



Department for  
Business, Energy  
& Industrial Strategy

**ofgem**

Making a positive difference  
for energy consumers

# Consultation on addressing supplier payment default under the Renewables Obligation

Closing date: 9 November 2021

10 August 2021



© Crown copyright 2021

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

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: [RO@beis.gov.uk](mailto:RO@beis.gov.uk)

# Executive summary

## Background

The Renewables Obligation (RO) is Government's biggest renewable electricity support scheme. It places an obligation on electricity suppliers to obtain a certain number of Renewables Obligation Certificates (ROCs) in proportion to the amount of electricity they supply to customers. As an alternative, suppliers may make a cash payment in lieu of each ROC, and about 10% of the obligation is met this way. Cash payments are recycled back to suppliers who met the obligation with ROCs, which increases their value and ensures they remain in demand.

Suppliers accrue an obligation ("the Renewables Obligation") over each 12-month obligation period and are given 5 months to settle it with ROCs or alternative cash payments. A further 2 months are available for permitted late payments, but these attract interest charges. The scheme's lengthy settlement arrangements lower the likelihood of volatility in the ROC market caused by seasonality and intermittency in the supply of ROCs, but in doing so they enable suppliers to default on up to 19 months' worth of obligation.

## Supplier payment default and mutualisation

In recent years there has been an increase in the number of suppliers exiting the retail market and defaulting on their obligation under the RO – defaults manifest as shortfalls in the cash payment fund. The level of default in England and Wales<sup>1</sup> peaked in 2018/19 when 21 suppliers defaulted on about £88.1m, which is equivalent to about 1.5% of scheme cost<sup>2</sup>. Payment default denies the scheme of funds and lowers the value of ROCs.

To protect the cash payment fund against the risk of payment default, the scheme features a mutualisation mechanism which recovers unpaid bills (up to a maximum of nearly £306m for 2021/22) from other electricity suppliers. The proceeds of mutualisation are recycled back to those suppliers who met their obligation with ROCs on a per-ROC presented basis, ensuring they realise full value. Mutualisation only occurs when there is a payment shortfall which exceeds a threshold. Since 1st April 2021 this has been set at 1% of scheme costs, equivalent to £63.7m for the 2021/22 obligation year. Below this threshold, any shortfall is left unrecovered. Mutualisation has occurred in each of the past three years (when the threshold was set at a fixed level of £15.4m), with the sum totalling £173m in England and Wales.

---

<sup>1</sup> The RO comprises separate schemes in Scotland, Northern Ireland and England and Wales - this consultation extends to the England and Wales scheme only.

<sup>2</sup> A payment of around £34m which was made after the 2018/19 RO deadline effectively lowered the mutualisation amount for 2018/19 to about £54m.

## Addressing RO supplier payment default

Supplier payment default is of continuing concern to scheme participants. Electricity suppliers resent meeting the unmet obligations of their competitors, whilst generators lose out when the level of default is insufficient to trigger mutualisation, i.e. when it is less than 1% of scheme cost. Some stakeholders have therefore called on Government, or Ofgem, to address the situation.

In this consultation, Government and Ofgem jointly consider some of the main approaches available for lowering the risk and extent of payment default, identifying some of the likely benefits and risks associated with each. These approaches are as follows.

1. **A legislative requirement for suppliers to settle their RO more frequently to lower the amount that they are able to default on** - in this consultation we consider a quarterly arrangement. We also consider the case for compressed settlement timeframes, i.e. shorter than the existing 7 months settlement period that follows each obligation year.
2. **A licence-based requirement for suppliers to protect their accruing obligation against the risk of default.** Under this arrangement, suppliers would be given the choice of which protection measure to put in place. Should a supplier exit the market or fail to put additional protections in place when required to do so, any existing protection measures would be put towards settling that supplier's obligation.
3. **Continue with existing policy.** Under this arrangement, we would allow recently introduced legislative changes (i.e. updates to mutualisation arrangements) and licence changes (i.e. those which aim to increase supplier standards of financial resilience) to take effect.

