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Competition and Markets Authority
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Dear Sir/Madam

We welcome a further opportunity to contribute to the Competition and Markets Authority's ("CMA") Heat Networks Market Study, following the publication of the Update Paper on 10th May 2018.

SSE is a UK-listed company and the broadest based utility operating in Great Britain with separate retail, wholesale, networks and enterprise businesses. SSE's core purpose is to provide the energy people need in a reliable and sustainable way.

SSE Enterprise Utilities ("SSEEU") has a strong track record of investing in, and delivering the key utilities infrastructure to support projects and developments throughout the UK. We design, build, operate and maintain utility networks, working with developers, housing associations and local authorities on a mix of residential, commercial and industrial developments.



SSEEU currently owns and operates 13 heat networks, serving in the region of 8,000 end users. When these existing networks are fully built out, we expect to have between 15,000 and 20,000 heat network customers. Our portfolio includes a network on the Wyndford Estate in Glasgow, which is the UK's largest retrofitted heat network.

As a heat networks Energy Services Company (“ESCo”) we tend to see projects throughout their evolution from contract development, design, construction and commissioning, through into operation, asset management and customer services. As such we have significant practical experience on how all these components can influence overall customer satisfaction with their heating system. Set against this backdrop, we welcome the CMA Market Study Update Paper.

We recognise that heat networks form an important part of the Government's plan to reduce carbon from heating and believe heat networks offer customers an efficient and reliable supply of heat and hot water, at prices which are the same or lower than other potential sources of supply (such as gas and electricity) and with comparable service standards.

In this further submission, we have sought to summarise our views on the three drivers identified by CMA as providing poorer outcomes for some heat network customers.

- Misaligned incentives between property developers, heat network operators and customers of heat networks
- Monopoly Supply of heat networks and the delivery models used
- Low Transparency – both pre-transaction and during residency

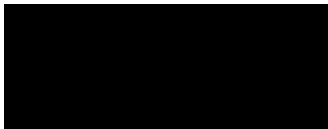
Our detailed response to the specific questions posed is set out in Appendix One.



SSEEU remains committed to providing our Heat Network customers with an excellent customer service regime and we have created a bespoke Customer Service team to ensure this happens. We are also a founder member of the Heat Trust, which sets out customer protection standards for district heating networks, and we continue to work with them to further develop these guidelines and protocols.

We would be happy to discuss our proposals with the CMA in further detail as the focus now moves towards developing the key recommendations and further stakeholder engagement.

Yours faithfully



Clare Cantle-Jones
Regulation Manager
SSE

Consultation questions

Assessment of the Issues

- 1. Do you have views on our approach to analysis and our findings regarding heat network outcomes, misaligned incentives in the supply chain and transparency?**

SSEEU welcomes the collaborative nature that CMA has taken to approach the analysis in the initial stages of this Market Study, and agree broadly with the findings that have been identified as drivers for poorer outcomes for some heat network customers.

- 2. Do you consider the individual household gas boiler price to be a reasonable benchmark for customers to be confident that their heat supply is value for money?**

SSEEU considers that individual household gas boiler price is a reasonable benchmark for customers; however, it is important that if used as the benchmark, it will also need to reflect the breakdown of the associated costs, e.g. boiler purchase, maintenance, energy costs, standing charges etc, particularly where elements are not directly comparable in nature and composition (e.g. standing charges), and where these charges vary over different time periods (e.g. maintenance costs). It is otherwise possible, if comparison is selective in nature that the customer may be misinformed as to the true cost comparison particularly of longer-term or lifetime costs.

- 3. Have we accurately captured the two broad categories of delivery models in the heat networks market (described in section 5) employed by housing associations and private property developers and their impact on customer outcomes? Do you have any views on potential different categories?**

SSEEU's heat network portfolio covers both broad categories of the identified delivery models in the heat networks market, and therefore is aware of the potential differences between them. SSEEU's ESCo model typically transfers a number of risks from developer/customer to ESCo customers are typically shielded from any spikes in expenditure on plant replacement.

For example, the ESCo typically takes an element of energy price risk, operational cost risks, load risks and plant performance risks. ESCo also typically insulates customers from peaks in asset/plant replacement costs by calculating this cost over the length of the concession and recovering this through charges which are consistent throughout the concession.

