



## **MODIFICATION PROPOSAL**

**SSEPD/10/001**

**Modification Proposal to Amend Use of System Charging  
Methodologies**

**Implementation of Use of System Charging to Pre 2005  
EHV-Connected Distributed Generation**

**Date of Issue: 25 June 2010**

**FOR APPROVAL BY THE GAS & ELECTRICITY MARKETS AUTHORITY**

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## 1 Issue Authority

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Issue Date	Issue No	Modification details
Nov/Dec 09	-	Draft proposal and supporting information provided to Ofgem for assessment and comment.
16/12/2009	SSEPD/09/002 (Draft)	Draft proposal amended to reflect comments received from Ofgem and treatment of pre April 2005 generators.
25/01/2010	SSEPD/09/002	Issued to Ofgem
18/02/2010	SSEPD/09/003	Pursuant to Ofgem request to remove pre 2005 EHV generator use of system charges proposal, SSEPD/09/002 withdrawn and resubmitted as SSEPD/09/003
25/06/10	SSEPD/10/001	Pursuant to discussions with Ofgem regarding charging pre-2005 connected sites in 2010/11, proposal SSEPD/09/003 amended and renamed SSEPD/10/001

## 2 Introduction and Background

- 2.1 SSE Power Distribution (“SSEPD”) is the trading name of Southern Electric Power Distribution plc (“SEPD”), Scottish Hydro Electric Power Distribution plc (“SHEPD”) and Scottish Hydro Electric Transmission Ltd (“SHETL”), part of the Power Systems division of Scottish and Southern Energy plc. SEPD and SHEPD are licensed electricity distribution businesses, which own and operate networks in Central Southern England and North of Scotland respectively. SEPD and SHEPD also own and operate small embedded distribution systems outside of their Distribution Service Areas (“DSAs”).
- 2.2 This proposal has been prepared by SSE Power Distribution to seek to resolve SEPD and SHEPD use of system charging issues related to EHV-connected Distributed Generation (“EHV DG”) which connected on the basis of connection charging arrangements which prevailed prior to April 2005 (“pre 2005 EHV DG”).
- 2.3 From April 2005, use of system charges have been applied in relation to the export connections of EHV DG. However, pre-2005 EHV DG sites have been exempt from export-related use of system charges (“GDUoS”) up to and including 31 March 2010.
- 2.4 With effect from 1 April 2010, the exemption from GDUoS charging was withdrawn by Ofgem as part of DPCR5. SSE Power Distribution Modification Proposal SSEPD/009/003 (18 February 2010) made proposals not to apply GDUoS charges to pre-2005 EHV DG from 1 April 2010, pending the outcome of an industry collaboration to review the implementation of GDUoS charging to such EHV DG. These proposals were not vetoed by the Authority.
- 2.5 As the industry collaboration did not result in an agreed solution or implementation plan, it is necessary to make separate proposals which enable SEPD and SHEPD to comply with their Licence obligations, recognising the withdrawal of the charging exemption for pre-2005 DG.
- 2.6 For all customers connected at EHV, the DNOs are to introduce new common charging arrangements with effect from 1 April 2011, implementing the Extra High Voltage Distribution Charging Methodology (“EDCM”). This proposal

therefore sets out proposals for interim revisions to the SEPD and SHEPD Use of System Charging Methodologies which, subject to non-veto within the required timescale, would implement GDUoS charging to pre-2005 EHV DG for the period 1 October 2010 to 31 March 2011.

### **3 Description of the Modification Proposal**

- 3.1 In the SHEPD DSA, with effect from 1 October 2010 until the introduction of a new EHV Distribution Charging Methodology on 1 April 2011, GDUoS charges shall be applied to all EHV DG.

However, in relation to EHV DG sites which were connected on the basis of the charging arrangements which prevailed from 1 April 1990 up to and including 31 March 2005, it is acknowledged that such DG sites were connected under a regime where they were (or were likely to have been) charged capitalised operation and maintenance (“O&M”) charges, normally covering a period of 15 or 25 years from the connection date.

Consequently, for such EHV DG sites where the capitalised O&M period has not expired, a discounted GDUoS rate shall be applied to recognise the historic capital O&M payment which was (or is likely to have been) made. The discount which shall be applied to GDUoS rates for such sites has been calculated and is equal to 33.4%.

