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Financial Framework: LDES 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) financial framework and the approach to assessing cap and floor levels for window 1. Overall, we believe that the outlined approach to financial assessment of LDES project is unbalanced and does not present a level playing field for the range of LDES technology types eligible for cap and floor. Stronger protections need to be applied as the current approach means the risks which are left to developers (inflation, end of regime clawbacks, asymmetric, penalty-only incentives) and limited, controlled up-side, make the scheme less investable, defeating the original purpose of the cap and floor: enabling investment in LDES.

We believe that a more balanced approach to financial assessment should be adopted with key changes needed to ensure investor confidence in the scheme summarised below. We expand on these points in our answers to the consultation questions in the flowing pages.

- To ensure a fair and effective process Ofgem needs to select projects based on the Multi-Criteria Assessment process, with accurate and transparent weighting applied to non-monetised economic and strategic factors. We believe an administrative cap and floor should be applied to successful projects.

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- Ofgem should introduce an inflation re-opener which can be triggered by projects in cases where real inflation outstrips the notional index.
- The truth-telling incentive as designed should not be adopted as it will not minimise the risk of strategic bidding.
- First-of-a-kind (FOAK) premium should be applied to parameters particularly considering the innovative nature of Stream 2 LDES types and the lack of recent development and track record of deploying new pumped hydro assets both in the UK and globally.
- The proposed beta of 1.125 is too low and fails to take into consideration the commercial and technical risk of LDES assets. We suggest that Ofgem considers either increasing the equity beta to reflect the greater average risk of LDES compared to interconnectors or applying a range of equity betas per technology class.
- The cost efficiency measure is unnecessary due to the strong incentive the Post Construction Review stage already provides and the delivery incentives will not encourage faster delivery as developers are already incentivised to deliver as quickly as possible.
- Greater consideration is required on how a soft cap could be designed particularly taking into account operational implications and risks to efficient dispatch. We suggest Ofgem considers applying a sliding scale to revenue-sharing above the cap or performance-linked measures as an option to better account for efficient dispatch.
- We consider that removing the risk of clawback at the end of the regime will support investability of the LDES cap and floor scheme now.

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 believe that with appropriated changes to setting out the cap and floor levels Ofgem and DESNZ will be able to achieve the overarching objectives and ensure that the cap and floor mechanism enables investment in LDES, brining much needed benefits to consumers and ensuring UK's energy security. We would be happy to engage further with Ofgem on any of the points raised in this response.

Consultation Questions:

Cap and floor levels approach

1. **What are your views on our proposal to move beyond focusing solely on project return rates at the C&F levels, towards a more flexible approach**

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that allows projects to tailor key parameters to the needs of their LDES project archetype?

We support the principle of competition and Ofgem's intent to ensure that projects that come through the cap and floor regime represent value for current and future consumers. However, as we have stated in our previous responses to Ofgem we do not believe that applying a competitive approach for the first cap and floor window is fair or appropriate for LDES technologies which have not been deployed at scale before. While we understand the motivations behind Ofgem's approach given the 171 applications for the scheme, we believe there are serious concerns about ensuring a level playing field between eligible LDES and lack of appropriate tools for Ofgem to ensure that aggressive bids and the consequences of strategic bidding are mitigated.

We are concerned about the proposed approach to inflation. Fixing inflation at 2% per annum for the duration of the regime introduces significant basis risk to projects. It is unrealistic to assume that inflation will average at 2% for LDES which would be looking to lock-in a fixed debt return over 20 or 25+ years. While we recognise that there is no certainty on the level of outrun inflation, both for the industry and Ofgem, we believe the cap and floor regime needs to appropriately recognise this as an uncontrollable risk to address as part of the scheme and use appropriate tools to mitigate against that. We believe that this will make the scheme more investable. Therefore Ofgem should look at introducing an inflation re-opener which can be triggered by projects in cases where real inflation outstrips the notional index. If not covered by the scheme, the inflation risk to projects will have to reflected in the submissions developers provide during Project Assessment stage. We also note that the CfD scheme also provides generators with protection from inflation in the contract by indexing the strike price to the CPI. The key purpose of indexing to inflation in the CfD is to de-risk investment, while protecting generators from inflation risks, particularly during the construction phase of CfD projects. The UK approach to indexation is seen as a gold-standard and a key reason why the UK scheme in general is viewed as a prime example of a stable and secure investment mechanism.

