



Email to: LDES@ofgem.gov.uk

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Selection of LDES projects for Window 1 Cap and Floor regime

About RenewableUK

RenewableUK members are building our future energy system, powered by clean electricity. We bring them together to deliver that future faster; a future which is better for industry, billpayers, and the environment. We support over 400 member companies to ensure increasing amounts of renewable electricity are deployed across the UK and access markets to export all over the world. Our members are business leaders, technology innovators, and expert thinkers from right across industry.

Overview

RenewableUK welcomes the Government's consultation on long duration electricity storage (LDES) project assessment and the approach to selection of LDES projects for window 1. Overall, we welcome the approach proposed, however we have concerns which we have summarised below.

- **Clarity on weighting applied across financial, economic and strategic assessment** – this is needed to demonstrate Ofgem and NESO will be following a fair and robust process which will give confidence to the industry to develop and deliver LDES projects. The industry is also concerned about the value Ofgem will place on strategic factors as part of the process and how non-monetised impacts will affect the overall project consideration. We see the need to simplify some of the strategic factors proposed and higher importance placed on factors such as ensuring technological diversity and LDES project value to system security and resilience.
- **Taking into account material impacts on LDES revenues such as re-optimisation revenue, participation in ancillary services and wider benefits like avoided network reinforcement** – as this is currently scoped out of the assessment, the process risks skewing the results of the assessment and not

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yielding a complete and fair picture of the overall LDES projects value to the system and consumers.

A regular dialogue between developers and Ofgem will be imperative for the success of the cap and floor scheme. We welcome that Ofgem has been progressing at pace to deliver a cap and floor scheme for LDES on the ambitious timelines required for Clean Power 2030. We note, however, that the industry is under significant pressure to respond to this consultation given the overlap between the deadline for window 1 project submission and the consultation timeline.

Consultation Questions:

1. Do you have any views on our overall approach to the MCA, including specifically the proposal to assess the three main areas set out in 2.2?

Welcome the flexibility that the overall project assessment approach provides. We agree with Ofgem's outlined approach which looks to include economic, strategic and financial assessment in evaluation of projects. We do not believe it is the right approach to simply combine the NVP of all monetised impacts with non-monetised impacts into an overall project score. We strongly encourage a more explicit scoring of strategic and economic assessment factors; there is very little detail in the consultation document on how this will be carried out or applied. In this way Ofgem could look to give greater consideration to projects which are deliverable and can bring benefits to the consumer.

Ofgem needs to be more transparent on the weighting applied to non-monetised impacts and particularly factors which align with Government objectives. Industry is concerned that there might be insufficient consideration or weighting applied to important factors such as project location, contribution to system operability and decarbonisation.

Lack of clarity on weighting of non-monetised impacts risks Ofgem being exposed to window 1 shortlisted projects raising challenges down the line which could slow down the process. Ofgem should avoid being exposed to those risks as the overall timeline for window 1 cap and floor award could be affected.

Target setting

At the stakeholder workshop on 18 June Ofgem suggested it will welcome comments from industry on the LDES capacity range. We have captured this below.

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We support Ofgem looking to set a LDES target for window 1 in consultation with NESO and DESNZ and the assumptions in the Clean Power 2030 Action plan and the Strategic Spatial Energy Plan. With LDES window 1 receiving 171 applications and the further review into the LDES target range we would be supportive of an approach which looks to further breaking down this target – either by setting out specific technology types or by setting out different duration categories. We believe that the latter could be more complicated in the timescales involved for LDES window 1 delivery, but could present a more permanent, technology-neutral solution for any future LDES cap and floor windows.

In setting the target capacity we would welcome further clarity from Ofgem on how any risks of non-delivery from eligible projects will be accounted for. Would Ofgem be looking to procure capacity towards the upper end of the overall window 1 range or favour capacity from more established technologies (Stream 1) over others?

