



Department for
Energy Security
& Net Zero

Contracts for Difference for Low Carbon Electricity Generation

Government response to the consultation on
policy considerations for future rounds of the
Contracts for Difference scheme

October 2024



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Context

Meeting the government's commitment to the Clean Energy Superpower mission, including clean power by 2030, will require a rapid and sustained scale-up of low carbon electricity deployment. This Government will work with the private sector to radically increase deployment of renewables by 2030. The Contracts for Difference (CfD) scheme will be a policy lever to support this rapid deployment.

To ensure the continued success of the CfD, the scheme must continually evolve to reflect the global challenges faced by the renewables sector and to enable innovative kinds of projects to come to market as the energy system itself evolves. To evolve the scheme ahead of the next allocation round, we consulted on policy considerations for future rounds.

This document will focus on the proposed changes for the next CfD allocation round and beyond that were the subject of a consultation earlier this year. We will announce further details on the next round in due course.

Overview of consultation proposals

On 11th January 2024, the Department¹ published a consultation on policy considerations for future rounds of the CfD scheme. The consultation sought views on specific changes proposed for the next allocation round, as well as early views on longer-term policy considerations for future rounds. The consultation was divided into two sections and included (i) proposals for the next allocation round, and (ii) considerations for future CfD rounds. Stakeholder views were sought for policy proposals in both sections of this consultation.

Section 1 – Proposals for the next allocation round

- **Repowering** – A significant portion of renewable assets may be coming to the end of their operational life during the late 2020s and throughout the 2030s. Government is proposing to enable repowering projects to apply for the CfD in the next allocation round, in limited circumstances, for onshore wind projects.
- **Appeals** – The timeline for a CfD allocation round currently runs to one of five possible scenarios, depending on whether applicants appeal decisions made by the Delivery Body. Government is considering improving this process to benefit participants.
- **Phased CfDs for floating offshore wind** – The Government is committed to radically increasing the deployment of the UK's offshore wind capacity by 2030. Floating offshore wind (FLOW), an emerging technology which allows us to access wind resource in deeper waters, is a growing sector for which further rapid expansion is anticipated. Government is proposing to expand the phased CfD policy to FLOW projects.

¹ Department for Energy Security and Net Zero (DESNZ), formerly Business, Energy and Industrial Strategy

- **Co-located generation and hybrid metering** – The changing needs of a fully decarbonised electricity system will create new opportunities for technological and business model innovation among renewable sites, such as providing flexibility and operability services, or optimising grid connections. Government is considering introducing changes to metering that would make it easier for CfD generators to co-locate with other assets in line with current CfD policy and is assessing how we can best enable innovation in a way that maintains the integrity of the scheme.

Section 2 - Considerations for future CfD rounds

- **How could the CfD support delivery of improved coordination of offshore transmission infrastructure?** As offshore wind development scales-up on the path to net zero, improved coordination is needed to deliver these commitments whilst avoiding unnecessary disruption to communities and the natural environment. Government is considering how the CfD could better support projects that include offshore hybrid assets and/or bootstrap infrastructure.
- **How could the CfD support innovation in floating offshore wind foundation technology as the sector develops?** This consultation sought further stakeholder views on how to define floating offshore wind so that the CfD does not hinder new or innovative offshore wind foundation technologies.
- **Should CfD indexation be updated to better reflect inflation risks?** CfDs currently protect against inflation risk, which is plausibly outside a developer's control, through indexation of strike prices to the Consumer Price index. Government is considering whether to update the indexation methodology to provide greater inflation protection during the construction period of future CfD projects.

Engagement with consultation proposals

The consultation was published online and ran from 11 January 2024 to 11 March 2024. Responses were submitted through an online response tool (Citizen Space), or by email. The consultation received 72 responses, 48 of which were from companies active in the energy sector (including developers, generators and suppliers) and 14 were from trade associations and bodies. The consultation also saw a small number of responses from investors, consultancies, a not-for-profit and public campaign group. Note that not all respondents engaged with every question in the consultation; as such, the number of respondents for each policy topic is indicated in each chapter.

Next steps

- **Allocation Round 6:** On 3 September 2024, the Government published the results. Over 130 renewable electricity projects across Great Britain won contracts, delivering a total capacity of 9.6GW – enough to power the equivalent of 11 million homes.
- **Implementing these changes:** We will bring forward secondary legislation as required to implement the policy changes proposed in this document. There will also be a consultation on appropriate contract changes.
- **Allocation Round 7:** We will publish further details on the next allocation round in due course.

Responses to the consultation

This consultation response outlines the summary of the 72 responses to the 37 questions in the consultation, and the associated policy responses. The Government is grateful to stakeholders for taking the time to engage with the consultation.

In reporting the overall response to each question, the '**majority**' indicates the clear view of more than 50% of respondents in response to that question, and '**minority**' indicates fewer than 50%. The following terms have been used in summarising additional points raised in the responses: '**most respondents**' indicates more than 70% of those answering the particular question; '**a few respondents**' means fewer than 30%; and '**some respondents**' refers to the range in between 30% and 70%.

Section 1 - Proposals for the next allocation round

1.1: Repowering

Proposals

Question 1 sought views on whether the eligibility criteria for full repowering appropriately balances CfD policy objectives of supporting decarbonisation, ensuring security of supply, and minimising costs to consumer.

Question 2 sought views on whether use of the power generation cost assumptions to define end of operating life is an appropriate metric to capture those projects which will be seeking to fully repower in each allocation round.

Question 3 sought views on whether each repowering project should need to at least retain capacity, or whether they foresee any challenges with this assumption.

Question 4 sought views on whether full repowering of onshore wind sites meets each of the repowering eligibility criteria and should therefore be eligible for the next allocation round. Further evidence was also requested to support this.

Question 5 sought views on whether all other technologies do not meet the eligibility criteria for full repowering support in the next allocation round.

Question 6 sought views on whether enabling forward bidding for repowered projects is required to better enable repowering via the CfD, and what impact enabling forward bidding would have on reducing non-generation periods between decommissioning and recommissioning of the site.

Responses to consultation

There were 36 responses to at least one of the above six questions. The majority of responses received were from developers, whilst responses were also received from trade bodies and non-governmental organisations, public bodies, an investor, a supply chain company, and an individual.

Summary of responses

In response to question 1, the majority of respondents agree with Government's minded to position to enable full repowering via the CfD from the next allocation round and that the use of eligibility criteria appropriately balances the CfD policy objectives of supporting decarbonisation, ensuring security of supply, and minimising costs to consumer. Some respondents however are seeking further clarity on how bids will be qualified against the eligibility criteria.

Some respondents disagreed with Government's minded to position and use of eligibility criteria:

A couple disagreed that support was required, on the basis that market forces should be left alone to decide the most efficient use of these sites in the future and that further access to the CfD may exacerbate market distortions that the CfD has created. However, another noted the benefits of enabling access to the CfD and suggested in this scenario that HMG should have: a lower ASP for repowering techs, a mechanism to limit excessive returns, and that any budget provided should be additional to that of the new build budget.

One agreed that there may be a benefit to consumers and to the system by allowing repowering projects to compete in a CfD auction, however requested a more detailed needs case.

One respondent challenged whether repowering under the CfD appropriately prioritised those projects which could help resolve or mitigate existing challenges to the electricity system. There was concern that the proposal to support repowering could compound these problems, if repowered projects did not support the wider system through co-location or flexibility.

One identified specific areas that required further consideration to ensure efficient investment and therefore realisation of best outcomes for consumers. This included the location of the repowering site and its system contribution as well as the CfD design itself, identifying that REMA may resolve these concerns.

One respondent strongly supported the case for considering ongoing support for generators when their initial support schemes run out, however did not believe that the policy objectives will be met due to the very limited scope of projects eligible. They stated that excluding all technologies except onshore wind will not fully support decarbonisation, nor energy security and risks a costlier long-term transition to decarbonisation. Support should instead be more ambitious, including support being offered to those projects which would not otherwise be financially viable to continue operating at the end of their life.

A few respondents also disagreed on the basis that the eligibility criteria meant that landfill gas to energy (LFGTE) systems would not be eligible and considered that the criteria did not appropriately value the functions that LFGTE sites deliver, including:

- Not appropriately valuing the role of baseload electricity in balancing the grid;
- The management of methane emissions; and
- The value of wider environmental benefits and services provided.

The same respondents also considered that the high upfront capital costs eligibility criteria did not appropriately reflect the varying capital expenditure profiles of different power generation technologies. Specifically, some respondents felt that the criteria should recognise high and sustained capital expenditure costs through the duration of the contract.

In response to question 2, the majority of respondents agreed that only being eligible to apply once the existing project has reached the end of its operating life would be a sensible

criterion. It was the general view that this would be when intervention would be required and that this would best balance the need to reduce the cost to consumer whilst also retaining security of supply and low carbon generation.

A few respondents also agreed with the use of the power generation costs assumption to define end of operating life, reflecting that they are broadly representative of the operating lives of low carbon technologies. They could also be used to ensure there is no possibility of incentivising early closure of operationally and commercially viable projects.

