Title: The implementation method for the Dispatchable Power Agreements (DPA) financial model **IA No:** **RPC Reference No:** **Lead department or agency:** Department Energy Security & Net Zero **Other departments or agencies:**	**Impact Assessment (IA)** **Date:** 21/07/23 **Stage: Consultation** **Source of intervention:** Domestic **Type of measure:** Secondary legislation **Contact for enquiries:** hamish.hanson@energysecurity.gov.uk

Summary: Intervention and Options

RPC Opinion: RPC Opinion Status

Cost of Preferred (or more likely) Option (in 2021 prices)			
Total Net Present Social Value	**Business Net Present Value**	**Net cost to business per year**	**Business Impact Target Status**
N/A	-£44.13m	£0	N/A

What is the problem under consideration? Why is government action or intervention necessary?

The issue being addressed is the cost-effectiveness of the implementation method for the financial mechanisms of the Dispatchable Power Agreement (DPA). The implementation method must allow the funds calculated by the DPA financial models to be drawn and distributed.

The aim of this intervention is to deliver an effective implementation method with the best value for money to consumers possible. This means at the lowest possible cost and with minimal risk to delivery due to the recharging of cost through a consumer levy. Government intervention is required to provide the legal framework for funds to be drawn from a levy or through exchequer funding.

What are the policy objectives of the action or intervention and the intended effects?

The implementation method for the DPA business must allow the funds calculated by the DPA financial models to be collected from electricity suppliers and distributed to power generators. The payments will be informed by an accurate interim levy rate and total reserve amount calculation. Thus, success for this policy intervention is:

- The counterparty being able to reliably draw and distribute the funds as calculated by the DPA business model.
- A low administrative burden placed on firms to familiarise and engage with the legislation, minimising overall costs.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

Do-nothing: We assume that in the do-nothing scenario the Government manages the DPA contracts and holds responsibility to calculate the expected payments and then pay them through exchequer funding.

Amend the Electricity Supplier Obligation (ESO) regulations with The Low Carbon Contracts Company (LCCC) as the contract counterparty: The LCCC holds responsibility for issuing and managing DPA contracts and payments. They will also be responsible the calculating the Interim Levy Rate (ILR). The LCCC uses the existing Contract-for-Difference (CfD) regulations as the basis to implement the DPA. Adjusting the ILR forecast to include the Availability Payment proposed by the DPA.

Create a new counterparty and legal framework, including a levy to fund the DPA business model. A new counterparty and legal framework are created to implement the DPA financial mechanisms. The new counterparty holds responsibility for issuing and implementing DPA contracts as well as managing payments.

Will the policy be reviewed? Review processes will be considered after the consultation stage.

Is this measure likely to impact on international trade and investment?			No		
Are any of these organisations in scope?	**Micro** **No**		**Small** **No**	**Medium** **Yes**	**Large** **Yes**
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** **N/A**	**Non-traded:** N/A	

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible SELECT SIGNATORY: Alec Waterhouse Date: 21/7/23

Summary: Analysis & Evidence

Policy Option 1

Description: Amend the Electricity Supplier Obligation (ESO) regulations with the Low Carbon Contracts Company (LCCC) as the contract counterparty. This is expected to have a transition time of 3 years and an assumed contract length of 15 years, an 18-year total appraisal time.

FULL ECONOMIC ASSESSMENT

Price Base Year 2022	PV Base Year 2021	Time Period Years: 18	Net Benefit (Present Value (PV)) (£m)		
			Low: -	High: -	Best Estimate: -£44.13m

COSTS (£m)	Total Transition (2024-2027) (Constant price) years		Average Annual (2027-2042) (Constant Price)	Total Cost (Present Value)
Low	-		-	-
High	-		-	-
Best Estimate	£7.13m		£3.35m	**£44.13m**

Description and scale of key monetised costs by 'main affected groups'

The DPA Counterparty (LCCC) have estimated a £3.45m annual administrative costs and a £7.13m cost for establishing the framework needed for managing the DPA contracts. These costs have been adjusted for inflation and are considered over the 15-year duration of a DPA contract. The set-up costs are incurred in the first 3 years. A high or low estimate of costs is not included as this was not estimated by the LCCC.