## Assessment of options considered

A new legislative requirement for quarterly settlement would reduce the maximum amount of obligation that suppliers could default on from 19 months to 10 months. By abolishing the option for late payments and compressing the settlement period from 5 months to 3 months, the amount of obligation that a supplier could default on could be further reduced to 6 months. However, compressed timeframes would introduce a new risk that there may be insufficient ROCs available to suppliers, particularly at the early settlement deadlines, to settle their obligation with ROCs. To mitigate this risk, which could disrupt the ROC market, we set out a proposal which would offer suppliers more flexibility in how they settle their quarterly obligations - "exchangeable" cash payments or a standby letter of credit (LoC) ahead of final settlement with ROCs or cash.

A licence-based requirement for suppliers to protect their accruing obligation with collateral could overcome some of the ROC supply concerns mentioned above. It would offer flexibility to suppliers in how they choose to protect sums at risk (e.g. parent company guarantee, letter of

credit, escrow accounts, ROCs or cash). This approach could enable the amount at risk to be lowered below 6 months (and potentially much more if a “forward looking approach” were adopted) although supporting legislative changes may be required to enable called-on collateral to be used in settling a supplier’s obligation. However, it is not yet clear whether suppliers who would be unable to meet this requirement with ROCs or cash would be exposed to additional costs attributable to the specific protection measures (e.g. arrangement fees). Equally, it is not clear to what extent a requirement for suppliers to post collateral, in one form or another, might impact on their ability to simultaneously engage in the ROC market should they wish to do so. We seek stakeholders’ views on these matters.

In general, we note that approaches that restrict suppliers’ access to their revenues, either as a result of more frequent (and therefore earlier) settlement, or because they are required to protect a portion of their accruing obligation for extended periods, will increase their operating costs. The greater the restriction, the greater the cost is likely to be. This is because the revenues which suppliers collect from their customers - for whatever purpose - represent an interest-free source of working capital. If access to this capital were restricted, alternative sources would be required and it is unlikely that they could be sourced on equivalent interest-free terms. Operating costs would therefore rise, which could lead to increased costs for consumers, and potentially creating pressures on some supply businesses. We seek stakeholders’ views on the likely cost impacts of the options we have developed.

On the option of continuing with existing policy, we note in particular that had the recent changes that Government has made to the scheme’s mutualisation arrangements (see Annex C for the details) been introduced much earlier, mutualisation would only have occurred on one occasion (for 2018/19) when the shortfall was £88.1m. On the other occasions the payment shortfall would have been below the mutualisation threshold. This is relevant in light of the increased costs that would accompany the licence and legislative based approaches we propose.

## Fixed price certificates (FPCs)

In 2011, the Government of the day said it would switch the RO to an FPC based scheme from 2027. The FPC scheme was proposed primarily as a means of addressing ROC price volatility that was expected to emerge as generators began losing their eligibility to receive ROCs from 2027 (eligibility is time limited). Under the envisaged FPC scheme, generators would receive frequent, and therefore earlier payments for their certificates from a newly established certificate purchasing body. In turn, this would likely require suppliers to make more frequent, and therefore earlier payments to the purchasing body. Whilst it was not the stated intention of the FPC based scheme, Government notes that the arrangements envisaged in 2011 would lessen the likelihood and extent of supplier payment default.

Government intends to issue a call for evidence on the FPC based scheme in due course, but nevertheless seeks the initial views of stakeholders on the introduction of the FPC based scheme as a way of addressing supplier payment default.