Where the O&M period and/or charges cannot be determined either from a connection agreement or connection offer, it shall be determined by SHEPD with reference to terms which applied to comparable DG sites and in any event shall be subject to a maximum of 25 years from the connection date. By referring to comparable DG sites, it can be ensured that we are not being unduly discriminatory against any DG sites for which some records cannot be located and that all EHV DG will be charged on the same basis, thus adhering to the principles of SLC 19.1 (which provides that a licensee must not discriminate between any person or class or classes of persons in providing Use of System). This mechanism ensures that each qualifying EHV DG shall receive a discount from full GDUoS rates to recognise any capitalised O&M previously paid (or likely to have been paid) under the prior charging arrangements. It would be unreasonable if no discount was given to those EHV

DG who paid (or were likely to have paid) capitalised O&M, as such EHV DG would effectively be paying twice for O&M as a result of the introduction of GDUoS charges.

Having assessed available records of relevant connection offers and/or connection agreements, SHEPD has concluded that there is no evidence that capitalised O&M charges were levied or paid prior to 1 April 1990 in the SHEPD DSA.

Where:

- (a) the capitalised O&M period has expired; or
- (b) there is evidence that such DG sites were not charged capitalised O&M charges,

non-discounted GDUoS charges will be applicable with effect from 1 October 2010.

Where there are existing contractual arrangements which justify that GDUoS charges should not apply, charges will continue to be levied in accordance with the existing contractual terms and we will seek to agree a variation to such terms with the EHV DG customer. In the event that agreement cannot be reached, we will seek to invoke the provisions of SLC 7.10 to enable a request to be made to the Authority to settle any dispute relating to the variation.

Separately from this modification, SHEPD is considering issues pertaining to capital payments in relation to network reinforcement which were made by certain DG customers on the basis of arrangements which prevailed from vesting up to and including 31 March 2005. These associated capital funding issues are not covered by Mod App SHEPD/10/001.

- 3.2 In the SEPD DSA, with effect from 1 October 2010 until the introduction of a new EHV Distribution Charging Methodology on 1 April 2011, GDUoS charges shall be applied to all EHV DG.

However, where there is evidence to confirm that an EHV DG site was charged capitalised O&M charges, a discounted GDUoS rate shall be applied to recognise the historic capital O&M payment which was made. The discount which shall be applied to GDUoS rates for such sites has been calculated and is equal to 39.9%. The discounted rate shall not be applied however in the event that the GDUoS tariff is of negative value.

Where the O&M period cannot be determined either from a connection agreement or connection offer, it shall be deemed to be 25 years from the connection date. We feel that this mechanism ensures that each qualifying EHV DG shall receive a discount from full GDUoS rates to recognise any capitalised O&M previously paid under the prior charging arrangements. It would be unreasonable if no discount was given to those EHV DG who paid capitalised O&M if no discount was given, as such EHV DG would effectively be paying twice for O&M as a result of the introduction of GDUoS charges.

DG sites in the SEPD DSA which were subject to the charges and arrangements which applied from 1 April 1990 up to and including 31 March 2005 were normally subject to annual or monthly O&M charges (generally known as "Service Charges"). Historically O&M was charged to cover the ongoing upkeep costs of the connection assets paid for by the generator. With effect from 1 October 2010 these Service Charges shall be withdrawn and be replaced by GDUoS charges.

Where there are existing contractual arrangements which justify that GDUoS charges should not apply, charges will continue to be levied in accordance with the existing contractual terms and we will seek to agree a variation to such terms with the EHV DG. In the event that agreement cannot be reached, we will seek to invoke the provisions of SLC 7.10 to enable a request to be made to the Authority to settle any dispute relating to the variation.

Separately from this modification, SSEPD is considering issues pertaining to capital payments in relation to network reinforcement which were made by

certain DG customers on the basis of arrangements which prevailed from vesting up to and including 31 March 2005. These associated capital funding issues are not covered by Mod App SSEPD/10/001.

## **4 Impact of Proposals**

- 4.1 Appendix 1 shows the assumptions used to calculate the EHV DG Allowed Revenues and Tariffs. The tariff impact of the modification proposal for EHV DG customers is shown in tables 2A, 2B and 2C.

## **5 How the Proposals Better Meet Relevant Objectives**

- 5.1 The Relevant Objectives in SLC 13.3 are:
- 5.1.1 (a) that compliance with the methodology facilitates the discharge by the licensee of the obligations imposed on it under the Act by this licence;
  - 5.1.2 (b) that compliance with the methodology facilitates competition in the generation and supply of electricity, and does not restrict, distort, or prevent competition in the transmission or distribution of electricity;
  - 5.1.3 (c) that compliance with the methodology results in charges which reflect, as far as is reasonably practicable (taking account of implementation costs), the costs incurred by the licensee in its Distribution Business; and
  - 5.1.4 (d) that, so far as is consistent with sub-paragraphs (a), (b), and (c), the methodology, as far as is reasonably practicable, properly takes account of developments in the licensee's Distribution Business.
- 5.2 This proposal seeks to equalise the treatment of pre-2005 EHV DG with EHV DG which connected on the basis of arrangements which came into effect from 1 April 2005. Through application of consistent cost-reflective charging across pre and post-2005 EHV DG, the proposal would, in accordance with Relevant Objective 13.3(a), better facilitate discharge of the licences held by SEPD and SHEPD.

