

# Carbon capture, usage and storage: Amendments to Contracts for Difference regulations

Summary of responses to the consultation and the government's response



This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit <a href="nationalarchives.gov.uk/doc/open-government-licence/version/3">nationalarchives.gov.uk/doc/open-government-licence/version/3</a> or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: <a href="psi@nationalarchives.gsi.gov.uk">psi@nationalarchives.gsi.gov.uk</a>.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to us at: <a href="mailto:enquiries@beis.gov.uk">enquiries@beis.gov.uk</a>

## Contents

Section 1: Introduction	4
1.1 Context	4
1.2 Overview of consultation proposals	5
1.3 Summary of Stakeholder engagement	5
1.4 Next steps	5
Section 2: Summary of responses and government responses per question	6
2.1 Definition of an eligible generator	6
2.2 Payment mechanism terminology	8
2.3 Non-pipeline transport	11
2.4 General comments	15

### **Section 1: Introduction**

#### 1.1 Context

The Dispatchable Power Agreement ("DPA") is the bespoke contract currently being designed for the Power Carbon Capture and Storage ("Power CCS") business model<sup>1</sup>. While the DPA is based on the CfD Allocation Round 4: Standard Terms and Conditions, specific amendments have been made to ensure that the DPA meets the requirements of Power CCS. The DPA is intended to encourage low carbon dispatchable electricity generation by bringing forward investment in Power CCS projects and incentivising those facilities to operate in a manner which benefits the UK energy market<sup>23</sup>.

Since December 2020, BEIS has consulted and published policy decisions on the construction of the legal and contractual framework and business model for the DPA.

It is intended that the Secretary of State will use the powers in section 10 of the Energy Act 2013 to direct the DPA Counterparty<sup>4</sup> to offer initial DPA contracts to generators who are identified through the cluster sequencing process, as explained in the Phase-1 cluster sequencing guidance document (published in May 2021) and the Phase-2 cluster sequencing guidance document (published in November 2021).

On 21st July 2021, the government published a consultation titled 'Carbon capture usage and storage: Amendments to Contracts for Difference Regulations' that invited views on the amendments to certain regulations (The Contracts for Difference (Definition of Eligible Generator) Regulations 2014 ("Eligible Generator Regulations") and The Contracts for Difference (Allocation) Regulations 2014 ("Allocation Regulations"), together the "Contracts for Difference regulations") to facilitate the award of the DPA for Power CCS. The consultation closed on the 8th September 2021. This response sets out the proposed amendments that will be included in this proposed Statutory Instrument ("proposed SI") (titled The Contracts for Difference (Miscellaneous Amendments) Regulations 2022) to the Contracts for Difference regulations and related policy rationale.

<sup>&</sup>lt;sup>1</sup>All Dispatchable Power Agreement updates relating to Power CCUS, accessible

https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-business-models

<sup>&</sup>lt;sup>2</sup> CCS Phase-1 guidance, accessible <a href="https://www.gov.uk/government/publications/cluster-sequencing-for-carbon-capture-usage-and-storage-ccus-deployment-phase-1-expressions-of-interest">https://www.gov.uk/government/publications/cluster-sequencing-for-carbon-capture-usage-and-storage-ccus-deployment-phase-1-expressions-of-interest</a>

<sup>&</sup>lt;sup>3</sup> CCS Phase-2 guidance, accessible <a href="https://www.gov.uk/government/publications/cluster-sequencing-for-carbon-capture-usage-and-storage-ccus-deployment-phase-2">https://www.gov.uk/government/publications/cluster-sequencing-for-carbon-capture-usage-and-storage-ccus-deployment-phase-2</a>

<sup>&</sup>lt;sup>4</sup> Guidance on the cluster sequencing process, accessible

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/986007/ccus-cluster-sequencing-phase-1-guidance-for-submissions.pdf

#### 1.2 Overview of consultation proposals

The consultation set out the three proposed amendments of the Contracts for Difference regulations that will facilitate the use of a DPA for Power CCS.

The consultation asked for responses on proposed amendments which would facilitate the award of DPAs by: (1) accommodating retrofit Power CCS projects; (2) accommodating the DPA payment mechanism and terminology; (3) allowing for any future developments in respect of non-pipeline transport.

This document provides a summary of the responses received throughout the consultation, as well as the rationale for certain decisions made by government which have been informed by those responses.

