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Dear Rachel,

ENW Response to Consultation on Boundary Metering

Thank you for your consultation on boundary metering. We have responded in detail to each of the specific questions raised, however the consultation has missed some fundamental points of principle; specifically, a recognition of the various measurement options available and the responsibility for providing these. We address these issues below.

The key questions that need to be addressed prior to the specific questions on boundary metering are:

1) Do the energy flows at the boundary between a DNO and an IDNO need to be measured?

2) If yes, who should fund the measurement of the boundary flows?

3) What options are available to measure the boundary flow?

4) Who is responsible for the provision of the various options?

1) Do the energy flows at the boundary between a DNO and an IDNO need to be measured?

It is clear that boundary flows need to be measured as accurately as possible. IDNO charges to suppliers are based on metered volumes, which in most cases is a statutory requirement. DNOs therefore need an accurate measurement of the flow of energy across the boundary, with a sufficient level of accuracy, in order to charge the IDNO correctly for use of its upstream network. To do otherwise could lead to a significant mismatch in the charges that an IDNO can recover through all the way charges and the boundary charges levied by the DNO, resulting in exactly the issues the industry has been trying to resolve. Your statement that the main reason for measuring the boundary flow is to allow the DNO to measure losses is incorrect. Whilst this is important, the main reason for measurement is due to the commercial boundary that is created when IDNO networks are connected. This measurement is not needed on DNO only networks as there is no commercial boundary. The consultation paper does not properly distinguish between the need for boundary flow measurement and boundary metering, which is merely one method of undertaking boundary flow measurement.

2) If yes, who should fund the measurement of the boundary flows?

Ofgem's previously stated position in its July 2005 decision document, that these additional costs should be borne by an IDNO, remains correct. To do otherwise would result in costs being borne by end users, with the resulting economic inefficiency and the effective cross-subsidy of IDNO network extensions. We find it unbelievable that Ofgem, as an economic regulator, could countenance such an approach. Whatever primary means of measurement of boundary flows is used, this must be funded by the IDNO. The cost of this measurement relative to IDNO charges is irrelevant and it is for IDNOs to drive this cost down.

3) What options are available to measure the boundary flow?

There are realistically two options currently available to measure boundary flows as widely discussed: boundary meters or the aggregation of settlement metering data from meters installed and read by suppliers for end users connected to the IDNO network. As measurement is necessary, one of these approaches must be adopted and funded by the IDNOs. Your comments on boundary metering are premature in the absence of consideration of an alternative approach.

4) Who is responsible for the provision of the various options?

The DNOs can arrange for the provision of boundary metering and data collection. However metering is a fully competitive activity and IDNOs are able to source these services from a number of alternative service providers to get the most efficient cost. In fact a number of DNOs, including ENW, no longer have a metering capability. With regard to using settlement metering, it is the IDNOs who have access to this data and it has been for the IDNOs to develop this solution. In the four years since the publication of the last Ofgem decision on this issue, the IDNOs have made little progress in implementing their preferred solution, either collectively or individually, using the data they have and have focussed mainly on how it might work conceptually.

We believe that an alternative to boundary metering, as proposed by ENW in the DNO/IDNO working groups and included in the CDCM, is viable and should be implemented through the DCUSA process. Once this solution is in place, boundary metering should no longer be necessary for boundary charging. We do not believe that reconciliation with boundary metering is necessary. DNOs should, however, be able to fit boundary meters and use the data from these meters to report losses if they wish.

In summary, we do not support the 'minded to' position with regard to boundary metering where the Ofgem consultation has failed to even discuss the fundamental issue of boundary flow measurement. Requiring DNOs to fund boundary flow measurement will lead to

inefficient IDNO networks being constructed and to end users and DNOs providing a subsidy for the additional costs that the IDNOs impose.

We would support a decision along the following lines which more correctly reflects the real issues, which the consultation paper has completely overlooked:-

- Until a settlement metering approach is developed and operational, boundary metering should continue to be installed and paid for by IDNOs;

- IDNOs to be free to appoint or change service providers for boundary metering services;

- The alternative settlement metering approach to be developed. Whilst this may be initially funded by DNOs, these costs should then be recovered through charges to IDNOs, possibly on a per MPAN basis, to avoid cross-subsidy and economic inefficiency;

- Following the implementation of a settlement metering approach, boundary metering may continue to be installed by either a DNO or IDNO but paid for by the party requesting it. DNOs should have a right to require that boundary metering is installed. DNOs may use the data for reporting losses rather than the settlement data provided by IDNOs; and

- Following the implementation of a settlement metering approach and where boundary metering continues to be installed by the DNO there will be no reconciliation between readings for the purpose of DNO/ IDNO boundary charges, as such reconciliation adds complexity and DNOs existing charging arrangements do not allow for such reconciliation through mechanisms such as the Group Correction Factor.