Ofgem also propose fixing the rates for the cap and floor financial parameters to 8 April 2025. While this provides certainty for the industry now, it adds to the basis risk developers need to account for in the cost of capital. If a lower rate is possible closer to when projects with cap and floor award reach Financial Investment Decision consumers would be able to benefit from it.

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We strongly encourage a more explicit scoring of strategic and economic assessment factors as part of the Multi-Criteria Assessment as we believe this should have a more material impact on the overall project selection. In the webinar on 8 July, Ofgem also stated that the financial assessment will not replace the Project Assessment, as the Project Assessment will determine if a project will get a cap and floor award. We do not consider that Ofgem's approach to competitive bidding is fair or can ensure a level playing field between different LDES technologies. To ensure a fair and effective process Ofgem needs to select projects based on the Multi-Criteria Assessment process, with accurate and transparent weighting applied to non-monetised economic and strategic factors and an administrative cap and floor should be applied to successful projects.

2. **How well does the proposed competitive framework accommodate the differing risk profiles of various LDES technologies? Are there any technology-specific considerations that should be better reflected?**

We have concerns about the competitive bid approach to cap and floor setting as set out in the consultation:

- The use of the 5 key parameters part of the bid package: target rate of return, residual value, contract length, decommissioning cost and interest during construction will lead to unnecessary complexity when comparing different projects both within the same asset class as well as altogether. The lack of clarity on how Ofgem will assess 'economic and efficient' costs introduces additional risk to LDES project developers, particularly for projects which might have a wider range of uncertainty about their costs. Clarity needs to be provided as soon as possible to avoid an unintended delay in project development and progress towards Final Investment Decision.
- We are concerned that none of the 5 key bid package parameters, with the exemption of contract length, will have a material impact on the financial assessment of projects. The ability to propose longer regime lengths could offer benefits for both customers and developers, but it is unclear how Ofgem will ensure projects of different contract length are assessed fairly against each other in a competitive framework.
- The competitive bid parameters also do not make any distinction between Stream 1 and Stream 2 LDES technologies, and the specific risk associated with those. Bidding the lowest possible target rate of return under a competitive framework also risks exacerbating the risk of strategic bidding and risks selecting projects which might not be able to reach FID unless adjustments are made late in the process. An administrative approach to

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cap and floor setting will ensure that the higher risk associated particularly with Stream 2 technologies is appropriately reflected in the process.

- We expect Interest During Construction (IDC) rates to be marginally higher for Stream 2 technologies due to higher associated construction risk of less established technologies, while pump hydro assets will also carry a high construction risk due to longer construction timelines. Competing on IDC rates across LDES technologies will not present a level playing field and therefore we do not support projects bidding on different IDC rates. We suggest Ofgem allows projects to justify their individual IDC rate based on their technology or construction risks and evidence from finance providers.
- We note that pumped hydro carries a higher risk of uncertainty in terms of their decommissioning costs than other technologies due to the long-life nature of those assets. Information about decommissioning may be incomplete as future decommissioning arrangements may be unknown both in terms of scope and timing. Using this as a competitive measure risks costs being bid at levels below what is necessary. We also suggest that Ofgem appropriately recognise this as part of the design of the decommissioning re-opener so that a re-opener is triggered not only when there is a change in law, but in limited cases where clarity on decommissioning activities (and hence certainty on costs associated with those) has only been provided to projects following commercial operation.

3. **How can Ofgem best ensure comparability between bids given the bespoke nature of the proposed parameters? Are there specific normalisation techniques or benchmarks you would recommend?**

We do not consider that Ofgem's approach to competitive bidding is fair or can ensure a level playing field between different LDES technologies. To ensure a fair and effective process Ofgem needs to select projects based on the Multi-Criteria Assessment process, with accurate and transparent weighting applied to non-monetised economic and strategic factors and an administrative cap and floor should be applied to successful projects.