Although this document addresses all the consultation questions, further guidance for the business models for Power CCS and CCUS Transport & Storage ("T&S") can be found on the <a href="https://www.gov.uk">www.gov.uk</a> website<sup>5</sup>.

#### 1.3 Summary of Stakeholder engagement

We received 16 direct responses to the consultation via email or the online portal. Over half of these responses were from businesses and organisations, including large multinationals and SMEs, directly involved in Power CCS. The remainder came from trade associations, non-governmental organisations and other interested parties.

#### 1.4 Next steps

The responses to this consultation are being taken into consideration in the drafting of the proposed SI to amend the secondary legislation as was set out in the consultation. BEIS is aiming for the proposed SI to be put before Parliament in 2022.

<sup>&</sup>lt;sup>5</sup> https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-business-models

# Section 2: Summary of responses and government responses per question

#### 2.1 Definition of an eligible generator

Q1: Do you have any comments on the proposed amendment to the definition of an eligible generator to specify that retrofit Carbon Capture and Storage (CCS) projects, involving the connection of an existing power station to a complete CCS system, are eligible generators?

#### Explanation of changes to the Eligible Generator Regulations

Question 1 of the consultation focused on the proposed amendment to the definition of an eligible generator to ensure that both new build and retrofit CCS projects will be eligible under the Eligible Generator Regulations to be awarded a DPA. The wording in the Eligible Generator Regulations that is relevant for Q1-3 is below.

#### Definition of an Eligible Generator:

The definition of a "complete CCS system" is set out in section 2 of the Eligible Generator Regulations:

"complete CCS system" means a system of plant and facilities for—

- (a) capturing some or all of the carbon dioxide (or any substance consisting primarily of carbon dioxide) that is produced by, or in connection with, the generation of electricity by a generating station;
- (b) transporting the carbon dioxide (or substance) captured; and
- (c) disposing of it by way of permanent storage;

The Schedule (at limb (d)) specifies that an "eligible generating station" includes: "a generating station connected to a complete CCS system".

The definition of "carry out a generating activity" is set out in section 3(5) of the Eligible Generator Regulations:

"carry out a generating activity" means—

- (a) to establish an eligible generating station, including where a relevant fossil fuel generating station (or part of it) has been altered to become a biomass conversion station (or part of such a station); or
- (b) to alter an eligible generating station in order to increase the generating capacity of that station by 5 megawatts or more;

#### Summary of consultation responses

This question asked respondents to provide views on allowing for retrofit Power CCS projects through the proposed amendment to the Eligible Generator Regulations. 15 responses were received via email or through the online portal for this question.

Most respondents were supportive of the proposed amendment to the definition to include retrofit Power CCS projects alongside new build Power CCS projects.

Some respondents stated that it should be made clear that individual generating units with CCS within a station of multiple generating units may be individually eligible for a DPA.

There was a common theme through the comments that the definitions should be broad enough to accommodate technologies such as biomass, energy from waste, combined heat and power and bioenergy plants, and the capture and permanent storage of all greenhouse gases, not only CO2.

A respondent stated that any gases should be subject to treatment ensure the removal of any Nitrogen Oxides (NOX) using a hydrogen peroxide solution, due to the role these oxides play in ozone layer depletion and wider contribution to global warming.

A respondent referenced the current regulation drafting limbs, highlighting the current requirement for a generator to intend to either establish an eligible generating station or alter an eligible generating station to increase its capacity by 5MW or more in order to be defined as an eligible generator. The respondent voiced concern that this condition (an increase of capacity by 5MW or more) would remain and therefore apply to the eligible generator definition for Power CCS retrofit projects.

A minority of respondents expressed that they would like to be consulted on the wording of the proposed amendment when it is close to being finalised.

#### Policy Response

The suggested amendment to the Eligible Generator Regulations is intended to be broad, technology neutral and accommodating of any future technology arrangements and this approach was supported by several of the consultation responses.

The Eligible Generator Regulations define a 'generation station' to mean a station which generates electricity. The boundary of a generating station and definition of what forms part of that station is intended to be more specifically set out in each individual DPA as this is a contractual matter rather than a point for regulations.

In response to the comment regarding the treatment of Nitrogen Oxide gases in the above section, this is dealt with in separate regulations. There are <u>national air quality objectives</u> that already mandate the clean-up of sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NOx), and particulates. Any equipment or plant used to retrofit existing power generation facilities to enable them to dispose of its GHG emissions will have to adhere to these regulations, as well as Emission Limit Values.

