

Heat Networks Team
Ofgem
10 South Colonnade
London
E14 4PU

9 July 2025

Dear Heat Networks Team,

Heat networks Regulation: Fair Pricing Protections

We welcome the opportunity to respond to this consultation.

ScottishPower is a major UK energy company with renewable generation, retail supply and networks businesses; we are a leading developer of wind power in the UK, and part of the Iberdrola Group, the world's leading renewables developer, and a global leader in tackling climate change, with a commitment to reaching carbon neutrality by 2050. We are the UK's first major integrated energy utility to be generating 100% renewable electricity, and we are committed to supporting our 4.4 million gas and electricity retail customers in making greener choices as part of the journey towards meeting the Net Zero challenge.

In 2022, we launched our eHeat business to install, own and operate shared ambient temperature heat networks with the ambition to promote such cost-effective and low carbon electric heating options at scale in suitable locations across the UK. Our eHeat systems use the thermal energy stored in the earth as a heat source (or as a heat sink for cooling). The natural thermal energy is harnessed through boreholes drilled into the ground (typically up to 200m in depth), which are looped together in a network of underground pipes (approximately 32mm diameter) for the purpose of supplying ambient temperature heat to individual heat pumps of varying sizes and numbers depending on the properties in play. These ground source heat pump arrays can be suitable for new housing and retrofits, as well as certain commercial properties.

We have set out responses to some of the specific consultation questions in the annex to this letter and we would highlight the following points:

Market segmentation

As acknowledged in the consultation, Ofgem's fair pricing framework has been developed for communal and district heat networks that undertake both asset operation and heat supply. As such, the framework is not wholly applicable to networks operating shared ground loops which do not undertake metered heat supply. In this context, it is essential that Ofgem tailors its monitoring and enforcement of the fair pricing framework

to the relevant market segment, to ensure pure asset owners/operators are not subject to scrutiny relevant to heat supply including billing and metering issues. Furthermore, it is likely that only a ground source heat array market segment would be appropriate for ground source heat array operators in the application of Ofgem's proposed approaches to cost allocation, price comparison and benchmarking, and profitability analysis.

Pass-through of customer compensation costs

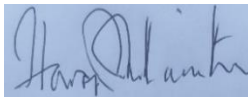
We are concerned that the proposed authorisation condition that prohibits recovery of GSOP payments, compensation and other forms of redress through prices charged to customers is too broad. We accept that heat network providers should not recover the cost of fines and penalties through their charges, but service providers in virtually all competitive markets will from time to time be unable to meet their intended standards of performance and then make compensation payments to their customers in order to retain customer goodwill. Such compensation payments are a normal cost of doing business and should be recoverable through prices charged to customers.

Heat network licensing

The Energy Act 2023 allows Ofgem to regulate heat networks through a general authorisation regime with the option to grant heat network licences. We understand Ofgem will consult in due course on a prospective licence regime for heat network operators wishing to access the statutory rights and powers currently available to licensed utilities. In this context, a more appropriate and proportionate option for price regulation of operators like eHeat might be a price control regime included in the heat network licence.

Please don't hesitate to contact me should you have any questions regarding any aspect of this response.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Pp Richard Sweet', is displayed within a light blue rectangular box.

Pp Richard Sweet
Director of Regulatory Policy

**HEAT NETWORKS REGULATION: FAIR PRICING PROTECTIONS
– SCOTTISHPOWER RESPONSE**

Chapter 2: Fair Pricing Framework

Question 1: Have we identified the right set of fair pricing consumer objective, principles and outcomes and are these properly defined? If you disagree with this proposal, please specify what changes you would like to see and provide a justification.

We agree with the consumer objective in the proposed authorisation condition (AC), effectively that consumers should pay fair and not disproportionate prices. The key to the appropriateness of the underlying regulatory framework will be the guidance developed on Ofgem's monitoring and enforcement of compliance against this objective and AC.

We agree with the high-level principles Ofgem has identified in support of the above consumer objective and to form the basis of its guidance:

- Cost reflective pricing
- Cost efficiency
- Fair and reasonable returns
- Affordability
- Price transparency

As recognised in the consultation, the challenge will be how the principles are evaluated and assessed across the diversity of heat network types. The key here will be market segmentation to ensure appropriate and proportionate application of the principles and outcomes to a particular network type. We provide the following comments on the applicability of the proposed principles from our perspective as an owner and operator of ambient temperature shared ground loop (SGL) arrays connecting ground source heat pumps (ie solely a capital asset provider with no heat service provision offering).

