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Company Secretary  
Electricity North West Ltd  
Dalton House  
104 Dalton Avenue  
Birchwood Park, Birchwood  
Warrington, WA3 6YF

Your Ref: UoS2009.001.1.  
[rachel.fletcher@ofgem.gov.uk](mailto:rachel.fletcher@ofgem.gov.uk)  
Direct Dial: 020 7901 7194

12 November 2008

cc: Simon Brooke (by email only)

Dear Colleague,

### **Decision in relation to modification proposal to modify Electricity North West Limited's charging methodology: 2009/001/1**

On 16 July 2008 ENW submitted a proposal<sup>1</sup> (2009.001.1) to the Gas and Electricity Markets Authority ("the Authority")<sup>2</sup> to modify its Use of System (UoS) charging methodology for its electricity distribution network.

This proposal introduces a number of changes across the charging methodology. ENW's modification proposal results in a substantial aggregate effect on certain end customer charges, including those to independent distribution network operators (IDNOs).

The proposal includes new IDNO-specific tariffs, new tariffs for embedded generation customers at High Voltage (HV) and Low Voltage (LV) and a number of additional changes to the Distribution Reinforcement Model (DRM). The proposed changes to the DRM include amendments to cost calculation and allocation within the model, including changes to how these costs are scaled to match allowed revenue.

On 13 August 2008 the Authority notified ENW of its decision to consult on their proposal. On 22 August 2008 the Authority published its consultation on ENW's proposal<sup>3</sup>.

Having carefully considered the proposals made by ENW and responses to our consultation we have decided **to veto** ENW's proposals.

This letter sets out ENW's proposal, the views of consultation respondents and the reasons for the Authority's decision.

#### *Background*

ENW has licence obligations<sup>4</sup> to have in place as of 1 April 2005 three charging statements: the statement of UoS charging methodology, the statement of UoS charges and the statement of connection charging methodology and connection charges. The UoS charging methodology outlines the method by which distribution UoS charges are calculated. ENW

<sup>1</sup> ENW's proposal can be found on the Ofgem website at:

<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=422&refer=Networks/ElecDist/Policy/DistChrgMods>

<sup>2</sup> Ofgem is the office of the Authority. The terms 'Ofgem' and 'the Authority' are used interchangeably in this letter.

<sup>3</sup> Our consultation can be found on our website at:

<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=498&refer=Networks/ElecDist/Policy/DistChrgMods>

<sup>4</sup> Standard licence condition 13.

has a requirement to keep the methodology under review and bring forward the proposals to modify the methodology that it considers better achieves the relevant licence objectives<sup>5</sup>.

### *ENW's Proposal*

A brief outline of ENW's proposal is provided in **Appendix 1**. For more detail consult their modification proposal report. ENW did not consult with industry prior to submitting their proposal to us.

### *Respondent's Views*

The Authority's consultation on ENW's proposal closed on 4 October 2008. A number of responses were received from industry which can be found on our website<sup>6</sup>. **Appendix 2** provides a summary of these responses.

### *The Authority's Decision*

In coming to our decision we have had to balance the improvements that this wide-ranging proposal achieves in terms of the relevant objectives, against the areas where we consider the proposal to be worse than the methodology ENW currently has in place.

We have considered this proposal against the licence objectives and wider statutory duties, and consider that on balance the proposal does not better meet the relevant licence objectives. We consider that certain elements of the proposal may better meet the licence objectives. However, the decision must be made on balance taking into account all aspects of the proposal. A more detailed explanation for our decision is set out below.

### IDNO Tariffs

ENW's proposal for IDNO tariffs has some benefits, specifically that:

- A domestic consumption profile is used instead of a commercial one which more closely reflects the cost incurred due to a downstream network;
- Capacity charges for domestic IDNO connections are removed which is more cost reflective. This is a key issue as currently IDNOs are unable to recover capacity charges from customers; and
- Some account is taken of the avoided costs in distributing electricity to the IDNO boundary rather than the end customer which notionally attempts to take account of costs of a downstream network.

