



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

**Network Charges for Autoproducers and CHP Producers**

**A Direction by the Commission for Energy Regulation**

**CER/03/237  
September 2003**

## **Introduction**

- 1 In exercise of the powers conferred on the Commission for Energy Regulation under Section 34(1) of the Electricity Regulation Act 1999, the Commission hereby issues the following direction to ESB Networks in its capacity as licensed Distribution System Operator (“DSO”) and to ESB National Grid in its capacity as de facto Transmission System Operator (“TSO”).
- 2 This direction follows and supersedes the direction issued by the Commission on 17th April 2002, entitled “The Treatment of Autoproducers in the Distribution and Transmission Charging Regime” (CER/02/037). **Appendix 1** sets out definitions of some concepts used in this direction, other than those addressed in paragraphs 4 and 5 below.
- 3 The background to this direction is set out in the Commission’s public consultation paper (CER/03/167). The Commission is also issuing a supplementary guidance note to this direction (CER/03/238), which addresses the important issues raised during the consultation.

## **Autoproducers and CHP Producers**

- 4 For the purpose of this direction, an Autoproducer shall be a person who has entered into a Connection Agreement with the DSO or TSO and generates and consumes electricity in a Single Premises, or on whose behalf another person generates electricity in the Single Premises, essentially for the first person’s own consumption in that Single Premises.
- 5 A CHP Producer shall be a person who generates electricity through a Combined Heat and Power process under a licence from the Commission.
- 6 For the avoidance of doubt, this definition of a CHP Producer, unlike that of an Autoproducer, will disregard the use made by the person of the electricity generated. For further avoidance of doubt, the Commission acknowledges that many, though not all, Autoproducers will also be CHP Producers and vice versa.
- 7 Autoproducers and CHP Producers will be treated on the same basis for the purpose of network connection and use of system charges. The primary effect of this direction is, therefore, to extend the charging regime introduced by direction CER/02/037 to those CHP Producers who are not producing electricity essentially for their own use.

## **Predominant Use Being Made of Networks**

- 8 Autoproducers and CHP Producers will both be differentiated, for the purpose of this direction, by reference to the predominant use they are deemed to be making of the transmission or distribution network, as the

case may be. Autoproducers and CHP Producers with a Maximum Import Capacity (MIC) greater than or equal to their Maximum Export Capacity (MEC) will be deemed to be using the networks predominantly to import electricity and will be referred to, for convenience, as “**Importing Autoproducers**” and “**Importing CHP Producers**” respectively. Autoproducers and CHP Producers with an MEC greater than their MIC will be deemed to be using the networks predominantly to export electricity and will be referred to, for convenience, as “**Exporting Autoproducers**” and “**Exporting CHP Producers**”, respectively.

- 9 An Autoproducer’s or CHP Producer’s MIC and MEC shall be determined by the terms of its contract with the TSO or the DSO, as the case may be.

### **Charges for Connections**

- 10 Importing Autoproducers and Importing CHP Producers shall be charged for connection to the transmission system or, where appropriate, the distribution system, on the same basis as a Final Customer. Their connection charge shall be based on their MIC with the exception of any additional costs required in relation to the provision of export meters, which shall be charged in full to them.
- 11 Exporting Autoproducers and Exporting CHP Producers shall be charged for connection to the transmission system or distribution system, where appropriate, on the same basis as a generator<sup>1</sup>. In other words, the charge will be based on their MEC.
- 12 Where an existing customer has an agreed MIC and installs generation capacity such that it now becomes an Exporting Autoproducer or Exporting CHP Producer, this customer shall be charged for connection based on its MEC in addition to the portion of the cost of connection that has not already been recovered via Distribution Use of System or Transmission Use of System Charges less any previous connection charges relating to its MIC.

### **De Minimis Levels for Transmission Use of System Charges**

- 13 Where any Autoproducer or CHP Producer connected to the distribution system has an MEC less than 10MW that person shall not be charged generator related Transmission Use of System Charges.

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<sup>1</sup> Generators connected to the distribution system do not pay distribution use of system charges for exported energy, however these generators do pay annual maintenance and operation charges associated with the connecting asset.

## **Producers Connected to the Transmission System**

### **Capacity Charges**

- 14 Importing Autoproductors and Importing CHP Producers connected to the transmission system will pay Network Capacity Charges in each Charging Period as set out in DTS-T of the ESB National Grid Statement of Charges and Payments, in accordance with their MIC.
- 15 Exporting Autoproductors and Exporting CHP Producers connected to the transmission system will pay Network Location-Based Capacity Charges in each Charging Period as set out in GTS-T of the ESB National Grid Statement of Charges and Payments, in accordance with their MEC.

