

Cofely District Energy Response to the Consultation on the provision of third party access to licence exempt electricity and gas networks, on behalf of:

- Cofely District Energy Limited



- Southampton Geothermal Heating Company

A partnership between:



and



- Birmingham District Energy Company

A partnership between:



- Bloomsbury Heat and Power



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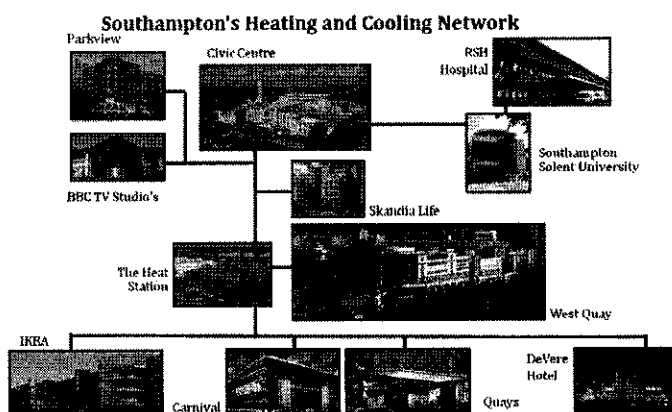
Summary of Cofely District Energy Limited's Response

Cofely District Energy is a nationwide energy services company (ESCO) operating both large and small scale district energy schemes, utilising low carbon energy generation technologies. Cofely District Energy forms part of Cofely's UK Energy Services business stream, which is a part of GDF SUEZ, one of the leading energy services companies in the world. GDF SUEZ holds a corporate vision of delivering the "Cities of Tomorrow" with an integrated approach to energy, waste and environmental management.

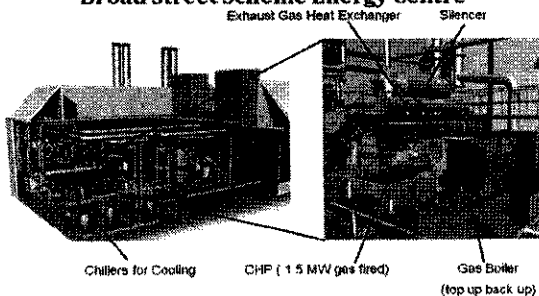
As GDF SUEZ's centre of excellence for decentralised energy, Cofely District Energy's schemes include:

- The Southampton District Energy Scheme
- The Birmingham District Energy Scheme
- The London Olympic Park and Stratford City Scheme
- The Whitehall CHP Scheme

Cofely District Energy is proud to be the UK's leading district energy company. Cofely District Energy's schemes range in size from city centre wide, such as the prestigious Southampton and Birmingham District Energy Schemes, to smaller schemes, such as the community heating scheme at Equinox in Hatfield and the Eastleigh Borough CHP scheme in Hampshire.



Broad Street Scheme Energy Centre



The UK's leading District Energy Company

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District Energy Limited

Q1: Do you have any views or concerns on how Government intends to apply third party access requirements to licence exempt distribution networks?

Network Operator Choice

The ability of a private network owner/operator to choose how it allows access to its networks is key to the potential for success of these proposed changes, if they are not to adversely impact decentralised energy schemes on which the UK relies to help meet its energy and environmental targets.

The proposed “multi-option” approach should allow network operators to protect both themselves and their consumers from unsustainable predatory pricing practises and choose an approach on a case-by-case basis that is most appropriate for each network in question.

Administrative Burdens & Guidance Documentation

CDE would like to emphasise the importance of providing transparent guidance with any new legislation (as DECC have suggested will be provided).

Since the legislation is likely to impact on many low-carbon decentralised energy schemes, which often operate with extremely tight margins, it is therefore important that DECC introduce legislation which is as “light touch” as possible. Any administrative burden imposed by changes in legislation must be minimised to restrict damage to the viability of decentralised energy schemes which contribute significantly towards the UK’s carbon abatement targets.

To minimise any administrative burden, we suggest that standard template agreements be developed for use between owners/operators of private wire networks and other energy suppliers wishing to gain access to a network’s consumers. As with the proposed common tariff methodology, the use of these standard template agreements should not be mandatory; to reinforce the principle of network operator choice. Providing these template agreements alongside the common charging methodology could enhance market confidence, through transparency, and reduce the (potentially very significant) legal and administrative burdens which the legislative changes stand to inflict on operators of private wire networks. These template documents could be provided as part of the guidance documentation which accompanies any changes in legislation.