Regulation of Heat Networks

4. Do you have views whether heat networks should be regulated? If you agree that they should be, please provide any views on which body might be best placed to act as the sector regulator.

SSEEU are supportive of CMA's provisional conclusion that there is a need for a statutory regime governing the regulation of heat networks, with a focus on customer service standards and transparency. We believe that this would lead to better outcomes for customers connected to heat networks, as well as creating an environment that would provide stability for investors. We note that Ofgem responded to the initial Statement of Scope for this study, and through their role in regulating the Gas and Electricity markets, could be best placed to act as the sector regulator.

Throughout our membership of the Heat Trust we have worked with other providers to bring self-regulation to the market, providing customer protection guidelines and protocols for those supplied by registered heat networks. We believe that this model can be utilised by any new sector regulator to bring a 'principle based regulation' to the market.

We understand that Ofgem is moving to a principles-based approach to regulating energy supplier conduct and a joined-up approach with heat networks would make it easier to read across arrangements from electricity and gas, and help to meet consumer expectations, especially regarding vulnerable customers and network reliability.

It is also worth noting that SSEEU currently ‘mirrors’ the Guaranteed Standards set out by Ofgem in relation to ‘direct’ energy billing for its Heat Networks customers, along with the requirements set out as a condition of our membership of the Heat Trust.

5. If there is sector regulation, should it apply to all communal and district heating networks, all delivery models and existing as well as new networks?

In order to provide a ‘level-playing field’ for developers and heat networks operators, along with ensuring protection for all consumers connected to heat networks, SSEEU believe that any sector regulation should apply to all communal and district heating networks, all delivery models and new networks.

6. Do you have views on whether regulation of heat network prices to end customers is appropriate? If there were a form of price regulation, should it be a cap at a certain level, or a ‘principles based’ approach with self-reporting against permissible contract terms and a regulator to investigate complaints? What factors should determine the maximum level of prices?

As stated above, SSEEU would recommend a ‘principle based’ approach to the regulation of heat network prices to end customers. A more prescriptive price cap has a risk of stifling the market and deters innovation of newer, more efficient delivery models.

Regarding the factors that should determine any maximum level of prices, we agree that one option might be that consumers connected to heat networks are charged no more than if they were using natural gas for heating. However, as stated previously, whilst this remains a reasonable benchmark it is important that if used as a counterfactual, all costs including boiler purchase and maintenance, energy costs and standing charges are considered.

7. Do you consider that any rules and guidance on pricing and quality should apply to all heat networks or, for example, only to those with ESCOs? Do you consider that it would be proportionate to ban ‘capital contributions’?

SSEEU believe that all heat network customer should be afforded the same level of protection on pricing, and quality of service, regardless of whether there is an ESCO or not.

In line with the principle based approach, we do not consider it proportionate to ban capital contributions, and would recommend the introduction of mandatory rules and criteria around the form of price and quality mechanisms applied to long term heat network concession arrangement, we would suggest that the current Heat Trust standards of service and minimum requirements for information to be provided about charging methodologies and component parts of charges, could be used as a model for this.

8. Do you have views on whether heat network customers should have similar consumer protections to customers of regulated gas and electricity utilities?

SSEEU are fully supportive of the proposal that heat network customers should have similar customer protections to customers of regulated energy suppliers. Currently we voluntarily mirror the Guaranteed Standards set out by Ofgem in relation to ‘direct’ energy customers for our heat network connected customers, along with the requirements set out as part of our membership of the Heat Trust.

SSE has been heavily engaged with Ofgem and other Energy Suppliers to deliver significant improvements to the Priority Services Register (PSR) in gas and electricity markets in recent years and we fully support the provision of a PSR for heat network connected customers, along with further support for vulnerable customers.

We are also supportive of the further proposals as set out in section 7.30 of the Update Paper to;

- Set requirements regarding complaint handling and mandating access to an Ombudsman.
- Key Performance Indicators (KPIs) for quality of service.
- Set requirements regarding billing frequency, quality of bills, transparency in heat price calculations and payment arrangements and protection from back billing.
- Introduction of a regulatory ‘backstop’ to mitigate risks to customers from a business failure, and a mechanism for alternative provision in the event of insolvency, in a similar vein to that afforded to energy customers under Ofgem’s Supplier of Last Resort Mechanisms.

