

TRANSMISSION CHARGING STATEMENT

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1 Introduction

- 1.1 Northern Ireland Electricity Networks Ltd ("NIE Networks") is the owner of the Northern Ireland **Transmission System**. 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 **Transmission Licence** NIE Networks is responsible for developing and maintaining the **Transmission System**.
- 1.3 NIE Networks is required by Condition 22 of the **Transmission Licence** to prepare (and obtain the **Authority's** approval to) a statement (or statements) setting out the basis upon which charges will be made to the **Transmission System Operator**:
 - (a) for the provision of **Transmission Services**; and
 - (b) in relation to the works referred to in Condition 20 of the **Transmission** Licence, covering SONI Construction Applications.
- 1.4 This statement has been prepared to meet that obligation.
- 1.5 This statement is required to be in such form and contain such detail as shall be necessary to enable the **Transmission System Operator** to make a reasonable estimate of the charges to which it would become liable for the provision of the services referred to in sub-paragraph 1.3.
- 1.6 This statement is required to include:
 - 1.6.1 a schedule listing those items (including the carrying out of works and the provision and installation of electric lines or electrical plant or meters) of significant cost liable to be required for the purpose of connection (at entry or exit points) to the **Transmission System** for which **Site Specific 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;
 - 1.6.2 the methods by which and the principles on which Site Specific Charges will be made in circumstances where the electric lines or electrical plant to be installed are (at NIE Networks' discretion) of greater size or capacity than that required for use of system by the person seeking connection;
 - 1.6.3 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 lines, electrical plant or meters provided and installed for making a connection to the **Transmission System**;

- 1.6.4 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 NIE Networks 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 NIE Networks of any service in relation thereto;
- 1.6.5 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 lines and ancillary meters following disconnection: and
- 1.6.6 such other matters as shall be specified in directions issued by the **Authority** from time to time.
- 1.7 **Site specific charges** for those items referred to in sub-paragraph 1.6 shall be set at a level which will enable NIE Networks to recover:
 - 1.7.1 the appropriate proportion of the costs directly or indirectly incurred (or to be incurred) in carrying out the works, extension or reinforcement in question and in providing, installing, maintaining and repairing (and, following disconnection, removing) the electrical lines, electrical plant, meters, special metering, telemetry, data processing equipment or other items in question; and
 - 1.7.2 a reasonable rate of return on the capital represented by such costs.
- 1.8 NIE Networks may periodically revise the information set out in and, with the approval of the **Authority**, alter the form of this statement and shall, at least once in every year revise this statement in order that the information set out herein continues to be accurate in all material respects. Each such revision requires to be approved by the **Authority** and shall not become effective until approved by the **Authority**.
- 1.9 A copy of this statement can be obtained from NIE Networks' website at:
 - www.nienetworks.co.uk/About-us/Regulation/Regulatory-documents
- 1.10 The Transmission Charging Statement that will apply to any Construction Offer issued by NIE Networks will be the Transmission Charging Statement in force on the date on which the Construction Offer is issued. However, if a Construction Offer is not accepted by the date on which a new Transmission Charging Statement comes into force, the Construction Offer may be revised to reflect the Transmission Charging Statement in force on the date of acceptance.
- 1.11 Subject to sub-paragraph 1.10, if at the date of connection the **Transmission**Charging Statement then in force is different to the **Transmission Charging**Statement that was in force at the date of acceptance of the **Construction**Offer, then the **Construction Offer** may be revised to reflect the **Transmission**Charging Statement in force at the date of connection.

- 1.12 NIE Networks shall not be entitled to revise the Construction Offer pursuant to sub-paragraph 1.11 above if connection would have occurred during the period in which the Transmission Charging Statement at the date of acceptance was in force but for delays due to reasons within the control of NIE Networks.
- 1.13 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 10 of this document.

2 General System Charges

- 2.1 NIE Networks shall recover the cost of providing **Transmission Services** from SONI through **General System Charges**.
- 2.2 The **General System Charges** levied on SONI will be set to recover the regulated transmission revenue approved by the **Authority** for each tariff period consistent with the price control revenue restriction set out in Annex 2 of the **Transmission Licence**.
- 2.3 In respect of each tariff period, NIE Networks shall provide SONI with details of **General System Charges** for that tariff period as soon as reasonably practicable after their approval by the **Authority**.
- 2.4 NIE Networks will invoice SONI monthly for **General System Charges** in accordance with the monthly charging schedule approved by the **Authority** for that tariff year.