As with the guidance documentation in general, involvement of industry representatives in drafting template agreements will be of paramount importance if they are to be useful tools. The consultation document acknowledges the diversity of the licence exempt sector and engagement with its varied interests will be important for developing guidance which works effectively to support access to the various applications of private wire in the UK.

Charging Methodologies & Viability of Low-Carbon Generation

The charging methodologies for each of the available access mechanisms will be central to their success and could have a profound impact on the economic viability of many private wire networks. The funding of decentralised energy schemes and private wire networks on which they depend, is secured on the bankability of long-term energy supply contracts with the private wire networks’ consumers. If the revenue stream from such long-term contracts is threatened (such as

by a requirement for third-party access to private wire networks) then the bankability of these energy supply contracts is harmed. A requirement to allow third-party access to private wire networks therefore has significant potential to disrupt the funding of decentralised energy schemes, unless the long-term revenue streams of private network operators are protected.

In our view, ensuring that an operator of a private wire network is able to receive (at a minimum) equal revenue from third party suppliers as it would from selling directly to the network's consumers, would ensure continued financial viability of the network and satisfy the requirement to allow third party access. Cofely District Energy can suggest one charging methodology to achieve this aim of revenue parity, which has been developed particularly with the "commercial arrangement" access method in mind:

For the quantity of electricity purchased from the private network by the third-party supplier (which is then sold-on to their consumer, as described under the "commercial arrangement" mechanism) the supplier could pay a unit price for the electricity which is equivalent to the market's average wholesale price. To bring the network operator's total revenue up to the same level as they would otherwise receive directly from the consumer (i.e. retail price less 5%-10%), an additional charge to the supplier for network access and distribution is levied. This headline methodology has been demonstrated in the attached chart at Appendix 1. It seems likely that many mechanisms could be developed to calculate this network distribution and access charge. Ofgem will need to engage with licence exempt operators of private networks to ensure that charging methodologies do not unfairly benefit the large energy suppliers.

Aside from pricing concerns, ensuring that generation plant continues to generate electricity for supply to its intended loads, is a requisite to guarantee the continued viability of such plant (the revenues from which are often required to recover significant long-term investments). This is an essential consideration if a private wire scheme attached to decentralised energy generation (particularly CHP and other low-carbon generation technologies) is to continue providing the same level of environmental benefits.

To clearly demonstrate how each access and pricing mechanism might be accomplished in reality, there could be significant benefit in including a number of worked examples, within any further consultation processes and/or attached to guidance documents. Cofely District Energy is able to assist DECC and Ofgem in developing such worked examples, which will depend on the particular access and pricing mechanisms proposed.

Further Consultation

It is apparent that further engagement with licence exempt network operators is a requisite to developing transparent, effective and fair legislation, particularly with regard to the charging methodologies surrounding third party access.

Cofely District Energy are particularly concerned that (the challenges of evidence collection notwithstanding) there has been no Impact Assessment undertaken for the effects of these changes on sustainable development and the environment. Licence exempt private wire networks are frequently used to distribute electricity to consumers from low carbon sources of generation, such as photovoltaic panels or combined heat & power (CHP) schemes. We therefore urge DECC to

seriously consider the effects that access to licence exempt electricity networks will have on these low carbon energy systems and investigate means of avoiding irreparable damage to the viability of current and future energy schemes. Failure to do so could mean a substantial reduction in UK industry's abilities to meet the nationwide need for widespread implementation of decentralised energy. A worked example demonstrating how the viability of decentralised energy schemes can be affected is provided at Appendix 2.

Cofely District Energy welcomes the substantial efforts that have so far gone in to developing these proposals, and is grateful for the level of industry engagement that DECC have sought. We are eager to offer further engagement with and assistance to DECC and Ofgem, providing evidence-based input, to help develop effective and fair mechanisms for third party access to licence exempt energy networks.

Q2: Do you have any views or concerns on how Government intends to apply these Third Package requirements to licence exempt undertakings?