# Contents

Executive summary	3
Background	3
Supplier payment default and mutualisation	3
Addressing RO supplier payment default	4
Assessment of options considered	4
Fixed price certificates (FPCs)	5
General information	9
Why we are consulting	9
Consultation details	9
How to respond	10
Confidentiality and data protection	10
Quality assurance	11
Background	12
Addressing the causes of supplier payment default	14
Overview	14
Summary of options	14
Option 1 – BEIS led solutions implemented through legislative change	16
Background	16
Consultancy input	16
Option 1a: Increased settlement frequency – settlement arrangements remain unchanged	17
Option 1b: Increased settlement frequency – settlement arrangements compressed	19
Assessment of the Option 1a and 1b proposals	20
A requirement for earlier ownership of ROCs	21
Shortages in the availability of ROCs	22
Application of the Option 1a and 1b proposals to historic ROC issuance data	23
Potential impact of ROC shortages on the ROC market	24
Additional factors that might limit the availability of ROCs to suppliers	24
Further options for mitigating the risks that ROC supply volatility might introduce to the scheme	25
Give ROC supply contracts parity with ROCs	25

## Consultation on addressing supplier payment default under the Renewables Obligation

---

Require only a fraction of each suppliers' obligation to be settled at each quarterly deadline _____	26
Provide suppliers with additional flexibility in settling their quarterly obligations _____	26
Option 1c: Increased settlement frequency – settlement arrangements compressed, exchangeable cash/standby letter of credit _____	27
Questions on options 1a, 1b and 1c _____	27
Option 2 – Ofgem led solutions implemented through the electricity supply licence _____	29
General approaches for protecting sums at risk _____	29
Protection measures _____	30
Assessment of the Option 2 proposal _____	30
Cost effectiveness of proposed measures _____	30
Design and implementation issues _____	31
Further challenges _____	31
Questions on option 2 _____	32
Option 3 – Continue with existing policy _____	33
Questions on option 3 _____	33
Impacts _____	35
Non-administrative impacts _____	35
Impacts on suppliers _____	35
Generators who claim ROCs on a monthly basis _____	36
Generators who claim ROCs on an annual basis _____	36
Third parties _____	36
Administrative impacts _____	37
Questions on impacts _____	38
Fixed Price Certificates _____	39
Questions on fixed price certificates _____	39
Call for evidence on mutualisation amount _____	39
Summary of consultation questions _____	40
Questions on options 1a, 1b and 1c _____	40
Questions on option 2 _____	41
Questions on option 3 _____	41
Questions on impacts _____	42
Questions on fixed price certificates _____	42

## Consultation on addressing supplier payment default under the Renewables Obligation

Next steps _____	43
Annex A - How the scheme operates _____	44
An obligation on electricity suppliers to acquire and present Renewables Obligation Certificates (ROCs) _____	44
Alternative cash payments _____	44
The recycling of cash payments _____	44
Setting the level of the renewables obligation _____	45
Annex B – RO settlement _____	46
Supplier compliance _____	46
The risk of unsecured credit _____	46
Annex C - Supplier default & mutualisation _____	48
The mutualisation mechanism _____	48
Recent mutualisation events _____	48
Causes of mutualisation _____	49
The erosion of the mutualisation threshold in proportionate terms _____	49
Increase in supplier failure and market exit _____	49
Action taken to date on supplier default _____	51
BEIS – updating mutualisation arrangements _____	51
Ofgem - supplier licensing review _____	51
Annex D - RO timeline and key activities _____	53

# General information

## Why we are consulting

Supplier payment default under the Renewables Obligation (RO) support scheme has emerged in recent years. The scheme features a mutualisation mechanism which seeks to recover unpaid bills from other electricity suppliers once they exceed a threshold. Government recently legislated<sup>3</sup> to increase the level of the mutualisation threshold (England and Wales only) to make it harder for mutualisation to be triggered, but this did not address the underlying causes of payment default.

This consultation, which has been prepared jointly with the energy regulator, Ofgem, focuses on supplier payment default under the RO. It considers the main options available for addressing it, through both legislation and the electricity supply licence, and qualitatively assesses the likely impacts of each. It seeks the views of stakeholders on these options and their preferred way of proceeding.

## Consultation details

**Issued:** 10 August 2021.

**Respond by:** 9 November 2021.

**Enquiries to:**

[RO@beis.gov.uk](mailto:RO@beis.gov.uk)

Current levels of home-working mean that BEIS is unable to provide a postal address at this time.

**Consultation reference:**

Consultation on addressing supplier payment default under the Renewables Obligation.