- *Cost reflectivity* – for SGL networks the relevant costs would be the design, construction, operation and maintenance of the ground source heat array; there would be limited costs to serve and no heat consumption cost. All costs would be determined at the commissioning of the heat array and should remain relatively fixed in real terms, over the asset life, eg 40 years. As consumers would take heat from their premises' ground source heat pumps connected to the array, they would not need to be directly billed for their heat consumption or have it metered, so metering and billing considerations would not be applicable.
- *Cost efficiency* – of relevance here would be technical efficiencies in the design and construction of the array and operational efficiencies over the lifetime of the asset and outsourcing of these activities. Consumers would pay for the input electricity consumption of their heat pump directly through their energy supplier so fuel procurement and hedging would not be undertaken by the SGL provider and therefore would not be relevant to any cost efficiency and fair pricing considerations.
- *Fair and reasonable returns* – we would simply note here our expectation that the rate of return for each of an SGL provider's arrays would be determined and fixed at the time of commissioning along with the capital and operational costs and would subsequently change only in line with inflation. Accordingly, we would expect the profitability assessment to be focussed on the determination of the fixed rate of return at commissioning and

whether this can or should, thereafter, be adjusted for changing financial conditions over the life of the asset at any subsequent review by Ofgem.

- *Affordability* – as a SGL provider will charge households fixed charges to recover capital and operational costs of the array and not supply and charge for heat consumption, bill volatility and “shock” will not be an issue. Similarly, considerations of debt and self-disconnection will not be applicable to a customer’s heat consumption but instead relate to heat pump electricity demand and will fall to the customer’s energy supplier (as is presently the situation).
- *Price transparency* – an SGL provider will be able to disclose all information relating to the basis and level of charges for its heat arrays. Any regulatory requirements in relation to this should, however, be proportionate to the expected simple charging structure, eg fixed annual standing charges.

Finally, we agree with the following fair pricing consumer outcomes identified by Ofgem in the consultation:

- the framework helps prevent disproportionate pricing: consumers pay prices for their heat that are not disproportionate.
- the framework incentivises efficiency: consumers pay prices which reflect the costs of an efficiently run heat network.
- consumers receive an appropriate quality of service.
- the framework enhances transparency and consumer confidence in the sector: consumers can understand the charges and are confident they are fair.
- the framework is forward looking and seeks to protect future consumers: consumers will keep paying fair prices in future through appropriate investment in the networks and industry development.
- consumers should not be unduly disadvantaged compared to other consumers on alternative heat sources.

Question 2: Do you agree with our proposals to develop the fair pricing guidance in relation to the principles (please note that questions on cost allocation proposals, including guidance, are asked separately under Chapter 3: Cost allocation). In particular:

- a) have we identified the right areas to be covered by the guidance implementing the fair pricing principles (see paragraph 2.53 for a summary of the areas we are proposing to develop in guidance under each principle)? If you disagree with this proposal or think other areas should also be included, please specify what changes you would like to see and provide a justification.
- b) Do you agree with the specific proposals to develop each of these areas in guidance? If you disagree, please specify what changes you would like to see and provide a justification.

Our understanding from the consultation is that the only principles identified for development in the guidance will be cost reflectivity, cost efficiency and affordability. We think it is important for Ofgem to be explicit in its approach to the other fair pricing principles if they feature in Ofgem’s monitoring and enforcement of the fair pricing framework. As alluded to in our response to Question 1, it will be helpful for Ofgem to set out as part of the guidance how the principles apply to different market segments.

Question 3: Do you agree with the proposed ‘fairness test’? In particular:

- a) Do you agree with the high-level features of the fairness test (principle based, reasonableness, case-by-case basis, and objectivity)?

We agree with the three features of the fairness test being:

- Based on the concept of reasonableness, ie that the standard that could reasonably be expected of a 'prudent' regulated entity that follows Ofgem's general authorisation conditions and is well-run.
- Case-by-case ie Ofgem will consider circumstances specific to the heat network under assessment.
- Objectivity - use statistical and economic models eg benchmarking, predefined steps and criteria and best practice in economic regulation.

