To distributors, suppliers, customers and other interested parties

Promoting choice and value for all customers

Direct Dial: 020 7901 7194
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22 August 2008

Dear colleague,

Consultation on proposals from Electricity North West Limited to modify use of system charges for independent distribution network operators (IDNOs), HV/LV generators and the DRM[1].

Distribution Network Operators (DNOs) have licence obligations[2] to have in place as of 1 April 2005 a statement of use of system (UoS) charging methodology, a statement of UoS charges and a connection charging methodology and statement. The statement of UoS charging methodology outlines the method by which distribution UoS charges are calculated.

DNOs are required to keep their methodology statements under review and to bring forward proposals to modify the methodology that they consider better achieve the relevant objectives[3].

Before making a modification to a UoS methodology a DNO must submit to the Gas and Electricity Markets Authority (the 'Authority')[4] a proposal to modify its methodology stating how the proposal better achieves the relevant objectives. The DNO then makes the modification unless within 28 days the Authority either directs the DNO not to make the modification or notifies the DNO that it intends to consult and then within three months directs the DNO not to make the modification.

Electricity North West (ENW) submitted a proposal on 16 July 2008 to modify their UoS charging methodology in respect of a number of changes:

1. How IDNO customers connected to their network are charged for their use. The proposals relate to the creation of new, IDNO-specific tariffs for IDNOs connected to ENW's network;

[1] Distribution Reinforcement Model: method of calculating and allocating distribution charges

[2] Standard Licence Conditions (SLC) 13.

[3] The relevant objectives for the UoS charging methodologies, as contained in paragraph 3 of SLC13 of the distribution licence respectively are:

- that compliance with the UoS charging methodology facilitates the discharge by the licensee of the obligations imposed on it under the Act and by the licence;
- that compliance with the UoS charging 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;
- that compliance with the UoS charging 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
- that, as far as is consistent with the sub-paragraphs above, the UoS charging methodology, as far as is reasonably practicable, properly takes account of developments in the licensee's distribution business.

[4] Ofgem is the office of the Authority. The terms 'Ofgem' and the 'Authority' are used interchangeably in this letter.

2. Introduction of new charging arrangements for HV and LV distributed generation connected since April 2005. The proposals introduce a new method of calculating HV and LV tariffs for generators using the DRM to model costs to the distribution network; and
3. In addition, changes are proposed to the DRM model encompassing costs[5], cost allocation[6] and revenue reconciliation[7].

As set out in ENW's modification report[8], the package of changes submitted within this modification proposal has a potentially significant impact on some tariffs against the level of tariffs currently. Although many of these issues have been consulted on before[9] we believe that there is merit in consulting now due to the impacts these changes will have on tariffs. With this in mind we consider it important to seek the views of parties affected by this proposal.

This proposal was submitted to the Authority prior to the publication of our decision[10] for a common UoS charging methodology to be developed by all DNOs[11]. This modification proposal is being taken forward under the existing electricity distribution licence and does not specifically move ENW towards commonality with other DNOs' approaches. Although ENW's proposal does not cover the full range of issues being covered in the Structure of Charges (SoC) project, it nevertheless incorporates a number of important changes including those to IDNO tariffs and HV/LV generator charging. It also changes ENW's approach to scaling charges to allowed regulatory revenue. These changes are therefore an important element of the SoC project. We note that the proposed implementation date for this modification is April 2009, one year before a proposed implementation of a common methodology in April 2010.

As we have commented previously, we consider that the growth of IDNOs and distributed generation constitutes an important change to DNOs' distribution businesses and that there is a risk that DNOs' charging methodologies could distort competition. We also emphasise that it is the responsibility of each DNO to ensure it complies with the requirements of the Competition Act 1998 as for any other legislation.

The Authority has decided to consult on these proposals and formally notified ENW of this by letter on 13 August 2008.

Background

ENW's proposal is wide ranging and introduces a number of changes in different areas of the charging methodology. A summary of the background to each aspect of the proposal is explained below. Further detail on ENW's proposal is provided in **Annex 1**.

[5] ENW has developed new service models to specify assets that are UoS and those that cover minimum cost of connection. This means that some costs that are covered in the upfront connection charge are no longer included in the UoS model. In addition, ENW has altered the percentage allocation of costs in respect of the voltage above that of connection which impacts on availability charges. See annex 1 for further details.
[6] A proportion of business rates are now allocated on a kWh basis where previously they were allocated per customer. ENW now propose to identify licence fees as a separate cost alongside changing the method for determining the operations and maintenance (O&M) percentage that feeds in to charges. See annex 1.
[7] Change from a fixed percentage to a fixed adder approach. ENW scales down costs under either approach.
[8] ENW's modification report is available on our website at: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=467&refer=Networks/ElecDist/Policy/DistChrgMods
[9] This includes our recent consultation on proposals from Scottish Power Distribution and Scottish Power Manweb to modify UoS charges for Independent Distribution Network Operators (IDNOs) that can be found on our website at: http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Documents1/PR-08-001a%20SP%20Consultation%20FINAL.pdf. We issued our decision on Scottish Power's IDNO modification proposals on 31 July.
[10] Which can be found at the following link: http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/FINAL%20July%20consultation%20letter_22_07_08.pdf.
[11] 'Delivering the electricity distribution structure of charges project: decision on a common methodology for use of system charges from April 2010, consultation on the methodology to be applied across DNOs and consultation on governance arrangements', 104/08, available on our website at: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=421&refer=Networks/ElecDist/Policy/DistChrgs.

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New IDNO-specific tariffs

In order to serve their customers IDNOs connect to a DNO's network. As a result, IDNOs pay the DNO UoS charges which should broadly reflect the costs the IDNOs impose on the DNO's network, measured and collected at the IDNO/DNO boundary. An IDNO's margin is therefore defined by the difference between the boundary charge defined by the DNO and sum of end-customer (all the way) charges defined by the DNO. In addition to ensuring (as far as reasonably practicable) cost reflectivity in their methodologies, DNOs are also required to ensure their methodologies do not restrict or distort competition.

Historically, IDNOs have been charged based on the size of their contribution to demand on the DNO network and have consequently been charged industrial or commercial (I&C) tariffs, reflective of the magnitude of this demand. IDNOs have raised concerns that this does not represent a cost reflective charge for the following reasons:

- The coincidence to peak demand of IDNO sites with predominantly domestic customers is not in line with the coincidence to peak demand applied in the calculation of I&C tariffs;
- The calculation of I&C tariffs does not adequately reflect the DNO's avoided costs from which DNOs benefit when IDNOs connect to their networks. This includes concerns that the structure of the I&C charge means that IDNOs cannot always pass through elements of this charge to end customers; and
- IDNOs have raised general concerns over the level of margins available to them.

ENW's proposed modification attempts to address concerns raised by IDNOs. The specific changes being proposed are summarised in **Annex 1**. The detailed proposals can be seen as part of the modification proposal report, as published on our website[12].

The Authority has already consulted on many of the potential issues relating to this proposal due to its similarity with WPD's current IDNO charging methodology[13] and, as set out above, SP's more recent proposal. While we do not wish to consult on the same issues repeatedly, each submission must be viewed against its own merits.

We feel there are enough differences between WPD's current and ENW's proposed methodology regarding charges to IDNOs to justify further consultation in specific areas. In addition, when the same principles are applied in separate cases the results can be different due to variations between the existing methodologies to which modifications are made and the relevance of locational differences amongst others. Further to this, other changes contained in the modification are likely to have a consequential impact on IDNO margins that differ to the WPD approved methodology. Tables 4.3.1 to 4.3.3 of the modification report document these impacts.

HV/LV generator charging

Following the introduction of government targets for renewable energy, it is increasingly expected that DNOs will see an increase in the number of generators seeking to connect to the distribution network. In order to reflect the costs and benefits imposed by distributed generation new tariffs need to be developed. ENW recognise that generation has the potential to delay reinforcements to the network and have sought to reflect this benefit in their tariffs.

Specifically, ENW recognise that the addition of generation can provide benefit to all voltage levels above the voltage of connection by reducing the demand at these levels. ENW's proposed methodology change seeks to reflect the benefit generators could provide to the network. Further details of these changes can be found in **Annex 1.**

[12] ENW's modification report is available on our website at: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=467&refer=Networks/ElecDist/Policy/DistChrgMods

[13] Joint consultation document on SP and WPD's proposed modifications to their IDNO charging methodology http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Documents1/UoS%20charges%20WPD%20and%20SP.pdf.

DRM Modifications

Alongside the introduction of two IDNO tariffs and changing HV/LV generator charging, ENW have also proposed changes to their DRM which alter costs and cost allocation as well as revenue reconciliation. ENW state that their proposals are intended to achieve better cost reflectivity across all tariffs.

Initial assessment

As set out above, we consider that these proposals represent a significant number of changes to ENW's existing methodology. The Authority has taken the decision to consult on the proposed modifications to further evaluate the extent to which the changes they represent address the current issues raised in this letter and do not raise further issues in relation to the way(s) in which ENW's modification proposal better achieves the relevant objectives. Specifically,

- The extent to which the proposals are more cost reflective than the current methodology[14];
- Whether ENW demonstrates that its proposals facilitate competition in generation and supply and do not restrict, distort or prevent competition in transmission and distribution[15];
- Whether the proposed changes allow licence holders to finance their activities[16]; and
- Whether we have correctly captured the main issues raised by ENW's modification proposals in **Annex 1**.
- The proposal is also assessed against our statutory duties[17].

We have some initial concerns over some aspects of the proposal. These are detailed in **Annex 2**. In summary these include:

- The use of a day/ night tariff for IDNOs and whether this is appropriate given IDNOs will service customers on a single day tariff;
- The lack of commercial tariffs for IDNOs and whether this prevents competition developing in this type of connection;
- The use of historic data for the Operation and Maintenance (O&M) calculation and whether this is appropriate for a forward looking cost model; and
- Whether the proposal is sufficiently transparent for end users to understand and assess.

In **Annex 3** we set out the impact of the changes and we invite views on our assessment of this.

Views sought

We welcome views on the extent to which the issues and effects we have highlighted are material and whether these changes to ENW's UoS charging methodology represent an improvement on their current approach.

In particular we seek views on questions in **Annex 2** as summarised in **Schedule 2.**

Responding to this consultation letter

Views are invited on these points from any interested parties, including IDNOs, DNOs suppliers, customers and their representatives.

Views are invited by **4 October 2008**. Where possible, responses should be sent electronically to Karron Baker via e-mail at distributionpolicy@ofgem.gov.uk.

[14] Standard condition 13.3(c) of the electricity distribution licence.
[15] Standard condition 13.3(b)) of the electricity distribution licence.
[16] Section 3A(2) of the Electricity Act 1989.
[17] Section 3(A) of the Electricity Act 1989.

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As the Authority's decision is time-bound, please ensure that your comments are received by the date indicated so that they can be fully considered. It may not be possible to consider responses that have been received after this date as the Authority needs to make a decision on this matter on or before 13 November 2008.

All responses will be held electronically by Ofgem. They will normally be published on our website unless they are clearly marked confidential. Respondents should put confidential material in appendices to their responses where possible. We prefer to receive responses electronically so that they can easily be placed on the website.

Copies of this document are available on our website under the distribution charging modifications area of work[18].

Please contact Karron Baker on 0207 901 7350 if you have any queries in relation to the issues raised in this letter.

Yours faithfully,

Rachel Fletcher
Director, Electricity Distribution

[18] http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Pages/DistChrgMods.aspx.

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Annex 1 – ENW's Proposal

Summary

1.1. In this section we summarise each element of ENW's proposal as follows:

- Approach to IDNO tariffs;
- Approach to HL/LV generation tariffs; and
- Description of ENW's restructuring of the DRM model.

1.2. It is important to note that each of the changes to the DRM will have consequential impacts on other areas of the modification.

IDNO Charging

1.3. ENW is proposing the creation of four new LV tariffs and one new HV tariff which will be applicable to IDNO customers connecting to its network at LV and HV respectively. The EHV charging methodology remains unchanged under the proposals. ENW has identified that the IDNO sites serving domestic premises connected to its network have profiles which are similar to those of their own domestic customers. ENW has recognised that this is not fairly reflected in the current tariffs applied to IDNO customers and is therefore proposing to introduce IDNO specific tariffs which reflect domestic coincidences to peak demand. Those IDNO serving commercial premises will remain on the current commercial tariff. This is the LV MD NHH tariff which would be unchanged for IDNO customers.

1.4. ENW is proposing to introduce day and night unit tariffs which reflect the IDNO's contribution to costs during a day.

1.5. When an IDNO connects to a DNO's network, the DNO will benefit by not incurring costs associated with the network nearest to the end customer. The IDNO charges should reflect this. ENW has identified that a proportion of network costs, operation and maintenance (O&M) costs and Customer Service, Administration and Billing costs are those which it avoids when an IDNO connects to its network.