Other key non-monetised costs by 'main affected groups'

Energy suppliers would incur administrative costs to forecast payments and familiarise themselves with the DPA contracts. Energy generators in receipt of DPA contracts would face additional administrative costs from forecasting payments and familiarisation with the contracts. We will invite consultees to indicate the scale of these costs.

Firms will pay an increased opportunity cost due to higher collateral obligations. The DPA model will increase the total value of the Interim Levy Rate (ILR). Therefore, suppliers will have to post more collateral.

For this option, the cost of the DPA agreements is funded through a counterparty under the existing CFD framework. In the do-nothing option the government is assumed to be the counterparty and funds the costs of the DPA agreements. This cost is not included in this Impact Assessment as it is dependent on prices that are still to be negotiated.

For any new power generators or energy suppliers entering the market, establishing these relationships may incur some cost through familiarisation. We expect this to have minimal impact. Barriers to entry for firms may marginally increase by adding additional complexities to an incumbent relationship. We anticipate that incumbent power generators and energy suppliers will face lower costs than entering firms due to familiarity with the LCCC.

BENEFITS (£m)	**Total Transition** (Constant Price)	Years	**Average Annual** (excl. Transition) (Constant Price)	**Total Benefit** (Present Value)
Low	N/A		N/A	**N/A**
High	N/A		N/A	**N/A**
Best Estimate	N/A		N/A	**N/A**

Description and scale of key monetised benefits by 'main affected groups'

There are no monetised benefits for this intervention. Firms can recharge their administration costs of the ESO through the consumer levy. This means the net impact of administration costs are zero. This is assumed to be the same for the do-nothing option and so is not included. This does not include the opportunity cost of collateral.

Other key non-monetised benefits by 'main affected groups'

There are no non-monetised benefits for this intervention. We expect the DPA financial mechanisms to deliver benefits through the incentivisation of investment in gas-to-power CCUS projects, this Impact Assessment refers explicitly to the implementation method of the DPA financial model and not whether to implement the DPA.

Key assumptions/sensitivities/risks	**Discount rate (%)**	3.5%

The monetised costs are based on LCCC estimates. We assume that engaging with the LCCC incurs a lower administrative burden than engaging with a new counterparty. We also assume an appraisal period of 18 years, with DPA contract length of 15 years and the setup costs occurring over a three-year period between 2024 and 2027. The value of the consumer levy is greatly influenced by the number and size of DPA contracts. This estimate is not included as negotiations over the value of the variable payment have not yet taken place.

BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m: N/A
Costs: 3.2	**Benefits: N/A**	**Net: -3.2**	

Summary: Analysis & Evidence

Policy Option 2

Description: Create a new counterparty and legal framework, including a levy to fund the DPA business model. This is expected to have a transition time of 3 years and an assumed contract length of 15 years, an 18-year total appraisal time.

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years	Net Benefit (Present Value (PV)) (£m)		
			Low: -	**High: -**	**Best Estimate: -£78.6m**
2022	2021	18			

COSTS (£m)	Total Transition (2024-2027) (Constant price) years		Average Annual (2027-2042) (Constant Price)	Total Cost (Present Value)
Low	£49.4m			
High	£92.9m			
Best Estimate	£71.1m		£3.35m	**£78.6m**

Description and scale of key monetised costs by 'main affected groups'

We assume that policy option 2 will incur similar costs to all of those discussed in policy option 1. Including: Administrative costs for the counterparty, electricity suppliers and power generators.

Additionally to policy option 1, we estimate an additional **£42.2m-£85.8m** for the years 2024-2027, due to the cost of establishing a new counterparty. We assume this would incur similar set up costs, allowing for inflation, to the Electricity Supplier Obligation (ESO).

Other key non-monetised costs by 'main affected groups'

Firms will pay an increased opportunity cost due to higher collateral obligations. The DPA model will increase the total value of the Interim Levy Rate (ILR) and suppliers will have to post more collateral because of this.

