

# EDCM CHARGING METHODOLOGY STATEMENT

ESP Electricity Ltd Bluebird House Mole Business Park Leatherhead Surrey KT22 7BA

#### Introduction

This document sets out how ESP Electricity Ltd (ESPE) calculates the charges for Extra High voltage (EHV) customers' use of our distribution system. This is known as the EHV Distribution Charging Methodology Statement (EDCM<sup>1</sup>). It is drafted in fulfilment of the requirements set out in our distribution licence (Condition 13 B).

Our Distribution Use of System (DUoS) charges allocate costs associated with the provision of network services to each customer. Our aim is to be both fair and cost reflective. We do this by identifying and attributing costs as far as possible to those assets actually used by our customers in proportion to their usage.

Our tariffs are re-calculated annually and a notice will be issued to each customer in accordance with our Use of System Charging Statement. Where a material change is made to our charging methodology, we will obtain approval from Ofgem prior to publication.

For further information, please contact ESPE with the following details:

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<sup>&</sup>lt;sup>1</sup> A full glossary is included in this document

# Definition of EHV customers

EHV customers have properties or systems that are:

- a. connected to our Distribution System at 22 kilovolts or more;
- b. connected directly to substation assets that form part of ESPE's Distribution System at 1 kilovolt or more and less than 22 kilovolts where the primary voltage of the substation is 22 kilovolts or more and where the Metering Point is located at the same substation;
- c. Distribution Systems connected directly to substation assets that form part of the licensee's Distribution System at 1 kilovolt or more and less than 22 kilovolts where the primary voltage of the substation is 22 kilovolts or more and where the Metering Point is located at the same substation; and
- d. Premises connected directly to substation assets that form part of the licensee's Distribution System at 1 kilovolt or more and less than 22 kilovolts where the primary voltage of the substation is 22 kilovolts or more and where the Metering Point is located at the same substation.

# Setting the appropriate Tariff

Where an All the Way (ATW) tariff is published by the DNO we want to connect to (the host DNO), ESPE will set our customer's tariff to match it. Where the host DNO does not publish an ATW tariff, or the published DNO's tariff does not enable ESPE to recover its reasonable costs in providing the network, ESPE will determine a tariff known as the "Interim Tariff" based on the principles and methodology set out below.

#### ATW Tariff Calculation

The ATW tariff consists of the "Boundary Tariff" set by the host DNO, and an "Interim Tariff" calculated by ESPE.

The "Boundary Tariff" is set by the host DNO to cover costs in providing their network up to the boundary with our network. This is passed through to the EHV customer at cost in the final ATW tariff (see Figure 1). The "Interim Tariff" recovers ESPE's costs in providing Network from the host DNO boundary to the EHV customer. It consists of the following elements::

- Network rates, direct costs, and allocated indirect costs. These costs are reduced by any customer contributions made to ESPE.
- Depreciation recovers the cost of each asset that make up the EHV network over a number of years.
- Return on assets return element is the rate of return that ESPE will recover for the assets it owns.
- Other costs ESPE may incur additional costs that relate to EHV customers that fall outside these categories. This may be costs relating to system studies, transmission related charges, active network management scheme costs or other costs. These costs will be passed through to the EHV Customer.

Where the end customers are a combination of EHV and Low voltage (LV) / High Voltage (HV), the costs associated with EHV customers will be calculated by removing the costs associated with the LV and HV connected customers based on the network capacity these customers are deemed to use.

In certain circumstances a transmission connection charge may be levied where ESPE connects directly to a transmission network. Where a transmission charge is levied it will be allocated across our customers by the cost recovery principles described in the next section.



#### Figure 1: Tariff diagram

# **Cost recovery principles**

ESPE will recover the costs associated with assets from all customers that use them. There is no spare capacity concept built into the methodology unless otherwise agreed in advance in a Bilateral Connection Agreement (BCA) with the EHV customer. ESPE will not charge for capacity from existing customers which is reserved for a future date.

