

Our Ref 50.14/PAM  
Your Ref

Donna Rossall  
Networks - Distribution  
Office of Gas and Electricity Markets  
9 Millbank  
London  
SW1P 3GE



Date 13 September 2004

Dear Donna,

**REGULATION OF INDEPENDENT ELECTRICITY DISTRIBUTION**  
**NETWORK OPERATORS**

I am writing to you, on behalf of EDF Energy, regarding the July 2004 Consultation Paper on the above subject.

Whilst supporting the principle that competition can be beneficial where customers have real choice, we are not convinced that embedded distribution networks represent a good example of this process. Choice is limited to that point in time when the connection is requested and will be primarily driven by the developer seeking to optimise the connection charges incurred. Subsequent connectees, new tenants and house owners will be bound by that decision and will have to live with the consequences of a choice made by others. In fact customers may not even appreciate they are connected to an independent network until something goes wrong or they suffer poor service.

We therefore agree with the focus through this consultation on ensuring that the right balance of ongoing regulatory treatment is in place to protect customers from these localised natural monopolies. This should aim at protecting “captive” customers of the embedded network from over-charging or from poor service and provide an appropriate balance to the Competition in Connection model for the original connection.

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We have therefore developed the following potential scenario as a means of considering, proposing and testing the overall solution:

1. The developer seeks the lowest connection charge.
2. The embedded network operator is tempted to defer a higher proportion of the connection costs, winning the business on the expectation that he can recover these costs in the future.
3. New assets incur lower maintenance costs. The embedded DNO initially has a strong business model in the early years of those assets, but in later years, maintenance costs increase.
4. If the embedded network was to suffer a catastrophic failure to a primary substation on its network, for example, and the embedded DNO did not have sufficient cash or expertise to maintain it, it is possible that it would be forced into receivership.
5. Connected customers would be affected. No party currently has an obligation “of last resort” to adopt the assets in this scenario and the changing regulatory regime may not be sufficient to financially incentivise anyone to take over the assets. Until asset transfer has been agreed, inevitable delays would occur and customers could remain off supply.
6. In the meantime, customers of the incumbent DNO have also been disadvantaged. Network resilience is affected and costs have increased. Unpaid use of system charges, previously levied on the embedded DNO have also been passed on to them.

The outcome of this consultation is therefore of significant impact and risk to customers of the respective networks and the incumbent DNO itself.

For the embedded network operator, the long run effects associated with recovering / retaining sufficient funds to maintain the network could be catastrophic and could lead to financial failure of the enterprise.

The above example is only one scenario, albeit an important one. What it does illustrate is that whilst these concerns, which are shared with other DNOs, have been raised in various industry meetings, we are still awaiting Ofgem’s thoughts on the issues raised.

We believe this consultation should address the outcome of such a train of events, in particular:

- Where the obligation of “distributor of last resort” rests;
- Ofgem’s thinking on the financial incentives that may be available to DNOs willing to take on the potentially significant liabilities associated with such failed networks;
- Confirmation of full “pass through” of the defaulting company's use of system charges at the interface point;
- The consequences of adverse publicity and criticism on the incumbent DNO in whose service area the failed network resides.

EDF Energy also has some specific concerns with regard to the interaction of embedded networks and a licence holder's obligation to discharge its statutory obligation to develop and maintain an efficient, economical and co-ordinated electricity distribution system. Two specific examples have recently arisen where wider ongoing economic benefits, through increased co-ordination and/or operation of the network, could be lost or costs increased (due to the duplication of assets) through the provision of a point of connection to an embedded and separately owned network. These costs do not always materialise at the point of connection but may later appear, and be recovered, as a part of the ongoing use of system costs. As such, they may not therefore form part of the initial overall cost/benefit analysis of whether an embedded network would provide the best ongoing economic solution over the life of the assets, as these benefits would be lost to the customers in general. It is, therefore, important to ensure that all independent network operators have an obligation within their licence to ensure that the wider benefit to the customer over the life of the asset is demonstrated. EDF Energy does not believe that the best way of resolving these issues is through individual determinations as has been separately suggested by Ofgem and therefore believes that the consultation should be widened to specifically include this material issue.