4. **What are your views on the proposed truth telling incentives? Do you think these will effectively discourage inflated or strategic bidding?**

Applying a competitive bid process to the cap and floor regime introduces a risk of strategic bidding which Ofgem recognise in the consultation. The suggested truth-telling incentive and the top 25% of competitive bidders approach creates an unlevel playing field for projects to compete on given the diverse nature of the LDES asset

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class. We do not believe that the truth-telling incentive as designed will minimise the risk of strategic bidding. On the contrary, as designed, the incentive could exacerbate the issue as it would likely drive projects to submit even more aggressive bids in the hope of being in the top 25% of competitive bidders. At the webinar on 8th July Ofgem also confirmed that the bids submitted by project cannot be validated which also exacerbates the risk of aggressive bidding underpinned by overly optimistic assumptions. We are also disappointed that Ofgem has not considered the risks to efficient market dispatch should a truth-telling incentive be applied as suggested in the document.

Setting of the cap and the floor

5. **What are your views on our proposed approach to floor setting?**

We agree with the use of iBoxx index of BBB rated GBP non-financial corporate bond yields of 15+ years remaining maturity. However, we believe that a First-of-a-kind (FOAK) premium should be applied to projects particularly considering the innovative nature of Stream 2 LDES types and the lack of recent development and track record of deploying new pumped hydro assets both in the UK and globally.

We welcome that Ofgem recognises that LDES projects applying in Window 1 are likely to have a higher credit risk than point-to-point interconnectors. However, we do not agree that the use of BBB-rated iBoxx index fully recognises this risk. FOAK premium should be introduced to make LDES projects bankable. We suggest that this is aligned with Ofgem's approach to FOAK risk premium for Non-Standard Interconnectors.

We are concerned by the proposal to fix the long-term inflation at 2% for the length of the regime period. This basis risk projects will be exposed to will result in projects including costs of hedging for real inflation as part of their bids and the RAV. We believe Ofgem needs to appropriately address this risk and allow for an inflation re-opener which can be triggered by projects in cases where real inflation outstrips the notional index.

The proposal for project to request an Actual Cost of Debt (ACOD) floor to accommodate the risk of raising debt financing is a welcome measure. We agree that ACOD floor should be available as an option for project financing.

6. **What are your views on our proposed performance-linked measures to access the floor and incentives below floor?**

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We welcome that Ofgem has decided to use a minimum availability target set per project or LDES technology. We also welcome the added flexibility in the approach on meeting the availability target and the clarity provided on exclusion of outages and force majeure events. We support the use of a minimum availability target as a performance-linked measure.

We note, however, that the proposed approach to availability is non-symmetrical (penalty-only approach is proposed). If Ofgem's aim is to incentivise higher availability, we suggest that this incentive should be symmetric so that there is also a reward for achieving higher levels of availability for both administrative and ACOD projects. A symmetrical approach to availability (reward and penalty) has been used by Ofgem successfully in the Interconnector Cap and Floor and the OFTO regime and we believe it is fair and appropriate to be applied for the LDES cap and floor scheme as well.

7. **Does the proposed cap design provide the right balance between incentivising efficient operation and sharing upside with consumer?**

We believe 10% sharing of revenues above the cap is insufficient to mitigate the risk of dispatch distortion.

If there is opportunity to earn returns above the cap, then this is because there is a system need and economic value that the LDES asset can provide. Preventing or disincentivising the asset from being able to provide that value to consumers will result in greater costs to consumers, as an asset higher up the cost merit order (potentially also high carbon) will need to provide that service instead. Any cap would therefore distort the economic merit order and bring additional costs to consumers.

Soft caps could minimise the risk of dispatch distortion as operators are incentivised to continue to operate and optimise assets. However, a soft cap does not in and of itself completely remove the dispatch distortion as the softer the cap, the greater the reduction in distortion risk.

We recommend that greater consideration is required on how a soft cap could be designed particularly taking into account risks form inefficient dispatch than simply applying a 10% or 20% sharing factor for project depending on how cap and floor levels have been set (administratively or competitive). We therefore suggest Ofgem explore the following options:

- *Either using a sliding scale approach* to sharing factor, gradually reducing the revenue sharing above the cap – e.g. a sliding scale with up to 50% sharing.

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- *Or factoring in LDES asset performance during the regime* in way where assets which have not received floor payments (over a certain period) are able to claim a % above the cap.