In cases where our customer's jointly use the same assets (known as Joint Use Assets (JUA)), costs are calculated based on the capacity they are deemed to reserve on the EHV network. The allocation across voltage level is based on the voltage of each asset. The voltage levels used are set out below and where a non-standard voltage is used, ESPE will assign it to one of these categories:

- 132kV
- 132/33kV
- 33kV
- 33/11kV

In cases where there is only a single connection, a Sole Use Assets (SUA) charge is calculated based on the assets that are used by one customer. For individual connections, the SUA for each EHV customer is individually identified based on the networks schematics.

ESPE allocates the costs at each voltage level between EHV customers based on the Maximum Import Capacity (MIC) and Maximum Export Capacity (MEC) of each EHV customer. This is because the network provided by ESPE allows each EHV customer to reserve capacity equal to their MIC and MEC. The MIC and MEC are therefore used as the key drivers of asset usage and cost allocation.

Where a site can both import and export energy, the tariff will be set at the higher of the MIC or MEC (known as the predominant capacity). Where these are equal, the MIC will be assumed to be the reference capacity for pricing.

ESPE will endeavour to ensure that an EHV customer does not pay distribution costs associated with unused capacity until they are ready to use it.

# **DUoS charges**

ESPE applies four tariff elements that make up the DUoS charges for EHV customers. A summary of each tariff element and how it is derived is shown below:

- Fixed charge (p/day)
  - Recovers costs associated with SUA where these costs are not recovered through Capacity charges
  - Pro-rated across import and export based on MIC and MEC
  - Pass through of the Boundary Tariff fixed charge
- Super-red unit rate (p/kWh)
  - Pass through of the Boundary Tariff super-red unit rate
- Capacity charges (p/kVA/day)
  - Recovers costs associated with JUAs including depreciation, return, Operating & Maintenance and any additional charges to cover other costs defined above.
  - Capital costs associated with the SUA
  - o Pass through of the Boundary tariff capacity charge
- Excess Capacity charges (p/kVA/day)
  - Set to recover our costs.
  - $\circ$  Applies for the duration of the month in which the capacity is breached.

Customers with generation assets will not be awarded a credit for DUoS charges for any export during times of peak usage unless there is a reduction in ESPE's network costs due to export generation that can clearly be identified. Where the DNO provides a credit, this will be passed through to the customer.

# Glossary

Term	Definition	
All-the-way (ATW) Charge	A charge that is applicable to an end user rather than an LDNO. An end user in this context is a Supplier/User who has a registered MPAN or MSID and is using ESPE's Distribution System to transport energy on behalf of a Customer.	
Authority	Means the Gas and Electricity Markets Authority as established under Section 1 of the Utilities Act 2000 that supervises Ofgem.	
Boundary Tariff	The tariff levied by the DNO in respect of an individual EHV customer that is connected to an LDNO network. The Boundary Tariff only recovers the portion of the network recovered by the DNO.	
Customer	A person to whom a user proposes to supply, or for the time being supplies, electricity through an exit point, or from who, a User or any relevant exempt supplier, is entitled to recover charges, compensation or an account of profits in respect of electricity supplied through an exit point; or A person from whom a User purchases, or proposes to purchase, electricity, at an entry point (who may from time to time be supplied with electricity as a Customer of that User (or another electricity supplier) through an exit point).	
Distribution Licence	This allows the licensee to distribute electricity for the purpose of enabling a supply to be given.	
Distribution Connection and Use of System Agreement (DCUSA)	The DCUSA is a multi-party contract between the licensed electricity distributors, suppliers, generators and offshore transmission owners of Great Britain. It is a requirement that all licensed electricity distributors and suppliers become parties to the DCUSA.	
Distribution Network Operator (DNO)	An electricity distributor that operates one of the 14 distribution services areas and in whose electricity distribution licence the requirements of Section B of the standard conditions of that licence have effect.	
Distribution Use of System (DUoS)	The charges levied by a distributor for use of the distribution network.	
Distribution System	<ul> <li>Distribution System The system consisting (wholly or mainly) of electric lines owned or operated by an authorised distributor that is used for the distribution of electricity from: <ul> <li>Grid Supply Points or generation sets or other entry points to the points of delivery to:</li> <li>Customers or Users or any transmission licensee in its capacity as operator of that licensee's transmission system or the GB transmission system and includes any remote transmission assets (owned by a transmission licensee within England and Wales) that are operated by that authorised distributor and any electrical plant, electricity meters, and metering equipment owned or operated by it in connection with the distribution of electricity, but does not include any part of the GB transmission system.</li> </ul> </li> </ul>	
EHV Distribution Charging Methodology (EDCM)	The methodology used for calculating charges to Designated EHV Properties as required by standard licence condition 13B of the Electricity Distribution Licence.	
EHV Properties	As defined in Standard Licence Condition 13B of the Electricity Distribution Licence.	
Electricity Distribution Licence	The Electricity Distribution Licence granted or treated as granted pursuant to section 6(1) of the Electricity Act 1989.	
Electricity Distributor	Any person who is authorised by an Electricity Distribution Licence to distribute electricity.	
Extra-High Voltage (EHV)	Nominal voltages of 22kV and above.	
Entry Point	A boundary point at which electricity is exported onto a Distribution System from a connected installation or from another Distribution System, not	

