



Providers of specialist cost solutions  
in electricity supply and distribution

Mr Colin Green  
Head of Distribution Policy  
Distribution & Financial Affairs  
Office of Gas & Electricity Markets  
9 Millbank  
London  
SW1P 3GE

**CoCal Limited**  
262 High Road  
Trimley St Martin  
Felixstowe  
IP11 0RG

8 August 2003

Dear Mr Green

**Response to Structure of electricity distribution charges: Initial conclusions Document**

I would first like to explain who we are and what we do. CoCal brings together many years experience in electricity charges (supply, use of system and connection) where individuals have had responsibility for:

- Setting current DUoS and connection charging arrangements (introduced after privatisation) for a public electricity supplier;
- Regulatory advice to a PES for supply and distribution price control reviews; and
- Setting prices in international electricity markets, including use of system and connections.

A main area of our work is helping utility customers (mainly electricity, but also gas and water) obtain fair charges. All too often we find that electricity customers in particular are being overcharged for a variety of reasons, e.g. too high installation and other engineering related costs, misapplication of tariff and connection charging arrangements and regulations placed on utilities.

We support Ofgem's views about the need for cost reflectivity, simplicity, ease of implementation, transparency and predictability since we believe they are key to establishing a fair and equitable charging regime. However, from a customer perspective, we do not see how some of your proposals will be beneficial. Moreover, we see some as not being equitable:

- Between customer connection groups;
- Between existing customers and those that are newly connected; and
- Any compensatory price control arrangements in favour of DNOs due to changes in connection charge components (i.e. the removal of TSA and O&M) is likely to be detrimental to competition and secure windfall revenue for DNOs.

Our views on the above are more fully explained in sections 1 to 3 of the attachment. We also cover EHV DUoS charges, 'GUoS' charges and tradeable access rights in sections 3 and 4.

We would have wished to enter the debate on distribution charges earlier but hope you find our comments helpful.

Yours sincerely

Adrian Callaby  
Director

## **1. TSA and O&M Charges in Connection**

Since the value of TSAs is greater than O&M charges, abandoning TSA and O&M components within connection charges will:

- Dilute locational signals;
- Distort the present balance of charges across the different categories of demand connections; and
- Create a distortion in charges between demand and generation connections (without appropriate provisions in DUoS and any new GUoS charges).

### TSA

TSA is an important element of connection charges. It is linked to the expected DUoS income over the assumed life of the connection and helps ensure that costs of newly provided connection assets are not paid for again through the tariff.

In many instances, TSAs have reduced over recent years against a background of substantial increases in connection charges. This is anomalous because if network costs have risen (as reflected in higher connection charges) then the network costs included within DUoS price setting will be higher also. TSAs are derived from the network costs within the DUoS pricing framework to the extent that the new connection provides the assets but are already covered within the DUoS charge. It follows, therefore, that TSAs should have increased in value to reflect the higher network costs being charged.

For example, a new housing development will typically require an HV extension, substation and LV mains (and services that are customer specific, fully chargeable and recognised as such in DUoS) to be installed and fully paid by the developer. Since the industry has common DUoS charges for different customer categories, the charges do not differentiate between existing or newly connected customers. DUoS charges assume that the whole of the network is already in place. For newly connected customers where network is being provided for the first time and funded by the developer, this means that connection assets would be paid for twice (once through the connection charge and again through the on-going DUoS charge) without a compensating adjustment. This is achieved through the TSA.

The removal of TSA (under appropriate DUoS costing arrangements which we would assume to be in place now) will, in our view, be:

- Discriminatory
- Lead to instances of charges that are unjustifiably high (because the value of TSAs is higher than O&M overall);
- Inequitable for connections where the value of the TSA is high (particularly for high capacity connections and housing developments).

### O&M

O&M costs are covered by DUoS charges in typical network cost situations and as assumed in DUoS methodology. For high cost connections (we see many six figure and above charges where long length, higher than normal installation costs and extra security of supply connections are required) it seems appropriate that O&M continues to be charged rather than being funded by the general body of other customers. In our view, the removal of O&M may lead to inappropriate cross-subsidy.