For further information, please see the Environmental Permitting (England and Wales) (Amendment) Regulations 2018, which transpose the Medium Combustion Plant Directive (EU) 2015/2193 and the Environmental Permitting (England and Wales) Regulations 2016, SI 2016/1154, which transpose the Industrial Emissions Directive 2010/75/EU . Furthermore, the Environment (Legislative Functions from Directives) (EU Exit) Regulations 2019 (SI 2019/1350) create legislative powers for the Secretary of State or the appropriate devolved authority, to replace functions conferred upon the European Commission by various environmental directives (including in relation to the Industrial Emissions Directive 2010/75/EU, The Medium Combustion Plant Directive 2015).

The proposed SI does not contemplate any amendments to those regulations.

The government has decided to proceed with the proposed amendment to ensure that generating stations which are retrofitted to become generating stations connected to a complete CCS system can be considered eligible generators by adding this limb to the definition of "carry out a generating activity":

"(c) to alter an existing generating station in order that it becomes a generating station connected to a complete CCS system;".

By amending the regulations in this way, the retrofitted plant will not need to repower to meet the 5MW increase requirement set out in limb (b) in order to fulfil the definition of "carry out a generating activity".

We do not plan to re-circulate the draft Statutory Instrument given that the consultation and this response have detailed the intended changes.

#### 2.2 Payment mechanism terminology

# Q2: Do you have any comments on the proposed amendment to the Allocation Regulations, which will allow the DPA payment terminology to be used?

#### Explanation of changes to the Allocation Regulations

Question 2 was focused on the terminology concerned with the payment mechanism. The proposal asked respondents to comment on the change to amend certain wording in the Allocation Regulations to ensure there is flexibility to use DPA terminology, whilst maintaining the integrity of the payment terminology for all other CfD contracts to which the relevant regulations apply.

#### Summary of consultation responses

This question asked respondents to consider the suggested change to the current regulations as laid out in the consultation document regarding the terminology of the payment mechanism wording (not the payment mechanism itself). This question received 15 responses.

Most respondents were supportive of the proposed wording change to allow for the payment mechanism under the DPA.

Two respondents requested that the amendments to the payment terminology are sufficiently broad so as to enable additional, future payment mechanisms which may be required to support future technologies such as Bioenergy Carbon Capture Storage (BECCS), and which may differ from the payment mechanism proposed for the DPA.

One respondent expressed a wish for greater consideration of rates of pay and health and safety for workers and for the use of UK manufacturing in the CCS supply chain, noting that they considered that the CfD regime had produced negative outcomes in these areas.

A respondent stated that there needed to be a stop clause in the DPA payments if CO2 emissions limits are breached (whereby a plant is emitting more CO2 than is permitted), and a requirement that generators are forced to improve plants and equipment over time.

The same respondent stated a need for a system of penalties and fines imposed on generators whose Power CCS plants fail to meet the expected performance requirements, to prevent breaches and hold generators to account.

One respondent requested for a further consultation on the wording of the proposed SI itself to be circulated before it is put before Parliament. The wording of the proposed SI and the rationale has been set out in detail in this consultation.

#### Policy Response

In the Allocation Regulations, there is a presumption that a "strike price" and a "reference price" shall be present in all contracts for difference, and regulation 60, which concerns the publication of direct award contracts for difference uses these terms. The government has decided to proceed with the proposed amendment that ensures that references to a "strike price" and a "reference price" are retained. However, by amending the language to state that a "strike price" and "reference price" may be included, but does not presume their inclusion, there will not be a requirement for these specific terms to be used in a DPA and the alternative payment mechanism can be used. This may also be relevant to other CCS technologies that use alternative payment terms in the future. This is in line with the main theme of the responses, which were requesting that the terminology should be sufficiently broad to accommodate future payment mechanisms that may be required to support a range of technologies.