We invite consultees to share potential costs that have not been considered.

BENEFITS (£m)	Total Transition (Constant Price) Years		Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	N/A		N/A	**N/A**
High	N/A		N/A	**N/A**
Best Estimate	N/A		N/A	**N/A**

Description and scale of key monetised benefits by 'main affected groups'

There are no monetised benefits for this policy option. We anticipate that the recharging capability of option 1 would also apply to option 2.

Other key non-monetised benefits by 'main affected groups'
There are no non-monetised benefits for this policy option. This option will also deliver the DPA financial model which is anticipated to generate the same benefits as mentioned in option 1.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5%
The same assumptions/sensitive/risks that apply to policy option 1 also apply to policy option 2. Additionally: We assume that the costs of establishing a counterparty are the same as the costs of establishing the LCCC.		

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			Score for Business Impact Target (qualifying provisions only) £m: N/A
Costs:	**Benefits:**	**Net:**	
6.56	**N/A**	**-6.56**	

Evidence Base

Problem under consideration and rationale for intervention

1. This Impact Assessment (IA) considers the different implementation methods of the Dispatchable Power Agreement (DPA) model charging arrangements.

2. The government has committed to implementing the DPA financial model through public consultations on CCUS deployment[1]. This is reflected in the 'do-nothing' option, where the Government is assumed to implement funding arrangements for the DPA without the use of a counterparty. We assume the do-nothing scenario would rely on funding the DPA through exchequer funding. The other options rely on a counterparty to implement the DPA, one option of using an existing counterparty established in the market (Option 1) and one option of creating a new counterparty (Option 2).

3. This Impact Assessment (IA) considers the different implementation methods of the Dispatchable Power Agreement (DPA) model charging arrangements.

4. A counterparty for this intervention would be a public body, separate and independent from the government, with responsibility to manage the DPA contracts. This responsibility would include forecasting and calculating the interim levy rate (ILR). The LCCC currently undertakes this activity for the CfD contracts. The counterparty will also request payments from energy suppliers and paying payment requests from power generators. This requires the enforcement of the conditions of the DPA contracts to ensure correct payments are requested and made.

5. The issue being addressed is the cost-effective implementation of the DPA funding mechanisms. The preferred option must allow the funds calculated by the DPA financial models to be drawn and distributed. This should be done by delivering the best value for money to consumers possible. Due to the nature of recharging through the consumer levy means at the lowest possible cost while ensuring minimal risk to delivery.

6. Failing to select the correct delivery method for the DPA financial mechanisms may result in power generators being unable to receive the revenues necessary to make power CCUS projects viable. The primary purpose of the consultation is to get external views on our preferred way forward. We hope that this will highlight if our proposed intervention will, in a cost-effective way, ensure that electricity suppliers to whom the levy is applicable can accurately and in a timely manner provide funds to the DPA Counterparty. The DPA counterparty must then be able to meet its payment obligations to DPA Generators.

7. The Government has previously committed to funding the DPA through the existing CfD framework. Using the existing CfD framework prevents additional pressure on the exchequer. It is therefore a policy objective to minimise the cost to taxpayers.

8. Consumers energy bills will be higher if an inefficient delivery method is selected. Where the administrative burden required to deliver the DPA financial mechanisms is higher than it could be. This would be passed on to consumers through the interim levy rate (ILR) in the form of increased electricity bills. This will reduce the value for money that

[1] Carbon capture, usage and storage (CCUS): Dispatchable Power Agreement business model

consumers receive from power CCUS projects. It is therefore the intention of this IA to assess the cost of each method and put forward the most cost effective to maximise the value for money that consumers receive.

9. The expected interested stakeholders are any parties interesting the deployment of CCUS policy including:

    - Consumer groups
    - Devolved and local governments
    - Investors and developers involved in potential CCUS projects
    - The industrial and energy sectors more widely
    - NGOs and other organisations with an interest in climate and energy
    - Electricity traders and suppliers

10. The government is best placed to intervene on this issue as it relates to updating existing legislation to implement the business models. There is currently no legal basis for which firms could enact the DPA financial mechanisms.

