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# **Harlaxton Energy Networks Limited**

## Use of System Charging Methodology Modification Report

1<sup>st</sup> October 2015

Draft – Subject to Approval by Ofgem

## **Use of System Charging Methodology Modification Report (Draft – 1<sup>st</sup> October 2015)**

1. This report is submitted to Ofgem under condition 13.4 of the electricity distribution licence granted to Harlaxton Energy Networks Limited.
2. The purpose of this report is to explain our proposal to introduce a new statement of use of system charging methodology.
3. Our proposed statement of use of system charging methodology is attached.

### **The need for a new statement of use of system charging methodology**

4. Since starting operations as an IDNO, Harlaxton Energy Networks Limited has mirrored DNOs' use of system charging tariffs.
5. We have recently undertaken a review of our commercial arrangements and identified the lack of a formal statement of use of system charging methodology as an area for improvement. In particular, there is a risk of a gap in our practical ability to apply the mirroring methodology to customers who, if they were on the Host DNO's network, be subject to a site-specific EDCM tariff rather than a generic CDCM tariff.
6. We have also been approached by developers who might be interested in connected new generating capacity to new networks built for that purpose, and as a result of these discussions we have identified a need to develop our charging methodology for generators. The need to cater for generation-led networks had not previously been a feature of our business.
7. The result of our work on these issues is the proposed statement of use of system charging methodology which is attached.
8. By adopting this statement, we would provide more commercial certainty to developers seeking to connect to our networks, to customers and generators connected to our networks now and in the future, and to the suppliers using our systems.

### **How the modification would better achieve the Relevant Objectives**

9. Condition 13.3 of our licence specifies the Relevant Objectives that we need to work towards when developing our use of system charging methodology. They are:
  - (a) that compliance with the methodology facilitates the discharge by the licensee of the obligations imposed on it under the Act and by this licence;
  - (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;

(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;

(d) that, so far as is consistent with subparagraphs (a), (b), and (c), the methodology, as far as is reasonably practicable, properly takes account of developments in the licensee's Distribution Business; and

(e) compliance with the Regulation and any relevant legally binding decisions of the European Commission and/or the Agency for the Co-operation of Energy Regulators.

**First Relevant Objective (discharge of licence obligations)**

10. The publication of a formal statement of use of system charging methodology will ensure that we discharge our obligations under standard licence condition 13.1(a).
11. For domestic customers, our licence requires us not to charge more than the Host DNO's tariffs. Our proposed methodology delivers this through mirroring of the Host DNO's tariffs for domestic customers.

**Second Relevant Objective (facilitate competition)**

12. Our proposed statement of use of system charging methodology facilitates competition in the generation and supply of electricity by improving the transparency of our charging policies, for both generation and demand.
13. Our proposed statement of use of system charging methodology removes restrictions to competition in the distribution of electricity by disclosing the way in which we will set site-specific tariffs for customers which would be subject to the EDCM if they were on the Host DNO's network. The current situation may restrict competition in distribution because of uncertainty about the charges that would apply when such sites are attached to competitive networks such as ours.

**Third Relevant Objective (set charges which reflect costs)**

14. For demand tariffs, our methodology is based on mirroring (and extending where necessary) the Host DNO's charging methodologies.
15. Insofar as the Host DNO's methodology set charges which reflect costs, then our charges will reflect the costs estimated by the Host DNO to provide similar distribution services as ours.
16. In the light of the fact that a significant proportion of our costs comes from upstream distribution charges payable to the Host DNO and the significant benefit to suppliers of facing the same charges on DNO and IDNO networks for non-domestic customers as well as for domestic customers (where we are obliged by our licence not to charge

more than the Host DNO), we believe that this mirroring approach comes as close as is reasonably practicable to reflecting our costs.