As explained in our response to Question 3b, the fairness test must be applied in a way that is specific to the market segment in question, to ensure it is applied in an appropriate and proportionate manner to the heat networks under review. We would suggest market segmentation is most pertinent to the objectivity feature of the test, ie use of objective data and methods should be relevant for the networks under review and ensure a like-fair or -for-like comparison where applied.

b) Do you agree with our proposals to implement the fairness test discussed in Appendix 1: Fairness test?

The proposed fairness test does not appear properly applicable to SGL providers who construct and operate capital infrastructure that provides ambient heat for households but do not supply metered heat as part of the service offering (unlike communal or district heat networks). Such models are characterised as asset owners with fixed costs over the life of the asset. The most appropriate regulatory approach for SGL providers would be a more involved assessment by Ofgem of costs and associated charges against the fair pricing principles, at the time of asset commissioning, and then Ofgem's monitoring should be focussed on any material changes or variances to the initial fair pricing assessment over the life of the asset. In this context we believe the proposed fairness test should for relevant market segments, include the initial assessment at asset commissioning and explain how this is recognised and referenced in any subsequent fairness test.

The fairness test as currently drafted is more appropriate for heat providers who charge for heat consumption, eg communal and district networks, and whose costs are therefore more likely to fluctuate materially over time.

Question 4: Does the revised authorisation condition, 'fair pricing', reflect the policy intent? Market segmentation Consultation - Heat networks regulation: fair pricing protections 18

The draft Fair Pricing Condition Number 04 as set out appears to broadly reflect the policy intent at a high level. The key will be the detail in the supporting guidance to be developed by Ofgem.

Question 5: In relation to market segmentation (please note that we are asking in relation to the considerations discussed in paragraphs 2.58-2.61, segmentation considerations in relation to price benchmarking are considered under Chapter 4: Price comparison and benchmarking methods):

a) Have we identified the right characteristics for market segmentation, and are these correctly defined?

We note the reference to "shared ground loops" which appears to be effectively shared ambient temperature arrays connecting ground source heat pumps in different premises however it is not clear this is captured in any of the segmentation characteristics listed in the same table. Shared ground loops or arrays are part of a segment which are heat infrastructure owners and operators that provide heat to households but metering and billing for the heat

consumption is not required eg consumers are charged for electricity demand of their heat pumps. Such heat providers are asset owner/operators and therefore their costs and associated charges are simpler and more stable relative to other market segments were providers charge for heat consumption. It is important to include this segmentation to ensure such providers are regulated appropriately and proportionately under the fair pricing framework reflecting that their costs and associated charges can be more easily determined and fixed at the point of commissioning. It is likely that shared ground loops/arrays would have to effectively be a self-contained segment for the purposes of cost benchmarking, profitability analysis and cost allocation.

Alternatively, the market segment of shared ground loops/arrays could be excluded from the fair pricing framework and authorisation regime and instead subject to licence regulation which may be more appropriate given they are more analogous to energy networks. Depending on Ofgem's approach we would be happy to discuss how shared ground loops/arrays, and their relevant market segment should be defined.

b) Do you agree with the segmentation approach discussed for each of these characteristics? Data requirements

We do not have any comments on the proposed segmentation approaches, we are unable to meaningfully comment without being clear what segmentation shared ambient temperature arrays would fall into.

Question 6: Of the information listed in Table 3 below, what do heat networks already regularly collect and can be easily reported?

As we do not currently have any operational networks, we are not yet in a position to record the data listed in Table 3. However, once our networks are operational, we anticipate being able to report on the charges associated with recovering the costs of our shared arrays and the underlying cost allocations. We also expect to provide relevant information on the characteristics of the shared ground loops, such as operational conditions, physical attributes, and the number of connected customers.

Question 7: Of the information listed in Table 3 below, which items would be more challenging for heat networks to report?

It would be helpful if a table of proposed data items could be developed for SGL heat networks which do not undertake the supply of heat. All the data types would be relevant for SGL heat networks but would not include data associated with the supply of heat, ie heat charges, unit rates of heat etc. The table below is an example of what we would expect to be provided for SGL heat networks.