- 5.3 This proposal recognises that, in respect of capital O&M payments, all EHV DG which was subject to the April 1990 to March 2005 charging basis and arrangements are most likely to have been charged and paid such capital O&M
- 5.4 charges, in line with the policies applied by SHEPD during this period. This is substantiated by evidence from historic records of connection offers for such DG. However, it has been established that for a significant number of such EHV DG, the records of the connection charges applied are no longer available to either SHEPD or the customer. In such cases, to avoid discrimination between individual EHV DG cases solely as a consequence of missing records, SHEPD propose to apply the discounted GDUoS tariff to all EHV DG sites which it believes, on a reasonable “balance of probabilities” basis, were highly likely to have been subject to capital O&M payments. This assists SHEPD to better facilitate meeting of Licence Condition 19.1 and consequently Relevant Objective (a).
- 5.5 As this proposal intends to equalise the use of system charging arrangements applied to EHV DG, whilst taking due and proper account of capital sums historically paid (or reasonably believe to have been paid) in respect of O&M, the proposed changes would better facilitate SEPD and SHEPD in meeting Relevant Objective (b) by placing generators of different connection vintages on the same charging basis.
- 5.6 In recognising historic capital O&M payments, the proposed changes would ensure that pre-2005 EHV DG customers contributed to an appropriate level of cost-reflective GDUoS charges and that double-counting of O&M does not take place. Accordingly, the proposal would enable SEPD and SHEPD to better facilitate meeting of Relevant Objective (c).

## **6 Proposed Use of System Charging Methodology Statements**

- 6.1 The proposals set out above would require changes to the Statements of Charges For Use of System of the SEPD and SHEPD Electricity Distribution Networks. The proposed modified versions of the Statements of Charging

Methodologies for SEPD and SHEPD are provided as separate attachments to this Modification Proposal.

- 6.2 Consequential changes to the SEPD and SHEPD Use of System Charging statements will be the subject of separate Modification Proposals and will be submitted to the Authority for approval.

## **7 Implementation Date**

- 7.1 If this Modification Proposal receives a non-veto decision from the Authority not later than 20 August 2010, the proposed changes will apply from 1 October 2010. Should a non-veto decision not be received by 20 August 2010, the existing Charging Methodologies shall continue to apply up to and including 31 March 2011.

## Appendix 1 EHV Distributed Generation

Table 1 below illustrates the assumptions determining the 2010/11 EHV Distributed Generation Use of System Charging Methodology

**Table 1**

<b>SSEPD</b>		<b>Distributed Generation Incentive Assumptions</b>	
<b>Term</b>	<b>Includes</b>		
Relevant MW	Connections after 01-April 2010 (i.e. DPCR5 MW), plus:  Connections between 01-April-2005 and 31-March-2010 (i.e. DPCR4 RPZ MW)		
Incentive Rate (gir)	DPCR5 MW: SHEPD = £1,000/MW/yr for 15 years; SEPD = £1,000/MW/yr for 15 years; and  DPCR4: per the GL term (previous price control amount) in CRC11		
O&M Rate (gor)	DPCR5 MW: £1,000/MW/yr for both SHEPD & SEPD Areas  DPCR4: per the GL term (previous price control amount) in CRC11		
GDUoS Charges billed to	All EHV Sites connected/connecting pre & post 31st March 2005. All those connected between 1990 and 2005 (SHEPD) attract an O&M discount. An O&M discount does not apply in SEPD DSA, as the tariff is negative		
PIAG <sub>2010-11</sub>	1.000 (per CRC11)		
DG Capex Pass Through (GP term)	80% over 15 years (but, in this instance, modelled at zero)		
Power Factor	Pf of 0.95 used to convert MW to MVA, and so derive p/kVA/month tariffs		

Table 2A below shows indicative EHV GDUOS tariffs proposed from 1 October 2010

**Table 2A**

<b>Indicative EHV Generation Use of System Charges</b>			
	<b>2009/10 p/kVA/month</b>	<b>2010/11 p/kVA/month</b>	<b>% Change</b>
<b>SHEPD</b>	45	10.4	- 65%
<b>SHEPD (Discounted)</b>	N/A	6.9	N/A
<b>SEPD</b>	45	- 1.5	- 103%