In summary, we have concluded that:

- Consistent and robust regulation is clearly needed to protect captive customers of licensed embedded networks from excessive charges, poor service or the risk of financial collapse of the network operator, during the normal life of those assets
- A de-minimus rule of 300,000 connected MPANs, whereby above this threshold the licence holder is subject to the same price control review framework as existing DNOs
- Below that threshold, all ongoing use of system charges should be capped to the published tariffs of the incumbent DNO
- Customers should not be disadvantaged through a third party decision resulting in their connection to an embedded network to which Ofgem has granted a lower standard of response to Quality of Supply and Standards of Performance measures than to the incumbent operator's network
- Adequate financial controls are required to ensure that the incumbent DNO has adequate access to monies, over the normal lifetime of the assets to ensure their adequate upkeep and security of supply

The attachment to this letter provides further thoughts on the above and other potential risk areas and suggests appropriate mitigating actions that Ofgem may choose to take.

I hope our comments will be helpful in furthering debate on this review. In particular, there may be value in organising a follow-up meeting to pick up on some of the topics raised in the consultation and this response.

In the meantime, if you would like to discuss the content of our response, in whole or in part, please do not hesitate to contact me.

Yours sincerely,

**Peter Merrick**  
Head of Regulatory Affairs  
Networks Branch

## **ATTACHMENT**

### **REGULATION OF INDEPENDENT ELECTRICITY DISTRIBUTION NETWORK OPERATORS**

#### **EDF ENERGY RESPONSE TO OFGEM'S JULY 2004 PAPER:**

##### **A. Introduction**

We are reassured that Ofgem has now indicated, through this consultation, a willingness to review a number of specific issues associated with the regulation of licensed embedded distribution network operators and their effective interoperability with existing DNOs and other affected industry parties.

However, we remain concerned that despite previous questions raised in this area, Ofgem has continued to limit the scope of this and earlier consultations to quite narrow and defined topics. This was further amplified at a recent DNO / Ofgem workshop, held on 17 August. Despite the renewed visibility of many related issues, there is still no specific view from Ofgem or apparent willingness yet to facilitate a more embracing, industry wide process to collectively resolve these points in a more inclusive framework.

For example, one of our greatest concerns from a strategic network development perspective is any adverse impact on our ability to develop our networks in a coordinated and economical way, as required by our obligations.

If we find that changes to the regulatory regime substantially stimulate large numbers of islanded embedded networks then, not only will this tend to reduce overall utilisation levels and increase losses but it may also largely preclude the same level of interconnections across our network. This can be an important contribution to overall resilience and security and it may also affect the level of supply performance we have been able to achieve and recent reaction times in responding to severe weather events.

The consultation document often refers to the principal duty and function of the Authority to protect the interests of consumers. However no further information is presented, as to how this objective should be interpreted, tested and demonstrated through this process. In order to advance debate and define suitable regulatory solutions, we have therefore concluded that it may be helpful to consider the question from a customer viewpoint.

Whilst customers can change suppliers at relatively short notice and, if they choose, appoint their own meter operator other than potentially at the time of requesting a connection, they cannot choose their electricity distributor. Equally, even if customers were to proactively choose their preferred network operator at the time of connection, they would undoubtedly have little forethought or visibility of the impact this decision would have on their future use of system charges. An enduring form of regulation, both of DNOs and embedded DNOs is therefore clearly a necessity. Customers need confidence that Ofgem has put in place an adequate regime to ensure that both the quality of the service and the charges paid for that service from an embedded DNO are no worse than that

required through the existing regulation of the incumbent DNO. EDF Energy's objective through this response will therefore focus, as a minimum on achieving this objective.

In paragraph 2.15, the document suggests that the expansion of embedded networks may have an impact on competition in metering. We agree with Ofgem. That is why we argued forcefully that embedded DNOs should hold the same responsibilities to offer metering services for customers connected to their network. Ofgem appeared at that time to ignore many of the arguments raised. As incumbent DNOs will continue to hold these obligations within their service areas, it is difficult to understand why embedded networks should not have them too. We would expect Ofgem to clarify this point.

We recognise that a framework is required for the licensed DNO companies operating outside of their normal service areas. Our initial thinking suggests that in view of the overall dominant size of each of the existing licence holders, it may be more appropriate that where an "out of area" network is required to operate under a licence rather than qualify through exemption, the affected assets should be treated as a part of the "in area" regulatory asset base and incorporated into the relevant price control mechanism.

The remainder of our response focuses on the implications and recommended solutions necessary to accommodate new licensed companies who may develop embedded networks within our service areas.