The above approach provides a sensible solution for moving this issue forward and recognises that the main reason for alternatives to boundary metering not being progressed is the slow progress of IDNOs in making the data they have available to DNOs.

I have attached more detailed responses to the consultation questions but it should be recognised that your consultation does not cover the key issue of boundary flow measurement and this represents a major flaw in your consultation process.

Yours sincerely,

Digitally signed by Paul Bircham
Reason: I am approving this document
Date: 2009.12.11 17:41:09 Z

Paul Bircham
Regulation Director

Copy to Mark Askew

Response to Consultation Questions

CHAPTER: Two

Question 1: Have we accurately understood the annual charges for boundary metering levied by DNOs in Table 1.1?

No. Our response to Ofgem's data request clearly stated that whilst HH metering is generally installed this is not an actual requirement, though most meters of the type installed generally have this capability included. HH metering is not in fact the issue; it is the method and frequency of data collection that has the main impact on costs.

Question 2: Why are there such large variations in the charges levied by DNOs for boundary metering?

This is irrelevant. Ofgem have initiated major reforms of metering over the years to make this a fully competitive service. IDNOs are active members of the industry and are fully aware of this and the metering is almost always installed in IDNO controlled premises. If IDNOs are not happy with the charges they are paying for metering they should take more advantage of the competitive metering market Ofgem have facilitated. This questioning implies an attempt by Ofgem to re-regulate activities that it has made competitive, simply because IDNOs have made no attempt to control their own costs by seeking competitive quotations or by developing and implementing alternative solutions.

Question 3: To what extent do IDNOs provide the boundary meter and data retrieval services themselves and what barriers prevent them from doing so on a wider scale, given the evidence we have that this may reduce their costs?

Since 2007 we have not provided metering services. Currently 45% of IDNO sites in ENW's area have (or will have) metering provided by or arranged by the IDNO.

There are no barriers. This is a fully competitive activity and some DNOs, including ENW, have to subcontract when asked to provide these services. The metering is almost always installed in IDNO controlled premises.

Question 4: Are we correct in assessing the level of additional costs required to accommodate the necessary technical and isolation equipment required at the ownership boundary between networks?

It is not clear in the consultation paper what costs have been assumed for the installation of the interface equipment which IDNOs are legally obliged to provide, so it is not possible to answer this question. As stated in the consultation there is a legal and safety requirement to provide isolation equipment at the boundary so it is not clear what additional equipment is being referred to here.

Question 5: Have we correctly understood the additional costs associated with accommodating boundary metering at sites?

We believe these are overstated and are in the region of £500 for LV and £300 for HV. We believe that the additional costs in the consultation do not appear to cover the situation where the isolation equipment at the boundary is provided by a link box. There would be additional costs in this situation for the portion of the link box containing the CT and potential connections as well as the multicore connection to the mini-pillar housing the meter. The costs of this equipment are not available to DNOs as the IDNOs purchase and install it.

We do not believe the assertion that there are additional legal fees associated with the installation of metering, over and above the costs needed to install the interface equipment.

CHAPTER: Three

Question 1: Have we captured all the arguments for and against boundary metering, and the reasons why flows should be measured across the boundary?

This question highlights the problem with this consultation and the failure to differentiate between the need to measure the flows across the DNO/ IDNO boundary and the means of doing it, which are separate issues.