However there are other aspects of this proposal which outweigh these benefits when assessed against the relevant objectives.

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<sup>5</sup> The relevant objectives for the UoS charging methodology, as contained in paragraph 13.3 of standard licence condition 13 of the licence are:

- (a) that compliance with the UoS charging methodology facilitates the discharge by the licensee of the obligations imposed on it under the Electricity Act 1989 and by this license;
- (b) that compliance with the UoS charging methodology facilitates competition in 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 UoS charging methodology results in changes which reflect, as far as is reasonably practicable (taking into account of implementation costs), the costs incurred by the licensee and its distribution business; and
- (d) that, so far as is consistent with sub-paragraphs (a), (b) and (c), the UoS charging methodology, as far as is practicable, properly takes account of developments in the licensee's distribution business.

<sup>6</sup> At the following link:

<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=498&refer=Networks/ElecDist/Policy/DistChrgMods>

ENW propose to introduce a restricted tariff for IDNOs serving domestic premises. The structure of the tariff includes a fixed charge, a day unit charge and night unit charge which they argue is more cost reflective. We have concerns with this approach because the day unit charge for the IDNO tariff in some cases is higher than the day unit rate the IDNO will be able to charge to its domestic customers on an unrestricted tariff.

We are concerned about the impact of mismatch of tariffs on an IDNO's ability to recover its costs which is supported by responses from IDNOs and WPD. Our analysis and the analysis contained in ENW's modification report indicates that where an IDNO is serving a customer on an unrestricted tariff the margins available fall by around twenty percent on larger sites<sup>7</sup>. This approach may distort or prevent competition in respect to domestic developments as it may foreclose IDNOs from competing and operating developments on an unrestricted tariff. We therefore consider the effect of this tariff will have on IDNOs may distort competition and therefore does not better achieve the requirement under SLC 13.3(b).

We note that other elements of the IDNO tariffs may also prevent competition. In particular, ENW do not offer a commercial IDNO tariff. ENW state that they do not have a mix of industrial and commercial IDNO connections and have not seen a growth in commercial IDNO connections. We note there are a small number of commercial developments and consider the absence of an IDNO commercial tariff may foreclose the development of IDNO commercial sites. This point is supported by responses by the IDNOs.

In addition, although ENW have tried to take account of avoided costs incurred via their banded approach we agree with WPD's response (see appendix 2) that there is not enough detail within the description of the method to fully understand the effects on IDNO charges. For this reason we are not able to confirm whether this element of the proposal better achieves SLC 13.3(b).

#### HV/LV Generator Tariffs

The Authority considers that the proposals for HV/LV generator tariffs represent an improvement in ENW's charging methodology and we welcome development in this area. We note that ENW's proposal attempts to recognise the benefits a distribution connected generator can provide and we welcome this approach to generator charging. ENW's proposal could result in negative charges to generators in some circumstances. While this may be cost reflective as it considers the benefits a generator may provide, ENW has not adequately justified some of the assumptions used to allocate benefits to generators. These concerns are also mentioned in WPD and SSE's responses to our consultation.

ENW make the assumption that generators with a load factor of greater than 50 percent receive a significantly larger negative charge than those with a load factor of less than 50 percent. This proposal may be more cost reflective and may better achieve the relevant objective SLC 13.3(c) on cost reflectivity. However, ENW do not justify these parameters in their modification report.

#### Changes to the DRM approach

ENW have proposed a significant number of changes to the DRM alongside the introduction of two new sets of tariffs for IDNOs and generators. We have found analysing the impacts of the different changes to the DRM and understanding their interactions to be problematic. The impacts are in some cases substantial<sup>8</sup>. Whilst ENW did provide tables quantifying the impact of components of the proposal a clear explanation of each of these impacts is not

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<sup>7</sup> This is based on the graphs contained in the consultation document which can be found on the website at: <http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=498&refer=Networks/ElecDist/Policy/DistChrgMods>

<sup>8</sup> These are documented in ENW's modification report tables 4.2.1 to 4.4.

provided. This has limited our ability to assess the cost reflectivity of the proposals under SLC 13.3 (c).