8. **What are your views on the use of the CAPM and the proposed input assumptions (e.g. equity beta, RFR, TMR) for calculating the cost of equity for LDES? Are there refinements or alternatives you would recommend?**

We agree that CAPM is a reasonable framework for estimating the cost of equity. However, we believe that the equity beta must be adjusted to reflect the systematic risk of LDES projects relative to the broader market.

The proposed beta of 1.125 is too low and fails to take into consideration the commercial and technical risk of LDES assets. LDES assets are exposed to significant uncertainty, including revenue volatility, evolving market designs, and the risk of deploying less mature technologies in comparison to point-to-point interconnectors which benefit from a stable cross-border trading and well-defined cap and floor framework. Applying the same beta used for point-to-point interconnectors overlooks these materially different risk drivers.

Eligible LDES technologies across Stream 1 and Stream 2 comprise of a diverse set of technologies at varying stages of commercialisation. Using a single beta across all LDES types risks under-pricing the required rate of return for higher-risk LDES assets. Given the heterogeneity of the sector, the beta should reflect both the higher overall risk and the differences between asset classes. This would ensure a more accurate cost of equity benchmark and improve alignment with the regime's objective of attracting sufficient investment into bankable, commercially viable LDES projects. We suggest that Ofgem considers the following adjustment to equity beta:

- *Either increasing the equity beta* to reflect the greater average risk of LDES compared to interconnectors. Ofgem approach for Non-Standard Interconnectors would be more appropriate as they also derive value from uncertain merchant revenue like LDES and could share a more similar risk profile than point-to-point interconnectors.
- Or *introduce a range of equity betas across different LDES types* (differentiated LDES asset class betas) to account for varying risk across technology types and maturity levels.

Treatment of capital costs

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9. **What are your views on the proposed capital cost components for determining the RAV and C&F levels, including the equity and debt transaction cost allowances?**

We agree these are appropriate cost components for determining the RAV and the cap and floor levels and agree with proposed equity and debt cost allowances. We have a number of questions which will require further clarification form Ofgem:

- The document does not specify how TNUoS or BSUoS costs would be treated in the RAV and if they will part of the OPEX expenditure. We also note that LDES and storage in general is different to interconnectors in the way they pay network charges such as TNUoS and BSUoS (interconnectors do not pay these charges). Clarity on how these will be treated is very important. Network charges LDES assets are liable for should be treated as uncontrollable, pass-through cost.
- We also seek clarity on how cost of re-financing the LDES project will be included in the RAV as the document does not refer to re-financing costs or their treatment.
- We also ask Ofgem provides further clarity on how economic and efficient assessment of costs occurred will be applied and particularly with regards to DEVEX costs.

10. **Do you agree with limiting reopeners during the operational phase to opex (after 10 years) and decommissioning (if there's a legal change)?**

We welcome the use of re-openers to help manage some of the unforeseeable risks LDES projects would face during the regime.

We welcome the additional flexibility in terms of frequency of the OPEX re-opener in comparison to the Interconnector Cap and Floor regime. However, given the uncertainty of uncontrollable cost included as part of the project's CAPEX we question whether 10 years is an appropriate frequency for LDES assets. As stated above (please refer to our answer to Q1 and Q5) we believe that the basis risk developers are exposed to with regards to the outlined approach to inflation merits appropriate consideration within the regime. We believe that designing an inflation re-opener is the best way to manage unforeseeable risks to LDES projects from inflation.

We agree with the proposed approach for decommissioning re-opener. We note that pumped hydro carries a higher risk of uncertainty in terms of their decommissioning costs than other technologies due to the long-life nature of those assets. Information about decommissioning may be incomplete as future

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decommissioning arrangements may be unknown both in terms of scope and timing. We suggest that the decommissioning re-opener is triggered not only when there is a change in law, but in limited cases where clarity on decommissioning activities (and hence certainty on costs associated with those) has only been provided to projects following commercial operation.