Data type	Detail	Collection frequency
Charges	<ul style="list-style-type: none"> standing charges for heat connection charges any other charges, for example one-off charges number of customers total annual charges across all customers 	Annual
Cost allocation	<ul style="list-style-type: none"> overview of costs recovered through standing charges, connection charging methodology 	Annual
Cost drivers	Data for collecting EBIT margins: <ul style="list-style-type: none"> revenue 	Annual

	<ul style="list-style-type: none"> operating costs (expenses directly associated with running the heat network) including but not limited to costs, operations and maintenance, administrative expenses, and depreciation 	
--	--	--

Question 8: Of the cost drivers listed in Table 7 (in Appendix 3), which items would be more challenging for heat networks to report?

Question 9: Should certain types of heat networks have more limited data reporting requirements? If so, which heat networks should these reduced requirements apply to, and what data should they be exempt from reporting?

SGLs and other heat networks that are solely asset providers are likely to have fixed costs during the year. Such networks should be limited to annual reporting as there is limited value in more frequent reporting.

Chapter 3: Cost Allocation

Question 10: Do you agree with our proposed prescriptive rule that GSOP payments, compensations, fines, penalties and other redress provided to consumers should not be passed through to customers?

No, we do not agree that GSOP payments, compensation and all other forms of redress should not be passed through to customers. We accept that the cost of fines and penalties should not be passed through, but we are concerned that the proposed authorisation condition is drafted far too broadly. Service providers in virtually all competitive markets will from time to time be unable to meet their intended standards of performance and then make compensation payments to their customers in order to retain customer goodwill. Such compensation payments are a normal cost of doing business and should be recoverable through prices charged to customers. Indeed if a service provider never had to make such payments it is arguably a sign that it is inefficiently over-resourced. GSOP payments differ from other compensation payments only in that the regulator sets a standard tariff, but the same principles apply.

Question 11: Do you agree with the draft best practice guidance provided? Is there anything that should be added? Should any of the best practice guidance be strengthened to prescriptive rules?

We think the guidance needs to be adapted for different market segments or heat network types (see our response to Question 12). At present, until we are satisfied the guidance is properly applicable to SGL arrays, we think the obligation should be on regulated entities to demonstrate that their cost allocation satisfies the fair pricing principles. Accordingly, we do not think any cost allocation guidance should be made into prescriptive rules at this stage.

Question 12: Do you think that the best practice approach to cost allocation should differ for different types of heat networks, or different types of suppliers? If so, for which types and how?

We believe the guidance should take account of different network types. Sole asset provider models like SGL who do not supply heat as a service are only likely to use standing charges and connection charges to recover costs without unit charges. The application of the guidance should allow heat network providers the flexibility to adopt such approaches subject to the charges being consistent with the fair pricing principles, eg cost reflectivity.

Question 13. Does the authorisation condition, ‘cost allocation’, reflect the policy intent?

Ofgem is proposing a two-part AC for cost allocation as follows:

“An authorised person must ensure cost allocation practices are consistent with the cost allocation guidance to ensure consistency with Fair pricing principles. This authorisation condition shall be interpreted in accordance with guidance on cost allocation published by the Authority.

An authorised person must not recover any penalties, fines, compensations, GSOP payments or redress, whether voluntary and/or involuntary, in lieu of payments made directly to consumers or in lieu of penalty, that it has paid (for example financial penalties arising from breach of heat network authorisation condition) from its customers through its charges unless specified otherwise in guidance.”

The AC reflects the stated policy intent, however, as noted above (Question 10), we object to the policy intent that prohibits the pass-through to customers of compensations, GSOP payments or redress, given that this does not reflect the economic realities of service provision in a competitive market.

We are also concerned that the AC makes it an obligation on the authorised person to ensure consistency with the guidance on cost allocation principles when the guidance is currently unclear, in particular as it applies to shared ambient temperature arrays. We would suggest the AC is amended such that cost allocation should be consistent with the fair pricing guidance and, only where applicable, cost allocation guidance.

Question 14: What other feedback do you have on the proposed approach to cost allocation?

We do not have any further feedback at this time.

Chapter 4: Price Comparison and Benchmarking Methods

Question 15: Do you agree with our proposed approach for defining heat network prices in a comparable way? Are there any other ways to define price that we should consider?