We intend to provide further details of the elements of the payment mechanism that we would be expected to publish in respect of the DPA in the upcoming Power CCS business model update, anticipated in Q1 2022, such as the Availability Payment Rate per Settlement Unit ("APRi") and the Variable Payment Rate for the day in the billing period (£/MWH) ("VP"). The government continues to place importance on transparency, both for the public and to help drive down costs of future generation stations going forwards and therefore we have proposed publishable items in the upcoming DPA consultation. These proposed publishable payment mechanism elements and details otherwise set out on the CfD Register are adapted from the

CfD Allocation Round 4 requirements and we intend to facilitate their publication via obligations in the DPA contract drafting itself, further details on this are expected to follow in the upcoming business model update. (In relation to the point raised about future contracts and the need to maintain flexibility, we may choose to adopt this approach (of addressing what contractual details must be published in the contractual drafting itself) in respect of such other relevant contracts which may be awarded pursuant to Section 10 of the Energy Act 2013 without a strike price and reference price.)

Across the UK, CCS is set to create up to 50,000 jobs, and job creation is one of the key criteria we have considered at a cluster level as can be found in the <a href="Phase-1 Cluster Sequencing guidance documents">Phase-1 Cluster Sequencing guidance documents</a>, as well as the subsequent <a href="Phase-2 Cluster Sequencing guidance documents">Phase-2 Cluster Sequencing guidance documents</a> concerned with assessing projects (i.e. the process relating to the identification of initial recipients of the DPA) rather than within the legislation. Within the Phase-1 cluster sequencing guidance document, BEIS considers the health and safety of workers on the Power CCS projects in the Economic Benefits criterion. This reference demonstrates the importance of health and safety of workers in respect of the cluster sequencing process.

In the <u>Cluster Sequencing for CCUS deployment: Phase-1: cluster plan form (Annex A)</u>, point 4.5 requires the Phase-1 clusters to demonstrate their commitment to the health and safety of their staff, including the indicators that would be monitored at Board level.

In the <u>Phase-2 Cluster Sequencing documents</u>, the cost consideration is one of five assessed criteria. Following Phase-1, the requirement to demonstrate a commitment to health and safety is also scrutinised in the <u>Power Project Plan</u>, section 5.8 under Deliverability. This section requires projects to demonstrate that work has been performed or is planned to identify and mitigate Health and Safety risks to staff, contractors and the local population during project development, execution, operational and post-cessation phases to be as low as practicable. This section [5.8] further requires information on Health and Safety Management and demonstration of how the project is in compliance with Construction Design Management Regulation 2015 and other relevant safety regulations. This is considered as part of the overall credibility of the project, which is a critical factor at assessment level.

In relation to the initial DPAs which are awarded, it is proposed that "availability payments" under the DPA will decrease in line with a decreasing capture rate – this incentivises projects to maintain a high carbon dioxide capture rate. In addition the DPA is expected to define minimum capture rates and to establish the contractual consequences in case of breach that would apply under the DPA in our <a href="Dispatchable Power Agreement business model October 2021 update">Dispatchable Power Agreement business model October 2021 update</a>. BEIS considers that measures of these kind are appropriately outlined in the DPA rather than being addressed in amendments to regulations.

Regarding supply chains, BEIS published a short update in November<sup>6</sup>. However, we do not consider that the proposed regulatory changes referred to in this consultation should have any bearing on supply chain requirements.

#### 2.3 Non-pipeline transport

Q3: Do you consider that the current definition of an "eligible generating station" (as defined in the CfD (Definition of Eligible Generator) Regulations 2014 and set out in the Transport Options for CO<sub>2</sub> section of this consultation) allows for the potential forms of non-pipeline transport as could be used in operations of a relevant generating station?

#### Explanation of changes to the Eligible Generator Regulations

This question and follow up questions focused on the wording of the Eligible Generator Regulations and if respondents considered that, within that given definition, the inclusion of non-pipeline transport was implicitly covered or not.

We have decided to explicitly include a reference to non-pipeline transport within the definition of a complete CCS system.

#### Summary of consultation responses

This question asked respondents for their views on how inclusive the current Contracts for Difference regulations are of non-pipeline transport. A total of 11 responses were received.

Many of the respondents were content that the current definition was inclusive enough but were not opposed to an expansion of the definition to provide clarification if BEIS felt this was warranted. Wording was offered by one respondent, who suggested an additional limb that would explicitly refer to the inclusion of pipeline and/or non-pipeline transport options.

A number of respondents felt that the definition of "a complete CCS system" should clarify that the system (i.e. from capture to storage) need not be owned in full by the Generator, and one respondent stressed that "it is vital that the definitions allow for a broad range of operators and solutions."