9. Do you have views on the recommendations described in section 7 that we are minded not to pursue (e.g. banning capital contributions from ESCOs to property developers and mandatory re-tendering of heat network operating and billing contracts)?

As previously stated, SSEEU would recommend a ‘principle based’ approach to the regulation of heat networks, and are supportive of CMA’s minded to recommendation not to pursue the banning of capital contributions from ESCOs to property developers or the mandatory re-tendering of heat network contracts. Such measures are likely to cause concern for investors and risks deterring innovation of newer, more efficient delivery models.

Planning and Technical Standards

10. Do you have views on how to improve technical standards, which cover the design and operation of heat networks, and make them enforceable? Could this be achieved in the absence of a regulatory regime requiring a licence to operate a heat network? For example:

a) What is the role of the CIBSE ADE CP1 Code of Practice in this process?

Design and operation of heat networks should be based on experience from UK networks (for example, CP1 still advises to use Danish Standards for Domestic Hot Water diversity factor). A UK level assessment should be made on what the UK heat and hot water demand profiles look like and what is the real diversity of different schemes (residential, mixed use, hospitals, education buildings, etc.)

SSEEU feels the Code of Practice is not enough to ensure a unified approach to the minimum standards a heat network should have in every aspect of the scheme (design, construction, operation, safety, customer service, etc.). To regulate this, there should be standard calculations and design methodologies in the form of British Standards (BS) industry trusted tests, and planning requirements, among others.

b) Do you have views on how these proposals could be embedded in the planning authorisation process?

If BS (or similar) are developed, planning authorities could ask for proof of compliance with those standards, perhaps as part of a framework exercise or submitting proof of design against a specific standard. Major developers would need to ensure the chosen designer and contractor complies with these. There is already some work done regarding this, such as British Engineering Services Association (BESA) tests for Heat Interface Units (HIUs).

c) For potential heat network connections affected by Building Regulations and / or planning, how could appropriate technical standards could be embedded these processes at local, regional and national levels?

As noted above, developed BS could be embedded in to the planning processes , which would ensure consistency at a national, regional and local level.

d) Could operating technical standards be applied retrospectively to existing heat networks?

Existing District heat Networks could be retrospectively retrofitted to improve the installation and include technologies that increase the performance and reliability of the system. As an example: insulation levels, monitoring system, recommissioning, an assessment of new technologies that could be implemented, etc. However consideration would need to be given on how the costs for this would be recovered, and therefore suggest this should be assessed on a case by case basis to balance the business case and customer service.

e) What is the impact of the current approach to professional indemnity insurance for heat network design and build on the recommendations of design engineers?

Currently, we tend to find that design consultants use high peak load forecasts and oversize plant and pipes to ensure that their design will always meet the peak load of the heat network, and hence there can be little focus on plant efficiency and overall system performance. This can lead to higher capital expenditure (capex) by way of oversized plant and higher operation expenditure (opex) due to higher losses, lower efficiency, higher energy use in generating heat. A move towards designs which were required to demonstrate minimum performance requirements could address the identified design issues and misaligned incentives.

11 How could local and development plans and their supplementary guidance be adjusted to take lifetime costs and customer prices into account? What would the impact of this be?

SSEEU considers that mechanisms could be introduced which ensure greater consideration is given to the prices that will be charged to the customers of a heat network at the planning consent stage and that this should be highlighted in local and development plans.

12 How should a heat network quality assurance scheme be established and embedded into the regulation of heat networks? Should such a scheme seek to accredit the commercial, financial and contractual aspects of a heat network as well as the technical?

SSEEU already work closely with CIBSE and ADE on the development of a heat network quality assurance scheme, and we believe that such a scheme should be included in any form of sector regulation and should encompass commercial, financial and contractual elements as well as technical standards.

Transparency -Pre-Transaction

13 Is further information required to improve consumer understanding of the significance of living in a home with a heat network? If so, what information would be useful?