2. Do you have any views on our proposed in-the-round assessment that will rank projects based on NPV and then adjust with non-monetary impact will provide a robust result?

As above, it is currently unclear how Ofgem will adjust the assessment with non-monetised impacts in a way that could give confidence to window 1 participants that due consideration has been given to those which contribute to alignment with Government policy objectives. As such, the lack of clarity particularly on taking into account strategically important factors is concerning and the industry fears it risks misalignment with the policy intent to support projects that are deliverable, but cannot be realised without a cap and floor revenue stabilisation mechanism in place.

Different types of LDES projects can offer significantly different economic benefits including jobs, skills and supply chain depending on location, the size of the project and the type of LDES technology. The approach to project assessment must account for strategic differences across different LDES technologies and align with the Government's growth mission; weighting must be given to non-monetary impacts and clarity provided on how these will be taken into consideration into the overall assessment.

3. Do you have any views on using competitive bids - based on project-specific parameters - to inform the financial assumptions and C&F levels in each project's assessment? How might this approach work on a technology-neutral basis?

We believe that an administrative cap approach for the first window of LDES cap and floor appears more appropriate than one using competitive bids.

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We would support an administrative approach where Ofgem uses a benchmark level based on assumptions about the cost of debt and cost of equity submitted by projects. This could then be applied to an asset class level using a common set of parameters across LDES projects.

4. Do you agree that some revenue streams – such as from re-optimisation or ancillary services – cannot be fully captured in the Economic Assessment? How could NESO or Ofgem better account for or validate these in the assessment process?

Re-optimisation and participation in ancillary services could have material impact on LDES project revenues. Not fully capturing those elements would not yield a complete picture for Ofgem and NESO to assess projects and the benefits they can deliver to the system. We understand that quantifying individual project re-optimisation and participation in ancillary services is difficult for NESO to carry out with the tools at hand. However, we believe that this should feature in the economic assessment.

Ofgem could potentially look at historical results on re-optimisation for LDES assets to understand the revenue opportunities for LDES assets in different locations. If this is not possible, or the information is deemed insufficiently robust, LDES projects should be able to provide supporting evidence to clarify both monetised and non-monetised elements in their submissions.

It will be important for Ofgem as well as NESO to clarify how this information will be used in the assessment process.

5. Are we considering the right impacts for the Economic Assessment, and have we correctly characterised both monetised and non-monetised impacts?

We agree this is a comprehensive list of impacts, but as above we are concerned that the modelling approach risks not capturing the full spectrum of LDES system benefits including benefits from re-optimisation and participation in ancillary services. Those impacts could materially impact projects overall performance in the assessment depending on where in the system they are located and their overall operating characteristics.

The LDES benefits on avoided network reinforcement is not included in the list of impacts. This is a key benefit of LDES particularly located in areas with high renewables and low demand. Looking at avoided network reinforcement costs alongside avoided curtailment costs is measuring two distinct benefits of LDES

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technologies to the overall consumer and both should be included in the assessment.

6. Are there important system-level benefits from LDES that are not well captured in the Economic Assessment but could significantly impact outcomes? If so, what are they, and can they be consistently assessed across projects?

As above, the cost of avoided network reinforcement should be captured in the assessment as this is an important benefit that different types of LDES can provide. There are useful points of reference for capturing this including the work on Beyond 2030.

The strategic assessment includes an additional assessment of service provision in system stress conditions – we welcome this, but the industry will need clarity on how factors would be assessed alongside evidence on wider benefits. These are likely to be quite material differences across different types of LDES projects and Ofgem will need to have a robust framework against which to weigh the evidence received.

7. Do you have any views on the relevance, appropriateness and completeness of the impacts proposed in the Strategic Assessment?

As above (Q1) industry is unclear on how projects will be scored under the Strategic Assessment and weighting in decision-making applied to the 5 factors listed in the consultation.

RenewableUK supports simplifying the criteria. We believe the objectives of option value as described in the consultation document could largely be captured under technological diversity.

