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Gary Keane  
Distribution Policy Analyst  
Regulation and Financial Affairs  
Office of Gas and Electricity Markets  
9 Millbank  
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Our ref: AKP/SE

Dear Gary,

### **Electricity Distribution Losses: Initial Proposals**

I am writing to provide Aquila's views in respect of Ofgem's initial proposals for distribution losses, published in June 2003.

The document seeks to provide Distribution Network Operators (DNOs) with adequate incentives to manage electricity losses on their networks efficiently. We support this objective and agree that the current arrangements are insufficient for encouraging DNOs to consider losses in their investment and operational decisions.

Our main comments are:

- The modified losses incentive proposed in the paper is an improvement on the existing arrangements and is supported by Aquila
- The period used for setting the fixed benchmark should exclude data between 1998 and 2002 due to the volatility of settlements data during that period
- We disagree with the proposed adjustment for reported losses, to include the impact of distributed generation
- An input based scheme should be implemented if additional incentives are subsequently required

More detailed comments on the issues raised in this document are set out below.

# 1 Estimating losses on distribution networks

## 1.1 Ongoing work to reduce distortions

Losses are calculated as the difference between electricity entering the distribution network and electricity being delivered to individual customers. Whilst the former is known with some certainty, the reliability of the consumption data is more questionable. Ofgem recognises that this can distort any estimate and discusses the present incentives for DNOs to remove these distortions.

### 1.1.1 Settlement data

Distortions arising from timing errors are assumed by Ofgem to cancel each other out if considered over a long enough period, although the document accepts that these errors may be significant. Moreover Ofgem does not believe that the potential rewards from investing in technical loss reduction will be affected by such a distortion.

We do not accept this view. The Settlement process has built within it an acceptable level of tolerance. These measurement errors however, are outside the control of distributors, and therefore create a more uncertain environment in which to place financial incentives on distributors to reduce losses. We nevertheless support the Improving Customer Transfer (ICT) project, designed to enable customers to transfer from one supplier to another in a more effective manner, and hope this helps to improve the accuracy of metered consumption.

### 1.1.2 Unmetered supplies

As acknowledged in the document, a number of DNOs including Aquila have been investing to update and improve inventories of unmetered supplies. Consequently we believe the incentives do not need to be increased to reduce this particular distortion.

### 1.1.3 Theft and illegal abstraction

DNOs also in our view have adequate incentives to undertake revenue protection activity. Whilst suppliers also have an obligation to prevent the theft and abstraction of electricity, we believe that the incentives placed upon them are not sufficient for them to undertake their duties. We therefore support Ofgem's project to review the responsibilities of the industry in this area, particularly whether DNOs should be obliged to provide a revenue protection service to suppliers.

## 1.2 Treatment of distributed generation in the losses incentive term of the price control

At present, the effect on losses caused by distributed generation is eliminated by including in the reported figure an estimate of losses that would have occurred had the generator not displaced electricity entering at the Grid Supply Point (GSP).

Ofgem proposes to remove this adjustment, and hence create incentives for distributors to seek out generators to help reduce losses on the system.

We disagree with this proposal. In our experience, distributors have very limited influence over the siting of distributed generation. Many schemes, particularly certain renewable technologies, could increase losses on the network. The implication of this proposal is to increase risk for distributors in a number of ways including:

- Generators connecting to the network who subsequently increase losses on the system
- Generators that initially connect and contribute to lower losses, but then take the commercial decision at some stage in the future to disconnect

We firmly believe that distributors should not be exposed to factors that are largely outside of their control, and therefore cannot support this proposed change to the calculation of reported losses.

## **2 Incentive design**

Ofgem assesses a number of options for improving the incentives on reducing losses:

- Three output based incentive schemes
  - Modifying the current mechanism
  - NGC style incentive
  - DNOs purchasing losses
- Input based scheme (possibly with minimum technical standards)

We support your initial conclusion that a modification to the existing 10 year moving average output based incentive is preferable to either an NGC style incentive or the purchasing of losses.

Ofgem's proposal seeks to provide more balanced incentives between capex and losses. We agree that the design of the incentive, which incorporates a fixed benchmark for each company, could avoid perverse incentives in this trade-off, which currently arise under the moving average target. However a number of issues will need to be addressed to ensure the operation of a more balanced framework.

### **2.1.1 Derivation of the benchmark**

It is proposed that a 10 year historic average, which may include the 2002/03 reporting year, will set the fixed benchmark for DPCR 4. However this encapsulates the period 1998-2002 when settlement data was very volatile. This could significantly distort the losses benchmark unless adjustments are made for

this factor. We believe this issue can best be addressed by either excluding, or normalising for, the early settlement years from the benchmark.

### 2.1.2 Balancing incentives between capex and losses

It is important that the benefits provided to shareholders from a losses incentive scheme reflects the costs of actively investing in low loss assets. As the benefit to cost ratio is small, we welcome the implication of these proposals, which potentially increases the benefits to shareholders of reducing losses, from 30% to in excess of 40%. However this suggests that the benefits shareholders accrue from the rolling capex efficiency incentive will need to be increased from the present 38% to ensure these two incentives are balanced.

## 2.2 Incorporation of losses expenditure in the Regulatory Asset Value (RAV)

Investment plans that are agreed with Ofgem, and which may include plans for reducing losses are currently allowed in the RAV. These proposals also provide additional flexibility, by opening up the possibility that investment unforeseen at the price control review, for further reducing losses, could be funded in two parts. For the first number of years, companies would be remunerated via the losses incentive. Ofgem have provided a commitment that efficient expenditure would then enter the RAV, in line with the treatment of other capex.

We welcome this initiative; however clear and transparent rules are required to provide certainty to distributors on the criteria that will be used to determine 'efficient' investment. Furthermore, without addressing the measurement distortions caused in particular by the settlement process, the risk of undertaking such investment may be too great, and hence this additional flexibility will not achieve its desired objective.

## 2.3 Future incentives

Ofgem suggest that incentives could be further strengthened in the future by requiring distributors to purchase losses. We do not agree with this assertion. Distributors must not become energy traders. Furthermore, there are significant costs attached to implementing this scheme as recognised by the Regulatory Impact Assessment (RIA) set out in the document. Instead we see merit in developing an input-based scheme for strengthening incentives further, which the RIA suggests is "broadly efficient" and "low risk" and has the advantage of bypassing the concerns related to measurement distortions.

# 3 Valuing the benefits of reducing losses

## 3.1 Estimating the marginal cost of losses

The document sets out a range of estimates for valuing losses, ranging from 2.2p/kWh to 4.7p/kWh. Ofgem will be consulting on the appropriate value that should be ascribed to losses over the coming months, for inclusion within the June

2004 Initial Proposals. Whilst Ofgem should acknowledge the importance of the environmental costs created by losses, it needs to balance this against the fact that losses arise largely as a result of factors that are outside the control of distributors. This needs to be reflected in setting the incentive rate, which should limit a DNO's exposure to this output.

### 3.2 Frequency of revision of the estimate

We support Ofgem's view that the incentive rate should only be revised as part of each distribution price control, as to do otherwise over a much shorter time frame would lead to an unacceptable level of uncertainty for distributors.

We look forward to continuing to work with Ofgem over the coming months on the design of the incentive scheme, and in valuing the benefit of losses, but if, in the meantime, you have any questions then please do not hesitate to call.

Yours sincerely

Andy Phelps  
Regulation Director