The section below offers background information on the rationale for the DPA model for context. It is not directly relevant to this IA or consultation as we are not consulting on the design of these models.

11. Carbon Capture imposes costs associated with capital investment and financing, ongoing operational costs for running the capture equipment and system costs including T&S fees. These costs are not faced by unabated electricity generators. These costs are combined with no corresponding increase in the value of the electricity produced for being low carbon.

12. This means that at present, the costs of capturing and transporting carbon cannot be recovered through the wholesale electricity market revenues. This is because the cost of abating CO2 emissions generates no additional revenue for power generators but does reduce social costs, this is a market failure. This results in a lack of commercially viable options for businesses in the production of carbon capture power generation technologies. The high upfront capital costs and loss of plant efficiency prevent businesses from retrospectively fitting their Combined Cycle Gas Turbines (CCGTs) with carbon capture technologies. The DPA supports deployment of Power CCUS facilities to overcome the market failure by allowing firms to generate additional revenues from operating carbon capture technology. Thus enabling generators to compete on a level playing field with other unabated fossil fuelled electricity generators.

13. The DPA business model aims to incentivise firms to invest in Power CCUS technologies. Displacing unabated power generation with abated generation will reduce carbon emissions and assist the government in meeting the 2050 net zero target. The government is committed to supporting Power CCUS deployment.[2] However, there is insufficient commercial incentive for firms to pursue this technology due to the market failure associated with capturing carbon emissions.

[2] Gov.uk - How the government supports the development of carbon capture, usage and storage (CCUS) in the UK and internationally.

14. The DPA model consists of the Availability Payment, the Variable Payment.

15. The DPA Availability Payment is linked to the electricity generation capacity and carbon capture capacity made available by a Power CCUS Facility. The payment is designed, to incentivise the availability of low carbon, non-weather dependant dispatchable generation capacity. The Availability Payment will be calculated and paid regardless of whether a Power CCUS Facility is dispatching power. Therefore, it will not incentivise facilities to displace lower cost and lower carbon sources of generation such as renewables and nuclear.

16. The second part of the DPA payment mechanism is a Variable Payment. This supports a Power CCUS Facility to dispatch electricity ahead of higher carbon alternatives. This accounts for the additional cost of generation faced by a Power CCUS Facility compared to an unabated Reference Plant. The reference plant is likely to be a Combined Cycle Gas Turbine (CCGT) with the highest defined thermal efficiency operating on the GB electricity system.

17. The Availability Payment is a different payment mechanism to the existing payment mechanism in the CfD contracts. A CfD consists of a strike and reference price and payments depend on the amount of electricity generated, e.g., when a CfD supported generator is not generating they will not receive revenue. Rather, the Availability Payment allows a DPA generator for how much low carbon generation capacity in makes available in each monthly billing period/

18. Existing Contracts for Difference (CfD) include a generation payment, which sets out that the CfD counterparty can pay electricity generators for electricity generated. The Electricity Supplier Obligation (ESO) Regulations 2014 prescribe that a levy can be charged for the generation payment. However, given the DPA establishes a new Available Payment, amendments to the ESO Regulations 2014 are necessary for the levy to be charged for this new payment mechanism.

19. The Variable Payment is based on the amount of electricity generated (MW/h) which is already accommodated for in the ESO Regulations 2014. We are not proposing amendments to facilitate this.

20. The DPA Availability Payment will incorporate components of T&S network fees set out under the T&S Regulatory Investment (TRI) model to ensure that the DPA Generator has access to a viable CO2 Transport and Storage Network.

21. The TRI model is based on a regulated asset value model. This seeks to balance the need to provide long term confidence to investors in the T&S Network with predictable and stable returns within a broadly bounded range, ensuring affordability and VfM for users, electricity consumers, and taxpayers and meeting subsidy control requirements. The TRI model draws heavily on other regulated asset base models, such as those used for gas and electricity networks.