The majority of respondents did however also advocate for a more robust case for end-of-life definition and methodology, and flexibility on the use of the power generation cost assumptions. In particular, respondents proposed the use of 20 years as an end-of-life assumption for onshore wind as opposed to the current 25 year assumption. They also proposed that Government could classify end-of-life as when the existing site is no longer commercially viable or on a case-by-case basis.

Specific concerns from respondents on the use of the power generation costs assumptions equated to the view that:

- Most first-generation technologies are more likely to have a 20-year operating life. This could result in a potential 5-year merchant operating gap which would not be feasible for projects which were no longer commercially viable after 20 years. There was a concern particularly around the aggregate effect of multiple projects ceasing to operate before the 25-years and the resultant loss of low carbon generation and impact on security of supply.
- The term 'operating life' in itself is inherently uncertain and so a rigid assumption may not be appropriate.
- CfD supported assets are likely to have priced in a 'merchant tail' (subsidy-free generation under market terms after support has ended) however those currently accredited for the Renewable Obligation scheme would not have considered that same merchant tail operation.

Some respondents suggested there could be circumstances where sites should be made eligible for CfDs before they have reached the assumed end of their operating life time period if they can provide evidence of wider economic benefits of repowering beyond just capacity. For example, co-location with batteries or wider benefits to the electricity system. Some respondents were also amenable to additional conditions and greater scrutiny of accounts if shorter lifetime assumptions were offered.

Some respondents also disagreed entirely with the use of an end of operating life criteria and advocated for support as soon as existing subsidies end, on the basis that some technologies would not be commercially viable on the market without support.

Some respondents also sought clarity on how this criteria would be applied and monitored.

In response to question 3, some respondents agreed with the inclusion of 'need to at least retain capacity' as an eligibility criteria noting that ambition to retain capacity should be a

minimum and that applying more modern technologies to repowered projects should enable increased capacity and generation significantly.

The majority of respondents however disagreed with the criteria and advocated for its removal. Respondents outlined that developers would be commercially incentivised to optimise and maximise generation from their site irrespective of this criteria.

It was also the view of the majority of respondents' that the introduction of an 'at least retain capacity' requirement could introduce an additional risk to deployment of repowered projects. It would leave them beholden to external factors such as: new land agreements or land suitability, planning restriction for larger turbines, and the likely requirement for a new grid connection and the waiting times for obtaining these.

Most respondents also raised concerns that the capacity criteria may impose complexities and restrictions to each project that could limit their ability to seize opportunities from hybridisation and site optimisation. It was also noted that reduced capacity but with more efficient turbines does not necessarily mean reduced generation.

Some respondents also felt that this criteria disproportionately excluded LFGTE sites.

In response to questions 4, the majority of respondents agreed that onshore wind full repowering meets the proposed eligibility criteria and therefore agreed with the minded to position to enable onshore wind full repowering in time for the next allocation round. In particular, they strongly supported the assertion that fully repowered onshore wind projects would have similarly high upfront capital costs to that of a new build.

Some respondents sought clarity on how eligibility criteria will be applied.

In response to question 5, the majority of respondents agreed that all other technologies did not meet the repowering eligibility criteria for the next allocation round with some specifically stating they do not think landfill gas should be eligible. Some also added that Government should continue to review the eligibility of technologies for repowering against the proposed criteria in future allocation rounds.

The majority of respondents also highlighted the need for Government to provide repowering eligibility decisions in advance of allocation rounds, as this would provide commercial certainty and clarity to industry. Some respondents highlighted in particular that commercial certainty was of particular importance to fixed bottom offshore wind and solar PV technologies. It was recommended that Government be proactive in including these technologies into repowering policy in anticipation of future pipelines, and to provide early confirmation of eligibility in future allocation rounds.

A few respondents criticised the proposed eligibility criteria for the next allocation round. Within this category, some respondents repeated concerns that were addressed in previous questions. For example, a common concern was that Government's assumptions on technology operating life span were inaccurate. In particular, respondents argued that early generation assets would have shorter operating lifespans.

There were also mixed views in relation to the eligibility of LFGTEs. Of the respondents that commented on this issue, some respondents agreed that LFGTE should be ineligible for full repowering support while others disagreed and criticised the proposed eligibility criteria for resulting in the exclusion of LFGTE projects. Those that disagreed, argued that the regular rebuilding and replacement costs of an LFGTE engine involved significant capital expenditure and that a CfD for repowering would provide the revenue certainty to support this. The same respondents did however acknowledge that LFGTE projects would struggle to compete with other technologies such as onshore wind and solar and as such may warrant bespoke auction parameters. One respondent even considered whether an auction process itself was an appropriate allocation method for LFGTE projects and that the current CfD is not well-suited to provide ongoing support to LFGTE projects.

Finally, a few respondents, expressed the view that there was a need to consider future revenue support for life extension of existing projects, particularly within offshore wind. These respondents argued that life extension also had high upfront capital expenditure and required revenue certainty. They suggested that Government consider expanding CfD support to include life-extension projects.

In response to question 6, all respondents agreed that forward bidding would better enable repowering via the CfD. A variety of benefits were highlighted by respondents. In particular, three major benefits were mentioned. Firstly, a majority of respondents mentioned that forward bidding would minimise the time period in which the site was non-operational, thereby increasing generation. This would allow a smoother transition from the original project to the repowered project.

Secondly, some respondents highlighted that forward bidding would allow developers to decommission and recommission in the same construction phase, which would reduce development time and enable lower costs.

Thirdly, some respondents stressed that forward bidding would enable developers to avoid commercial uncertainty. The ability to secure a CfD early in the process would enable developers to make financial commitments before the existing generator stopped operating and take on less risk. Forward bidding would therefore help level the playing field between new builds and repowered projects.

However, a few respondents also raised potential concerns and challenges with forward bidding. One respondent highlighted the risk of speculative forward bidding and the concern that this could lead to an auction hiatus. They recommended that sufficient guard rails and penalties be considered. Another respondent flagged that forward bidding of offshore wind would involve additional complexities due to interactions with the Offshore Transmission Owner (OFTO) regime and the need to consider transmission in the CfD bidding process.

Policy response

Enable access to the CfD for fully repowered projects

Government intends to implement its proposal to enable CfD support for full repowering projects in the next allocation round. In doing so, Government has had due regard to the following principles:

Firstly, the rationale for intervention, to support full repowering via the CfD, should align with the rationale for supporting new build projects on the CfD scheme, per the statutory considerations set out in the Energy Act 2013 and subsidy control principles. Any intervention must therefore appropriately balance the UK's decarbonisation aims with maintaining security of supply and costs to consumer.

Secondly, any policy implemented to enable repowering via the CfD should seek to minimise complexity of auction design and scheme delivery to enable implementation in time for the next allocation round. For example, any CfD offered to a repowered project would be on standard CfD terms and conditions (i.e. 15-year term). Parameters will also be set out ahead of each allocation round.

Thirdly, any intervention to support repowering projects should align with work on wider market arrangements being considered through REMA.

Following assessment of responses to the consultation, we will also apply the following eligibility criteria to each technology and project to assess eligibility for each allocation round:

- Technologies must already be eligible for the CfD scheme.
- Projects must align to the fundamental CfD case for intervention including high upfront capital costs.
- Projects must have at least reached the end of their operating life by/before the end of the applicable Delivery Year in the next allocation round and not be in receipt of any other subsidy for electricity generation at that point.

Not requiring repowering to 'at least retain their current capacity over the term of the contract'

Having considered respondent views to this consultation, we have further assessed whether to retain the requirement that repowered projects should at least retain their current capacity over the term of the contract.

Whilst requiring projects to at least retain their current capacity could maximise repowering capacity, we are sympathetic to the view from most respondents that there are commercial incentives to maximise the capacity of the repowered site and that where repowering does not result in at least retaining capacity this should be due to legitimate barriers such as changes in site ownership or difficulties in configuring site assets with geography. Excluding these repowering projects from CfD support would be contrary to encouraging continued deployment on these sites and the resultant benefits for decarbonisation as opposed to retirement. Whilst

assessing the implementation of such a criterion, we have also considered the practical compliance and enforcement of the criterion to 'at least retain capacity'. Our further assessment has identified that this may be more difficult to deliver effectively in time for the next allocation round without unintended consequences. It may also be potentially more difficult for developers to navigate. Designing the criterion such that it did not hinder hybrid or more innovative repowering projects in particular from applying is a factor we will continue to explore.

We therefore will not require repowering projects to 'at least retain current capacity' for the next allocation round. However, we also recognise that there may be circumstances where commercial incentives do not align with maximising capacity on the repowered site. The current grid connection queue means that there is a risk that it could be cheaper for developers to use their existing grid connection and repower cheaply with older turbine models. We want to discourage these less innovative forms of repowering and will therefore keep this criterion under review to monitor its impact on the pipeline of repowering projects. We will therefore continue to explore the need for a requirement to 'at least retain capacity' for future rounds and the most appropriate method through which to implement it should it be required.

