

Recommendations for network operators

Flexibility (supply, demand, trading) is a key part of the future energy system as demonstrated by industry net zero pathways. Future decisions made around the UK's transmission network will be significant in influencing development of new renewable generation, balancing, flexibility and trading.

It is unlikely that establishing a digital trading platform represents the correct choice right now, given the immaturity of the hydrogen market. However, there remains scope for stakeholder action to enable local trading platforms to become operable in the future, integrating hydrogen and electricity markets.

Electricity

Milford Haven does not sit in a Constraint Managed Zone, and WPD is therefore not looking to procure flexibility here. However, Distributed Energy Resources (DERs) in the area still experience non routine curtailment, indicating constraints on the network. WPD could consider extending their Constraint Managed Zone to include Milford Haven to allow for flexible power trading.

New DERs currently have limited options to connect to the distribution network on a firm basis in Milford Haven due to it being in an Active Network Management zone where WPD can curtail distributed generation assets. WPD could act as a keystone by supporting opportunities for local flexibility and energy trading, through using flexibility to provide capacity for new connections before traditional reinforcements need to be made.

It is recommended that WPD continues and doubles down on the steps needed to support its transition to DSO, in keeping with the Energy Data Taskforce recommendations.

It is recommended that WPD urgently update their existing IT platform currently used to assess the requirements for flexibility, manage dispatch and make payments for the flexibility provided.

Gas

WWU should consider how peer to peer trading in gas markets could be operationalised, enabling learnings from natural gas trading to apply to hydrogen when it becomes more widespread.

Continue the gas mains replacement program to enable hydrogen to be transported through the network and be transparent about the cost of other upgrades needed for a hydrogen transition so that these costs can be accounted for.

WWU could undertake pilots of network conversion to get clarity on further costs for upgrading the system to hydrogen, the cost of decommissioning natural gas and sharing the outputs of these studies widely and openly.

Network operators (WPD and WWU) should maintain engagement with the MH:EK project or the local entities to integrate the network capacity and planned upgrades into further whole system energy modelling and the future decarbonisation roadmap.