**Audiences:**

The proposals set out in this consultation could have an impact on scheme participants:

- The owners of RO accredited generating stations and PPA off-takers who sell renewables obligation certificates (ROCs) to suppliers and brokers;
- Electricity suppliers who are under an obligation to acquire renewables obligation certificates (ROCs) or make payments into the scheme's 'buy-out' fund;

---

<sup>3</sup> Renewables Obligation (Amendment) Order 2021 (SI 2021/415).

- Businesses involved in the scheme (e.g. ROC brokers; financiers, advisers etc);
- Consumers who ultimately fund the scheme through their electricity bills.

Government and Ofgem are keen to hear the views of all stakeholders on the proposals.

### **Territorial extent:**

England and Wales only.

This consultation relates to the Renewables Obligation scheme as set out in the Renewables Obligation Order 2015 (as amended), i.e. it relates to the England & Wales scheme only. For Scotland and Northern Ireland, the Renewables Obligation is devolved to the Scottish Government and Northern Ireland Executive respectively.

## How to respond

**Respond online at:** <https://beisgovuk.citizenspace.com/clean-electricity/ro-supplier-payment-default>

or

**Email to:** [RO@beis.gov.uk](mailto:RO@beis.gov.uk)

A response form is available on the GOV.UK consultation page:

<https://www.gov.uk/government/consultations/renewables-obligation-ro-addressing-electricity-supplier-payment-default-under-the-ro-scheme>

Current levels of home-working mean that BEIS is unable to provide a postal address at this time.

When responding, please state whether you are responding as an individual or representing the views of an organisation.

Your response will be most useful if it is framed in direct response to the questions posed, although further comments and evidence are also welcome.

## Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential, please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our [privacy policy](#).

We will summarise all responses and publish this summary on [GOV.UK](#). The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

## Quality assurance

This consultation has been carried out in accordance with the government's [consultation principles](#).

If you have any complaints about the way this consultation has been conducted, please email: [beis.bru@beis.gov.uk](mailto:beis.bru@beis.gov.uk).

## Background

The Renewables Obligation was launched in 2002 and continues to play an important role in the delivery of renewable electricity – about 30% of the electricity supplied in the UK is supported by the scheme. It places an obligation on electricity suppliers to obtain a certain number of Renewables Obligation Certificates (ROCs) in proportion to the amount of electricity they supply to customers. As an alternative, suppliers may make a cash payment in lieu of each ROC into a cash fund - about 10% of the obligation is met this way. The cash fund is recycled back to suppliers who met the obligation with ROCs, increasing their value and ensuring they remain in demand.

The Renewables Obligation actually comprises three separate but interlinked schemes: the Renewables Obligation (RO), which applies in England & Wales; the Renewables Obligation Scotland (ROS); and the Northern Ireland Renewables Obligation (NIRO). The Scottish and Northern Irish Governments are responsible for their own schemes, whilst the UK Government is responsible for the RO. This consultation relates to the RO (i.e. England & Wales) only, but consideration has been given to interactions with the ROS and NIRO.

Whilst the Renewables Obligation (UK-wide) is now closed to new generating capacity, it remains government's biggest renewables support scheme, costing UK electricity suppliers and their customers over £6bn per annum. The Renewables Obligation will continue to support renewable electricity generation until its closure in 2037.

In recent years there has been an increase in the number of suppliers failing to settle their annual obligation under the scheme - defaults manifest as shortfalls in the cash payment fund. When this happens, the scheme is denied of revenue which threatens the value of ROCs. If the level of default exceeds 1% of scheme costs (which for 2021/22 is £63.7m), unmet obligations, up to a ceiling of nearly £306m for 2021/22 (England and Wales), are passed onto other suppliers to settle in a mutualisation process. The proceeds of mutualisation are recycled back to those suppliers who met their obligation with ROCs on a per-ROC presented basis. If the threshold is not exceeded, any shortfall remains unrecovered, and generators lose out.