3 Site Specific Charges

- 3.1 Where SONI requires **Connection Assets** to be installed or modified and enters into a **Construction Agreement** with NIE Networks, SONI will be required to pay **Site Specific Charges** for:
 - 3.1.1 either the estimated or the outturn cost of the new or modified **Connection Assets**, as defined in section 4;
 - 3.1.2 the estimated or outturn cost of decommissioning transmission assets resulting from the new or modified connection, if any;
 - 3.1.3 certain pass-through costs which will be set out in the Construction Offer. For example, 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;
 - 3.1.4 the cost of operating and maintaining the **Connections Assets** over the lifetime of the connection; and
 - 3.1.5 where relevant, costs relating to design reviews, inspection and monitoring of **Contestable Works**.
- 3.2 Where SONI advises NIE Networks that it wishes to pay the estimated cost of the works, NIE Networks will provide as part of the Construction Offer an estimate of the Site Specific Charges, identifying the costs of the main items of expenditure in a manner consistent with the level of detail provided in Table 2. Since the Construction Offer may be dependent upon compliance with certain technical and programme requirements and the fulfilment of other obligations, it may be varied or updated by NIE Networks if circumstances have changed following the preparation of the offer. It may also be necessary to revise the Site Specific Charges in certain circumstances, for example where a re-design is required, there is a change in the scope of the works, an alternative connection route is required or for other technical or programme reasons. It may also be necessary to carry out reconciliation exercises where the Site Specific Charge is based on a desk top analysis and is indicative only.
- 3.3 Where SONI advises NIE Networks that it wishes to pay the outturn cost of the works, NIE Networks will provide as part of the **Construction Offer** an estimate of the **Site Specific Charges**, identifying the costs of the main items of expenditure in a manner consistent with the level of detail provided in Table 2 and, in this case, SONI will be charged the actual outturn cost, including any additional administrative costs associated with this payment option. The detail of the actual outturn costs provided to SONI will be consistent with the level of detail provided in Table 2. NIE Networks will only consider this payment option where SONI has demonstrated to NIE Networks' satisfaction that the User has agreed to pay the outturn cost of the works.

- 3.4 The estimate provided to SONI, as set out in sub-paragraphs 3.2 or 3.3, will contain elements covering engineering costs and a reasonable rate of return on any capital outlay in excess of sums received.
- 3.5 Where a **Construction Offer** is based on an estimated cost, as opposed to an outturn cost, and where the works are completed over a significant period of time after the acceptance of the **Construction Offer** (greater than 12 months) the actual **Site Specific Charges** 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 **Construction Offer**.
- 3.6 Notwithstanding sub-paragraph 3.1, all assets which were installed on the **Transmission System** at April 1992 are funded through use of system charges. SONI will not therefore be charged **Site Specific Charges** for pre-April 1992 plant, equipment or cabling which is utilised as part of the local connection arrangements, even if they require to be refurbished, modified or replaced due to asset condition or for wider system needs. However, where SONI requests that any pre-April 1992 plant, equipment or cabling is refurbished, modified or replaced to meet the requirements of a **User** then the new or modified assets will be defined as **Connection Assets** and **Site Specific Charges** will be levied in accordance with this section 3.
- 3.7 Where an **Applicant's** connection requires that works which are planned to be constructed and which are set out in the **Transmission System Capacity Statement** be advanced or altered, then SONI will be charged for any incremental costs incurred by deviating from the original plan, whether for **Connection Assets** or **System Assets**, including any advancement costs.
- 3.8 The **Site Specific Charges** 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 1.3% 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, NIE Networks may agree to O&M charges being paid annually. NIE Networks will only consider this arrangement where SONI has demonstrated to NIE Networks' satisfaction that the **User** has agreed to pay O&M charges to SONI on an annual basis. Where the payment of annual O&M charges is agreed the annual charge shall be set at 1.3% of the value of the **Connection Assets**, increasing in real terms over the lifetime of the **Connection Agreement**.
- 3.9 The **Site Specific Charge** is normally payable in full in advance of energisation.
- 3.10 Where SONI has elected to pay the outturn cost of the works 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.
- 3.11 Where appropriate, a payment schedule will be set out in the **Construction Offer**.

