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Dear Mark

Structure of Electricity Distribution Charges – Consultation on longer term framework

We welcome the opportunity to provide comments on the above document and have attached an appendix of detailed points, which address the various specific issues raised in the document. However, we set out below the main themes of our response.

Ofgem promotion of changes in charge structure

We do not believe that Ofgem has powers to force particular changes in DNO charging methodology, once the initial charging methodology statements have been approved. Nonetheless, in this consultation document it is unquestionably the case that Ofgem is proposing major reform of distribution charge structure rather than the DNOs. Effectively, Ofgem is stretching its powers in the electricity distribution licence, which relate to charge setting methodologies, to become involved in the creation of specific types of charging models and specific types of charges. The statutory criteria for the production of impact assessments include "significant impact on market participants in the gas or electricity sectors". We are strongly of the view, as we discuss below, that Ofgem's proposed reforms would have a significant impact on generators, suppliers and the DNOs themselves. Therefore, a full regulatory impact assessment (RIA) including cost/benefit analysis, is required before Ofgem proceeds to press for the changes outlined in the consultation document.

We would also contrast the lack of an RIA for the current distribution charges project with the introduction of GB transmission prices for BETTA, which was preceded by an RIA. For this significant industry project, impact assessments and cost/benefit analyses were carried out in the early stages of the project, so that the justification for the project had been agreed before the significant resources required to bring about project delivery were committed. It would appear to us that a necessary pre-requisite for an impact assessment on changes to the charge structure would be the production of indicative charges and indeed, that these would also be necessary to allow a fully informed consultation with interested parties. In our view, a necessary first step

would be to consider the costs and benefits of asking the DNOs to produce such information, as this would inevitably involve them in significant work.

Against this background, we have three fundamental objections to Ofgem's proposed reforms to distribution use of system (DUoS) charges:

- Firstly, the interference with property rights that is entailed in the proposed introduction of charging for existing generators, who have made investments against a different background of cost liability;

- Secondly, the instability in charging that is being created by Ofgem's continuing involvement in promoting changes to network charge structures;

- Thirdly, Ofgem's specific emphasis on unstable long-run marginal cost (LRMC) models to derive locational signals in use of system charges.

We discuss each of these in turn below.

<u>Introduction of Charges for Existing Generation</u>
This is a significant issue for us and we believe there are grounds on which such an approach could be legally challenged, based on European law. Generators who have previously connected to the distribution system on the basis of a "deep" connection charge would be adversely affected in terms of exposure to an additional ongoing and potentially volatile annual cost, which could not have been foreseen at the time that the investment was made. We also believe that renewable generators would be particularly adversely affected, contrary to European law and to UK government policy to encourage such generation. Our arguments are discussed in outline below.

Ofgem's proposals to extend generator distribution use of system charges (GDUoS) charges to existing generators will penalise generators who have already connected to the distribution networks, either before privatisation or since then, on the basis of a long-standing position that generators pay all the required costs of connection to a network through a one-off payment for that connection. Such generators might have made different investment decisions if the introduction of GDUoS had been signaled. It is simply not acceptable for Ofgem to push for the introduction of a revised approach to charging which is intended to provide a new set of economic signals to prospective new generators but which entails financial penalties on generators already connected to the distribution network.

There is a body of UK and, increasingly, European law which relates to and protects the property rights of natural and legal persons. For example, Article 1 of the First Protocol of the European Convention if Human Rights (ECHR) states that

> *"Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law."*

Regulatory action which has the effect of diminishing the value of a business is recognised as capable of constituting a breach of the above by the European Court of Human Rights as noted in

the following case: *Tre Traktorer Aktiebolag -v- Sweden* (1989) 13 EHRR 309. It is evident that an additional material cost imposed on an electricity generating business will affect its profitability and therefore its value. In our view, GDUoS charges will be material and, depending on the methodology used to derive charges, could be significantly so.

A further legal principle is that of proportionality, which could be summarised by considering the following two-stage question:

- Can the objective of the measure be achieved by means which are less interfering of an individual's rights? and
- Does the measure have an excessive effect on the interests of affected persons, bearing in mind the decision-maker's task of striking a fair balance between his aim and the affected person's Convention rights?

Considering the objectives of Ofgem's proposal to introduce GDUoS, these appear to be captured by the intention that distributed generation should pay its "fair share" of costs, covering both connection and use of system elements. In our view, and recognising the wider benefits that distributed, and particularly renewable, generation will bring to Great Britain, this objective could be sufficiently met, for new generators, through the combination of the newly established "shallowish" connection boundary plus simple GDUoS charges. For existing generators who have paid connection charges on a "deep" basis, it would be a disproportionate action for Ofgem to impose GDUoS charges, thus affecting their property rights, in order to achieve an objective that it is possible to achieve by other means which do not have this effect.