## **2. Adjusting the Balance between DUoS and Connection Charges**

The approach in the document seems to be mainly about making changes to connection charging arrangements with minimal consideration of the changes these should have to DUoS charges. It does, of course, discuss adjustments to price control revenue but the issue, for us, is more fundamental since changes to connection charging arrangements impact directly on connection charge payers. Any price control measure would, in our view, only be able to target existing customers

The principles embodied in DUoS methodology (appropriately in our view one that is based on marginal or LRMC principles) should determine the principles of connection charge calculations. We see the approach in the document as affecting outcomes (connection charges) without addressing the fundamentals of tariff cost construction. We cannot see how one can be done without considering the consequent effect on the other. In our view, it is not a simple matter of adjusting DNO revenues; methodology of customer charging is important to discharge non-discriminatory provisions which is best provided through cost reflective pricing. Many of the issues discussed in the document do not, in our view, achieve this.

You note that there is significant disparity between charges for similar customer groups across DNOs (which in our view cannot be properly explained by regional differences of customer density, load densities, etc.) and one DNO bases its charges on the nominal tariff basket values within its price control formula. (It is difficult to see how price control basket values can have any bearing on the relationship of network costs and appropriately derived DUoS charges).

In our view, a fundamental and thorough review of DNO charging arrangements for both DUoS and connection should be carried out. This has never been fully done and is, in our opinion, long overdue.

## **3. Helping Customers Obtain Fair Connection and DUoS Charges**

### Connection

DNOs (and the network installers working on their behalfs) typically just quote the overall price for providing the network. They are usually reluctant to provide a breakdown of the charge. We also have an instance where a breakdown of cost information has been refused on the basis that the Licensee has a confidential contract in place with their contractor. We find such approaches less than helpful and a potential obstruction to competition.

We would prefer to see an obligation placed on DNOs to present their charges in a standard format where individual charge components are specified. Many do not even specify the split between the contestable and non-contestable work which may leave the impression to many that all the work can only be done by the DNO. Such approaches do not encourage competition.

We would propose that all connection quotations should itemise the various components in an 'approved' format along the following lines:

- Charge for non-contestable work and a description of what is to be done

- Charge for contestable work and a description of what is to be done
  - Broken down by voltage level and transformation
- TSA and a description on what it is based
- O&M on-cost charge, rate and on what it is applied
- Reinforcement charges and how applied and calculated
- Any up-front charges for design work.

It should also be possible to compare the above information with that provided in each DNO's Licence Condition Connection Statements.

We believe the above steps would aid transparency of charging and assist competition.

#### DUoS Charges for EHV Customers

Since LV and HV DUoS charges are standard and directly constrained within price controls a high degree of protection (within the limitations of DUoS charges discussed above) is afforded to these customers. Charges for EHV customers are individual to each site and DNOs usually give no information about how they have been calculated. The need for transparency of charging is therefore overlooked.

We would like to see a requirement placed on DNOs to show how charges have been calculated. This could include:

- Cost of each network asset included in the charge
- Apportionment basis of shared assets included in the charge
- Applied rate of return/discount rate
- O&M charge
- Replacement costs (if any).

We believe this would aid transparency of charging. Some DNOs already provide some limited information and we see no reason why this approach should not be extended and become a requirement for all. Companies should be open (transparent) about the charges they apply and provide supporting evidence to justify them.

## **4. GUoS and Tradeable Access Rights**

### GUoS

The proposal to move towards shallower connection charges for generators leads to a requirement for Generator Use of System charges (GUoS). GUoS, together with associated connection charges, will ensure that the costs faced by DNOs of generation connected to their systems will be met by those causing them. Existing generators would presumably face a nil GUoS charge as they have paid a deep connection charge.

Some method of apportioning upstream reinforcement costs between GUoS and DUoS will be required.

Whilst site specific Connection/GUoS charges may be appropriate for large generators, it would seem appropriate for smaller scale generators to have standard

GUoS charges according to the technology of the generator (e.g. mCHP, PV, etc.) where consumption and output patterns of usage might be similar and able to be reasonably grouped together. GUoS could be both positive and negative charges or a combination of both to reflect the costs of providing network capacity and the value of generated output capacity.

#### Tradeable Access Rights

Tradeable access rights would require a substantial information/IT system and a forum for trade. This seems excessive for what might be small amounts of capacity.

It would seem easier and more cost effective for DNOs to be required to publish data by area where the costs to connected load may be different (high, medium and low) and where generators might be more beneficial to locate (e.g. high load or potentially lower cost to connect).

Such a system would help facilitate the location of load and generation for the benefit of customers and generators alike.