## **B. Contractual Arrangements**

### **Use of System Charging**

Whilst today, the electricity industry model normally assumes that a DNO will charge the supplier assigned to the metering point for transportation of electricity to or from that exit point, it is by no means the only available solution. This is exemplified by some embedded generation customers who appear to be considering taking use of system services direct from the DNO. The key principle here is therefore that a DNO will charge for all energy either entering or leaving boundary points on its distribution network. In previous consultations, which Ofgem supported, electricity suppliers demanded that they should only receive one use of system invoice per connected customer to which they were appointed and that this would be provided by the distributor who owns the metering point (as signified by the MPAN). Industry parties have expended considerable monies to develop / support this requirement. In fact, when the benefits of P62 (the BSC Modification Proposal that implemented these trading arrangements) were questioned by the Panel, the Ofgem representative was quite forceful in informing the Panel that they had to approve P62 because it was consequential to Primary Legislation. Existing parties would therefore require to be held financially neutral should Ofgem now decide (if indeed it has the powers) on such a fundamental change, such as alignment with the gas model, at this late stage.

## **Metering**

In the consultation Ofgem reminds interested parties that it rejected P70, suggesting it was due to constraints imposed by the BSC Applicable Objectives and despite Panel members' views that the change proposed through P70 should have been incorporated into a more holistic P62 change.

As the sponsor of P70 it is important to remind Ofgem why we raised that proposal. We understood the imposition of a meter at the boundary point was not required for settlements. However we believed then as we still believe today, that metering costs could be minimised by adopting the same standards, meters and processes that had already been developed by industry, rather than incurring additional costs by developing new standards for relatively low volumes of take up. Adoption of P70 would have minimised costs, whilst allowing parties to size the metering requirement at the boundary as appropriate. However we might conclude that Ofgem appeared not to consider the broader benefits associated with this Change Proposal.

EDF Energy continues to hold the view that installation of suitable metering equipment at the boundary is a prerequisite to the provision of a connection to our networks.

The consultation raises the debate on metering, but masks the industry's underlying concern over protection / means of isolation at the boundary point. The ESQC Regulations, amongst other legislation, requires distributors to ensure their equipment is constructed, installed and protected to, amongst other obligations, prevent interruption of supply. Establishment of a point of isolation / protection at the boundary point will protect both up-stream assets and other connected customers to the DNO's network, from down-stream faults on the embedded DNO's network. It also provides an opportunity to establish a position to house suitable metering requirements.

Further justification for the normal provision of metering equipment at entry and exit points to the DNO network, is that it not only enables the DNO to, as Ofgem indicates, calculate use of system charges and losses, but also to meet its primary obligation to develop an efficient network by more fully understanding the nature of such load flows.

## **Quality of Supply**

Ofgem's current proposals in respect of effective management of embedded DNO's quality of supply are of concern to EDF Energy and will do little to satisfy customers that they might expect to receive an adequate service from being connected to such networks.

Established / aged networks are more likely to exhibit higher numbers of interruptions and customer minutes lost. They will also incur higher maintenance levels and costs (discussed later in this response). New networks should expect to offer better performance levels. As new embedded DNOs become established, the average age of incumbent DNO networks will increase and underlying performance will reduce. Quality of supply targets (including

financial incentives) tend to be used by Ofgem as short term tools in influencing good performance and behaviour. It would be inappropriate for Ofgem not to create a level playing field with existing DNOs, by not adhering to exacting (and higher, in the short term) standards / incentives for embedded DNOs. We understand that this requirement would create an additional workload for Ofgem in deriving the target values, which simple reporting cannot do, but this would not be a good reason not to proceed in this way.

The same argument exists in respect of Standards of Performance. There appears to be no justifiable reason why Ofgem should allow distortion of the market by setting any different standards on embedded DNOs under the Statutory Instrument than are applied to DNOs. Should Ofgem be minded to relax the obligations placed on embedded DNOs, there is a further possibility that this action will have the effect of distorting or restricting competition in supply. Suppliers may be less willing to supply customers on this network, where distribution services are of a lower standard, as this may damage their own brand.

### **Other Contractual / Regulatory Issues**

DNOs, supported through the ENA, held a useful workshop with Ofgem on 17 August. At that meeting it became evident that there remained a significant number of other areas of concern, requiring resolution. It is therefore imperative that Ofgem does not continue to take only the defined / narrow outlook as described in this consultation and fully embraces all of the other relevant points raised in developing a national workable solution to support the efficient and coordinated entry of licensed embedded networks.

EDF Energy believes that there would be merit in incumbent and embedded network operators jointly developing a common, combined Connection and Use of System Agreement under the guidance of Ofgem. There are a number of national standard templates in circulation that could be used to reduce the development time of this agreement. In the meantime, we will continue to develop the connection arrangements necessary to define the commercial, operational and legal relationship between EDF Energy and any prospective embedded DNO, including the provision of relevant information that we may require to meet all of our licence and other obligations.