There is considerable uncertainty over what level of revenue requirement GDUoS charges would have to cover under Ofgem's proposals. This, in itself, introduces uncertainties and risks to any generation liable to pay such charges. However, it will bear disproportionately on renewable generation, which may be inconsistent with the requirements of the Renewables Directive. In our view, the application of GDUoS charging to existing generators will discriminate against electricity from renewable sources generally and particularly against generation in peripheral areas.

<u>Instability in Charging</u>

Ofgem is creating considerable uncertainty and potential instability in charging through its continuing drive to develop use of system charges in particular ways. In our view, a fundamental principle for use of system charges should be to maintain stability and predictability for those who pay the charges. We are therefore concerned about the number of projects in which Ofgem is involved that involve wholesale change to the structure of use of system charges. Overall, these changes do not affect total revenue to the network operators, but they tend to drive network operator costs in design and implementation of changes as well as creating costs, uncertainty and changes in use of system liability for many industry participants. It is important to us that price disturbance in use of system charges to suppliers, their customers and to generators from any source is minimised and we believe that Ofgem should also have this objective.

There is no segment of energy network charges that is not currently being reviewed at Ofgem's behest. Transmission charging in electricity has been continuously under review for a number of years and, unusually for the electricity industry, is still so controversial that it is subject to legal

challenge. The auction approach to transmission entry charging in gas has not delivered appropriate signals for investment and Ofgem has noted in its annual plan that the current incentive structure in this area is to be reviewed to see if it should be modified and/or simplified. There is widespread opposition in the gas industry to the extension of the auction approach to transmission exit capacity. Ofgem's policies on shallow connection charging and concomitant complexity in use of system charging is demonstrably failing to achieve either its intentions or, importantly, the confidence and support of the market.

The reforms proposed in the consultation paper on electricity distribution charging extend similar policies to those used at transmission level into distribution. We are strongly of the view that there should be no further review of charge structures at distribution level until Ofgem has concluded its review of what is appropriate at transmission level.

Locational Signals

There are many references (3.24, 3.29, 3.46, 3.66, 3.69, 4.5) in the document to the desirability of locational signals within distribution use of system (DUoS) charges based on LRMC models. This policy has not been adequately justified. We do not accept that the criticism of DNOs' existing charge structure model that it "does not take account of locational factors" (3.24) is valid. It is not necessary for use of system charges to do this in our view. The academic papers published recently on Ofgem's website as part of the structure of charges review demonstrate that the academics have different views of the appropriate approach to use of system charges. For example, two out of the three papers actually support a "deep connection" approach. It is a subject where there is no one "right answer" and a requirement for much subjective judgment about what is "best".

Against this background, Ofgem alone appears to be attempting to direct the development of "locational signals". We know of no distribution system user who is actively seeking to have locational signals in DUoS charges whereas suppliers would be significantly against such a development due to implications for billing and information system requirements and disturbance to prices. Changes to supplier billing systems, and to the information systems that support them, could run into millions of pounds across the industry. Quite apart from these additional costs which would have to be passed through to customers, we expect that the consequences of such a move would adversely affect competition in the supply market. In our view, there would be an increase in the perception of regulatory risk in the supply market and thus a higher barrier to entry for any new supplier. There might also be an adverse effect on competition between suppliers for those customers with "high" use of system charges. We expect that these considerations would lead to a risk of legal challenge if DNOs proceed to try to implement this aspect of Ofgem's proposed reforms, which also, of course, brings risks to the DNOs themselves.

We note that Ofgem is aware of the practical billing constraints in introducing "locational charges on a nodal basis" (3.68) and also notes that the radial nature of distribution systems makes even zonal approaches likely to be unstable. We have grave concerns over the stability of the zonal charging approach at transmission level, let alone on distribution systems, and do not agree that this or any other type of locational variation should be pursued for distribution systems. There are obviously cost implications for the DNOs in amending their own billing and support systems to cater for this sort of charging development and the justification has yet to be demonstrated.

There are further considerations. If there was to be a move away from the averaging of costs inherent in most DUoS tariffs, this is likely to result in a substantial increase in charges to rural customers. In our view, this would not be consistent with the Authority's duty to have regard to the interests of individuals residing in rural areas. In addition, there is a condition in the standard supply licences requiring suppliers of domestic customers not to discriminate geographically in pricing across the north of Scotland. This has recently been augmented by an obligation on distribution and transmission licensees not to discriminate geographically in the charges they make to suppliers for use of the network systems for the purpose of supplying domestic premises in the north of Scotland.