22. T&S Fees cover fixed capital costs, operational costs and other costs including tax and decommissioning faced by a T&S Network. The addition of mutualisation of T&S Fees will apply where the network is not fully utilised, i.e., when there are fewer users on the network than the network is designed to accommodate. In this case mutualisation is used to cover revenue shortfalls and protect a T&S Co from revenue risk. Mutualisation amounts will vary yearly and are dependent on numerous factors including, user size and network usage, network size and utilisation, and expected revenue shortfalls.

Options analysis

23. **Main policy objective**: The method by which the DPA financial mechanisms are delivered should ensure appropriate funds are drawn from electricity suppliers. This will be informed by the interim levy rate and total reserve amount forecasts. These are necessary to ensure the LCCC as DPA Counterparty can pay DPA Generators and CfD generators.

24. **Critical success factors:**
    a. The delivery method allows the successful implementation of the DPA financial mechanisms. This will allow appropriate funds to be drawn from electricity suppliers and paid to power generators.
    b. The money raised through the consumer levy via electricity suppliers is proportionate to the value received.
    c. Minimised administrative burden to firms to comply with the legislation
    d. Minimised cost to taxpayers

Discussion of critical success factors

25. The most important success factor for this intervention is that the chosen delivery method provides the necessary framework for the successful implementation of the DPA financial mechanisms. The delivery method should provide the legal and operational capability for the DPA financial mechanisms to function as intended. The DPA Counterparty should be able to draw the necessary funds from suppliers via accurate interim levy rate forecasts.

26. The next most important factor is that the money raised through the consumer levy via electricity suppliers is proportionate to the value received from power CCUS projects. The levy must represent value for money for billpayers. The levy must not unfairly burden some consumers compared to others as the benefits are assumed to be equal for each consumer. This includes the overall efficiency of the delivery method as the costs of the counterparty are also drawn from the levy. If the costs of the counterparty are excessive, then the value for money to consumers is reduced. We are not proposing to amend the existing eligible Energy Intensive Industry (EII) exemption contained within the ESO Regulations Amendment (2020).

27. The delivery method of the DPA financial mechanisms should aim to cause the least possible amount of additional administrative burden to firms. Creating new legal frameworks or establishing new relationships and business practices will cause additional costs to energy suppliers and generators. These should be minimised where possible.

28. The delivery method should also reduce the impact on taxpayers. The government has committed for DPA contracts to be delivered through a consumer levy and not rely on exchequer funding. It is therefore a policy objective to avoid using taxpayer funding where possible.

29. Options considered:

a. **Do-nothing (taxpayer funded levy)**
   In a do-nothing option, the government implements the DPA financial mechanisms without the use of a counterparty. This is the do-nothing option due to responses to consultations and previous public commitments to implement the models. The government is the counterparty to any DPA contracts. It would have responsibility to validate the payments requested by power generators and manage the

collection of these payments from electricity suppliers. This would require the government to create a new legal framework.

b. **Amend the Electricity Supplier Obligation (ESO) with the LCCC as the counterparty**
The existing Contracts for Difference (CfD) within the Electricity Supplier Obligation (ESO) 2014 regulations are adjusted to include the ability to implement the DPA payment mechanisms. This includes the existing Strike and Reference price mechanism in CfD contracts. The LCCC holds responsibility for issuing and implementing DPA contracts as well as managing payment collection and distribution. This consultation offers a potential technical method for this amendment. It is possible that if this technical method is not appropriate and alternatives are offered. This option may be split into further sub options to assess the impact of different methods of ESO regulation adjustment.

c. **Create a new counterparty and legal framework**
A new counterparty and legal framework are created to implement the DPA financial mechanisms outside of the existing regulations. The new counterparty holds responsibility for issuing and managing DPA contracts as well as managing payment collection and distribution.