Tables 2B and 2C show the impact on SEPD and SHEPD EHV generation customers from the application of the proposed methodologies on a 2010/11 indicative prices basis (at 17-02-10 and at 25-06-10)

**Table 2B**

<b>Site</b>	<b>Existing (£m)</b>	<b>Proposed @ 17-02-10 (£m)</b>	<b>Proposed @ 26-06-10 (£m)</b>
1	0.270	-0.115	-0.009
2	0.038	-0.016	-0.056
3	0.000	0.000	-0.005
4	0.000	0.000	-0.013
5	0.000	0.000	-0.002
6	0.000	0.000	-0.006
7	0.000	0.000	-0.013
8	0.000	0.000	-0.003
9	0.009	0.009	-0.004
10	0.007	0.007	-0.001
11	0.000	0.000	-0.001
12	0.000	0.000	-0.004
13	0.000	0.000	-0.004
14	0.000	0.000	-0.001
15	0.005	0.005	-0.001
16	0.000	0.000	-0.001
17	0.000	0.000	-0.001
18	0.004	0.004	-0.001
19	0.000	0.000	-0.001
20	0.005	0.005	-0.000
21	0.000	0.000	-0.002

**Table 2C**

Site	Existing (£m)	Proposed @ 17-02-10 (£m)	Proposed @ 26-06-10 (£m)
1	0.016	0.018	0.012
2	0.029	0.012	0.008
3	0.014	0.010	0.007
4	0.018	0.009	0.006
5	0.000	0.017	0.011
6	0.000	0.025	0.017
7	0.000	0.008	0.005
8	0.000	0.008	0.006
9	0.000	0.026	0.018
10	0.000	0.011	0.008
11	0.000	0.000	0.003
12	0.000	0.000	0.002
13	0.000	0.000	0.002
14	0.000	0.000	0.001
15	0.000	0.000	0.001
16	0.000	0.000	0.001
17	0.000	0.000	0.005
18	0.000	0.000	0.005
19	0.000	0.000	0.002
20	0.000	0.000	0.003
21	0.000	0.000	0.003
22	0.000	0.000	0.007
23	0.000	0.000	0.002
24	0.000	0.000	0.000
25	0.000	0.000	0.000

**Table 2C (continued)**

<b>Site</b>	<b>Existing (£m)</b>	<b>Proposed @ 17-02-10 (£m)</b>	<b>Proposed @ 26-06-10 (£m)</b>
26	0.000	0.000	0.002
27	0.000	0.000	0.004
28	0.000	0.000	0.016
29	0.000	0.000	0.003
30	0.000	0.000	0.001
31	0.000	0.000	0.007
32	0.000	0.000	0.005
33	0.000	0.000	0.007
34	0.000	0.000	0.001
35	0.000	0.000	0.001
36	0.000	0.000	0.008
37	0.000	0.000	0.002
38	0.000	0.000	0.006
39	0.000	0.000	0.003
40	0.000	0.000	0.012
41	0.000	0.000	0.012
42	0.000	0.000	0.002
43	0.000	0.000	0.006
44	0.000	0.000	0.009
45	0.000	0.000	0.015
46	0.000	0.000	0.015
47	0.000	0.000	0.001
48	0.000	0.000	0.001
49	0.000	0.000	0.001
50	0.000	0.000	0.001

**Table 2C (continued)**

<b>Site</b>	<b>Existing (£m)</b>	<b>Proposed @ 17-02-10 (£m)</b>	<b>Proposed @ 26-06-10 (£m)</b>
51	0.000	0.000	0.021
52	0.000	0.000	0.010
53	0.000	0.000	0.010
54	0.000	0.000	0.001
55	0.000	0.000	0.012
56	0.000	0.000	0.006
57	0.000	0.000	0.003
58	0.000	0.000	0.003
59	0.000	0.000	0.005
60	0.000	0.000	0.000
61	0.000	0.000	0.001
62	0.000	0.000	0.000
63	0.000	0.000	0.003
64	0.000	0.000	0.000
65	0.000	0.000	0.011
66	0.000	0.000	0.002
67	0.000	0.000	0.001
68	0.000	0.000	0.004
69	0.000	0.000	0.003
70	0.000	0.000	0.029
71	0.000	0.000	0.003
72	0.000	0.000	0.007
73	0.000	0.000	0.005
74	0.000	0.000	0.002