1.6. ENW has recognised the avoided network and O&M costs through the creation of four LV tariffs based on the length of the LV connection measured from the source substation, as a proportion of the average LV feeder length in each DNO area. The tariffs assume the customer is connected at the start of each distance band. The distance bands and the associated DNO avoided costs are shown in the table below:

Tariff Name	Distance (as percentage of average LV feeder length)	DNO avoided Network and O&M costs
LV IDNO Band 1	0-25%	100%
LV IDNO Band 2	25-50%	75%
LV IDNO Band 3	50-75%	50%
LV IDNO Band 4	>75%	25%

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1.7. Further to this for the HV IDNO tariff, ENW does not allocate any O&M tariff yardsticks costs for the LV level of the network, or the voltage above at HV/LV transformation as these costs are assumed to be 100% avoided.

1.8. ENW has identified the avoided costs associated with a different billing and customer service process for IDNO customers. These are calculated as £14.86 per customer per year. ENW states that a manual process for IDNO billing results in additional costs above the existing billing system costs, however they intend to cap this cost to the level of the current automated process as in the longer term it is expected that IDNO charges will form part of the standard process.

1.9. ENW is proposing not to include capacity charges, citing that capacity charges are not appropriate given an IDNO's demand profile is more similar to a domestic customer. The IDNO tariffs consist of a standing charge (pence per day), day unit rate and a night unit rate (pence per kWh).

HV/LV Generator Charging

1.10. ENW proposes a new approach to HV/LV generator charging that will replace all elements currently included in their charging methodology. This includes the removal of the recently approved modification, ENW-2008-004 which applied from April 2008 and saw a distinction being drawn between generators that triggered system reinforcements at the time of connection and those that did not. Under modification ENW-2008-004, generators that did not trigger reinforcements were subject to a reduced generator UoS charge.

1.11. ENW recognises that the addition of generation can provide a benefit to higher voltage levels by reducing the demand at these levels. In a demand dominated network, the generator should therefore receive a credit, based on deferring reinforcement. However, in a generation dominated network a cost should be imposed based on the bringing forward of reinforcement due to increasing export capacity at the time of peak power flows. ENW assumes that the network is demand dominated at HV and LV.

1.12. ENW proposes to use the new service models to identify the other marginal costs that should be credited to generation. This is calculated based on the additional costs over and above those costs identified in the minimum cost connection imposed by a similar sized demand connection.

1.13. ENW is proposing to apply a generation coincidence factor within the DRM. ENW's modification report indicates the sign of this coincidence factor will reflect whether the generation is providing a benefit (demand dominated) or cost (generation dominated). At this point in time, ENW assumes that the network is demand dominated so all generation will receive a negative coincidence factor. ENW assume that as there is no direct correlation between the generation export profile and the network peak power flow. Therefore ENW use the load factor as a proxy for the coincidence factor. ENW are proposing to use two coincidence factors based on an analysis of load profiles:

- For generation with a load factor of less than or equal to 50% the coincidence factor is (-0.3);
- For generation with a load factor of greater than 50% the coincidence factor is set to (-0.7).

1.14. This is based on an analysis of currently connected generation load factors which identified clustering around 30% and 70%. ENW assumes that the network is currently demand dominated so generation will receive a negative coincidence factor and all generation is seen to provide a benefit. The type of generation that will receive a larger benefit will be landfill, biomass, waste and fossil generation, whereas those who will receive a smaller credit are likely to be wind generation and some CHP.

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1.15. This will create four new tariffs, with each coincidence factor being applied at both HV and LV. Each tariff is made up of a fixed charge and capacity (kW) charge. Indicative tariffs can be found in appendix E[19] of ENW's modification report.

Other Modifications to DRM

1.16. ENW is proposing to make a number of changes to their DRM, for example for O&M costs the percentage applied will be calculated from the Regulatory Reporting Pack (RRP)[20]. We understand that ENW is proposing to uplift DRM yardstick values to account for O&M costs based on a percentage calculated from RRP data. Currently, the O&M percentage is calculated by taking all operating costs and dividing this by the gross asset value of the network.

1.17. In addition, ENW is proposing to reduce the DRM network yardstick by an amount typically recovered in the connection charges, thereby removing the concept of tariff support (which ceased from April 2005) from their UoS charge calculation. ENW do this by reducing the network level yardstick costs at certain voltage levels in accordance with the percentages below.

Voltage Level	Percentage Reduction in Network Yardstick
132kV	0%
132/33kV	0%
33kV	0%
33kV/11kV	2.5%
11kV	10%
11kV/LV	20%
LV	50%

1.18. ENW is proposing changes to the availability charge to take account of the changes to the connection boundary. ENW have altered the assets included in the connection charge and UoS charge in accordance with the table above. Therefore the assets included in the calculation of the availability charge reflecting capacity have subsequently changed. It is proposed that the availability charge will be calculated by taking 100% of the network yardsticks values for the voltage of connection and two network levels above connection and dividing this by the capacity available for the voltage level. Under the current approved methodology it is assumed there is less utilisation of the next voltage level so a smaller percentage of the network level yardsticks is used to calculate the availability charge. To calculate availability charges under the current methodology ENW take 100% of the

[19] ENW's modification report is available on our website at: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=467&refer=Networks/ElecDist/Policy/DistChrgMods
[20] Disaggregated price control information, provided to Ofgem annually.

network level yardstick at the voltage of connection, 100% of the next voltage of transformation, and 20% of the next voltage level.

1.19. ENW proposes introducing four new service models: two for IDNO tariffs and two for HV/LV generation that define the minimum cost of connection which is estimated as the future asset replacement cost for each customer group. This has two components, the future capital replacement cost and the O&M cost associated with this.

Revenue Reconciliation and *Cost Allocation*

1.20. ENW has decided to separate network rates into its constituent parts: network business rates and metering business rates, the former becoming part of the unit charge and the latter passed through to the standing charge. Currently, business rates are not separated into network business rates and metering business rates. They are currently allocated together on a pence per kW hour basis into the unit charge.

1.21. ENW has now identified licence fees as a separate cost that can be allocated per customer into the standing charge. These were not previously identified and allocated (these costs therefore currently fall in to the scaling element of the charge).

1.22. ENW has proposed a new method to scaling moving from a percentage multiplier approach on unit rates (p/kWh) to a fixed adder (£/kW) method. ENW is also proposing to modify its revenue reconciliation methodology. As part of the modification, revenue reconciliation will occur before attributing costs within tariff structures (e.g. unit rates, standing charge etc). Where possible, ENW has attempted to scale portions of the modelled revenue to the same portions of allowed revenue. Two steps are being proposed. Firstly, a fixed adder is used to scale the modelled allowed demand revenue to the allowed demand revenue[21]. The second step is to include a fixed adder to the value of the target incentives revenue[22], based on the relation between the tariff group maximum demand and system maximum demand. ENW currently over recovers and proposes to apply a fixed adder (in £/kW) notionally at the GSP level where NGET[23] and Network Business Rate costs (in £/kW) are grouped for each tariff. To illustrate this approach Figure 1 shows the elements of the charge that are subject to scaling in ENW's current methodology. Figure 2 shows how costs are scaled under the proposal.

[21] Excluding incentive revenue.
[22] For example revenue under the losses incentive.
[23] Charges from National Grid Electricity Transmission to ENW in relation to connection charges (exit rates) at the interface between the transmission and distribution system.

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Figure 1 current revenue reconciliation process

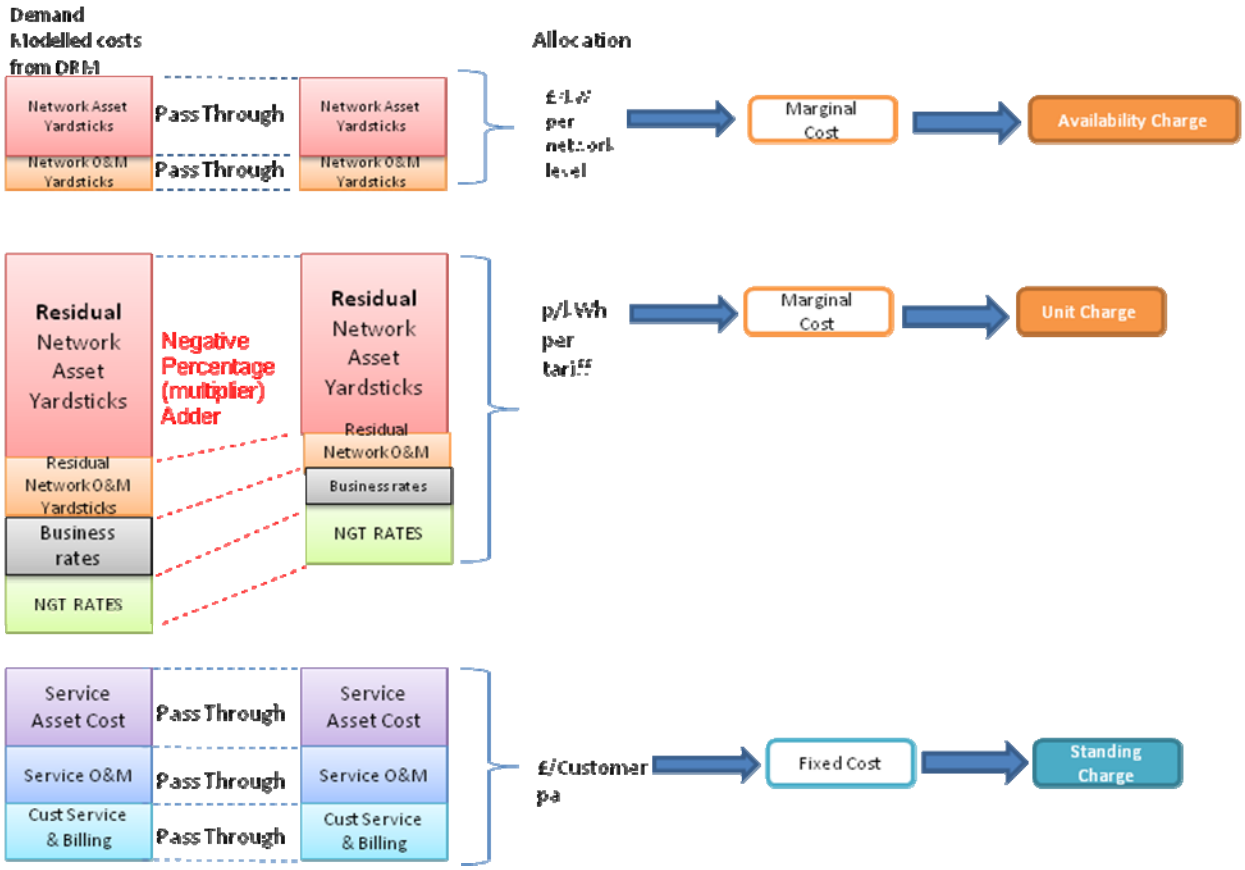
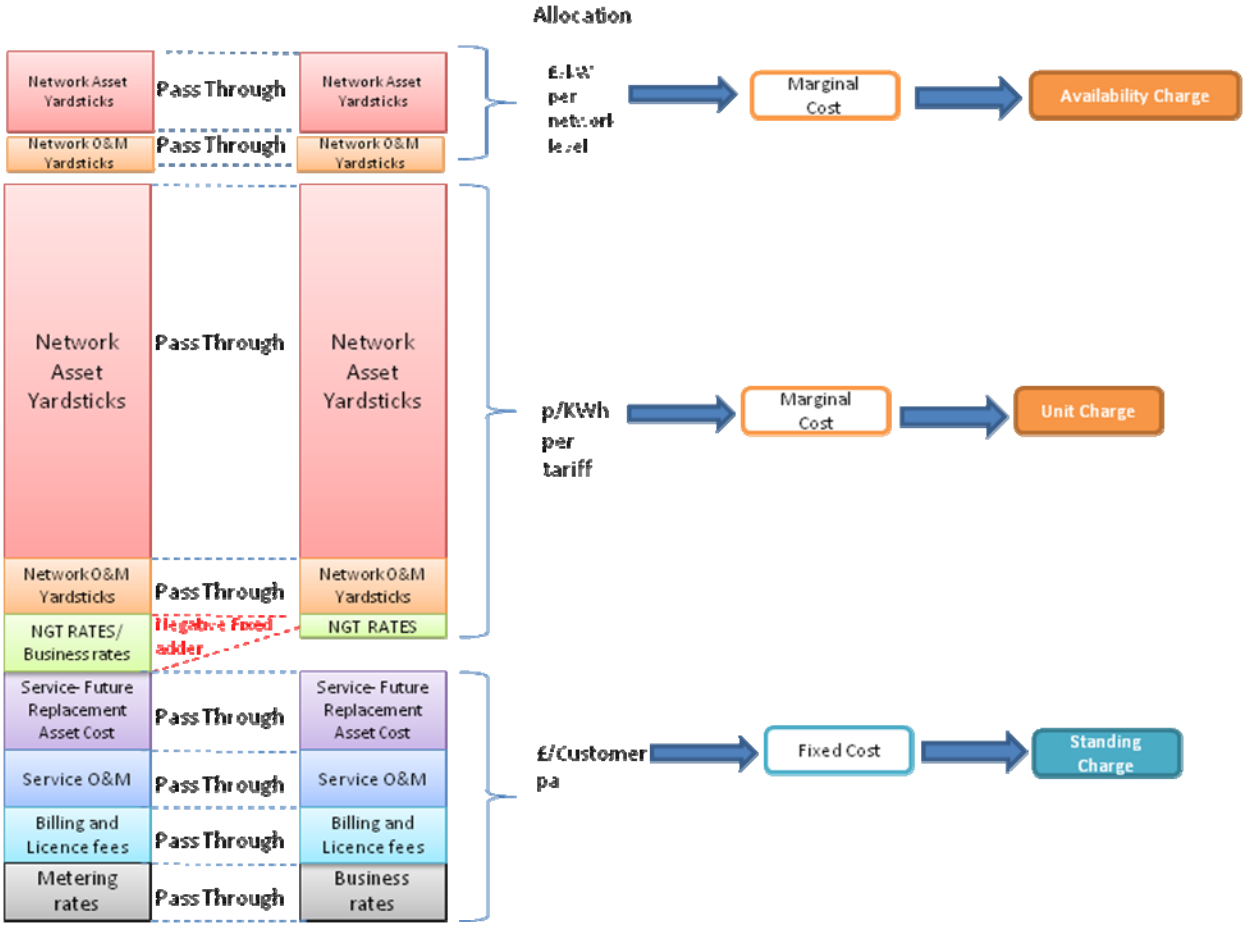


Figure 2 Proposed revenue reconciliation process



1.23. Figure 2 shows how a negative fixed adder reduces the costs allocated from NGET connection costs and Network Business rates compared with the scaling of the costs within the unit rate under the current methodology. Only the unit charge is scaled in both cases.