The inclusion of CO2 usage in the definition was requested by three respondents as it was felt that this is not currently provided for. However, another respondent was against the use of non-pipeline transport as they were opposed to CO2 usage under these regulations and felt that non-pipeline transport would be more likely to be used to facilitate CO2 usage than permanent storage.

<sup>&</sup>lt;sup>6</sup> <a href="https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-business-models/november-2021-updates-on-the-industrial-carbon-capture-and-dispatchable-power-agreement-business-models">https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-business-models/november-2021-updates-on-the-industrial-carbon-capture-and-dispatchable-power-agreement-business-models</a>

Two respondents requested that the definition of a cluster<sup>7</sup> be expanded, one to support synergies outside the existing cluster structure, the second to include non-pipeline transport in the CCS cluster definition.

One respondent felt that it was important to retain a broad definition of permanent storage, to allow for alternative methods (e.g., through carbonisation and use in building materials). They also stated they would welcome clearer wording on the meaning of 'substance' in the context of 'carbon dioxide (or substance)'.

#### Policy Response

We do not consider that these regulations suggest or require that the complete CCS system needs to be owned by one company. Further details of T&S asset ownership is explored in the <a href="Transport and Storage business model update">Transport and Storage business model update</a> (January 2022). In addition, we have stated in the recent <a href="CCUS Transport and Storage business model update">CCUS Transport and Storage business model update</a> (January 2022) that the Transport and Storage Company ('T&SCo') will be established as a separate legal entity from the users (including electricity generators) of the transport and storage network. Legal and financial separation between T&SCo, its investors and the users of the network provides an important means of mitigating against the potential for conflicts of interest.

The DPA does not currently support the use of CO2 generated and captured by a Power CCS plant. Usage has purposely not been allowed in the Contracts for Difference regulations, nor is it supported in the DPA. This is because we are intending to support low carbon generation, including to ensure Net Zero targets, and therefore need to have confidence that the carbon that is captured is permanently stored.

The CCS clusters are not defined in, or governed by, the Eligible Generator Regulations. However, please note that in a separate consultation response for cluster sequencing, and in the <a href="Phase-2 launch documentation">Phase-2 launch documentation</a>, we confirmed that the Phase-2 process will be open to all prospective capture Projects which could viably connect, via pipeline or non-pipeline transport, to one of the T&S Networks provisionally sequenced onto Track-1 or a reserve cluster CO<sub>2</sub> store, regardless of whether they featured on the relevant T&SCo's Phase-1 submission .

In the context of this consultation, we believe that within limb (b) of the definition of a 'complete CCS system' in the Eligible Generator Regulations, the word 'substance' in the phrase 'carbon dioxide (or substance)', refers back to limb (a) of the same definition, which reads 'capturing some or all of the carbon dioxide (or any substance consisting primarily of carbon dioxide)'. We consider that the meaning of the word substance should be as commonly understood and we

<sup>&</sup>lt;sup>7</sup> CCUS cluster is defined as a Transport & Storage network and an associated first phase of at least two CO<sub>2</sub> capture projects (*Cluster sequencing for CCUS deployment: Phase-1 guidance* available here:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/986007/ccus-cluster-sequencing-phase-1-guidance-for-submissions.pdf)

do not believe that any clarification of this, or further definition is required in our changes to the regulations.

#### Q3.1 If not, please specify why not?

#### Summary of consultation responses

A number of respondents expressed a need for the definition of an eligible generating station to be explicitly expanded, requiring "regulation to clarify that a complete CCS transport system can include non-pipeline solutions." One requested that road, rail and shipping (and combinations of the foregoing) are explicitly referenced as forms of transport". This contrasts with other responses in Q3.2, which suggested that the language should remain technology neutral.

In relation to the term "complete CCS system", one respondent stated that "there is a risk of inconsistency with the preferred proposal for eligibility for the availability payment within the draft DPA heads of terms. This only required that the generator is ready to connect, regardless of whether the transport system is ready."

#### Policy Response

This follow-up question received 3 responses.

The government has decided to propose an amendment to the Eligible Generator Regulations which includes specific wording regarding non-pipeline transport, making it clear that non-pipeline transportation can form part of the complete CCS system that would deem a generator eligible, and without specifying a form of non-pipeline transport for flexibility. This proposed amendment adds the words ""(including by way of non-pipeline transport methods)" at the end of limb (b) of the definition of a "complete CCS system".