In its role as an ESCO, SSEEU prepares fact sheets, and sample customer contracts, that we ask the developer to share with any potential purchasers. However, as we have no contractual relationship with the consumers at the point of purchase/prior to moving in, we have no means of making sure that this information is passed on to the purchasers.

We understand that ADE are looking to make improvements in this area by, for example, developing best practice ‘templates’ under the Heat Trust, so that the supplier of heat will be obliged to provide certain pre-determined information to the end consumer.

In addition to this, SSEEU regularly provide realistic samples of our Heat Interface Units; metering information; and customer interfaces for developers to use in their sales offices. We have also provided training for developers’ sales agents and/or housing officers to ensure that consumers are provided with sufficient information on the purpose, intention and workings of heat network developments.

We would support the mandatory requirement for provision of information about the heating system and associated charges as part of the conveyancing process. It should be noted however that certain information may not be available at the point where customers buy/let properties in advance of completion of heat supply arrangements between developer/landlord and heat service providers

14 Who should be responsible for ensuring that new leasehold agreements include a clear reference to the treatment of heat network assets connected to a leasehold property?

SSEEU propose that, at the point of purchase and/or prior to moving in, the property developer (working with the provider of the heat networks) should be responsible for providing sufficient information to its potential consumers on the workings of the heat networks.

SSEEU understands that developers and private landlords have an obligation under Section 20 of the Landlord and Tenant Act to consult with prospective purchasers on proposed heat charges and, therefore, we suggest that such obligations and the adherence to them, should form part of the remit of any sector regulator to monitor and enforce.

15 Should heat supply agreements or contracts which set out key performance indicators, such as guaranteed terms of service, be made compulsory?

Further to the earlier recommendation that heat network customers should have similar customer protections to customers of regulated energy suppliers, the introduction of guaranteed standards of service and the measurement and reporting of key performance indicators should be made compulsory.

16 How could EPCs be improved in relation to heat networks?

Energy Performance Certificate or EPCs, currently only consider the costs of energy supplied, and not the purchase price of a boiler or its ongoing maintenance – this leads to incorrect comparisons being made between costs to heat network connected and mains gas connected customers. EPCs could be improved by considering the whole system costs as a counterfactual.

Transparency - During Residency

17 Should heat supply bills be improved? Is further information necessary? If so, what information would be helpful?

Billing transparency is something that SSEEU considers to be vitally important to aid customers understanding of the costs to heat their properties and how these costs are calculated. To this extent, SSEEU is committed to ensuring that our bills for our heat network customers are as clear and concise as those provided to our regulated electricity and gas customers

We suggest standardisation of the elements that should be included on heat supply bills could be introduced and should include cooling/heating charges, standing charges and any capital replacement charges. Further to this customer bills should also provide information relating to The Heat Trust and Energy Ombudsman.

We also believe that it is important that bills should include clear instruction of where and how to pay along with a 'strapline' and advice of what to do when they can not pay or are facing financial difficulties. We also believe that it is important to include the supplier's contact details, as many customers do not keep a copy of their Supply Agreement and the bills are the regular reminder of how to get in touch.

18 Should there be specific requirements regarding the frequency of bills beyond that already required by the Heat Network (Metering and Billing) Regulations?

SSEEU believes that heat networks customers should be billed as frequently as customers on regulated supplies, and that annual billing is not sufficient. Customers should be entitled to receive regular updates on their consumption so they can amend this accordingly. SSEEU does this by way of a regular bill, which ensures affordability and enables the end user to make adjustments to their consumption if the bills are too high.

Furthermore, frequent billing can uncover change of tenancy information, as within a year, there is the potential of 2 or 3 short term lets at a property, and without regular contact with the customer, opportunities to bill accurately may be missed.

19 Should standard performance metrics for suppliers be produced – for example, in relation to planned and unplanned outages and heat temperatures? Should this information be published?

Ofgem currently report on energy suppliers' performance in relation to complaints and customer service, and on distribution networks performance under the Guaranteed Standards of Service obligation in relation to outages, we suggest this could be replicated for heat networks.



Under the Heat Trust, response times and included standards are aligned, providing clarity to customers on the level of service they should be receiving and ensuring it is comparable to other heat network schemes.