ENW propose to use data from the Regulatory Reporting Pack (RRP) to calculate the Operation and Maintenance (O&M) percentage. We do not consider this provides a forward looking indication of O&M spend. We expressed similar concerns regarding the cost reflectivity of the use of RRP data for calculating the O&M percentage in a previous decision letter for CE Electric's<sup>9</sup> DRM as well as in our letter on SP's G3 modification proposal concerning the widespread use of RRP data in setting HV/LV charges<sup>10</sup>.

ENW also proposed to reduce the network yardsticks for an amount typically recovered in connection charges and as a consequence alter the allocation of capacity charges between voltage levels. We are concerned that the reasons for this change in allocation are not sufficiently explained.

Similarly, ENW's changes to their service models are designed to better reflect the current connection boundary based on a survey of current projects. It has been difficult for us to assess the change to the UoS and connection charge boundary split as ENW has provided us with only limited analysis.

This is a substantial modification proposal. We note that ENW has not sufficiently justified its changes against underlying analysis. This has made the proposal hard for us to assess. As such we urged ENW to submit a separate modification report for each different element of their proposals. In our view this would have better indicated to both us and ENW's customers the full impact of each change and allowed us to make a decision against the relevant licence objectives on each element separately.

On balance we do not consider that the proposal better achieves the relevant objectives in accordance with the reasons set out above. We have decided to veto the modification to the UoS charging methodology statement.

Please contact Karron Baker on 0207 901 7350 or email [distributionpolicy@ofgem.gov.uk](mailto:distributionpolicy@ofgem.gov.uk) if you have any queries relating to issues raised in this letter.

Yours faithfully,



Rachel Fletcher

**Director, Distribution**

Signed on behalf of the Authority and authorised for that purpose by the Authority

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<sup>9</sup> This decision letter can be found on our website at:  
<http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgs/Documents1/15815-NEDL%20charging%20meth.pdf>

<sup>10</sup> Which can be found on our website at:  
<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=502&refer=Networks/ElecDist/Policy/DistChrgMods>

## Appendix 1 - ENW's proposal

ENW's proposal is very broad and can be broken into three main components: the introduction of new IDNO tariffs, new HV/LV generation tariffs and changes to the DRM. The impacts of each element are not mutually exclusive.

### IDNO Tariffs

ENW's proposal introduces 5 new IDNO-specific tariffs. These are calculated based on demand profiles resembling the profile of a domestic customer. At LV there are four tariffs each corresponding to a different distance of the IDNO connection boundary from the local LV substation of the DNO network. At HV level ENW propose to introduce a single tariff. IDNOs currently serving commercial premises will remain on their existing (LV MD NHH)<sup>11</sup> commercial tariff.

ENW propose to charge IDNOs serving domestic premises on the basis of a day/night unit charge. They suggest that the data of consumption patterns taken from IDNO meters indicates that as a network develops they reflect the consumption patterns of domestic customers where more consumption occurs during the day than the night. The day unit rates ENW propose for the new IDNO tariffs are higher than the domestic customer unit rates. ENW has not explained the rationale for this aspect of the proposal other than stating in their response to our consultation<sup>12</sup> that the use of a multi rate tariff will better reflect costs than a single rate tariff.

ENW do not propose to introduce a commercial IDNO charge, rather those IDNOs which are currently serving commercial premises will remain on the existing (LV MD NHH) commercial tariff. ENW state they have not seen a growth in IDNO connections serving commercial customers. In their response they stated they consider that not offering a commercial IDNO tariff will not hamper the development of commercial IDNO connections, as only three of fifty-five IDNO connections to ENW's network serve commercial customers.