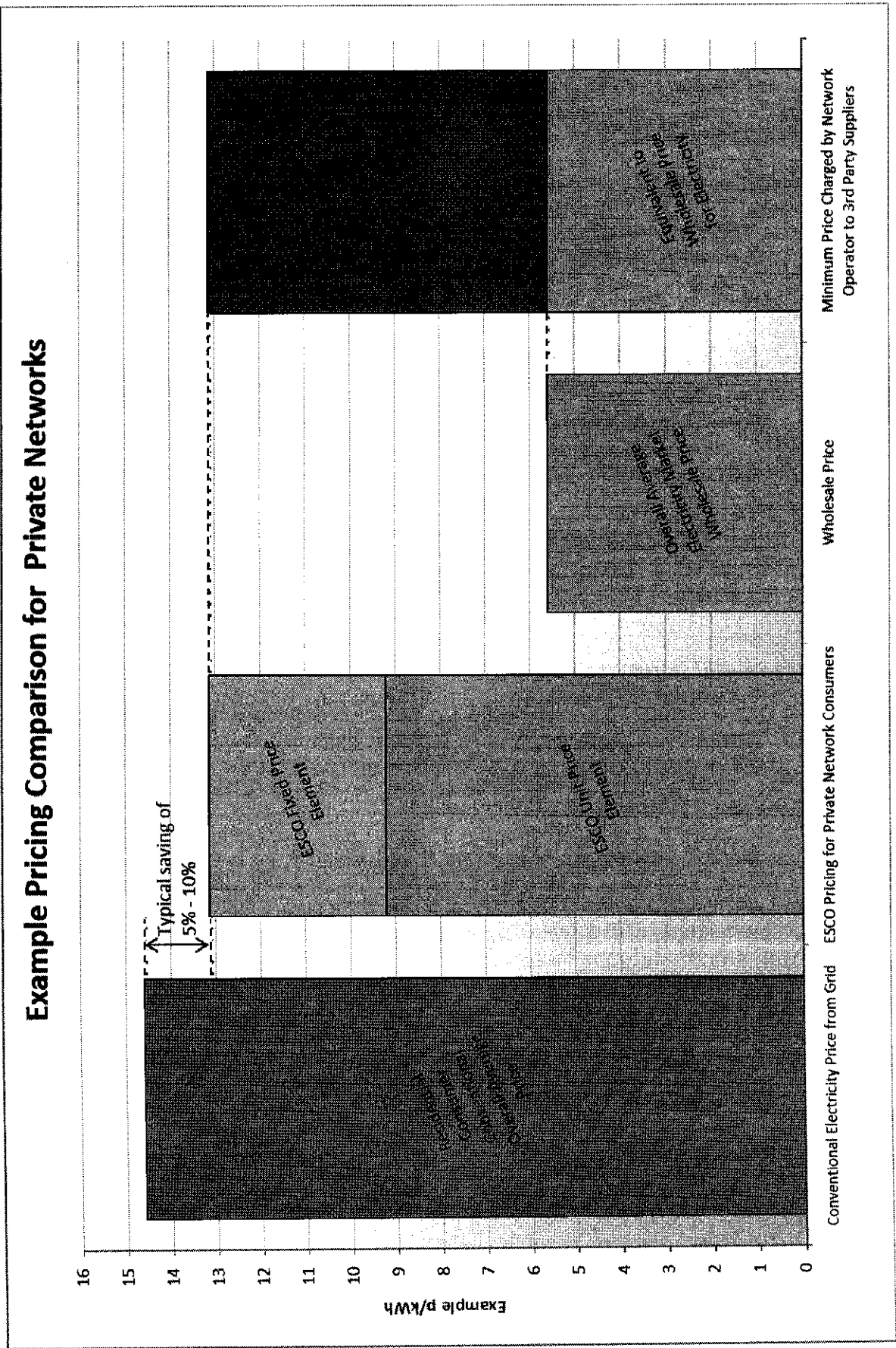
Cofely District Energy recognises the importance of the approach to apply the "least burdensome solution" to licence exempt network operators. A light touch is required to minimise administrative and cost burdens which are placed on small scale operators of licence exempt networks, as far as is possible.

It should be pointed out that the requirement, to allow customers to switch supplier within three weeks of making a request, will be heavily dependent on the transparency and efficacy of the proposed access methodologies for third party supplies over licence exempt networks. For example, if the (as yet un-proposed) access methodologies inherently take longer than 3 weeks to apply, it is unfair to require a switch of supply within 3 weeks. Therefore, engagement of licence exempt network operators in developing the access methodologies will be essential.

