

**Smart Energy Team** 

Department for Business, Energy and Industrial Strategy 1 Victoria Street London SW1H 0ET

By email: smartenergy@beis.gov.uk

Response to: Facilitating the deployment of large-scale and long-duration electricity storage: call for evidence

September 27, 2021

## Uniper

Uniper is an international energy company with around 12,000 employees in more than 40 countries. The company plans to make its power generation CO2-neutral in Europe by 2035. With about 35 GW of installed generation capacity, Uniper is among the largest global power generators. Its main activities include power generation in Europe and Russia as well as global energy trading, including a diversified gas portfolio that makes Uniper one of Europe's leading gas companies.

The company is headquartered in Düsseldorf and currently the third-largest listed German utility. Together with its main shareholder, Fortum, Uniper is also the third-largest producer of CO2-free energy in Europe. In 2020, Uniper had a gas turnover of more than 220 bcm. Uniper is also a reliable partner for municipalities, public utilities, and industrial companies for developing and implementing innovative, CO2-reducing solutions on their way to decarbonizing their activities. As a pioneer in the field of hydrogen, Uniper has set itself the target of operating worldwide along the entire value chain in the future and implementing projects that will make hydrogen the mainstay of the future energy supply.

In the UK, Uniper operates a flexible generation portfolio of seven power stations capable of powering around six million homes, and a fast-cycle gas storage facility. A broad range of commercial activities is offered through the Engineering Services division, while the Uniper Engineering Academy delivers high-quality technical training and government-accredited apprenticeship programmes for the utility, manufacturing and heavy industry sectors. Uniper is investigating the feasibility of CCUS, hydrogen fuel switching, and other decarbonisation options for the UK fleet. In addition, Uniper is developing options for low carbon hydrogen production both by electrolysis and gas reformation with CCS, at our Killingholme site, utilising the Zero Carbon Humber infrastructure, and at our Connah's Quay site in North Wales, to connect to the Hynet North West infrastructure.

## **Consultation Response**

Uniper welcomes the consideration of the need for large-scale long-duration storage indicated by this call for evidence and the study commissioned by BEIS.

Uniper UK Limited Compton House 2300 The Crescent Birmingham Business Park

Birmingham B37 7YE www.uniper.energy

Registered in England and Wales Company No 2796628

Registered Office: Compton House 2300 The Crescent Birmingham Business Park Birmingham B37 7YE



It is widely recognised that there is a need for large-scale long-duration storage in a low carbon energy system with high volumes of intermittent renewables.

The analysis commissioned by BEIS is necessary to set out more clearly the system need and estimate the potential cost of this type of storage. In turn this will enable meaningful deliberation on current market barriers, policy gaps and provide input to assessing any changes needed to the current market framework to provide a route to market.

Therefore, we have not sought to answer the questions in detail. The market framework should be technology neutral and where it is identified that support or specific intervention is required, it should be available consistently across technologies. The commissioned analysis should provide input to developing an appropriate definition; the definition proposed – energy storage of over four hours with a power capacity of 100 MW – looks to be too low a threshold on both duration and scale. The study should also consider the role of long duration storage using different energy vectors, such as hydrogen; producing hydrogen from wind power feeding directly into storage facilities for example.

Yours sincerely,

Uniper UK Limited