

**DATED 31<sup>st</sup> October 2007**

- (1) SONI LIMITED (ACTING AS TSO)**
- (2) EIRGRID PLC (ACTING AS TSO)**
- (3) SONI LIMITED AND EIRGRID PLC (ACTING AS SEMO)**

**SYSTEM OPERATOR AGREEMENT**



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**THIS SYSTEM OPERATOR AGREEMENT** is made the 31<sup>st</sup> day of        October        2007

**BETWEEN**

- (1) **SONI Limited** (incorporated in Northern Ireland with registered number NI 38715) having its registered office at 120 Malone Road, Belfast BT9 5HT, Northern Ireland ("**SONI**") acting in its capacity as holder of a licence under Article 10(1)(b) of the Electricity (Northern Ireland) Order 1992, ("**NI TSO**");
- (2) **EirGrid PLC** (incorporated in the Republic of Ireland with registered number 338522) whose registered office is at 27 Lower Fitzwilliam Street, Dublin 2, Ireland ("**EirGrid**") acting in its capacity as holder of a licence under Section 14(1)(e) of the Electricity Regulation Act 1999 ("**ROI TSO**"); and
- (3) **SONI** and **EirGrid** each acting in its capacity as holder of a licence under Article 10(1)(d) of the Electricity (Northern Ireland) Order 1992 and under Section 14(1)(j) of the Electricity Regulation Act 1999 respectively, and together in their capacity as the Single Market Operator in relation to the Single Electricity Market ("**SEMO**"), being a contractual joint venture.

**RECITALS:**

- (A) SONI is the transmission system operator in Northern Ireland and has been granted a licence by NIAUR to carry on this role pursuant to Article 10(1)(b) of the Electricity (Northern Ireland) Order 1992. EirGrid is the transmission system operator in Ireland and has been granted a licence by the CER to carry on this role pursuant to Section 14(1)(e) of the Electricity Regulation Act 1999.
- (B) Each of NI TSO and ROI TSO has certain obligations under its System Operator Licence, the SEM legislation and/or the Legal Requirements in respect of which it is required by the terms of its System Operator Licence, the SEM legislation and/or the Legal Requirements to act in conjunction with, to co-operate with, to co-ordinate with, to consult with, to provide information to or otherwise interface with the other System Operator.
- (C) NI TSO is required by Condition 24 of its System Operator Licence, and ROI TSO is required by Condition 4 in Sections B and C of its System Operator Licence, by 1 October 2007 (or such later date as NIAUR/CER may direct) to enter into an agreement and thereafter to comply with and, in conjunction with each other, at all times maintain in force an agreement (this "**System Operator Agreement**") for the purposes set out in clause 1.2 of this System Operator Agreement.
- (D) Each of SONI and EirGrid has also been licensed and granted the appropriate exemption to undertake the role of SEMO, in conjunction with each other on an all-island basis as required by the Market Operator Licences.
- (E) SONI is required by Condition 18 of its Market Operator Licence, and EirGrid is required by Condition 8 in Section B of its Market Operator Licence, no later than 1 October 2007 to accede to and comply with the System Operator Agreement insofar as applicable to it in its capacity as the holder of its Market Operator Licence.
- (F) This System Operator Agreement and the activities of each Party in carrying on its TSO Business and of the Parties in carrying on the SEMO Business exist in the wider context of the SEM Legislation, the Grid Codes, the TSC and the overall regulatory governance of the SEM by the Regulatory Authorities.

This **SYSTEM OPERATOR AGREEMENT** provides as follows:

## 1. **BASIS AND BACKGROUND TO SYSTEM OPERATOR AGREEMENT**

### 1.1 **Regulatory basis**

The Parties acknowledge that this System Operator Agreement is entered into in compliance with their respective obligations under the System Operator Licences and the Market Operator Licences.

### 1.2 **Background to the System Operator Agreement**

The regulatory background to this System Operator Agreement is that:

- (a) it must ensure that any matter that is within the control of one TSO and affects the ability of the other TSO to carry on, on a continuing basis, its TSO Business, is carried out in a manner such that the other TSO is capable, on a continuing basis, of carrying on its TSO Business;
- (b) it must ensure that any matter that is within the control of the Parties or either of them as System Operator(s) and affects the ability of SEMO to carry on, on a continuing basis, the SEMO Business, is carried on in a manner such that SEMO, is capable, on a continuing basis of carrying on the SEMO Business;
- (c) it must ensure that any matter that is within the control of SEMO and affects the ability of either or both of the Parties as a TSO to carry on, on a continuing basis, its or their TSO Business(es), is carried on in a manner such that the relevant TSO or both of the TSOs as applicable is capable on a continuing basis of carrying on its or their TSO Business(es); and
- (d) it must be designed to:
  - (i) promote the efficient discharge by the TSOs of the obligations imposed upon each of them as System Operator under licences laws and regulations;
  - (ii) facilitate the development, maintenance and operation of the Irish transmission system and the Northern Ireland transmission system as part of efficient, economical, co-ordinated, safe, secure and reliable All-island Transmission Networks;
  - (iii) neither prevent nor restrict effective competition in the generation and supply of electricity on the Island of Ireland; and
  - (iv) promote good industry practice and efficiency in the implementation and administration of the matters covered in the System Operator Agreement.

### 1.3 **Relationships addressed in SOA**

- (a) This System Operator Agreement relates:
  - (i) to the relationships between the TSOs as TSOs; and
  - (ii) to the relationships between the TSOs and SEMO.
- (b) The provisions in relation to the relationship between the TSOs and SEMO are set out in Schedule 2.
- (c) This System Operator Agreement does not relate the relationship between SONI and EirGrid as SEMO which relationship is governed by the Market Operator Agreement.

## 2. SOA OPERATIONAL LIAISON

### 2.1 Interface Obligations

The TSOs agree to carry out their Interface Obligations in accordance with the provisions of this System Operator Agreement including the Schedules. An outline of the principles that the TSOs shall follow in order to comply with the Interface Obligations referred to in Column 1 below are set out in the Schedule specified in Column 2 opposite the relevant Interface Obligation.

Column 1	Column 2
Generation Outage Planning	Schedule 3A
Transmission Outage Planning	Schedule 3B
All Island System Planning	Schedule 4
Applications for Connections	Schedule 5
Determination of TUOS Tariffs	Schedule 6
Revenue Transfer between System Operators	Schedule 7
Calculation of Transmission Loss Adjustment Factors	Schedule 8
Grid Code Governance Schedule	Schedule 9
Grid Code Referenced Interactions	Schedule 10
Inter-jurisdictional procedures	Schedule 11
Scheduling and Dispatch	Schedule 12

### 2.2 Personnel

Each TSO agrees and undertakes to the other TSO that at all times during the term of this System Operator Agreement:

- (a) it will ensure an adequate number of personnel with suitable training and/or experience are available for the purposes of fulfilling its Interface Obligations in accordance with this System Operator Agreement; and
- (b) it shall procure (in so far as it is within its power to do so) that its nominees (and their alternates) on the Steering Committee and the Joint Management Committee and the staff who are involved in the fulfilment of its Interface Obligations comply with, and act in a manner which ensures that effect is given to, the terms and conditions of this System Operator Agreement and such other terms and conditions as may be agreed in writing between the TSOs from time to time.

### 2.3 Regulatory Approval

Where the performance of any obligation arising under or in relation to this System Operator Agreement requires approval by either of the Regulatory Authorities, the TSOs agree that they need not perform such obligation unless and until such regulatory approval is obtained. The TSOs further agree that they shall co-operate with each other to the extent necessary in

order to prepare, make and provide in a timely manner all such submissions and information as are required in order to seek such regulatory approval.

## 2.4 Compliance

The TSOs shall co-operate with each other to ensure that they are compliant with their respective Interface Obligations.

## 2.5 Transmission Asset Owner Interface

Each Party shall liaise with the relevant Transmission Asset Owner of the transmission system which it operates and shall use reasonable endeavours to procure from such Transmission Asset Owner does such things as may be necessary to ensure that each Party can comply with its obligations under this Agreement.

## 3. GOVERNANCE

### 3.1 Overview

The following provisions set out the arrangements under this System Operator Agreement for meetings and committees for operating under the System Operator Agreement. By way of overview, there shall be:-

- (a) a Steering Committee;
- (b) a Joint Management Committee;
- (c) committees established by the Joint Management Committee.

### 3.2 TSO Approvals

Each TSO acknowledges that the appointee of the other TSO on the Steering Committee and the staff of the other TSO who are involved in the fulfilment of its Interface Obligations may be subject to requirements to obtain approvals or other governance requirements of that other TSO for the purposes of carrying out its functions.

### 3.3 Steering Committee

- (a) The Parties have established, and shall maintain in place, a steering committee to oversee the maintenance in force of this System Operator Agreement (the "**Steering Committee**").
- (b) The function of the Steering Committee shall be oversight of the arrangements between the TSOs whereby they fulfil their respective Interface Obligations in accordance with this System Operator Agreement.
- (c) The Steering Committee shall fulfil its functions in accordance with this System Operator Agreement and subject to such requirements in respect of approvals of the Parties and other matters as the Parties may agree in writing from time to time.
- (d) There shall be reserved to the Steering Committee for decision or approval such matters in respect of this System Operator Agreement as the Parties may agree in writing from time to time, such matters being in accordance with the overall role of the Steering Committee as outlined above. Such matters shall include:
  - (i) receiving and considering reports (including the annual report) made to the Steering Committee by the Joint Management Committee;

- (ii) giving such directions to the Joint Management Committee as the Steering Committee sees fit (including in relation to the form and substance of the annual report and any other reports to be made to the Steering Committee);
- (iii) the resolution of any disputes referred to Steering Committee by the Joint Management Committee under this System Operator Agreement including any dispute in relation to a proposed amendment to a Schedule (subject to Clause 8); and
- (iv) proposing and considering amendments to this System Operator Agreement (other than the Schedules) (subject to Clause 13.3).

### 3.4 Constitution and Proceedings

The provisions set out in this Clause 3.4 shall apply to the constitution and the proceedings of the Steering Committee and, subject to such provisions and such other provisions as the Parties may agree in writing from time to time, the Steering Committee may otherwise regulate its proceedings as it sees fit:

- (a) the Steering Committee shall comprise the CEOs of SONI and EirGrid respectively (the "**Members**") and the total number of Members on the Steering Committee shall not exceed two;
- (b) Members may be removed and replaced at the discretion of the Party that appointed them by notice in writing to the other Party;
- (c) each Member shall have one vote on the Steering Committee and all decisions of the Steering Committee must be unanimous and recorded in minutes or such record of the meeting as the Members may direct;
- (d) there shall be at least one Steering Committee meeting each year. Either Member may call a meeting of the Steering Committee from time to time during the term of this System Operator Agreement. Either Member calling a meeting shall ensure that reasonable notice and where practical an agenda for the meeting is given to the other Member in advance of a meeting. Meetings of the Steering Committee may be held either in person or by conference call (by telephone or otherwise). Meetings shall be held successively (in rotation) in Belfast or Dublin unless otherwise agreed;
- (e) Members may participate in a meeting by means of a conference telephone or similar communicating equipment whereby all persons participating in the meeting can hear each other, and participation in a meeting in this manner will be deemed to constitute presence in person at such meeting. For the avoidance of doubt, for the purposes of determining whether the quorum for the transaction of business exists, a Member in telephonic communication with a meeting of a Steering Committee will be counted in the quorum;
- (f) the quorum for Steering Committee meetings shall be two comprising the Member from SONI and the Member from EirGrid (or in either case an alternate for that Member);
- (g) no business shall be transacted at any meeting of the Steering Committee unless a quorum is present at the time when the meeting takes place;
- (h) if no quorum is present within half an hour from the time appointed for the start of the meeting, or if during the meeting a quorum ceases to be present, the meeting shall be dissolved;
- (i) each Member may appoint an alternate to attend meetings of the Steering Committee in his or her absence and each alternate shall be entitled to vote on his or her behalf in the absence of such Member; and

- (j) a resolution in writing signed by the two Members comprising one Member from SONI and one member from EirGrid (or an alternate from each) shall be as effective as a resolution passed at a meeting of the Members duly convened and held and may consist of several documents in the like form, each signed by one or more of the Members. Such a resolution may (unless the Members shall otherwise determine either generally or in any specific case) be transmitted by facsimile or email.

### 3.5 The Joint Management Committee

- (a) The TSOs have established with effect on the date of this System Operator Agreement, and shall maintain in place from time to time, a joint management committee (the “**Joint Management Committee**”).
- (b) The Joint Management Committee shall be responsible for the management of the arrangements between the TSOs whereby they fulfil their respective Interface Obligations in accordance with this System Operator Agreement and of the sub-committees established by the Joint Management Committee subject to the overall direction of the Steering Committee and to such requirements in respect of approvals and other matters as the TSOs may agree in writing from time to time.
- (c) The functions of the Joint Management Committee shall be as set out in this System Operator Agreement and as determined by the Steering Committee from time to time. Such functions shall include:
  - (i) reviewing at such intervals as the Joint Management Committee shall determine (but not less frequently than annually) the operation of the provisions of the Schedules to this System Operator Agreement, any Agreed Procedures or any processes or procedures developed by the Parties in connection with the Interface Obligations;
  - (ii) approving any Agreed Procedures;
  - (iii) proposing and agreeing amendments to the Schedules to this System Operator Agreement (subject to Clause 13.3) and to any Agreed Procedures;
  - (iv) proposing and approving special joint projects to be undertaken by the TSOs which are relevant to the Interface Obligations;
  - (v) reporting to the Steering Committee annually and at such other intervals and in each case in such format as the Steering Committee may require on the operation of the arrangements between the TSOs whereby they fulfil their respective Interface Obligations; and
  - (vi) reviewing and considering reports made to the Joint Management Committee by sub-committees of the Joint Management Committee;
- (d) The provisions set out in Schedule 13 shall apply to the constitution and proceedings of the Joint Management Committee and, subject to such provisions and such other provisions as the TSOs may agree in writing from time to time the Joint Management Committee may regulate its proceedings as it sees fit.
- (e) Any disagreement or dispute between the members of Joint Management Committee shall be submitted to the Steering Committee no later than five Business Days after any member of the Joint Management Committee gives notice in writing of the disagreement or dispute to the other members of the Joint Management Committee. Clause 8 shall apply to any such disagreement or dispute which has not been resolved by the Steering Committee.

#### 4. PROVISION OF INFORMATION

##### 4.1 Exchange of information between the TSO

Each TSO (the “**first TSO**”) shall provide to the other TSO such information as the first TSO is required to provide by its System Operator Licence and by this System Operator Agreement and such information as the other TSO may reasonably require to enable it to carry on its TSO Business.

#### 5. PROCEDURAL MATTERS IN RELATION TO INTELLECTUAL PROPERTY RIGHTS

##### 5.1 Prior IP

The Parties agree that all Intellectual Property Rights owned by or licensed to Party prior to the date of this Agreement (“**Prior IP**”) shall, unless otherwise agreed by the Parties in writing, remain the exclusive property of that Party or its licensor and the other Party shall obtain no right, title or interest therein under or pursuant to this System Operator Agreement except as expressly provided in clause 5.2. No Party shall make any representation or do any act which may be taken to indicate that it has any right, title, or interest in or to the ownership or use of any of the Prior IP of the other Party except under the terms of this System Operator Agreement.

##### 5.2 Sole IP and Joint IP

(a) The Parties agree that all Intellectual Property Rights which on or after the date of the Agreement,

- (i) are created by or on behalf of a Party for use for the purposes of the Interface, or
- (ii) are acquired or licensed by or on behalf of a Party from third parties for use for the purposes of the Interface,

shall remain the exclusive property of that Party or its licensor (“**Sole IP**”) unless the Parties expressly agree that such Intellectual Property Rights shall be jointly owned by the Parties in such proportions and on such other terms as they may agree (“**Joint IP**”).

(b) To the extent that joint ownership of Intellectual Property Rights for use for the purposes of the Interface vests otherwise than in accordance with Clause 5.2(a), the Steering Committee may determine whether a Party shall assign any Intellectual Property Rights as may be necessary in order to give effect to Clause 5.2(a).

