**Impact of implementing PPA and heat supply agreements into an ESCO model**

An ESCO is a commercial structure specifically created to produce, supply and manage the local delivery of decentralised energy to a development. Usually an ESCO will own and be responsible for the whole network.

As currently set up PEC will have contracts with each individual occupier to supply:

* electricity from the solar panels installed on their property; and
* heat from an air or ground source heat pump on their property.

We understand that PEC is looking to transition to an arrangement where an ESCO supplies heat and electricity to a housing association as part of a microgrid and the housing association then has the direct contractual relationship with individual households.

ESCO

(Heat Supplier)

Housing Association/Community Group

Individual Homes

O&M subcontractor

PEC – Installation/O&M services

EPC subcontractor

**Electricity**

As you are aware there is a strict licensing regime in place for the generation and supply of electricity.

How can PEC avoid need to be a licensed supplier as an ESCO?

The PEC ESCO could potentially apply for the small supplier exemption to avoid the need for an electricity supply licence. This would allow the ESCO to supply up to 5MW of electricity, of which no more than 2.5mw could be supplied to domestic customers. This would equate to approximately 500 customers.

However, the ESCO would still need a contract with a licensed supplier to be able to release excess electricity to the grid and buy extra power if needed.

**Heat**

Current legal framework for heat supply

There are currently limited regulatory controls on heat distribution and controls are limited to responsibilities of the heat supplier in respect of metering and billing. The Heat Network (Metering and Billing) Regulations 2014 set out metering and billing obligations for heat suppliers. They do not apply to systems where customers receive fuel to generate their own heat, for example individual heat pumps installed by PEC which just provide heat for a single property. However, these regulations would apply to the proposed ESCO arrangement.

Future regulations for heat supply

A Government consultation on the regulation of heat networks closed on 1 June which "plans to establish a licensing arrangement." The consultation considers that a full licensing regime is not appropriate for heat networks but it proposes to "take forward a regulatory model that comprises of general authorisation for all networks (to protect consumers from the point in which the network becomes operational) with an option for parties to apply for a licence for rights and powers." It is unclear at this stage which party would have the obligations under the regulations.

The consultation does not give any indication on timings for the introduction of the new regulations, but we anticipate that some elements of this will be in place before Summer 2021. For further details on the proposed approach I have copied a link to the consultation paper below (key pages are 36-40).

<https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878072/heat-networks-building-market-framework-condoc.pdf>

Guidance/controls in place prior to new regulatory controls

Until the new regulatory regime is in place the ESCO should:

* comply with the Heat Networks Code of Practice for the UK developed by the Chartered Institution of Building Services Engineers and the Association for Decentralised Energy; and
* consider joining the Heat Trust. As set out in the consultation paper the Government encourages all heat networks to join to prepare for the transition to regulation.
* comply with general consumer protection law.
* Comply with the obligations under the Heat Network (Metering and Billing) Regulations 2014 referred to above.

Contracts required for an ESCO to supply heat to a heat network

The contractual arrangements which an ESCO will need to consider will depend on the way the project is setup and how responsibility is apportioned between the parties involved. However, at the very least, in addition to the heat supply agreement and PPA with individual occupiers there would need to be an agreement between the ESCO and the housing/community association setting out what parts of the network the ESCO owns, demand guarantees or exclusivity and service standards across the network. There would also need to be a connection agreement setting out the process and costs for connecting to the network.

Would the ESCO have to be responsible for metering, billing, payment and customer service?

If the ESCO was supplying heat to a housing association for onward supply to individual households, the housing association would have the direct contractual relationship with the customers. However, under The Heat Network (Metering and Billing) Regulations 2014 the ESCO would be the heat supplier as the housing association would not be a final customer (as it would not be using the heat itself) and therefore the ESCO would retain legal responsibility for metering and billing.

The ESCO could consider using a specialist service company to manage the billing and payments on its behalf. Such companies are unlikely to accept credit risk but this could be mitigated to an extent with performance standards in the contract between the service company and the ESCO, for example an obligation to ensure any issues are appropriately escalated.

How would a move to an ESCO model affect PEC's existing heat supply agreements and PPAs?

PEC's heat supply agreements with individual occupiers could be novated across to the housing association/community group but they would also need to be amended to reflect any agreed network service standards and relevant provisions in the agreement with the housing association.

Similarly, the PPAs could be novated across but would also need amending. For example, the ESCO may want to consider the scenario where the occupier needs more electricity than is generated by his/her solar panels and he/she wants to buy the surplus electricity generated from others within the community.

Conclusion

As summarised above there are several different elements which will need to be considered in more detail before the heat supply agreements and PPAs are incorporated into an ESCO model. The legal position on heat networks is set for imminent change which is likely to have a significant impact on how the roles and responsibilities are divided between the various stakeholders and the appropriate contract structure.

Given the complexity further advice would be necessary regarding any specific scenario.