It is also unclear what *'additional plausible future scenarios that have not been explicitly modelled in our assessment framework'* refers to and what these scenarios would be. Do projects need to submit evidence with additional sensitivities as part of their Q3 submissions or would Ofgem/NESO be running additional modelling exercises?

It is also unclear what criteria will be used by Ofgem to assess if LDES project needs a cap and floor support. It risks potentially harming the overall intent of the LDES cap and floor mechanism – providing a revenue certainty that will catalyse investment in LDES by addressing the uncertainty LDES projects face in terms of market risk.

8. Are there other impacts that we should be considering in the Strategic Assessment?

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We suggest that other important strategic and policy issues should be addressed in this assessment category. We support the inclusion of sector growth and ability to achieve Government decarbonisation aims. We also believe that Ofgem should look to re-assess project deliverability and risk of non-delivery, including taking into consideration challenges to non-delivery such as supply chain delays.

9. Do you have specific suggestions for how the Financial Assessment output should be considered alongside the Economic Assessment?

We welcome Ofgem's approach to use project-submitted financial information and then validate this against Ofgem/NESO own assumptions and analysis. We also note that as suggested the outputs of the analysis will rely on input assumptions which are inherently uncertain – assumptions about demand growth, forecast commodity prices and generation mix.

Revenues such as re-optimisation or participation in ancillary services will also not be included in Ofgem's assessment which limits the value of the assessment given the importance of those revenue streams for LDES projects. It will be important for Ofgem not to discount projects on the basis of the financial assessment alone.

It will be important to place a clear and transparent weighting/scoring to the economic and strategic assessment and communicate how this is going to be achieved with the industry.

10. Do you agree with our proposal to assume that LDES projects will remain revenue neutral following balancing market actions?

We understand that there are some limitations with using PLEXOS, however we stress that this approach is not reflective of LDES behaviours.

Re-dispatch of LDES assets and its location could have an important impact on the LDES project overall revenues (as it is project specific). The omission of balancing market revenues will distort the assessment as typically projects located in high renewables areas can access higher Balancing Market revenues than those that are not. We support Ofgem and NESO looking at ways to include LDES participation in the Balancing Mechanism and particularly re-dispatch to account for location-based differences in projects revenues.

11. Do you have any views on the proposed Marginal Additional method and whether it provides a robust basis for assessment?

We welcome the simplicity of the chosen approach and what it is trying to achieve. However, we note the use of notional LDES plant in the counterfactual which is allocated equally across the 37 transmission zones rather than economically optimal

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locations could be harmful for the results of the assessment and might not provide a fair assessment. The location of the LDES assets could have a significant impact on the overall project performance under the assessment.

The modelling approach also does not take into account the second-order impacts of LDES projects on network capacity and generation. We believe this could have a material impact on the ranking. LDES projects can deliver significant benefits to avoided network reinforcement or displacement of gas generation on the system.

12. Do you have any views on the counterfactual to use for this assessment and sensitivities that we could use?

NESO consultation states 3 different sensitivities which could be modelled: another FES scenario, zonal pricing and different weather years. It is not clear if the intent is to model 1 or all 3 sensitivities as part of the assessment.

We highly support the case of modelling the impact of zonal pricing and keeping this as an option in the sensitivity scenario(s) which will be adopted.

Modelling different weather years and the case of high or low wind seems reasonable, and we support the use of different weather years in the assessed sensitivities. It will be important to include prolonged or short periods of system stress event (different weather years) which would uncover the value of LDES projects and also support the strategic assessment of the 'system security and resilience' factor.

Without having sight of the FES 2025 publication, we cannot comment on how valuable it will be to have another FES scenario used as the basis for the sensitivities. It would be useful to have a scenario with different assumptions in terms of the level of consumer-led flexibility on the system and demand-side response as this is likely to affect the LDES performance and LDES assets revenues.

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