(c) The following provisions shall govern any Joint IP save to the extent that the Parties otherwise agree in writing:

- (i) each Party hereby assigns (including where possible by way of future assignment) and shall assign to the extent such assignment is ineffective, all such right, title and interest as it has or may come to have in the Joint IP to the Parties to hold as tenants in common in such proportions as the Parties may agree;
- (ii) subject to paragraph (iv) below, each of the Parties agrees that it will not assign, transfer, license, sublicense or otherwise deal with the Joint IP Rights without the prior approval of the Joint Management Committee;
- (iii) neither Party shall be entitled to grant any encumbrance (including fixed or floating charges) over any of, or over any licence of, the Joint IP without the prior approval of the Joint Management Committee;

- (iv) each of the Parties shall be entitled to use and to allow its employees, agents and subcontractors to use the Joint IP only for the purposes of the Interface. For the purposes of this paragraph (iv) "use" shall not include transfer or licensing to a third party in consideration of royalties or other payments;
- (v) the Parties shall be jointly responsible for and shall each co-operate (whether by execution of documents or otherwise) in obtaining and maintaining registration of, or any other applicable form of protection for, any Joint IP which is capable of registration or such protection and for complying with any other formality for the registration or protection of the Joint IP; and
- (vi) in the event that:
  - (A) any Joint IP is challenged, or being an application for protection, is opposed; or
  - (B) any application for Joint IP is made by or any Intellectual Property Right is granted to a third party by reason of which the third party may be granted or may have been granted rights which conflict in any way with any of the Joint IP; or
  - (C) any unlicensed activities are carried out by any third party which could constitute an infringement of any Joint IP,

the Party becoming aware of such matter shall notify the Joint Management Committee of such matters and both Parties shall join in taking all such steps (if any) as the Joint Management Committee determines shall be desirable for the protection of the Joint IP.

### 5.3 Licensing of Prior IP or Sole IP for Interface

- (a) Each Party shall license to the other Party (including its agents and contractors) on a non-exclusive, royalty-free basis such of its Prior IP and its Sole IP as is necessary in order for the Interface to operate and to the extent only such Party has the right to license the same to the other Party (including its agents and contractors).
- (b) If the consent, licence, authorisation or permission of a third party is required in order to grant the licence referred to in sub-clause 5.3(a) the relevant licensing Party shall use its reasonable endeavours to obtain the same at minimum cost. If the third party requires payment as a condition of the grant of the same, such payment shall be borne in such manner as the Parties shall agree.

### 5.4 Further Assurance

Each Party shall do and execute or procure that there shall be done and executed all documents, deeds, matters, acts and things as may be reasonably required in order to assign, vest, license, register and protect any Joint IP in accordance with this clause 5.

### 5.5 Third party claims

- (a) If either Party receives any notice, demand, letter or other document concerning any claim that the use or possession of any Intellectual Property Rights of the other Party or of any Joint IP or any information, data or material provided by either Party to the other Party pursuant to this Agreement infringes the Intellectual Property Rights of any third party (a "**Claim**"), that Party shall give notice in writing to the Joint Management Committee and the other Party as soon as reasonably practicable.
- (b) Where any Claim relates to the Intellectual Property Rights of one Party or any information, data or material provided by one Party, that Party (the "**Responsible Party**") shall, unless otherwise agreed by the Parties in writing, shall have the sole

conduct of any defence, dispute, compromise, settlement or appeal of the Claim and all Proceedings in respect of the Claim and of any incidental negotiations at its expense.

- (c) Where any Claim relates to Joint IP, the Parties shall take such steps to jointly resist such Claim as the Joint Management Committee may determine and shall have joint conduct of any defence, dispute, compromise, settlement or appeal of the Claim and all Proceedings in respect of the Claim and of any incidental negotiations and all Losses, costs and expenses incurred in relation to such Claim shall be borne in such manner as the Parties may agree.

## 6. LIABILITY

### 6.1 All Island Liability

#### **TSO liability:**

- (a) In the case where one TSO (the “**First TSO**”) is liable as TSO to pay an amount to:
  - (i) a Relevant User under a Relevant Agreement made between them in respect of an act or omission by a Relevant Transmission Licence Holder in the Other Jurisdiction and the First TSO would be so liable under the Agreed Terms; or
  - (ii) a Transmission Asset Owner under a Relevant Agreement made between them in respect of an act or omission by a Relevant Person in the Other Jurisdiction and the First TSO would be so liable under the Agreed Terms,the other TSO (the “**Second TSO**”), will pay on demand to the First TSO an amount equal to the amount so paid by the First TSO.
- (b) The amount payable by the First TSO in accordance with paragraph (a) of this sub-clause 6.1 to the Second TSO in relation to:
  - (i) a Relevant Act or Omission by a Relevant Transmission Licence Holder in the Other Jurisdiction under sub-clause 6.1(a)(i); or
  - (ii) a Relevant Act or Omission by a Relevant Person in the Other Jurisdiction under sub-clause 6.1(a)(ii),

will be no greater than the lower of (a) the monetary cap (if any) applying under the terms of the Relevant Agreement between the First TSO and the Relevant User or Transmission Asset Owner (as applicable) and (b) the monetary cap (if any) which would apply under the terms of an Equivalent Relevant Agreement had it been made between the Second TSO and the Relevant User or Transmission Asset Owner (as applicable).

#### **Relevant User/Transmission Asset Owner liability:**

- (c) In the case where:
  - (i) a Relevant User is liable to the First TSO under a Relevant Agreement made between them in respect of an act or omission by it which causes a loss to a Relevant Transmission Licence Holder in the Other Jurisdiction and the Relevant User would be so liable under the Agreed Terms; or
  - (ii) a Transmission Asset Owner is liable to the First TSO under a Relevant Agreement made between them in respect of an act or omission by it which causes a loss to a Relevant Person in the Other Jurisdiction and the Transmission Asset would be so liable under the Agreed Terms,

the First TSO agrees to pay to the Second TSO an amount equal to any amount it recovers from such Relevant User and/or Transmission Asset Owner in relation to such loss.

- (d) The amount payable by the First TSO in accordance with paragraph (c) of this sub-clause 6.1 to the Second TSO in relation to:
- (i) a Relevant Act or Omission by a Relevant User under sub-clause 6.1(c)(i); or
  - (ii) a Relevant Act or Omission by a Transmission Asset Owner under sub-clause 6.1(c)(ii),

will be no greater than the lower of (a) the monetary cap (if any) applying under the terms of the Relevant Agreement between the First TSO and the Relevant User or Transmission Asset Owner (as applicable) and (b) the monetary cap (if any) which would apply under the terms of an Equivalent Relevant Agreement had it been made between the Second TSO and the Relevant User or Transmission Asset Owner (as applicable).

**TSO waiver:**

- (e) In consideration of the rights conferred upon the TSOs under this Agreement, the right of each TSO to claim in negligence, other tort, or otherwise howsoever against a Relevant User which has entered into a Relevant Agreement with the other TSO and/or the Transmission Asset Owner in the Other Jurisdiction in respect of any act or omission of that Relevant User and/or Transmission Asset Owner in relation to the subject matter of the Relevant Agreement is hereby excluded and the TSO agrees not to pursue any such claim: provided that:
- (i) nothing in this sub-clause 6.1(e) shall restrict the TSO's ability to claim against such a Relevant User and/or such Transmission Asset Owner under any contract to which the TSO and such Relevant User and/or such Transmission Asset Owner are (from time to time) party, or in respect of fraudulent misrepresentation or death or personal injury resulting from the negligence of such Relevant User and/or such Transmission Asset Owner; and
  - (ii) such exclusion and agreement in respect of such Transmission Asset Owner shall only apply in respect of those periods in which the interface arrangements between that Transmission Asset Owner and the other TSO contains an equivalent waiver in favour of the TSO whether enforceable under the 1999 Act or by the other TSO on its behalf.
- (f) Each Relevant User and/or Transmission Asset Owner may rely upon and enforce the terms of sub-clause 6.1(e) against the TSOs. The third party rights of a Relevant User and/or Transmission Asset Owner in this sub-clause 6.1(f) may only be enforced by that Relevant User and/or Transmission Asset Owner subject to and in accordance with the provisions of the 1999 Act. Notwithstanding any other provision of this Agreement, this Agreement may be amended without the consent of any third party and section 2(1) of the 1999 Act shall not apply to this Agreement.

**Co-operation in relation to claims:**

- (g) Where a claim is brought by a Relevant Person against a TSO in relation to an act or omission by the other TSO or the Transmission Asset Owner or a Relevant User in the Other Jurisdiction (a "**Relevant Claim**") the Steering Committee shall meet to determine how such claim shall be handled, including in relation to:
- (i) how the TSOs shall cooperate and work together in the defence, dispute, compromise, settlement or appeal of such claim; and

- (ii) whether one TSO will have sole conduct of the defence to any such claim (whether in its own name or in the name of the other TSO) and/or the right to sue in the name of the other TSO in relation to any such claim or relation to any defence, dispute, compromise, settlement or appeal of such claim.

The TSOs shall cooperate with each other in relation to the conduct, investigation and defence of any such claims and each TSO shall provide the other with all information and documents whatsoever in its possession, custody or power of whatever nature relating in any way to any such claim, together with access to any relevant person or persons within its power who may be a witness of fact or who may have any information in relation to the claim. Neither TSO shall make any admission of liability in respect of, or compromise, dispose of or settle, any such claim without the written consent (not to be unreasonably withheld) of the other TSO. All matters in relation to conduct and defence of any such claim shall be referred to the Steering Committee for determination.

#### **Enforcement:**

- (h) Each TSO (the “**Enforcing TSO**”) shall use all reasonable endeavours to enforce the provision of any Relevant Agreement to which it is a party pursuant to which any liability is due to it as described in paragraph (c) of the sub-clause 6.1. The other TSO shall provide to the Enforcing TSO all such assistance, information and co-operation as shall be necessary or desirable to enable the Enforcing TSO to enforce such provisions.

#### **Information exchange:**

- (i) Upon reasonable notice, each TSO shall provide to the other such information in relation to the form (but not the commercial content) of the Relevant Agreements to which it is a party as the other TSO may reasonably request, including as to the monetary caps on liability thereunder.

#### **Illegality:**

- (j) If any of the provisions in any Relevant Agreement relating to any waiver by a party to that Relevant Agreement is or becomes or is declared invalid, unenforceable or illegal by the courts of any jurisdiction or by order of the Commission of the European Communities or of the Secretary of State, then the TSOs shall meet to discuss the amendments needed to be made to this Agreement to reflect that such waiver does not then exist and shall, where such amendments cannot be agreed, refer the matter to the Authority for final determination (and subsequently amend this Agreement to in accordance with such determination).

### **6.2 Scope of Liability**

- (a) Without prejudice to Clause 6.1 neither Party (“**Party Liable**”) nor any of its officers, employees or agents shall be liable to the other Party (“**Party Not Liable**”) for any losses, damages, claims, liabilities, costs or expenses arising from any breach of this Agreement other than for losses, damages, claims, liabilities, costs or expenses directly resulting from such breach in respect of:
  - (i) physical damage being occasioned to the property of the Party Not Liable, its officers, employees or agents; or
  - (ii) the liability of the Party Not Liable to any other person for loss in respect of physical damage caused directly to the property of such other person as a result of such breach other than any liability for which the Party Not Liable can claim pursuant to Clause 6.1 (a claim by a third party in respect of that liability hereafter in this Clause 6 being referred to as a “**Legal Claim**”);

provided that the liability of the Party Liable in respect of all such losses, damages, claims, liabilities, costs or expenses shall not exceed (i) in respect of any one event or series of connected events, the Liability Amount and (ii) in aggregate in respect of all occurrences during any calendar year, the Liability Cap.

- (b) Nothing in this Agreement shall exclude or limit the liability of the Party Liable for death or personal injury resulting directly from the negligence of the Party Liable or any of its officers, employees and agents and the Party Liable shall indemnify and keep indemnified the Party Not Liable, its officers, employees and agents from and against any losses, damages, claims, liabilities, costs or expenses which the Party Not Liable, its officers, employees and agents may suffer or incur by reason of any claim on account of death or personal injury resulting from the negligence of the Party Liable or the negligence of any of its officers, employees or agents (such claim hereafter in this Clause 1 being referred to as an **"Injury Claim"**).

### 6.3 Limitations on Liability

- (a) Subject to Clause 6.2(b) and any provision of this Agreement which provides for payment obligations or an indemnity, neither Party nor any of its officers, directors, employees or agents shall in any circumstances whatsoever be liable to the other Party for:
  - (i) any losses, damages, claims, liabilities, costs or expenses arising from any breach of this Agreement other than any losses, damages, claims, liabilities, costs or liabilities specified in Clause 1.2(a);
  - (ii) any loss of profit, loss of revenue, loss of use, loss of contract (other than this Agreement), loss of sales arrangements or loss of goodwill;
  - (iii) any indirect or consequential loss, incidental or special damages (including punitive damages); or
  - (iv) loss resulting from the liability of the other Party to any other person howsoever and whensoever arising save as provided in Clauses 6.1 or 6.2.
- (b) Except to the extent provided in Clause 7 neither Party shall be liable for any breach of this Agreement directly or indirectly caused by Force Majeure.

### 6.4 Exclusive Rights

The rights and remedies provided by this Agreement to the Parties are exclusive and not cumulative and exclude and are in place of all substantive (but not procedural) rights or remedies expressed or implied and provided by common law or statute in respect of the subject matter of this Agreement, including without limitation any rights either Party may possess in tort which shall include without limitation actions brought in negligence and/or nuisance. Accordingly, each of the Parties hereby waives to the fullest extent possible all such rights and remedies provided by common law or statute, and releases the other Party, its officers, employees and agents to the same extent from all duties, liabilities, responsibilities or obligations provided by common law or statute in respect of the matters dealt with in this Agreement and undertakes not to enforce any of the same except as expressly provided herein.

### 6.5 Claims

In the event of any Claim being made against the Party Not Liable, the Party Liable shall be promptly notified of the Claim and may at the Party Liable's own expense conduct all negotiations for the settlement of the same, and any litigation that may arise from the Claim. The Party Not Liable shall not, unless and until the Party Liable has failed within ten (10) Business Days of receiving notice from the Party Liable requesting it to do so, to

unconditionally agree in writing to take over the conduct of the negotiations or litigation in respect of the Claim, make any admission which might be prejudicial to the Claim. The conduct by the Party Liable of such negotiations or litigation shall be conditional upon the Party Liable having first given to the Party Not Liable an indemnity as the Party Not Liable shall from time to time notify the Party Liable that it requires to cover the amount ascertained or agreed or estimated, as the case may be, of any losses, damages, claims, liabilities, costs or expenses for which the Party Not Liable may become liable in respect of the Claim. The Party Not Liable shall, at the request of the Party Liable, afford all available assistance for the purpose of contesting the Claim and shall be paid by the Party Liable (within ten (10) Business Days of the date of its invoice therefor) all reasonable expenses incurred in so doing.

#### **6.6 Several Provisions**

Each of the provisions of this Clause 6 shall:

- (a) be construed as a separate and severable contract term, and if one or more of such provisions is held to be invalid, unlawful or otherwise unenforceable the other or others of such provisions shall remain in full force and effect and shall continue to bind the Parties; and
- (b) survive termination of this Agreement.

#### **6.7 Trustee**

Each of the Parties agrees that the other Party holds the benefit of Clauses 6.1-6.5 for itself and as trustee and agent for its officers, directors, employees and agents.

#### **6.8 Enforcement of this Agreement**

For the avoidance of doubt:

- (a) nothing in this Clause 6 shall prevent or restrict either Party enforcing any obligation (including suing for a debt) owed to it under or pursuant to this Agreement; and
- (b) each Party acknowledges and agrees that the provisions of this Clause 6 are fair and reasonable having regard to the circumstances as at the date hereof.

#### **6.9 Waivers in other agreements**

- (a) Each TSO shall ensure that each Relevant Agreement it has entered into with a Relevant User contains provisions whereby such Relevant User waives its right to claim in negligence, other tort or otherwise howsoever against a Relevant Transmission Licence Holder in the Other Jurisdiction in respect of any act or omission of that Relevant Transmission Licence Holder in relation to the subject matter of such Relevant Agreement provided that;
  - (i) nothing in such provisions restricts the Relevant User's ability to claim against such Relevant Transmission Licence Holder under any contract to which the Relevant Transmission Licence Holder and the Relevant User are (from time to time) party or in respect of fraudulent misrepresentation or death or personal injury resulting from the negligence of such Relevant Transmission Licence Holder; and
  - (ii) such waiver in respect of a Transmission Asset Owner shall only apply in respect of those periods in which the interface arrangements between the other TSO in the Other Jurisdiction and the Transmission Asset Owner in the Other Jurisdiction contains an equivalent waiver in favour of the Relevant

User whether enforceable under the 1999 Act or by the other TSO on its behalf.

