



SONI LIMITED

TRANSMISSION CONNECTION CHARGING METHODOLOGY STATEMENT

CONSULTATION DRAFT – 30 JUNE 2016

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1 Introduction

- 1.1 SONI Limited ("SONI") is the Transmission System Operator for Northern Ireland. It is authorised to participate in the transmission of electricity by means of a licence issued by the Department for the Economy under Article 10(1)(b) of the Electricity (Northern Ireland) Order 1992 (the "**Order**"). It is regulated by the Northern Ireland Authority for Utility Regulation (the "**Authority**").
- 1.2 Under the **SONI Transmission Licence** SONI is responsible for planning and operating the **Transmission System**.
- 1.3 SONI is the only party in Northern Ireland entitled to offer terms to enter into a **Connection Agreement** (or to amend an existing **Connection Agreement**) for connection (or modification of an existing connection) to the **All-Island Transmission Networks** at entry and exit points on the **Transmission System**. Such terms are offered under Condition 25 of the **SONI Transmission Licence**.
- 1.4 SONI has prepared and published this statement to meet its obligations as set out in Condition 30 of the **SONI Transmission Licence** that requires SONI, in co-operation with the **Republic of Ireland Transmission System Operator**, prepare (and obtain the **Authority's** approval to) a statement setting out the basis upon which charges will be made for connection to the **All-Island Transmission Networks** at entry or exit points on the **Transmission System**.
- 1.5 This statement is required to include:
 - 1.5.1 a schedule listing those items (including the carrying out of works and the provision and installation of electric circuits or electrical plant or meters) of significant cost liable to be required for the purpose of connection (at entry or exit points on the **Transmission System**) to the **All-Island Transmission Networks** for which connection charges may be made or levied and including (where practicable) indicative charges for each such item and (in other cases) an explanation of the methods by which and the principles on which such charges will be calculated;
 - 1.5.2 the methods by which and the principles on which charges, if any, will be made in respect of extension or reinforcement of the **All-Island Transmission Networks** rendered necessary or appropriate by virtue of providing such connection to the **All-Island Transmission Networks** (at entry or exit points on the **Transmission System**);
 - 1.5.3 the methods by which and the principles on which connection charges will be made in circumstances where the electric lines or electrical plant to be installed are of greater size or capacity than that required for use of system by the person seeking connection;
 - 1.5.4 the methods by which and the principles on which any charges (including any capitalised charge) will be made for maintenance and repair required of electric circuits, electrical plant or meters provided and installed for making a connection to the **All-Island Transmission Networks** at entry or exit points on the **Transmission System**;

- 1.5.5 the methods by which and the principles on which any charges will be made for the provision of special metering or telemetry or data processing equipment by SONI for the purposes of enabling any person which is bound to comply with the **Grid Code** to comply with its obligations in respect of metering thereunder, or for the performance by SONI of any service in relation thereto;
- 1.5.6 the methods by which and principles on which any charges will be made for disconnection from the **Transmission System** and the removal of electrical plant, electric circuits and ancillary meters following disconnection; and
- 1.5.7 such other matters as shall be specified in directions issued by the **Authority** from time to time.
- 1.6 SONI may, in co-operation with the **Republic of Ireland Transmission System Operator**, periodically revise the information set out in this statement and, with the approval of the Authority, alter the form of this statement prepared in accordance with Condition 30 of the SONI Licence and shall, at least once in every year, revise this statement in co-operation with the **Republic of Ireland Transmission System Operator** in order that the information set out in this statement shall continue to be accurate in all material respects. Each such revision shall require to be approved by the **Authority** and shall not become effective until approved by the **Authority**.
- 1.7 The statement that will apply to any **Connection Offer** issued by SONI will be the statement in force on the date on which the **Connection Offer** is issued, provided that should a **Connection Offer** not be accepted on the date that a new statement comes into force the **Connection Offer** may be revised to reflect the statement in force on the date of acceptance.
- 1.8 In the event that connection is delayed and does not occur until after the statement which was in force at the date of acceptance of the **Connection Offer** has been superseded by an approved updated statement, and such delay was not due to reasons within the control of SONI then the **Connection Offer** may be revised to reflect the statement in force on the date of connection.
- 1.9 A copy of this statement can be obtained from SONI's website at www.soni.ltd.uk. A paper copy can also be obtained from SONI by any persons who request it on payment of a reasonable charge.
- 1.10 Details on the processes to be followed in applying for a connection to the **All-Island Transmission Networks**, along with the relevant application form(s) to be completed can be obtained from SONI's website at www.soni.ltd.uk.
- 1.11 Expressions used in this statement have the definitions given to them in the **Order** unless otherwise defined herein and shall be construed accordingly. Terms which are capitalised and in bold type are defined in Section 14 of this statement.
- 1.12 Persons being connected to the **All-Island Transmission Networks** at entry and exit points on the **Transmission System** will be required to enter into an

agreement(s) with SONI setting down the terms and conditions which will apply in providing a connection. In the event of any inconsistency between this statement and the agreements(s), the agreement(s) will take precedence.

- 1.13 Where the person seeking a connection to the **All-Island Transmission Networks** is not satisfied with the terms offered and agreement with SONI cannot be reached within a reasonable time, either party may request a determination of any of the terms and conditions of connection by the **Authority** as detailed in Condition 26 of the **SONI Transmission Licence**.