30. **Options analysis matrix**

Options	CSF1: DPA is effectively delivered.	CSF2: VfM for consumer levy	CSF3: Minimal administrative burden to firms	CSF4: Minimal use of exchequer funding
Option 1: Do-nothing	Partially meets objective	N/A	Partially meets objective	Does not meet objective
Option 2: Adjust the ESO regulations to use existing framework and counterparty	Meets objective	Meets objective	Meets objective	Meets objective
Option 3: Create new counterparty and legal framework	Partially meets objective	Does not meet objective	Does not meet objective	Meets objective

Options discussion

1. **Option 1: Do nothing**

The do-nothing options partially meets two objectives and fails another. There is limited government expertise in being the counterparty for arrangements of this sort, potentially increasing the risk to successful delivery. No consumer levy exists in this scenario and so there is no assessment of how well it meets the VfM criteria for the consumer levy. There is likely to be some additional administrative burden to firms to engage with government as the owner of the DPA contracts. As it would be a new counterparty in the market. Hence this options only partially meets CSF3. This option significantly fails the objective of minimal use of exchequer funding as the DPA business model would be entirely funded through taxpayer funding. This would cause additional administrative costs to government due to the need to

develop settlement systems. There is low existing capability in government to act as the role of being a contract counterparty in energy markets.

2. **Option 2: Adjust the ESO regulations to use existing framework and counterparty**
Adjusting the ESO regulations meet all critical success factors. The DPA financial mechanisms can be effectively delivered using the existing regulatory framework and counterparty, the LCCC. The LCCC's experience and familiarity with similar contracts allow for cost minimization and utilization of existing capabilities. No one-off setup cost is required as the LCCC already exists, reducing deployment costs and increasing value for money (VfM) for levy-paying consumers. Firms engaging with the LCCC as the contract holder reduces administrative burden through the utilisation of existing relationships. Taxpayer funding remains in the DPA model but is minimized as per the mutualization methodology.

3. **Option 3: Create a new legal framework and use a new counterparty**
This option partially meets the key success factors. Creating a new legal framework and counterparty poses the highest delivery risk for the DPA model as familiarization with the model and legal framework would be required. This may lead to delivery issues. The new counterparty's administrative and set up costs would increase, raising the consumer levy and reducing VfM for consumers. Energy suppliers and generators would also incur familiarization costs. The level of exchequer funding is assumed to be the same as in option 2 thus meeting the objective.

Preferred method

4. Option 2: 'Adjust the ESO regulations to use existing framework and counterparty' is the preferred option for this policy intervention because it meets all the critical success factors. The other options fail at least one objective.

5. The preferred method can be enacted through adjusting secondary legislation relating to the ESO. This will allow the LCCC to operate the DPA payment mechanisms to ensure that power generators can attain the payments as outlined in the DPA financial mechanisms.

6. This option minimises delivery risk due to the DPA payments being modelled on existing CfD payments which the LCCC is the current counterparty for. Familiarity with the models and implementation of CfDs makes the LCCC the ideal counterparty to manage these payments. This is also a cost-effective solution as no new counterparty is required. Furthermore, due to already managing similar arrangements, the LCCC has existing capabilities that it can draw on to implement the solution more efficiently and effectively. This will reduce the total administrative cost of implementation. All else equal, this maximises the value for money case for consumers.

7. 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 to offer initial DPA contracts to generators that are selected through the Cluster Sequencing process (a "DPA Supported Generator"). To enter a DPA, a power DPA Supported Generator must meet the definition of an Eligible Generator, specified in the Contracts for Difference (Definition of Eligible Generator) Regulations 2014 as amended by the Contracts for Difference (Miscellaneous Amendments) Regulations 2022, which came into force on 21 June 2022.

8. Subject to successful negotiations with projects applying to be included in Track 1 Phase 2 of the Cluster Sequencing Process[3] costs relating to the DPA are likely to be applied to

[3] Cluster sequencing for carbon capture, usage and storage (CCUS) deployment: Phase-2 guidance

consumer bills in the late 2020s. The levy impacts of the first award of any DPA is subject to the Cluster Sequencing Process which sets out the negotiation process. Any decision to award support is contingent on government satisfying itself that it follows relevant value for money and subsidy control requirements.