The emergence of supplier payment default is of concern to participants in the RO. Electricity suppliers are unhappy about meeting the unmet obligations of their competitors, whilst generators lose out when the level of default is insufficient to trigger mutualisation. Government recently legislated to increase the level of the mutualisation threshold (England and Wales only) to make it harder for mutualisation to be triggered, whilst Ofgem has taken steps via the electricity supply licence to improve supplier standards of financial resilience. However, neither of these measures directly addressed the underlying causes of supplier payment default under the RO. Some stakeholders have therefore called on Government, or Ofgem, to address the problem.

This consultation focuses on supplier payment default under the RO. It considers the main options available for addressing it through both legislation and the electricity supply licence, the

challenges arising and the likely qualitative impacts of these options on scheme participants. It seeks the views of stakeholders on proceeding with one of these options.

Further details on how the scheme operates are given in Annex A. Supplier settlement arrangements are detailed in Annex B. A description of supplier payment default, mutualisation arrangements and recent steps taken by BEIS and Ofgem to alleviate the problem are given in Annex C. Annex D outlines key activities in the RO calendar.

# Addressing the causes of supplier payment default

## Overview

Despite the recent steps that Government and Ofgem have taken to update mutualisation arrangements, and improve supplier standards of financial resilience respectively (see Annex C for details), neither approach has directly addressed what some stakeholders believe to be the underlying problem: the ability for suppliers to accrue significant levels of obligation “at risk”, i.e. without any specific measures in place to ensure their obligations are settled in the event of default. Under current arrangements, the default risk lies with other scheme participants. Therefore, whilst the likelihood of mutualisation occurring has been lowered, it remains a possibility.

As a consequence, there have been continuing calls from some stakeholders for either Government or Ofgem to introduce additional measures to address the causes of supplier payment default. In the main, these calls have advocated either the introduction of more frequent settlement arrangements (to prevent suppliers from defaulting on such large sums as is currently the case) or a new requirement for suppliers to protect their accruing obligations by posting collateral, in one form or another. In the event a supplier defaulted on its obligation, its posted collateral would be put towards settling its obligation, lowering the level of default and the amount that other suppliers are exposed to.

In the following sections, we explore a number of options for addressing supplier payment default, categorising them as either BEIS led, i.e. approaches which would be implemented primarily through legislative change, or Ofgem led, i.e. implemented primarily through the supply licence (although as we note, supply licence measures may require supporting legislative changes to enable a supplier’s obligation to be settled with collateral). We also consider the case for continuing with existing policy, allowing recently introduced legislative changes (i.e. updates to mutualisation arrangements) and licence changes (i.e. those which aim to increase supplier standards of financial resilience) to take effect.

## Summary of options

Table 1 summarises 3 options and sub-options that we consider in the following sections for addressing supplier payment default under the RO:

- **Options 1a, 1b and 1c** are approaches that would increase RO settlement frequency. They would be implemented by Government through amendments to the Renewables Obligation Order 2015 (as amended), the legislation which underpins the scheme. Some of these amendments would require changes to primary legislation;

- **Option 2** is an approach that would require suppliers to protect sums at risk of being mutualised. It would be implemented by Ofgem through the electricity supply licence. It is likely that it would also require complementary changes to be made to the Renewables Obligation Order 2015 (as amended);
- **Option 3** is to continue with existing policy, allowing recently introduced legislative and licence changes to take effect.

**Table 1: Summary of options for addressing supplier payment default under the RO.**

Option	Description
1a	BEIS – New legislative requirement for more frequent RO settlement either with ROCs and/or buy-out payments.
1b	BEIS - New legislative requirement for more frequent RO settlement either with ROCs and/or buy-out payments.  Settlement timelines are compressed, and the late payment period is abolished.
1c	BEIS - New legislative requirement for more frequent RO settlement, either with ROCs and/or buy-out payments and/or a letter of credit.  Settlement timelines are compressed, and the late payment period is abolished.  Suppliers would be required to substitute any letters of credit presented in fulfilment of a quarterly obligation with ROCs and/or buy-out payments on or before the final settlement deadline.  Suppliers would be given the option of substituting buy-out payments with ROCs on or before the final settlement deadline.
2	Ofgem – Creation of new prescriptive licence requirements, requiring suppliers to protect sums at risk of mutualisation.
3	Continue with existing policy.