CONSULTATION DRAFT

2 Contestability

- 2.1 The introduction of contestability for connections in Northern Ireland opens up the market to allow **Applicants** to apply for the option to provide certain elements of the design, procurement and installation of **Connection Assets** necessary to accommodate a new connection, referred to as **Contestable Works**, to be carried out by a **User** or **Independent Connection Provider** ("ICP").
- 2.2 An **Applicant** applying for a connection to the **All-Island Transmission Networks** at entry and exit points on the **Transmission System** can request a **Contestable Offer** from the 1st September 2016 which will facilitate a **User** or **ICP** to carry out the **Contestable Works**. The **Guidelines for Contestability in Electricity Connections in Northern Ireland**, as published on the SONI website at www.soni.ltd.uk, outlines:
- 2.2.1. the elements of the connection works that are **Contestable Works**;
 - 2.2.2. the elements of the connection works that are **Non-Contestable Works**;
 - 2.2.3. the process for requesting either a **Contestable Offer** or a **Non-Contestable Offer**;
 - 2.2.4. the process for requesting a **Non-Contestable Offer** to be modified to a **Contestable Offer** or vice-versa; and
 - 2.2.5. the details of what shall be included in a **Contestable Offer** and a **Non-Contestable Offer**;
- 2.3 An **Applicant** seeking a **Contestable Offer** must undertake all elements of the **Contestable Works** as per the **Guidelines for Contestability in Electricity Connections in Northern Ireland**. For the avoidance of doubt, it is not possible for an **Applicant** seeking a **Contestable Offer** to request to undertake only some of the **Contestable Works**.
- 2.4 If an **Applicant** requests a **Contestable Offer** to carry out the **Contestable Works** for a connection, then the **Applicant** or **ICP**, where appropriate, must enter into an **Adoption Agreement** with **NIE Networks** to allow the ownership of the assets constructed via the **Contestable Works** to be transferred from the **Applicant** or **ICP** to **NIE Networks** in its role as **Transmission Owner** under the **NIE Transmission Licence**.
- 2.5 SONI has complete responsibility for the decision to accept operational responsibility of the **Contestable Works** on the **Transmission System**. SONI shall not accept full operational responsibility and control prior to **NIE Networks** accepting ownership of the **Contestable Works** in its role as **Transmission Owner** under the **NIE Transmission Licence**.
- 2.6 When assets constructed via **Contestable Works** are installed by a **User** or **ICP** then, at commissioning, and providing certain specifications and conditions are met, as will be outlined in the associated **Contestable Offer**:

- 2.6.1 the ownership of the **Contestable Works** will be transferred to **NIE Networks** in its role as **Transmission Owner** under the **NIE Transmission Licence** via an **Adoption Agreement** as per sub-paragraph 2.4; and
- 2.6.2 subject to sub-paragraph 2.5, SONI will assume full operational responsibility for the connection to the **Transmission System**.
- 2.7 Inspections and monitoring of the **Contestable Works** being carried out by a **User** or **ICP** will be required as the **Contestable Works** progress. The number of visits required will be determined according to the actual connection proposals and the inspection and monitoring regime will be in line with Table 4 of this statement. Information regarding inspections and monitoring and the associated charges for this will be specified within the **Contestable Offer**.
- 2.8 A **Contestable Offer** will also include charges for design reviews of the **Contestable Works**.
- 2.9 If for any reason additional inspections, monitoring, design reviews or technical queries relating to the **Contestable Works** are required (or requested by the **User** or **ICP**), then this will incur additional charges which must be paid in advance of adoption of the assets.
- 2.10 Charges relating to inspections, monitoring, design reviews or technical queries in respect of **Contestable Works** are contained in Tables 3A, 3B and 3C of this statement.

3 Charging Methodology Objectives

3.1 The connection charging methodology is designed to ensure:

3.1.1 the recovery of the appropriate proportion of the costs directly or indirectly incurred (or to be incurred) in carrying out the connection works, including any chargeable extension or reinforcement works, and in providing, installing, maintaining and repairing (and, following disconnection, removing) the electrical circuits, electrical plant, meters, special metering, telemetry, data processing equipment or any other items required. For **Contestable Works**, this includes the design reviews, inspections and monitoring of the **Contestable Works**;

3.1.2 the recovery of a reasonable rate of return on the capital represented by such costs;

3.1.3 that charges are based on clear and transparent rules; and

3.1.4 that SONI does not unduly discriminate between any persons or class or classes of persons.

3.2 For the avoidance of doubt and unless otherwise stated, the charging methodology objectives in sub-paragraph 3.1 applies for any connection charges that are contained in a **Contestable Offer**.

4 Connection Charging Methodology

- 4.1 In order to calculate transmission charges, SONI categorises assets as either **“Connection Assets”** or **“System Assets”**.
- 4.2 In connecting to the **All-Island Transmission Networks**, at entry or exit points on the **Transmission System**, a new **User** may connect to either **Connection Assets** or to **System Assets**, and the connection charge payable will vary in each circumstance.
- 4.3 Any person wishing to enter into a **Connection Agreement** (or to amend an existing **Connection Agreement**) for connection (or modification of an existing connection) to the **All-Island Transmission Networks** at entry or exit points on the **Transmission System** will be required to pay for:
- 4.3.1 either the estimated or the outturn cost of the **Non-Contestable Works** to deliver the new or modified **Connection Assets**, as defined in Section 5;
 - 4.3.2 a proportion of the estimated or outturn cost of the **Non-Contestable Works** to deliver any new **Connection Assets** which are to be shared with others who are connecting simultaneously, if any;
 - 4.3.3 a proportion of the cost of any existing **Connection Assets** to be shared with other **Users** who are already connected, if any, with this cost being estimated based on the assumption that the value of all connection works to deliver the **Connection Assets** were subject to a **Non-Contestable Offer** irrespective of whether or not this was the case;
 - 4.3.4 the estimated or outturn cost of decommissioning transmission assets resulting from the new or modified connection, if any; and
 - 4.3.5 certain pass-through costs which will be set out in the **Connection Offer**. For example, this may include, but is not limited to, any environmental planning costs, any costs incurred in acquiring planning consents, any costs incurred in complying with any conditions of planning consents, any external legal costs, any costs incurred in seeking, obtaining and paying for wayleaves or easements and any costs relating to exceptional land conditions or exceptional civil works.
- 4.4 Where the **Applicant** advises SONI that he wishes to pay the estimated cost of the connection, SONI will provide as part of the **Connection Offer** an estimate of the connection charge for the **Non-Contestable Works**, identifying the costs of the main items of expenditure in a manner consistent with the level of detail provided in Table 2. The **Applicant** will pay this amount irrespective of the outturn cost, subject to any price adjustment mechanism(s) set out in the **Connection Offer**.
- 4.5 Where the **Applicant** advises SONI that he wishes to pay the outturn cost of the connection, SONI will provide as part of the **Connection Offer** an estimate of the connection charge for the **Non-Contestable Works**, identifying the costs of the main items of expenditure in a manner consistent with the level of detail provided in Table 2. In this case the **Applicant** will pay a connection charge in respect of