For these reasons, we continue to believe that it is vital to keep use of system charges averaged over DNO areas whilst reasonable locational signals for system users are retained in their connection charge. No case has been made and no impact assessment produced for making DUoS charges locational at any level of the distribution network.

Development of Charging Methodologies by DNOs

As a final point, we note that the introduction of the interim arrangements and the new distribution price control settlement introduced two significant changes in charging: the shallowish connection boundary and a generation-related revenue stream enabling charges to be made to generators connecting under these new arrangements. In our view, it would be worthwhile for the DNOs to take stock of these developments and assess how they are working in practice rather than being required to consider further specific reforms at this point in time. The licence conditions envisage that DNOs will bring forward modifications to charging methodologies and they should, in our view, be allowed to control this process. As changes in methodology are contemplated, they should be carried out in a precautionary and incremental manner, with due regard to the time required to develop and assess potential alternatives.

Summary

We advocate that:

- Ofgem carries our a full impact assessment of its proposals before any further work is done;
- Ofgem also finalises its use of system approach at transmission levels before significant development of distribution charge structures is contemplated;
- Existing generators are not brought within framework of use of system charges;
- DNOs be allowed to develop their methodologies as they see fit, as envisaged in the relevant licence conditions.

I hope the above and the attached comments adequately outline our concern with the direction of this project. I look forward to discussing the matter with you further at the video conference arranged for later this week.

Yours sincerely

Rob McDonald
Director of Regulation

Structure of Electricity Distribution Charges
Response to Detail of Consultation on the Longer Term Framework

The following are our comments on the specific points raised in the above consultation.

Chapter 3 – Use of System Charging Models

This chapter discusses the general approach taken by DNOs in their current charging models and moves on to discuss other types of approach.

Charging Principles

In line with comments we have made previously, we do not support an approach which gives undue weight to cost-reflectivity of DUoS charges at the expense of simplicity and predictability in charging. We agree with the comment that transparency and predictability facilitate competition and believe the converse is true in that complexity and volatility in DUoS charges will adversely affect competition by forming a barrier to entry into the supply and generation markets.

Discussion of Current Approaches

We do not accept the theme of this chapter that current approaches are deficient because they do not provide locational variation. Existing DuoS models have served the supply market well to date in providing a stable set of charges for each DNO area. Significant changes in charges have generally resulted only from step-changes in allowable revenue at the start of price review periods.

While "forward-looking costs" are generally agreed to be an economically efficient way of designing charges, this approach is not without problems. Any required move away from DNOs' current approaches would have to be fully cost/benefit justified in advance.

Connection Security Standards

The consultation document raises this issue at paragraph 3.55 and it is worth noting that, in the north of Scotland a relaxation to planning standards is enshrined in the licence, such that economic assessments can be made of appropriate security requirements. Generators in this area have almost always taken the option for single circuit security when faced with the full cost of connection as alternative, second circuit security arrangements are generally prohibitive. We would therefore expect single circuit generation security to continue to be the norm, even though generators may not see the full cost of the alternative reinforcement costs through connection charging arrangements. Against this background, however, it would be worth considering how generation security could be developed further.

The question of connection security for generators also raises the issue of the current lack of clarity in the interaction between distribution and transmission-related network security. It would be possible for transmission network incidents or constraints to affect distribution system availability and this would have to be factored into future security arrangements. Of more immediate concern is the lack of clarity faced by distribution-connected generation in the north of Scotland on the rights that parties to different forms of connection agreement (Bellas and Begas) have in the event of capacity limitations on the transmission system. Clearly, a generator's effect on flows on the transmission system is independent of the contract chosen. However, the effect of this contractual choice on the generator's rights and the DNO's obligations

needs to be clarified, particularly since the DNO will need to back off in its agreement with the generator any obligations imposed by NGC in the DNO's connection agreement for the Grid Supply Point.

Specific Models Advocated by the Academics

We believe that the models discussed are generally too complex for the production of workable DUoS charges, although we agree with Turvey that whatever location signal is needed should be made via connection charges. It is also interesting to note Ofgem's observation that in Europe, only Sweden levies GDUoS charges, suggesting a further background reason why any development of these charges should be carried out with caution, as little precedent is available.

Views Invited

In response to specific query at paragraph 3.97, we do not believe that an ICRP model could or should be adopted for DNO charging.