End of operating life by delivery years for the next allocation round

Taking into account responses to this consultation, we have also further assessed the potential advantages and disadvantages of maintaining this criterion. It is our conclusion that we will keep the 'end of operating life' definition using the power generation cost assumptions. However we are clarifying our definition of 'end of operating life' to include the period of time required to decommission and re-commission. For example, an onshore wind project will qualify for repowering support if it commenced commercial operation 25 years before the delivery years of the next allocation round. However, this does not mean the project can only begin decommissioning after those 25 years have elapsed. The 25 year period can include the decommissioning and recommissioning of the new project on site. The requirement for the existing project on site to reach the end of its operating life by the delivery year of the allocation round for which it is applying will safeguard consumers as it provides greater assurance that projects, which may have previously received subsidy, operate for as long as their original design and business case intended. From a consumer perspective, this seeks to ensure some period of merchant tail generation for projects that have previously received subsidy.

While we recognise that the operating life of generating assets will differ on a project-by-project basis due to differences in models and site geography, the assumptions in the power generation costs report are verified, publicly available, and supported by existing use cases for many projects. The use of the generation cost report is also more deliverable than a case-by-case approach and we are therefore not considering a case-by-case approach at this stage.

Technology eligibility

Having worked through the consultation responses, we intend to proceed with the proposed repowering eligibility criteria (as set out and explained above) which will determine the

technologies that are eligible for repowering. As was set out in the consultation document, it remains our assessment that only onshore wind meets the eligibility criteria for repowering.

A few respondents presented evidence advocating for the inclusion of LFGTE projects. We have therefore further considered the eligibility of LFGTE and the case for intervention against our repowering principles and eligibility criteria. LFGTE is the only other technology that is both currently eligible for the CfD scheme and which could be considered for repowering because it has a pipeline for the next allocation round in line with the 'end of operating life' criterion. However, for the reasons set out below, it remains our assessment that support for LFGTE does not satisfy our case for intervention for CfD repowering and that LFGTE projects do not meet the eligibility criteria.

Firstly, we do not consider that support for the continued operation and maintenance of LFGTE sites aligns with the **CfD repowering case for intervention**. The policy intent of introducing repowering is to support renewable projects that face comparable circumstances to new build projects, in a way that provides sufficient protection to consumers. In this it largely mirrors the intent of the CfD for new build projects, providing revenue certainty to enable renewable projects which have high upfront capital costs to deploy, attracting investment at a lower cost of capital. The CfD also aims to deploy the technologies that are necessary for meeting the UK's decarbonisation targets but at lowest cost to the consumer. Restricting repowering to projects with comparable costs to new build projects ensures that we do not overcompensate projects which could otherwise apply without having to incur the significant upfront capital expenditure and costs of capital that comes with fully repowering. Although existing LFGTE sites may face high capital costs, this will be continual capital expenditure throughout their operation and as such is more akin to life extension rather than full repowering with high upfront capital costs, and therefore does not meet this criteria.

By comparison, the full repowering of onshore wind projects involves extensive decommissioning, and recommissioning of infrastructure and has a cost profile that is similar to that of a new build project with high upfront capital costs. In those scenarios the case for intervention aligns to the case for intervention of a new build project on the CfD.

This consultation has also highlighted that any intervention to support LFGTE via a repowering CfD would conflict with one of the policy principles to seek to **minimise complexity of auction design and scheme delivery to enable implementation in time for the next allocation round**. Consultation respondents have noted that any intervention for existing LFGTE sites via the CfD would only be of value if they are given bespoke parameters, with some further questioning whether an auction-based allocation process is at all appropriate for LFGTE. CfD allocation rounds are designed to balance our statutory considerations set out in the Energy Act 2013 and subsidy control principles. Any case for intervention for bespoke parameters or allocation process via the CfD therefore requires a strong case to ensure it is needed to meet the statutory consideration and subsidy control principles.

As well as carefully applying the repowering criteria to LFGTE (which in themselves reflect the purpose of the CfD and the subsidy control principles) we have also had regard to

decarbonisation targets, cost to consumer, security of supply, and alignment with other policies, in particular the 2023 Biomass Strategy².

The 2023 Biomass Strategy emphasises that opportunities for biomass use within each sector should be considered against other low carbon alternatives available and that, for unabated power, biomass should be moved to where more valuable contributions to decarbonisation could be made. Where possible, Biomass Strategy principles should be followed. We consider that awarding a 15-year CfD for LFGTE may conflict with these principles where this encourages deposition of biodegradable waste in landfill to support LFGTE, but we are conscious that there's a long-term management need for existing sites. Government also does not currently consider that there is a viable case for bespoke parameters under the current CfD mechanism for existing LFGTE sites.

We therefore consider that, taking into account all the factors discussed, it is not proportionate to the CfD objective to support repowering for LFGTE. However, Government does recognise the benefits that LFGTE offers, both as a form of baseload generation, and to capture and make use of methane in order to meet our net zero goals. Government is therefore considering what the closure of the RO, and the ineligibility of existing sites via the CfD, mean for our wider environmental targets.

Aligned to ongoing work to implement the Biomass Strategy, Government also intends to review the eligibility of all biomass technologies currently eligible for the CfD scheme more generally. This does not include unabated coal to biomass conversions, which we have consulted on separately. We will consider the case for both repowering and new build support and what the most appropriate mechanism for their support may be. This will be with particular regard to prioritising the use of biomass in the longer term within the harder to abate sectors and providing the services and products that will be vital for meeting Net Zero.

Government also intends to continue to assess the eligibility of other non-biomass technologies for repowering support ahead of future CfD rounds, taking into consideration the case for intervention and available pipeline. Technologies that are not included for the next allocation round, such as offshore wind and solar PV, will therefore be re-assessed in the future.

Finally, Government, through REMA, will continue to consider the potential impact of price cannibalisation on the commercial viability of merchant renewable deployment and operation and whether intervention is required to continue to incentivise renewable generation to meet our Net Zero commitments.

Forward bidding for repowering projects

The Government proposes to allow repowering projects to forward bid for the CfD. The current regulatory framework does not allow developers to apply for a CfD for an already commissioned project, and this will create uncertainty for developers seeking to repower.

² <https://www.gov.uk/government/publications/biomass-strategy>

Forward bidding would enable developers to apply for a CfD for a repowering project, without requiring the existing project on site to have first decommissioned.

Enabling forward bidding for repowering projects allows for smoother transition from the original project to the repowered project and provides parity with new builds. Commercial certainty is provided as a developer can apply for a CfD before making decisions on what to do with their existing project. Further, the time period in which a site is not generating electricity is minimised, ensuring less disruption to supply. Finally, it could reduce development time as the certainty of an early CfD award would enable the developer to proceed with commissioning the repowered project while decommissioning the existing project.

However, we are also aware of the risks of speculative forward bidding and its potential to distort bidder behaviour. The Government will therefore keep under review, for future rounds, the possible need to introduce further disincentives for speculative bidding.

Approach to qualification

Government intends to make amendments to the legislation and allocation framework to ensure onshore wind projects that meet the eligibility criteria can bid into the CfD from the next allocation round and that forward bidding will be possible for those fully repowered onshore wind projects.

The Government will also better enable full repowering projects to apply for the CfD by using the existing application procedure. Repowering projects will need to satisfy the same qualification requirements as new build CfD projects, including a valid grid connection and planning consent.

Amendments to the allocation framework will introduce additional checks in Schedule 1 to verify these criteria, and to distinguish full repowering projects from life-extension projects. For example, planning application documents may need to provide proof of the intention to significantly decommission the existing project on site in line with the end-of-life assumptions. Full clarity will be provided in the allocation framework for the next allocation round.

1.2: Appeals

Proposals

Questions 7 to 12 sought views on potential improvements to the current CfD appeals process. Options considered to alter the process and potentially reduce uncertainty faced by developers whilst also maintaining a fair appeals process included:

- Option 1: a fixed timeline – having a fixed timeline for appeals, rather than five timeline scenarios;
- Option 2: Changing the grounds for appeal – amending the grounds of appeal, to prevent appeals in relation to clerical errors and incomplete documentation holding up the allocation round;

- Option 3: introducing a pre-qualification process with appeals before formal application – providing a pre-qualification process modelled on the Capacity Market model, and opportunity for appeals before formal application, to provide certainty about the timing of auctions, as well as greater clarity about the pipeline for budget-setting.

Question 7 sought views on the proposed options and which might be most suitable for increasing certainty for applicants.

Question 8 sought views on what grounds for appeal might be ruled out under Option 2, and whether removing the right to appeal for clerical errors might have any unintended consequences.

Question 9 sought views on whether, under Option 3, conditional approval at pre-qualification should be allowed, and under what conditions.

Question 10 sought views on whether, under Option 3, developers should be required not to change the capacity of their main bid, to improve clarity in budget-setting.

Question 11 sought views on whether there would be any transitional impacts in a change to the application and appeals windows for the next allocation round.

Question 12 sought views on whether there were times in the year when respondents would prefer not to have auction results released.

Responses to consultation

There were 36 responses to the consultation that addressed one or more of these questions. Most of the responses came from developers and trade bodies, with two responses from public bodies and one further response from an investor.