the **Non-Contestable Works** based on the actual outturn cost, including any additional administrative costs associated with this payment option. The detail of the actual outturn costs provided to the **User** will be consistent with the level of detail provided in Table 2.

- 4.6 The estimate provided to an **Applicant**, as set out in sub-paragraph 4.4 or sub-paragraph 4.5, will contain elements covering engineering costs and a reasonable rate of return on any capital outlay in excess of sums received.
- 4.7 For **Connection Offers** based on a requested estimated cost as set out in sub-paragraph 4.4, where the **Non-Contestable Works** are completed over a significant period of time after the acceptance of the **Connection Offer** the actual connection charge may be adjusted in line with the **Retail Price Index** or in line with another appropriate index, such as a London Metal Exchange price index. Any price adjustment mechanism will be set out in the **Connection Offer**.
- 4.8 Notwithstanding sub-paragraph 4.3 all assets which were installed on the **Transmission System** at April 1992 are funded through use of system charges. New or existing **Users** will not therefore be charged a connection charge for pre-April 1992 plant, equipment or cabling which is utilised as part of the local connection arrangements, even if they need to be refurbished, modified or replaced due to the condition of the asset or for wider system needs only.

However, where a new or existing **User** requests that any pre-April 1992 plant, equipment or cabling is refurbished, modified or replaced to meet the requirements of that **User's** connection then the new or modified assets will be defined as **Connection Assets** and a connection charge will be levied in accordance with this Section 4.

Where an **Applicant's** connection requires that works which are already planned to be constructed, and which are set out in the **Transmission System Capacity Statement**, be advanced or altered, the **Applicant** will be liable to pay for any incremental costs incurred by deviating from the original plan, whether for **Connection Assets** or **System Assets**, including any cost to advance this work.

For the avoidance of doubt, this also applies whether or not elements of the **Connection Assets** are delivered via **Contestable Works**.

- 4.9 The connection charge will include an element to provide for the Operation and Maintenance ("O&M") costs over the lifetime of the connection. The O&M charge shall be paid prior to commissioning the connection. It is set at 1.4% of the value of the **Connection Assets**, increasing in real terms over the lifetime of the **Connection Agreement**, discounted back to a present value using the regulated rate of return. In certain cases, SONI may agree to annual O&M charges. Where this is the case the annual charge shall be set at 1.4% of the value of the **Connection Assets**, increasing in real terms over the lifetime of the **Connection Agreement**.
- 4.10 Where elements of the **Connection Assets** are being delivered via **Contestable Works** to be carried out by a **User** or **ICP**, then for the purpose of determining the O&M costs, the value of the **Connection Assets** will be estimated based on an assumption that all connection works to deliver the **Connection Assets** were

subject to a **Non-Contestable Offer**, irrespective of whether or not this was the case.

On completion of any **Contestable Works** being delivered by a **User** or **ICP**, SONI shall then revise, as necessary, the O&M charge to reflect any change between the estimated value of the **Connection Assets** at the time of the **Connection Offer** and the value of the final **Connection Assets** constructed and the **User** will be liable to pay the revised O&M charge.

- 4.11 The connection charge as detailed in the **Connection Offer** is payable in full in advance of energising the connection. Where a connection is to be commissioned or constructed in phases, payments will be reflective of those phases, with payment details set out in the **Connection Offer**.

Where the **Applicant** has elected to pay the outturn cost of the connection as set out in sub-paragraph 4.5 , the full estimated cost will be payable in advance of energising the connection with any reconciliation carried out after a determination of the final costs.

5 Connection Assets

5.1 Connection Assets are:

5.1.1 those assets which are installed to enable the transfer of the **Maximum Export Capacity ("MEC")** or the **Maximum Import Capacity ("MIC")** of the **User** located at the **Connection Point**, to or from, as appropriate, the **All-Island Transmission Networks** at entry or exit points on the **Transmission System**, subject to sub-paragraph 5.2; and

5.1.2 those assets which are installed as a result of the **User's** effect on fault current levels and harmonic distortion levels on the **Transmission System**, but does not include any assets installed at any location other than the transmission node to which the **User** connects.

5.2 In deciding which assets are required to enable the MEC or the MIC transfers referred to in sub-paragraph 5.1.1, power flows other than those to or from the **User(s)**, shall be disregarded.

5.3 Assets which are not **Connection Assets** are **System Assets** and the costs of these **System Assets** are recovered through use of system charges.

5.4 Connection Assets include, as appropriate:

5.4.1 the circuit(s), or those parts of the circuit(s), required to connect the **User** to the existing **All-Island Transmission Networks** at entry or exit points on the **Transmission System**;

5.4.2 in addition to assets required under sub-paragraph 5.4.1, any new circuit(s) or enhancements to existing circuit(s) required pursuant to sub-paragraph 5.1.1;

5.4.3 the circuit bay(s) required by the **User**;

5.4.4 in addition to assets required under 5.1.2, any upgraded existing protection or communication equipment required as a direct result of the connection but not changes or additions to protection systems at remote substations (including the provision of communication channels); and

5.4.5 metering, telemetry or data processing equipment supplied by SONI and/or **NIE Networks**.