We are also concerned that embedded DNOs could develop networks and then seek to persuade / require the incumbent DNO to adopt only those assets that are either non profitable and / or present the embedded DNO with operational, technical or process difficulties. It is therefore imperative that Ofgem ensures that notwithstanding any financial protection required through the licence, that the embedded DNO must also ensure and demonstrate that it has all the necessary technical capabilities, resources and contracts in place to provide repair and maintenance services, notice of planned interruptions, Network Control and most importantly emergency response for the entirety of that network.



## **C. Charging Arrangements**

We are reassured, within the context of this consultation that Ofgem is now ready to consider and review some aspects of the longer term regulatory framework for embedded DNOs. We hope this will provide both the appropriate level of protection to customers and the right financial signals to prospective embedded DNOs in the funding they will be required to commit to in their development of sustainable network infrastructures.

However, we need the right balance. For example, in paragraph 5.7 of the consultation document, Ofgem introduces the principle that charging arrangements by the embedded DNO should strike the right balance between cost reflectivity and simplicity. This is no different from the requirements placed on the incumbent DNO through the recent modifications to the SLC 4 suite of obligations and we would expect the embedded DNO to set out the methodology on which their prices have been prepared in the same way as incumbent DNOs. On the assumption that these conditions are mirrored on the embedded DNO, we see that no additional / related conditions are required.

As to charging methodology and publication of charges however, customers clearly need to be protected from the consequences of excessive connection and / or use of system charges. Before considering the benefits and suitability of the proposed options for longer term charging arrangements for embedded DNOs it is important to set / agree the key principles that should be used in setting them. We therefore propose the following principles:

### **1. Customer protection and transparency.**

As previously identified in this response, connected customers will not be able to change distributors in the way in which they can change suppliers. Whilst in other markets it has been argued that non domestic customers may have greater experience and resources available to negotiate better supply arrangements, these are lost where no choice is available. Therefore, other than potentially new EHV customers, major retail chains or distributed generation, who may all have some degree of choice as to where to locate, the longer term charging arrangements will need to protect the majority of customers. A particular risk today for primarily non-domestic licensed networks is the prospect that the embedded DNO will offer the developer a low connection charge to win the business, knowing that he can recover any out of pocket expenses from ongoing, unconstrained, use of system charges.

It is also important to recognise that embedded networks may exhibit materially different customer mixes from the more mature and predictable incumbent DNO, so each customer class of the embedded DNO will require adequate protection, as it is unlikely that any other form of overall regulation will be sufficiently flexible to deal with this volatility.

The requirement to publish charges will ensure that customers can compare rates, if they choose to, on an embedded network to the equivalent of the incumbent DNO. Customers could test that Ofgem had adequately protected their interests if the embedded DNO charge was no greater than the incumbent

DNO. This transparency would be compromised if Ofgem was minded to adopt the gas model for electricity.

## **2. Equalised treatment relative to the incumbent DNO.**

The embedded DNO should not be more adversely treated than the incumbent DNO, but equally the incumbent DNO would be concerned if Ofgem were minded to treat the embedded DNO more favourably.

Incumbent DNOs are currently regulated in terms of maximum allowed revenue. This is set on a five year basis and therefore the predictability of long term revenue streams for the DNO is limited to this period. Fairness would not be demonstrated if Ofgem was to provide embedded DNOs with any greater clarity.

In the first bullet point under paragraph 5.11, Ofgem suggests that embedded DNOs face some uncertainty in predicting long term revenue streams if it cannot predict the incumbent DNO charges over the long term and if the existing price constraints faced by it were to continue. In taking services from the incumbent DNO, the embedded DNO will always face these costs, irrespective of the form of the price regulation. It is difficult to see why they should receive any greater favour than for example suppliers, taking the same services. Suppliers have built forecast costing models in setting their retail prices and predicting profit levels. It is difficult to understand why embedded DNOs cannot build equivalent models.

We understand that if an embedded DNO's revenue is closely linked to the incumbent's published tariffs then predicting profit levels over the five year period of the incumbent DNO price control period may create some uncertainty. However, recognising the amount of information Ofgem places into the public domain this should not be seen as any more of a constraint than if the embedded DNO was subjected to the same form of regulatory price control as the incumbent DNO. With this option, the embedded DNO will also of course avoid the immense administrative costs and management focus associated with any price control review.

