

## Ofgem Consultation

### Proposed DNO charging methodology statements

#### Response from the Renewable Power Association (RPA)

09 November 2004

#### Introduction

1.1 The RPA has actively participated on the Distribution Charging Implementation Steering Group since its formation in late 2003 and has responded to all of Ofgem's regulatory consultations relating to the structure of distribution charges.

1.2 Many of the concerns and issues raised in our August 2004 response to Ofgem's open letter regarding the Electricity Distribution Use of System & connection charging methodologies remain valid with respect to the revised methodology statements published in October 2004.

1.3 The Renewable Power Association (RPA) welcomes Ofgem's commitment to improving the transparency and user input into electricity distribution charging. To reiterate, the RPA believes that sufficient information should be available for generators to accurately predict the level of Use of System charges. In addition, divergence between the different DNO charging methodologies should be minimised.

#### Generator Use of System: Magnitude and variations in proposed charges

1.4 Our main concerns relate to level of Generator Use of System charges being proposed by a number of DNOs. Whilst the move to a Shallowish connection charging methodology should reduce initial generator connection contributions (especially where significant network reinforcement is required), we remain concerned that overall, the introduction of Generator Use of System charges could represent a more expensive arrangement when full project lifecycle costs are considered. Indicative examples illustrating this concern are included in Appendix A.

1.5 The different DNO approaches to Generator Use of System charging and the significant variations in the proposed level of charges also represent a major concern. To illustrate this point, the variation in charges between DNOs are summarised below:

Generation charges for 2005:

- LV / small connection tariffs: £0 to £32.49/MPAN pa
- HV tariffs: £0 to £9.36/kVA pa
- EHV site specific and tariffs: £2.20 to £19.50/kVA pa

1.6 Whilst some regional variations will be inevitable, the RPA does not accept that such significant variations can be justified or cost-reflective when considering the provision of fundamentally comparable services. The RPA urges Ofgem to seek clarification from the relevant DNOs as to the reasons for such high indicative charges.

1.7 RPA members are particularly concerned that sites with significant import and export capabilities, through the same connection assets (e.g. some CHP schemes), could be required to pay Use of System charges for both generation and demand on the same assets concurrently, i.e. effectively twice. Urgent confirmation is sought that such generators will not be double charged. It would be particularly useful to clarify how use of system charges will be determined in such situations with worked examples.

1.8 A consistent concern of the RPA has been the 15-year depreciation period selected for network assets relating to Distributed Generation (DG), compared with the 20-year figure adopted for demand customers. To date, no satisfactory explanation has been provided for this discrepancy, even though the network assets employed are largely identical.

1.9 In addition to the above anomaly relating to depreciation periods, the RPA continues to seek clarification regarding the level of Generator Use of System charges to be applied once the relevant network assets have been fully depreciated. We remain concerned that generators could be required to continue paying charges on assets for which the DNO has recovered their initial capital outlay. Again, we reiterate our position that both the incentive and pass-through elements of GDUoS charges should cease after generation connection assets have been depreciated. In such instances, the only ongoing charges should correspond to O&M.

1.10 The RPA also seeks confirmation as to each DNO's policy for the replacement of network assets associated with DG.

1.11 A major concern relates to the imposition of Generator Use of System charges upon existing generators at an unspecified time in the future. The RPA strongly disagrees with the proposal that existing generators, having funded both the provision of sole use assets and network reinforcement, should be required to pay Generator Use of System charges in future.

### **Generator Use of System charge volatility**

1.12 In order to reduce the uncertainties facing the developers of DG projects, the RPA strongly supports the introduction of mechanisms to restrict annual variations in use of system charges. Whilst limited comfort can be drawn from some DNO statements regarding the 'smoothing' of tariff changes, more clarity is required regarding the approaches being adopted.

1.13 As a minimum, the RPA believes that annual tariff changes should be restricted to a maximum of +5% per annum and the RPA is concerned that the Ofgem may seek to time limit the duration of such mechanisms to 5 years. The RPA believes that any such time limits should apply for at least 10-year periods.

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## **Generator Use of System charge structure, transparency and definitions**

1.14 To implement GDUoS charges in April 2005, it will be essential to understand how DNOs will vary their charges for different types of generator. It is concerning that DNOs have structured their indicative charges using different categorisation principles, e.g. connection voltage, metering type, customer type and/or location.

1.15 In order to draw any meaningful comparisons between the charges being proposed or applied by different DNOs, it will be essential to introduce consistency with respect to charging structures. Consequently, the RPA urges Ofgem to ensure that all DNOs structure their charges in a consistent manner.

1.16 The RPA regards a consistent definition of capacity as a fundamental feature of GDUoS charging which will enable like-for-like comparisons. It is concerning that some DNOs have selected export capacity whilst others have chosen installed capacity. The RPA believes that all DNO capacity definitions should be aligned and based upon export.

1.17 Similarly, significant variations are apparent with respect to capacity tie-in periods with some DNOs seeking 15-year contracts. Again, a consistent approach across all DNOs would be preferred aligned around a maximum tie-in period of 5 years.