5.5 Figures 1 and 2 illustrate the standard boundary between the **Connection Assets** and the **User's** assets, and the standard boundary between the **Connection Assets** and the **System Assets**.

6 Least Cost Technically Acceptable Connection Design

- 6.1 SONI will evaluate a number of design and connection options to determine the **Least Cost Technically Acceptable** (“**LCTA**”) connection arrangement for a new or modified connection to the **All-Island Transmission Networks** at entry or exit points on the **Transmission System**.

- 6.2 There may be occasions where SONI will have reason to require that the design and connection option that is to be delivered may not be the **LCTA** connection arrangement.

Where SONI does not proceed with the **LCTA** connection, whether new or modified, to accommodate a **User**, or a group of **Users**, then that **User**, or group of **Users**, will only be required to pay for the estimated cost of the **LCTA** connection arrangement.

- 6.3 Where an **Applicant** has requested a **Contestable Offer** for their connection but SONI requires that the connection and design arrangement that is to be delivered is not the **LCTA** connection arrangement, the **Contestable Offer** will be based on the required SONI preferred connection arrangement and the **Contestable Works** shall be designed and constructed to this SONI preferred connection arrangement.

On completion of the delivery and adoption of the **Contestable Works** for the SONI preferred connection arrangement, the **Applicant** will be refunded any estimated incremental costs incurred by delivering the SONI preferred connection arrangement in excess of the estimated cost of the **LCTA** connection arrangement.

The estimated cost for the **LCTA** connection arrangement and the estimated cost for the SONI preferred connection arrangement that are used to determine the value of this incremental costs incurred will be estimated based on an assumption that the value of all connection works to deliver these were subject to a **Non-Contestable Offer**, irrespective of whether or not this was the case.

- 6.4 Where an **Applicant** requests a **Connection Offer** that comprises of a connection arrangement which is more expensive than the **LCTA** connection arrangement then the **Applicant** will be required to pay either the estimated or outturn cost of providing both the **Connection Assets** and all additional **System Assets**, if any, required by the **Applicant's** preferred requested connection arrangement.

7 Cost Allocation Rules for Shared Assets

- 7.1 Where a new **User** connects to the **All-Island Transmission Networks** at entry or exit points on the **Transmission System** by making use of existing **Connection Assets** which have been funded by an existing **User(s)** who connected within the preceding ten years the new **User** will be charged a proportion of the value of the shared **Connection Assets**, calculated in accordance with sub-paragraph 7.3.
- 7.2 If the existing **User(s)** connected within the preceding ten years then the existing **User(s)** will be entitled to receive a partial rebate of the original connection charge from SONI, calculated in accordance with sub-paragraph 7.3.
- 7.3 The charge to the new **User** and the rebate to the existing **User** will be derived using:
- 7.3.1 the historic cost of the assets, including any decommissioning costs;
 - 7.3.2 the current cost accounting valuation of the assets, using the **Retail Price Index**;
 - 7.3.3 any advanced contributions towards O&M charges in respect of the **Connection Assets**; and
 - 7.3.4 the per MW share of the utilisation of the shared assets.
- 7.4 In addition to the charges for use of the shared **Connection Assets** the new **User** will be required to make a payment to SONI in respect of reasonable administrative expenses.
- 7.5 Where a number of **Users** connect simultaneously at a new **Connection Point** and jointly make use of **Connection Assets** each **User** will be charged a proportion of the estimated cost of the shared **Connection Assets**, calculated on a per MW share of the utilisation of the shared **Connection Assets**.
- 7.6 Where any elements of the **Connection Assets** referred to this Section 6 have been, or will be, delivered via **Contestable Works** by a **User** or **ICP**, then the estimated cost of the existing or proposed shared **Connection Assets** will be based on an assumption that the value of the connection works to deliver the **Connection Assets** were subject to a **Non-Contestable Offer**, irrespective of whether or not this was the case, with all potential rebates as outlined from sub-paragraphs 7.1 to 7.5 being based on this estimated cost of the **Connection Assets**.

8 Application Fees

- 8.1 An **Applicant** seeking a **Connection Offer** will be required to pay to SONI a fee to enable SONI to recover the costs of producing the **Connection Offer**. The fee shall be either:
- 8.1.1 A fixed fee derived from Table 1; or
- 8.1.2 A fee based on the outturn cost of carrying out the relevant detailed studies, preparing a connection design and issuing a **Connection Offer**.
- 8.2 The **Applicant** shall advise SONI of his preferred payment method for this fee.
- 8.3 Where the **Applicant** advises SONI that he wishes to pay the outturn cost of carrying out the relevant detailed studies, preparing a connection design and issuing a **Connection Offer**, SONI shall levy the appropriate application fee in Table 1 and a reconciliation of the actual charge will be carried out after a determination of the final costs.
- 8.4 If SONI has carried out relevant feasibility studies in relation to the connection in advance of the submission of the connection application, then a reasonable credit may be allowed in respect of these feasibility studies. This will be at the sole discretion of SONI and will be dependent on SONI being able to reasonably use the outcome and results of the feasibility studies to produce the **Connection Offer**.
- 8.5 The fee will be paid in two instalments. A first instalment of £5,000 (exclusive of VAT) must accompany the connection application form. The second instalment, the balance of the fee, will be invoiced when SONI deems the application to be effective, which means that all information necessary to enable SONI to prepare a **Connection Offer** has been received and it is clear in all material respects.
- 8.6 Delays in production of the **Connection Offer** may occur if the application fee instalment payments are not received in a timely manner.
- 8.7 Any **User** applying for an offer to modify an existing connection will be required to pay an application fee to enable SONI to recover the costs of producing the connection modification offer. The fee for a connection modification offer is calculated on a case by case basis.
- 8.8 Where an **Applicant** wishes to change any aspect of the connection application, or in the case of a **User**, change a modification application, then the **Applicant** or **User** may be obliged to pay a further application fee. The decision on whether or not to levy a further application fee will depend on the materiality of the change to the application. The period specified in Condition 25 of the **SONI Transmission Licence** to offer terms for connection to the **Transmission System** may also restart dependent on the materiality of the change to the application.

