

Hitachi ABB Power Grids response to Ofgem's Consultation on EHVDC's Initial Needs Case and initial thinking on its suitability for competition

Introducing Hitachi ABB Power Grids

Hitachi ABB Power Grids (HAPG) is a global technology leader serving the energy and related sectors. We are a major investor in the UK, with a turnover of £500 million.

We are committed to powering good for a sustainable energy future. Our aim is to bring affordable, clean energy and sustainable living to the world to make it fit for future generations. 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 GB Electricity transmission system, and are supplying Europe's first multi-terminal HVDC interconnection, linking Shetland to the mainland electrical network for the first time.

We strongly believe that the UK can lead the world in creating a secure, net zero-ready energy system through a stronger, smarter, greener grid.

Our response

We have shaped our response around the issues where we have most expertise and will leave other areas to consultees better placed to respond.

Chapter Three: Eastern HVDC Assessment

Question 1: Do you agree that meeting the technical requirement with the two proposed HVDC links is appropriate?

Yes, we agree with the direction of travel.

It is imperative that this project goes ahead. If it does not, or if there is a delay to the project, it will cause significant costs to the consumer.

It will also mean that TOs, including National Grid, SSE and SP, will be unable to reach 2030 targets. If this happens, it will also impact on the government's ability to deliver a 78% reduction in carbon emissions by 2035, and a fully Net Zero UK by 2050.

Question 2: Do you agree with our initial conclusions on the cost benefit assessment and the appropriateness of the options taken forward?

Yes, we agree.

Question 3: Do you agree that on the balance evidence including CBA, recent FES and NOA documentation, that these investments appear low regret?

National Grid ESO is a fair & impartial system operator and has developed and evaluated a comprehensive range of scenarios that can provide best value to GB consumers. These investments in the

infrastructure on the East Coast are critical under a broad range of credible scenarios and will form the basis of the future energy system the UK needs.

Question 4: Are there any additional factors that we should consider as part of our Initial Needs Case assessment?

Yes. We would urge caution against anything that might delay this project. As set out by the TOs, a single year delay of one HVDC link may incur £330m of additional constraint cost. If both HVDC links are delayed by one year, £665m of additional constraint cost could be incurred. This cost is too large for consumers to bear and contradicts the principle of achieving the best value for the consumer.

One link being delayed will cost consumers more than £900 K a day. If both links are delayed by a year, the daily cost to consumers is greater than £1.8M.

We would expect the cost to deliver the project to exceed the £665m annual figure if both links are delayed. Therefore, any delay to delivery would mean that consumers would also lose the cost of delivering the project just in terms of outage constraints.

Chapter Four: Delivery model considerations

Question 1: Do you agree with our proposal to make a final decision on delivery model at the FNC?

No. Further detail as to our position is provided in our response to question 2.

Question 2: Do you consider there is likely to be any quantifiable consumer detriment if we defer our decision on competition until the FNC?

Yes.

In the run up to reaching 2030 targets and the next round of Ofgem Contract for Difference (CfDs), we may encounter constraints in the supply chain. As such, certainty as to whether this project will be delivered on time is needed as soon as possible to ensure that we can mitigate against capacity issues. The earlier that stakeholders in the supply chain are able to secure the costs for their designs and materials, the better.

Furthermore, it is worth stating that there is of course a huge cost involved in bidding for these projects, and in creating innovative engineering solutions. If the project runs the risk of being delayed, stakeholders within the supply chain risk losing resource and capacity, which ultimately could lead to supply chain disengagement. This is not cost efficient to any player involved in the delivery of these links, which is a critical piece of national infrastructure.