- (b) EirGrid shall enforce the terms of such waiver against any Relevant User seeking to bring any such claim against SONI and/or the Transmission Asset Owner in Northern Ireland, including, where appropriate, bringing an action under the Relevant Agreement to prevent such Relevant User pursuing such claim; and
- (c) EirGrid shall enforce the terms of any waiver given by ESB in the RoI Infrastructure Agreement in favour of Relevant Users or a Relevant Transmission Licence Holder in the Other Jurisdiction.

## 7. SOA FORCE MAJEURE BETWEEN THE PARTIES

7.1 Where a Party is affected by an event of SOA Force Majeure:

- (a) the FM Party shall notify the other Party of the circumstances of SOA Force Majeure, identifying the nature of the event, its expected duration, and the particular obligation(s) affected;
- (b) the FM Party shall furnish reports at such intervals as the other Party may reasonably request, in respect of the circumstances of SOA Force Majeure during the period of SOA Force Majeure;
- (c) no obligations of either Party under or pursuant to this System Operator Agreement that arose before the SOA Force Majeure and which can reasonably be expected to be performed are excused as a result of SOA Force Majeure;
- (d) on the occurrence of the SOA Force Majeure, the FM Party shall consult with the other Party as to how the FM Party might best give effect to its obligations under or pursuant to this System Operator Agreement so far as is reasonably practicable during the period of the SOA Force Majeure;
- (e) the FM Party, in consultation with the other Party, shall do all reasonable acts to mitigate the consequences of any SOA Force Majeure to enable it to resume full performance of its obligations under this System Operator Agreement;
- (f) the FM Party shall resume full performance of its obligations under or pursuant to this System Operator Agreement on cessation of any SOA Force Majeure and shall inform the other Party of this without delay;
- (g) the FM Party shall be relieved of its obligations and liability under or pursuant to this System Operator Agreement only for so long as and to the extent that the occurrence of the SOA Force Majeure and/or its effects could not be overcome by measures which the FM Party might reasonably be expected to take acting prudently with a view to continuing or resuming performance of its obligations as appropriate; and
- (h) the FM Party shall in its sole discretion determine whether it is affected by Force Majeure for the purposes of the TSC.

7.2 Where a Party is rendered wholly or partially unable to perform all or any of its obligations under or pursuant to this System Operator Agreement by reason of SOA Force Majeure, the FM Party's relevant obligations under or pursuant to this System Operator Agreement shall be suspended and it shall be relieved from liability subject to Clause 7.3 in respect of such obligations provided that such liability and suspension shall be of no greater scope and no longer duration than is required by the SOA Force Majeure.

7.3 Notwithstanding the foregoing, SOA Force Majeure shall not relieve any FM Party from any liability to make payments due under or pursuant to this System Operator Agreement save to the extent that any failure to pay is caused by SOA Force Majeure affecting all reasonable

means of payment in which event on cessation of the SOA Force Majeure event, the FM Party shall pay all amounts due together with interest thereon at a rate agreed between the Parties in writing from time to time from the due date to the actual date of payment.

## 8. DISPUTE RESOLUTION

### 8.1 Decisions

Where:

- (a) there is any disagreement between the Parties arising out of or in connection with this System Operator Agreement which has not been resolved through the Steering Committee (including, without prejudice to the generality of the foregoing, any disagreement as to whether a Party has complied with its obligations under this Agreement); or
- (b) a unanimous vote of the Steering Committee cannot be achieved at a meeting or a quorum is not present at two consecutive meetings of the Steering Committee and either Party has subsequently notified the other within 7 days after that meeting or the second consecutive meeting, as the case may be, that a matter has not been resolved to its satisfaction and the matter has been referred to its CEO,

a Dispute (a “**Dispute**”) shall be deemed to have arisen and subject to Clause 8.4 the procedure set out in Clause 8.2 shall apply.

### 8.2 Dispute Resolution Process

- (a) The Parties shall refer the Dispute to either:
  - (i) an independent expert agreed between them who shall determine the Dispute in accordance with the terms of Schedule 14; or
  - (ii) the Regulatory Authorities.
- (b) Where the Parties are unable within 7 days of the expiry of the Discussion Period to agree whether to refer the Dispute to an independent expert or to the Regulatory Authorities, the Parties shall refer the matter to the Regulatory Authorities which may determine the Dispute or determine that the Dispute be referred to an independent expert.
- (c) Where the Parties agree to refer the Dispute to an independent expert but are unable within 7 days of the expiry of the Discussion Period to agree whether the Dispute involves a commercial matter or a technical matter for the purposes of Schedule 14, the Parties shall refer the matter to the Regulatory Authorities which may decide which type of matter the Dispute involves.
- (d) Where the Parties agree to refer the Dispute to an independent expert and the type of matter which the Dispute involves for the purposes of Schedule 14, but are unable within 7 days of the expiry of the Discussion Period to agree on the identity of the independent expert of the relevant type, the Parties shall refer the matter to the Electricity Arbitration Association which shall appoint an independent expert of that type who meets the criteria set out in Schedule 14.

### 8.3 Final and Binding

The determination of the Regulatory Authorities, or subject to Schedule 14 an expert, pursuant to Clause 8.2 shall be final and binding on the Parties, save in respect of fraud or manifest error, and the Parties agreed to be bound by, perform and/or amend this System Operator Agreement in accordance with and undertake to implement, as the case may be, such determination.

#### 8.4 **Disputes regarding amendments**

A Party may refer to a Regulatory Authority any proposed amendment to this System Operator Agreement that the other Party disputes if such dispute remains outstanding for more than 30 days after either Party serves a notice on the other that refers to the Relevant Licence Dispute Condition. In the event of such a referral of a proposed amendment the Parties shall comply with, and shall in conjunction with each other amend this System Operator Agreement to conform to, such amendment to the extent that it is approved by that Regulatory Authority.

#### 8.5 **Interim activities**

During the course of any dispute under this System Operator Agreement:

- (a) the Parties shall to the extent possible continue to perform their respective obligations under this System Operator Agreement; and
- (b) neither Party shall exercise any other remedies arising under this System Operator Agreement with respect to the matters in dispute.

### 9. **CONFIDENTIALITY**

#### 9.1 **General**

Each Party shall take such steps as shall be necessary, and shall procure that its officers, employees, agents and professional and other advisers take such steps as shall be necessary to ensure that the arrangements whereby the Parties fulfil their respective Interface Obligations are operated in such a manner that each Party is in compliance with its obligations under its System Operator Licence restricting the use and disclosure by that Party of information held or obtained by that Party (or its Affiliates or related undertakings) pursuant to or by virtue of carrying on its TSO Business.

### 10. **ASSIGNMENT**

#### 10.1 **Consent**

Neither Party may assign the benefit of this System Operator Agreement without the prior written consent of the other Party.

#### 10.2 **Successor**

Subject to Clause 10.1, this System Operator Agreement is binding upon and enures for the benefit of the assigns and successors in title of each of the Parties.

### 11. **TERM AND TERMINATION**

#### 11.1 **Term**

This System Operator Agreement shall commence on the date of this System Operator Agreement and shall continue in full force and effect for such time as SONI and EirGrid both hold their System Operator Licences until terminated by written agreement between the Parties in accordance with this Clause 11 or until one or both Parties is instructed by its or their Regulatory Authority(ies) to terminate this System Operator Agreement, whichever is the earlier.

#### 11.2 **Continuation of Obligations**

On termination the rights and liabilities of the Parties which have accrued beforehand shall subsist. This Clause 11 and Clauses 9 (Confidentiality), 14 (Waiver and Invalidity), 15

(Announcements), 21 (Governing Law and Jurisdiction) and to the extent required Schedule 1 (Definitions and interpretation) shall survive termination without limitation in time.

### **11.3 Winding up process**

In the event of the termination of this System Operator Agreement under this Clause 11 the Parties will co-operate together to procure the proper and orderly wind-down of the Interface.

## **12. ENTIRE AGREEMENT**

### **12.1 Definition of System Operator Agreement**

In this clause, references to this System Operator Agreement include all other written agreements and arrangements between the Parties which are agreed by the Parties to be supplemental to this System Operator Agreement or which this System Operator Agreement expressly preserves or requires to be executed.

### **12.2 Entire Agreement**

(a) Subject to paragraph (b) of this Clause 12.2:

(i) this System Operator Agreement constitutes the whole and only agreement and understanding between the Parties in relation to the subject matter of this System Operator Agreement; and

(ii) all previous drafts, agreements, understandings, undertakings, representations, warranties, promises and arrangements of any nature whatsoever between the Parties with any bearing on the subject matter of this System Operator Agreement (including the Memorandum of Understanding and the Project Implementation Agreement) are superseded and extinguished, and all rights and liabilities arising by reason of them, whether accrued or not at the date of this System Operator Agreement, are cancelled, to the extent that they have such a bearing, except insofar as any such thing is in terms repeated or otherwise reflected in this System Operator Agreement and save, in the case of the Project Implementation Agreement, for the provisions of Clause 1.4 of that Agreement which shall survive such termination without limitation in time.

(b) The Redbook Schedules shall continue to apply as between the TSOs in the manner set out in the letter agreement between them dated 7 June 2006 save to the extent provided in Schedule 11 (Inter Jurisdictional Procedures) and to such extent the Redbook Schedules shall be superseded and extinguished as set out in paragraph (a) of this Clause 12.2 in so far as they apply as between the TSOs.

## **13. MANAGEMENT OF SYSTEM OPERATOR AGREEMENT**

### **13.1 Review**

Each TSO shall in conjunction with the other TSO review this System Operator Agreement and its implementation annually and at any time at the request of the Regulatory Authorities.

### **13.2 Report**

Each TSO shall, in conjunction with the other, report annually to its Regulatory Authority on the operation of this System Operator Agreement to the extent relevant to the functions, rights and obligations of that TSO.

### 13.3 Amendment

- (a) Save as provided in Clause 8.4, no amendment to this System Operator Agreement (other than an amendment to the Schedules except Schedule 2) shall be of any effect unless it is agreed in writing and signed by or on behalf of each Member of the Steering Committee and no amendment to any Schedule to the System Operator Agreement (except Schedule 2) shall be of any effect unless it is agreed in writing signed by or on behalf of a Member of the Joint Management Committee appointed by each of the Parties.
- (b) Either Party may propose an amendment to this System Operator Agreement for any purpose it sees fit including for the purpose of ensuring that, to the extent that it does not already do so, this System Operator Agreement requires that, where a Party (the “**first Party**”) is not reasonably capable of fulfilling an obligation imposed by its System Operator Licence without the assistance of the other Party, the other Party shall provide such assistance as the first Party reasonably requests in order to enable it to fulfil that obligation.
- (c) Any proposal for an amendment made by a Party shall be notified to the other Party in writing setting out reasonable details of the proposed amendment and the reasons for it. The other Party shall respond promptly to the proposal and shall enter into negotiations in good faith regarding the proposal. Any dispute regarding a proposed amendment shall be dealt with in accordance with Clause 8.4.
- (d) The Parties agree and acknowledge that this System Operator Agreement is entered into in compliance with the System Operator Licences and the Market Operator Licences and that its terms are intended to reflect the terms of and give effect to, or facilitate the operation of or compliance with, the System Operator Licences, the Grid Codes, the TSC and other applicable Legal Requirements. The Parties further agree and acknowledge that they intend that this System Operator Agreement would be amended in a manner agreed between them to the extent necessary to reflect and give effect to, or facilitate the operation of or compliance with, any relevant amendments or variation properly made to the System Operator Licences, the Market Operator Licences, the Grid Codes, the TSC and the other applicable Legal Requirements from time to time.

### 13.4 Schedules

In any case where a Schedule to this System Operator Agreement expressly states that its provisions are to be further developed by the Parties after the date of this Agreement, the Parties agree, that as soon as practicable after the date of this System Operator Agreement, they shall use their best endeavours to agree and incorporate the relevant provisions into the Schedule. The agreement and incorporation into the Schedule of such provisions shall constitute an amendment to a Schedule to this Agreement and shall be made in accordance with and subject to Clause 13.3.

### 13.5 Agreed Procedures

The Parties may from time to time agree and set out in such manner as the Joint Management Committee sees fit detailed procedures for the Interface Obligations.

### 13.6 Agreement of Measures

Where this System Operator Agreement provides or requires that a Party or the Parties shall take any action or procure any result, and any measure or procedure necessary to enable the Party or the Parties to do so:

- (a) is not within the power or procurement of the Party under the obligation, or
- (b) does not exist by common accord of the Parties, or

(c) is not specified or provided for in this System Operator Agreement,

then the Parties shall meet within five (5) Business Days to agree such procedures or measures as may be necessary to enable the Party or Parties concerned to take the action concerned or procure the result concerned. Until such time as the Parties agree such procedures or measures, the Parties shall continue to observe and maintain the arrangements in respect of the relevant matters which existed prior to this System Operator Agreement.

### 13.7 **Publication**

Each of the Parties shall publish this Agreement (as amended from time to time in accordance with Clause 13.3) on its website in respect of its TSO Business.

## 14. **WAIVER AND INVALIDITY**

### 14.1 **No implied waiver**

No right, power or remedy provided by law or under this System Operator Agreement shall be waived, impaired or precluded by:

- (a) any delay or omission to exercise it; or
- (b) any single or partial exercise of it on an earlier occasion; or
- (c) any delay or omission to exercise, or single or partial exercise, of any other such right, power or remedy.

### 14.2 **Express waivers**

Any waiver of any right, power or remedy under this System Operator Agreement must be in writing and signed on behalf of the waiving Party and may be given subject to any conditions thought fit by the grantor. No waiver will take effect if the person seeking the waiver has failed to disclose to the grantor every material fact or circumstance which (so far as the person seeking the waiver is aware) has a bearing on its subject matter. Unless otherwise expressly stated, any waiver shall be effective only in the instance and only for the purpose for which it is given.

## 15. **ANNOUNCEMENTS**

### 15.1 **Prior consent**

Save and insofar as required by any regulatory authority or as expressly provided for in this System Operator Agreement or as permitted by any protocol agreed by the Joint Management Committee for the purposes of this Clause 15.1, no announcement shall be made by either Party, either before or after the date of this System Operator Agreement, in relation to this System Operator Agreement without the prior written consent of any other Party which consent shall not be unreasonably withheld or delayed.

### 15.2 **Consultation**

In the event that any announcement is to be made in connection with this System Operator Agreement which does not require the prior written consent of the other Party, the Party making the announcement shall use all reasonable endeavours to consult the other Party with regard to the terms of such announcement before it is made.

## 16. **NO PARTNERSHIP**

16.1 None of the provisions of this System Operator Agreement (or any of the arrangements

contemplated by this System Operator Agreement) shall be deemed to constitute a partnership between the Parties at any time or, save as expressly provided in this System Operator Agreement, to constitute any Party the agent of the other, or to have any authority to bind the other in any way.

**17. NO AUTHORITY**

17.1 No Party shall have the right nor shall either Party hold itself out as having the authority or right to assume, create or undertake any obligation of any kind whatsoever, expressed or implied, including but not limited to borrowing money, pledging credit, in the name of the other Party without the prior written consent of the other Party.

17.2 Nothing contained in this System Operator Agreement is intended in any manner to limit the Parties in the conduct of their respective businesses or activities, which are not related to this System Operator Agreement.

**18. THIRD PARTY RIGHTS**

Except as expressly provided in this System Operator Agreement, nothing in this System Operator Agreement is intended to confer on any person other than the Parties any right to enforce any term of this System Operator Agreement and the terms of the Contracts (Rights of Third Parties) Act 1999, which is Northern Ireland legislation, shall not apply to this System Operator Agreement.

**19. COUNTERPARTS**

This System Operator Agreement may be executed in any number of counterparts and by the Parties on different counterparts. Each counterpart shall constitute an original of this System Operator Agreement but all the counterparts shall together constitute one and the same Agreement.