9 Bonds and Credit Cover

9.1 An **Applicant** seeking to connect to the **All-Island Transmission Networks** must provide security in the form of a number of bonds which are designed to protect other **Users** of the system. Detailed requirements are set out in subparagraphs 9.2 - 9.3.

9.2 Connection Charges Bond

9.2.1 A **User** must post a connection charges bond upon acceptance of their **Connection Offer** based on the connection charges within the **Connection Offer**. This bond will cover any connection charges expected to be incurred during the pre-construction and construction of the connection which are not covered under the payments already made by the **User** in respect to the connection charges. The bond will be drawn down should the **User** decide not to proceed to completion. The connection charges bond must be provided prior to execution of the **Connection Agreement**. This requirement is a condition precedent to acceptance of the **Connection Offer**.

9.3 Maximum Export Capacity Bond and Maximum Import Capacity Bond

9.3.1 Due to limited capacity on the **Transmission System**, **Applicants** should only request a **Connection Offer** for an **MIC** or **MEC** that they can reasonably achieve, and **Applicants** should not attempt to reserve additional capacity on the network for later development of their facilities.

9.3.2 A generation **User** will require an **MEC** bond and a load **User** will require an **MIC** bond.

9.3.3 Once a generator has demonstrated to the satisfaction of SONI that it has passed the **Capacity Test** then the **MEC** bond is returned. However, if the generator has not passed the **Capacity Test** by the date specified in the **Connection Offer** and/or the **Connection Agreement**, or where the **User** withdraws its acceptance of the **Connection Offer** and/or terminates the **Connection Agreement**, then SONI is entitled to draw down the **MEC** bond.

9.3.4 The value of the **MEC** bond is set at £7,000 per MW.

9.3.5 SONI shall be entitled to draw down the **MIC** bond under the terms of the **Connection Offer** and/or the **Connection Agreement** including where the **User** withdraws its acceptance of the **Connection Offer** and/or terminates the **Connection Agreement** and/or fails to pay for the appropriate loss in TUoS revenue.

9.3.6 The **User** is required to maintain an **MIC** bond for two years from the date of acceptance of the **Connection Offer** or date of execution of the **Connection Agreement** (whichever date is the later).

10 Disconnection, De-energisation and Decommissioning Charges

- 10.1 Where a **User** withdraws from an accepted **Connection Offer** after construction works have commenced to deliver the **Connection Assets**, then the **User** shall be liable for the reasonable outturn cost of, removing any **Non-Contestable Works** already constructed at that point in time from the connection site and making good the condition of the connection site. In the event that the assets are not decommissioned or the site is not reinstated no decommissioning or reinstatement charges, as appropriate, will be payable by the **User**.
- 10.2 Where a **User** wishes a connection to be de-energised then, on request, SONI will arrange to de-energise the **Connection Point**. No charge will be made for this service if carried out during **Normal Working Hours** and following reasonable notice, except as provided by agreement the **User** and SONI.
- 10.3 On termination of the **Connection Agreement** the **User** shall be liable for the reasonable outturn cost of decommissioning the **Connection Assets**, removing the **Connection Assets** from the connection site and making good the condition of the connection site. In the event that the assets are not decommissioned or the site is not reinstated no decommissioning or reinstatement charges, as appropriate, will be payable by the **User**.

11 Indicative Charges

11.1 Factors which influence costs and charges are:

- 11.1.1 statutory and other standards governing the system;
- 11.1.2 the length of cable or overhead line required to connect to the existing system;
- 11.1.3 the **User's MEC or MIC** in relation to the available capacity of the existing **Transmission System**;
- 11.1.4 whether the connection is by underground cable or overhead lines;
- 11.1.5 the type of ground requiring excavation;
- 11.1.6 the type and extent of reinstatement necessary;
- 11.1.7 the need for river, railway, telecommunication, other electric circuit and road crossings;
- 11.1.8 the availability of wayleaves or easements for cables or lines, including any planning consents;
- 11.1.9 the availability of a suitable substation site, including any necessary planning consents; and
- 11.1.10 the connection programme.

11.2 These items should not be regarded as a comprehensive list.

11.3 Significant cost items for connection to the **All-Island Transmission Networks** at entry or exit points on the **Transmission System** are provided in Table 2.

12 Charges relating to Contestable Works

- 12.1 Where a **User** advises SONI that it will undertake the **Contestable Works**, the **User** will be required to pay SONI charges relating to design review, technical queries, inspection and monitoring of the **Contestable Works**.
- 12.2 The SONI connection charges as set out in the **Connection Offer** shall include an estimate of the charges relating the design review, technical queries, inspection and monitoring of the **Contestable Works** to any **Contestable Works**. These charges shall be estimated from the charges set out in Tables 3A and 3B, using an estimate of the scale of the work derived from Table 4.
- 12.3 Other relevant charges in relation to **Contestable Works** may be applicable, including, but not limited to, programme management, project management, technical queries, legal checks or time spent by SONI to deal with any other additional issues relating to any **Contestable Works** that may arise up until the point of the Adoption Agreement being executed. An estimate of these costs will be provided in the **Connection Offer** and will be based on the charges as set out in Table 3C.
- 12.4 If, for any reason, additional inspections, site visits, design reviews technical queries or any other issues as per sub-paragraph 12.3 are required (or requested by the **User** or **ICP**), then this will incur additional charges which must be paid by the **User** in advance of adoption of the assets.