Monetised and non-monetised costs and benefits of each option (including administrative burden)

9. Option 2: Adjust the ESO regulations to use existing framework and counterparty

Monetised costs - Administration costs

10. The LCCC has estimated the additional administrative burden of implementing the DPA financial mechanisms: £2.066m for 22/23. £2.21m in 23/24, £2.8m for 24/25. Adjusting for inflation, the expected average annual cost over the 15-year duration of a DPA contact is £3.34m. The Low Carbon Contracts Company (LCCC) will be the assigned counterparty and will be responsible for managing and forecasting the payments, setting the levy rate and reserve amounts, billing and making payments to or from suppliers and generators. This will require resource and therefore cost to the LCCC.

Other costs

11. The opportunity cost to energy suppliers will increase as the amount of collateral that they will have to post will increase. The Availability Payment inclusion in the existing CfD framework would increase the total amount expected to be paid via the interim levy rate (ILR). Energy suppliers are required to post a level of collateral based on their expected payment of the ILR. Posting collateral incurs an opportunity cost as this capital could have been used for other purposes and potentially delivered a return. The opportunity cost is therefore the lost return on the capital that is required to be held for collateral obligations. We have not included our analysis of this cost as any accurate approach to estimation would reveal the government's expectation around the value of the DPA payments and they are still to be negotiated.

12. Consumers will face higher energy bill costs through the DPA business model being implemented. Energy suppliers will increase the value of the ILR to meet their obligations to power generators. This cost will be met through increased energy bills for consumers. We expect this price increase to be small given known potential CCUS projects. We have not included our analysis of this cost as it would be difficult to estimate and any accurate approach to estimation would reveal the government's expectation around the value of the DPA payments, which is also yet to be negotiated.

Non monetised costs

13. Familiarity with the LCCC will be advantageous to incumbent firms as it continues existing relationships between energy suppliers, energy generators and the counterparty. For new entrants in the market, establishing these relationships may incur some cost through familiarisation. Adding additional complexities to an incumbent relationship may marginally increase barriers to entry for firms. We expect this to have minimal impact.

14. Electricity suppliers will also bear additional administrative burden which would have an associated cost. They will need to update their systems to forecast and manage the availability and variable payments. We have not estimated this cost and instead invite consultees to provide evidence where possible to allow us to assess this potential cost.

15. Similarly, power generators who hold DPA contracts will incur administrative costs. These will relate to billing and settlement of payments to and from the DPA Counterparty

as well as collecting, analysing and reporting of data to the LCCC. We have not estimated this cost and instead invite consultees to provide evidence to allow us to assess this potential cost.

16. Regardless of the level of cost, the net cost to these firms will be zero. All administrative costs for parties involved in meeting the ESO-based agreements can recharge this cost through the consumer levy. It is an important factor in our appraisal to reduce the cost burden on consumers as much as possible.

Monetised benefits

17. There are no expected monetised benefits of this intervention.

Non monetised benefits

18. There are no expected non-monetised benefits of this intervention. We expect the DPA financial mechanisms to deliver benefits through the incentivisation of investment in gas-to-power CCUS projects. This Impact Assessment refers explicitly to the implementation method of the DPA financial model and not whether to implement the DPA.

Option 3: Create a new legal framework and use a new counterparty

Monetised costs

19. The DPA Counterparty will be responsible for managing and forecasting the payments, setting the levy rate and reserve amounts, billing and making payments to or from suppliers and generators. This will require resource and therefore cost for the DPA counterparty. We assume that this will be the same as the LCCC's estimate of managing the DPA contracts: £2.066m for 22/23. £2.21m in 23/24, £2.8m for 24/25 (2021 prices). It is likely that due to the LCCC's existing capabilities, this figure is an underestimate of the true ongoing administrative costs of a new counterparty managing the DPA contracts.

20. Administration costs for set up and operation of the CfD Counterparty and suppliers in establishing the necessary framework for the DPA model are expected to be similar in scope to the initial costs of the ESO. These are estimated to be £38.1m - £77.3m for one-off set-up costs (2021 prices).