Summary of responses

Of the respondents that answered question 7, the majority thought that Option 1 (introducing a fixed timeline) would be the most suitable. The majority also indicated that clarity about timelines was important, with a few stating that it was more important than having a shorter timeline. A few respondents supported Option 3 (introducing pre-qualification and earlier appeals), and a few supported either Option 1 or Option 3 or a combination of elements of them both. Some respondents wanted a shorter or simplified process. A few respondents expressed concerns about Option 2 (changing the grounds of appeal), which might result in applications that were ineligible due to clerical errors having no right of appeal. A few respondents were concerned about effectively bringing the application process forward to accommodate pre-qualification under Option 3. A few wanted to understand how an earlier pre-qualification process would interact with the application process for Sustainable Industry Rewards. However, a few respondents suggested that Option 3 might be viable in the longer term. A few suggested that the process could be improved by further engagement with, or guidance or feedback from, the Delivery Body.

Of the respondents that answered question 8, none were in favour of Option 2 and the majority highlighted potential unintended consequences of limiting the grounds for appeal, such as unfairly limiting participation in the round and slowing deployment of renewable generation. A few respondents were supportive of measures that could reduce the incidence of clerical errors, including greater engagement by the Delivery Body with applicants.

Of the respondents that answered question 9, the majority considered that allowing conditional approval would provide greater flexibility to enable more projects to participate in an allocation round. Respondents suggested that approval could be conditional ahead of receiving planning consents and grid connection agreements. However, some respondents recognised that allowing conditional approvals could introduce project risks. It would require supply of further documentation at a later stage, potentially after the appeals process, removing a right to appeal on related grounds or, alternatively, requiring a further stage for appeals, which would lengthen the application process. A few respondents did not support conditional approval.

Of the respondents that answered question 10, views differed on whether developers should be required not to change the capacity of their main bid after submitting their pre-qualification application and the subsequent appeals process, in order to improve clarity in budget-setting. Some respondents thought that the capacity should not be changed, to avoid the need for further checks at the stage of formal application, and to provide greater clarity about the required budget. Some other respondents thought that developers should retain the flexibility to change the capacity in order to optimise project design, noting that some economic decisions could still affect bid capacity up to the bid window.

Of the respondents that answered question 11, some highlighted the importance of publicising any changes to the timing of the application process (in the context of introducing a pre-qualification process) at the earliest possible opportunity. A few respondents saw potential transitional impacts of changing the timeline, given developers were planning on the current timeline for the next allocation round, including potentially delaying projects by a year if they could not make the new timeline. A few respondents suggested that opening an earlier pre-qualification window could provide tension with the timing of the application process for Sustainable Industry Rewards, with potential resource impacts for developers. A few respondents suggested considering how changes would fit with wider and longer-term changes such as those under REMA. A few respondents recommended managing transitional impacts by not introducing changes under Option 3 until after the next allocation round.

Of the respondents that answered question 12, the majority indicated that it would be best to avoid auction results being released around public holidays, such as the Christmas period (i.e. late December to early January). A few respondents suggested avoiding issuing results in June or July, with a few noting the read-across to Milestone Delivery Dates, which would best be avoided, falling in December. A few respondents also suggested avoiding results being issued over the summer holidays (i.e. August). A few other respondents noted the value of co-ordinating with delivery partners to avoid inconvenient times, for instance to ensure that there was no clash with the timeline for the Capacity Market (which would have implications for the Delivery Body). However, a few respondents noted that most times could be accommodated (especially if avoiding public holidays), so long as advance notice was given of changes.

Policy response

Reflecting consultation responses, the Government does not intend to pursue the introduction of a pre-qualification process ahead of the next allocation round, nor to amend the grounds for appeal. The Government notes respondents' preference for introducing a fixed timeline for the appeals process and agrees that publishing a fixed timeline, with the assumption that both Tier 1 and Tier 2 processes will take place, would help provide greater clarity (as, whether or not the appeals process is triggered, the timeline for the round would remain the same). The Government intends to implement a fixed timeline for appeals from 2026 onwards via legislation to help provide greater clarity to stakeholders about the operation of the appeals process. The Government also notes wider feedback on potential improvements to the process. The Government intends to make its proposed minor change to the regulations on the same timeline in order to expedite the consideration of appeals by allowing for all documents already shared between applicants and NESO to be shared with Ofgem also as part of the Tier 2 disputes process.

1.3: Co-located generation and Hybrid Metering

Proposals

The hybrid metering approach described in this section could help facilitate CfD co-location with other assets in line with current CfD policy, as well as facilitating potential changes to permitted arrangements in line with our policy objectives in the future. A hybrid approach to metering would permit CfD generators to measure their Metered Output used to calculate CfD difference payments at a sub-BMU level (outside of the BSC) while co-located alongside other assets (for example, merchant generation, battery storage or hydrogen).

Question 16 sought views regarding the extent to which respondents agreed we had correctly identified the challenges with the current CfD metering requirements. Question 17 sought views regarding the extent to which introducing hybrid metering would support innovation and more flexible use of CfD-supported renewable generation. Question 18 asked to what extent could hybrid metering remove barriers to the deployment of low carbon hydrogen. Question 19 asked for evidence on the cost savings that could arise from introducing hybrid metering. Question 20 asked what the potential drawbacks or unintended consequences of hybrid metering could be.

Responses to consultation

There were 39 responses to the consultation that addressed questions 16-20. Most responses were from developers, but we also received responses from investors, transmission operators, suppliers and public bodies.

Summary of responses

In response to Question 16, most respondents agreed that we had correctly identified the challenges created by the current metering requirements.

Of the respondents who agreed, a few respondents said that current metering arrangements are overly restrictive, and the flexibility provided by hybrid metering, which removes the link between the Balancing and Settlement Code (BSC) and CfD settlement, would further incentivise co-located sites. One respondent highlighted that current rules require projects to request a metering dispensation from Elexon in order to co-locate assets with CfD generators, which they did not feel should be a standard approach.

Of the respondents who did not agree we had correctly identified the challenges created by the current metering requirements, a few respondents said that co-locating two different asset classes - generation and demand, with varying dynamic data behind the same Balancing Mechanism Unit (BMU) can restrict all metered assets from accessing the Balancing Mechanism in a clear and efficient manner.

Another issue raised by a few respondents is whether co-located assets could share a connection agreement below their total combined capacity. It is already possible to have a Transmission Entry Capacity (TEC) lower than combined co-located asset capacities.

In response to question 17, most respondents thought that hybrid metering would likely support innovation and more flexible use of CfD-supported renewable generation to some extent.

Of the respondents who disagreed, one response relayed that improvements within the scope of the BSC would support innovation and address the needs for delivering co-location projects at a transmission level.

We also received suggestions for co-location with alternative demand sources, such as charging electric vehicles and carbon capture, usage and storage (CCUS).

Some respondents asked whether batteries would be able to import from the grid under hybrid metering, and some respondents urged government to consider the inclusion of submetering to enable “DC-coupling” of solar and battery storage projects. Both of these suggestions are currently allowed, as stated under the existing co-location guidance published by LCCC last year.

In response to question 18, the majority of respondents did not provide evidence regarding the extent to which hybrid metering could remove barriers to the deployment of low-carbon hydrogen specifically.

Some respondents agreed that hybrid metering would remove barriers for the deployment of hydrogen. A few respondents said that hybrid metering would enable CfD generation to be used for hydrogen production in the event of curtailment on the network, which would remove barriers to entry for hydrogen production. On a similar theme, a few respondents underlined that hybrid metering could enable more streamlined operation of co-located assets, encompassing hydrogen production.

One respondent said that the hybrid metering proposal would enable electrolyzers to be part of the same BMU as a generation unit and limit exposure to Transmission Network Use of System (TNUoS) charges and consumer levies, which could make co-location between CfD generators and electrolyzers more attractive.

A few respondents said that hybrid metering would not help offshore wind assets co-locate with hydrogen, and this would need to be overcome for the co-location of CfD assets and hydrogen to reach its full potential.

A few respondents disagreed directly with the suggestion that hybrid metering would remove barriers to the co-location of hydrogen electrolyzers. One respondent said that very few of the identified barriers to the deployment of low carbon hydrogen can be removed through hybrid metering and cited its only benefit for hydrogen deployment being the access to overplanted energy.

More broadly, a few respondents raised a concern that the current funding model for electrolytic hydrogen is incompatible with power sourced from a CfD asset. They suggested that the CfD and Hydrogen Production Business Model (HPBM) regimes create misaligned trading incentives that may prevent the use of CfD power to produce hydrogen.

In response to question 19, the majority of respondents agreed that there would be a cost saving through the implementation of hybrid metering, and the most commonly cited cost saving was a small cost reduction through not having to install more than one BMU. A few respondents did not identify any further cost savings associated with hybrid metering.

A few respondents suggested other cost savings that could arise from hybrid metering. These included:

- cost savings associated with the simplification of hybrid sites.
- avoidance of some network charges by co-located assets.
- ability to share grid connection costs between assets and ease the burden on onshore connections.
- better utilisation of renewable power and (where location permits) the potential reduction in curtailment for renewables in constrained locations.