### **Usage and Service Charges**

- 16 When any Autoproductor or CHP Producer connected to the transmission system imports electricity in a Trading Period the following charges (in addition to the relevant Capacity Charges in 14 or 15 above) will apply:
  - Network Unauthorised Usage Charge;
  - Network Transfer Charge;
  - System Service Charge;
  - Capacity Margin Charge.
  - (a) Where a producer's energy transfer is measured for each Trading Period, the above charges will be applied to Metered Energy imported in each Trading Period less Metered Energy exported in the same Trading Period.
  - (b) Where a producer's energy transfer is not measured for each Trading Period, the charges will be applied to all Metered Energy imported during the Charging Period.
- 17 When any Autoproductor or CHP Producer connected to the transmission system exports electricity during a Trading Period the following charges (in addition to the relevant Network Capacity Charges in 14 or 15 above) will apply:
  - System Services Generator Direct Trip Charge;
  - System Services Generator Fast Wind-down Trip Charge;

## **Producers Connected to the Distribution System**

### **Transmission Capacity Charges**

- 18 Importing Autoproductors and Importing CHP Producers connected to the distribution system will pay Network Capacity Charges in each Charging Period as set out in DTS-D1 or DTS-D2 of the ESB National Grid Statement of Charges and Payments as appropriate, in accordance with their MIC.
- 19 Exporting Autoproductors and Exporting CHP Producers connected to the distribution system will pay Network Location-Based Capacity Charges in each Charging Period as set out in GTS-D of the ESB National Grid Statement of Charges and Payments, in accordance with their MEC.

### **Distribution Capacity Charges**

- 20 Importing Autoproductors and Importing CHP Producers connected to the distribution system will also pay a Standing Charge and Capacity Charge in each Charging Period as set out in the ESB schedule of Distribution Use of System Charges under DG6, DG7, DG8 or DG9 in accordance with their MIC, voltage and type of connection.

### **Transmission Usage and System Charges**

- 21 When any Autoproductor or CHP Producer connected to the distribution system is importing electricity in a Trading Period, the following (in addition to the relevant charges above) will apply:
  - Network Transfer Charge;
  - System Service Charge;
  - Capacity Margin Charge.
  - (a) Where the producer's energy transfer is measured for each Trading Period the above charges will be applied to Metered Energy imported in each Trading Period less Metered Energy exported in the same Trading Period.
  - (b) Where the producer's energy transfer is not measured for each Trading Period the charges will be applied to all Metered Energy imported during the Charging Period.
- 22 When any Autoproductor or CHP Producer connected to the distribution system is exporting electricity the following charges (in addition to the relevant charges above) will apply:
  - System Services Generator Direct Trip Charge;
  - System Services Generator Fast Wind-down Trip Charge.

## **Distribution Usage and System Charges**

23 When any Autoproducer or CHP Producer connected to the distribution system is importing electricity the following Distribution Use of System Charges as published in ESB Schedule of Distribution Use of System Charges under DG6, DG6a, DG7, DG7a, DG8, DG8a, DG9 or DG9a, in accordance with the producer's MIC, voltage and type of connection, as appropriate, (in addition to the relevant charges above) will apply:

- Unit Rates;
- Low Power Factor Surcharge.

(a) Where a producer's energy transfer is measured for each Trading Period, the above charges will be applied to Active Power and Reactive Power imported in each Trading Period less Active Power and Reactive Power exported in the same Trading Period

A producer will be deemed to be importing energy in a Trading Period when the imported Active Power and Reactive Power is greater than the exported Active Power and Reactive Power respectively during that Trading Period.

(b) Where a producer's energy transfer is not measured for each Trading Period, the charges will be applied to Active Power and Reactive Power imported during the Charging Period.

24 Where any Autoproducer or CHP Producer connected to the distribution system is exporting electricity in a Trading Period it shall not be charged Distribution Use of System Charges on electricity exported.

Where any Autoproducer or CHP Producer's energy transfer is measured for each Trading Period that producer will be deemed to be exporting energy in a Trading Period when the exported Active Power and Reactive Power are greater than the imported Active Power and Reactive Power, respectively, during that Trading Period.

## **Application of Direction**

25 This direction shall take immediate effect and apply to charges due from the first Charging Period commencing after this date.

## **Appendix 1: Definitions.**

**“Active Power”:** is the product of the voltage and the in-phase component of alternating current measured in units of watts or multiples thereof.

**“Charging Period”:** As defined in the ESB National Grid Statement of Charges and ESB Networks DUoS Agreement, as the case may be.

**“Combined Heat and Power”:** As defined in the Electricity Regulation Act, 1999 means the simultaneous production of utilisable heat and electricity from an integrated thermo-dynamic process where the overall process operating efficiency, based on the gross calorific value of the fuel used and defined as the ratio of energy output usefully employed to the energy input, is greater than 70 per cent and where the integrated thermo-dynamic process satisfies such technical, operational, economic and environmental criteria as may be specified by the Minister from time to time, following consultation with the Commission.

**“Final Customer”:** As defined in the Electricity Regulation Act, 1999 means a person being supplied with electricity at single premises for consumption on those premises.

**“Maximum Export Capacity”:** As defined in the connection agreement with ESB Networks or ESB National Grid in MW or kW and where the value of such (in the connection agreement for a given Entry Point) is expressed in MVA or kVA then such value will be converted to MW or kW by a factor of 0.95 kW/kVA.

**“Maximum Import Capacity”:** As defined in the connection agreement with ESB Networks or ESB National Grid in MW or kW and where the value of such (in the connection agreement for a given Exit Point) is expressed in MVA or kVA then such value will be converted to MW or kW by a factor of 0.95 kW/kVA

**“Metered Energy”:** As defined in the ESB National Grid Statement of Charges.

**“Reactive Power”:** Is the product of the voltage and current and the sine of the phase of the angle between them, which is measured in KVAR or multiples thereof.

**“Single Premises”:** As defined in the Electricity Regulation Act, 1999 means one or more buildings or structures, occupied and used by a person, where each building or structure is adjacent to, or contiguous with, the other building or structure.

**“Trading Period”:** As defined in the Trading and Settlement Code