1.24. Subject to a 'non-veto' decision by the Authority on these changes, ENW proposes to implement the changes from 1st April 2009.

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Annex 2 - Issues for Consideration

Summary

1.25. In this section we have identified a non exhaustive area of issues for consideration by industry for which we would like to seek views. As before these are examined in the following order:

- IDNO tariffs;
- HV/LV generator tariffs; and
- DRM restructuring.

Further to this we welcome views on any other relevant issues from respondents.

1.26. The proposal is wide ranging and proposes many changes in a number of areas. A change is one area is likely to have a consequential impact on another component of the proposal. A breakdown of these impacts can be found in ENW's modification report[24].

IDNO-Charging

1.27. Many of the potential issues with this methodology have been considered by industry during the consultation process for WPD's existing IDNO charging methodology[25] and the recent consultation on SP's charging methodology[26]. The Authority has identified specific areas where we feel the methodology is either different or where the application of the methodology produces different results. These focus on:

- The impact of a restricted type IDNO tariff on IDNOs with restricted and/or unrestricted customers;
- The inclusion of one 'domestic only' tariff; and
- The margin changes that result from the proposed tariffs.

1.28. By including day and night unit charges, ENW has essentially proposed a restricted type tariff for all IDNOs. The Authority wishes to further understand whether this is appropriate given the potential for IDNOs to levy either restricted or unrestricted tariffs as with SP's proposal, as the day/night split used to calculate the IDNO tariffs will impact the margin for both restricted and unrestricted IDNO revenues. We have provided provisional analysis on the impacts of a day/night split on IDNO margins in **Schedule 1**. We welcome views on the extent to which respondents consider that the proposals are cost reflective.

1.29. In addition, we are seeking views on the extent to which a domestic only tariff is appropriate. This may be particularly relevant for HV connections, where domestic coincidence factors may be less appropriate than an alternative approach. Views are welcomed in this area.

1.30. The provisional margin analysis in Schedule 1 shows IDNO margins for a notional IDNO development under the proposed tariffs vary, (Table 1-2) along with how margins change with the number of plots on an IDNO site (Figure 1-4) and with a different day/night ENW split (Figure 5-8) figures 9-16 flex these assumptions. We recognise that for the majority of plot sizes margins

[24] See tables 4.21-4.4 which can be found at: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=467&refer=Networks/ElecDist/Policy/DistChrgMods

[25] Joint consultation document on SP and WPD's proposed modifications to their IDNO charging methodology: http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Documents1/UoS%20charges%20WPD%20and%20SP.pdf

[26] This can be found at: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=415&refer=NETWORKS/ELECDIST/POLICY/DISTCHRGMODS

fall on average at LV and increase at HV. We welcome views on whether the proposals represent cost reflective modifications to the methodology and whether they do not prevent competition in the distribution of electricity.

1.31. We welcome views on the issues set out in this section:

- **Respondents' views on the use of a day/night restricted tariff for IDNOs;**
- **Whether respondents consider it is appropriate to not have a specific IDNO commercial tariff and whether this would influence the development of IDNO commercial connections; and**
- **Whether respondents agree with the approach to avoided costs attributed to IDNOs?**

HV/LV generator charging

1.32. As mentioned previously the new proposals replace all previous HV/LV generator charging approaches. We need to consider whether the new proposals better facilitate the licence objectives over and above the current baseline.

1.33. ENW have chosen to treat the impact of generation to the network in the same way as demand by modelling the impact of demand increments on the network. It is unclear whether assigning a cost or credit to a generator based on the assumption of whether the network is generation dominated or demand dominated is appropriate. It is also unclear whether this is an appropriately cost reflective approach to reflect the costs and benefits to the network. Currently the network is assumed to be demand dominated so all generation will receive a credit.

1.34. ENW consider that generation should be treated the same as demand and is therefore assumed to have the same impact, but there is no evidence in the modification report that generation has the same impact as demand. It is important that generation charging is cost reflective and provides the appropriate signals for efficient use of the network. We need to consider whether there are other characteristics of generation that may have a different impact on the network from demand and whether it is appropriate to reflect these at HV/LV voltage levels.

1.35. In addition, respondents need to consider whether the use of average generation load factor is an appropriate proxy for the coincidence factor. This is particularly important given the structure of the HV/LV generation tariff and the way in which the benefit is applied between those whose load factor is either side of 50% load factor. Consideration needs to be given to whether this a sensible approach to identify who provides a benefit to the network at this level and whether this is cost reflective.

1.36. We welcome views on the issues in this section:

- **Whether respondents consider generation should be treated as the reverse of demand?**
- **Whether respondents consider average generation load factor is an appropriate proxy for the coincidence factor?**
- **Whether respondents agree with the allocation of benefits to generators with a load factor either side of 50%?**
- **Are the coincidence factors being used appropriate?**

Other Modifications to the DRM

1.37. The adjustment of the O&M percentage to reflect that contained in the RRP introduces an element of historic data to the model that is not forward looking, neither does it reflect the underlying principles of forecasting costs in the model. There is potential for these changes to cause distortions to pricing signals and therefore end tariffs and we need to be mindful of whether this properly takes account of developments in the licensee's business in accordance

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with SLC 13.3 (d). We have previously asked Central Electric (CE) to reconsider this issue in our decision letter relating to their DRM model[27].

1.38. ENW have argued that their current charging model needs amending to ensure costs recovered in connection charges are not also recovered in the use of system charges. Assumptions are made on the percentage of costs recovered by connection charges that are to be removed from the UoS charging model. These reductions reduce the costs in the network model and as a consequence availability (capacity) charges which recover the costs of local assets have fallen. Therefore ENW have redefined the local assets and therefore the connection boundary.

Revenue Reconciliation and Cost allocation

1.39. We seek views on EHW's proposal to use a fixed adder to adjust DRM yardstick values before allocation of costs to tariffs. ENW currently over recover their network yardsticks and NGT[28] rates and propose to apply a fixed adder to the NGT rates only[29]. Previously they used a percentage reconciliation approach which applied to all network costs. This change in approach may result in distortions and therefore not encourage efficient use of the system. Further to this, the presence of a negative fixed adder may imply the model is not cost reflective as it over recovers costs.

1.40. Further to this ENW have now identified licence fees as a cost to be allocated per customer. Consideration needs to be given to whether this cost can be adequately identified and attributed in this way and is therefore cost reflective.

1.41. We welcome views on the issues set out in this section:

- **Whether ENW's approach to scaling is appropriate? Do respondents consider any distortions will arise when moving from a fixed percentage to a fixed adder?**
- **Do respondents have any thoughts or comments on the fact that ENW currently scale down, i.e. they propose to apply a negative fixed adder?**
- **Do respondents consider the use of the RRP data is sensible for the O&M percentage?**
- **Do respondents consider the changes to the network yardsticks for connection costs and subsequent changes to the availability charges are sensible?**
- **Do respondents consider ENW's approach to model the minimum costs of connection for the future asset replacement cost is sensible with regard to their service models?**
- **Are licence fees something that can be attributed per customer that reflect costs incurred by the licensee?**

Further Issues

1.42. We welcome comments on the transparency of ENW's modification proposal in terms of respondents' ability to understand what is changing and ENW's justification for the changes against the relevant licence objectives.

- **Are these changes sufficiently transparent?**

[27] This relates to our decision on the Structure of Charges we had argued that for users to be able to estimate their future charges full details on inputs to the models would be needed, however we had approved the mod but said this needed to be kept under review by industry.
[28] Known as National Grid Electricity Transmission exit rates.
[29] In considering this modification proposal we have noted that ENW's existing UoS charging methodology is misleading in its description of scaling yardsticks to revenue. The existing methodology sets out that NGET exit charges are set after ENW applies the percentage scaling to allowed revenue whereas Figure 1 above (which has been verified by ENW as its current model) sets out that the percentage scaler is applied to the NGET exit charges.

1.43. We note that this modification proposal is wide ranging and complex. We encourage respondents to read ENW's modification report and we welcome views on any further issues respondents wish to raise.

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1.44. The Authority will make its decision on ENW's modification proposal in light of the relevant licence objectives set out in the electricity distribution licence (standard licence condition (SLC) 13), the Authority's principal objective and its statutory duties and obligations[30].

1.45. In accordance with the SLC 13 a DNO may modify its current charging methodology if within 28 days it has not been notified of the Authority's intention to veto the modification or consult.

1.46. The Authority has taken the decision to consult on ENW's proposal to establish the extent to which the methodology achieves what it sets out to do in terms of relevant licence conditions. These issues are set out in **Annex 2** with further analysis provided in the schedules to this Annex.

1.47. The purpose of this consultation is to seek views on the proposed modification and its associated impacts. To assist this process, we have included analysis of the impact of this proposal to help respondents understand the potential consequence of the modification.

1.48. The schedules attached to this document provide some context and analysis to build upon the issues highlighted in **Annex 1**.

Background

1.49. ENW's proposed modification is designed to implement a methodology which better achieves the relevant objectives. ENW has developed this modification as part of their work under the Structure of Charges programme for the development of models at HV and LV voltage levels. ENW consider that the DRM will form the foundation of charges in the future and have sought to restructure this for more longer term charging arrangements.

1.50. ENW consider their proposed modification to the methodology is more cost reflective in a number of ways:

- The adjustment of network yardsticks to remove the cost of assets covered in the connection charge is more cost reflective of the connection boundary;
- The adjustment to O&M costs to use the percentage from the RRP better reflects actual costs;
- The adjustment of the assets covered by the availability charge they argue better reflects the local assets included within the UoS charge;
- The identification of licence fees as a cost and the separation of business rates they argue is more transparent;
- ENW suggest that moving from a fixed percentage adder to a fixed adder is more cost reflective as it is only applied to costs at the Grid Supply Point (GSP) level;
- ENW argue that new specific IDNO tariffs ENW argue better reflect the costs incurred by IDNOs and better reflect development in their network business and at the same time do not restrict distort or prevent competition; and

[30] The Authority's powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. The Authority also has other statutory duties in respect of the environment, as set out in various other Acts, for example the Environment Act 1995 and the Countryside and Rights of Way Act 2000.

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- The new approach to calculating HV/LV charges ENW argue better reflects the costs they impose and helps facilitate competition in connection of generation.

Impact on Customers

Non Half Hourly (NHH) Demand Customers

The proposed modification represents significant changes to ENW's charging methodology for HV and LV. This will have an impact on domestic customers and small businesses. Further to this, general changes to revenue reconciliation and cost allocation will affect other customers such as large businesses. Table 1.1 below[31] shows the impact on NHH tariffs based on actual annual consumption amounts per tariff. This shows an increase in the most tariffs, with larger increases for non domestic tariff.

Half Hourly (HH) HV and LV Demand Customers

1.51. Table 1.2[32] shows the tariff analysis for HV and LV HH customers. From our analysis it can be seen that most business customers will expect to see approximately a 10-15% decrease in their annual bills. HV MD NHH will see the largest decrease at approximately 33%. Only one tariff, SS MD NHH is expected to see a marginal increase in their annual bill of approximately 1%. These figures are calculated based on consumption data from ENW for each tariff.

HV/LV Generation

1.52. The proposed methodology will split generators into those who have a load factor of less than or more than 50% and apportion a benefit depending on this load factor.

1.53. Illustrative tariffs and changes to these are provided in appendix E of the modification report. This shows a 10% movement in tariffs.

IDNOs

1.54. The impact of the introduction of IDNO specific tariffs can be seen in Table 1.333. Further impacts of these tariffs can be seen in schedule 1 which analyses the impact on IDNO margins. Although there are large increases in the day unit rate and night rate, the balance of the tariff has changes as the fixed charge has fallen. The impact this is expected to have on annual bills based on consumption data from ENW shows a fall in annual bills. It is estimated that IDNOs at LV would be expected to see a decrease in annual bills of approximately 26-30%, whereas IDNOs connected at HV would expect larger decreases in annual bills of around 43%.