The Government regards that some of the cost savings identified by respondents, such as those arising from some co-located assets sharing some infrastructure, already apply under the current CfD co-location guidance.

A few respondents said that hybrid sites would be unable to operate optimally due to the existence of the negative pricing rule. The current negative pricing rule states that no CfD payments are made during any hour when the day ahead price is below zero. Some respondents stated that the negative pricing rule hinders the benefits of on-site power for co-located batteries or hydrogen facilities and limits renewable project flexibility.

One respondent highlighted that co-locating wave and wind energy would lead to cheaper energy production costs for both projects.

In response to question 20, most respondents did not present potential drawbacks or unintended consequences of introducing hybrid metering. Some respondents said that metering CfD generators at the point and time of generation minimises the risk of gaming.

A few respondents raised that hybrid metering interacts with the balancing mechanism, and specifically the Transmission Constraint License Condition (TCLC), which prohibits generation licensees from obtaining an excessive benefit in transmission constraint periods. A problematic

situation could occur because the National Grid Electricity System Operator (NG ESO)³ could have reduced visibility of the flows of electricity behind the BMU, and there would be additional complexity caused by both generation and final demand being behind one BMU. Respondents who mentioned the TCLC said that more guidance would be needed regarding how hybrid sites should adhere to the TCLC. One respondent suggested that hybrid sites should form a new category of market participant in the Balancing Mechanism and a bespoke approach is needed.

One respondent raised the issue of the complexities surrounding the interaction between the BSC modification P462 and hybrid metering. P462 is the modification that aims to remove the distortion of support mechanisms (such as the CfD and Renewables Obligation schemes) from Balancing Mechanism bids, to reduce actions being taken outside of consumer cost order.⁴ Under hybrid metering, a BMU could include both subsidised and unsubsidised assets, so the volume of subsidised capacity may be only a part of the site's Balancing Mechanism bid. The Government is considering the interaction between hybrid metering and P462, as part of the modification assessment process. On that theme, a few respondents highlighted the necessity for NG ESO to have appropriate visibility of hybrid sites.

Policy response

The Government welcomes the responses on the questions regarding hybrid metering and recognises that the majority of respondents broadly supported the proposal.

The Government also recognises the complex challenges raised by some respondents, which must be understood further before hybrid metering can be implemented in the CfD. Following the consultation period, NESO raised questions about how hybrid CfD assets would interact with the wider market, including the Balancing Mechanism, and noted that further consideration would be required, including any resultant code and structure changes. NESO intends to explore the value of making wider market changes related to hybrid metering solutions for all market participants, and will share further information on their plans in the coming months.

In addition, questions remain around whether we should allow final demand sources, including hydrogen electrolyzers, to co-locate with CfD generators under hybrid metering. There is uncertainty regarding how final demand sources would use CfD generated electricity and if hybrid metering would over-incentivise use of CfD electricity behind the grid, and what impact this could have on value for money for consumers that fund the CfD scheme.

Finally, as reflected in some consultation responses, additional work is needed to investigate the interaction between hybrid metering and offshore wind. Some stakeholders responded that the hybrid metering proposals only work for onshore assets, due to the configuration of offshore infrastructure and interactions with the OFTO regime, which means the BMU is located at the offshore substation. This issue will need further consideration as part of the NESO workstream on wider market changes related to hybrid BMUs. More broadly, the

³ From 1 October 2024 NG ESO is known as the National Energy System Operator (NESO)

⁴ <https://www.elexon.co.uk/mod-proposal/p462/>

Government is currently reviewing the OFTO regime, and as part of this, recently conducted a call for evidence and is considering potential changes.

The Government does not believe it is right to implement hybrid metering in the CfD before it is clear how such assets would be treated in the wider system. Therefore, hybrid metering will not be implemented for the next allocation round. The Government will continue to consider how the CfD might be amended in future in light of any wider market changes that are brought forward in this area.

1.4: Phased CfDs for Floating Offshore Wind

The Government is committed to radically increasing the UK's offshore wind (OFW) capacity by 2030. FLOW is an emerging technology which allows us to access wind resource in deeper waters, which tend to be further from shore with higher, more consistent wind speeds. We anticipate further rapid expansion of the FLOW sector throughout the 2030s.

CfD phasing policy, allowing projects to be built in multiple stages, was designed to provide support for early fixed-bottom offshore wind projects by providing greater flexibility during the construction stage to de-risk project delivery. There are various rules and restrictions that must be adhered to by fixed-bottom assets to qualify for phasing, including that the overall capacity of a phased project is capped at 1500 MW, that the project be built in no more than three phases, and that at least 25% of the total project capacity must be constructed and commissioned in the first phase.

In the consultation, views were invited on extending phasing policy to FLOW to help de-risk the overall construction process, improve the sector's commercial viability and facilitate its early development in the UK. When phasing was first introduced for fixed-bottom offshore wind, FLOW projects were not large enough in scale to merit inclusion in the policy. In recent years this has changed, with many projects currently in development in the UK targeting capacities of greater than 1 GW. Despite increasing scale of projects in development, FLOW remains a nascent sector and the construction process is yet to be industrialised. Consequently, projects may face higher construction risks as a result of factors such as limitations on suitable port capacity and increased sensitivity to adverse weather conditions during the installation phase. The Government also sought views on whether to maintain the existing rules that exist for fixed-bottom offshore wind, and if not, what rules would be most appropriate.

Proposals

Question 13 sought views on whether respondents felt that phasing policy should be extended to FLOW.

Question 14 asked for views on the potential impact of extending phasing, or not, to FLOW projects.

Question 15 asked whether, if extending phasing to FLOW, the existing rules for fixed-bottom offshore wind project phasing, including the 1500 MW cap, are appropriate for the technology, and if not, why.

Responses to consultation

There were 37 responses to this section of the consultation, most of which were from developers and trade bodies.

Summary of responses

Most responses to question 13 agreed with the proposal to extend phasing to FLOW in the next allocation round. Key themes in the responses included the need to de-risk projects, shorter weather windows for the construction of FLOW, the success of the phasing policy for fixed-bottom offshore wind, and the critical stage of development for FLOW. A few respondents disagreed with the proposal, suggesting that phasing should be introduced at a later stage to enable test and demonstration sites to be successful in earlier allocation rounds.

A range of views on potential impacts were offered in response to question 14. The most common themes were that the extension of phasing to FLOW would increase flexibility in project delivery, thereby reducing project risk and resulting in lower costs overall. In addition, a few respondents noted that the introduction of FLOW phasing could enable projects to begin commercial generation earlier whilst maintaining a realistic construction programme. It was noted that these impacts could provide increased investor confidence in the UK FLOW sector.

A minority of respondents stated that the reduction in project costs could be passed onto consumers by enabling a reduction in the CfD strike price. However, one respondent noted the risk that consumers would not benefit from any cost reduction between phases in the way that they would if each phase were required to bid for its own CfD in subsequent allocation rounds.

Respondents also highlighted potential benefits to the development of the UK FLOW supply chain, with a minority stating phasing policy could, by providing developers greater certainty on the delivery of projects of greater capacity, allow them to place longer term supply contracts with manufacturers. The increased confidence provided by a lengthened order pipeline could enable the supply chain to invest in building the capacity and capability required to support the growing FLOW industry. Finally, the extension of phasing could, due to the greater confidence in large project delivery provided, smooth the pace of project delivery between seasonal installation windows. This would help avoid a boom-bust cycle for the supply chain, providing a more manageable order book and enable industry collaboration to better manage areas of constrained capacity such as ports.

The majority of responses to question 15 explicitly supported maintaining the 1.5 GW cap on the capacity of a phased project for FLOW. Reasoning included the recognition that, given FLOW's current developmental stage, raising the cap might lead to projects securing funding without sufficient material experience to deliver successfully. Additionally, a few respondents raised concerns that increasing the cap could result in a 'lock-in' situation, with large projects able to secure higher strike prices for their entire capacity in an earlier allocation round. This

could cause potential disruptions to other projects and the connections queue if those projects were to face challenges in taking FID and delivery. One respondent supported reducing the cap to 1 GW. Some responses explicitly supported a cap higher than 1.5 GW, noting that multiple 2-3 GW projects are planned in the coming years.

Most respondents either explicitly expressed a preference that the other rules – such as the requirement for projects be built in no more than three phases and that at least 25% of the total project capacity be built in the first phase – *not* be changed, or did not comment on the rules. A minority requested that the 25% first phase completion requirement be changed and/or the allowable time between the first and last phases' Target Commissioning Dates be extended.

A majority of those who supported keeping the rules as they are for fixed-bottom offshore wind also encouraged a review of these rules and restrictions for later rounds of the scheme.

Policy response

In light of the responses received, the Government intends to extend phasing to FLOW for the next allocation round onwards through amendments to the legislation. Initially we will apply the current rules in place for fixed-bottom offshore wind, including the 1.5 GW cap, to phased floating offshore wind projects. This will ensure smooth implementation for the upcoming allocation round.

