

7 June 2022

Emailed to: [flexibility@ofgem.gov.uk](mailto:flexibility@ofgem.gov.uk)

Dear Sir/Madam

Thank you for the opportunity to provide input to the future of local energy institutions and governance consultation.

EMEC has had considerable dealings over an extended period with parts of the energy electrical supply system and therefore has formed some opinions based on this. EMEC is a test centre for marine energy devices and is therefore a supplier of energy to the network as well as a consumer from it. In addition, EMEC has been the project leader for the ReFLEX project: part of the profiting from the energy revolution programme sponsored by BEIS. The following comments are EMEC's rather than specifically those of the project.

EMEC warmly welcomes the consultation itself as it shows recognition that there are issues within the present arrangements that lead to some behaviours which have significantly impeded the roll out of decarbonisation. The fact that this consultation is being undertaken at all is therefore extremely welcome and also timely.

EMEC supports the statement that investments will be suitable in one area and less appropriate in another and indeed this has been the case in Orkney for a number of years. Orkney has seen significant underinvestment in flexibility and grid access when there have been clear and repeated calls for improvements. Unfortunately, the 'needs cases' presented by the DNO have not met with approval and EMEC would be happy to expand upon issues surrounding this process if that was useful.

EMEC would also agree with the statement that *'the existing institutional landscape is complex and it is not clear that the current arrangements will deliver net zero at least cost'* to which EMEC would also add *'...or even at all.'*



SCOTTISH  
**Business  
Pledge**



EMEC strongly support the statement 2.9 *‘Effective delivery means that planning is coordinated across the energy system both at a local level and nationally. This means that network planning both informs and is informed by wider energy planning activities such as transport, gas, heat, hydrogen and CCUS, and that network planning is also coordinated between transmission and distribution’*. It is EMEC’s experience that this coordination is sadly lacking and that there is significant silo thinking in each of these areas. Furthermore, EMEC has had experience of the further fragmentation within the DNO where ‘transmission’ and ‘distribution’ staff do not have any apparent contact and indeed seem hostile to suggestions that they should.

EMEC would also draw attention to the fact that there has been no effective coordination of heat to date except in isolated and determined pockets. The new arrangements to consider this long overlooked resource only seem to consider existing heat sources and are not looking forward to those which might arise through the introduction of new forms of generation and electrolysis. This is a significant danger and EMEC believes significant work is required in this area. It is critical that we holistically consider the nation’s energy requirements and at present there is absolutely no sign that this is being considered.

Section 3 for the ‘strategic case for change’ is welcome in that it recognises that carbon has been largely missing in the decisions to date. This change is now welcome however it is unclear whether the social value of investment is yet fully recognised. The role that investments in energy systems can play in terms of the creation of employment and the enablement of the infrastructure to prevent decentralisation to population do not clearly come through in the consultation as being matters which have been considered. EMEC hopes that the forthcoming Strategy and Policy Statement will give some guidance as to how these matters should be dealt with in future to aid decision-making.

3.7. There is reference to the need for there to be *‘a mix of technical skills as well as a democratic mandate’* and that this mix is critical in delivering the planning roles and responsibilities. In EMEC’s experience the DNO has assumed this mandate but has been proven to be demonstrably incapable of delivering it. Extreme care needs to be taken to ensure that the intentions within this paragraph are properly delivered and that a purely technocratic, and indeed rather isolationist, approach are not embedded in the future governance arrangements. To some extent this is picked up in section 3.9 and EMEC would thoroughly agree with the contents of these paragraphs.

In addition, the recognition in 3.12 that *‘there is significant room for improvement between distribution and network planning’* has been completely borne out in EMEC experience. In addition, staff have recounted personal experiences of seeking to influence processes within the energy system and found a complete wall between distribution and transmission staff within the DNO. Sub optimal arrangements have therefore been very common and probably wasteful. This behaviour needs to be ended expeditiously if we are to achieve Net Zero in time and affordably.

EMEC would take some issue with part of the intent in 3.14 where there is once again reference to the *‘lowest cost outcomes’*. EMEC is rather disappointed that this continues to be the main mantra in that the task is to decarbonise as quickly and as

cost effectively as possible. Lowest cost will not be the main driver. EMEC recognises hitherto that Ofgem has been very focused on minimum cost throughout its decisions but it is not clear that the basis upon which such decisions have been taken is now entirely robust. The externalities of the threats to the climate and war in Europe seemed to be inadequately factored into decisions with the level of urgency that they now require. A degree of judgement should therefore also be applied to the purely mathematical approach which has been deployed to date.

3.24. It is not clear whether the role of the prosumer has been completely picked up in this section. The dispersion of energy generating capacity across the homes and businesses of the United Kingdom is going to cause significant change in the number of generators within the network. Such change will inevitably alter the dynamics of the relationships between the regulators and the regulated. This will effectively bring an almost infinite number of small players into the arena and the potentially disruptive nature of this should be fully considered. It was not clear that this was absolutely the case in this consultation.

## **Models**

Overall EMEC favours framework models 3 and 4. Whilst more complex than the other models they have the advantage of there being a 'regional system planner' in the machine. EMEC would suggest that to date the networks have not been particularly effective at even coordinating distribution and transmission activities so to think that they would be capable of factoring in heat and hydrogen and other technical requirements is implausible. The need to have a properly constituted and orientated body that is seeking to deliver decarbonisation at the fastest and most cost effective pace would be a significant step forward from the present ad hoc arrangements. EMEC does not have specific insight as to some of the more granular matters within this however EMEC is firmly of the opinion that root and branch change is urgently needed.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'N Kermode', is written over a faint, light blue circular watermark or background.

Neil Kermode  
Managing Director