	forming part of the total system (boundary point and total system having the meaning given to those terms in the BSC)	
	inearing given to those terms in the bac).	
	A point on the licensee's Distribution System at which units of electricity,	
	A point of connection at which a supply of electricity may flow from the	
Exit Point	Distribution System to the Customer's installation or User's installation or the	
	Distribution System of another person.	
Grid Supply Point (GSP)	A metered connection between the National Grid Electricity Transmission	
	from the Distribution System.	
High Voltage (HV)	Nominal voltages of at least 1kV and less than 22kV.	
Host DNO	The electricity distributor that operates one of the 14 distribution services	
	areas the EHV connection is to take place.	
Independent Distribution	A licensed distribution network operator, meaning an Independent DNO Party	
Network Operator (IDNO)	or DNO Party operating an electricity distribution system outside of its	
	The tariff lovied by ESPE in respect of an individual EHV sustemer for the	
Interim Tariff	network owned by ESPE.	
kVA	Kilovolt amperes.	
kw/	Kilowatt	
kWh	Kilowatt hour (equivalent to one "unit" of electricity).	
Licensed Distribution Network	Company that distributes electricity through wires outside the distribution	
Operator (LDNO)	services area of a DNO.	
Low Voltage (LV)	Nominal voltages below 1kV.	
	The MEC of apparent power expressed in kVA that has been agreed can flow	
Maximum Export Capacity (MEC)	installation as specified in the connection agreement.	
	The MIC of apparent power expressed in kVA that has been agreed can flow	
Maximum Import Capacity (MIC)	through the exit point from the Distribution System to the Customer's	
Metering Point Administration	installation as specified in the connection agreement.	
Number (MPAN)	An identifying number relating to a Metering Point under the MRA.	
	The point at which electricity that is exported to or imported from the	
Metering Point	licensee's Distribution System is measured, is deemed to be measured, or is intended to be measured and which is registered pursuant to the provisions of	
	the MRA. For the purposes of this statement, GSPs are not 'metering points'.	
	Particular commissioned metering equipment installed for the purposes of	
Metering System	measuring the quantities of exports and/or imports at the exit point or entry	
	point.	
Master Registration Agreement	Ine MRA is an Agreement that sets out terms for the provision of Metering Point Administration Services (MPAS) Registrations, and procedures in relation	
(MRA)	to the Change of Supplier to any premise/metering point.	
Office of Gas and Electricity	The government regulator for the electricity and downstream natural gas	
Markets (Ofgem)	markets in Great Britain including distribution companies.	
Bradominant canasity	Where a site can both import and export energy, the tariff will be set at the	
	higher of the MIC or MEC, the predominant capacity.	

User Someone that has a use of system agreement with the generator or other DNO/ LDNO	e L/DNO e.g. a supplier,
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