Government keeps phasing policy continually under review to ensure it remains appropriate, taking account of project sizes and the maturity of the respective technologies to which it applies. This includes whether to extend phasing to other renewable energy generation technologies, should it become appropriate to do so in future.

Section 2 – Considerations for future allocation rounds

2.1: How could the CfD support innovation in floating offshore wind foundation technology as the sector develops?

Proposals

Question 21 sought views on gaming risks or unintended consequences of determining technological eligibility for established and emerging technology tariffs by more tightly defining ‘established fixed-bottom’ offshore wind, with a view to then considering anything else eligible as an emerging foundation technology. Question 22 sought initial suggestions on appropriate definitions or metrics by which to define ‘established fixed-bottom’, should this approach be implemented. While Government recognises the limitations of water depth for use in such definitions, Question 23 sought views on the appropriate minimum depth requirement for emerging foundation technology deployment.

Responses to consultation

Thirty-eight responses to this consultation chapter were received, with not all respondents answering all three questions. Thirty-six respondents answered question 21 with one response not applicable, twenty-seven answered question 22, and thirty-one answered question 23 with one response not applicable. Most respondents were from companies active in the energy sector. The majority of responses were from developers. Responses were also received from consultancies, industry and public sector bodies, a bank and a supply chain company.

Summary of responses

The majority of respondents did not agree with the proposed approach to determining technological eligibility for established and emerging technologies in the CfD scheme. The majority of respondents who disagreed were developers.

The main concern raised by respondents was that this approach risks diverting support away from the deployment of floating offshore wind projects, which could impact deployment and therefore standardisation and cost reduction. A few respondents suggested establishing a separate CfD pot for emerging foundation technologies of any kind, whether fixed, non-fixed or floating. A few respondents who were in disagreement stated they do not consider there to be enough commercially viable foundation concepts that are neither established fixed-bottom nor floating to justify the change. A few respondents agreed with the proposed approach.

There was no clear majority in response to question 22 on introducing a tighter definition for ‘established fixed-bottom’ offshore wind. Of the minority of respondents that disagreed, a few highlighted the difficulty in defining at what point a foundation design becomes ‘established’. Of those respondents that offered suggestions for how to define established fixed-bottom, one

suggested using Technology Readiness Levels, another suggested using prior deployment and others suggested wording that describing the physical load bearing characteristics of fixed-bottom offshore wind.

Half of the respondents were neutral on the use of water depth in definitions. Some respondents disagreed and a few respondents agreed. A few respondents agreed. Of those respondents that offered a suggested water depth, these ranged from 50m to 110m.

Policy response

The Government acknowledges the concerns raised about opening up the higher Administrative Strike Price currently available to floating offshore wind (FLOW) to a greater range of eligible technologies. The Government also recognises the potential difficulties of creating a definition for established fixed-bottom offshore wind, and of defining a minimum eligible water depth for access to the emerging technology pot.

However, the Government still considers it important to develop a long-term solution to the question of floating offshore wind definition that does not preclude CfD support for viable, novel solutions to the deployment of offshore wind in deep waters. The Government will not be making any changes for Allocation Round 7 but will keep this area under review and continue to work with industry and other stakeholders through the Floating Offshore Wind Taskforce to further refine the proposed approach, and will consult on this issue again ahead of any potential future changes.

2.2: How could the CfD support delivery of improved coordination of offshore transmission infrastructure?

Bootstraps: Proposals

Question 24 sought views on the Department's assessment that offshore renewable generation projects that connect to a 'bootstrap' should be eligible to apply for a CfD. The Department assessed that further work was needed to clarify the costs of these projects, their appropriate categorisation in auctions, and any changes that may be needed to the CfD.

Bootstraps: Responses to consultation

There were 27 responses to the consultation that addressed this question. Most of the responses came from energy companies (developers, suppliers and consultants) and trade bodies, with one response also received from an investor.

Bootstraps: Summary of responses

The majority of respondents supported these projects and agreed with the Government's position, including the need to clarify costs and categorisation of projects in auctions.

A few respondents suggested clarification was needed on transmission charges for these projects, for instance where a bootstrap connected different charging zones. A few suggested

consideration was needed of how any transmission reforms introduced through REMA would affect project costs and how existing projects could be protected.

A few respondents sought clarity on further points of detail, such as how the point of connection might be determined, how arrangements with Offshore Transmission Owners would work, and how it could be ensured that such projects did not suffer in the prioritisation of network reinforcements.

A few respondents commented on the need to protect value for money for consumers.

Bootstraps: Policy response

The Government will undertake further work to clarify the costs of bootstrap-connected projects, as well as considering the wider issues raised by respondents. This will inform a decision on whether any changes would be needed to the categorisation of these projects in CfD allocation rounds. This in turn will determine what, if any, changes would be needed to regulations, the allocation framework and the contract. In order to ensure that the costs of these projects are properly understood and that they are treated fairly, the Government cannot at this stage confirm that they would be eligible to apply for a CfD in the next allocation round. The Government will further clarify its proposed approach in time for applications consistent with allocation rounds beyond that.

Multi-Purpose Interconnectors: Proposals

Question 25 sought views on the Department's assessment of the role of the CfD in the Home Market (HM) and Offshore Bidding Zone (OBZ) models.

Question 26 sought any evidence from respondents on the additional costs and benefits to consumers of an Offshore wind – Multi Purpose Interconnector (OWF-MPI) arrangement.

Question 27 sought views on whether respondents could identify any other options that could better address the issues outlined in this consultation chapter.

Multi-Purpose Interconnectors: Responses to consultation

There were 33 responses to at least one of the above three questions. The majority of responses received were from developers. Responses were also received from trade associations, non-governmental organisations, suppliers, public bodies, transmission developers, a transmission system operator, an investor, and a public campaign group.

Multi-Purpose Interconnectors: Summary of responses

In response to Q25, most respondents agreed in principle to the use of the CfD in both a HM and OBZ model, outlining the view that the CfD has a role to play in derisking OFW-MPI projects. One respondent raised their concern that CfD / consumer support to OFW-MPI projects would provide top up payments to generators exporting to non-GB markets.

Of those that agreed, most agreed with the implementation of the existing CfD mechanism for a HM arrangement on the basis that it essentially replicates the status quo of a radially connected OFW with respect to market interaction.

Most respondents also agreed that there was an additional revenue risk to the OFW in an OBZ import scenario, with most agreeing that scenario C (additional risk placed on consumers) was the best option to incentivise MPI-OFWs in an OBZ scenario. This was instead of option A (do nothing) or B (additional risk placed on the interconnector).

Of the options proposed under scenario C, most agreed that the flexible CfD was the best option to resolve additional revenue gap/price risk when importing to GB in an OBZ scenario. Further clarification was however sought from a few respondents on the specific reference price being used in an OBZ model. No respondents supported the 'congestion rent sharing' or 'always use the GB ref price' options.

One respondent explicitly disagreed with bespoke CfD support in an OBZ scenario on the basis that they considered the scale of the OFW-MPI pipeline of projects to be insufficient to realise significant opportunities and benefits and as such would not justify bespoke arrangements within the CfD.

In addition, many respondents identified explicitly that a flexible CfD would not resolve an additional volume risk that was perceived to be created for OFW developers in an OBZ scenario where they do not have priority access to interconnector capacity. For this reason, some respondents requested that a deemed CfD be considered further to help alleviate some of this additional volume risk. Some respondents however considered that the application of implicit trading arrangements in an OBZ scenario would largely mitigate this additional risk.

Some respondents also proposed that the 'asset life CfD' option should be further considered due to its ability to more broadly reduce the risk profile of OFW-MPI projects across its lifetime. It was suggested that whilst this would not directly reduce the identified volume risk, it would further mitigate price risk, including the perceived lower revenue for the OFW merchant tail period in an OBZ scenario.

Whilst noting the above agreement in principle to use of the CfD for OFW-MPIs and the flexible CfD in an OBZ scenario, most respondents also considered that there was insufficient assessment of the cost-benefits to consumers or maturity of broader MPI and REMA policy to appropriately consider the merits of including MPI-OFWs in the CfD at this stage.

Respondents were particularly seeking clarity on the MPI market model, trading arrangements and alignment with non-GB jurisdictions, and transmission charging policy. They also considered the lack of certainty regarding REMA CfD design options and location arrangements to have a direct impact on the costs for OFW-MPIs, particularly outstanding risks that the CfD design would not resolve.

Most respondents specifically requested that Government complete a full cost-benefits analysis / impact assessment of CfD intervention for OFW-MPIs and the most appropriate design option. These respondents considered that this should take place once policy certainty

is established on the wider REMA and MPI policy framework to ensure that costs beyond that to the CfD are appropriately considered and that any intervention via the CfD is optimised to ensure savings are passed onto consumers.