**20. COSTS**

20.1 Each Party shall bear its own costs and expenses in relation to the negotiation of this System Operator Agreement.

20.2 Except as otherwise expressly provided in this Agreement, the TSOs may make such arrangements for the sharing of any costs and the making of any payments between them, including where arising from the performance of their obligations under this Agreement, as the TSOs may agree in writing from time to time.

**21. NOTICES**

**21.1 General**

Any notice to be given in connection with the matters contemplated by this System Operator Agreement shall except where expressly provided otherwise be in writing and shall either be delivered by hand or sent by email, pre-paid post (where available first class) or facsimile transmission. Delivery by courier shall be regarded as delivery by hand.

**21.2 Addresses**

Such notice shall be sent to the email address or address of the relevant Party referred to in this System Operator Agreement or the facsimile number set out below or to such other email address or address or facsimile number as may previously have been communicated to the sending Party in accordance with this clause. Each notice shall be marked for the attention of the relevant person.

**SONI**

Castlereagh House  
12 Manse Road  
Belfast  
BT6 9RT

Facsimile: 028 907 07560

Email: robin.mccormick@soni.ltd.uk

For the attention of: System Operations Manager

**EirGrid**

27 Lower Fitzwilliam Street  
Dublin 2  
Ireland

Facsimile: 00 353 1 661 5375

Email: niamh.cahill@eirgrid.com

For the attention of: Niamh Cahill

**21.3 Timing**

A notice shall be deemed to have been served:

- (a) if delivered by hand at the address referred to in sub-clause 21.2 at the time of delivery;
- (b) if sent by email to the email address referred to in that sub-clause, at the time of completion of the transmission of the email;
- (c) if sent by pre-paid post (where available first class) to the address referred to in that sub-clause, at the expiration of 2 clear days after the time of posting; and
- (d) if sent by facsimile to the number referred to in that sub-clause, at the time of completion of transmission by the sender.

If a notice would otherwise be deemed to have been delivered outside normal business hours (being 9:30a.m. to 4:45p.m. on a Business Day) under the preceding provisions of this clause, it shall be deemed to have been delivered at the next opening of such normal business hours.

**21.4 Evidence**

In proving service of the notice, it shall be sufficient to show that delivery by hand was made or that the envelope containing the notice was properly addressed and posted as a pre-paid letter (where available first class) or that the email or facsimile was dispatched and a confirmatory transmission report received.

**21.5 Changes**

A Party may notify the other Parties of a change to its name, relevant person, email address or facsimile number for the purposes of sub-clause 21.2 provided that such notification shall only be effective on:

- (a) the date specified in the notification as the date on which the change is to take place; or

- (b) if no date is specified or the date specified is less than five clear Business Days after the date on which notice is deemed to have been served, the date falling five clear Business Days after notice of any such change is deemed to have been given.

**21.6 Service for Proceedings**

For the avoidance of doubt, the Parties agree that the provisions in this clause shall not apply in relation to the service of any claim form, application notice, order, judgement or other document relating to or in connection with any Proceedings.

**22. GOVERNING LAW AND JURISDICTION**

**22.1 Governing Law**

This System Operator Agreement and any disputes arising under, out of, or in relation to this System Operator Agreement, shall be interpreted, construed and governed by the laws of Northern Ireland.

**22.2 Jurisdiction**

Subject to the provisions of Clause 8 (Disputes) the Parties hereby submit to the exclusive jurisdiction of the courts of Ireland and the courts of Northern Ireland for all disputes arising under, out of or in relation to the System Operator Agreement.

**IN WITNESS** of which the Parties have executed this Agreement on the date above written.

Signed by..... )  
 for and on behalf of )  
**SONI LIMITED as NI TSO** ) .....  
 Director/Duly Authorised Signatory

Signed by..... )  
 for and on behalf of )  
**EIRGRID PLC as ROI TSO** ) .....  
 Director/Duly Authorised Signatory

Signed by..... )  
 for and on behalf of )  
**SONI LIMITED** and signed by ) .....  
 ..... for and on )  
 behalf of **EIRGRID PLC** as )  
**SEMO** being a contractual )  
 joint venture ) .....  
 Director/Duly Authorised Signatory

## SCHEDULE 1

### Definitions and Interpretation

#### Part 1

In this System Operator Agreement (including the Recitals) the following terms shall, unless the context otherwise requires, have the meaning hereby attributed to them:

“**2007 Order**” means the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007;

“**1999 Act**” means the Contracts (Rights of Third Parties) Act 1999 of Northern Ireland;

“**Agreed Procedures**” means any agreed procedures agreed pursuant to Clause 13.5;

“**Agreed Terms**” means in respect of a Relevant Agreement the terms of the form of that Relevant Agreement as designated or directed by the relevant Regulatory Authority at the date of this System Operator Agreement subject to any amendment to those terms that may be agreed between the Parties from time to time;

“**All-island Transmission Networks**” means the Irish transmission system together with the Northern Ireland transmission system;

“**Applicable Laws**” has the meaning given in the TSC;

“**Business Day**” means a day (other than a Saturday or Sunday) when banks are open for business in both Dublin and Belfast;

“**CEO**” means as applicable the Chief Executive of EirGrid or the System Operations Manager of SONI from time to time or in each case the person appointed to that role by whatever name so called from time to time and “**CEOs**” means both of them;

“**CER**” means the Commission for Energy Regulation including the committee thereof appointed pursuant to section 8A of the ERA 1999;

“**Claims**” means any Legal Claim as defined in Clause 6.2(a) or any Injury Claim as defined in Clause 6.2(b);

“**Competent Authority**” has the meaning given in the TSC;

“**Dispute**” has the meaning given in Clause 8.1 of this System Operator Agreement;

“**Electricity Order 1992**” means the Electricity (Northern Ireland) Order 1992 (N.I.);

“**Equivalent Relevant Relevant**” means in respect of a Relevant Agreement to which a TSO is a party, the form of agreement entered into or offered by the other TSO which is the nearest equivalent to that Relevant Agreement;

“**ERA 1999**” means the Electricity Regulation Act 1999 of Ireland;

“**ESB**” means the Electricity Supply Board;

“**FM Party**” means a Party which is unable to perform all or any of its obligations under this Agreement by reason of SOA Force Majeure;

“**Forecast Statement**” has the meaning given in EirGrid’s System Operator Licence;

**“Grid Code”** in respect of a Party, shall have the meaning set out in its System Operator Licence and **“Grid Codes”** means the Grid Codes of both Parties;

**“Intellectual Property Rights”** means all patents, trade marks, service marks, trade and business names, copyright (including copyright in computer programs), rights in designs, database rights, rights in Know How, trade secrets, rights in confidential information and all other intellectual property rights or forms of protection of a similar or equivalent nature or effect which may subsist anywhere in the world (whether or not registered or capable of registration), together with all applications for registration of and rights to apply for any of the above;

**“Interface”** means the arrangements between the Parties in respect of the Interface Obligations;

**“Interface Obligations”** means the obligations of each TSO pursuant to its System Operator Licence, the SEM legislation and/or any Legal Requirements to act in conjunction with, co-operate with, co-ordinate with, consult with, provide information to or as the case may be engage in any other interface with the other TSO (acting as such);

**“Irish SEM legislation”** means the Energy Miscellaneous Provisions Act 2006, the Electricity Regulation (Amendment) (Single Electricity Market) Act 2007, the Electricity Regulation Act 1999 (Single Electricity Market) Regulations 2007 (S.I. No 406 of 2007) and (when made) the Irish Connection Regulations;

**“Irish Connections Regulations”** means the regulations expected to be made in or around the date of this Agreement pursuant to Section 34B of ERA 1999;

**“Irish transmission system”** shall have the meaning given to the term “transmission system” as defined in EirGrid’s System Operator Licence;

**“Island of Ireland”** means the entire island of Ireland comprising Northern Ireland and the Republic of Ireland;

**“Joint IP”** has the meaning given in Clause 5.2;

**“Joint Management Committee”** has the meaning given to it in Clause 3.5;

**“Know How”** means trade secrets and confidential business information, including details of supply arrangements, customer lists and pricing policy; sales targets, sales statistics, market share statistics, marketing surveys and reports; marketing research; unpatented technical and other information including inventions, discoveries, processes and procedures, ideas, concepts, formulae, specifications, procedures for experiments and tests and results of experimentation and testing; information comprised in Software or databases; together with all common law or statutory rights protecting any such thing, including by any action for breach of confidence and any similar or analogous rights to any of the above, whether arising or granted under the law of any jurisdiction;

**“Legal Requirements”** means any requirement under Applicable Laws, the Market Operator Licences, the Grid Codes, the TSC, any applicable Metering Code or any requirement, direction, determination, decision, instruction or rule of any Competent Authority;

**“Liability Amount”** means €130,000 per occurrence;

**“Liability Cap”** means €1,300,000 in any calendar year;

**“Market Operation Activity”** in respect of a Party, shall have the meaning set out in its Market Operator Licence;

**“Market Operator Agreement”** means the agreement entered into between the Parties on 3 July 2007 pursuant to Condition 14 of SONI’s Market Operator Licence and Condition 2 of Section B of EirGrid’s Market Operator Licence;

**“Market Operator Licence”** means the licence granted to SONI under Article 10(1)(d) of the Electricity (Northern Ireland) Order 1992 and/or the licence granted to EirGrid under Section 14(1)(j) of the Electricity Regulation Act 1999 as applicable and **“Market Operator Licences”** shall be construed accordingly;

**“NIAUR”** means the Northern Ireland Authority for Utility Regulation including the committee thereof appointed pursuant to Article 8 of the 2007 Order;

**“NIE”** means Northern Ireland Electricity plc;

**“Northern Ireland SEM legislation”** means the Northern Ireland (Miscellaneous Provisions) Act 2006 and the Electricity (Single Wholesale Market) (Northern Ireland) Order 2007;

**“Northern Ireland transmission system”** shall have the meaning given to “transmission system” in SONI’s System Operator Licence;

**“Other Jurisdiction”** means in the case of SONI, the Republic of Ireland and in the case of EirGrid, Northern Ireland;

**“Parties”** means SONI and EirGrid and shall, where the context requires, include a reference to each of them in its capacity as holder of its System Operator Licence and/or in its capacity as holder of its Market Operator Licence and/or in their capacity as SEMO and “Party” shall be construed accordingly;

**“Prior IP”** has the meaning given in Clause 5.1;

**“Prudent Electric Utility Practice”** has the meaning given in the TSC;

**“Prudent Industry Operator”** has the meaning given in the TSC;

**“Redbook Schedules”** means the schedules to the unexecuted Electricity Interconnection and Trading Agreement proposed to be made between Electricity Supply Board and Northern Ireland Electricity plc in accordance with which the EirGrid and SONI have operated the interconnection between the transmission systems as described in the letter agreement between them dated 7 June 2006;

**“Regulatory Authorities”** means the NIAUR and the CER and **“Regulatory Authority”** shall mean either one of them;

**“Relevant Agreements”** means, in respect of:

- (a) NIE, any agreement for connection to and/or use of the distribution system in Northern Ireland to which NIE is party, and/or the Transmission Interface Arrangements;
- (b) the other TSO, any agreement for connection to and/or use of the All-Island Transmission Networks to which the Other TSO is party;
- (c) ESB, the RoI Infrastructure Agreement; and
- (d) a Relevant User, any agreement for connection to and/or use of the All-Island Transmission Networks to which the Relevant User is party.;

**“Relevant Claim”** has the meaning given in Clause 6.1(e);

**“Relevant Licence Dispute Condition”** means where a referral is to NIAUR Condition 24(5) of the System Operator Licence granted to SONI and where a referral is to CER, Condition 4(5) of the System Operator Licence granted to EirGrid;

**“Relevant Person”** means a Relevant User, a TSO or a Transmission Asset Owner;

**“Relevant Transmission Licence Holder”** in respect of either jurisdiction means the TSO and the Transmission Asset Owner in that jurisdiction;

**“Relevant User”** means a person in either jurisdiction having rights in relation to connection to or use of the All-island Transmission Networks pursuant to a Relevant Agreement with either TSO;

**“ROI Infrastructure Agreement”** means the infrastructure agreement dated 16 March 2006 made between EirGrid and ESB;

**“SEM”** means the single wholesale electricity market for the Island of Ireland;

**“SEM Generation”** has the meaning given in the System Operator Licences;

**“SEM Go-Live”** means the time and date designated as such by the Regulatory Authorities for the purposes of the SEM and which, at the date of this Agreement, is anticipated to be on 1 November 2007;

**“SEM legislation”** means the Irish SEM legislation and the Northern Ireland SEM legislation;

**“SEMO”** means the joint market operator function for the single wholesale electricity market for the Island of Ireland as provided for pursuant to the TSC and the Market Operator Licences or the Parties or either of them as the context may require in their respective capacities as holder of a Market Operator Licence;

**“SEMO Business”** means the Market Operation Activity of each Party taken together;

**“SOA Force Majeure”** means in relation to a Party, any event beyond the reasonable control of that Party and which could not have been reasonably prevented or the consequences of which could not have been prevented by Prudent Electricity Utility Practice and which is not due to the act, error, omission, breach, default or negligence of that Party, its employees, agents or contractors and which has the effect of preventing that Party from complying with all or any of its obligations under this System Operator Agreement and including, without limitation:

- (a) acts of terrorism,
- (b) war (whether declared or undeclared), blockade, revolution, riot, insurrection, civil commotion, invasion or armed conflict;
- (c) sabotage or acts of vandalism or criminal damage;
- (d) 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; or
- (e) strikes, lockouts or other industrial actions or labour disputes

provided that SOA Force Majeure does not include any inability (however caused) of that Party to pay any amount due to be paid by it pursuant to this System Operator Agreement;

other than where such events arise as a result of the circumstances in sub-paragraphs (a)-(e) above;

**“Software”** means any and all computer programs in both source and object code form, including all modules, routines and sub-routines such programs and all source and other preparatory materials relating to them, including user requirements, functional specifications and programming specifications, ideas, principles, programming languages, algorithms, flow charts, logic, logic diagrams, orthographic representations, file structures, coding sheets, coding and any manuals or other documentation relating to them and computer generated works;

**“Sole IP”** has the meaning given in Clause 5.2 of this Agreement;

**“Steering Committee”** has the meaning given in Clause 3.3 of this Agreement;

**“System Operator”** means the operator of the Northern Ireland transmission system (or SONI) or the operator of the Irish transmission system (or EirGrid) as the case may be;

**“System Operator Agreement”** or **“SOA”** means this System Operator Agreement including the Recitals and Schedules;

**“System Operator Licence”** means the licence granted to SONI under Article 10(1)(b) of the Electricity Order 1992 and/or the licence granted to EirGrid under Section 14(1)(e) of ERA 1999 as applicable and “System Operator Licences” shall be construed accordingly;

**“Transmission Asset Owner”** means NIE and/or ESB as applicable each in its capacity as the owner of the relevant transmission system;

**“Transmission Interface Arrangements”** has the meaning given to it in SONI’s System Operator Licence;

**“transmission system”** in respect of a Party, shall have the meaning set out in its System Operator Licence;

**“TSC”** means the Single Electricity Market Trading and Settlement Code as designated by the Regulatory Authorities from time to time for the purposes of the Market Operator Licences;

**“TSO”** means the NI TSO or the ROI TSO or either of them as the case may be and **“TSOs”** means both of them;

**“TSO Business”** in respect of a Party, shall means its Transmission System Operator Business as set out in its System Operator Licences; and

**“TSO Readiness Project”** shall have the meaning given in the Project Implementation Agreement.

## **SCHEDULE 1**

### **Definitions and Interpretation**

#### **Part 2**

In this System Operator Agreement:

- S.1.2.1 the Recitals and Schedules form part of this System Operator Agreement and shall have the same force and effect as if set out in the body of this System Operator Agreement;
- S.1.2.2 the table of contents and headings and sub-headings are for convenience only and shall not affect the construction of this System Operator Agreement;
- S.1.2.3 unless the context otherwise requires, words denoting the singular shall include the plural and vice versa and references to any gender shall include all other genders. References to any person (which for the purposes of this System Operator Agreement shall include natural persons, bodies corporate, unincorporated associations, partnerships, governments, governmental agencies and departments, statutory bodies or other entities, in each case whether or not having a separate legal personality) shall include the person's successors;
- S.1.2.4 "other", "include" and "including" do not connote limitation in any way;
- S.1.2.5 references to Recitals, Schedules, clauses and sub-clauses are to (respectively) recitals to, schedules to, and clauses and sub-clauses of, this System Operator Agreement (unless otherwise specified); and references within a Schedule to paragraphs are to paragraphs of that Schedule (unless otherwise specified);
- S.1.2.6 references to any treaty, statute, statutory provision, directive of the Council of the European Union (whether issued jointly with any other person or under any other name) or other legislation include a reference to that treaty, statute, statutory provision, directive or legislation as amended, extended, re-enacted, consolidated or replaced from time to time (whether before or after the date of this System Operator Agreement) and include any order, regulation, instrument or other subordinate legislation made under the relevant treaty, statute, statutory provision, directive or legislation;
- S.1.2.7 any reference to another agreement, licence or document or any deed or other instrument is to be construed as a reference to that other agreement, licence or document, deed or other instrument as lawfully amended, modified, supplemented, substituted, assigned or novated from time to time; and
- S.1.2.8 any reference to "writing" or "written" includes faxes and any legible reproduction of words delivered in permanent and tangible form (and shall unless otherwise agreed or provided for in this System Operator Agreement include e-mail).

