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Ofgem consultation - Financial Framework: LDES Window 1 Cap and Floor regime

1 Executive summary

Frontier Power welcomes the opportunity to respond to Ofgem's consultation on the Financial Framework for the Long-duration Energy Storage (LDES) Window 1 Cap and Floor regime.

Frontier Power is a leading developer and operator of energy infrastructure. We have a strong track record across offshore transmission, interconnectors and renewable energy. Founded by former National Grid executives, the company brings deep sector expertise and global experience.

We have successfully managed approximately £1 billion of offshore transmission assets and have recently developed a landmark interconnector project, NeuConnect, a 1.4GW undersea HVDC link between the UK and Germany. In the renewable energy and energy grid sectors, we are developing over £10bn of assets.

As part of the first application window for LDES projects under the cap and floor regime, announced on 8 April 2025, we have put forward a portfolio of projects surmounting over 20GWh across 16 locations. We, and our investors, are committed to becoming the largest LDES developer in GB, ensuring that GB consumers today and in the future can benefit from an ever-increasing share of renewable power generated to fuel Clean Power 2030 and GB's 2050 targets.

Our headline messages

We strongly believe that Ofgem should abandon attempts to introduce competitive elements to the financial framework. A competitive process will place an additional burden on developers and, more importantly, it is unclear to us how five dimensions of bid parameters can be assessed fairly by Ofgem. It will be a very challenging task to develop a robust framework that combines and allocates appropriate weight to each parameter and we doubt it will be technically feasible to accomplish the aims that Ofgem is seeking.

The intention of the LDES cap and floor regime is to create an investable framework that ensures developers can raise the necessary financing in a timely manner, minimise potential market distortions, and protect consumer interests. This can only be achieved if Ofgem sets the cap and floor and the Interest During Construction (IDC) at appropriate levels and if the regime protects investors from unnecessary risk.

However:

- The methodology that Ofgem's proposes to follow to set the cap and floor, and to determine the level of IDC does not take account of the risks of projects that involve technologies that are at Technology Readiness Level (TRL) 8;
- It is wrong to leave investors with exposure to inflation risk; and
- It is wrong to leave investors with a cap and floor set on the basis of market values in April 2025, when they investors will make their Final Investment Decisions at a later date.

As the consultation document acknowledges, developers already have strong incentives to deliver on time. Developers, who will have invested considerable sums of money, are only able to generate revenue when energy storage projects have been commissioned. Given this, there is no need for the regime to include further incentives to deliver on time.
Finally, whilst we agree that cap should be a "soft cap", we think it is wrong to introduce a 10% sharing factor to revenues earned above the Cap. A 10% sharing factor is too low to encourage efficient dispatch. There is precedent for a sharing factor where 70% of any upside is retained by the developer (see below).

2 Consultation questions

We have focused our response to Ofgem's consultation on the questions that we consider are most relevant to the investability of projects that are successful in the LDES Window 1 regime.

Q2: 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 strongly believe that Ofgem should abandon attempts to introduce competitive elements to the financial framework.

A competitive process will place an additional burden on developers and, more importantly, it is unclear how five dimensions of bid parameters can be assessed fairly by Ofgem. It will be a very challenging task to develop a robust framework that combines and allocates appropriate weight to each parameter and we doubt it will be technically feasible to accomplish the aims that Ofgem is seeking. For example:

- it will be very challenging to compare a five-parameter bid from a battery with a bid from a pumped hydro storage developer – given the latter project will involve complex construction with a likely useful life of 100 years;
- two projects might bid the same level for the cap and floor, and expect the same expected rate of return, but anticipate very different distributions of returns, implying different implications for customers;
- projects will involve technologies at different levels of technological maturity and face different safety and operational risks; and
- some of the parameters (such as the IDC) can be known with a degree of confidence, whereas other parameters (such as the residual value of the project and decommissioning costs) will be very uncertain. It will be challenging for Ofgem to factor different levels of confidence into its multi-dimensional evaluation.

We think there is a significant risk that Ofgem's assessment will end up being too simplistic and result in unintended consequences. Simplistic comparisons of competitive bids are very unlikely to serve the interests of customers.

Q3: 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?

As set out in our response to Question 2, we strongly believe that Ofgem should abandon attempts to introduce competitive elements to the financial framework.

The difficulty of ensuring the comparability of bids is one of the reasons we consider it is not in customers' interest to introduce a competitive bid process.

Q4: What are your views on the proposed truth telling incentives? Do you think these will effectively discourage inflated or strategic bidding?

We agree that there is a risk in introducing a framework that incentivises developers to bid parameters to increase the chance that they are selected, whilst allowing them to drop out of the LDES regime at a later stage. There are no penalties in the cap and floor regime that would discourage a developer from doing this.

However, "truth telling" incentives are a potentially ineffective, complex and indirect way, of addressing this problem. For example, it is likely to provide difficult to calibrate a "truth telling" incentive in a way that discourages strategic bidding, particularly given the wide range of different projects, with different operational and financial characteristics.

Rather than developing complex "truth telling" incentives, we consider it would be better to design a regime that directly addresses the rationale for strategic bidding.

Q5: What are your views on our proposed approach to floor setting?

We consider that Ofgem's proposed floor is too low.

Whilst we commend the move to using the BBB iBoxx index, Ofgem is not taking account of the risks of projects that have applied to the LDES regime. Ofgem recognises that LDES projects are risky and therefore needs to build in a premia to the figure implied by the iBoxx index.