Cofely District Energy has reservations regarding the wording in the consultation document stating that this provision is "subject to any other contractual terms that may have been agreed between the supplier and customer". It is vital that, as well as acknowledging contractual terms between the third party supplier and customer, this provision must be subject to any contractual terms between the customer and licence exempt network operator.

The requirement for separate accounting arrangements to be in place for use of network charges would indicate that there is potential for very substantial administrative burden to occur and this requirement would therefore not appear to meet the need for the "least burdensome solution". Further clarity is required on precisely what these separate accounting arrangements entail before a judgment can be made on their likely impact. Cofely District Energy would be keen to work with DECC and Ofgem in identifying the most appropriate approach for decentralised energy systems.

Appendix 1 – Example Pricing Structure for Third Party Access to Private Electricity Network.



Appendix 2 – Worked Example Demonstrating the Potential Effect of Third Party Access Requirements on the Viability of Decentralised Energy Schemes.

Example Residential Development with Decentralised Heat & Electricity Supplies, Utilising a Private Electricity Network

Size of Development	500 connected dwellings
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Heat Sales	
Heat Consumption	7,000 kWh per dwelling per annum
Typical All-In Heat Cost	7.9 p/kWh (overall average price from conventional sources)
Consumer Cost Saving from ESCO	10% against conventional heat supplies
Heat Price from ESCO	7.1 p/kWh (overall average ESCO price)
Total Heat Sales	3,500,000 kWh p.a
ESCO Heat Sales Revenue from All Consumers	£248,850 per annum

Electricity Sales	
Electricity Consumption	2,000 kWh per dwelling per annum
Typical All-In Electricity Cost	14.6 p/kWh (overall average price from conventional sources)
Consumer Cost Saving from ESCO	10% against conventional electricity supplies
Electricity Price from ESCO	13.1 p/kWh (overall average ESCO price)
Total Electricity Sales	1,000,000 kWh p.a
ESCO Electricity Sales Revenue from All Consumers	£131,400 per annum

Scheme Financial Performance - under the current situation	
Total Energy Scheme Revenue	£380,250 per annum
Typical Decentralised Energy Scheme Annual Pre-Tax Profit	5%
Total Energy Scheme Annual Pre-Tax Profit	£19,013 per annum

Scheme Performance with Loss of Electricity Consumers - with no requirement for 3rd party suppliers to purchase electricity from private wire network	
Number of Lost Electricity Consumers	100
Loss in Electricity Sales to Residential Consumers	200,000 kWh p.a.
Loss in Electricity Revenue from Residential Consumers	£26,280 per annum
Electricity Export Price	3.4 p/kWh
New Electricity Revenue from Export to Grid	£6,800 per annum

Therefore, the decentralised energy scheme is rendered financially unviable, with the loss of only a small proportion of its electricity consumers.

As well as irreparably damaging existing decentralised energy schemes, this uncertainty would result in a massive reduction in funding for proposed new schemes, because electricity revenues are no longer secured by effective long-term energy supply agreements.

Scheme Performance with Loss of Electricity Consumers - with a requirement for 3rd party suppliers to purchase electricity from private wire network, at equivalent price to residential consumers	
Number of Lost Electricity Consumers	100
Loss in Electricity Sales to Residential Consumers	200,000 kWh p.a.
Loss in Electricity Revenue from Residential Consumers	£26,280 per annum
Electricity Price Paid by 3rd Party Supplier	13.1 p/kWh (equivalent to residential consumers)
New Electricity Revenue from Sales to 3rd Party Suppliers	£26,280 per annum
Extra Admin Costs from Providing Access to 3rd Party Suppliers	£100 per dwelling with 3rd party supply, per annum
Extra Admin Costs from Providing Access to 3rd Party Suppliers	£10,000 per annum

Therefore, the decentralised energy scheme has significantly lower annual profits due to the administrative costs of allowing 3rd party access to the network, even if electricity revenues are maintained by a fair pricing mechanism.

This situation will still result in a reduction in funding for decentralised energy schemes and demonstrates why legislation must be as light touch as possible, minimising any new administrative burdens.