## SCHEDULE 2

### Relationship between the TSOs and SEMO

#### S.2.1 Interface Obligations

In this Schedule 2 the term "Interface Obligations" means the obligations to provide information or engage in any other interface imposed by the System Operator Licences and the Market Operator Licences:

- (a) on each of the Parties acting as TSO in relation to SEMO, and
- (b) on SEMO in relation to either of the Parties acting as TSO.

#### S.2.2 Current Interface Obligations

Each of the Parties acknowledges that the Interface Obligations as at the date of this System Operator Agreement are as summarised below and that such obligations are subject to any amendments or variations which may lawfully be made to the relevant provisions of the System Operator Licences and/or the Market Operator Licences and/or the SEM Regulation.

##### ***Interface Obligations as at the date of this Agreement.***

1. *In the case of the TSOs or either of them furnishing to the Market Operator Licensee in such manner and at such times as may be reasonably required, such information as may be reasonably required by the Market Operator Licensee in order for it to carry out its licensed activities under the SEM legislation, TSC and its Market Operator Licence*
2. *In the case of SEMO furnishing to the TSOs, or either of them in such manner and at such times as may be reasonably required, such information as may be reasonably required by the TSOs or either of them in order for it or them to carry out its or their licensed activities under the SEM legislation, TSC and its or their System Operator Licence(s).*

#### S.2.3 Regulatory Matters

Clause 2.2 and 2.3 of the System Operator Agreement shall apply to the Interface Obligations mutatis mutandis.

#### S.2.4 Governance

The provisions of the System Operator Agreement in relation to the Steering Committee shall also apply mutatis mutandis in respect of the arrangements between the Parties whereby they fulfil their respective Interface Obligations.

#### S.2.5 Provision of Information

In relation to exchanges between the TSOs together or separately, on the one hand, and SEMO on the other hand, the TSO(s) shall provide to SEMO, and SEMO shall provide to each or either TSO, or both, such information as it is required by its licence to provide and as the other may reasonably require to enable it to carry its SEMO Business or TSO Business, as the case may be.

#### S.2.6 Other Provisions

Clauses 5-21 (other than clauses 6.1, 6.9, 13.1 and 13.2) of the System Operator Agreement shall apply mutatis mutandis as between the TSOs (or either of them) SEMO provided that:

- (a) references to the Joint Management Committee in clause 5 shall be deemed to be references to the Steering Committee; and
- (b) the proviso to Clause 6.2 shall be read as though the words “(whether as TSO or as SEMO)” were inserted after the words “Party Liable”.

## **SCHEDULE 3A**

### **Generation Outage Planning**

#### **S.3A.1 Scope**

- S.3A.1.1 This Generation Outage Planning Schedule sets out the key principles and arrangements for the interface between SONI and EirGrid as transmission system operators (“TSOs”) in Northern Ireland and Ireland respectively in relation to Generation Outage Planning.
- S.3A.1.2 It sets out in broad terms the arrangements whereby the TSOs shall work together in accordance with their respective licence and Grid Code obligations in relation to Generation Outage Planning.
- S.3A.1.3 Developing and enhancing the interface processes and procedures between the TSOs on this issue is an ongoing process and both TSOs shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.3A.1.4 This Generation Outage Planning Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a Member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### **S.3A.2 Definitions**

- S.3A.2.1 In this Generation Outage Planning Schedule capitalised words and expressions not defined in the SOA shall have the meanings given in the Grid Code.

#### **S.3A.3 Summary of TSO governance arrangements**

- S.3A.3.1 The TSOs have established a System Operation Committee consisting of key personnel from each organisation which shall oversee and manage the interface between the TSOs in relation to joint operational activity, including Generation Outage Planning.
- S.3A.3.2 The System Operation Committee has been constituted to manage the process whereby the TSOs will need to coordinate with each other in accordance with their respective licence and Grid Code obligations in relation to Generation Outage Planning. The System Operation Committee will be responsible for overseeing the development of specific business processes and procedures considered necessary for this purpose.
- S.3A.3.3 The TSOs have appointed operational personnel from each organisation to work together to the extent required to meet the respective licence and Grid Code obligations in relation to Generation Outage Planning.
- S.3A.3.4 The TSOs will ensure that personnel appointed to oversee the coordination between the TSOs in relation to Generation Outage Planning comply with the procedural steps set out in this Schedule.
- S.3A.3.5 The governance provisions in this Schedule are intended to supplement the general governance provisions between the two TSOs set out in the main body of the SOA, which shall take precedence over the provisions in this Schedule to the extent there is any inconsistency.

#### S.3A.4 Generation Outage Planning - Outline of areas of co-ordination

S.3A.4.1 The following outline process between the two TSOs reflects the co-ordination required between them for their respective roles under each Grid Code in relation to Generation Outage Planning.

##### Indicative Term Operational Planning – Years 4 to 7

S.3A.4.2 The process starts formally when Generators and other Users submit Indicative Outage Programmes for years 4 to 7 to the TSO of the transmission system to which their plant is connected in accordance with the relevant Grid Code provisions.

S.3A.4.3 Each TSO shall for years 4 to 7 produce and assess the Indicative Outage Programme for its transmission system and carry out a risk assessment based on “Weekly Peak Generating Capacity” (including output from any external interconnections), “Demand Forecasts”, “Customer Demand Management” (TSO Forecast), the Margin as set by the relevant TSO, Constraints on System and on the Louth Inter-Jurisdictional Tie Line, Constraints on the transmission system to ensure that as far as possible these have the least restraint on Generator Outages.

S.3A.4.4 In preparing the Indicative Outage Programme, each TSO will make appropriate assumptions based on the following:

- *Moyle*: The Northern Ireland TSO shall assume that there will be capacity margin available from the Moyle Interconnector.
- *Tie-Lines*: Each TSO shall seek to ensure that there will be an agreed capacity margin in each direction available to support the other TSO across the Louth Inter Jurisdictional Tie–Line.

S.3A.4.5 Each TSO shall inform the other TSO where, due to a proposed Generator Outage in the Indicative Outage Programme, it will be unable to provide the expected level of system margin to the other TSO. The TSOs will discuss the consequences of any inability by one of them to provide the expected level of system margin.

S.3A.4.6 If after further discussions with Generators connected to its transmission system either TSO cannot accept a proposed Generator Outage on the other TSO’s transmission system, then the two TSOs together will decide how the Outage Programme will be amended.

S.3A.4.7 Where the operational personnel of each TSO cannot agree which Generator Outage to postpone, the matter shall be passed to the System Operation Committee for resolution. If the System Operation Committee cannot resolve the matter then it shall be passed to the Joint Management Committee for final resolution. Where necessary in order to meet any licence or Grid Code obligation the most appropriate solution based on the technical requirements of the transmission systems shall be adopted pending the decision of the System Operation Committee and/or Joint Management Committee.

S.3A.4.8 Where the System Operation Committee and/or Joint Management Committee cannot agree, the TSOs shall reach a solution which allows for each TSO to provide the expected level of system margin to the other.

S.3A.4.9 The two TSOs shall then produce a Provisional Outage Programme for years 4 to 7, which will still be indicative only but will signal, in advance, all major Generation Outages which could impact on capacity adequacy or on the TSOs’ Transmission Outage Maintenance and Development Programmes in that period.

##### Long Term Operational Planning – Years 2 and 3

- S.3A.4.10 This process for year 2 and 3 starts with Generators submitting their suggested Provisional Outage Programme for years 2 and 3 in accordance with the relevant Grid Code provisions.
- S.3A.4.11 The process for the Long Term Operational Planning procedure is the same as that for the Indicative Term Operational Planning procedure, with any assumptions being updated as appropriate, except that at the end of the process the TSOs shall, in conjunction with each other, provide to each Generator a Provisional Outage Programme for that Generator.
- S.3A.4.12 The TSOs shall continue to liaise with each other in the preparation of each Provisional Outage Programme for each Generator to ensure that each TSO is kept fully informed of any material implications for its transmission system.

Medium Term Operational Planning – for Year 1

- S.3A.4.13 This process for year 1 starts with Generators submitting their proposed Final Outage Programme for year 1 in accordance with the relevant Grid Code provisions.
- S.3A.4.14 The process for the Medium Term Operational Planning procedure is the same as the Long Term Operational Planning procedure. The assumptions used previously for this year will be updated as appropriate and should be more easily validated.
- S.3A.4.15 The TSOs will continue to liaise with each other in the preparation of each Final Outage Programme for each Generator to ensure that each TSO is kept fully informed of any material implications for its transmission system.

Short Term Operational Planning – for Year 0

- S.3A.4.16 The TSOs will continue to liaise with each other in relation to Generator Outages on each TSO's transmission system to ensure that each TSO is kept fully informed of any material implications for its transmission system into the Short Term Operational and Planning Phase.
- S.3A.4.17 The TSOs will work with one another as appropriate in order to seek to agree any unexpected Generator Outages on each other's transmission system having regard to the relevant system requirements in respect of each transmission system.
- S.3A.4.18 As the timescales move towards real time the personnel appointed by the TSOs to oversee coordination in relation to scheduling and dispatch will take over in relation to the required interface between the two TSOs.

**S.3A.5 General**

- S.3A.5.1 The TSOs will agree jointly outages of the inter-jurisdictional tie lines taking into account the implications for both transmission systems that there will be no margin available across the tie-lines.
- S.3A.5.2 The System Operators will regularly communicate expected margins and notify each other of significant changes which may impact on margins or the ability to deliver support to the other TSO.
- S.3A.5.3 Each TSO will implement its Generation Outage Plan having regard to the agreed level of system margin and individual security standards as well as any last minute final outages.
- S.3A.5.4 The TSOs will maintain a joint Generation Outage Schedule, which includes actual and expected outages.

S.3A.5.5 The TSOs will send the Final Outage Programmes to the Market operator to publish as required under the TSC.

## **SCHEDULE 3B**

### **Transmission Outage Planning**

#### **S.3B.1 Scope**

- S.3B.1.1 This Transmission Outage Planning Schedule sets out the key principles and arrangements for the interface between SONI and EirGrid as transmission system operators (“TSOs”) in Northern Ireland and Ireland respectively in relation to Transmission Outage Planning.
- S.3B.1.2 It sets out in broad terms the arrangements whereby the TSOs shall work together in accordance with their respective licence and Grid Code obligations in relation to Transmission Outage Planning.
- S.3B.1.3 Developing and enhancing the interface processes and procedures between the TSOs on this issue is an ongoing process and both TSOs shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.3B.1.4 This Transmission Outage Planning Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a Member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### **S.3B.2 Definitions**

- S.3B.2.1 In this Generation Outage Planning Schedule capitalised words and expressions not defined in the SOA shall have the meanings given in the Grid Code.

#### **S.3B.3 Summary of TSO governance arrangements**

- S.3B.3.1 The TSOs have established a System Operation Committee consisting of key personnel from each organisation which shall oversee and manage the interface between the TSOs in relation to joint operational activity, including Transmission Outage Planning.
- S.3B.3.2 The System Operation Committee has been constituted to manage the process whereby the TSOs will need to coordinate with each other in accordance with their respective licence and Grid Code obligations in relation to Transmission Outage Planning. The System Operation Committee will be responsible for overseeing the development of specific business processes and procedures considered necessary for this purpose.
- S.3B.3.3 The TSOs have appointed operational personnel from each organisation to work together to the extent required to meet the respective licence and Grid Code obligations in relation to Transmission Outage Planning.
- S.3B.3.4 The TSOs will ensure that personnel appointed to oversee the coordination between the TSOs in relation to Transmission Outage Planning comply with the procedural steps set out in this Schedule.
- S.3B.3.5 The governance provisions in this Schedule are intended to supplement the general governance provisions between the two TSOs set out in the main body of the SOA, which shall take precedence over the provisions in this Schedule to the extent there is any inconsistency.

#### **S.3B.4 Transmission Outage Planning - Outline of areas of co-ordination**

- S.3B.4.1 The process of coordination between the TSOs in relation to Transmission Outage Planning will largely follow on from the coordination between them in respect of Generation Outage Planning.
- S.3B.4.2 Each TSO will plan for transmission outages on their respective Transmission Systems having regard to the Generation Outage Schedule and where a transmission outage has an effect on Generation Outage Planning the TSOs will feed this into the process in relation to Generation Outage Planning.
- S.3B.4.3 The following outline process between the two TSOs reflects the co-ordination required between them for their respective roles under each Grid Code in relation to Transmission Outage Planning.

Long Term Operational Planning – Years 2 and 3 ahead

- S.3B.4.4 For transmission system outages required in years 2 and 3 ahead for construction or refurbishment works each TSO shall plan taking due account of known system requirements.
- S.3B.4.5 For transmission system outages required in years 0 and 1 ahead each TSO will also take into account system outages required as a result of maintenance.
- S.3B.4.6 Each TSO will co-ordinate transmission system outages with generation outages in years 2 and 3 ahead such that generation outages will take precedence over transmission system outages, subject to the TSO's discretion to determine otherwise on the basis of the proper operation of the transmission system and any information received from the other TSO in respect of its transmission system.
- S.3B.4.7 The TSOs will liaise and where necessary co-ordinate with each other in respect of proposed transmission system outages before notifying Users of the draft Transmission System Outage Plan.
- S.3B.4.8 Each TSO will draw up a draft Transmission System Outage Plan for years 2 and 3 ahead and notify each User connected to its transmission system in writing of those aspects of the draft plan which may operationally affect such User.

Medium Term Operational Planning – Year 1

- S.3B.4.9 The draft Transmission System Outage Plan shall be updated each calendar year to take into account outages required for maintenance work.
- S.3B.4.10 The TSOs will keep each other informed of any changes to the draft Transmission Outage Plan that may impact on the transmission system of the other TSO and where necessary co-ordinate with each other in respect of proposed transmission system outages before notifying Users of changes to the draft Transmission System Outage Plan.
- S.3B.4.11 Each TSO shall draw up a draft revised Transmission System Outage Plan and will inform Users of any restrictions which may affect it in accordance with the relevant Grid Code provisions.
- S.3B.4.12 Each TSO will issue the final Transmission System Outage Plan for year 1 and will notify any Users in writing of those aspects which may operationally affect such User in accordance with the relevant Grid Code provisions.

Short Term Operational planning – year 0 down to Programming Phase

- S.3B.4.13 Each TSO shall update its Transmission System Outage Plan each week and shall notify the other TSO of any changes that may impact on the transmission system of the other TSO.

S.3B.4.14 The TSOs will notify any Users in writing of those aspects which may operationally affect such User in accordance with the relevant Grid Code provisions.

S.3B.4.15 Each TSO shall inform the other immediately if that TSO is informed by any User on its transmission system of any unavoidable requirement to depart from the outages in the Transmission System Outage Plan.

### **S.3B.5 General**

S.3B.5.1 Where any transmission system outage may materially affect the transmission system of the other TSO the TSOs will discuss and where necessary coordinate with each other in order to seek to agree a solution.

S.3B.5.2 Where the operational personnel cannot agree on a solution the matter shall be referred to the System Operation Committee for resolution. If the System Operation Committee cannot resolve the matter then it shall be passed to the Joint Management Committee for final resolution.