1.18 In order for generators to readily compare generator use of system charges across different DNOs, it will be helpful for GDUoS charges to be published transparently in the public domain. Whilst such arrangements should be straightforward for standard LV & HV GDUoS tariffs, complications could arise with respect to EHV site-specific charges. To overcome any issues of commercial confidentiality, the RPA would be supportive of anonymous EHV GDUoS charges being available to developers and generator upon request from the DNO.

1.19 The RPA remains concerned by the wide variations in reactive power charging structures being proposed by DNOs. The arrangements for DG appear to mirror those for demand customers with charges being incurred at power factors of between 0.8 and 0.95 in different areas. Such arrangements take no account of the costs being imposed (or reduced) on distribution networks. Further clarification regarding the basis for such charges is sought.

## **General Comments**

1.20 The RPA is concerned by the significant variations in O&M charges between different DNOs. It is not clear how such variations can be justified or cost reflective for the provision of essentially similar services.

1.21 The RPA supports the requirement for all DNOs to provide a broad range of worked examples to clarify the application of distribution charging methodologies. Such examples should include the interaction of the different connection charge apportionment rules.

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1.22 The RPA continues to support the option for generators to enter direct use of system billing arrangements with DNOs. We anticipate that such arrangements will be most attractive to the larger generators and thus will not impact upon current DNO billing arrangements.

1.23 Where DNOs specify additional connection assets over and above those requested by the connectee, the RPA agrees that the DNO should be responsible for any additional costs. Similarly the DNO should be responsible for the O&M costs of such equipment.

1.24 Further clarification is requested regarding the application of '2nd Comer' reinforcement cost apportionment rule. The RPA believes that the reimbursement of initial connectees due to the arrival of 2nd comers should not be restricted to the 5-year period following the connection of the first generator. A 10 year period would be more appropriate.

1.25 In addition, clarification is also sought regarding the regulatory safeguards to ensure that DNOs actually make 2nd comer reimbursements to original connectees. Should such safeguards not be implemented, DNOs could effectively be paid twice for the same assets.

1.26 The RPA agrees with the approach adopted by the majority of DNOs regarding the exclusion of exit charges from Generator Use of System. The RPA seeks confirmation that all GDUoS charges will be aligned to exclude exit charges.

1.27 The RPA seeks clarification regarding the application of the Use of System rebate mechanism for network unavailability. In addition to confirming how such rebates will be calculated, we also seek clarification regarding how such charges will be reimbursed to generators.

The RPA will continue to contribute to the development of short and long-term solutions to distribution network charging issues, and agrees that the ISG should continue to develop future charging policies. Should you require any clarification regarding any of the issues contained within this document, please do not hesitate to contact Gaynor Hartnell.

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## APPENDIX A

### Examples comparing existing and proposed distribution charging arrangements

A 50 MVA generator connected at 33 kV at a GSP in Scottish Hydro (Scotland).  
No reinforcements needed.

Current Deep Charging Methodology		Proposed Shallower Charging Methodology	
Connection charge (for sole use assets)	£238k	Connection charge (for sole use assets)	£238k
Capitalised o+m	£52k	GDUoS charge	£204k per year £1,900k (discounted over 20 years)
<b>TOTAL</b>		<b>TOTAL</b>	
Upfront charge	<b>£290k</b>	Upfront charge	<b>£238k</b>
Total lifetime cost	<b>£290k</b>	Total lifetime cost	<b>£1,900k</b>

A 2.7 MVA generator connected at 33 kV deep within Scottish Hydro (Scotland).  
No reinforcements needed.

Current Deep Charging Methodology		Proposed Shallower Charging Methodology	
Connection charge (for sole use assets)	£138k	Connection charge (for sole use assets)	£138k
Capitalised o+m	£31k	GDUoS charge	£11k per year £102k (discounted over 20 years)
<b>TOTAL</b>		<b>TOTAL</b>	
Upfront charge	<b>£169k</b>	Upfront charge	<b>£138k</b>
Total lifetime cost	<b>£169k</b>	Total lifetime cost	<b>£240k</b>

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CONSULTATION RESPONSE: DPCR & STRUCTURE OF CHARGES

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A 2.6 MVA generator connected at 33 kV deep within Scottish Hydro (Scotland). Reinforcements needed - increased capacity of system from 4 MVA to 11 MVA.

<b>Current Deep Charging Methodology</b>	<b>Proposed Shallower Charging Methodology</b>
	Total Reinforcement £397k (£160k/kW) ("high cost" element) £147k (apportionment element) £250k
Connection charge (for sole use assets) £457k	Connection charge (for sole use assets) £60k ("high cost" element) £147k (capitalised o+m on "hc" element) £29k (apportionment element) £60k
Capitalised o+m £83k	GDUoS charge £11k per year £99k (discounted over 20 years)
<b>TOTAL</b> Upfront charge £540k Total lifetime cost £540k	<b>TOTAL</b> Upfront charge £296k Total lifetime cost £395k