Site Specific Charges where a User is undertaking Contestable Works

- 3.12 Where SONI has advised NIE Networks that a User will undertake the Contestable Works, SONI will be required to pay NIE Networks' charges relating to design review, inspection and monitoring of the Contestable Works.
 - 3.12.1 NIE Networks' charges set out in the relevant **Construction Offer** shall include an estimate of the charges relating to the **Contestable Works**.
 - 3.12.2 If for any reason fewer or additional inspections, site visits or design reviews are required in relation to the **Contestable Works**, the estimated charges shall be adjusted accordingly and SONI will be required to pay any such adjusted charges.
 - 3.12.3 The structure of the charges is shown in Tables 3A and 3B.
- 3.13 For the purposes of estimating the O&M charge for the connection, the value of the Connection Assets (including both the Contestable Works and the Non-Contestable Works) shall be estimated by NIE Networks. The estimated value and the O&M charge derived from the estimated value shall be provided in the Construction Offer. Where SONI subsequently advises NIE Networks that the design of the Connection Assets has been changed and the changes have been agreed between SONI and the User, NIE Networks shall then revise, as necessary, the O&M charge to reflect any change to the estimated value of the Connection Assets and advise SONI.
- 3.14 Where a **User** is undertaking the **Contestable Works**, NIE Networks' **Site Specific Charges** for the **Connection Assets** will not include charges for the **Contestable Works**, apart from charges relating to design review, inspection and monitoring of the **Contestable Works** and the O&M charge for the **Contestable Works**.

4 Connection Assets

4.1 **Connection Assets** are:

- 4.1.1 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, subject to sub-paragraphs 4.2 and 4.3; and
- 4.1.2 those assets which are installed as a result of the **User's** effect on fault current 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.
- 4.2 In deciding which assets are required to enable the transfers referred to in subparagraph 4.1.1, power flows other than those to or from the **User(s)** shall be disregarded.
- 4.3 Assets which are not **Connection Assets** are **System Assets**.
- 4.4 **Connection Assets** include, as appropriate:
 - 4.4.1 the circuit(s), or those parts of the circuit(s), required to connect the **User** to the existing **All-Island Transmission Networks**;
 - 4.4.2 in addition to assets required under sub-paragraph 4.4.1, any new circuit(s) or enhanced circuit(s) required pursuant to sub-paragraph 4.1.1;
 - 4.4.3 the circuit bay(s) required by the **User**;
 - 4.4.4 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
 - 4.4.5 metering, telemetry or data processing equipment supplied by NIE Networks.
- 4.5 Figures 1 and 2 illustrate the standard boundary for asset ownership and the standard boundary for Connection Asset System Asset.

5 Least Cost Technically Acceptable Connection Design

- 5.1 SONI will evaluate a number of design options before deciding on the preferred design for a new or modified connection to the **All-Island Transmission**Networks. In doing so, there may be occasions where the preferred design is not the **Least Cost Technically Acceptable** ("LCTA") connection.
- 5.2 Where SONI does not proceed with the **LCTA** connection then SONI will only be required to pay **Site Specific Charges** which are set to recover the estimated cost of the **LCTA** connection. The additional NIE Networks' costs will be recovered as **General System Charges**.
- 5.3 Where an **Applicant** requests a **Connection Offer** from SONI which is more expensive than the **LCTA** connection then SONI will be required to pay either the estimated or outturn cost of NIE Networks providing both the **Connection Assets** and additional **System Assets**, if any, required by the **Applicant's** preference.