11. **What are your views on the treatment of decommissioning costs and IDC - particularly around timing of recovery, project delays, and legislative changes?**
12. **What are your views on the proposed IDC rate approach and the option for projects to bid their own rate? Should riskier technologies receive a different rate?**

RUK comments on Q11-Q12:

- We don't believe that treatment of IDC will have a material effect on project's bid. Competing on IDC rates across LDES technologies will not present a level playing field and therefore we do not support projects bidding on different IDC rates. We suggest Ofgem allows projects to justify their individual IDC rate based on their technology or construction risks and evidence from finance providers.
- We also question the assumption that there is no requirement for FOAK risk premium added to the calculations. We expect IDC rates to be marginally higher for Stream 2 technologies due to higher associated construction risk of less established technologies, while pump hydro assets will also carry a high construction risk due to longer construction timelines. To mitigate the risk, we suggest that Ofgem includes a FOAK risks to the IDC calculation akin to the FOAK risk provision for Non-Standard Interconnectors.

Cost and delivery incentives

13. **What are your views on the types of cost efficiency and delivery performance incentives included in the regime?**
14. **What is your preferred approach to cost incentives (e.g. cost sharing vs. outturn comparison), and how should these be appropriately calibrated?**

RUK comments on Q13-Q14:

We acknowledge the approach to ensure cost efficiency is part of the LDES cap and floor scheme. We believe that the post construction review (PCR) and the risk of cost disallowance of any non-justified expenditure from the PCR provides a very strong

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incentive for developers to deliver within budget and will protect consumers from the risk of cost inefficiency.

With regards to the two cost incentives proposed (RAV adjustment and outrun cost sharing) we believe that both approaches would be challenging for LDES projects which are less certain about their forecast costs. Using RAV adjustment or outrun cost sharing approach could exacerbate the fairness of the regime, particularly if projects are compared against each other under a competitive bid framework as proposed by Ofgem.

With regards to the delivery incentives proposed (graduated levers adjustment to IDC and clawback mechanism) we believe that it will do little to encourage timely project delivery. We believe the measure is unnecessary as LDES developers are already incentivised to deliver as quickly as possible.

We welcome Ofgem's proposal to include provision on force majeure and events outside developer's control within the cap and floor scheme. We note that Ofgem's recent guidance to Transmission Companies in relation to delivery of Accelerated Strategic Transmission Investment (ASTI) Projects has used a similarly broad definition of exceptional events that are outside their reasonable control. We suggest it is appropriate to apply a similar approach for LDES projects which goes beyond the clarity provided in the document on treatment of force majeure events. We believe this will support the investablity of the LDES cap and floor scheme.

Financial resilience

15. **Does our proposed mix of gearing caps, ringfencing, and financial reporting strike the right balance between financial resilience and flexibility for LDES projects? If not, what would you change?**

We welcome the proposed annual financial reporting and think that this should be part of the LDES scheme. We also believe that the gearing cap and ringfencing proposals are reasonable and should be adopted.

TNUoS/ BSUoS cost recovery

16. **Which charges - TNUoS or BSUoS - do you consider more appropriate for funding cap and floor payments and receipts, and why?**

We agree with Ofgem that BSUoS might be more appropriate and fairer approach to funding cap and floor payments and receipts.

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However, we note that in our earlier responses we suggested that Supplier Levy would be the best mechanism for costs and payments of the LDES cap and floor scheme and would welcome if future efforts are focused on ensuring this could be achieved.

End of regime arrangements

17. **What are your views on including a residual value at the end of the cap and floor period, and how should this affect depreciation and investor returns?**
18. **What policy mechanisms should be introduced to support investability now and post regime or recovery of residual value beyond the C&F period?**

RUK comments on Q17-18:

We welcome the principles set out by Ofgem with regards to the end of regime arrangements. However, we do not support the proposed measures (end of regime floor payments clawback, or an enduring soft cap). These proposals are un-balanced in comparison to the interconnector approach where a 5-year reconciliation period is applied and ensures consumers are protected.

We question the fairness of applying a soft cap only to projects which have received administrative cap and floor levels and the lack of consideration on how projects have operated during the regime (or the cumulative effect of the cap and floor payments). We consider that removing the risk of clawback at the end of the regime will support investability of the LDES cap and floor scheme now.

Cap and floor financial model

19. **What are your views on our proposed financial model and handbook? Do you have any suggestions for simplifying it while keeping it clear and robust?**

Reflecting the differences between Interconnector Cap and Floor and LDES cap and floor in the CFFM and associated handbook will be important. We believe this needs to be fully developed before cap and floor is awarded to give confidence to developers about the ongoing operation of the regime.

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