In response to the comment about the risk of inconsistency between the DPA and the Eligible Generator Regulations, it is worth noting that the regulations contain a requirement that there must be an intention to operate the generation station which is connected to a complete CCS system (noting that the station and the transport and storage system may be in construction phase at the time a generator is supplying for support). In the Eligible Generator Regulations it says that: "3.— (1) this regulation defines [an] "eligible generator" for the purposes of Chapter 2 of Part 2 of the Energy Act 2013 "as "(2) A person ("A") who intends to carry out a generating activity in relation to an eligible generating station is an eligible generator in respect of the station."

Furthermore, an updated set of provisional Heads of Terms for the DPA were published in October 2021, which set out that a Generator must demonstrate that it has a signed T&S Connection agreement within 20 days of contract signature as an Initial Conditions Precedent. There is then a further requirement that, before its start date, a Generator must provide evidence that the Facility has connected to the T&S Network, unless the T&S network is unavailable, in order to meet its Operational Conditions Precedent (OCPs) and for payments under the DPA to commence. Where a T&S Network is unavailable, the DPA Counterparty

may offer a temporary waiver of the requirement to demonstrate connection with due consideration to the fact that the Generator has demonstrated a genuine intention to connect, is otherwise ready to capture and inject CO2 into the T&S Network and has agreements with the T&S network for a connection.

In the December 2020 update we set out that where the T&S network was unavailable, but the Generator otherwise was ready, either:

The Generator could delay its commissioning to match the T&S Network's schedule. It would face no contractual penalties under the DPA as its Target Commissioning Window and Longstop Date could be delayed, day-for-day until the T&S network was available for the project to meet its OCPs; or

The term of the DPA could commence and the Generator would receive its Availability Payment if the Generator has commissioned, is available and has met all? its other OCPs while waiting for the T&S Network to commission. The Generator would not receive any variable payments.

In the December 2020 and October 2021 updates we noted that where a non-fault event prevents the Facility from accessing the T&S Network for a continuous period (with such period to be determined), BEIS was considering whether to give the DPA Counterparty the right to terminate the DPA. We are continuing to consider the appropriate contractual triggers that would result in termination for prolonged T&S Unavailability under the DPA, including in circumstances where a Generator began to receive availability payments while the commissioning of the T&S Network was delayed. We intend to provide further updates on these measures in the next DPA update.

# Q3.2 Should any particular form(s) of non-pipeline transport be expressly included or excluded from the definition of a complete CCS system?

#### Summary of consultation responses

This question asked respondents about specific forms of non-pipeline transport and if any should be excluded from a definition. It received 6 responses.

A number of respondents stressed that non-pipeline transport in any form should not be excluded from the definition, and that the regulations should remain technology neutral.

One respondent requested that the definition explicitly allow for non-UK storage, both temporarily, in the event that the relevant UK T&S network has not yet commissioned, and also as a mitigation for periods where the UK T&S network is unavailable. This was also requested by two other respondents in response to Q4.

One respondent asked for the inclusion of rail, road and shipping specifically as non-pipeline forms of transport as there is developing confidence in these forms of non-pipeline transport.

One respondent wanted all non-pipeline transport to be excluded.

#### Policy response

The outcome of the responses received on this question are that the government has decided to explicitly include the phrase 'non-pipeline transport methods' within the definition of a complete CCS system. This proposed amendment does not specify methods of non-pipeline transport.

With respect to non-UK storage, BEIS is considering its position on mitigations for T&S timing mismatch and Generator Stranded Asset Risks as set out in the <u>DPA December 2020 Update</u>. Information regarding compensation for T&S unavailability termination was published in the <u>DPA October 2021 update</u>. We intend to publish further details on T&S unavailability termination and commissioning delays in the next DPA update<sup>8</sup>.

BEIS continues to consider its position on non-pipeline transport for CCS. The proposed amendments in this consultation intend to facilitate non-pipeline transport generally in the regulations as has been set out. The proposed changes to the Eligible Generator Regulations aim to be neutral regarding the different possible configurations of non-pipeline transport and will not exclude any particular form of non-pipeline transport. The proposed changes to the Eligible Generator Regulations will also not exclude the use of an international store, in order to allow for flexibility in the development of future non-pipeline transport policy and the Power CCS business model.

These proposed changes to regulations aim to ensure that, should the use of non-pipeline transport develop, Power CCS projects are able to make the best possible use of the technology available to them.

