

Hitachi response to Ofgem Open Letter on the next network price control review process

Introduction

We welcome the opportunity to respond to this open letter on the next network price control review process. Hitachi Energy is an exciting global business founded on two iconic companies – Hitachi and ABB Power Grids – 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 £500 million.

1. Do you have any views on the strategic issues we will face in the development of the next price control review process?

We are broadly in agreement with the strategic challenges laid out. We have detailed below a number of key themes that crossover with the strategic considerations.

Electricity Value Chain Transformation

We agree that in order for a successful transition to be delivered, there is a clear need for whole electricity value chain transformation to ensure that consumers can benefit from cheap renewables and the system can support electrification as the backbone of the transition. Increased investment in the transformation and digitisation of every part of the electricity value chain – generation, transmission, distribution, and smart consumption – will be necessary, whether to support the electrification of transport, heating, or the production of alternative fuels. Were investment increased, brought forward, and accompanied by clearer delivery plans from both regulators and government, significant economic benefits could be gained.

Future system flexibility

We agree that increased flexibility within the system should be a priority. However, it is a significant challenge to deliver the flexibility required at pace. We believe that current BEIS and Ofgem assumptions around the degree of flexibility that can be successfully added to the energy system in time are unrealistic. To ensure businesses and households take advantage of and benefit from low carbon solutions, network capacity must be sufficient to allow the necessary grid connections to be secured. This will require significant network reinforcement.

We would advise consideration of BEAMA's report from March this year, which, we believe, makes an important case for network enhancements in lieu of the quick delivery of flexibility technologies. In the scenario laid out, infrastructure is assumed to be replaced, reinforced and upgraded using existing, established technologies and processes, which therefore, provides a "deliberately conservative, upper limit on the investment required for infrastructure to deliver Net Zero should innovations in distribution networks and end-use technologies not be realised." The paper outlined makes clear that a rapid increase of the capacity of the distribution network will be required.

Achieving greater Demand Side Reduction

Demand side reduction (DSR) remains an important and illusive factor to unlock greater flexibility in the system. Encouraging consumers or their retail market suppliers to participate in DSR services goes beyond regulation and into engagement campaigns. Such campaigns would be well aligned with the need to encourage consumers to reduce demand to minimise their exposure to high energy prices over the winter. Demand side technologies such as vehicle-to-grid charging – which returns power to the grid from electric vehicles at times of low demand – should be embraced.

Accelerating the transition to Net Zero & UK energy security together

Renewables are now the cheapest, cleanest and most secure form of energy available, meaning accelerating the move towards renewable energy is highly desirable, as this will bring forward the UK receiving the benefits of lower costs and greater energy security. We welcome the government's efforts to decouple low carbon electricity prices from gas prices via the Energy Prices Bill, which will see UK consumers begin to benefit from the naturally low prices of clean power.

As we continue the transition to net zero, it will be important to continually keep in mind that there are significant costs to the delay of delivering renewable energy projects or new storage. Whilst we acknowledge there is difficulty in predicting exactly how networks should adapt and invest in the next price control period, in order to avoid the costs of delay – both environmental and economic – mechanisms need to be in place to allow for variations that are applied for approved rapidly and resource efficiently. This will help ensure the framework is responsive and efficient.

Ensuring the UK remains a globally competitive and attractive market for renewable energy investment and supply chains

We would urge you, in conjunction with the UK Government, to clearly lay out the regulatory frameworks required to give business and investors certainty, support innovation in renewables and accelerate the transition to Net Zero. If these frameworks can be delivered promptly, alongside a more detailed vision for a Net Zero economy, there is a significant opportunity for the UK to enjoy a 'first mover' advantage, thereby increasing the opportunities around the exporting of green technologies and services. An economically beneficial and equitable transition to Net Zero can only be delivered at pace through rapid investment in a more sustainable, flexible, and secure energy system, accompanied by the clarity and regulation required from government to make the UK an attractive destination.

One of the most important ways the government can ensure that the UK is attractive to investors is through timely and effective regulation. Regulation has a major implication for implementation costs and the attractiveness of the UK for investment and must be designed and implemented in a manner that maximises the opportunities that Net Zero presents. This approach would make the UK a more globally attractive destination for international investment, reducing the cost of capital and increasing economic benefits.

2. Do you have any views on the case for change we have outlined?

We broadly support the case for change, though we would seek to emphasise one key point. A key area we wish to see a shift in emphasis is on the question of cost to the consumer. We believe that the definition of 'best value to consumer' should be broader than currently, which focuses on lowest capital cost of projects. Best value to the consumer can be delivered through accelerated investment in a Net Zero power system, in order to avoid the environmental impacts of delay, and by transitioning more quickly away from reliance on expensive fossil fuels. Focusing purely on the least cost could miss out on some wider economic benefits and additional grid services that some technologies may offer, particularly acceleration in delivery of Net Zero and achievement of lowest costs.

Separately, we have observed that Distribution Network Operators (DNO's) often struggle to outline the benefits of projects effectively to Ofgem. We believe that Ofgem should make it easier for DNO's to get early feedback on innovation ideas and justifications for investments. Better communication, greater understanding of criteria and a more open decision-making process in this regard would help avoid unnecessary rejections and delays, thereby bringing forward the benefits of Net Zero to consumers. When giving consideration to such projects, we believe a change in approach is needed. We believe it would be preferable to adopt a process which more readily supports beneficial projects and identifies their benefits.

3. Do you have views on whether the changes to the electricity or gas sectors mean we should consider alternatives to the approach taken in the RIIO-2 price control?

We welcome that consideration is being given to moving away from the use of periodic reviews for some or all of the network companies' activities and are in agreement that options (2)-(4) would bring benefits through the reduction of the need for strategic investments to be considered as part of the period review.

Hitachi Energy would also like to emphasise the importance of maintaining investor confidence over the next decade. Doing so in a competitive global landscape will be crucial to ensuring the UK benefits from investment in its future energy system. Market reform is central to this and must be harnessed to bring forward investment – ahead of need – in a future-ready electricity grid.

Are there any broad frameworks or options that you think we should consider, including variants and alternatives to those we set out?

No response.