6 Settlement Statements for Currency Cost for all Participants for the Currency Cost shall contain, inter alia, for each Capacity Period c, values of:

1. The total Currency Cost or benefit made to all Participants for Capacity Period c.

2. Capacity Period Currency cost (or benefit) (CAPCc).

U.7 Settlement Statements for Capacity Payments for Generator Units shall contain, inter alia, for each Generator Unit u in each Trading Period h, values of:

1. Capacity Payments for Generator Units for Capacity Period c;

2. Charge for Unsecured Bad Energy Debt for the relevant Billing Period b;

3. Charge for Unsecured Bad Capacity Debt for the relevant Capacity Period c;

4. Settlement Reallocation Capacity Amount in respect of the Settlement Reallocation Agreement for Capacity Period c;

5. Eligible Availability (EAuh)

6. Unsecured Bad Energy Debt (UBEDb);

7. Unsecured Bad Capacity Debt (UBCDc).

U.8 Settlement Statements for Capacity Charge for Supplier Units shall contain inter alia for each Supplier Unit v in each Trading Period h, values of:

1. Capacity Charge for Supplier Units for Capacity Period c;

2. Settlement Reallocation Capacity Amount in respect of the Settlement Reallocation Agreement for Capacity Period c;

3. Net Demand (NDLFvh).