13 Contact Details

13.1 Should you require any further details about the information contained in this document please contact us at the address below.

13.2 Additional information on the connection process can be obtained at SONI's website at www.soni.ltd.uk.

Contact Details:

SONI Limited
Castlereagh House
12 Manse Road
Belfast
Northern Ireland
BT6 9RT

Tel: +44 28 907 94336

Email: connections@soni.ltd.uk

14 Definitions

Adoption Agreement an agreement covering the ownership transfer of the **Contestable Works** from the **User** or **ICP**, as appropriate, to **NIE Networks** in its role as **Transmission Owner** under the **NIE Transmission Licence**.

“All-Island Transmission Networks” means the **Transmission System** and the **Rol Transmission System** taken together;

“Applicant” (a) means a person who has applied for an offer of terms to enter into an agreement with SONI in respect of connection to the **All-Island Transmission Networks** at entry or exit points on the **Transmission System** but has not yet signed that agreement;

or

(b) where relevant, a **User** seeking a modification to an existing connection to the **All-Island Transmission Networks** at entry and exit points on the **Transmission System** and to amend their existing **Connection Agreement** accordingly;

“Authorised Area” as defined in the **SONI Transmission Licence**;

“Authority” means the Northern Ireland Authority for Utility Regulation, as established under the **Energy Order**;

“Capacity Test” means the test(s) to be undertaken by the **User** to determine if the facility has met the conditions required to allow the **MEC** capacity bond to be released by SONI or in the case where the **User** does not meet the conditions, allows SONI to draw down the **MEC Bond**;

“Connection Agreement”	an agreement between SONI and a User setting out the terms relating to a connection to the All-Island Transmission Networks at entry or exit points on the Transmission System ;
“Connection Assets”	as defined in Section 5 of this statement;
“Connection Offer”	a SONI offer of connection to the All-Island Transmission Networks at entry or exit points on the Transmission System which is either a Non Contestable Offer or a Contestable Offer ;
“Connection Point”	means the point at which a User’s plant connects to the All-Island Transmission Networks , normally the busbar clamp on the busbar side of the busbar isolators on User circuits;
“Contestable Offer”	an offer of connection to the All-Island Transmission Networks at entry or exit points on the Transmission System which is based on the User or ICP delivering the Contestable Works ;
“Contestable Works”	the connection works that are identified in a Connection Offer which can be carried out by a party other than NIE Networks and SONI;
“Energy Order”	means the Energy (Northern Ireland) Order 2003;
“Grid Code”	means the code of that name drawn up pursuant to Condition 16 of the SONI Transmission Licence ;
“Guidelines For Contestability In Electricity Connections In Northern Ireland”	the document produced jointly by NIE Networks and SONI that provides the guidelines on how contestability works in electricity connections in Northern Ireland, and is revised and amended from time to time;

“Independent Connection Provider” or “ICP”	a person other than NIE Networks or SONI who holds relevant accreditation for specific activities undertaken under the National Electricity Registration Scheme (“NERS”) operated by Lloyd’s Register which deems them to be competent to undertake Contestable Works in relation to the provision of a connection to the Transmission System .
“Least Cost Technically Acceptable” or “LCTA”	<p>the Least Cost Technically Acceptable connection is the connection which:</p> <ul style="list-style-type: none">• complies with the Transmission System Security and Planning Standards; and• complies with any other applicable standard, regulation and code; and• takes into account committed developments on the Transmission System; and• is the least overall cost including both Connection Assets and System Assets;
“Maximum Export Capacity” or “MEC”	means the maximum permissible amount of electricity to be exported to the All-Island Transmission Networks at entry or exit points on the Transmission System at the Connection Point as set out in the Connection Agreement ;
“Maximum Import Capacity” or “MIC”	means the maximum permissible amount of electricity to be imported from the All-Island Transmission Networks at entry or exit points on the Transmission System at the Connection Point as set out in the Connection Agreement ;
“NIE Transmission Licence”	means the licence to participate in transmission of electricity granted to NIE Networks under Section 10 of the Order ;

- “Non-Contestable Offer”** an offer of connection to the **All-Island Transmission Networks** at entry or exit points on the **Transmission System** which is based on the **NIE Networks** and/or SONI (as relevant) delivering the **Contestable Works** and **Non-Contestable Works**;
- “Non-Contestable Works”** the connection works that are identified in a **Connection Offer** which can only be carried out by either **NIE Networks** or SONI;
- “Normal Working Hours”** means 9am to 5pm on Monday to Friday, excluding any Northern Ireland Public Holidays or Bank Holidays as published at www.nidirect.gov.uk);
- “Northern Ireland Electricity Networks Limited” or “NIE Networks”** means a company registered in Northern Ireland with company number NI0026041 whose registered office is at 120 Malone Road, Belfast, BT9 5HT and who has been granted the **NIE Transmission Licence**;
- “Order”** means The Electricity (Northern Ireland) Order 1992;
- “Retail Price Index”** means the index of prices compiled by the Office for National Statistics and published at www.ons.gov.uk;
- “RoI Transmission System”** means the system of electric lines operated by the **Republic of Ireland Transmission System Operator** and comprising high voltage lines and electrical plant and meters used for conveying electricity from a generating station to a substation, from one generating station to another, and from one substation to another within the Republic of Ireland;
- “Republic of Ireland Transmission System Operator” or “RoI TSO”** means EirGrid plc, the company formed under Regulation 34 of SI 445 of 2000 of the Republic of Ireland legislation and licensed under Section 14 (1) (e) of the Republic of Ireland Electricity Act, 1999;