Other costs

21. The opportunity cost to energy suppliers will increase as the amount of collateral that they will have to post will increase The Availability Payment inclusion in the existing CfD framework would increase the total amount expected to be paid via the interim levy rate (ILR). Energy suppliers are required to post a level of collateral based on their expected payment of the ILR. Posting collateral incurs an opportunity cost as this capital could have been used for other purposes and potentially delivered a return. The opportunity cost is therefore the lost return on the capital that is required to be held for collateral obligations. We have not included our analysis of this cost as any accurate approach to estimation would reveal the government's expectation around the value of the DPA payments (which in any case are yet to be negotiated).

22. Consumers will face higher costs through the DPA business models being implemented. Energy suppliers will increase the value of the ILR to meet their obligations to power generators. This cost will be met through increased energy bills. We expect this price increase to be small given known potential CCUS projects. We have not included our

analysis of this cost as it would be difficult to estimate and any accurate approach to estimation would reveal the government's expectation around the value of the DPA payments (which in any case are yet to be negotiated).

Non monetised costs

23. Electricity suppliers will bare additional administrative burden which would have an associated cost. The payments contained withing the DPA will impose administrative costs on electricity suppliers, in terms of updating systems to forecast and manage the availability and variable payments. We have not estimated this cost and instead invite consultees to where possible provide evidence to allow us to assess this potential cost.

24. Power generators and T&S Cos who hold DPA contracts will incur administrative costs. These will relate to billing and settlement of payments to and from the DPA Counterparty as well as collecting, analysing and reporting of data to the DPA counterparty. We have not estimated this cost and instead invite consultees to where possible provide evidence to allow us to assess this potential cost..

25. Regardless of the level of cost, the net cost to these firms will be zero. All administrative costs for parties involved in meeting the ESO-based agreements can recharge this cost through the consumer levy.

Monetised benefits

26. There are no expected monetised benefits of this intervention.

Non monetised benefits

27. There are no expected non-monetised benefits of this intervention. We expect the DPA financial mechanisms to deliver benefits through the incentivisation of investment in gas-to-power CCUS projects. This Impact Assessment refers explicitly to the implementation method of the DPA financial model and not whether to implement the DPA.

Risks and assumptions

28. For certain costs, there are significant gaps in our evidence base meaning the analysis required to estimate costs accurately at this stage would be disproportionate. We invite consultees to provide evidence that could help us to assess these costs going forward.

29. We invite consultees responses on the following:

a. If delivering the DPA through a counterparty other than the LCCC is this likely to increase the risk to successful delivery?

b. What administrative costs do power generators and electricity suppliers expect to incur from adhering to the DPA contracts?

c. What value do energy suppliers anticipate for the additional opportunity cost of posting additional collateral associated with the increased value of the ILR?

30. Some assumptions have been made regarding the costs of the proposed options:

a. The LCCC have accurately forecasted the expected costs of managing the DPA contracts. We consider this a very low risk assumption given the LCCCs extensive experience of managing similar contracts and their close involvement with the development of the DPA.

b. In the case of a new counterparty being created, the costs of running the counterparty would be the same as the costs estimated by LCCC. It is likely that due to the LCCC's track record and existing capabilities, this figure is an

underestimate of the true ongoing administrative costs of managing the DPA contracts.

c. For both power generators and energy suppliers, engaging with the LCCC incurs a lower administrative burden than engaging with a new counterparty (including the government). This is on the basis that continuing existing relationships carries a lower administrative burden than creating new ones.

d. We also assume a DPA contract length of 15 years, with the setup costs occurring over a three-year period between 2024 and 2027. This gives a total appraisal time of 18 years ending in 2042. It is possible that DPA contracts will be signed after 2027 and the LCCC would need to manage DPA contracts beyond 2042. However, it is not clear at this time the number of DPA contracts that the LCCC would be managing in any given time frame. Therefore, a cut-off date of 2042 is used for the purposes of this Impact Assessment.

Monitoring and Evaluation

Monitoring and evaluation processes will be established after the consultation stage when the option decision is made. In the situation where the preferred option is taken forward, the LCCC currently records its operational costs and the value of payments collected. These figures could be used against the critical success factors to assess intervention effectiveness.