ENW also state that they have identified additional avoided costs for IDNO customers in relation to billing and administration purposes and further to this they propose to cap the cost of manual billing processes at the lower level for automated billing.

ENW consider that the proposed changes to IDNO charges would result in UoS charges which more accurately represent its avoided network costs compared to the existing arrangements. They also consider that the proposal better achieves SLC 13.3(b) to ensure that the charging methodology does not restrict distort or prevent competition.

### HV/LV Generator Tariffs

ENW propose replacing the existing HV/LV generator tariffs they introduced in April 2008<sup>13</sup> with a new approach. The existing tariffs for HV/LV generation apply a reduced UoS tariff for those generators that do not trigger reinforcements to the network upon connection.

ENW have proposed to replace this approach by applying negative charges to generation, the degree of which depends upon the load factor of the generator. Those generators that have a load factor of more than 50% ENW will apply a coincidence factor of -0.7 to reflect the assumed increased coincidence of a generators export to the time of maximum demand on the system. For those generators with a load factor less than or equal to 50 percent ENW have proposed to apply a coincidence factor of -0.3. Generators with a higher load

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<sup>11</sup> This tariff is for connections at LV, based on a Maximum Demand (MD) tariff which is metered on a Non Half Hourly (NHH) basis.

<sup>12</sup> Which can be found on our website at:

<http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Documents1/ENW.pdf>

<sup>13</sup> The decision can be found on our website at:

<http://www.ofgem.gov.uk/Networks/ElecDist/Policy/DistChrgMods/Documents1/ENW%202008%20004%20decision%20letter.pdf>

factor will therefore receive a higher benefit as it is assumed they will offset more local demand.

ENW have stated that the use of average load factors is a pragmatic solution to having limited data on generation on which to base a negative charge. They suggest the analysis undertaken by them showed a strong correlation between the load factor and the coincidence factor. This analysis was not provided as part of the modification report.

#### Changes to the DRM approach

ENW propose to introduce a number changes to their DRM which they state enable greater transparency of the allocation of costs. These changes include changes to the costs, their allocation and the revenue reconciliation (scaling of these costs) to allowed revenue.

ENW propose to change the Operation and Maintenance (O&M) percentage applied to uplift network costs at each voltage level to account for O&M costs. They propose to change the percentage applied by deriving it from the percentage applied in the revenue reporting pack, where currently it is a fixed percentage. ENW state this approach is more cost reflective as it provides an audit trail to how the costs are calculated. ENW have also proposed that the network level costs are adjusted down for an amount that is typically recovered in connection charges. ENW state that this amount will vary depending upon the type of connection and is calculated on an average basis from a survey of connection projects.

ENW have stated as a consequence of network level costs being adjusted for an amount recovered in connection charges, those tariffs which include an availability charge then this will include 100 percent of the next voltage level an increase from 20 percent. ENW have stated this is changed because costs up to the voltage level above are included in connection charges and reflect the capacity requested. ENW also state that the proposal takes account of costs typically recovered through connection charges. The reasons for this are not fully explained by ENW.

Further changes to the DRM proposed by ENW include separating business rates into network business rates and metering business rates. ENW have proposed to change the allocation of these costs. ENW have proposed to allocate network business rates with National Grid (NGET) transmission connection charges at the 132kV voltage level and charge these on £/kW/year. This is done by dividing costs by actual system maximum demand. ENW suggest that in the longer term costs are marginal and vary with maximum demand. Metering business rates remain allocated on pence per kW basis and grouped with the newly separately identified cost, licence fees.

ENW have also proposed changes to their service models for each customer group. These models estimate the cost of asset replacement for the service cable for each customer group in the future. ENW propose that these costs include the minimum cost of connection and the O&M costs for each customer group.