6 Application Fees and Feasibility Studies

- 6.1 Where SONI requires a **Construction Offer** SONI will be required to pay to NIE Networks a fee to enable NIE Networks to recover the costs of producing the **Construction Offer**. The fee shall be either:
 - 6.1.1 a fixed fee derived from Table 1; or
 - 6.1.2 a fee based on the outturn cost of carrying out the relevant detailed studies, preparing a connection design and issuing a **Construction**Offer.
- 6.2 SONI shall advise NIE Networks of the preferred payment method.
- 6.3 Where SONI advises NIE Networks that it wishes to pay the outturn cost of carrying out the relevant detailed studies, preparing a connection design and issuing a **Construction Offer**, NIE Networks will 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.
- 6.4 If SONI and/or NIE Networks have carried out relevant feasibility studies in relation to the connection in advance of the submission of the application, then a reasonable credit to the fee, determined by NIE Networks, will be allowed in respect of these studies.
- 6.5 The fee will be paid in two instalments. A first instalment of £4,000 (exclusive of VAT) must accompany the **Construction Application** form. The second instalment, the balance of the fee, will be invoiced when NIE Networks deems the application to be effective, which means that all information necessary to enable NIE Networks to prepare a **Construction Offer** has been received and it is clear in all material respects.
- 6.6 Delays in production of the **Construction Offer** may occur if the application fee instalment payments are not received in a timely manner.
- 6.7 Where SONI is applying for a **Construction Offer** in relation to the modification of an existing connection SONI will be required to pay NIE Networks an application fee to enable NIE Networks to recover the costs of producing the **Construction Offer**. For modification of an existing connection the fee will be calculated on a case by case basis.
- 6.8 Where SONI wishes to change any aspect of a **Construction Application** then SONI may be charged a further fee. The decision on whether or not to levy a fee will depend on the materiality of the change to the application.

7 Disconnection, De-energisation and Decommissioning Charges

- 7.1 Where SONI wishes a connection to be de-energised then, on request, NIE Networks 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.
- 7.2 On termination of a **Connection Agreement** SONI 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 SONI.

8 Indicative Charges

- 8.1 Factors which influence costs and charges are:
 - (i) statutory and other standards governing the system;
 - (ii) the length of cable or overhead line required to connect to the existing system;
 - (iii) the **User's MEC** or **MIC** in relation to the available capacity of the **Transmission System**;
 - (iv) whether the connection is by underground cable or overhead lines;
 - (v) the type of ground requiring excavation;
 - (vi) the type and extent of reinstatement necessary;
 - (vii) the need for river, railway, telecommunication, other electric circuit and road crossings;
 - (viii) the availability of wayleaves or easements for cables or lines, including any planning consents;
 - (ix) the availability of a suitable substation site, including any necessary planning consents; and
 - (x) the connection programme.
- 8.2 These items should not be regarded as a comprehensive list. Significant cost items are provided in Table 2.

9 Disputes

9.1 Any differences, disagreements and disputes between NIE Networks and SONI arising out of or in relation to NIE Networks' charges shall be resolved in accordance with Section Q of the **TIA** and any other applicable section of the **TIA**.

10 Definitions

"All-Island Transmission means the Transmission System and the Rol Networks" Transmission System taken together;

"Applicant" means a person who has applied for an offer of

terms to enter into an agreement with SONI in respect of connection (or modification of an existing connection) to the All-Island Transmission Networks at entry or exit points on the Transmission System but has not yet

signed that agreement;

"Authorised Area" As defined in the Transmission Licence;

"Authority" means the Northern Ireland Authority for Utility

Regulation, as established under the **Energy**

Order;

"Connection Agreement" an agreement between SONI and a User setting

out the terms relating to a connection to the All

Island Transmission Networks;

"Connection Assets" as defined in paragraph 4;

"Connection Offer" A SONI offer of connection to the All-Island

Transmission Networks;

"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:

"Construction Agreement" a contract for the construction of those Changes

to NIE Networks' **Transmission System** set out

in an NIE Networks Construction Offer;

"Construction Application" as defined in Section D, sub-paragraph 2.1.2 of

the TIA;

"Construction Offer" an offer made by NIE Networks to SONI

pursuant to Section D, paragraph 4 of the TIA;

"Contestable Works" The 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;

"General System Charges" means charges to recover costs associated with

those assets which are not **Connection Assets**, set to recover NIE Networks' allowable revenue

approved by the **Authority**;

"Grid Code"

"Least Cost Technically Acceptable" or "LCTA"

means the code of that name drawn up pursuant to Condition 16 of the SONI **Transmission Licence**;

The Least Cost Technically Acceptable connection is the connection which:

- 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, taking into account the cost of both Connection Assets and System Assets;

"Maximum Export Capacity" or "MEC"

"Maximum Import Capacity" or "MIC"

"Normal Working Hours"

"Order"

"Retail Price Index"

"Rol Transmission System"