# Option 1 – BEIS led solutions implemented through legislative change

## Background

Under the Option 1 proposals that we set out below, we consider a set of sub-options for introducing more frequent supplier settlement into the RO. More frequent settlement would lower the maximum sum that suppliers could default on. It would also act as an early warning indicator, enabling Ofgem to take earlier regulatory intervention when suppliers are non-compliant than is possible under current arrangements.

Under our proposals, the current single annual settlement event would be replaced with four quarterly settlement events relating to electricity supplied (and therefore obligations accrued) during the following quarters: April – June (**Q1**); July – Sept (**Q2**); Oct – Dec (**Q3**); and Jan – Mar (**Q4**). Electricity suppliers would continue to remain under an annual “ROCs per MWh” obligation in respect of the electricity they supply during the annual obligation period. In other words, the level of the obligation would continue to be set by Government on an annual basis and would apply to electricity supplied to customers during each 12-month obligation period, which would continue to run from April – March inclusive. This would avoid Government having to set the level of the obligation in respect of periods of less than one year (this would increase uncertainty and mitigating the associated risk to the ROC market would increase scheme costs).

Under our proposals, suppliers would continue the current practice of settling their obligation retrospectively, i.e. after each quarter’s obligation had been accrued. Specific arrangements for how and when settlement would take place are considered under the Options 1a – 1c headings below. Whilst the retrospective approach means that suppliers would continue to accrue their obligation at risk, the maximum amount at risk would be lower than it is under current arrangements where suppliers are able to default on up to 19-months’ worth of obligation. Since the default risk would be lower, greater protection would be given to the buy-out fund. This would be of benefit to other suppliers and generators alike. Further details on how much obligation might remain at risk are given in the following sections.

## Consultancy input

In order to shape our thinking on how more frequent settlement might work in practice, we developed a “straw-man” proposal outlining potential future arrangements. We also developed a more ambitious variant of the straw-man where the settlement timeframes (i.e. the time given to suppliers to settle their obligation following each quarterly obligation period) are compressed.

Mindful of the potential impacts these new arrangements might have on the operation of the scheme, and therefore the welfare of scheme participants, we asked the consultants Cornwall Insight to provide a high-level assessment of our proposals. Cornwall Insight's findings, which are published alongside this consultation, have informed the quarterly settlement options which we set out below.

### Option 1a: Increased settlement frequency – settlement arrangements remain unchanged

Under this option, suppliers would be required to settle their obligation in respect of electricity supplied to customers during each of the four quarters described above. Following each quarter, each supplier's electricity supply volume would be determined, and the prevailing renewables obligation (i.e. ROCs per MWh) would be applied to that volume. Existing RO settlement arrangements would then be applied. Suppliers would be required to provide electricity supply volume data to Ofgem before the first day of the fourth month following each quarter. They would have 5 months following each quarter to present ROCs or buy-out payments to Ofgem, and a further 2 months to make late payments.

To illustrate how this might work, and taking the first quarter of each obligation year as an example, suppliers would accrue an obligation in respect of electricity supplied to customers during April – June. They would then be required to provide electricity supply volume data to Ofgem before the 1<sup>st</sup> of October, and to settle their April – June obligation either with ROCs and/or buy-out payments before 1<sup>st</sup> December, or with late payments before 1<sup>st</sup> February.

ROCs issued in respect of generation that occurred during any one quarter could be used by suppliers to fulfil their obligation in respect of a subsequent quarter during the obligation year. Existing ROC "banking" rules<sup>4</sup>, which govern what proportion of a supplier's obligation may be settled with the previous year's ROCs, would continue to apply. Buy-out and late payment funds would continue to be redistributed annually, and the shortfall in the buy-out/late payment funds would continue to be determined on an annual basis. Mutualisation arrangements would remain unchanged.