- “SONI Transmission Licence”** means the licence to participate in transmission of electricity granted to SONI under Section 10 of the **Order**;
- “System Assets”** as defined in Section 5 of this statement;
- “Transmission Owner”** **NIE Networks** in its capacity as the owner of the **Transmission System** under the **NIE Transmission Licence**;
- “Transmission System Security and Planning Standards”** the standards referred to in Condition 20 of the **SONI Transmission Licence**;
- “Transmission System”** means the system of electric lines owned by **NIE Networks** and comprising high voltage lines and electrical plant and meters used for conveying electricity from a generating station to a substation, from one generating station to another, and from one substation to another within the **Authorised Area** (including such part of the North/South Circuits as is owned by **NIE Networks**) (except any such lines which the **Authority** may approve as being part of **NIE Networks’** distribution system) and any other electric lines which the **Authority** may specify as forming part of the **Transmission System**, but shall not include any Interconnector;
- “Transmission System Capacity Statement”** means the statement of that name prepared pursuant to Condition 33 of the **SONI Transmission Licence**;
- “User”** means a person who has entered into an agreement with SONI in respect of connection to the **All-Island Transmission Networks** at entry or exit points on the **Transmission System**.

Table 1 – Connection Offer Application Fee

The following table sets out the application fee payable to SONI by **Applicants** when seeking a **Connection Offer**.

<i>MIC and MEC ranges</i>	<i>Demand - Assessment of system works</i>	<i>Generation - Assessment of system works, including distribution connected generation</i>	<i>G or D - Assessment of Shallow Works</i>	<i>Total fee for demand with shallow works</i>	<i>Total fee for generation with shallow works</i>	<i>Maximum charge for an assessment by the RoI TSO (generation connections only)</i>
<20 MW	£15,000	£23,000	£24,000	£39,000	£47,000	£23,000
> 20 MW ≤ 100 MW	£24,750	£33,000	£27,500	£52,250	£60,500	£33,000
>100 MW	£33,750	£35,250	£31,250	£65,000	£66,500	£35,250

Notes:

1. For the payment of this application fee an applicant shall receive a **Connection Offer** within the period defined in Condition 25 of the **SONI Transmission Licence** and the offer shall set out any connection and/or reinforcement works required, the dates by when these works are planned to be completed and the connection charges payable. The works specified in the **Connection Offer** will not normally be fully engineered and specified. In particular, any overhead line routes or cable routes will not have been identified and any environmental aspects of the works will not have been fully evaluated. These tasks will not be undertaken until after the acceptance of any **Connection Offer**.
2. Fees are subject to Value Added Tax at the appropriate rate.
3. Where the **RoI TSO** is required to assess the impact on the **RoI Transmission System** caused by a proposed generation development in Northern Ireland then a fee no more than the figure in the column headed “Maximum charge for an assessment by the **RoI TSO** (generation connections only)” will be levied to enable SONI to recover the **RoI TSO**’s costs.
4. Where two or more transmission connection applications are processed together as a group of applications SONI may, in its sole discretion, reduce the **Connection Offer** application fees for each applicant if the costs incurred in preparing the offers are reduced.
5. As per sub-paragraph 8.6 a fee for a connection modification offer will apply and will be calculated on a case by case basis.
6. As per sub-paragraph 8.7 a further application fee may apply dependent on the materiality of a requested change to an application.

Table 2 – Indicative Costs

This table gives typical costs for the main items of expenditure, excluding VAT, for a new or modified connection to the **Transmission System**. These costs are based on current market information, budgetary quotes received from manufacturers and recent tenders. While SONI believes these costs are reasonable at the time of publication actual costs can vary significantly, depending on, for example, movements in labour and raw material costs, site conditions and planning requirements.

Description	£k		
	275 kV	110 kV	33 kV
Bay of switchgear			
Single busbar bay (GIS)	-	1,070	86
Double busbar bay (AIS excluding cable)	670	1,260	-
Overhead Lines (10 km)			
110 kV Double Circuit Steel Tower (875A/circuit @ 75°C)	-	6,600	-
110 kV Single Circuit Wood Pole (AP1) (729A @ 75°C)	-	2,970	-
Transformer Cables (100 m)			
240 MVA	670	720	-
120 MVA	670	395	-
Transformers			
240 MVA 275/110 kV (excluding cable)	5,020	-	-
90 MVA 110/33 kV (excluding cable)	-	1,540	-

Notes:

1. The switchgear costs are inclusive of all civil, electrical, protection and control items and are based on a minimum of three switching bays per substation.
2. The overhead line tables give the estimated cost per 10 km of overhead line assuming a normal route of 10 km or more in length with 80% of steel towers of the suspension type. These costs will increase for lines located in particularly difficult areas, e.g. urban or inaccessible areas. They do not include costs for scaffold protection or sky-cradles at, for example, road or railway crossings.
3. Costs do not include land purchase, wayleaves, legal fees, environmental impact assessments, communications equipment, metering equipment, SCADA equipment, applications for planning permission or compliance with any conditions of planning permission as these costs vary considerably for each individual project.
4. It has been assumed that the cables are installed in the substation which is located in a rural environment.
5. All costs are inclusive of manufacture, supply, delivery, erection, commissioning and any SONI project on-costs.