In response to Q26, of those that responded, most respondents outlined multiple benefits from OFWs connecting into MPIs which focused upon a few themes:

- **Reduced transmission infrastructure costs** compared to a radial OFW project. Some respondents offered estimated figures for costs savings between £0.5-1bn per GW, with some respondents quoting an overall reduction from the amount of cable, offshore platforms and converter stations required which can form a significant proportion of a project's costs. Depending on the size of the comparable conventional project, one respondent considered that costs could be saved by up to 5 to 10% of total project costs compared to radially connected projects.
- **Reduced community and environmental impacts** due to reduced cabling and connections into shore reducing the impact of construction on the environment. OFW-MPIs can enable more efficient use of maritime space and, in doing so, help to decrease environmental impacts of offshore development.
- **Price reduction**. Via greater access to additional markets, OFW-MPIs can improve the supply of potential renewable energy to GB whilst utilising the transmission infrastructure in a more efficient manner leading to a consumer benefit of lower energy prices.
- **Greater access to renewable resource**. MPIs can facilitate the development of offshore wind projects in locations further away from the coast with wind resources that might otherwise remain untapped.
- **Decreased congestion and balancing costs**. A few respondents considered that an OFW-MPI could lead to more efficient use of transmission infrastructure when the UK is exporting power, relying on the interconnector capacity and bypassing the onshore GB grid. Additionally, OFW-MPIs are able to directly export generation that would otherwise be curtailed, reducing curtailment costs. Both of these should be reflected in reduced consumer energy bills.

Most respondents however also noted that these benefits could only be fully realised if the policy framework and CfD design ensured lower costs from OFW-MPI project are passed onto the consumers, and perverse incentives were avoided.

With respect to costs of the flexi CfD option itself, a few respondents also claimed that forecasts that GB may become a net exporter from end 2020s would reduce the amount of flexi CfD top up payments and therefore the potential additional cost to consumer directly from CfD top up payments.

In response to Q27, and additional to what is already discussed on specific CfD design options in Q25 above, some additional policy considerations were raised by respondents.

A few respondents stated that viewing the transmission system as a single integrated grid, without the distinctions between offshore and onshore connections, would mitigate many of the risks associated with an OFW-MPI project.

A few respondents suggested a cooperative approach between connecting countries to jointly pay the CfD top ups for the MPI-OFWs or introduce cost-benefit sharing arrangements. It was considered that this would help increase efficiency between jurisdictions and reduce the cost to GB consumers where electricity is being exported.

Some respondents expressed that more needs to be done to provide certainty and confidence to developers and investors earlier in the process. Particularly aligning OFW CfD award and Final Investment Decision (FID) with MPI FID where possible.

A few respondents also raised issues outside the scope of this consultation. This included consideration of wider market rules such as unbundling and whether greater access to the CfD should be provided for GB territories and Northern Ireland. One respondent also suggested that a subsidy scheme should be developed to support early adopters through pilot projects to encourage first of a kind projects.

Multi-Purpose Interconnectors: Policy response

Connecting to neighbouring markets through interconnection can provide access to a more diverse pool of generation and allow the import of cheaper electricity by responding to market signals. During times where renewable generation is abundant, interconnectors can provide export routes for excess generation and help reduce the need for curtailment. They can also contribute to net zero and energy security efforts by supporting the integration of renewable energy onto the grid.

The Offshore Transmission Network Review (OTNR)⁵ identified MPIs in particular as enablers to better coordination as they can contribute to net zero and energy security efforts. They can provide more efficient use of transmission assets in comparison to point-to-point interconnectors and radial offshore wind connections, and this has the potential to reduce the total amount of infrastructure, decreasing the impact on coastal communities and the marine environment.

In their final Phase 1 report into offshore coordination⁶, the Electricity System Operator (ESO) indicated that adopting an integrated approach to offshore transmission from 2030, including through the use of MPIs, could deliver savings of around £3 billion in capital and operating expenditure, which were expected to be passed on to consumers in the form of lower energy bills. In addition, the study found that habitat loss, disturbance, disamenity to local populations and other resultant impacts from the construction and placement of transmission infrastructure are estimated to be reduced by 30%⁷.

⁵ [Offshore Transmission Network Review](#) was commissioned by the previous Government in 2020.

⁶ [The final Phase 1 report in our Offshore Coordination project](#), nationalgrideso.com, 16 Dec 2020

⁷ <https://www.nationalgrideso.com/document/183031/download>

In addition, a study commissioned by the European Commission of 10 potential European OHAs found capex savings for projects ranged from €300m and €2500m (5-10% of total project costs) when compared to counterfactual scenarios using traditional interconnectors⁸. A portion of these cost savings were expected to be passed on to consumers, either indirectly and/or through lower subsidy payments to support the construction and operation of the asset.

OFW connected to MPIs are likely to have different cost structures to radially connected OFW, however access to the CFD is still likely required to reduce their cost profile and incentivise investment in these types of projects. When considering any support under the CfD for OFW-MPIs, however, it is important to note that this may impact consumers.

Under an OBZ arrangement, annual revenues are estimated to be lower for OFW connected to an MPI compared to a HM arrangement. The revenue gap between the HM and OBZ arrangement could therefore be bridged through a flexible CfD which, all else being equal, would result in higher top up payments than under a HM arrangement.

OFW would, however, still be exposed to lower OBZ revenues after the CfD contract period, and so it is likely that wind developers would anticipate a revenue gap under OBZ arrangements and will price this into their CfD bids. This would be to either reflect lower revenues in the merchant tail in case they are offered a flexible CfD, or lower merchant tail revenues and lower revenues through the duration of the CfD if offered a CfD struck against the HM price.

It is therefore unclear at this stage how exactly the risks of OFW-MPI projects will translate into strike prices within the CfD. Similar to differences in revenues however, we would expect any cost savings under the OBZ arrangement to be passed on to consumers via CfD strike prices with appropriate allocation design.

i. Current CfD position

Government remains of the view that it would be, in principle, possible to enable OFW-MPIs to be eligible for CfD contracts to realise projects which demonstrate good value for money for consumers and wider benefits to the energy system.

Government also considers a standard CfD to be the most viable approach for an OFW-MPI in a HM scenario.

The flexi CfD remains, in our view, the most viable option to resolve the additional revenue risk in an import OBZ scenario. The CfD payment could flex to the appropriate market reference price as determined by the OBZ algorithm and the agreed CfD strike price. This CfD option is 'flexible' in the sense that the reference price may either be GB's reference price or the reference price of the connected country, generally depending on which is lower.

Alongside further consideration of the flexible CfD, we will continue to consider the role of other design options through the ongoing REMA programme. It is Government's position however

⁸ https://op.europa.eu/en/publication-detail/-/publication/59165f6d-802e-11e9-9f05-01aa75ed71a1/language-en?WT_mc_id=Searchresult&3BWT_ria_c=37085&3BWT_ria_f=3608&3BWT_ria_ev=search

that we are unable to commit to CfD eligibility or a specific CfD design until further clarity has been reached on the MPI policy framework and REMA options on CfD design and locational arrangements have been further matured. That will ensure that the policy uncertainty is not priced into CfD bids. Once we have sufficient clarity on the policy framework within which a CfD could apply, Government will complete a full assessment of the most viable CfD design option.

In particular, further clarity is required to understand costs and the market within which an OFW-MPI would operate. This includes further clarity on the MPI policy framework including: the market model, implicit or explicit trading arrangements, and transmission charging arrangements. It also includes further clarity on the future CfD design and locational arrangements through REMA.

ii. MPI policy framework development

The Energy Bill, which received Royal assent in October 2023, introduced a new legal definition for MPIs alongside a new licensable activity of operating MPIs. There have been various publications from government and Ofgem to progress MPI policy⁹.

Government has engaged with stakeholders via the MPI Framework Discussion Group (MFDG) which was established by Ofgem in late 2022, with the purpose of engaging with stakeholders to develop proposals for the commercial, policy and regulatory frameworks that will apply to MPIs. The MFDG provides an opportunity to collaboratively discuss risks and opportunities, and a space to test thinking and gauge stakeholder views on key policy issues.

Through the above work, government identified four key workstreams which require further development to enable MPI projects to come forward: (1) Contracts for Difference (being developed through this consultation and led by DESNZ); (2) Licensing (led jointly by Ofgem and DESNZ); (3) Regulatory regime, market arrangements and charging arrangements (led by Ofgem); and (4) Operations (led by NGENSO).

Respondents raised market arrangements, trading arrangements, charging regime and infrastructure costs and interplay with EU regulatory position as key areas where further clarity was required in order to resolve outstanding project risks and benefit realisation. Government is aware that any future MPI must address these issues in addition to the four workstreams initially identified.

As set out in the joint DESNZ and Ofgem consultation on Market Arrangements for Multi-Purpose Interconnectors published June 2023, and the associated Summary of Responses published in December 2023, the government considers that an OBZ configuration with implicit trading arrangements is likely to be the optimal arrangement for maximising the benefits of MPIs.

⁹ For a full listed of publications, please see paragraph 1.29 of the Consultation for Market Arrangements for Multi-Purpose Interconnectors and the 'Related publications' section in the Consultation on the Regulatory Framework for Offshore Hybrid Assets: Multi Purpose Interconnectors and Non-Standard Interconnectors

With regard to implementation of the UK-EU Trade and Cooperation Agreement, Government considers that efficient electricity trading arrangements will be important for maximising the value of future MPIs through efficient dispatch of both cross-border flows and offshore wind generation. The UK and EU committed to developing efficient electricity trading arrangements in the Agreement.