Impact on Competition

1.55. The proposed modification will have an impact on suppliers, generators, IDNOs and ultimately end customers. These impacts could alter behaviour and potential competition.

1.56. The introduction of specific IDNO tariffs is likely to have an impact on competition as IDNOs are direct competition to DNOs for small developments. Therefore any changes to these tariffs are likely to have some impact on competition.

1.57. Provisional estimation of the impact on IDNO margins can be found in Schedule 1.

[31] At the end of Annex 3.
[32] Which can be found at the end of Annex 3.
[33] See previous footnote.

1.58. The introduction of new HV/LV generator charging to reflect the benefits generation provides is likely to provide better signals to generators on where to connect. This in turn may encourage more connections and competition in generation.

Impact on Sustainable Development

Environment

1.59. Whilst we have not attempted to quantify the environmental costs and benefits of the proposed modification, a charging methodology that reflects the benefits provided by generation some of which is renewable is likely to provide some benefits to the environment. This is likely to be relatively small as only a small benefit is attributed to wind generation.

Security of Supply

1.60. Electricity distribution networks are designed to meet security standard P2/6. It is a licence requirement that DNOs ensure they are compliant with these security requirements. We do not consider this proposed modification affects security standard, but these standards remain the duty of the DNO to uphold.

Energy Savings

1.61. We do not consider any energy savings will arise from this modification.

Impact on Health and Safety

1.62. We do not consider this proposal has any implications for health and safety.

Risks and Unintended consequences

1.63. The main risk comes from the possibility that the proposed modifications are implemented and do not better meet the relevant licence objectives. It is for this reason that a full consultation and analysis is being carried out ahead of possible implementation. This process allows the Authority to consider all issues in an informed way ahead of making a decision based on the licence objectives. In this way, this risk is minimised.

1.64. Risks can arise if methodologies containing assumptions regarding emerging industry trends are implemented and these trends are subsequently not realised. Where possible, the ENW methodology has based some assumptions on historical data, such as the O&M percentage. As these sources change, it is expected that the methodology would be updated to reflect these changes. However, there maybe some small risks as this is based on historical data and is not forward looking. It is also desirable that a methodology attempts to account for expected future developments by adopting a forward looking approach.

Other Costs/Benefits

1.65. ENW is not expected to incur significant additional costs in implementing these proposals. Neither do we expect ENW to incur significant costs when implementing the new tariffs in the settlement system.

Benefits

1.66. In attempting to develop a charging methodology which better meets the relevant licence objectives a number of benefits are expected in line with what the licence conditions and structure of charges project is striving to achieve. A more cost reflective methodology would mean customers and generators pay charges which are more representative of the costs incurred by the DNO which result from their use of the distribution network. In addition, the way in which these costs are allocated and charged for are designed to create signals to

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customers encouraging a more efficient use of the network. A cost reflective methodology attempts to create a network which is efficiently utilised by influencing the behaviour of those for whom UoS charging is an active consideration in setting their demand profile and location. ENW have tried to achieve this it argues by creating tariffs for IDNOs that reflect more closely the costs imposed by IDNOs by removing the capacity charge and applying a domestic coincidence factor. The same applies to HV/LV generator charging exports are recognised as offsetting demand and delaying reinforcement to the network.

Post Implementation Review

1.67. Ofgem and the industry are committed to developing charging methodologies as part of the ongoing structure of charges project, most notably with regard to a common charging methodology.

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Table 1.1: Tariff Analysis for ENW NHH Demand Customers

April 2008 Tariff rates	Fixed Charge/Standing Charge (p/day)	Day Unit Charge (p/kWh)	Night Unit Charge (p/kWh)	Evening and weekend charge (p/kWh)	Current Sample tariff (£/annum)
Domestic Unrestricted	4.98	1.34	0.00	0.00	£67.76
Domestic E10	4.98	1.95	0.14	0.00	£81.89
Domestic E7	4.98	1.51	0.12	0.00	£75.71
Domestic Smart 7	4.98	2.10	0.12	1.24	£270.94
Restricted Hour 7	0.16	0.00	0.12	0.00	£6.22
Restricted Hour 8	0.16	0.00	0.12	0.00	£8.02
Restricted Hour 9	0.16	0.00	0.16	0.00	£8.90
Restricted Hour 10	0.16	0.00	0.16	0.00	£5.38
Restricted Hour 11	0.16	0.00	0.16	0.00	£11.30
Non Domestic Unrestricted	7.92	1.33	0.00	0.00	£227.08
Non Domestic E7	7.92	1.48	0.09	0.00	£251.88
Non Domestic E7 E&W	7.92	1.94	0.09	0.23	£211.25
Non Domestic E&W	7.92	1.94	0.00	0.18	£217.49

Proposed Tariff Rates	Fixed Charge/Standing Charge (p/day)	Day Unit Charge (p/kWh)	Night Unit Charge (p/kWh)	Evening and weekend charge (p/kWh)	Proposed Sample tariff (£/annum)	Diff. (£)	Diff. (%)
Domestic Unrestricted	2.27	1.65	0.00	0.00	£69.26	£1.51	2.22
Domestic E10	2.27	2.45	0.17	0.00	£87.99	£6.11	7.46
Domestic E7	2.27	1.88	0.15	0.00	£79.86	£4.15	5.49
Domestic Smart 7	2.27	2.67	0.15	1.58	£328.95	£58.02	21.41
Restricted Hour 7	0.38	0.00	0.15	0.00	£8.36	£2.14	34.31
Restricted Hour 8	0.38	0.00	0.14	0.00	£10.24	£2.22	27.63
Restricted Hour 9	0.38	0.00	0.21	0.00	£12.08	£3.18	35.68
Restricted Hour 10	0.38	0.00	0.21	0.00	£7.56	£2.17	40.40
Restricted Hour 11	0.38	0.00	0.21	0.00	£15.16	£3.86	34.15
Non Domestic Unrestricted	5.78	1.67	0.00	0.00	£270.33	£43.25	19.05
Non Domestic E7	5.78	1.88	0.11	0.00	£303.67	£51.79	20.56
Non Domestic E7 E&W	5.78	2.48	0.11	0.28	£252.32	£41.07	19.44
Non Domestic E&W	5.78	2.48	0.00	0.22	£261.66	£44.17	20.31

Table 1.2: Tariff Analysis for HH HV and LV Customers

April 2008 Tariff rates	Standing Charge Day (£/mth)	Day Unit Charge (£/kWh)	Night Unit Charge (£/kWh)	Availability Charge (£/KVA/mth)	Reactive charge (p/kVARh)	Current Sample tariff (£/annum)
LV MD HH	22.41	0.0043	0.0009	1.47	0.62	£4,128.72
SS MD HH	24.70	0.0026	0.0011	1.33	0.54	£6,992.34
HV MD	145.60	0.0024	0.0006	1.16	0.28	£19,058.31

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HH						
LV MD NHH	12.55	0.0043	0.0009	1.47	0.62	£1,472.20
SS MD NHH	24.70	0.0026	0.0011	1.33	0.54	£1,426.67
HV MD NHH	145.60	0.0024	0.0006	1.16	0.28	£7,171.08

Proposed Tariff Rates	Standing Charge Day (£/month)	Day Unit Charge (£/kWh)	Night Unit Charge (£/kWh)	Availability Charge	Reactive charge	Proposed Sample tariff (£/annum)	Diff (£)	Diff (%)
LV MD HH	9.65	0.0055	0.0010	1.05	0.74	£ 3,520.57	-£608.16	-14.73
SS MD HH	10.08	0.0040	0.0014	1.01	0.65	£ 6,129.54	-£862.80	-12.34
HV MD HH	33.08	0.0023	0.0009	1.12	0.33	£ 16,837.05	-£2,221.26	-11.66
LV MD NHH	7.77	0.0065	0.0010	1.05	0.74	£ 1,286.39	-£185.81	-12.62
SS MD NHH	10.08	0.0067	0.0014	1.01	0.65	£ 1,440.61	£13.95	0.98
HV MD NHH	33.08	0.0013	0.0009	1.12	0.33	£ 4,757.86	-£2,413.22	-33.65

Table 1.3: Tariff Analysis for IDNO customers

April 2008 Tariff rates	Standing Charge Day (£/month)	Day Unit Charge (£/kWh)	Night Unit Charge (£/kWh)	Availability Charge (£/kVA)	Reactive charge (p/kVARh)	Current Sample tariff (£/annum)
LV IDNO	12.55	0.0043	0.0009	1.47	0.62	£2,553.62
HV IDNO	145.60	0.0024	0.0006	1.16	0.28	£9,125.78

Proposed Tariff Rates	Standing Charge Day (£/month)	Day Unit Charge (£/kWh)	Night Unit Charge (£/kWh)	Availability Charge (£/kVA)	Reactive charge (p/kVARh)	Proposed Sample tariff (£/annum)	Diff (£)	Diff (%)
LV IDNO (Band 4)	5.87	0.0184	0.0014	0	0	£1,865.64	-£687.98	-26.94%
LV IDNO (Band 3)	5.87	0.0180	0.0012	0	0	£1,827.24	-£726.38	-28.45%
LV IDNO (Band 2)	5.87	0.0176	0.0011	0	0	£1,786.44	-£767.18	-30.04%

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LV IDNO (Band 1)	5.87	0.0172	0.0010	0	0	£1,745.64	-£807.98	-31.64%
HV IDNO	27.01	0.0118	0.0016	0	0	£5,143.52	-£3,982.26	-43.64%
LV HH Diff. %	-53.23%	327.91%	55.56%	-100.00%	-100.00%	-26.94%		
HV HH Diff. %	-81.45%	391.67%	166.67%	-100.00%	-100.00%	-43.64%		

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Schedule 1 – Provisional IDNO margin analysis
PART ONE

Illustrative IDNO Domestic margins at LV (50 plots) and HV (400 plots) (£)

Assumptions:

Table A

		Units
Average household consumption	**3900**	kWh
Average household capacity	**2**	kVA
Capacity diversity factor, domestic	**1**	
Diversified domestic site capacity	**100**	kVA
Day consumption, domestic	**75.00%**	
Night consumption, domestic	**25.00%**	

Please note: If these assumptions were to change the results will change. ENW have used assumptions set out above in their modification proposal to estimate the impact of the tariffs. We have replicated these results in more detail. For comparison, in part two we have altered these assumptions later in the document to show a range of results.

Table 1: IDNO Margins for LV tariffs:

LV- 50 plots

	ATW[34] income Dom	IDNO Income per plot	Site boundary charge	IDNO gross margin	IDNO margin per kVA	IDNO Margin per plot	%ATW charge
Domestic UR- LV Current	£3,521.85	£70.44	£2,705.49	£816.36	£8.16	£16.33	23.18%
Domestic UR LV 1	£3,631.78	£72.64	£2,634.64	£997.13	£9.97	£19.94	27.46%
Domestic UR LV 2	£3,631.78	£72.64	£2,698.02	£933.76	£9.34	£18.68	25.71%
Domestic UR LV 3	£3,631.78	£72.64	£2,761.39	£870.38	£8.70	£17.41	23.97%
Domestic UR LV 4	£3,631.78	£72.64	£2,829.64	£802.13	£8.02	£16.04	22.09%
Domestic R- LV Current	£3,175.73	£63.51	£2,705.49	£470.24	£4.70	£9.40	14.81%
Domestic R- LV 1	£3,236.90	£64.74	£2,634.64	£602.26	£6.02	£12.05	18.61%
Domestic R- LV 2	£3,236.90	£64.74	£2,761.39	£538.88	£5.39	£10.78	16.65%
Domestic R- LV 3	£3,236.90	£64.74	£2,761.39	£475.51	£4.76	£9.51	14.69%
Domestic R- LV 4	£3,236.90	£64.74	£2,829.64	£407.26	£4.07	£8.15	12.58%

Table 2: IDNO margins for HV tariffs:

HV - 400 Plots

Domestic UR- HV Current	£31,757.25	£79.39	£19,468.50	£15,750.00	£15.75	£39.37	44.72%
Domestic UR- HV	£36,317.75	£90.79	£18,361.63	£17,956.12	£17.96	£44.89	49.44%
Domestic R HV Current	£31,757.25	£79.39	£19,468.50	£12,288.75	£12.29	£30.72	38.70%
Domestic R HV	£32,369.00	£80.92	£18,361.63	£14,007.37	£14.01	£35.02	43.27%

[34] All The Way income: Income received from end customers.

Illustrative graphs - IDNO margins

Figures 1 to 8 below set out illustrative graphs showing the change in IDNO margins with the number of households connected for ENW restricted and unrestricted tariffs. This analysis assumes a HV connection is used to serve sites with greater than 400 plots. All other assumptions are the same as above.