ENW also proposed to introduce changes to how all costs within the DRM are matched to allowed revenue. Currently once all costs are calculated by the DRM they are subject to a negative fixed percentage adder. ENW has proposed to alter this to a fixed adder, but to only scale NGET rates whilst all other costs are passed through. ENW have suggested this is more cost reflective as it maintains the marginal cost signals for the network level costs within the tariff.

## Appendix 2 – Respondents' views

We invited responses to ENW's proposal in our consultation document. This appendix summarises responses.

### IDNO Tariffs

The IDNOs were not supportive of the new IDNO tariffs proposed by ENW arguing that the use of a restricted tariff was discriminatory. Western Power Distribution (WPD) also support the concerns about the split between the day and night tariff as they suggest it could cause distortions when the end tariff is applied. Scottish and Southern Energy (SSE) were also unsupportive of the tariff structure suggesting that restricted IDNO tariffs reduce headroom between the all the way tariff for the customer and the IDNO boundary tariff.

Respondents were also unsupportive of the application of the tariffs. SSE stated they perceived the absence of a commercial IDNO tariff as a weakness of the proposal. They suggested a domestic only IDNO tariff will not correctly allocate costs imposed by non-domestic connections, whereas WPD argue that it is appropriate to use the existing commercial tariff for IDNO sites as their characteristics and servicing costs will not differ to industrial customers.

IDNOs were not supportive of this either, suggesting that the absence of a commercial IDNO tariff would prevent the development of commercial IDNO connections. They also went further to add that the application of capacity charges in the standard industrial and commercial tariff is not cost reflective as it does not take account of capacity used unlike other approaches which charge capacity monthly on maximum demand. The approach taken by ENW to avoided costs to IDNOs was not widely supported either.

WPD suggest that ENW do not provide enough information in their modification report to understand the effects. The IDNOs suggested that the approach to avoided costs is too narrow and neither is the report clear on what is included within the avoided costs. IDNOs also stated that the complexity of the proposal with regard to other changes to the DRM created difficulties in identifying changes to IDNO tariffs resulting from avoided costs above other changes to the methodology.

### HV/LV Generator Tariffs

Respondents recognised that the approach to charging for HV and LV generation was broadly pragmatic, however the Mathematical and Computer Modelling (MCM) response pointed out that fault levels are not symmetrical with demand and create an additional cost that should be accounted for. Also whilst MCM suggest the general use of coincidence data could be appropriate, WPD suggest that actual coincidence data could have been used.

SSE go further to state that they do not support the approach taken by ENW and question whether there is sufficient evidence in the modification report to justify their approach. WPD also state that no evidence is provided for why generators with greater than 50 percent load factor are assigned a lower charge than those below 50 percent.

### Changes to the DRM approach

Responses to the changes to the DRM were mixed. Respondents expressed concerns over the method to scaling. MCM argued a single fixed adder could lead to major distortions in charge rate between voltage levels, explaining those connecting at higher voltage levels pay more. The IDNOs also support this concern. WPD also supported this and explained that given ENW apply negative scaling, this implies that prices increase at higher voltage levels and decrease at lower voltage levels. WPD state that negative scaling implies that the marginal charge is greater than the average charge this may suggest there is double counting in the model. SSE also question the approach to revenue reconciliation and

expressed concern over whether the model was cost reflective and suggest it may create price distortions.

WPD also had some concerns over the proposed service models and the changes to availability charges. WPD state that the need to change availability charges are not sufficiently explained in the report and neither are the calculations used to attribute the minimum cost of connection and the proportion attributed to customers.

#### General

Given some parties anticipated that a common charging methodology would be adopted in via our collective licence modification proposal in October a number of responses requested that the proposal be withdrawn to allow the development of a the common methodology across DNOs. Those who expressed these views included Haven Power, Energetics and Centrica.

ENW also responded providing views on the questions posed in the consultation. Where ENW have responded to provide additional clarity to their original modification report this has been documented in appendix 1.