Government also agrees that close collaboration with other jurisdiction across the North Seas is required to develop regulatory, market and trade frameworks that create the environment necessary to facilitate the development and operation of MPIs.

iii. REMA

The two main alternate CfD models explored in the second REMA consultation are the deemed CfD and capacity-based CfD. Both of these models are based around de-linking CfD payment from an asset's output in an attempt to address the distortions associated with the current CfD. Government recognises that any intervention on MPI-OFW projects should be consistent with wider reform being considered for the CfD scheme.

The consultation also explored options for sending more efficient locational signals in the electricity market. These include zonal pricing, as well as reforms to existing arrangements such as network charging and access rights under a single national wholesale electricity price, both of which would likewise have impacts for MPI-OFW projects.

As a result, Government will develop policy for MPI-OFWs alongside REMA work. The next phase of REMA will be considering how CfD and wholesale market reforms might act in combination, and to better understand how risks, benefits, and costs could be allocated across different market participants and technologies including MPIs.

The next phase of REMA will shift to a narrower, deeper assessment of the remaining CfD reform options. We are aiming to complete this 'policy' stage of the programme by mid-2025. It is likely that we will move to implement the chosen CfD reform option/s as quickly as possible after policy decisions, although it is possible that some CfD reforms may be more suited to being implemented alongside any wider wholesale market reform at a later date.

iv. Other consideration raised by respondents

Some respondents expressed that more needs to be done to provide certainty and confidence to developers and investors earlier in the process. Government recognises that the timing of investment decisions is a novel challenge for coordinated infrastructure.

Some respondents to the consultation also expressed the need to lift the compartmentalisation of transmission between onshore and offshore connections with a focus on an integrated system. Government will take this into consideration.

2.3: Should CfD indexation be updated to better reflect inflation risks?

Contracts for Difference currently protect renewable electricity generation projects against inflation risk through index-linking strike prices to the Consumer Price Index (CPI). Project development costs are sensitive to change as a result of rising or falling input costs. The effect of this on the cost of renewable electricity generation projects can be particularly acute during construction, when exposure to the risk of fluctuations in key input costs is high. The global rise in inflation rates and the sustained volatility of commodity prices has placed significant upward pressure on renewable project costs globally, and has been a particular challenge for offshore wind projects.

Proposals

Question 28 sought views on whether a change in the inflation-indexation of CfDs could help to future-proof projects against macroeconomic shocks in future.

Question 29 sought views on whether a change in indexation could better protect developers from inflation risk whilst also protecting electricity consumers from unreasonable costs.

Question 30 sought views on whether electricity consumers, who ultimately fund the CfD, should bear greater construction risk if more reflective inflation protection were introduced.

Question 31 sought views on the significance of commodity price risk to developers, and how it compared to other risks such as labour costs, and exchange rates.

Question 32 sought views on the time period in which renewable generating projects were most likely to be exposed to fluctuations in key input costs, and how that period could be contractually defined.

Question 33, 34, 35 sought views on the impact that indexing strike prices to PPI during the construction phase of the CfD could have on project hurdle rates and CfD bid.

Question 36 sought views on whether trade-offs such as partial indexation later in the contract, or other forms of protection should be included in indexation proposals to help retain consumer value for money.

Question 37 sought views on alternative proposals for indexation reform which respondents felt Government should explore.

Responses to consultation

There were 43 responses that answered at least one question in this chapter of the consultation. Most responses were from developers of renewable generators, particularly from the offshore wind sector, however responses were also received from investors, electricity suppliers and other public bodies.

Summary of responses

Most respondents welcomed the Government's review of CfD indexation, agreeing that the current approach has not always sufficiently shielded projects against rapid cost increases during periods of macroeconomic shocks. Several attributed this to some of the recent difficulties witnessed in taking investment decisions within the sector. Consultation responses were in general agreement that indexation reform could be 'win-win' for both consumers and renewable developers if indexation better reflected actual cost inflation experienced by projects.

There were, however, many who highlighted the sensitivity of design details for any future reforms in this area, in particular the need to carefully consider whether changes could increase perceived risk to investors. Whilst many respondents put forward alternative proposals (summarised below), there were some who concluded there was no 'perfect' solution, and that finding an appropriate mechanism to fully mitigate shocks in the market would be challenging. Some responses suggested that the combination of price shocks experienced in the last few years could be a relative 'one-off' event.

Views around the implications for electricity consumers, who ultimately fund CfDs, were mixed. There were a few respondents who were of the view that project developers and investors are best placed to manage exposure to inflation risk and hedge these risks accordingly. The majority, however, were of the view that consumers bearing more overall inflation risk would be better value for money than developers incorporating this as risk premium on CfD strike prices. Some made the case that more comprehensive inflation protection would directly benefit consumers by filtering through into lower CfD strike prices.

There was widespread rejection of any suggestion to move to partial indexation to balance risks for consumer value for money, with many respondents commenting that this would have the opposite effect of increasing risk exposure and pushing up strike prices in a way which could harm consumers. Several respondents agreed with the need for a guardrail mechanism to manage the risk of generator overcompensation, especially in times of commodity price spikes.

In quantifying the significance of commodity price risk there were, again, mixed views, albeit a consensus that this was largely dependent on renewable technology. Many viewed commodity prices as by far the most significant influence on project costs. A minority of stakeholders, largely those operating in the offshore wind sector, noted that interest rate rises and implications for cost of finance presented a bigger risk.

When asked how to define the period in which renewable projects are most likely to be exposed to inflation risk there was almost universal agreement from respondents that it is the period between CfD bid and taking Final Investment Decision (FID) where the most exposure occurs. Before an allocation round begins, several argued that cost increases could be accommodated within the value of CfD strike price bids. And that after FID, many supply chain contracts are themselves indexed.

In considering potential changes to CfD indexation, the Government sought views and evidence on the merits of indexing strike prices to the Producer Price Index (PPI) during the construction phase of a project, noting in particular how this would be perceived by financial investors, and the impact this could have on project hurdle rates.

Whilst there was recognition that PPI would be more cost reflective of construction costs than CPI, the majority of respondents agreed that it would be an unsuitable alternative to CPI, which is predictable and could be hedged. The volatility of PPI was most often cited as the key risk, with many noting that this could have the effect of *adding* risk, pushing up project hurdle rates and increasing strike prices. The frequency with which prices can turn negative was also highlighted, with the potential for this to *add* risk through the threat of mismatch with actual costs incurred.

Some respondents proposed ways that this volatility risk could be mitigated. For example, through a rolling average of CPI/PPI, a 'double lock' approach where whichever is tracking higher is applied, or by designing contracts so that indexation to PPI is only triggered by predefined, supranormal economic circumstances.

Consultees proposed various alternative proposals aimed at providing greater inflation risk protection in CfD contracts. Many of these focussed on moving toward a bespoke commodity weighted index approach methodology akin to approaches taken in Irish and French offshore wind auctions. This was cited by several respondents as a particularly helpful approach for offshore wind, where costs are particularly sensitive to the price of a number of critical commodities including steel and copper. There was, however, recognition of the practical challenges in moving to a more bespoke approach, not least the competition implications of technologies with different approaches competing directly against each other. A number of respondents were of the view that the most effective way to build resilience against price shocks would be for the Government to adjust Administrative Strike Prices (ASPs) and/or CfD budgets so that developers have more headroom to be able to manage risk themselves (akin to the approach taken in setting ASPs in Allocation Round 6).

Policy response

The Government wants to ensure that the CfD scheme continues to support new investment in renewables by providing efficient and cost-effective revenue stabilisation. The global rise in inflation and difficulties witnessed across the renewables sector over the last few years mean it has been right to reflect on whether the management of risk in CfDs remains appropriate.

It is clear from consultation responses and discussions with industry that full CfD indexation to CPI continues to offer comparatively advantageous terms in an increasingly competitive global market. The Government shares this view and does currently not intend to make any changes to this approach.

In seeking evidence on providing greater inflation protection against construction risk, the Government sought views on whether indexing strike prices to the Producer Price Index (PPI) during construction could better reflect costs borne by developers. As a proposal, this was

considered alongside a range of alternatives informed through discussions with industry, internal and external analysis, and by considering international comparisons.

As set out in the consultation document, the key question identified in this approach was what impact indexing to PPI – an historically more volatile price index – could have on investor confidence and project hurdle rates. Most respondents inferred that whilst PPI would be more cost reflective of construction cost increases in the past two to three years, it would be an unsuitable alternative with a majority concluding that this would increase, and not reduce, risk.

Reflecting on the significant concerns raised by consultees, the Government will not at this time give any further consideration to proposals to index strike prices to PPI. The Government considers that moving away from full CPI-linked indexation may have a significant impact on investor confidence and therefore does not intend to diverge from the current approach. Ahead of future allocation rounds the Government may reflect further on alternative approaches and priorities, including those put forward by consultees.

This publication is available from: www.gov.uk/government/consultations/proposed-amendments-to-contracts-for-difference-for-allocation-round-7-and-future-rounds

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