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Figure 1- IDNO margins based on proposed LV INDO tariffs and ENW domestic unrestricted tariff

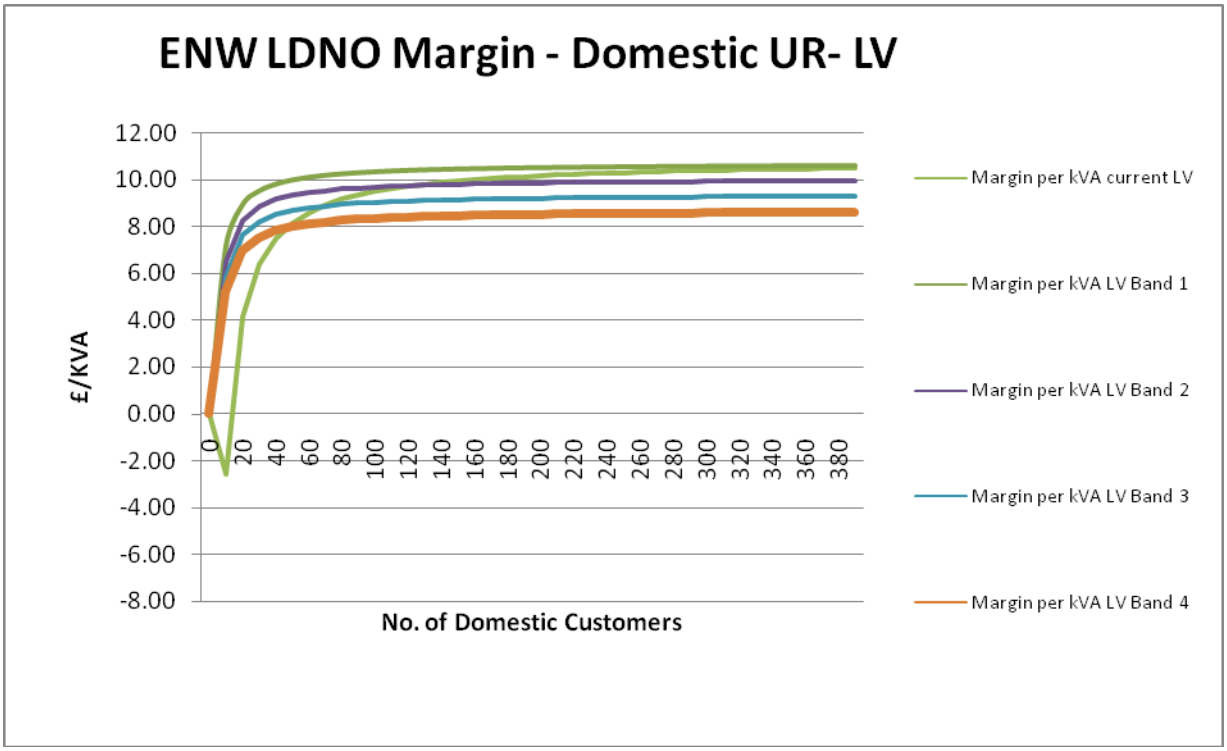


Figure 2- IDNO margins based on proposed LV INDO tariffs and ENW domestic restricted tariff

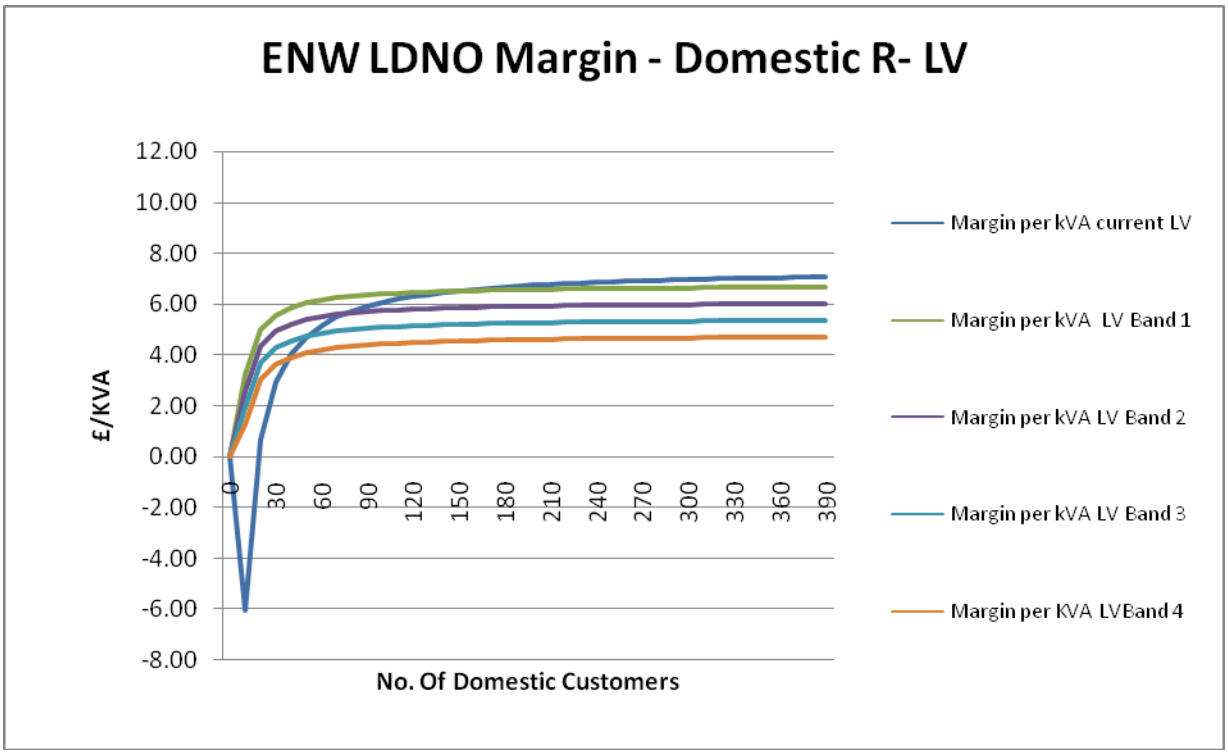


Figure 3- IDNO margins based on proposed HV IDNO tariffs and domestic unrestricted tariff

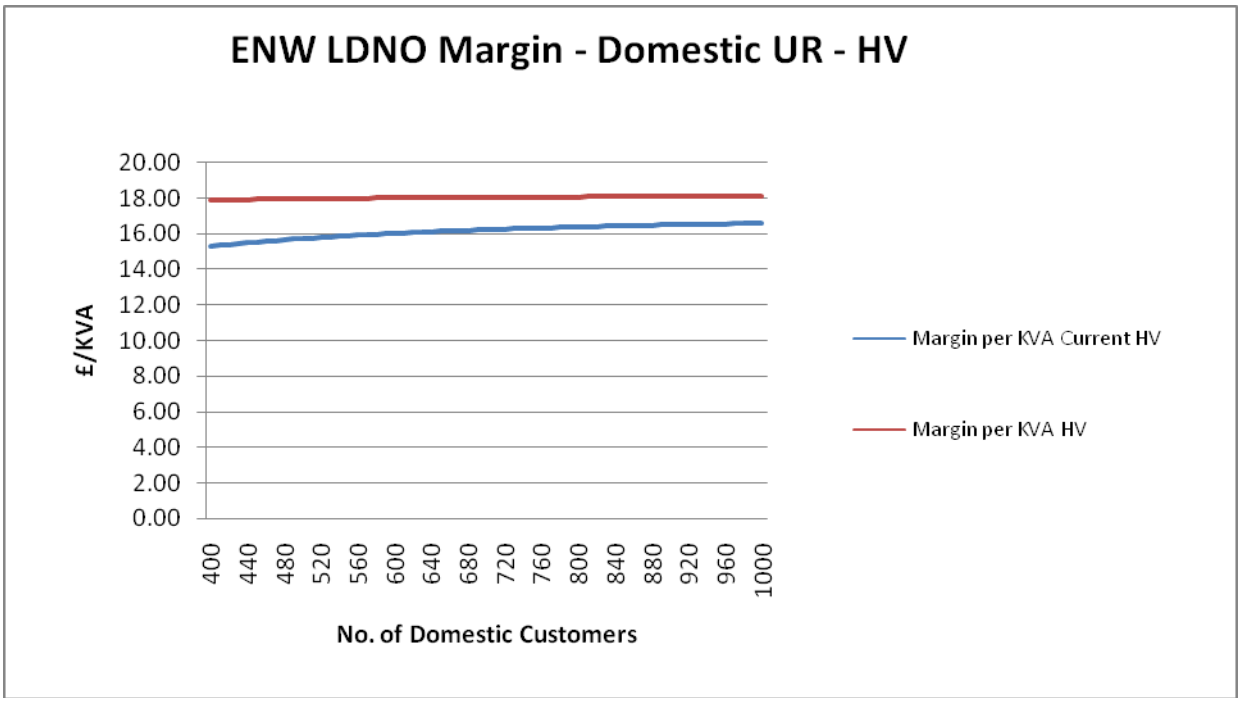
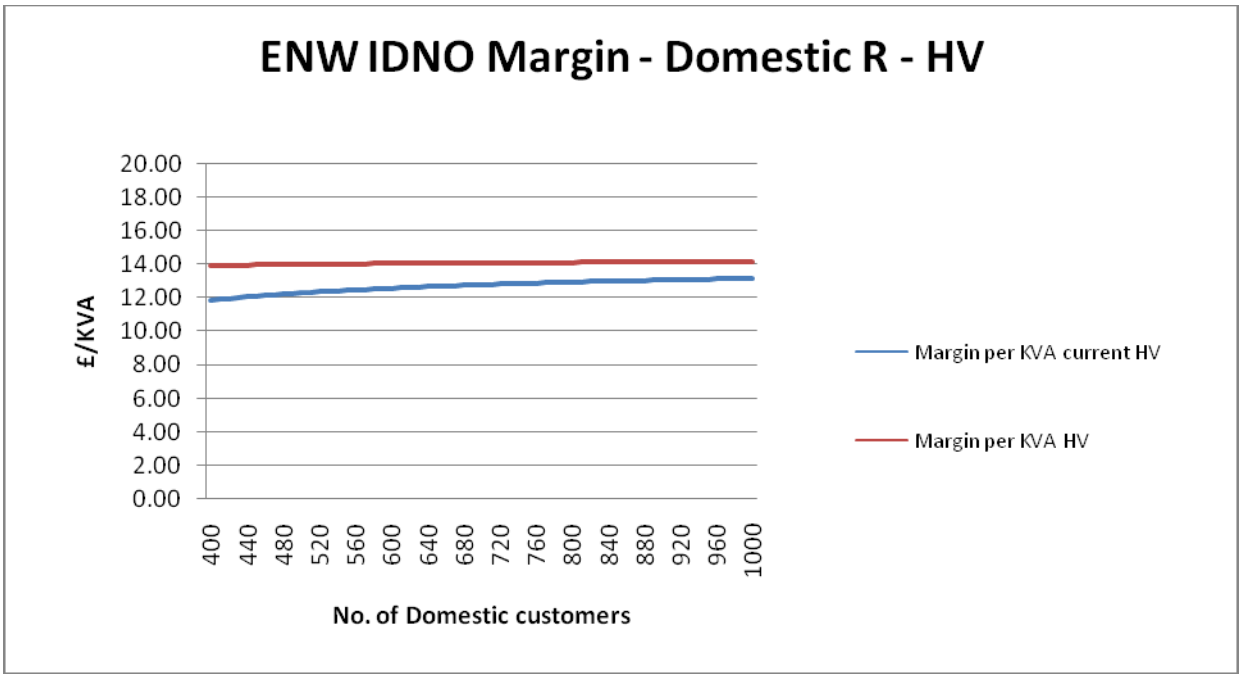


Figure 4- IDNO margins based on proposed HV IDNO tariffs and domestic restricted tariff



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Illustrative graphs to show the impact of a change in day/night consumption on IDNO margin. All other assumptions are the same as above.