More generally, we do not believe that the case has been made for the further development of DNO charging methodologies. Thus, we do not believe it is appropriate to implement fully "economic" models to any extent. In our view, the current capabilities of industry billing and information systems (both those of DNOs and of suppliers) severely constrain the implementation of the sorts of models discussed in this chapter of Ofgem's paper.

Chapter 4 – Detailed Charging Issues

- Connection Charging Boundary

  Having just introduced the "shallowish" boundary, it is appropriate for this to be allowed to bed in, with "fine-tuning" of the apportionment rules as experience of the initial implementation is gained. However, we fundamentally disagree with Ofgem's statement at 4.5 that "the longer term arrangement should seek to provide cost reflective locational signals which may allow for a "shallow" connection charging boundary."

  As discussed in our cover letter, we do not consider that it is appropriate for use of system methodologies to attempt to capture locational signals. To the extent that such signals are considered appropriate, the connection charge provides a unique opportunity to allow a user to take into account the locational signal in making a siting decision. One academic view quoted is that "high" connection charges for generation may serve as a barrier to entry. In our view, so also would the prospect of complex and volatile use of system charges.

- Charge Application Issues

  On tariff structures, we agree there may be merit in a more converged approach to setting charges across the DNO groups. The development of such an approach should be led by the DNOs themselves and, where changes in any particular DNO's charges are felt to be necessary, these should only be introduced gradually to minimise the price disturbance seen by suppliers and hence customers. In our view, it has not been helpful to suppliers for certain DNOs to have been allowed to implement revised charging models in 2005/06 without phasing of significant changes.

  In this section, Ofgem also raises the question of access rights conferred by payment of use

of system charges and this was discussed at the May workshop. Our understanding is that customers are paying for an evergreen right to use the system as DNOs have a statutory obligation to connect and to maintain the connection. Thus, provided the appropriate use of system charges are being paid, the user will be sure of their capacity entitlement on an evergreen basis. We note that Ofgem refers to the possibility of longer (than annual) products for use of system. While we accept there may be interest in this from some users, it does not appear to sit well with the licence obligation for a DNO to ensure that its charges comply with those in the annual charging statement.

- Line Loss Factors (LLFs)
  We are not convinced of the viewpoint put forward by some academics that losses may be a significant determinant of investment costs. It will be for DNOs, individually and collectively to consider this issue as part of the development of their methodologies.

  In relation to the questions raised on line loss factor methodologies in Annex B of the document, we have the following comments.

  It would appear sensible for there to be a convergence between DNOs (and also for IDNOs) on how LLFs are calculated and for these methodologies to form part of the use of system charging methodology statements in due course. We are aware that a number of DNOs already use a standard industry model developed by EA Technology and this may be an appropriate starting point for other DNOs and IDNOs, although there may be good reason for individual DNOs and IDNOs to adapt this as appropriate to their own networks.

  Appropriate methodologies are likely to consider the overall relationship between units entering distribution systems and those leaving the system and hence implicitly include all categories of losses including theft. It is not likely that exactly the same methodology will be appropriate in all DNO areas. We consider that it is appropriate, where there is an element of aggregating and averaging in order to produce tariffs, for standard and averaged LLFs to apply to such tariff groupings. It would not, in our view, be practicable for large numbers of site specific LLFs to be created and managed.

- Scaling Prices to Revenues
  SSE's approach to scaling tariff model outputs is to apply the same percentage increment as set out in our charging methodology statement. We would wish to maintain this simple approach and any different approach would lead to disturbance in tariffs.

- Transition Arrangements
  As noted above, one of our significant concerns in relation to changes to use of system charging methodologies is the potential for disturbances to prices affecting suppliers and their customers. This is a major issue and DNOs should be allowed to plan gradual changes to their charges, as well as flagging up the expected overall disturbance.

- Generator Charging Issues
  Again, this is one of our major concerns with the consultation document as discussed in the cover letter.

- Distributed Generation (DG) and Deferred Expenditure
  While there will be some circumstances where suitable DG allow reinforcement to be deferred, this is likely to be a very small number of circumstances at present. This is due to the low penetration of DG on the parts of the networks most used by demand customers. The new P2/6 planning standard allows the contribution from such generation to be taken into account, but the price control treatment of other contractual measures that the DNOs have to put in place to secure the generation capacity is uncertain. In our view, such circumstances are best treated bilaterally as they arise, rather than an attempt being made to incorporate this complexity into use of system charging structures.

  Similarly, we believe that DG may be able to provide other system services to DNOs. In our view, these should also be remunerated via bilateral contracts.