17. For small-scale generation that is settled non half hourly or aggregated half hourly, we are also using the mirroring approach. This is in order to avoid creating undue administrative barriers to customers wishing to install small-scale generation on their premises, and to avoid unexpected costs for suppliers of such customers. We consider that these reasons of practicality outweigh consideration of cost reflectivity in the context of the minor importance of this type of generation to our business at present.
18. For other export tariffs, i.e. cases where a maximum export capacity will have been agreed, our methodology is different from the ones used by the Host DNO. This is because we expect these tariffs to apply to networks which we would have constructed specifically for the purpose of collecting power from a group of generating stations.
19. These generation-led networks are completely different from the demand-led network models which underpin the Host DNO’s charging methodologies for export tariffs:
  - (a) The Host DNO’s CDCM tariffs for distributed generation assume that these generators are an add-on to an existing distribution system: the only charges are for service assets, and there is a credit for units because they are taken to offset local demand. This assumption would not be correct for our generation-led networks.
  - (b) The Host DNO’s EDCM tariffs for distributed generation include a charge for sole-use assets, a charge for export capacity which is based on previous distributed generation price control systems, and a unit credit based on the “charge 1” element of charges to EDCM demand using the same parts of the DNO’s network — assuming that generation offsets demand. These assumptions are also inappropriate for our generation-led networks.
20. Because of the differences between the assumptions underpinning these tariffs and our business model for generation-led networks, we do not think that it would be appropriate to mirror either charging methodology of the Host DNO for export tariffs.
21. Instead, we have developed a simple approach based on a single transparent export capacity charge, which is calculated to reflect our estimated costs of operating generation-led networks.
22. The section “Impact of our proposed methodology” below shows how the application of our approach to export capacity charges gives reasonable charges.

**Fourth Relevant Objective (take account of developments)**

23. The development of our new methodology was triggered by developments in our distribution business, in particular enquiries by developers asking us to build and/or operation generation-led networks.
24. To date, progress in taking forward these developments has been impaired by the lack of a formal statement of use of system charging methodology. Our new statement use of system charging methodology will ensure that such barriers are addressed.

**Fifth Relevant Objective (comply with EU requirements)**

25. We do not think that the fifth Relevant Objective is engaged by our proposals.

**Impact of our proposed methodology**

26. For the remainder of the 2015/2016 financial year, we propose to apply our methodology for export capacity charges as follows.
27. Our illustrative generation-led network comprises 33kV switchgear, a 33kV/11kV transformer, and an 11kV switchboard.
28. The costs of inspection and routing maintenance are estimated at £500 a year.
29. The probability of a component defect is estimated at 10 per cent a year. The typical cost of component repair/replacement is estimated at £40,000.
30. This gives total expected costs of £4,500 a year for the illustrative generation-led network.
31. This illustrative network could serve up to 20MVA of export capacity, but we assume that only 15MVA would be connected on average due to spare capacity arising from the early commissioning of network capacity and/or the risk of early closure of generators.
32. The export capacity charge is therefore £0.3/kVA/year, which converts to a tariff of 0.08p/kVA/day.
33. This export capacity charge is within the range of export capacity charges that have been levied by DNOs under the EDCM.
34. The effect of our export capacity charge is also comparable to the fixed charges levied by DNOs for CDCM HV generators. For example, for a 1MVA generator, our charge would be 80p/day; DNOs' fixed charges for CDCM HV generation range from less than 10p/day to more than 300p/day.

### **Timetable for implementing the modification**

35. We plan to introduce the new statement of use of system charging methodology and use of system charges with effect from 1 October 2015.
36. The introduction of the new statement of use of system charging methodology will not have any effect on the tariffs that apply in respect of any existing customer on our network. But new generators to whose needs the new methodology is particularly geared may need to start using the new tariffs before 1 April 2016.
37. In these circumstances, we consider that a mid-year amendment to the statement of use of system charges is appropriate and consistent with Ofgem's recent efforts to ensure that suppliers receive sufficient notice of changes in use of system tariffs.