Figure 5- Graph showing impact of changing day/night split on IDNO margin calculated using LV IDNO tariffs and ENW domestic unrestricted tariffs

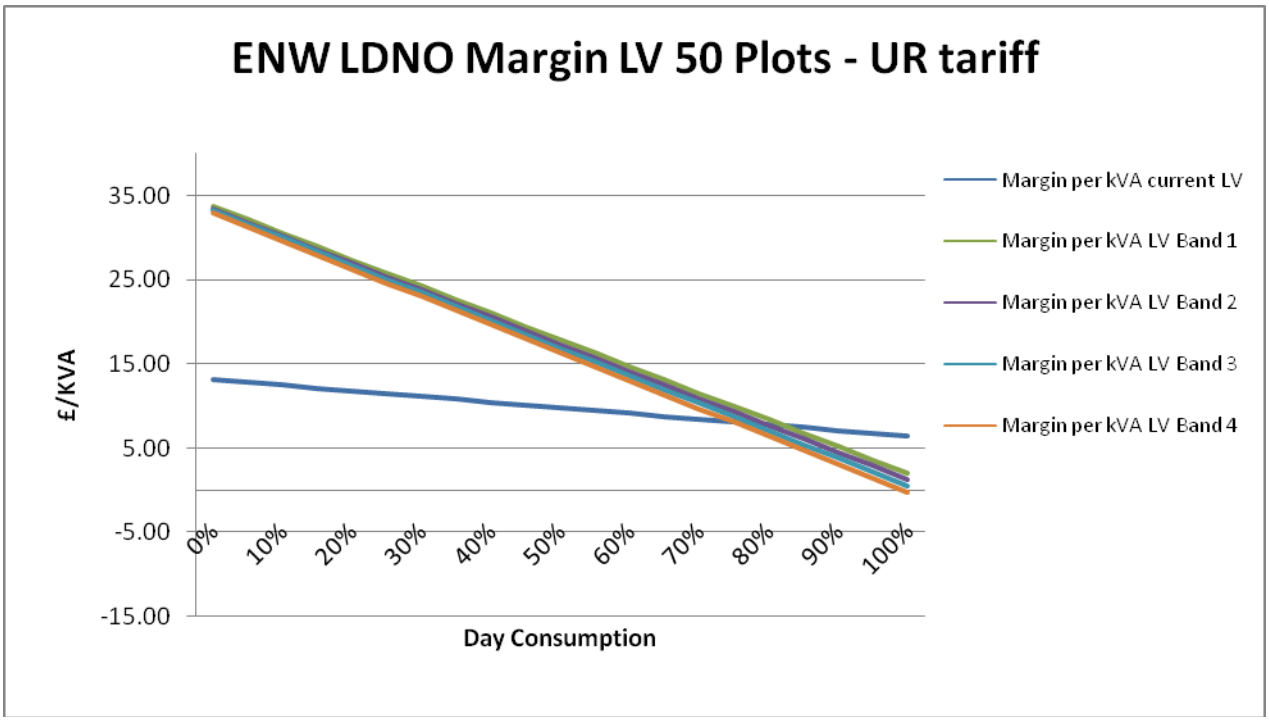


Figure 6- Graph showing impact of changing day/night split on IDNO margin calculated using LV IDNO tariffs and ENW domestic restricted tariffs

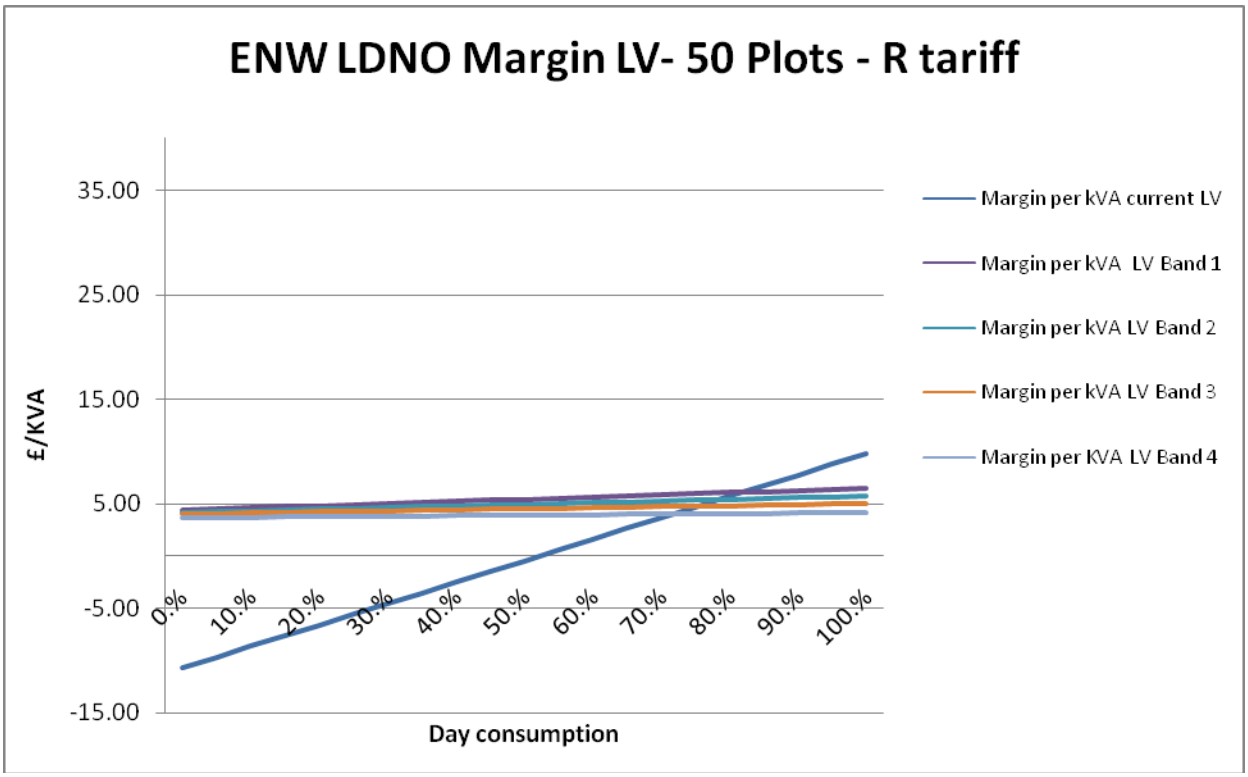


Figure 7- Graph showing impact of changing day/night split on IDNO margin calculated using HV IDNO tariffs and ENW domestic unrestricted tariffs

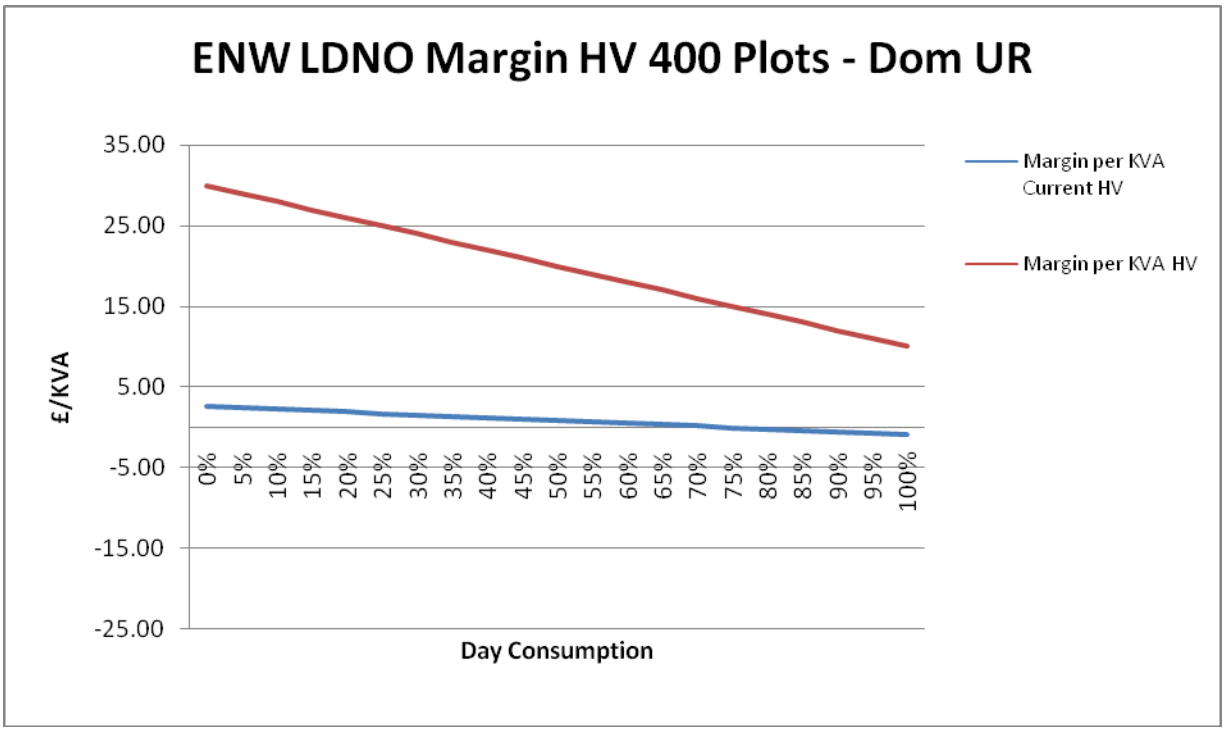
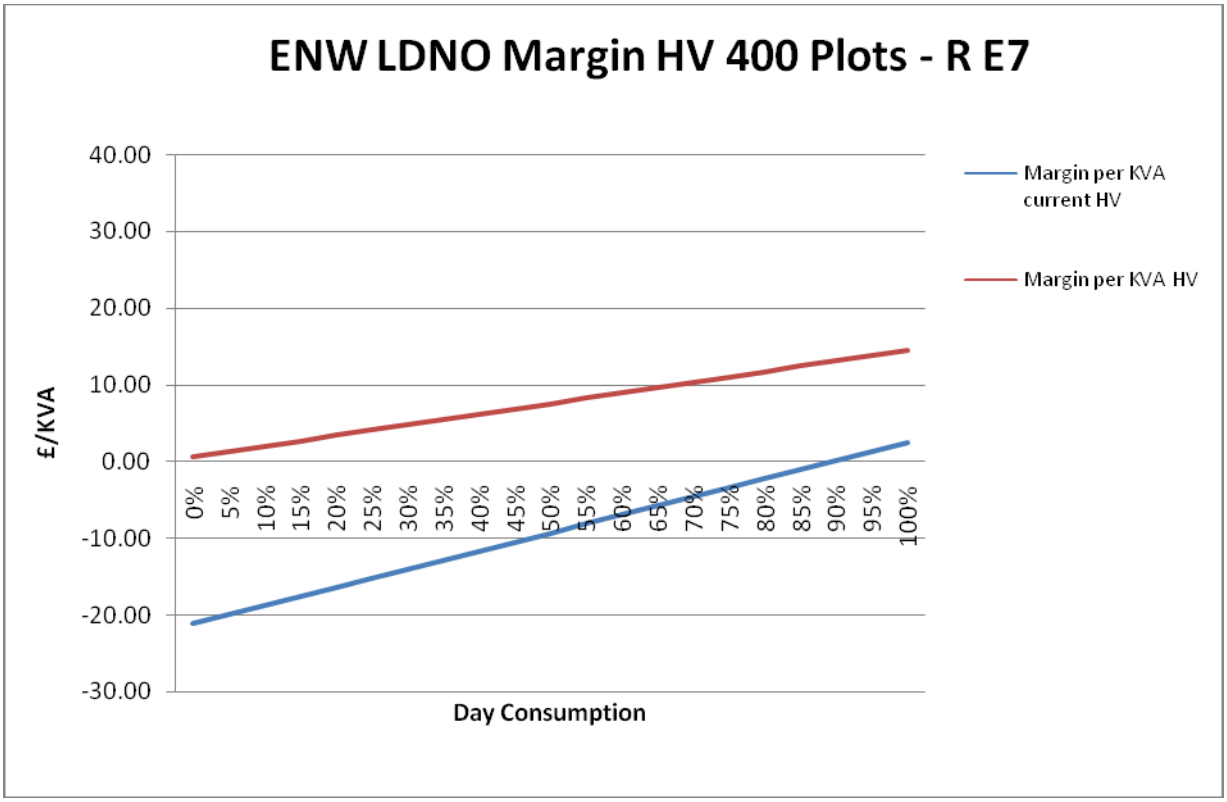


Figure 8- Graph showing impact of changing day/night split on IDNO margin calculated using HV IDNO tariffs and ENW domestic restricted tariffs



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Schedule 1
PART TWO

In order to illustrate a range of results we have altered ENW's assumptions for calculating provisional IDNO margins for the following analysis. We have reduced the average household consumption and altered the consumption between day and night.

Assumptions

Table A1

		Units
Average household consumption	**3700**	kWh
Average household capacity	**2**	kVA
Capacity diversity factor, domestic	**1**	
Diversified domestic site capacity	**100**	kVA
Day consumption, domestic	**85.00%**	
Night consumption, domestic	**15.00%**	

Table 3: Illustrative IDNO margins LV tariffs

LV- 50 plots	ATW income Dom	IDNO Income per plot	Site boundary charge	IDNO gross margin	IDNO margin per kVA	IDNO Margin per plot	%ATW charge
Domestic UR- LV Current	£3,521.85	£70.44	£2,733.89	£653.96	£6.54	£13.08	19.30%
Domestic UR LV 1	£3,466.78	£69.34	£2,802.84	£663.93	£6.64	£13.28	19.15%
Domestic UR LV 2	£3,466.78	£69.34	£2,868.52	£598.26	£5.98	£11.97	17.26%
Domestic UR LV 3	£3,466.78	£69.34	£2,934.19	£532.58	£5.33	£10.65	15.36%
Domestic UR LV 4	£3,466.78	£69.34	£3,002.64	£464.13	£4.64	£9.28	13.39%
Domestic R- LV Current	£3,316.63	£66.33	£2,733.89	£582.74	£5.83	£11.65	17.57%
Domestic R- LV 1	£3,412.20	£68.24	£2,802.84	£609.36	£6.09	£12.19	17.86%
Domestic R- LV 2	£3,412.20	£68.24	£2,934.19	£543.68	£5.44	£10.87	15.93%
Domestic R- LV 3	£3,412.20	£68.24	£2,934.19	£478.01	£4.78	£9.56	14.01%
Domestic R- LV 4	£3,412.20	£68.24	£3,002.64	£409.56	£4.10	£8.19	12.00%

Table 4: Illustrative IDNO margins HV tariffs

HV - 400 Plots							
Domestic UR- HV Current	£26,533.00	£66.33	£16,034.40	£11,068.40	£13.84	£27.67	40.84%
Domestic UR- HV	£27,734.20	£69.34	£15,523.73	£12,210.47	£15.26	£30.53	44.03%
Domestic R HV Current	£26,533.00	£66.33	£16,034.40	£10,498.60	£13.12	£26.25	39.57%
Domestic R HV	£27,297.60	£68.24	£15,523.73	£11,773.87	£14.72	£29.43	43.13%

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Illustrative graphs - IDNO margins

Figures 9 to 16 below set out illustrative graphs showing the change in IDNO margins with the number of households connected for ENW restricted and unrestricted tariffs. This analysis assumes a HV connection is used to serve sites with greater than 400 plots. All other assumptions are the same as set out in Table A1.