#### 2.4 General comments

#### Q4 Any other general comments?

#### Summary of response

This section received 11 responses.

Respondents in this section re-emphasized their preference for any CfD regulatory amendments for Power CCS purposes remain broad to accommodate any viable power plant connected to a CO<sub>2</sub> carbon capture and transport system.

One comment highlighted that consideration should be given to how regulations can support CCS systems from broader industrial emissions rather than solely focused on power generation.

<sup>&</sup>lt;sup>8</sup> All business model updates accessible: <a href="https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-business-models">https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-business-models</a>

There was a request for clarification from BEIS on how "Article 14(2)(a) of the CfD Regulation", which we understand to refer to section 14(2)(a) of the Allocation Regulations, will impact any of the proposed changes in this consultation.

A respondent highlighted that there may be an issue with the Contracts for Difference (Electricity Supplier Obligations) Regulations 2014 Supplier Obligations regarding the funding for Power CCS.

Some respondents noted that the CCS scheme may add costs to UK consumer energy bills.

Finally, a respondent commented that using the electricity consumer funded Supplier Obligation, creates an imbalance in the policy costs between electricity and gas, which brings significant detrimental impacts for the government's Net Zero agenda, which would lead to reduced incentives for domestic and commercial energy consumers to switch away from fossil fuels.

There was a call from several respondents to facilitate the usage of CO<sub>2</sub>.

There was a request for non-UK shipping to be explicitly allowed as a stop-gap solution until the relevant UK T&S system comes online and as a mitigation for projects.

#### Government's View

The intention is for the outlined regulatory amendments to be inclusive of future combustion technologies with varying fuel types.

Industrial emissions are being considered through the development of an Industrial Carbon Capture<sup>9</sup> business model, which is being developed separately to Power CCS, and these proposed changes in the proposed SI cannot be extended to cover carbon capture from industrial processes because these proposed changes are being made pursuant to the Energy Act 2013, which provides powers relating to support for low carbon electricity generation.

In response to the request for clarification on the impact of Section 14(2)(a) of the Allocation Regulations, which set out excluded applications; it is relevant to the proposed changes in the proposed SI as follows. The Allocation Regulations state "2. No application may be made in respect of a CFD unit where the unit is" "(a)a generating station connected to a complete CCS system". As noted in the Allocation Regulations section above, DPAs are not being awarded via using the CfD allocation round process but are intended to be directly awarding under Section 10 of the Energy Act 2013. In order to ensure that the proposed amendment to the Eligible Generator Regulations, which allows for retrofit Power CCS, do not impact the general exclusion of CCS under 14(2)(a) of the Allocation Regulations (set out above), we intend to add wording to make it clear that the exclusion covers any retrofit station also, by adding explicit wording to this effect: "a generating station connected to a complete CCS system or is to be altered to be a generating station connected to a complete CCS system"

<sup>&</sup>lt;sup>9</sup> All Industrial Carbon Capture business model updates are available here: <a href="https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-business-models">https://www.gov.uk/government/publications/carbon-capture-usage-and-storage-ccus-business-models</a>

Requirements for changes to the Supplier Obligation to facilitate the DPA are outside the scope of this SI and consultation.

Regarding the additional costs to consumer energy bills that may result from support for Power CCS, BEIS considers that CCS should be viewed as part of the UK wider Net Zero agenda and that to meet the future energy and environmental needs of the UK in line with Net Zero objectives, CCS is an affordable whole system solution to decarbonise the energy system that can be brought to commercial scale through government support.

BEIS recognises that the capacity for T&S to be able to accept CO2 from dispersed sites and international sources, either by ship, road or rail (non-pipeline transportation), will be vital for our long-term objectives of achieving our carbon budgets and net zero. We are continuing to develop the T&S business model and are seeking to understand how non-pipeline transportation could fit into its design. This includes working with industry and the devolved administrations to understand government's role in supporting non-pipeline transportation within a CCS network.

This publication is available from: <a href="https://www.gov.uk/government/consultations/carbon-capture-usage-and-storage-amendments-to-contracts-for-difference-regulations">www.gov.uk/government/consultations/carbon-capture-usage-and-storage-amendments-to-contracts-for-difference-regulations</a>	
If you need a version of this document in a more accessible format, please email <a href="mailto:enquiries@beis.gov.uk">enquiries@beis.gov.uk</a> . Please tell us what format you need. It will help us if you say what assistive technology you use.	