6. *It is assumed that all sites are accessible by means of routes that are suitable for heavy loads, such as the transformers, and there are no road infrastructure or bridge reinforcement costs.*
7. *Transformer costs include civil works, such as plinths and oil containment bunds, but do not include noise enclosures.*

CONSULTATION DRAFT

Tables 3A, 3B and 3C – Charges Relating to Contestable Works**Table 3A - Design Reviews of the Contestable Works**

Category	Charge	Additional Charge £/hour
Connection to 110kV and 275kV	Due to the variations in scale, capacity, voltage and technology of transmission connections it is not possible to derive a standard price for design reviews. The price will be supplied in the Connection Offer .	Price on Application

Table 3B - Inspection and Monitoring of the Contestable Works

Category	Unit	Charge
110kV Network	per site visit	Price on Application
275kV Network	per site visit	Price on Application
110kV/33kV Substation	per site visit	Price on Application
275kV Substation	per site visit	Price on Application
110kV Civil Works	per site visit	Price on Application
275kV Civil Works	per site visit	Price on Application

Table 3C – Other Relevant Charges Relating to Contestable Works

Category	Charge	Additional Charge £/hour
Connection to 110kV and 275kV	Due to the variations in scale, capacity, voltage and technology of transmission connections it is not possible to derive a standard price for other relevant charges. The price will be supplied in the Connection Offer .	Price on Application

Table 4 – Site Visits

Calculating Site Visits for Monitoring of Contestable Works				
Item	Calculation	Comments	Risk	Audit Level
Underground Cable				
110kV & 275kV	Minimum of one site visit per 100m of cable installed	Round up to nearest 100m of cable installed	High	Apply calculation to 100% of cable installed.
Overhead Line				
110kV & 275kV	Minimum of one site visit per 100m of overhead line installed	Round up to nearest 100m of overhead line installed	High	Apply calculation to 100% of overhead line installed
Cable Jointing				
110kV & 275kV	Minimum of one site visit for each joint		High	Apply calculation to 100% of Joints
Substations				
Substation Commissioning	Dependent on connection	Estimate additional site visits for protection testing where applicable	High	Apply calculation to 100% of substations
Civil Works	Minimum of one site visit for each substation building	As far as practicable, substation civil works shall be inspected before switchgear is installed.	High	Apply calculation to 100% of Substations
Foundations	One site visit per Foundation	Minimum of one site visit	High	Apply calculation to 100% of Foundations
Transformer & Switchgear	Dependent on connection		High	Apply calculation to 100% of Substations

Notes:

1. Audit Level criterion is at the discretion of SONI.
2. Charges will be levied in accordance with the calculation criteria above.
3. Where a **User** undertakes construction activities outside of **Normal Working Hours** and SONI or its appointed contractor(s) requires that activity to be inspected as it is being carried out, revised site visit charges will apply.
5. For the inspection of the wiring installation associated with HV CT Metering installations, a separate charge will be levied where applicable.
6. Excludes polarity checks and earth fault loop impedance testing.

Figure 1 – Generator Connection

Illustration of the standard boundary between the **Connection Assets** and the **User's** equipment, and the standard boundary between the **Connection Assets** and the **System Assets** for a generation connection as per sub-paragraph 5.5.

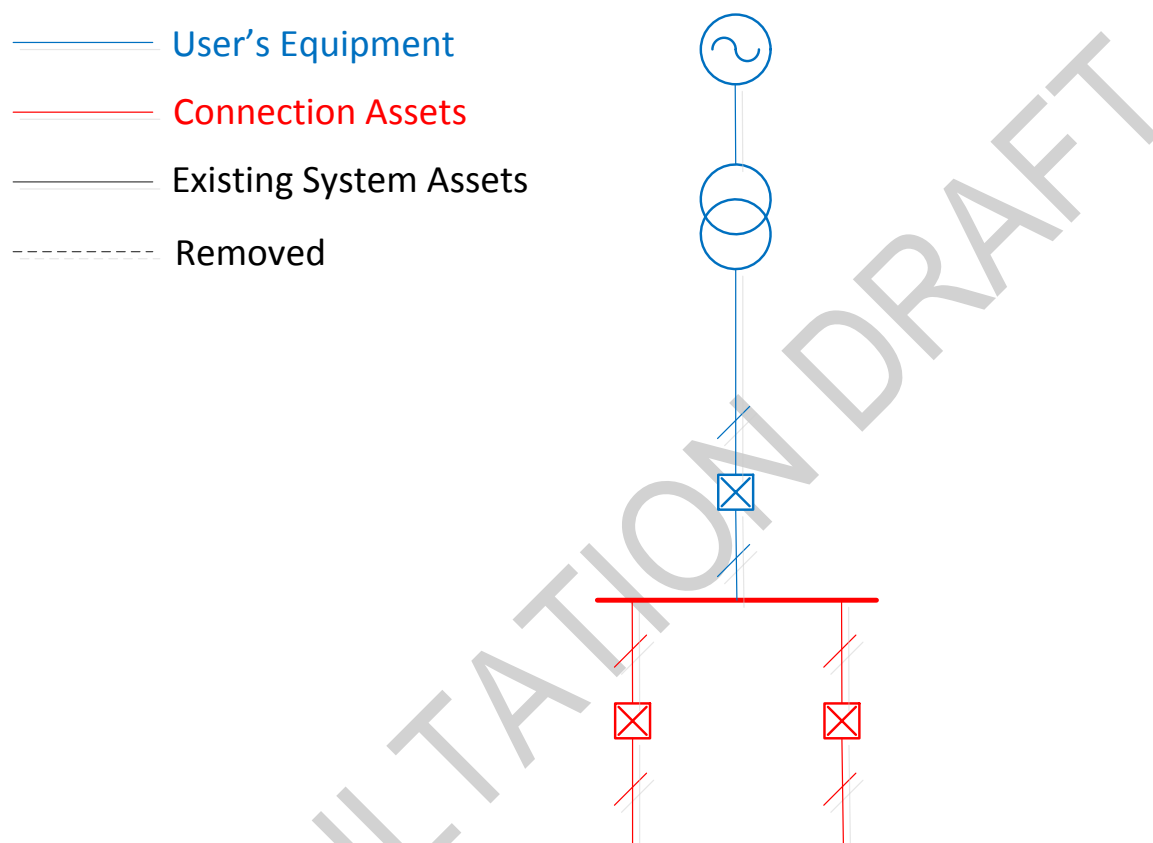


Figure 2 – Load Connection

Illustration of the standard boundary between the **Connection Assets** and the **User's** equipment, and the standard boundary between the **Connection Assets** and the **System Assets** for a load connection as per sub-paragraph 5.5.