Figure 9- IDNO margins based on proposed LV INDO tariffs and ENW domestic unrestricted tariff

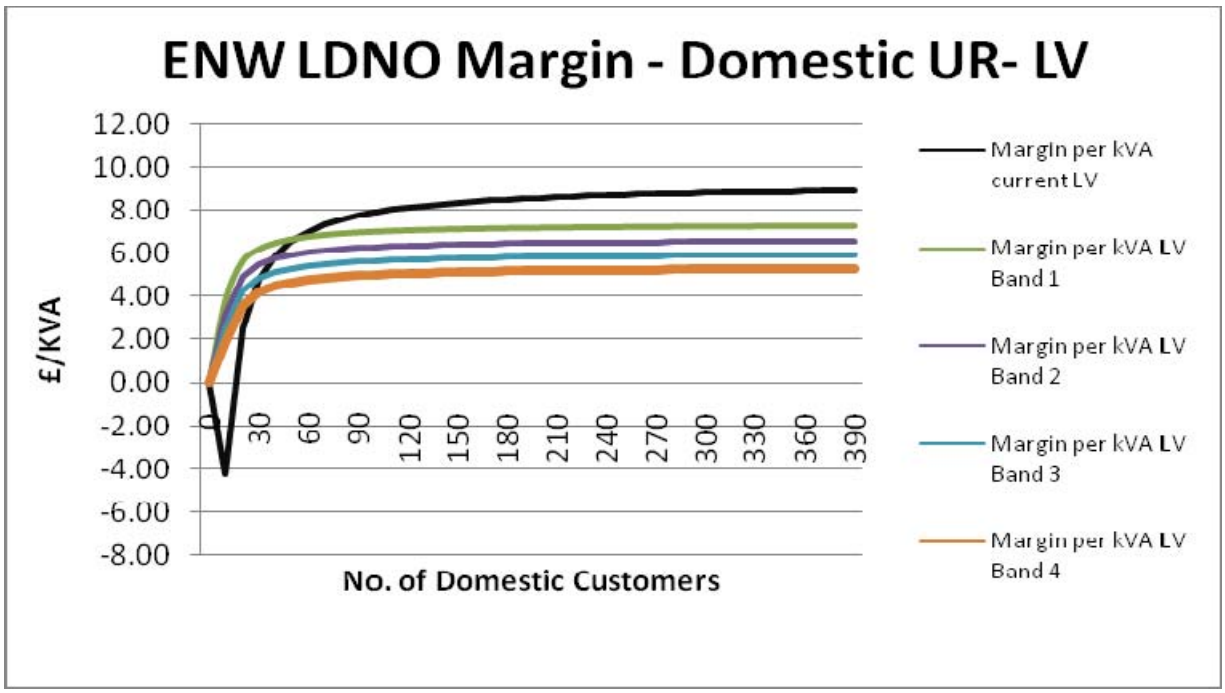


Figure 10- IDNO margins based on proposed LV INDO tariffs and ENW domestic restricted tariff

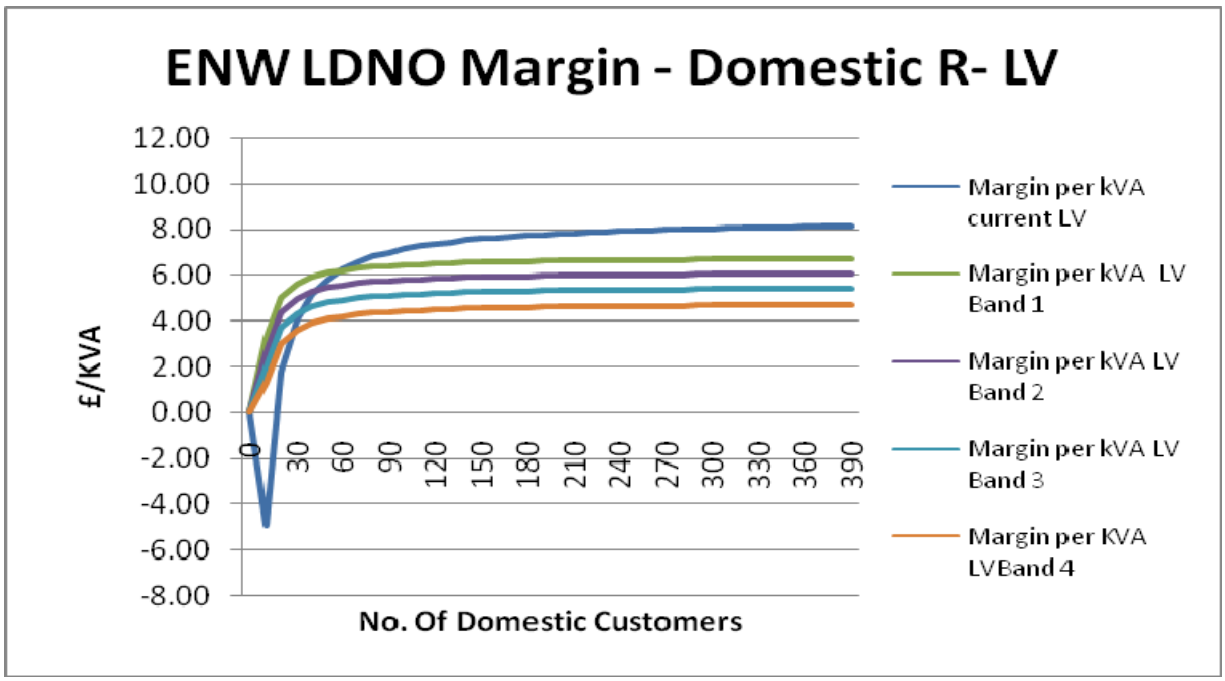


Figure11- IDNO margins based on proposed HV IDNO tariffs and domestic unrestricted tariff

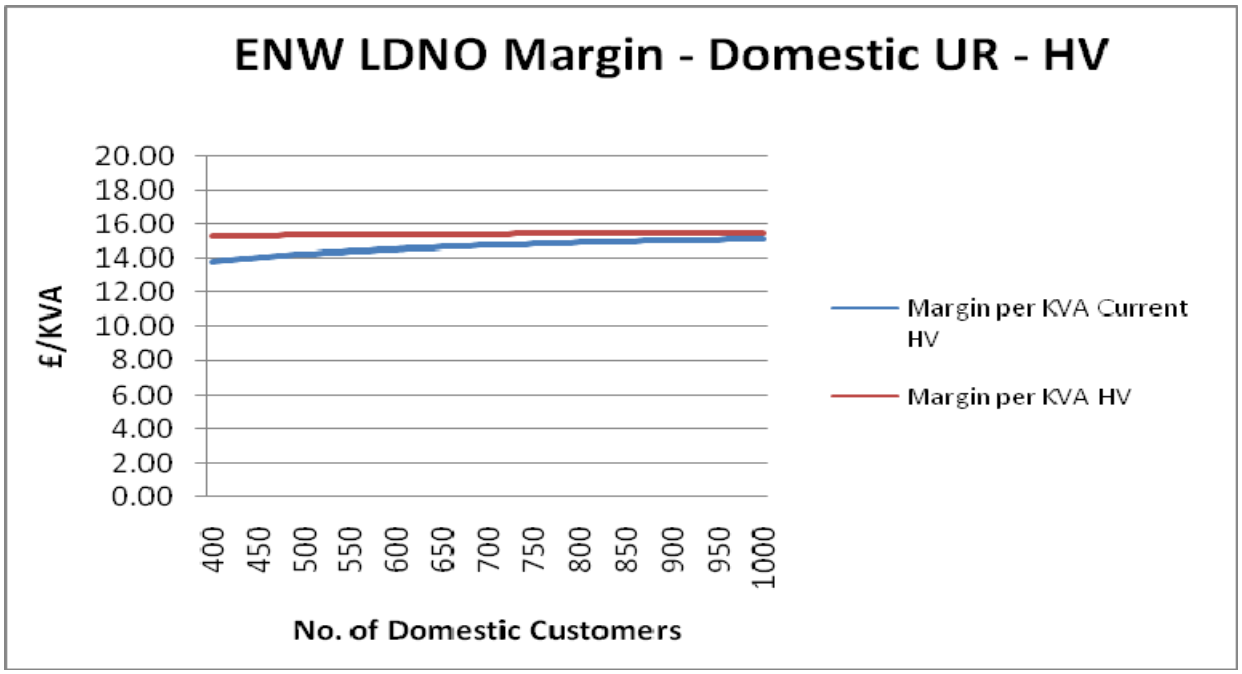
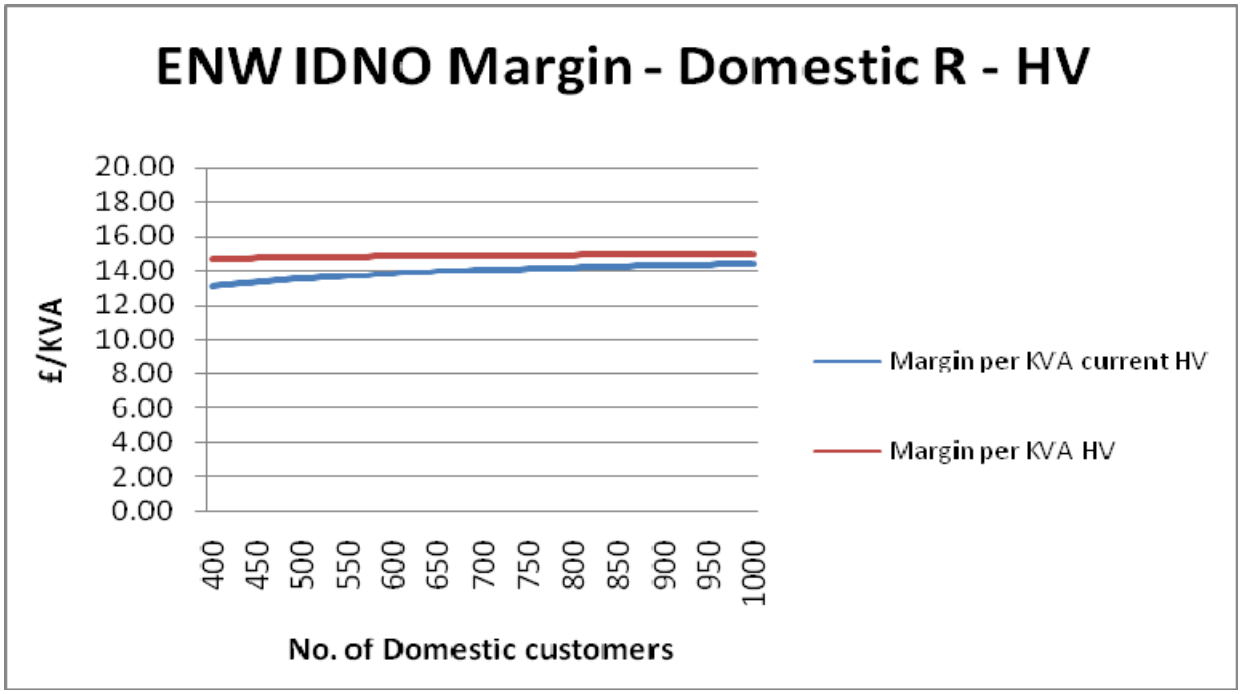


Figure 12- IDNO margins based on proposed HV IDNO tariffs and domestic restricted tariff



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Illustrative graphs to show the impact of a change in day/night consumption on IDNO margin. All other assumptions are the same Table A1.

