



**Energy Local**

# **Response to Future of local energy institutions and governance Consultation**

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## **Introduction to Energy Local**

**Energy Local CIC Limited**

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Energy Local CIC is a social enterprise set up to develop the local energy markets in a practical manner. The Energy Local concept aggregates smart meter data together to allow domestic customers to benefit from Time of Use Tariffs and to directly use locally owned small-scale renewables by entering half-hourly settlement in a cost-effective manner as one virtual meter. Generation and demand are netted before entering settlement.

Energy Local is also trialling a home energy management system that takes account of: forecast of local renewable generation, time of use tariffs, local demand curves. We are working with DNOs to measure the benefit in terms of flexibility and local balancing. We have good experiences of where flexibility is currently falling short but also the ability of local users to flex and how this can be practically harnessed.

## **Response to Questions**

### **Question 1**

We do not believe that the description is accurate of the present status quo or that it is possible to split the functions as described.

The present situation with only a small amount of active network management and flexibility is created by the current regulation. Not a conflict of interest by the DNOs but a regulatory situation where the risks and lack of reward makes

it very difficult for a DNO to take on DSO function and use flexibility effectively. The 'taxi rank' approach to network planning means that they cannot plan across an area of network or design for forecast future need. If flexibility does not materialise it is difficult to recoup costs of mitigation. Network planning and facilitation of flexibility are inextricably linked as without the correct design of the network, flexibility cannot be deployed. Likewise real time operation cannot be managed without the right network design.

The document has also missed a key issue in that the same resources can be used for flexibility on a national scale; the needs of which may conflict with local needs. The energy suppliers or TSO may be able to offer higher prices and therefore undermine a distribution network use of flexibility without coordination between the markets. Indeed, this is what Energy Local achieves.

### **Question 2**

Facilitating the best technical design needs to be the highest priority.

### **Question 3 and 4**

As highlighted above, the DNO is in the best position to become a DSO but this needs the right regulation. They need a framework whereby they can plan for developments over a number of years and be allowed to recoup costs of mitigation of stranded assets (if the correct risk assessment and the probability of forecast load or generation occurring has been calculated). This by its nature will then draw in local authorities and other local organisations to support this type of planning, indeed it will be dictated by the land planning regime that should be democratic.

### **Question 5 and 6**

There are undoubtedly benefits and opportunities but splitting organisations further and without the right regulation they will not materialise. The benefits should be an efficient low cost, local carbon network that rewards users for operating in efficient manner at whatever scale. This requires a strategic approach that allows coordinated planning and design. This is not clearly outlined in the document.

Likewise the clashes between control of the distribution network and transmission network are due to a regulatory regime that encourages a top down approach.

Coordination of markets is due to Ofgem's regulation regime not due to lack of cooperation on the ground.

It assumes that a DNO/DSO must issue dispatch flexibility but much of this can be carried out on probability basis and be incentivised by the market. Where

dispatch is required it must be controlled by the DNO/DSO so that their control room can effectively manage the network. There is a fundamental misunderstanding of the technical needs of the network in this document.

The document speaks of liquidity in local flexibility. A basic understanding of the network will indicate that only a few loads can offer local flexibility and therefore there will not be much scope for liquidity. This document assumes that only benefits can be via a traditional market which is inappropriate in this case.

Most organisations at a local level want the same thing, efficient, low carbon energy systems. This requires a regulatory system that allows the cooperation required over the long term.

### **Question 7**

The greatest risk is that there will be a huge reorganisation with little benefit and the regulation will still not facilitate long term planning or bottom up control.

There is a risk that the proposals further complicate processes for individuals or communities participating, being 'done to' or having an intermediary take much of the benefit.

### **Questions 8-10**

The only model that seems to be beneficial is 'interacting organisations'. This allows each organisation to do their job and use their skills whilst coordinating activity.

The first option will mean carrying on with the status quo effectively.

Option 2 will mean no coordination between network design and operation and lead to chaos.

The Option 3 is not possible with the multiple ownership of different networks and will not be accountable. It assumes a top down approach to control that is unlikely to deliver value to end users.

### **Question 11**

For the fourth option to work the following risk and probability based strategic planning approach. This would take an area over 5-10 year period:

- Its likely planning and development and energy needs would be taken into account and, from passed data, the likelihood of success would be estimated. From this a plan of the needs from different energy vectors

can be planned. This will be informed by planning and local energy planning. Design of the different networks can then be developed.

- A stage gate approach to big infrastructure, that is to only allow it to be developed as planned if demand/generation has been built or flexibility not been successful
- An assumption to use local flexibility, where possible via the main energy market A probability approach to flexibility when group a cluster of MPANs together on a particular piece of network to harness this resource. This also needs to use smart meter data to reduce the cost of participating in flexibility contracts.

### **Question 12**

For flexibility to be cost effective and not be in conflict with other markets, it must

- Work from the bottom up, i.e. the smallest entity first must manage constraints as much as possible before the next level up.
- The flexibility market must be an integral part of the main electricity market. This will also facilitate the participation of local users without purchasing expensive equipment or requiring an intermediary.

### **Question 13**

There needs to be a thorough understanding of how flexibility is linked to network planning and how it should integrate into the market power. There then needs the development of the right regulatory framework before continuing with this work.

This work also needs to be developed in coordination with the DuoS pricing regime.