

Hitachi Energy's response to Ofgem's Forward Work Programme – 2024/25

Introducing Hitachi Energy

Hitachi Energy is an exciting global business with a ground-breaking heritage of innovation in pioneering technologies. As a global technology leader, we serve the energy, industrial, mobility, IT and smart cities sectors. We are a major investor in the UK, with a turnover of £1 billion.

We are advancing the world's energy system to be more sustainable, flexible and secure. As a technology leader, we collaborate with customers and partners to enable a sustainable energy future – for today's generations and those to come. In the UK, we are already helping to bring clean energy to 4.5 million homes by connecting the world's largest offshore windfarm at Dogger Bank to the grid. We strongly believe that the UK can lead the world in creating a secure, Net Zero-ready energy system through investing in technologies to make the energy system more sustainable, flexible, and secure.

Our response

Hitachi Energy broadly agrees with the direction and initiatives set out in Ofgem's draft Forward Work Programme (FWP). Considering the unprecedented challenges facing the UK's current energy system, coupled with the need to deliver a sustainable and secure future energy system, we are supportive of the proposed strategic framework for Ofgem's regulatory work, as well as the majority of the proposed policy projects and activities. However, we wish to address the below proposals, which in our view require further consideration.

Delivering best value

We believe the FWP needs to place an emphasis on ensuring and maximising value for customers. We note that Ofgem uses varied terms to denote a focus on lowest cost solutions and we recommend that this objective is clarified as 'best value for customers'. In our view, best value should be the principal objective and assessment criteria, not the lowest capital cost of projects. We believe that best value to the consumer can be delivered through accelerated investment in a decarbonised power system that will avoid the environmental impacts of delay, and by transitioning more quickly away from reliance on expensive fossil fuels. We recognise that Ofgem has moved closer towards similar definitions in recent years but there is still a lack of clarity on the wider benefits and services that some technologies offer, which creates uncertainty for investment.

Growth duty

We welcome the FWP's proposals to extend a growth duty to Ofgem, effective from April 2024. While we recognise that the regulator will consider the full ramifications of the new duty in coming months, we would welcome greater clarity on how Ofgem will deliver this objective. We note that the FWP notes the need to increase the pace of net zero infrastructure buildout, yet growth duty is only reflected in relation to the retail market. We would recommend that a specific work programme for the growth of net zero infrastructure and efficient, flexible energy system is also developed.

Strategic planning

While we note Ofgem's focus on strategic planning at local and national levels, including plans to reduce the scale, complexity and long lead times of new infrastructure buildout, we would recommend that the regulator addresses how it can help overcome existing planning challenges. We would particularly welcome a consideration of the balance between infrastructure design, costs and environmental impact to reduce planning challenges and avoid the risk of delaying buildout. For example, increasing the footprint of electricity substations to allow for screening from trees will support more environmentally friendly solutions but will likely increase overall project costs. At the same time, there is an increasing need to deliver projects at pace and reduce any undue delays due to planning challenges. As it now

has a statutory net zero duty, the regulator should work to ensure that there is a right balance between the speed and value of all infrastructure to meet decarbonisation targets.

Major projects regime

We welcome proposals in the FWP for the development of a major projects regime and agree that it is necessary to address existing structural challenges within the sector and ensure delivery of infrastructure at pace. We would particularly welcome greater focus on supply chain engagement in major infrastructure buildout, which is currently extremely limited. If unresolved, this will pose major challenges for the delivery of net zero infrastructure projects and, ultimately, represents a risk to the UK's decarbonisation targets. We would urge Ofgem to develop the new regime as quickly as possible to mitigate the risk of delivery delays. As part of this we recommend that Ofgem rapidly finalises and launches its early onshore competition model as the option of competition reduces TOs clarity on their investment pipeline and prevents them securing supply chain commitment to delivery dates. In the short term any benefit from an option on introducing competition could be severely outweighed by the benefit of supply chain certainty and reduced risk of failing to hit project timescales and the UK's net zero targets.

Hybrid assets

We note Ofgem's intention to conclude an initial assessment and pilot phase for offshore hybrid assets. The current lack of clarity on hybrid assets, and shared offshore wind transmission links in general, is limiting cooperation between developers and with TOs. This will result in further limiting the degree of offshore coordination that is achieved, reducing the cost, time and resilience benefits delivered by a coordinated meshed network. We see this as a priority issue as the accepted benefits of coordination will be further diminished if clarity on the regime is further delayed, or if the final regime is not attractive to investors. Ofgem will also need to account for the development of new commercial approaches, new mechanisms for insurance, technical issues or supply chain strategies, which will also need to be in place before new schemes are viewed as investable.

Digitalisation and innovation

We welcome Ofgem's recognition of the need to continue promoting innovation and to remove barriers negatively affecting the introduction of new products, services and methodologies. However, we believe that Ofgem should consider the introduction of clearer, more prescriptive regulation to support the acceleration of digitalisation. In recognition of the volume of net zero infrastructure required to meet the statutory 2035 and 2050 targets, we believe that increasing the pace of digitalisation will be critical. This is not only due to the overall cost efficiency of digitalisation in comparison to new infrastructure buildout, but also because various digital technologies are available and deployable now, which reduces the need for slow and expensive retrofit in the future. For example, this includes sensing and measurement technologies that enable the optimisation of operations and maintenance. However, the UK is witnessing a slow uptake of digitalisation, which threatens to delay our progress to net zero. As part of its statutory net zero duty, we believe that the regulator should consider the introduction of baseline expectations for digitalisation technologies, supporting long-term continuity and policy pathways which would provide energy systems participants with clarity on what solutions are required and to make investment at the required pace.

Ofgem's new and anticipated responsibilities

We appreciate that Ofgem has a challenging role in an uncertain and changing market, with the regulator forced to balance concerns around energy security, value for money, delivery of net zero, and environmental impact in decision making. We particularly recognise that numerous challenges arise from Ofgem's new statutory net zero duty, which we believe is well reflected in the FWP. This is seen through the example of a new climate change resilience programme, which is a welcome addition in recognition of the challenges represented by increasing severe weather phenomena. We also acknowledge that particularly the establishment of the National Energy System Operator (NESO) may have further implications on Ofgem's responsibilities, and we look forward to seeing how it balances its responsibilities as GB's independent regulator and as the NESO's regulator. Reconciliation of these varying objectives will be critical given the need to deliver investment and innovation at pace and we

would strongly urge Ofgem to ensure that such challenges do not cause unnecessary delays in the delivery of net zero and relevant policymaking.