## **3. Sufficient funding to sustain an efficient and enduring network.**

We must firstly appreciate that if an embedded DNO were to be placed into receivership, there is no obligation on any other DNO to adopt the assets. In addition, the adopting DNO would not be willing to adopt the assets unless the regulatory treatment was clear, including that any purchase price required / agreed with the administrator could be placed into the DNO regulatory asset base.

The more material risk is that the embedded DNO may have taken the profits, whilst network assets were new and maintenance costs low and entered receivership when the assets require greater maintenance. It is therefore evident that this consultation cannot develop a regulatory solution in isolation for the embedded DNO without also clarifying the environment for other DNOs,

who at that critical time, may be willing to consider adoption of the assets, thereby ensuring that customers can continue to receive a supply.

### **Proposed Solution**

1. It is evident that with the existence of an embedded DNO, a de-minimus rule needs to be set as to when a licensed DNO is of a size requiring full participation in the normal price review process which would lead to the setting of a price controlled, revenue. It also seems appropriate that once an embedded DNO is of a defined size, the benefits to customers and Ofgem of including them in this process outweighs the cost and management attention. Past experience seems to support the argument that MPAN count acts as a good proxy of size. Ofgem's suggestion in the consultation of a level at which different treatment is warranted appears sensible. We would propose a threshold of 300k equating to approximately 1% of the national market as a pragmatic level.
2. For smaller sized licensed embedded DNOs, the solution needs to be simpler, more transparent in its application and the primary objective must be that customers connected to this network are not disadvantaged, when compared to the treatment they would otherwise receive from the incumbent DNO. Prices should therefore continue to be capped to the incumbent DNO published charges but extended to all customer groups.
3. The remaining risk to be resolved is to ensure that the embedded DNO has sufficient funds available over the lifetime of the assets. This will prevent the embedded DNO from being tempted to take profits in early years and enter receivership "when the going gets tough". We are not convinced that the other financial controls being considered by Ofgem are, by themselves, sufficient to mitigate this risk. The only sensible control that we can envisage that may be sufficient to enable appropriate safeguards would comprise the following.

The embedded DNO would be required to set up a fully Ofgem audited and controlled Escrow type account, receiving contributions at an agreed and reducing scale for "young" assets, in order to fund their maintenance in later years. The embedded DNO would only be entitled to draw on the account as permitted by Ofgem. Equally, should the embedded DNO still place itself into receivership, the account would not be available to the administrator, but would pass to the party agreeing to adopt the assets.

In conclusion, we do not believe the other options suggested by Ofgem are viable, practical or give adequate forms of control / customer protection.

### **D. Financial Ring Fencing**

We agree with Ofgem's view that in respect of licensed DNOs (6.3) that all customers should be afforded the same level of protection whether the network is operated by the incumbent DNO or the embedded DNO. We have supported Ofgem's position in this response of the early points raised in the consultation and the same arguments apply equally to financial ring fencing.

As there is currently no certainty or obligation on DNOs to adopt network assets of a third party, there are also compelling reasons to consider more stringent financial controls to protect customers. Our response earlier recognised the significant risks associated with the maintenance cost profile and its effect on the embedded DNO profit and loss account.

Clear and demonstrable measures are required from Ofgem to prevent an embedded DNO from pocketing the profit in early years of the asset life and not returning these monies for later maintenance costs. On financial ring fencing, we have therefore concluded that there are no obvious grounds for Ofgem a) taking risks that customers may be disconnected if the embedded DNO goes into default and b) granting embedded DNOs a competitive advantage over the incumbent DNO. It is therefore imperative that the embedded DNO is required to maintain the same minimum level of credit rating as the incumbent DNO and to provide the same obligations and detail of regulatory accounts. It may be that at some point in the future when greater experience and information is available some modification to these arrangements may be appropriate. However in the meantime, the consequence of embedded DNO failure to connected customers would seem to preclude Ofgem from adopting a more lenient position at this time.

This response also seeks to highlight the risks incurred by DNOs through being required to offer use of system services to the embedded DNO. We therefore require Ofgem's absolute confirmation that we are entitled to treat them in the same manner as suppliers taking similar services. We will require the same credit cover provisions and the ability to pass through any un-recovered charges, in the situation of default. It is concerning that customers connected to our networks will in this instance be unfairly treated relative to those connected to the embedded network, but you will understand we have a responsibility to protect the financial position of our business.

**EDF Energy**

**September 2004**