

CMA HEAT NETWORKS MARKET STUDY

INITIAL SUBMISSION BY BUUK

1. INTRODUCTION

- BUUK Infrastructure (BUUK) welcome the opportunity to respond to the CMA market study into heat networks. We are a leading UK multi-utility infrastructure investor, working across Great Britain and competing against incumbent utility companies. We provide c1.75m property connections across c30,000 discrete networks. We apply this considerable experience to the district heating sector through our Metropolitan business. Our main investor is Brookfield, who own 800MW of heat and cooling plant in North America. We believe we can offer a unique perspective as both an investor and operator of heat systems and as an experienced owner operator of last mile utility distribution systems in five other regulated essential utilities.
- BUUK's district heat model disaggregates the vertically integrated Energy Services Company (ESCO) model by splitting generation, distribution and retail into different functions that can be undertaken by different operators. This disaggregated model mitigates against monopoly supplier concerns by allowing the possibility of:
 - Multiple generators connecting to a common heat network
 - Competition in Retail Services to end customers that would facilitate price and service competition, as well as switching.
- We would welcome the introduction of formal regulation of the heat sector, where there is currently none. In fact, based on our experience as a new entrant in other utilities, we believe this is essential. Regulation, if done well, can provide a higher degree of certainty for investors, drive investment in the industry to lower carbon emissions, as well as protecting consumers. We already successfully operate a proxy for a disaggregated and regulated heat network model to the flagship district heating solution we operate at the King's Cross Development in London. The system used at that site is a forerunner to the 'best practice' approach to consumer protection espoused by the industry's "Heat Trust" initiative.

2. KING'S CROSS – CASE STUDY

We have provided district heating in the UK since 2007 when we started to develop our network at the King's Cross regeneration zone. When fully built out this will consist of 2,500 residential plots along with commercial space. Today the site is about 50% developed and is fully operational. BEIS (DECC at the time) have previously visited and we would be pleased to invite the CMA for a tour if that is of interest. This is a unique site in the UK if not Europe, with one company efficiently operating seven different types of utility networks on one site; district heating, district cooling, electricity, gas, fibre, water and wastewater.

The model that has been successfully deployed at this site **disaggregates the generation, distribution and retail functions** of the heat supply chain and we consider that this would be a strong solution to mitigate potential concerns over the monopoly supply of heat. The ESCo is owned

by the developer (KCCLP). The ESCo owns the generation plant within the energy centre and supplies heat to residents. BUUK own the distribution assets (the district heat and cooling networks and ancillary plant). A Use-Of-System Agreement ties the ESCo and distributor together. BUUK also provide the retail service for the ESCo, procuring fuel, setting heat tariffs, providing metering and billing services and managing customers.

We have also deployed this model at Greenwich Millennium Village, where Eon are the ESCo and provide the heat generation. In this case they also retail the heat produced. BUUK own the heat network and also provide the site utility networks.

At both Greenwich and King's Cross, BUUK is paid a use-of-system charge, rather than re-selling the product that moves through its system. This is based on the proven model that has worked well for many years in the gas and electricity sectors. Communities have a single cost-effective distribution network, i.e. a gas pipe or electricity cable, but competition can take place at both the generation and retail levels. The common distribution network is also regulated to ensure both the charges and standards of performance are fair and reasonable.

Although retail is not presently offered by a separate operator at either King's Cross or Greenwich, there is no reason why this could not happen in the wider district heating segment, particularly as large district heat networks are rolled out in urban centres. In that way, the retail of district heat can be structured in the same way as gas and electricity. A single, regulated, distribution network can be used by multiple generators (particularly if adjacent heat networks are merged, as is often possible) creating competition that reduces prices and raises service levels. Similarly, multiple retailers can also purchase heat from generators and compete to supply end customers which facilitates reduced prices, raised service levels and consumer switching.

3. REGULATION

BUUK has contributed much to the development of competition in the gas transportation sector in the 1990s, designing, building, owning and operating gas networks with an Ofgem-regulated Independent Gas Transporter (IGT) licence. We added electricity distribution in 2004/2005 with an Ofgem regulated Independent Distribution Network Operator (IDNO) licence. Water and wastewater networks followed in 2007/8 with Ofwat regulated New Appointment and Variation (NAV) / Inset licences. We also added ultrafast pure fibre networks for homes and businesses and now offer new developments a full multi-utility solution. We provide a one-stop-shop service to house builders on new developments across Great Britain, working for the majority of house builders.