Figure 13- Graph showing impact of changing day / night split on IDNO margin calculated using LV IDNO tariffs and ENW domestic unrestricted tariffs

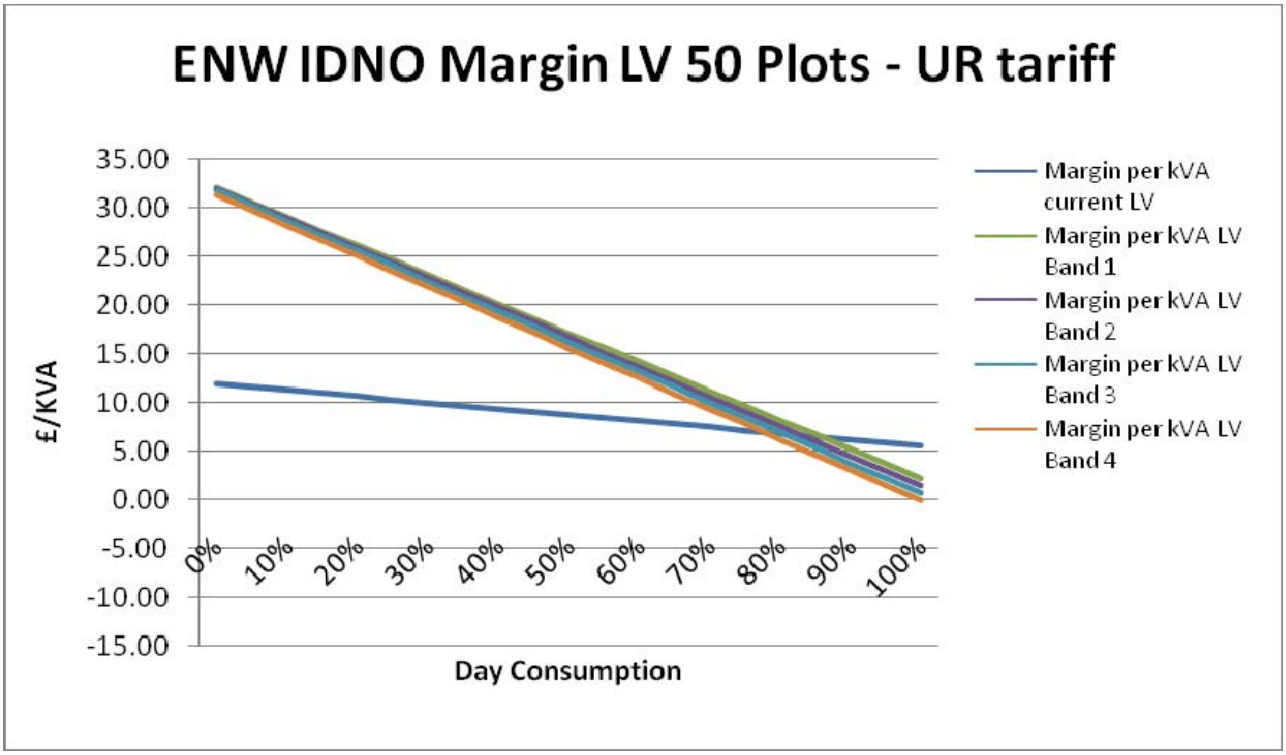


Figure 14- Graph showing impact of changing day / night split on IDNO margin calculated using LV IDNO tariffs and ENW domestic restricted tariffs

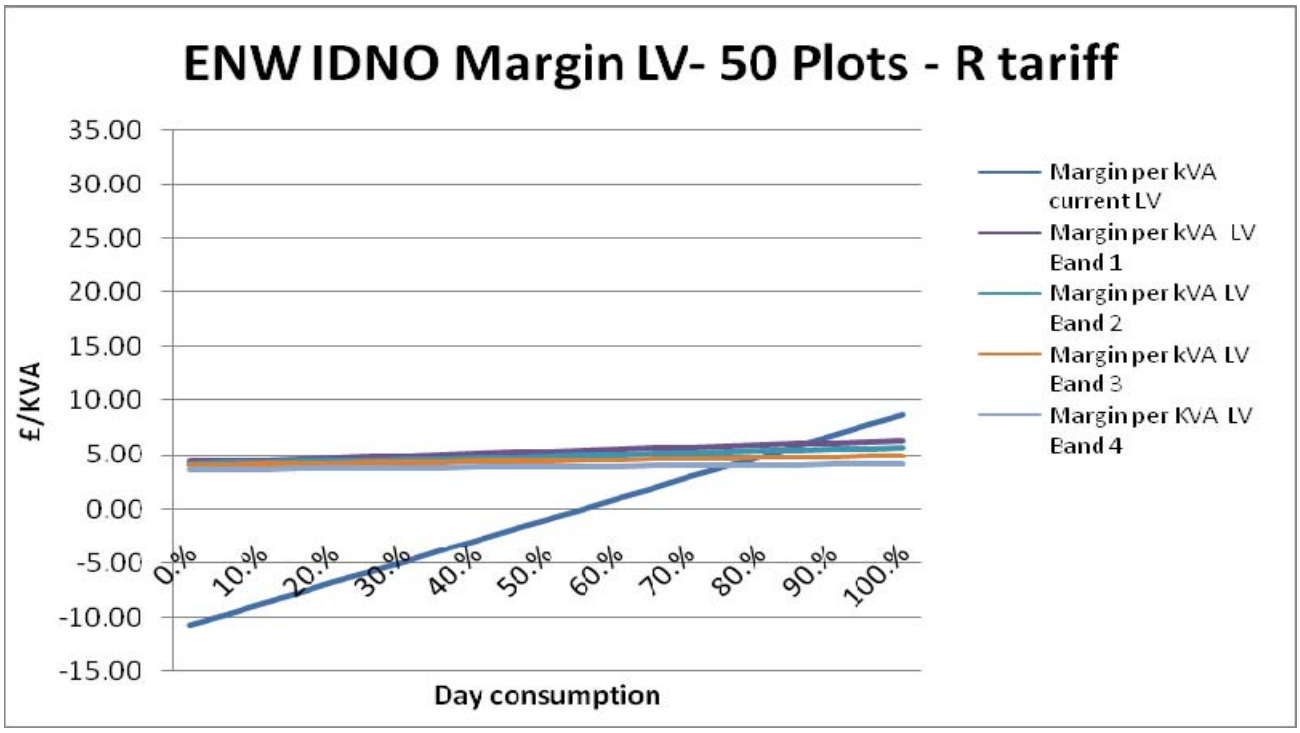


Figure 15- Graph showing impact of changing day / night split on IDNO margin calculated using HV IDNO tariffs and ENW domestic unrestricted tariffs

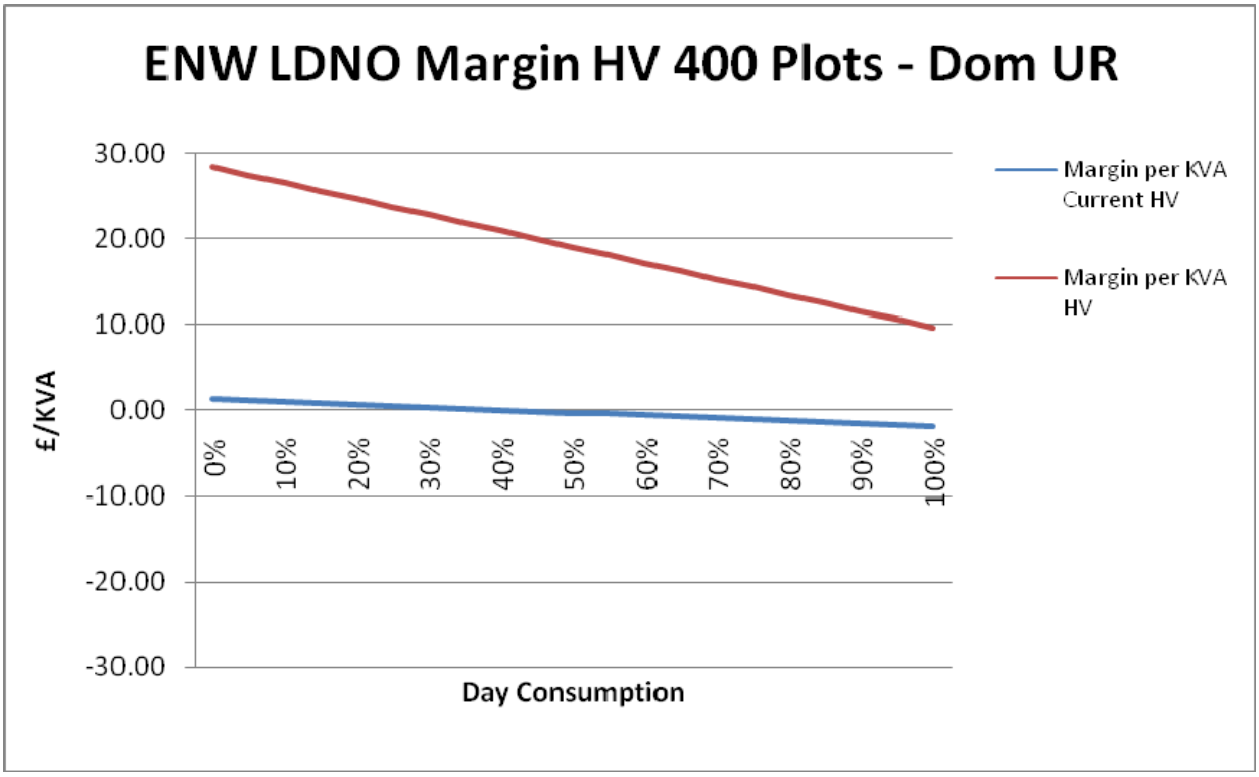
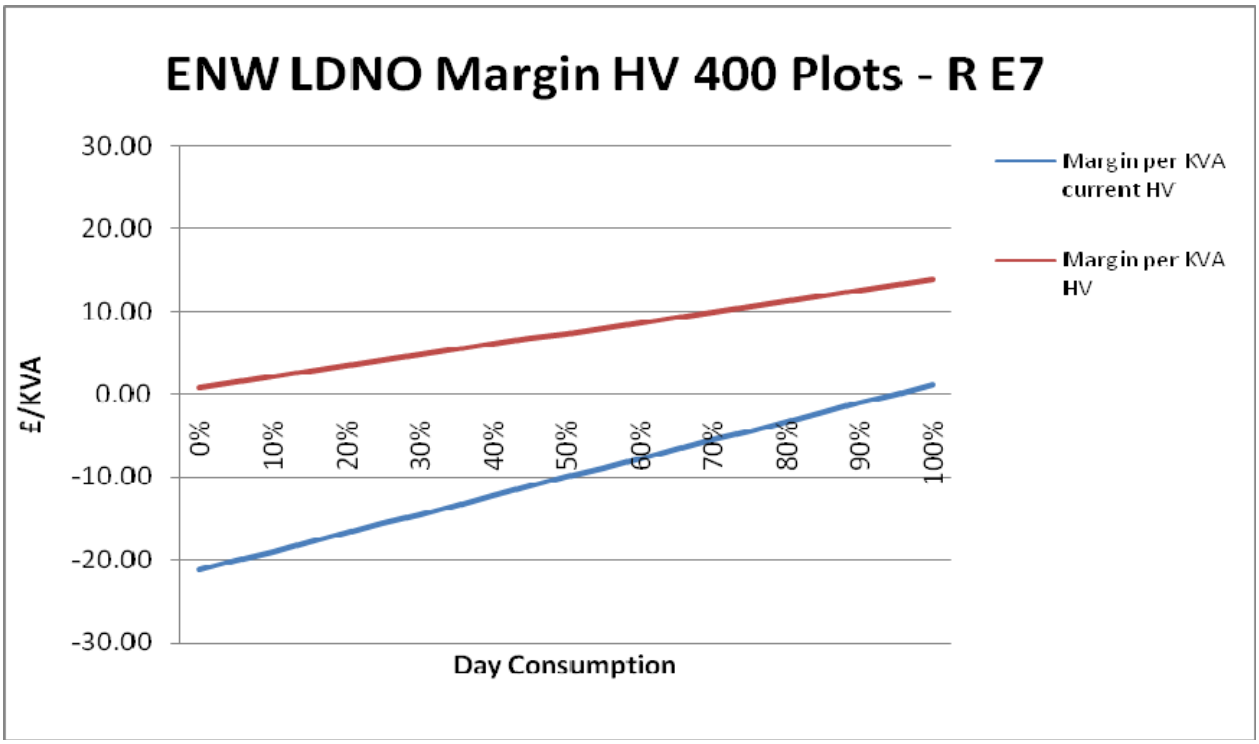


Figure 16- Graph showing impact of changing day / night split on IDNO margin calculated using HV IDNO tariffs and ENW domestic restricted tariffs



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Schedule 2 – Summary of consultation questions

IDNOs

1. Respondents' views on the use of a day/night restricted tariff for IDNOs;
2. Whether respondents consider the lack of an IDNO commercial tariff would influence the development of IDNO commercial connections; and
3. Whether respondents agree with the approach to avoided costs attributed to IDNOs?

HV/LV Generation Charging

4. Whether respondents consider generation should be treated as the reverse of demand?
5. Whether respondents consider average generation load factor is an appropriate proxy for the coincidence factor?
6. Whether respondents agree with the allocation of benefits to generators with a load factor either side of 50%?

DRM Modifications

7. Whether ENW's approach to scaling is appropriate? Do respondents consider any distortions will arise when moving from a fixed percentage to a fixed adder?
8. Do respondents have any thoughts or comments on the fact that ENW currently scale down, i.e. they propose to apply a negative fixed adder?
9. Do respondents consider the use of the RRP data is sensible for the O&M percentage?
10. Do respondents consider the changes to the network yardsticks for connection costs and subsequent changes to the availability charges are sensible?
11. Do respondents consider ENW's approach to model the minimum costs of connection for the future asset replacement cost is sensible with regard to their service models?
12. Are licence fees something that can be attributed per customer that reflect costs incurred by the licensee?

Further Issues

13. Are these changes sufficiently transparent?