Our comments against your table of arguments for and against boundary metering

Arguments for boundary metering	*Arguments against boundary metering*
The control and identification of losses across both networks to allow accurate reporting of losses and reward or penalty under the losses incentive.	*The DNO would not install metering if they operated the network and charges for end customers would be based on settlement. There should not be an additional cost through further metering just because there is another distributor supplying the end customer.*
There is clearly a requirement to measure flows at the boundary. If the DNO had provided the network it would have access to settlement data to determine this flow. For IDNO connected networks, DNOs have no access to this data and to date, IDNOs have not made this data available. Boundary metering is therefore essential until such time as the settlement data that IDNOs possess is made available to DNOs.	
The calculation of agreed charges between networks to enable accurate billing of IDNOs by DNOs. This benefits the IDNO as well as DNO in ensuring the correct amount of DUoS revenue is recovered. It also saves other consumers bearing the costs of any error in billing	*Boundary meters result in a cost which if borne by the IDNO makes them less competitive with the DNO who would not have to pay for metering if they themselves operated the network.*
Again the measurement of boundary flows is required to ensure there is not a large mismatch between boundary charges and end users' charges. The use of settlement data would be better for this purpose but IDNOs have not made this available, which has meant that boundary metering has been, to date, the only viable option. The cost of measuring boundary flow is an additional requirement and must be funded by the IDNO to ensure economic efficiency and avoid end users eventually subsidising the IDNOs.	
To facilitate the development of embedded generation. Embedded generation has specific network benefits and these benefits are best recorded by precise measurement of electrical flows at the boundary.	*The boundary meter takes up valuable room on the development. Developers are less likely to opt for an IDNO if it requires additional equipment on site.*
As above.	
To help IDNOs with the identification of unmetered supplies on their network.	*End consumers bills are based on profile data or estimates which get reconciled over time. Using a boundary meter to bill an IDNO, leaves the IDNO exposed to any errors of incorrect profiling assumptions.*
We agree that using settlement meters for charging is better to avoid the issues raised, but IDNOs have not made this data available to DNOs. Boundary metering can assist IDNOs in determining unrecorded units on their network and thereby allow them to increase their revenues. DNOs may benefit in losses reporting. The benefits of boundary metering therefore do not all flow to DNOs.	

To supply IDNOs with data identifying the potential abstraction of electricity (theft). DNOs should not have to bear the costs of theft on IDNO networks and IDNOs need an incentive to ensure that they are proactive in the identification and resolution of theft on their network.	*The cost of a boundary meter may foreclose IDNOs from competing in the market for new developments with a small number of end customers.*
The benefits of identifying unrecorded units flow to both DNOs and IDNOs as described above. The cost of measuring boundary flows must be borne by IDNOs. IDNOs are best placed to bring these costs down to their lowest level. If IDNOs cannot then compete for developments with small numbers of end users then this is because it is not economically efficient for them to do so and Ofgem should not introduce cross-subsidies, at the ultimate expense of end customers, merely to provide business opportunities to IDNOs.	

Question 2: Have we identified all the reasonable alternatives to uniform half hourly boundary metering which can measure flows of electricity between DNO and IDNO networks?

As we stated in the response to Q1 above, there is no requirement for universal half hourly boundary metering in ENW. We do not know what the situation is in other DNOs. We have considered the options in a lot of detail and we believe that the portfolio approach using aggregated settlement data is the most appropriate method for charging for use of the upstream network in the future, when IDNOs make this information available. DNOs should have the option and the right to install boundary metering, at their own cost, to more accurately report losses.

Question 3: We welcome views on whether our illustrative analysis is an accurate picture of the costs and benefits of boundary metering?

We do not believe that this analysis has any bearing on the real issue. IDNOs must ensure settlement data is available before boundary metering is removed. Once settlement data is available on the same basis that a DNO would have received it had it provided the network itself, then it is for the DNO to determine its benefit case for the installation of boundary metering. DNOs should have the right to install metering subject to covering any reasonable additional cost incurred by an IDNO to facilitate this. Such costs should be subject to determination.

Question 4: Why would IDNO networks incur losses which are 7-10% higher than those on similar DNO networks?

This has no relevance on the decision.

Question 5: We welcome respondents' views on the conclusions which should be drawn from this analysis.

No conclusions should be drawn from the analysis as the decision as to whether boundary metering, funded by the IDNO, should be fitted is driven by whether the IDNOs make the end customer metering data available to DNOs.

CHAPTER: Four

Question 1: Do you agree with our minded to view that DNOs are best placed to decide the most appropriate arrangements for measuring electrical flows between DNOs and IDNOs, and that by bearing the costs of the arrangements they choose, more economical arrangements will be chosen?

No, this is completely illogical. IDNOs can arrange for meters to be fitted through the competitive metering arrangements introduced by Ofgem of which they are fully aware. They are also in possession of end customer metering data to which DNOs have no access. Therefore, IDNOs have the best incentive of ensuring the most economical approach to measuring electrical flows between DNOs and IDNOs and the lack of progress in this area over the past four years is disappointing.

Question 2: Are there any practical difficulties that respondents can identify with implementing our minded to position?

Yes, it will make the adoption of the settlement based approach more difficult to progress. IDNOs have had a clear incentive to adopt such approaches over the past four years. The proposal for DNOs to subsidise IDNOs by covering the costs of metering will provide even less incentive for them to take any positive action.

Question 3: We welcome views on the proposed ways forward for the development, procurement and governance of a portfolio billing system.

We believe that the procurement and governance of the portfolio billing system should be through DCUSA/ DCUSA Ltd.