"Republic of Ireland Transmission System Operator" means the maximum permissible amount of electricity to be exported to the All Island Transmission Networks at the Connection Point as set out in the Connection Agreement;

means the maximum permissible amount of electricity to be imported from the All Island Transmission Networks at the Connection Point as set out in the Connection Agreement;

means 9:00 a.m. to 5:00 p.m. on Monday to Friday, excluding any Northern Ireland public holidays and bank holidays, as published at www.nidirect.gov.uk;

means The Electricity (Northern Ireland) Order 1992;

means the index of prices compiled by the Office for National Statistics and published at www.ons.gov.uk/;

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;

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; "Site Specific Charges"

charges relating to costs associated with those assets classed as **Connection Assets**:

"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 sub-paragraph 4.3;

"Transmission System Security and Planning Standards"

the standards referred to in Condition 20 of the **SONI Transmission Licence**:

"Transmission Charging Statement"

means the statement prepared in accordance with Condition 22 of the **Transmission Licence** setting out the basis upon which charges will be made to the **Transmission System Operator** (this document);

"Transmission Interface Arrangements" or "TIA"

means the arrangements between NIE Networks and SONI required by Condition 17 of the **Transmission Licence**;

"Transmission Licence"

a licence to participate in transmission granted to NIE Networks under section 10 of the **Order**:

"Transmission Services"

means those services defined in Section B of the **TIA**:

"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 the 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**;

"Transmission System Operator"

means SONI;

"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 - Construction Offer Application Fee

The following table sets out the application fee payable by SONI to NIE Networks when seeking a Construction Offer.

MIC and MEC ranges	<u>Demand</u> Assessment of system works	Generation Assessment of system works, including distribution connected generation	Generation or Demand Assessment of Shallow Works	Total Fee for demand with shallow works	Total fee for generation with shallow works
< 20MW	£9,250	£14,250	£15,000	£24,250	£29,250
> 20 MW ≤ 100 MW	£15,250	£20,500	£17,000	£32,250	£37,500
> 100 MW	£21,000	£21,750	£19,250	£40,250	£41,000

Note:

- 1. Fees are subject to Value Added Tax at the appropriate rate.
- 2. Where two or more **Construction Applications** are processed together as a group of applications NIE Networks may, in its sole discretion, reduce the **Construction Offer** application fee if the costs incurred in preparing the offers are reduced.

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 NIE Networks 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.

		£k	
Description	275 kV	110 kV	33 kV
Bay of switchgear			
Single busbar bay (GIS)	-	1,060	86
Double busbar bay (AIS excluding cable)	1,650	1,240	-
Overhead Lines (10 km)			
110 kV Double Circuit Steel Tower (875A/circuit @ 75°C)	-	6,600	-
110 kV Single Circuit Wood Pole (AP1) (729A/circuit @ 75°C)	-	2,970	-
Transformer Cables (100 m)			
240 MVA	660	710	-
120 MVA	-	390	-
Transformers			
240 MVA 275/110 kV (excluding cable)	4,960	-	-
90 MVA 110/33 kV (excluding cable)	-	1,520	-

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 skycradles 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 NIE Networks 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.

Tables 3A and 3B - Charges Relating to Contestable Works

Table 3A - Design Reviews of the Contestable Works

Category	Charge	Additional Charge £/hour
Connections at 110kV and 275kV	Due to the variations in scale, capacity, voltage and technology of transmission connections it is not possible to derive an average price for design reviews. The price will be supplied in the Construction 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
Civils	per site visit	Price on application

Figure 1 – Generator Connection

Illustration of asset ownership and system/connection boundaries

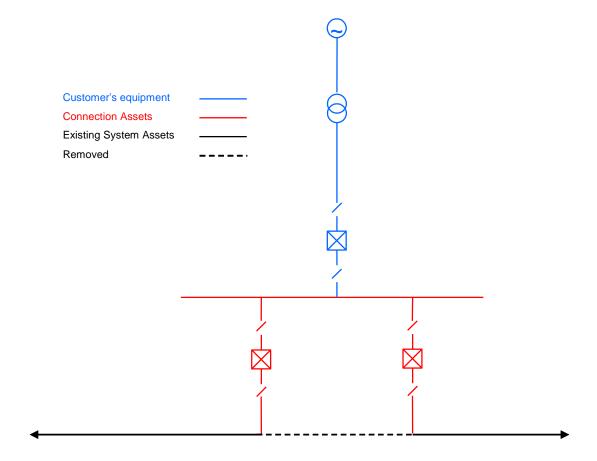


Figure 2 – Load Connection

Illustration of asset ownership and system/connection boundaries