Ofgem’s proposed definitions of heat network prices are effectively variants of a fully cost of heat model comprising both the heat network and heat supply elements:

- Communal networks - prices charged to end consumers.
- Communal network supplied by a district network operated by the same entity – prices charged to end consumers.
- Communal networks supplied by a district network operated by a different entity – prices charged to end consumers.
- District network supplying secondary networks.

None of the above captures SGLs connecting ground source pumps in different premises. The shared ground loop costs would only be part of the capital element of the cost stack and therefore not comparable to any of the above definitions. If Ofgem does not adopt a definition appropriate for SGLs, we would expect such heat networks to be exempted from benchmarking and price comparison or subject only to own past price benchmarking.

Question 16: Do you agree with our proposal to use gas boilers and heat pumps as external reference benchmarks?

As noted in our response to Question 15, Ofgem's price definitions are based on the full price of heat supplied to end consumers and therefore the proposed external cost benchmarks for gas boilers and air source heat pumps are not directly comparable to SGL arrays. To undertake a meaningful comparison, other elements of the cost stack would need to be obtained, notably the costs of the ground source heat pumps from the freeholder or housing association and the cost of electricity demand of the heat pumps from the energy supplier.

Notwithstanding the above considerations, we would recommend that the external benchmarks are selected based on the appropriate counterfactual. For example, in premises currently supplied by gas, the gas boiler benchmark would be appropriate not the air source heat pump, and for new build properties both benchmarks could be appropriate.

Question 22: Do you have any other feedback on the proposed approach to price comparison and benchmarking?

The key for an owner and operator of SGL arrays is to have an appropriate cost or price comparator. Realistically we think this can either be achieved through:

- Development of comparator benchmarking between shared ground loop operators; or/and
- Past own price benchmarking.

Chapter 5: Profitability Analysis

Question 26: Do you have any other feedback on the proposed approach to profitability assessment?

Under a typical SGL pricing model (such as we have in mind for eHeat) profitability would be easy for Ofgem to assess and monitor at the time of asset commissioning and thereafter over the asset lifetime. We intend to apply a rate of return on capital employed (ie the SGL/array) which would be a clearly identifiable element of the charges for the array and remain fixed over the life of the asset and only adjusted in line with inflation. Following commissioning, Ofgem could monitor all elements of the SGL network's charges including the rate of return through data reporting.

Rather than being captured by Ofgem's benchmarking and profitability analysis regime, a bespoke price control could be developed for SGLs with the option to include this in licence conditions, at least for those SGL which are granted a licence in order to gain 'statutory undertaker' powers (see our response to Question 34).

Chapter 6: Central Price Transparency

Question 27: What are your views on the three options? Please comment on each option in terms of the price information to be centrally published, how the price information is presented and what prices are compared to.

The three options for central price transparency all provide consumers with information on how their total charge for heat consumption compares to relevant benchmarks:

- Option 1 Segmented Approach – comparisons within heat network market segment groups in a central register
- Option 2 comparison to market average and/or gas or low carbon benchmarks
- Option 3 a RAG rating comparison to price and compliance benchmarks.

We would be supportive of all the above options in that they provide transparency to consumers on their charges for heat consumption. However, none of the options in itself would be meaningful in terms of an SGL's charges for shared arrays in isolation. We would be happy to explore if a full price/cost stack for ground source heat pumps on shared arrays/loops could be constructed with other related parties for use in the above options. However, identifying an SGL's charges alone in these central registers will not provide any insights to consumers.

Chapter 7: Price Investigations

Question 34: Do you agree with the approach to price investigations set out so far? Please provide reasons and views to support your response.

We support the proposed approach to price investigations though we would want to see further details from Ofgem on how this approach would be adapted specifically for SGLs. We note that the proposed benchmarking and profitability analysis approaches which would be triggers for investigations do not in themselves adequately accommodate the factors specific to such networks.

Given the fixed costs of SGL arrays, we would be willing to submit costs and proposed charges to Ofgem for full assessment at the time of asset commissioning, after which they could be fixed and monitored over the life of the assets, typically 40 years. Ofgem now has powers under the Energy Act 2023 to grant licences to heat network operators wishing to become 'statutory undertakers' and access statutory rights and powers available to other licensed utilities. Ofgem could include a bespoke price control regime in licences granted to SGL arrays, with potential similarities to the price controls imposed on other licensed energy networks.

ScottishPower
July 2025