S.3B.5.3 Each TSO will implement its Transmission Outage Plan having regard to the agreed operational system margin and individual security standards.

S.3B.5.4 The TSOs will send the Transmission Outage Plans to the Market operator to publish as required under the TSC.

## SCHEDULE 4

### All Island System Planning

#### S.4.1 Scope

- S.4.1.1 This Schedule sets out the key principles and arrangements for the interface between SONI and EirGrid as transmission system operators (“TSOs”) in Northern Ireland and the Republic of Ireland respectively in relation to All Island System planning.
- S.4.1.2 It sets out in broad terms the arrangements whereby the TSOs shall work together in accordance with their respective licence and Grid Code obligations in relation to All Island System planning. The information shared between the TSOs in relation to All Island System planning will be used in the production of:
- SONI’s seven year transmission system capacity statement
  - SONI’s generation capacity statement
  - EirGrid’s Transmission Forecast Statement
  - EirGrid’s Transmission Development Plan
  - Eirgrid’s Generation Adequacy Report
  - Eirgrid’s Transmission System Security and Planning Standards
  - Soni’s Transmission and Distribution System Security and Planning Standards
  - Eirgrid’s Operating Security Standards
  - Soni’s Operating Security Standards
- S.4.1.3 SONI and Eirgrid agree as TSOs that they will co-ordinate and consult with each other in relation to the production and any revision of the documents listed at S.4.1.2 above.
- S.4.1.4 Developing and enhancing the interface processes and procedures between the TSOs on this issue is an ongoing process and both TSOs shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.4.1.5 This Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### S.4.2 Summary of TSO governance arrangements

- S.4.2.1 The TSOs have established a Planning Committee consisting of key personnel from each organisation which shall oversee and manage the interface between the parties in relation to All Island System planning.
- S.4.2.2 The Planning Committee has been constituted to manage the process whereby the TSOs will need to coordinate with each other in accordance with their respective licence and Grid Code obligations in relation to All Island System planning. The Planning Committee

will be responsible for overseeing the development of specific business processes and procedures considered necessary for this purpose.

- S.4.2.3 The TSOs have appointed operational personnel from each organisation to work together to the extent required to meet the respective licence and Grid Code obligations in relation to All Island System planning.
- S.4.2.4 The TSOs will ensure that personnel appointed to oversee the coordination between the TSOs in relation to All Island System Planning comply with the procedural steps set out in this Schedule.
- S.4.2.5 The governance provisions in this Schedule are intended to supplement the general governance provisions between the two TSOs set out in the main body of the SOA, which shall take precedence over the provisions in this Schedule to the extent there is any inconsistency.

### **S.4.3 All Island System Planning - Outline of areas of co-ordination**

- S.4.3.1 The TSOs will provide each other with planning data, having each liaised with Users connected to its transmission system and with SONI having liaised with the transmission system owner in Northern Ireland where appropriate. The TSOs will cooperate with each other, including in relation to the exchange of planning data, as may be required by their respective Grid Codes.
- S.4.3.2 The TSOs will coordinate in respect of:
- Updating planning data
  - Updating All-Island planning model
  - Updating market models including constraint costs
  - Reviewing constraint management practices
  - Reaching agreement on background planning assumptions, including
    - (A) All-Island dispatch scenarios
    - (B) committed generation
    - (C) demand forecasts
    - (D) network configuration
    - (E) wind output
- S.4.3.3 The TSOs will then carry out deterministic assessments of their respective transmission systems with SONI providing planning assumptions to the transmission system owner in Northern Ireland where appropriate and liaising with the transmission system owner in Northern Ireland in respect of operational concerns which could be resolved by investment.
- S.4.3.4 The TSOs will coordinate in respect of any network issues caused by any potential contravention of planning or security standards, constraints or asset condition.
- S.4.3.5 The TSOs may agree any areas for joint study, involving the transmission owner in Northern Ireland where appropriate.

S.4.3.6 The TSOs will meet regularly through the Planning Committee in order to coordinate with each other on planning issues and to ensure that the TSOs can comply with their respective licence and Grid Code obligations in respect of All Island System planning.

S.4.3.7 In furtherance of the general requirement in the main body of the SOA for the TSOs to liaise where necessary with their relevant transmission asset owner, SONI will work with NIE to ensure that it can comply with its obligations in respect of All Island planning.

#### S.4.4 Joint Planning Data Exchange

S.4.4.1 A key aspect of All Island System planning will be the exchange of data between the two TSOs. Each TSO must procure sufficient planning data annually to enable it to comply with its licence requirements and Grid Code requirements, including in relation to interfacing with the other TSO in respect of planning.

S.4.4.2 The following data for each network will be exchanged on an annual basis. This Schedule does not preclude either system operator seeking other specific data not listed here for special studies.

##### Network Data

The data exchange between the TSOs in respect of Network data will include data on the following:

- *Bus Data*
- *Overhead Lines and Underground Cables*
- *Distribution Network Data*
- *Transformer Data*
- *Transformer Control Data*
- *Reactive Compensation Devices: (See also Bus Data)*
- *HVDC circuits*
- *Load modelling Data*

##### User Data

The data exchange between the TSOs in respect of User data will include data on the following:

- *Demand Customers*
- *Power Station Data*
- *Generation Unit*

## SCHEDULE 5

### Applications for Connections

#### S.5.1 Scope

- S.5.1.1 This Schedule sets out the key principles and arrangements for the interface between SONI and EirGrid as transmission system operators (“TSOs”) in Northern Ireland and the Republic of Ireland respectively in relation to applications for connections to either transmission system.
- S.5.1.2 It sets out in broad terms the arrangements whereby the TSOs shall work in accordance with their respective statutory and licence obligations in relation to applications for Connections.
- S.5.1.3 Developing and enhancing the interface processes and procedures between the TSOs on this issue is an ongoing process and both TSOs shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.5.1.4 This Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a Member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### S.5.2 Summary of TSO governance arrangements

- S.5.2.1 The TSOs have established a Connection and Use of System Committee consisting of key personnel from each organisation which shall oversee and manage the interface between the TSOs in relation to applications for connections.
- S.5.2.2 The Connection and Use of System Committee shall manage the process whereby the TSOs will need to coordinate in accordance with their respective licence and statutory obligations in relation to applications connections to either transmission systems. The Connection and Use of System Committee shall be responsible for overseeing the development of specific business processes and procedures considered necessary for this purpose.
- S.5.2.3 The TSOs have appointed personnel from each organisation to work together to the extent required to meet the respective licence and statutory obligations in relation to applications for connection to the transmission systems.
- S.5.2.4 The TSOs will ensure that personnel appointed to oversee the coordination between the TSOs in relation to applications for Connections comply with the procedural steps set out in this Schedule.
- S.5.2.5 The governance provisions in this Schedule are intended to supplement the general governance provisions between the two TSOs set out in the main body of the SOA, which shall take precedence over the provisions in this Schedule to the extent there is any inconsistency.

#### S.5.3 Outline of areas of co-ordination

- S.5.3.1 Each TSO shall on receipt of a request from the other TSO insofar as any matter is within the TSO's control, ensure that the other TSO can fulfil the conditions of its System Operator Licence and/or its statutory requirements in relation to applications for connection or modification to an existing connection to its transmission system.

- S.5.3.2 Where it receives an application for a connection to its transmission system and any relevant applications from a Distribution System Operator notified to it for connection, each TSO shall inform the other TSO and provide such information as is necessary for the other TSO to assess the potential impact on its transmission system.
- S.5.3.3 Where it is considered by either TSO that an application for connection may impact on the transmission system of the other TSO, each TSO shall co-operate with the other TSO in relation to the provision of information, carrying out of any system studies, testing or works, or arranging to have carried out such works, in relation to any extension or reinforcement of the other TSO's transmission system rendered necessary or appropriate by reason of such connection.
- S.5.3.4 Where necessary given the nature of any connection, the TSOs will co-operate with one another, including in relation to the provision of offers to the other TSO making provisions for the carrying out of works, including any extension or reinforcement, to the transmission system necessary to enable any connection or modification and the obtaining of any consents.
- S.5.3.5 The TSOs will continue to develop more detailed business processes which will set out in more detail the manner in which the TSOs will co-ordinate with each other in relation to connections to the two transmission systems.
- S.5.3.6 The TSOs will coordinate with each other in order to enable each to publish a statement of charges setting out the basis on which charges will be made for connection to the transmission networks in Northern Ireland and the Republic of Ireland such that each TSO can comply with its respective licence obligations.
- S.5.3.7 Each TSO will co-operate with the other to the extent required to enable each of them to fulfil their obligations in relation to use of the All-Island Transmission Networks.

#### S.5.4 **Data Exchange**

- S.5.4.1 The TSOs will in respect of applications for connection to their respective transmission systems provide relevant connection data to each other, which may, for example, include:
- *Generator capacity*
  - *Generator configurations*
  - *Potential locations voltage levels*
  - *Generator characteristics (including generic design data)*
  - *Impedances, dynamic models etc.*
  - *Construction offer options (including costs and timescales)*
  - *As built performance data*
  - *AVR and governor models etc.*

## SCHEDULE 6

### Determination of TUOS Tariffs

#### S.6.1 Scope

- S.6.1.1 This Schedule sets out the key principles and arrangements for the interface between SONI and EirGrid as transmission system operators (“TSOs”) in Northern Ireland and the Republic of Ireland respectively in relation to the determination of transmission use of system tariffs.
- S.6.1.2 It sets out in broad terms the arrangements whereby the TSOs shall work together in accordance with their respective statutory and licence obligations in relation to the determination of transmission use of system tariffs.
- S.6.1.3 Developing and enhancing the interface processes and procedures between the TSOs on this issue is an ongoing process and both TSOs shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.6.1.4 This Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a Member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### S.6.2 Summary of TSO governance arrangements

- S.6.2.1 The TSOs have established a Connection and Use of System Committee consisting of key personnel from each organisation which shall oversee and manage the interface between the parties in relation to the determination of transmission use of system tariffs.
- S.6.2.2 The Connection and Use of System Committee shall manage the process whereby the TSOs will need to coordinate with each other in accordance with their respective licence obligations in relation to the determination of All Island transmission use of system tariffs. The Connection and Use of System Committee shall be responsible for overseeing the development of specific business processes and procedures considered necessary for this purpose.
- S.6.2.3 The TSOs have appointed personnel from each organisation to work together to the extent required to meet the respective licence and statutory obligations in relation to the determination of transmission use of system tariffs.
- S.6.2.4 The TSOs will ensure that personnel appointed to oversee the coordination between the TSOs in relation to the determination of All Island transmission use of system tariffs comply with the procedural steps set out in this Schedule.
- S.6.2.5 The governance provisions in this Schedule are intended to supplement the general governance provisions between the two TSOs set out in the main body of the SOA, which shall take precedence over the provisions in this Schedule to the extent there is any inconsistency.

#### S.6.3 Outline of areas of co-ordination

- S.6.3.1 The TSOs shall co-operate with one another to prepare and obtain the approval of the Regulatory Authorities for a statement setting out the basis on which Users will be charged for use of the transmission system in their respective jurisdictions.

- S.6.3.2 **Annual Process:** The Annual Generator TUoS Tariffs Business Process is a process that provides for the annual development of generator tariffs to apply across the Island and for application by the System Operators for approval of the tariffs by the Regulatory Authorities.
- S.6.3.2 **Within Year Process:** The Within Year TUoS Tariffs Business Process is an event driven process that ensures that as a new generator is coming on the system that a TUoS tariff has been derived for the generator and provided to TSO Billing and Settlement and is ready for application in billing. The process also provides for the calculation of a tariff in circumstances where a generator was not anticipated in the annual process and no tariff exists for the generator.
- S.6.3.3 **Annual Process:** The Annual Generator TUoS Tariffs Business Process is being aligned to a harmonised regulatory approval period of 1<sup>st</sup> October to 30<sup>th</sup> September in accord with the joint Regulatory Authority determination in respect of the tariff year. The process is complete upon the approval of final tariffs by the Regulatory Authorities and the provision of approved values to TSO Billing and Settlement.
- S.6.3.4 **Within Year Process:** The Within Year Generator TUoS Tariffs Business Process begins with a triggering event that advises of a new generator connecting to the system. The triggering event may come from a number of sources but in the final instance will come from SMO Customer Services as part of the New Participant/Unit registration process and the process is complete when a tariff for the generator has been calculated.
- S.6.3.5 **Business Objective:** Locational Generator TUoS Tariffs are part of integral locational price signals that are intended to provide incentives to generators to select locations that are more optimal from a transmission system standpoint. The tariffs should therefore seek to fairly reflect the costs imposed on the system resulting from their locational decision.
- S.6.3.6 **Process Impact:** It is most important from a process standpoint to meeting the business objective that tariffs are produced in a timely manner based on an approach that is applied in a consistent, fair, transparent and non-discriminatory manner. Critical to this is the application of the tariff methodology which is determined through regulatory processes and approved by the Regulatory Authorities.
- S.6.3.7 The TSOs will coordinate with each other in order to enable each to publish a statement of charges setting out the basis on which charges will be made for use of the transmission networks in Northern Ireland and the Republic of Ireland such that each TSO can comply with its respective licence obligations.

#### **S.6.4 Sharing and Exchange of Data required to calculate TUoS Tariffs**

- S.6.4.1 The data to be exchanged between the TSOs in order to calculate the transmission use of system tariffs will include network costing covering:
- *General station costs*
  - *Circuit costs (including line and cable costs)*
  - *Transformer costs*
  - *Switchgear costs*
- S.6.4.2 The data to be exchanged between the TSOs in order to calculate the transmission use of system tariffs will include revenue recovery data covering:
- *Rate of recovery*

- *O&M costs*
- *Depreciation*
- *Overhead*
- *Rate of Return*

## **SCHEDULE 7**

### **Revenue Transfer between System Operators**

#### **S.7.1 Scope**

- S.7.1.1 This Schedule sets out the key principles and arrangements for the interface between SONI and EirGrid as transmission system operators (“TSOs”) in Northern Ireland and the Republic of Ireland respectively in relation to the transfer of revenue between the TSOs.
- S.7.1.1 It sets out in broad terms the arrangements whereby the parties shall work together in accordance with their respective licence obligations in relation to the transfer of revenue between the TSOs.
- S.7.1.3 Developing and enhancing the interface processes and procedures between the TSOs on this issue is an ongoing process and both parties shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.7.1.4 This Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a Member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### **S.7.2. Summary of TSO governance arrangements**

- S.7.2.1 The TSOs have established a Connection and Use of System Committee consisting of key personnel from each organisation which shall oversee and manage the interface between the TSOs in relation to the transfer of revenue between the System Operators.
- S.7.2.2 The Connection and Use of System Committee shall manage the process whereby the TSOs will need to coordinate with each other in accordance with their respective licence obligations in relation to the transfer of revenue between them. The Connection and Use of System Committee shall be responsible for overseeing the development of specific business processes and procedures considered necessary for this purpose.
- S.7.2.3 The TSOs have appointed personnel from each organisation to work together to the extent required to meet the respective licence and statutory obligations in relation to the oversight of the appropriate sharing of costs and transfer of revenue between TSOs.
- S.7.2.4 The TSOs will ensure that personnel appointed to oversee the coordination between the TSOs in relation to revenue sharing comply with the procedural steps set out in this Schedule.
- S.7.2.5 The governance provisions in this Schedule are intended to supplement the general governance provisions between the two TSOs set out in the main body of the SOA, which shall take precedence over the provisions in this Schedule to the extent there is any inconsistency.

#### **S.7.3 Outline of areas of co-ordination**

- S.7.3.1 The Connection and Use of System Committee will set out both the basis for and means of the transfer of revenues between the two TSOs in respect of carrying out their respective statutory and licence obligations.
- S.7.3.2 The basis for the transfer of revenue will be determined by the TSOs with appropriate input from the Regulatory Authorities from time to time but will include:
- S.7.3.2.1 An appropriate transfer in respect of Transmission Use of System tariffs for generators recovered on an All Island basis in accordance with any

regulatory determination in respect of the model applying to same, or in the absence of such a determination, in accordance with any agreement reached between the TSOs in the determination for submission of their respective Statements of Charges for Transmission Use of System in either jurisdiction.