Likewise, projects that utilise TRL8 technologies face greater risks than projects that utilise TRL9 technolgies. It is wrong to use the same floor for TRL8 and TRL9 projects. Using the same floor fails to take into account different technology risks and the corresponding benefit to society of proving the deployment of mature technologies at scale.

In addition, fixing the floor based on market information in April 2025 creates a potential wedge between market conditions at time of Final Investment Decisions and the cap and floor level. This undermines the investability of the regime. Ofgem should set the cap and floor levels based on concurrent market information.

Finally, indexing the cap and floor with reference to forecast inflation exposes developers to outturn inflation risk. Once again, this undermines investability.

Q7: Does the proposed cap design provide the right balance between incentivising efficient operation and sharing upside with consumer?

We consider that Ofgem's proposed cap is too low.

As explained in our answer to Question 6, Ofgem recognises that LDES projects are risky. This risk needs to be factored into the level of the Cap.

It is important that Ofgem uses inputs to CAPM that appropriately reflect the riskiness of Window 1 projects. For example, we do not consider the equity beta of National Grid is at all relevant to determination of Window 1 financial parameters. National Grid is an entity that is mainly regulated through the RIIO regulatory framework. The RIIO framework underpins stable and largely predictable levels of returns. A very small proportion of National Grid's operations are related to interconnectors and, even then, as Ofgem acknowledges LDES projects are more risky than interconnectors. Given this, it is wrong to include National Grid in the set of comparators used to determine an appropriate beta for LDES projects.
Projects that utilise TRL8 technologies face greater risks than projects that utilize TRL9 technolgies. It is wrong to use the same cap for TRL8 and TRL9 projects. Using the same cap fails to take into account different technology risks and the corresponding benefit to society of proving the deployment of mature technologies at scale.

It is wrong to leave investors with excessive exposure to inflation risk. The cap and floor should be recalibrated so that everything except fixed nominal debt is indexed to actual inflation, not for forecast inflation. There is no benefit in introducing additional risk to the regime.

Similarly, it is wrong to leave investors with a cap and floor set on the basis of market values in April 2025, when they investors will make their Final Investment Decisions at a later date.

Finally, whilst we agree that cap should be a "soft cap", we think it is wrong to introduce a 10% sharing factor to revenues earned above the Cap. A 10% sharing factor is too low to encourage efficient dispatch. There is precedent for, and we suggest, a sharing factor where 70% of any upside is retained by the developer[1].

Q8: 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 the CAPM forms an appropriate basis for determining the cost of equity for LDES. However, Ofgem has not selected the right comparator set when determining the level of the equity beta.

National Grid is an entity that is mainly regulated through the RIIO regulatory framework. The RIIO framework underpins stable and largely predictable levels of returns. A very small proportion of National Grid's operations are related to interconnectors and, even then, Ofgem acknowledges that LDES projects are more risky than interconnectors. Given this, it is wrong to include National Grid in the set of comparators used to determine an appropriate beta for LDES projects.

Projects that utilise TRL8 technologies face greater risks than projects that utilize TRL9 technologies. It is wrong to use the same Floor for TRL8 and TRL9 projects. Using the same Floor fails to take into account different technology risks and the corresponding benefit to society of proving the deployment of mature technologies at scale.

Q12: 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?
The methodology that Ofgem's proposes to follow to determine the level of IDC does not take account of the risks of projects associated with technologies that are at Technology Readiness Level (TRL) 8. It is important that Ofgem uses inputs to the determination of the IDC that appropriately reflect the riskiness of Window 1 projects.

[1] See p46 of [CCUS DPA business model summary]

Q13: What are your views on the types of cost efficiency and delivery performance incentives included in the regime?

Cost efficiency incentives

We do not consider it is necessary for Ofgem to introduce cost efficiency incentives.

Not allowing economically efficient costs to be recovered risks discouraging investment. This is particularly likely if it is unclear how Ofgem will come to views about what is efficient. For these reasons, we do not consider cost efficiency incentives are necessary.

However, if Ofgem does feel it necessary to introduce cost efficiency incentives through the level of allowed IDC, then we have a strong preference for Option 2 (the Outturn cost comparison approach). The adoption of Option 1 (RAV adjustment approach) would increase risk and make it more difficult for investors to evaluate projects.

Delivery incentives

As Ofgem acknowledges, developers already have strong incentives to deliver on time. Developers, who will have invested considerable sums of money, are only able to generate revenue when energy storage projects have been commissioned. Given this, there is no need for the regime to include further incentives to deliver on time. Introducing delivery incentives will only serve to increase risk and discourage investment.

However, if Ofgem considers it necessary to introduce delivery incentives we suggest it would be more appropriate to start from the less onerous approach used in the interconnector regime.

Q14: What is your preferred approach to cost incentives (e.g. cost sharing vs. outturn comparison), and how should these be appropriately calibrated?

Frontier Power is very familiar with the way in which cost variances are handled in the interconnector regime. We consider Ofgem should adopt a similar approach for LDES as this is a framework that has been shown to encourage investment.

If costs exceed expectations prior to FID, Ofgem should be able to re-evaluate the project. If costs exceed expectations after FID, Ofgem should assess whether costs are economic and efficient, and if they are found to be economic and efficient the additional costs should be allowed.