EIP041

Can we accelerate development of co-located storage assets?

# Problem Statement Details

|  |
| --- |
| Grid scale storage assets have the potential to smooth generation, but also provide flexible demand with long and short duration batteries using same connections. However, these assets tend to compete for connection capacity because there is no incentive to collaborate. There is real need to define flexibility for markets as an enabler or restoration services as a secondary enabler.  Networks and grid service developers need to be incentivised to optimise the development site and maximise the use of land to provide grid services. |

# Key Stakeholders

|  |
| --- |
| NGESO, TOs, DNOs, electricity storage developers and optimisers, electricity generators, site owners. |

# Target Market

|  |
| --- |
| NGESO, Ofgem. |

# Enablers and Constraints

|  |
| --- |
| ***Enablers*** – REMA addresses some of this problem (e.g., operability, long duration storage and long duration flexibility, balancing mechanisms) so perhaps needs a local angle or a specific focus such as hydrogen?  ***Constraints*** – National Grid tend not to recognise the value provided by co-located assets. They ask who owns assets/connections. |

# Scalability and Target Implementation Date

|  |
| --- |
| In line with REMA review. |

# Seed Question

|  |
| --- |
| Are there any low regrets actions or quick wins ahead of REMA delivering the proposed reforms? |

# Innovation Strategy Target Areas

|  |  |  |
| --- | --- | --- |
| Innovation Theme | Target Area | Primary or Secondary |
| Data and Digitalisation | The shift to data-driven, digitally-enabled networks is critical as we move towards Net Zero.  We need your help to drive standardisation, interoperability, security and digital skills whilst accelerating our transformation to data-driven networks by the mid 2030s. |  |
| Flexibility and Market Evolution | Energy networks must quickly and efficiently respond to the rapidly evolving needs of the energy system transition. We need your support to eliminate barriers to new market entrants, deploy novel commercial and network management solutions whilst ensuring fair participation and eliminating regulatory barriers within the RIIO-2 price control periods. | Secondary |
| Net zero and the energy system transition | In order to meet the UK net zero targets of 2050 we must start converting our networks to deliver low carbon fuels today. We want to work with you to develop the role of our gas networks into the future by investigating, trialling, implementing and delivering safe, low carbon alternatives to natural gas such as Hydrogen. |  |
| Net Zero requires connection of more low and zero carbon sources of energy generation, storage and demand to both the transmission and distribution networks. We need your innovative methods for effective network management and accessing flexibility to improve visibility, forecasting and modelling of low carbon technologies. |
| Optimised assets and practices | Innovation has a key role to play in ensuring our networks continue to remain reliable, safe, secure and resilient to our changing climate. We are constantly looking to improve and welcome support to identify methods to prevent interruptions, ensure resilience, reduce climate impact and future-proof our networks. | Primary |
| Supporting Consumers in Vulnerable Situations | Equality and fairness are the foundations of a just transition to Net Zero. We hope you can provide insight into the transient and situational nature of vulnerability and how we can overcome the impact the energy system has on consumers, building strong relationships for the future. |  |
| Whole Energy System Transition | The energy system must consider the full range of opportunities, risks and interdependencies that exist across the energy networks to integrate and optimise them in a way that best serves the consumer. We are looking for ways to improve visibility of the networks and transitional options, co-ordinate approaches and collaborate across the UK. |  |