- S.7.3.2.2 Appropriate payments for the carrying out of studies at the request of the other party, including but not limited to, studies for the issuing of connection offers or offers for the identification of contingent works, in accordance with any principles agreed between the parties under the Applications for Connection Schedule.
  - S.7.3.2.3 Payments, to the extent appropriate, for the carrying out of, or for securing the carrying out of, infrastructure works, required by applications for connection or as result of seeking to co-operate to deliver the most efficient overall transmission investment solution and part of the development of the All Island Transmission Networks.
  - S.7.3.2.4 Payments, to the extent appropriate for the procuring and provision of operating reserve and other support facilities in accordance with any principles agreed by the TSOs.
  - S.7.3.2.5 Appropriate payments from one TSO to the other in relation to works, whether capital or operational, which are carried out on behalf of, or are to the benefit of, both parties in respect of fulfilment of their respective statutory and licence obligations as shall be agreed between the TSOs from time to time.
  - S.7.3.2.6 Any such other matters as shall be determined by the TSOs.
- S.7.3.3 The means for the invoicing and receipt of payments and the transfer of monies shall be in accordance with the relevant business processes as agreed by the TSOs from time to time.

## SCHEDULE 8

### Calculation of Transmission Loss Adjustment Factors

#### S.8.1 Scope

- S.8.1.1 This Schedule sets out the key principles and arrangements for the interface between SONI and EirGrid as transmission system operators (“TSOs”) in Northern Ireland and the Republic of Ireland respectively in relation to the calculation of transmission loss adjustment factors (“TLAFs”).
- S.8.1.2 It sets out in broad terms the arrangements whereby the TSOs shall work together in accordance with their respective statutory, licence and Trading and Settlement Code obligations in relation to the calculation and submission of transmission loss adjustment factors.
- S.8.1.3 Developing and enhancing the interface processes and procedures between the TSOs on this issue is an ongoing process and both parties shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.8.1.4 This Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a Member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### S.8.2 Summary of TSO governance arrangements

- S.8.2.1 The TSOs have established a Connection and Use of System Committee consisting of key personnel from each organisation which shall oversee and manage the interface between the parties in relation to the calculation of transmission loss adjustment factors.
- S.8.2.2 The Connection and Use of System Committee shall manage the process whereby the TSOs will need to coordinate with each other in accordance with their respective obligations in relation to the calculation of transmission loss adjustment factors and shall be responsible for overseeing the development of specific business processes and procedures considered necessary for this purpose.
- S.8.2.3 The TSOs have appointed personnel from each TSO to work together to the extent required to meet the respective obligations in relation to the calculation of transmission loss adjustment factors.
- S.8.2.4 The TSOs will ensure that personnel appointed to oversee the coordination between the TSOs in relation to the calculation of transmission loss adjustment factors comply with the procedural steps set out in this Schedule.
- S.8.2.5 The governance provisions in this Schedule are intended to supplement the general governance provisions between the two TSOs set out in the main body of the SOA, which shall take precedence over the provisions in this Schedule to the extent there is any inconsistency.

#### S.8.3 Outline of areas of co-ordination

- S.8.3.1 **Annual Process:** The Annual TLAF Business Process is a process that provides for the development of annual TLAFs to apply across the Island of Ireland and for application by the System Operators for approval of the TLAFs by the Regulatory Authorities. It will enable the TSOs to co-operate in order to calculate and submit TLAFs for each

Generator Unit that is connected within its Jurisdiction in order to comply with the obligations in the Trading and Settlement Code.

S.8.3.2 **Within Year Process:** The Within Year TLAF Business Process is an event driven process that ensures that as a new generator is being connected to the system that TLAFs are derived for the generator and have been provided to SMO Settlement Operations and are ready for application in market settlement. The process also provides for the calculation of TLAFs in circumstances where a Generator was not anticipated in the annual process and no TLAFs exist for the generator.

S.8.3.3 Both business processes have been developed by the operational personnel appointed by the TSOs under this Schedule.

#### **S.8.4 Sharing and Exchange of Data required to calculate TLAFs**

S.8.4.1 The TSOs will exchange data with each other in order to enable them to calculate transmission loss adjustment factors, including:

- *Current network data*
- *Current wind farm connection details*
- *Current generator outage schedule*

## SCHEDULE 9

### Grid Code Governance Schedule

#### S.9.1 Scope

- S.9.1.1 This Schedule sets out the key principles and arrangements for the interface between SONI and EirGrid as transmission system operators in Northern Ireland and the Republic of Ireland respectively in relation to governance arrangements for the Sections Under Common Governance and other Grid Code sections in EirGrid's and SONI's Grid Codes that may affect the SEM. It sets out in broad terms the manner in which both parties shall work together to meet their respective licence and Trading and Settlement Code obligations in relation to their respective Grid Codes.
- S.9.1.2 Developing the interface business processes and procedures between the transmission system operators is an ongoing process and both parties shall continue to work together further to develop such processes and procedures as provided for in this schedule.
- S.9.1.3 This Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.
- S.9.1.4 Each Grid Code continues to be subject to the approval process of the current relevant Regulatory Authority, albeit that the SEM Committee will also have a role on behalf of each Regulatory Authority
- S.9.1.5 This schedule may be updated as business processes and procedures are further developed.

#### S.9.2 Definitions

In this Schedule the following words and expressions shall have the following meanings:

**Clause** shall have the same meaning as the term Paragraph with respect to the SONI Grid Code and the same meaning as the term Clause with respect to the EirGrid Grid Code;

**EirGrid Grid Code** shall mean the code prepared by the EirGrid pursuant to section 33 of the Electricity Regulation Act 1999 and approved by the Commission for Energy Regulation as amended from time to time;

**Joint Grid Code Review Panel** shall mean the panel referred to in paragraph 4 of this schedule;

**NI Grid Code Review Panel** shall mean the panel with the functions set out in GC.6 of the SONI Grid Code;

**ROI Grid Code Review Panel** shall mean the panel with the functions set out in GC.5 of the EirGrid Grid Code;

**Sections Under Common Governance** shall have the meaning given to it in paragraph S.9.3.1 of this schedule;

**SONI Grid Code** shall mean the code prepared by SONI in accordance with its licence to participate in the transmission of electricity as amended from time to time;

**User** shall mean a User as defined in the relevant Grid Code.

### **S.9.3 Summary of TSO governance arrangements**

- S.9.3.1 EirGrid and SONI have established a Grid Code Governance Committee consisting of key personnel from each organisation which shall oversee and manage the interface between both parties in relation to the Sections Under Common Governance of the Grid Code.
- S.9.3.2 The Grid Code Governance Committee shall ensure that both parties work together to meet their respective licence and Trading and Settlement Code obligations in relation to the Sections Under Common Governance and shall be responsible for overseeing the development of specific business processes and procedures considered necessary.
- S.9.3.3 Each Grid Code shall continue to exist and be managed separately by SONI or EirGrid as appropriate. Certain sections of the SONI Grid Code and the EirGrid Grid Code have been aligned so that, in as far as reasonably practical, those sections are the same. Users of such sections shall have, in so far as possible, a common set of requirements and management of such sections shall be undertaken jointly by SONI and EirGrid. Such sections are known as “Sections Under Common Governance”. The Sections Under Common Governance shall include the Scheduling and Dispatch Code No. 1 and the Scheduling and Dispatch Code No 2.
- S.9.3.4 Specific provisions in other sections of each Grid Code have been amended to allow for the effective operation of the Sections Under Common Governance.
- S.9.3.5 The TSOs shall endeavour to ensure that a User of its Grid Code can easily identify those sections of that Grid Code which are the Sections Under Common Governance.

### **S.9.4. Outline of areas of co-ordination**

- S.9.4.1 Governance of Modification Proposals to Sections Under Common Governance
- S.9.4.1.1 Following the introduction of the SEM the TSOs shall jointly manage modifications to the Sections Under Common Governance of the Grid Codes.
- S.9.4.1.2 The TSOs shall work together to ensure that any modifications to other parts of their respective Grid Codes do not adversely affect the operation of the Sections Under Common Governance or the SEM.
- S.9.4.1.3 ***EirGrid Domestic Process:***
- The *Grid Code Review Panel* (GCRP) in the Republic of Ireland discusses proposed modifications to the EirGrid Grid Code. Any panel member can bring a modification proposal to the panel. Following discussion at the meeting EirGrid can then seek CER’s approval to modify the Code. In its request to CER, EirGrid makes known any comments made by the GCRP or any Users. Under the terms of the Grid Code EirGrid is also required to advise all Users that a modification proposal has been submitted to CER in addition to advising any views expressed by the GCRP or other Users. This gives Users an opportunity to make direct representation to the CER if they so wish. CER either approves or does not approve. In certain circumstances CER may choose to carry out its own consultation prior to making its final decision.
- S.9.4.1.4 ***SONI Domestic Process:***
- In Northern Ireland, any User can raise a modification proposal with SONI, and changes have to be discussed in the GCRP before they can be consulted upon by SONI. SONI undertakes the consultation, prepares a

report to NIAUR, having first sought to obtain unanimity. If there are outstanding objections, these must be included in SONI's report. NIAUR either approves or does not approve – if there are outstanding objections it can carry out a consultation itself and then decide on the change.

**S.9.4.1.5 *Joint Grid Code Review Panel:***

The Joint Grid Code Review Panel shall be a standing body comprising all members of the ROI Grid Code Review Panel and the NI Grid Code Review Panel. The Joint Grid Code Review Panel shall have the following functions:

- (c) keep the Sections Under Common Governance and their operation under review;
- (d) review and discuss all suggestions for amendments to the Sections Under Common Governance which the relevant Regulatory Authority or any User may submit to SONI or EirGrid for consideration by the Joint Grid Code Review Panel;
- (e) determine recommendations for amendments to the Sections Under Common Governance which either TSO or the Joint Grid Code Review Panel feels are necessary or desirable and the reasons for the recommendations;
- (f) consider what changes are necessary to the Sections Under Common Governance arising out of any unforeseen circumstances referred to it by EirGrid pursuant to the EirGrid Grid Code or SONI pursuant to the SONI Grid Code.

The establishment of the Joint Grid Code Review Panel and its functions as stated above shall be reflected in each of the General Conditions of both the EirGrid Grid Code and the SONI Grid Code.

S.9.4.1.6 SONI and EirGrid shall draw up a Joint Grid Code Review Panel Constitution in consultation with the existing GCRP members in their respective jurisdictions and then ensure it is approved by the Regulatory Authorities. The Joint Grid Code Review Panel shall be governed by this Joint Grid Code Review Panel Constitution.

S.9.4.1.7 The principles to be underpinned in the Joint Grid Code Review Panel Constitution shall include:

- (a) Users or prospective Users of the EirGrid Grid Code may bring modification proposals to the EirGrid GCRP Secretary in accordance with the current EirGrid GCRP Constitution;
- (b) Users of the SONI Grid Code may bring modification proposals to SONI in accordance with the current SONI GCRP Constitution; and
- (c) if either of SONI or EirGrid believe that the proposal merits further consideration, a special meeting of the Joint Grid Code Review Panel shall be convened.

S.9.4.1.8 The Joint Grid Code Review Panel shall be a discussion panel and shall not have voting rights.

S.9.4.1.9 A Joint Grid Code Review Panel meeting may also be held when deemed necessary by either SONI or EirGrid and in any event at least once in each two year period.

- S.9.4.1.10 No fewer than one representative from each of SONI and EirGrid shall attend each meeting of the Joint Grid Code Review Panel.
- S.9.4.1.11 SONI and EirGrid shall each endeavour to ensure that representatives from its respective Regulatory Authority are invited to attend each meeting.
- S.9.4.1.12 Each meeting shall be chaired and minuted by either EirGrid or SONI on a rotating basis and the location of the meeting shall be decided by the chairman of that meeting.
- S.9.4.1.13 The NI Grid Code Review Panel and ROI Grid Code Review Panel meetings may be held separately immediately following the Joint Grid Code Review Panel meeting to discuss any consequential modifications arising from any modifications to Sections Under Common Governance and/or any usual modification proposals to other sections of the relevant Grid Code. Such meetings may also take place on another date.
- S.9.4.1.14 Any modification to a Section Under Common Governance shall be carried out as follows:
- (a) If a User of either Grid Code makes a proposal to the relevant TSO regarding a modification to the Grid Code, or either TSO identifies a possible Grid Code modification and such modification proposal relates to a Section Under Common Governance, the relevant TSO shall notify the other TSO.
  - (b) Both TSOs shall discuss any modification proposals for the Sections Under Common Governance.
  - (c) A Joint Grid Code Review Panel meeting shall be called to discuss the modification proposal if deemed appropriate by either TSO.
  - (d) If the TSOs do not consider it appropriate that a Joint Grid Code Review Panel meeting is called, the relevant TSO shall give reasons for the decision not to hold such meeting to the proposer.
  - (e) If the User is not satisfied with the decision by a TSO not to hold a Joint Grid Code Review Panel meeting then the User can approach the relevant Regulatory Authority with the proposal and that Regulatory Authority may decide if a Joint Grid Code Review Panel meeting is necessary.
  - (f) If a meeting is considered appropriate by either TSO or either Regulatory Authority, the Joint Grid Code Review Panel shall meet to consider the proposed modification in accordance with the Joint Grid Code Review Panel Constitution.
  - (g) Any modifications agreed in accordance with the Joint Grid Code Review Panel Constitution shall be implemented by SONI and EirGrid pursuant to the provisions governing modifications to the SONI Grid Code or the EirGrid Grid Code as appropriate.
  - (h) All comments received by either TSO in relation to any consultation held on modifications to the Sections Under Common Governance shall be passed to the other TSO as soon as reasonably practical.
  - (i) The TSOs shall submit to the relevant Regulatory Authority reports containing identical modification proposals to the Sections Under Common Governance. Such modification proposals shall not be

implemented by the TSOs unless a joint decision approving such modification proposal has been made by both Regulatory Authorities.

- (j) If approval for a modification to a Section Under Common Governance is granted by the Regulatory Authorities, the TSOs shall implement any modifications in a way that ensures that modifications to the Grid Codes take effect at the same time.

S.9.4.1.15 Both TSOs shall monitor and review the operation of the Joint Grid Code Review Panel. If, in the opinion of either TSO, there is a more appropriate method of considering modifications to Sections Under Common Governance, that TSO may propose the alternative method and if agreed upon by the other TSO, the alternative method may be implemented

#### **S.9.4.2 Grid Code Clarification Requests Relating to Sections Under Common Governance**

- (a) If a User requires a clarification or guidance on any provision that is part of a Section Under Common Governance, they shall in the first instance contact their relevant TSO for a clarification. That TSO shall, in relation to the query raised by the User, liaise with the other TSO as soon as practicable and the other TSO shall respond in a timely manner.
- (b) If further clarification is required, the User may request that it be raised for discussion at the next Joint Grid Code Review Panel meeting.

#### **S.9.4.3 Grid Code Derogations**

- (a) The existing procedures for derogation applications shall remain the same for each Grid Code.
- (b) The relevant TSO shall liaise with the other TSO if it considers that a derogation request may have an impact on the SEM. If the other TSO has raised an issue on the derogation request, the relevant TSO will then consider the points so raised, and these points will be considered in any assessment or discussion with the relevant Regulatory Authority.

#### **S.9.5. Communication between transmission system operators**

The primary means of communication between the TSOs to address issues concerning the Sections Under Common Governance is through the Grid Code Governance Committee. Regular meetings (both formal and informal) and conference calls will be used by EirGrid and SONI to share information and to make appropriate decisions. Where necessary the Joint Management Committee may discuss a topic relevant to the management of the Sections Under Common Governance.

## SCHEDULE 10

### Grid Code Referenced Interactions

#### S.10.1 Scope

- S.10.1.1 This Schedule sets out the key areas in the Grid Code where SONI and EirGrid as transmission system operators (“TSOs”) in Northern Ireland and the Republic of Ireland respectively are required to interface with one another.
- S.10.1.2 Developing and enhancing the interface processes and procedures between the TSOs on this issue is an ongoing process and both parties shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.10.1.3 This Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### S.10.2 Summary of TSO governance arrangements

- S.10.2.1 The TSOs have established a System Operation Committee consisting of key personnel from each organisation which shall oversee and manage the Grid Code referenced interfaces between the parties.
- S.10.2.2 The TSOs have appointed operational personnel from each organisation to work together to the extent required to meet the respective Grid Code obligations.
- S.10.2.3 The governance provisions in this Schedule are intended to supplement the general governance provisions between the two TSOs set out in the main body of the SOA, which shall take precedence over the provisions in this Schedule to the extent there is any inconsistency.