As a first new entrant in each of the utility sectors, we appreciate the value of regulation. In the early stage of competition for each utility there was limited regulation. Some new entrants focused on providing value to developers to win their work, which could have been to the detriment of some consumers, as the quality of the installed network and also the transportation charges varied. This is a similar position that the heat sector faces today, identified in the recent report issued by BEIS. Particularly in gas and electricity (with water now catching up) this issue was resolved thanks to the enhanced regulatory system in place today. Our experience is that this has facilitated healthy competition and protected consumers. A further benefit of regulation is that it provides a higher level of certainty for investors, which we believe would help to sustain the growth of this lower-carbon energy source. Investment decisions and levels of return are based on risk. Regulation establishes a framework, which includes clear expectations on performance standards along with the level of return investors can expect. Regulatory price control periods are relatively long term with typically 5 to 8 year duration. This certainty provides investor confidence. For example, this helped BUUK gain an investment grade credit rating of Baa2, allowing access to low cost debt, which in turn allows us to provide significant further investment into utility infrastructure. This is essential to support Government plans to increase the number of house builds, as developers need choice. Competition brings improved service and innovation, which is evidenced across the utility sector.

4. MOVING TO REGULATION

We recognise that the majority of the heat segment consists of existing / older assets, many owned by the public sector. While this will present some challenges in applying performance standards and introducing regulation and competition, there are no inherent legal, or physical issues preventing this. District heat systems lend themselves very naturally into a division into the separate generation, distribution and retail functions.

The Heat Trust standards, which the CMA will learn about in the course of the Market Study, focus mainly on the retail function and provide consumers with protection over levels of performance and heat charges. This can evolve to formal regulation for the retail activity, as a first step to a fully regulated model.

The BEIS Heat Network Investment Project (HNIP) provides a £320m stimulus in the form of grants and soft loans to stimulate the segment over the current term of Government. This is expected to attract £2bn of private investment to deliver 200 new, large city based heat networks supplying heat to 400,000 homes by 2030. The networks installed from today will by then comprise the major part of the heat network segment. It is important to draw a line in the sand and make sure that going forward, all new networks are fit for purpose and deliver a high standard of service to connected customers. This can be achieved with the regulated model.

This is particularly important where public funds, such as HNIP, are being used to help stimulate heat network take up. There needs to be confidence that the public funds are being invested in good quality assets that will provide a high standard of service to the connected residents.

This regulated model can also be applied retrospectively to existing networks. The generation and distribution assets undergo lifecycle replacement programmes. This brings fresh investment and the opportunity to update assets. This also presents the opportunity to move to a regulated model. The new build segment presents the opportunity to develop a new model on a 'clean slate', which will also provide existing operators with a clear direction as they also move to regulation.

New development sites that require a heat network can already benefit from an operating framework that works 'as if' they are already regulated. This consists of the **Heat Trust** scheme and the **CIBSE Code of Practice** and BUUK played an active role in developing each of these. This creates a robust framework and means that it would be possible to move to formal regulation with minimal consumer disruption. For example, BUUK actively implements them today by making compliance mandatory in our contract structure.

The Heat Trust provides a **cost comparator** for connected customers to check if their heat charges are reasonable. This provides a spot-check on a given day and does not cover annual changes to charges. The Heat Trust scheme has raised awareness with developers on the need to look after the end heat customers. BUUK provide a price promise as part of our Energy Supply Agreement, making the Heat Trust scheme mandatory. This also provides the basis for subsequent changes to bills and assurance that they will not exceed the level set by the Heat Trust.

The Heat Trust also includes **performance standards** for the ESCo. We include this in the contract with developers, along with key performance indicators (KPI). Penalty points are levied when KPIs are breached, with threshold levels triggering corrective action. The ESCo can ultimately be terminated for persistent poor performance.

The CIBSE Code of Practice provides the technical standard for the installed assets. We include this as a contract obligation.

5. SUMMARY

BUUK believes that the introduction of regulation, if done well, would be very beneficial for all stakeholders in the district heating sector. We believe there are important lessons from other utility distribution sectors where clear regulatory frameworks have stimulated healthy competition. Regulation can also ensure protection for all customers and also provide investors with greater confidence. The Heat Trust scheme and Code of Practice provide a good starting point for regulation.

BUUK believes that better consumer outcomes would be driven by a wider industry adoption of a disaggregated ESCo model for heat networks, with separate generation, distribution and retail functions. We offer King's Cross as an example of this model which could allow the common use of a single, regulated, distribution network by competing retailers, who purchase their heat from competing generators. The regulation of heat networks can also encourage the linking up of separate networks to increase resilience and plant efficiency.

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