- Reactive Power Charges
  We agree that reactive power charging should be considered as part of the development of the DNOs' charging methodologies. In particular, a different approach may be required for generator power factors compared to that for demand. In our view, there is a need to consider payments to generators that provide reactive support to the distribution network and to provide a mechanism for the DNOs to recover these costs.

- Development Process Issues
  We note the comments about the interaction between transmission and distribution charging and Ofgem's intention to consult on the subject of transmission costs being caused by distribution-connected generators. As we have commented before, 132kV connected generators in Scotland already pay for using the transmission system whereas equivalent generation connected at 132kV in England and Wales pays nothing. We continue to believe that this is discriminatory, although we do not believe that the solution to this is to introduce transmission charges (or higher GDUoS charges) at 132kV in England and Wales. Below 132kV, generators are considered as negative demand and the net demand is used to develop appropriate transmission charges and load flow models. It would seem appropriate to continue with this approach.

  On the subject of providing charging models to users, we are not convinced that making models available will provide the transparency that users seek. This is because, with the 5 year horizon of distribution price control reviews, there is likely to be a significant change in DNOs' allowable revenue, and hence prices, at the start of each new price control period. Such an externally driven change is not capable of being predicted by the tariff models but there may be a perception by users that the recent price changes due to the start of the new price control period in April 2005, for example, would have been signalled by tariff models had these been available. While such one-off price changes at the start of price reviews will continue to be inevitable, we firmly believe that users should be able to expect a high degree of stability in charges from year to year within the price control period. Where the regulatory framework is able to deliver this, there may be less user interest in the charging models than Ofgem expects. However, if there is a proven demand for access to the models, we would be happy to facilitate that, subject to control of the corresponding costs.

- IDNO Charges and Methodologies
  In our view, the arrangements for DNO charging of IDNO networks embedded in their distribution services areas are very clear and transparent. The DNO's published use of system charges, as applicable to the characteristics of the IDNO connection, are applied.

  We agree that IDNOs should publish charging methodology statements and are not aware that, to date, any IDNO has yet done so. We are concerned to hear, in fact, that very simplistic "estimated annual consumption" type charges are being proposed in at least one case. We understand that these quantities would be set by the IDNO, which would then ignore industry settlement dataflows on consumption updated by meter readings as these become available. This obviously raises concerns about the accuracy of the information that would be used to bill suppliers and their customers and the breaking away from the industry-standard approach that will lead to increased costs and reconciliation difficulties for suppliers.

Chapter 5 – Impact Assessment
We have addressed the question of impact assessments in our cover letter. The following additional points are made in response to matters raised by Ofgem in this chapter.

DNO Joint Working / Common Charging Methodology
We believe DNOs should continue to monitor and develop use of system charging methodologies as envisaged in the licence. This approach would not preclude differences in the detailed methodology in different DNO areas.

Timing of implementation of longer term arrangements
As we have made clear in other parts of this response, we consider that the case has yet to be made for large-scale development of DNO charging methodologies. Any changes that DNOs consider necessary to existing methodologies should be introduced in a gradual manner. Specific deadlines mandated by Ofgem are only appropriate to projects put in place and run by Ofgem after justification through full regulatory impact assessment. Only once this framework has been established do implementation timescales become relevant.

For those DNOs with conditional approvals of their DUoS charging methodologies requiring to be resolved by 1 April 2006, there will be an inevitable emphasis on meeting these requirements before any further developments can be considered.

Interaction with other projects
We agree that the lead up to the next distribution price review, which would be expected to start around summer 2008, might interact with the development of the charging structure, as might development of revised governance arrangements

Chapter 6 – Implementation
This chapter discusses the approvals process for changes to DNO methodologies, as well as touching on the required consultation process, the role of the Implementation Steering Group (ISG) and distribution commercial governance.

We support the comments on the prime role of the DNOs, rather than Ofgem itself, in taking forward the development of charging methodologies. In our view, the ISG has served a useful purpose to date in providing a focus for discussion between DNOs, Ofgem and other interested parties on charge structure development to inform the formal consultation process that has been carried out to date by Ofgem. We consider that this type of group, albeit with slightly different terms of reference, could continue to be useful as DNOs develop charging methodologies going forward. We do not believe that further industry groups would be necessary. Also, we agree that the Distribution Commercial Forum (DCF) covers different areas and that its work should continue to exclude charging matters. However, we recognise that there are some areas of DCF work that are relevant to the structure of charges, such as the contractual framework for billing of charges, and agree with Ofgem that each group needs to be aware of progress in the other group.