#### S.10.3 Outline of areas of Grid Code Interactions

- S.10.3.1 There are a number of areas in the respective Grid Codes that require the TSOs to interact or exchange information with each other and which are not covered elsewhere in the SOA. In summary these include:
- OC1 Demand Forecasts/Forecasting
  - OC4 (SONI)/ OC5 (EirGrid) Demand Control
  - OC5 Operational Liaison & OC8 Op. Event Reporting and Info. Supply (SONI) / OC7Info Exchange (EirGrid)
- S.10.3.2 In relation to each Grid Code, where there is an obligation on either TSO to interact or exchange information with the other TSO the TSOs will co-operate with one another to ensure that they can each comply with any such obligation.
- S.10.3.3 Where the TSOs consider it appropriate specific business processes will be developed in relation to the interaction between them on Grid Code matters.

## SCHEDULE 11

### Inter Jurisdictional Procedures

#### S.11.1 Scope

- S.11.1.1 This Schedule sets out the key principles for the interface between SONI and EirGrid as transmission system operators in Northern Ireland and the Republic of Ireland respectively in relation to inter jurisdictional procedures.
- S.11.1.2 It sets out in broad terms the principles whereby the parties shall work together in accordance with their respective licence and statutory obligations in relation to inter jurisdictional procedures.
- S.11.1.3 Developing and enhancing the interface processes and procedures between the transmission system operators on this issue is an ongoing process and both parties shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.11.1.4 This Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### S.11.2 Summary of TSO governance arrangements

- S.11.2.1 The parties have established a System Operation Committee consisting of key personnel from each organisation which shall oversee and manage the interface between the parties in relation to inter jurisdictional procedures.
- S.11.2.2 The System Operation Committee shall manage the process whereby both parties work together in accordance with their respective licence obligations in relation to inter jurisdictional procedures and shall be responsible for overseeing the development of specific business processes and procedures considered necessary for this purpose.
- S.11.2.3 The System Operation Committee will appoint operational personnel from each TSO to work together to the extent required to meet the respective licence and Grid Code obligations in relation to inter jurisdictional procedures.
- S.11.2.4 SONI and Eirgrid may agree that another committee of the Joint Management Committee shall oversee and manage the interface between the Parties in relation to some inter-jurisdictional procedures (the "**relevant procedures**"). In the event that they do so, references in this Schedule to the System Operator Committee shall be deemed to include a reference to that other committee in so far as the Schedule relates to the relevant procedures.
- S.11.2.5 Further detail on the governance arrangements is set out in the SOA.

#### 3. Outline of areas of co-ordination

- S.11.3.1 As provided for in the SOA, the Redbook Operating and Commercial Arrangements shall continue to apply as between the TSOs in accordance with the letter agreement of 7 June 2006, save to the extent that such arrangements are superseded by the provisions of the SOA or the separate processes and procedures that may be developed from time to time pursuant to this Schedule.
- S.11.3.2 The Operating and Commercial Arrangements for North-South Tie-Lines that will continue to apply between the TSOs from SEM Go-Live are as follows:

- (a) No.1 – General
- (b) No.2 – Operating Reserve
- (c) No.3 – Switching Procedures
- (d) No.4 - Fault and Emergency Operating Procedures
- (e) No.5 – Operating Plant Shortfall
- (f) No.6 – Inter Control Centre Communication Facilities
- (g) No.8 – Commercial Metering

S.11.3.4 The Operating and Commercial Arrangements for North-South Interconnectors that will cease to apply between the TSOs from SEM Go-Live are as follows:

- (a) No.7 – Energy Trading Procedures
- (b) No.9 – Pricing
- (c) No.10 – Settlement Procedures

S.11.3.5 The TSOs will from time to time through the System Operation Committee continue to develop and update the Operating and Commercial Arrangements between them in relation to the North-South Tie-Lines and the Operating and Commercial Arrangements that shall apply at any time will be the Operating and Commercial Arrangements as amended and agreed by the Joint Management Committee.

S.11.3.6 To the extent required to ensure the safe and efficient operation of the North-South Tie-Lines each TSO shall ensure that appropriate arrangements are in place between it and the relevant transmission asset owner of its Transmission System.

## SCHEDULE 12

### Scheduling and Dispatch

#### S.12.1 Scope

- S.12.1.1 This Schedule sets out the key principles and arrangements between SONI and EirGrid as transmission system operators (“TSOs”) in Northern Ireland and the Republic of Ireland respectively in relation to the scheduling and dispatch of SEM Generation.
- S.12.1.2 It sets out in broad terms the arrangements whereby the TSOs shall work together in accordance with their respective licence and Grid Code obligations in relation to the scheduling and dispatch of SEM Generation.
- S.12.1.3 Developing and enhancing the processes and procedures between the TSOs on this issue is an ongoing process and both parties shall continue to work together further to develop and maintain such processes and procedures as provided for in clause 13.4 of the SOA.
- S.12.1.4 This Schedule may be updated in accordance with clause 13.4 of the SOA by agreement in writing signed by or on behalf of a member of the Joint Management Committee appointed by each of the TSOs as (i), those processes and procedures are further developed and (ii) to reflect necessary or desirable changes to this Schedule.

#### S.12.2 Summary of TSO governance arrangements

- S.12.2.1 The TSOs have established a System Operation Committee consisting of key personnel from each organisation which shall oversee and manage the processes and procedures between the parties in relation to the scheduling and dispatch of SEM Generation.
- S.12.2.2 The TSOs have appointed operational personnel from each organisation to work together to the extent required to meet the respective licence and Grid Code obligations in relation to the scheduling and dispatch of SEM Generation.
- S.12.2.3 The TSOs will ensure that personnel appointed to oversee the coordination between the TSOs in relation to scheduling and dispatch comply with the procedural steps set out in this Schedule.
- S.12.2.4 The governance provisions in this Schedule are intended to supplement the general governance provisions between the two TSOs set out in the main body of the SOA, which shall take precedence over the provisions in this Schedule to the extent there is any inconsistency.

#### S.12.3 Outline of areas of co-ordination

- S.12.3.1 The TSOs will liaise with each other in respect of the scheduling of SEM Generation output to match forecast demand on the Island of Ireland after taking into account inter alia:
- (a) Forecast system demand and wind output;
  - (b) unavailability of generation sets and/or Interconnector transfers;
  - (c) energy limits for energy limited plants;
  - (d) constraints from time to time imposed by technical limitations on the All-Island Networks or any part thereof;

- (e) electricity delivered to the All-Island Networks from generation sets not subject to central dispatch;
- (f) the requirement to provide operational reserves to maintain system security;
- (g) bids and offers submitted by participants.

S.12.3.2 The TSOs shall together establish and operate a merit order system for SEM Generation.

S.12.3.3 Taking account of the factors in S.12.3.4 below, the TSOs shall together:

- schedule SEM generation;
- issue dispatch instructions to SEM Generation in their own jurisdiction;

in each case:

- in a manner which will aim to minimise overall production cost; and
- as will in aggregate (and after taking account of electricity delivered to or from the All-Island Networks from or to other sources) be sufficient to match at all times (to the extent possible having regard to the availability of SEM Generation) demand forecast on the All-Island Networks taking account of information provided by electricity undertakings, together with an appropriate margin of reserve.

S.12.3.4 The factors that the TSOs shall take into account in S.12.3.3 are:

- forecast demand on the Island of Ireland;
- technical constraints from time to time imposed on the All-Island Networks or any part or parts thereof;
- the dynamic operating characteristics of the SEM Generation;
- forecast exports of electricity across any Interconnector;
- transmission and distribution losses;
- (in respect of the transmission system) the operating security standard, and (in respect of the Republic of Ireland transmission system) the Republic of Ireland Operating Security Standards; and
- other matters provided for in the Grid Code and the Republic of Ireland Grid Code (including, in each case, any arrangements for the dispatch of renewable generators).

S.12.3.5 The TSOs shall where appropriate taking into account the quantity, nature and cost of the services in question cooperate with each other in the contracting for ancillary and/or system support services.

## SCHEDULE 13

### Constitution and Proceedings of the Joint Management Committee

- S.13.1 **Size:** The Joint Management Committee shall comprise an equal number of members from SONI and EirGrid appointed by the CEO of SONI and EirGrid respectively (the “**Members**”). The total number of Members on the Joint Management Committee shall not exceed 4.
- S.13.2 **Chairman:** The Members shall appoint one of their number as their chairperson and such person shall be responsible for ensuring that the meetings of the Joint Management Committee are conducted in an efficient and proper manner.
- S.13.3 **Changes in Members:** Members may be removed and replaced at the discretion of the CEO of the Party that appointed them by notice in writing to the CEO of the other Party.
- S.13.4 **Voting:** Each Member shall have one vote on the Joint Management Committee and all decisions of the Joint Management Committee must be unanimous and recorded in minutes or such record of the meeting as the Members may direct.
- S.13.5 **Frequency of meetings:** There shall be at least 4 Joint Management Committee meetings each year, one in each calendar quarter. The first meeting of the Joint Management Committee shall be held in November 2007.
- S.13.6 **Secretary:** The Members shall appoint a secretary (the “**Secretary**”) and may remove the Secretary at their discretion.
- S.13.7 **Effects of Votes:** Any Member(s) appointed by a Party or their alternates who vote on a matter before the Joint Management Committee shall be deemed to exercise, between them (if relevant), the number of votes that could be cast if all the Members appointed that Party were present and voting, provided that, if more than one such Member votes, votes are exercised in the same manner.
- S.13.8 **Convening Meetings:** Any Member may, and the Secretary shall at the request of a Member, call a meeting of the Joint Management Committee from time to time during the term of this System Operator Agreement. Any Member calling a meeting, or the Secretary as the case may be, shall ensure that reasonable notice and where practical an agenda for the meeting is given to the other Members in advance of a meeting. Meetings of the Joint Management Committee may be held either in person or by conference call (by telephone or otherwise). Meetings shall be held successively (in rotation) in Belfast or Dublin unless otherwise agreed.
- S.13.9 **Remote Attendance:** Members may participate in a meeting by means of a conference telephone or similar communicating equipment whereby all persons participating in the meeting can hear each other, and participation in a meeting in this manner will be deemed to constitute presence in person at such meeting. For the avoidance of doubt, for the purposes of determining whether the quorum for the transaction of business exists, any Member in telephonic communication with a meeting of a Joint Management Committee will be counted in the quorum.
- S.13.10 **Quorum [1]:** The quorum for Joint Management Committee meetings shall be two comprising one Member from SONI and one Member from EirGrid (or in either case an alternate for that Member).
- S.13.11 **Quorum [2]:** No business shall be transacted at any meeting of the Joint Management Committee unless a quorum is present at the time when the meeting takes place.

- S.13.12 **Quorum [3]:** If no quorum is present within half an hour from the time appointed for the start of the meeting, or if during the meeting a quorum ceases to be present, the meeting shall be dissolved.
- S.13.13 **Alternates:** Each Member may appoint an alternate to attend meetings of the Joint Management Committee in his or her absence and each alternate shall be entitled to vote on his or her behalf in the absence of such Member.
- S.13.14 **Invitees:** The Members may agree to invite such persons to attend at all or such part of one or more meetings of the Joint Management Committee as in each case they see fit but any such invitee shall not be entitled to vote on decisions of the Joint Management Committee.
- S.13.15 **Minutes:** At each Joint Management Committee meeting Members shall appoint the Secretary (or, if the Secretary is not present, a Member or an alternate) to be the person to prepare and circulate minutes, or such other record of the meeting as the Members may direct, within 5 Business Days after that meeting, the contents of which shall be deemed agreed by the Parties unless objected to in writing by any Member within 5 Business Days of receipt of the minutes or other record.
- S.13.16 **Committees etc:** The Members may delegate any of their powers to such person or persons or to such committees consisting of such person or persons as they think fit provided that each such committee must include at least one member from each of SONI and EirGrid respectively. Any such person or committee shall exercise any power delegated to him or it in accordance with any directions given to him or it by the Members. Without prejudice to the Joint Management Committee's power to establish new and alter existing Committees from time to time, the initial committees established by the Joint Management Committee are the Planning Committee, the System Operation Committee, the Connection and Use of System Committee and the Grid Code Governance Committee. Such committees shall have the functions set out in the Schedules and such other functions as Joint Management Committee may determine from time to time.
- S.13.17 **Meetings of Committees:** Meetings and proceedings of any committee established pursuant to paragraph S.13.16 shall be governed by the terms agreed between the TSOs in respect of meetings and proceedings of the Joint Management Committee in each case so far as they are applicable and are not superseded by any directions given to the committee by the Members and provided that, in the case of each of the Planning Committee and the Connection and Use of System Committee, there shall be at least 2 committee meetings each year, one in each calendar half year.
- S.13.18 **Written Resolutions:** A resolution in writing signed by two members comprising one Member from SONI and one Member from EirGrid (or in either case an alternate for that Member) shall be as effective as a resolution passed at a meeting of the Members duly convened and held and may consist of several documents in the like form, each signed by one or more of the Members. Such a resolution may (unless the Members shall otherwise determine either generally or in any specific case) be transmitted by facsimile or email.

## **SCHEDULE 14**

### **Independent Expert**

(Referred to in Clause 8.2)

- S.14.1 This Schedule 14 shall apply where a Dispute is referred to an independent expert pursuant to clause 8. A Dispute involving a commercial matter shall be referred to an independent commercial expert and a dispute involving a technical matter shall be referred to an independent technical expert in each case in accordance with this Schedule 14.
- S.14.2 The expert shall be engaged on such reasonable terms as the expert shall accept. The following procedure shall apply to determination of a dispute by an expert and the Parties shall procure that it is reflected in the expert's terms of engagement.
- S.14.3 The expert shall:
- (a) in the case of an independent commercial expert, possess skills in the interpretation, negotiation or implementation of contracts or financial and economic analysis (as appropriate for the type of dispute) and shall not, directly or indirectly, be associated with either Party as officer, employee, consultant, contractor or otherwise;
  - (b) in the case of an independent technical expert, possess skills and expertise in the technical areas that are the subject matter of the dispute and shall not, directly or indirectly, be associated with either Party as officer, employee, consultant, contractor or otherwise;
  - (c) give his decision within 10 Business Days (or such longer period as may be decided by the independent expert but not exceeding 15 Business Days) from the date that the independent expert is satisfied that it has received adequate representations from both Parties;
  - (d) determine the amount of his fees and the costs of referral to him in accordance with the terms of his engagement and which Party shall be responsible for such fees and costs; and
  - (e) give copies of his decision and the reasons for his decision in writing to each of the Parties.
- S.14.4 The Parties shall promptly provide the expert and each other with all such evidence and information within their respective possession or control as the expert may request, as he considers necessary, for determining the Dispute or which is relevant to and bears upon the dispute.
- S.14.5 The Parties shall each within 20 Business Days of the referral of the Dispute to the expert submit to the expert and to each other a written proposal detailing their respective positions on the issue in dispute and the expert shall decide which of the Parties' proposals most closely reflects the intention of this System Operator Agreement. The expert shall have no discretion to propose or select any proposal which is not one of the proposals submitted by the Parties unless the Parties otherwise agree.
- S.14.6 If the expert shall fail to give his decision within the period specified in paragraph 3(c), either Party may by notice to the other require that the Dispute be decided by reference to the Regulatory Authorities pursuant to clause 8.3, whereupon the expert shall be instructed not to consider the matter further.

- S.14.7 The expert shall not act as arbitrator and shall decide the Dispute referred to him using his skill, experience and knowledge and with regard to such matters as are expressly specified in this Agreement to be considered by him and as the expert in his sole discretion considers appropriate.
- S.14.8 In the event that the expert fails or is unable to act in relation to the Dispute for a continuous period of one month or (being a firm or partnership) is dissolved or discontinued or (being a company) goes into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation, or commences carrying on its business under an administrator, receiver, manager or liquidator for the benefit of its creditors, then the Parties shall agree on a substitute expert. The substitute expert shall be selected in accordance with the procedure specified in clause 8 and this Schedule 14.