If a supplier failed to fulfil one of its quarterly obligations, it would have failed to comply with a requirement of the scheme. This would enable Ofgem to commence regulatory intervention as appropriate, potentially many months earlier than is possible under existing arrangements. Any cash or ROCs already provided by that supplier in fulfilment of its quarterly obligations would remain committed towards its annual obligation, even in the event it became insolvent and exited the market. This should tend to lower the annual payment shortfall and lessen the likelihood of mutualisation being triggered.

Under this option, the amount of obligation that suppliers could accumulate before being required to settle part of their obligation would be reduced from 19 months to 10 months, which

---

<sup>4</sup> Under current arrangements, suppliers are permitted to fulfil up to 25% of their obligation with ROCs issued in respect of the previous obligation year.

we determine as the 3-month accrual period, plus a settlement period of up to 7 months (i.e. if a supplier settled its quarterly obligation with late payments) during which the following quarters' obligations would be accrued. In other words, if a supplier failed to fulfil one of its quarterly obligations and/or underwent disorderly market exit, the maximum amount of unmet obligation that it could default on (and which would contribute to the scheme's annual payment shortfall) would be 10 months. This is an improvement of 9 months on current arrangements. A summary of the Option 1a timelines is given in Table 2.

**Table 2: Timelines associated with the Option 1a proposal under which suppliers would discharge their annual obligation on a quarterly basis (Q1 – Q4).**

	Q1	Q2	Q3	Q4
Obligation accrued	Apr – Jun	Jul – Sep	Oct – Dec	Jan - Mar
ROCs issued	Late Jul – late Sep (Q2)	Mid Oct – mid Dec (Q3)	Mid Jan – mid Mar (Q4)	Mid Apr – mid Jun (Q1 Y+1)
Present ROCs/buy-out payments before:	1 Dec (8 months obligation at risk)	1 Mar (8 months obligation at risk)	1 June (8 months obligation at risk)	1 Sep (8 months obligation at risk)
ROCs available at ROC deadline	Apr – Aug (i.e. 5 months' worth issued Jul – Nov, plus banked ROCs)	Apr – Nov (i.e. 8 months' worth issued Jul – Feb, plus banked ROCs)	Apr – Feb (i.e. 11 months' worth issued Jul – May, plus banked ROCs)	Apr – Mar (i.e. 12 months' worth issued Jul – Jun, plus banked ROCs)
Make late payments before:	1 Feb (10 months obligation at risk)	1 May (10 months obligation at risk)	1 Aug (10 months obligation at risk)	1 Nov (10 months obligation at risk)

The default risk of 10 months could be further reduced to 8 months if the late payment period were abolished - suppliers would still have 5 months in which to settle their quarterly obligation, so this does not seem an unreasonable proposition. Further information on removing the late payment period is set out under option 1b below.

## Option 1b: Increased settlement frequency – settlement arrangements compressed

Under Option 1b, suppliers would again be required to settle their obligation, retrospectively, in respect of electricity supplied to customers during each of the four quarters described earlier. As was the case for Option 1a, this would mean that following each quarter, each supplier's electricity supply volume would be determined, and the prevailing renewables obligation (i.e. ROCs per MWh) applied to that volume. However, under Option 1b, settlement arrangements would be compressed.

Suppliers would be required to provide electricity supply volume data to Ofgem by the first day of the third month following each quarter. They would have 3 months following each quarter to present ROCs or buy-out payments to Ofgem. The option of late payments would be abolished.

To illustrate, and again taking the first quarter of each obligation year as an example, suppliers would accrue an obligation in respect of electricity supplied to customers during April – June. They would then be required to provide electricity supply volume data to Ofgem by the 1<sup>st</sup> of September and to settle their April – June obligation before 1<sup>st</sup> October. All other aspects of the Option 1b proposal (portability of ROCs between quarters, ROC banking rules, redistribution of the buy-out and late payment funds, determination of a payment shortfall and mutualisation arrangements) would remain the same as for Option 1a.

As was the case with the proposal set out in Option 1a, the failure of a supplier to fulfil one of the quarterly obligations would enable Ofgem to commence regulatory intervention as appropriate, and any cash or ROCs already provided by that supplier would count towards its annual obligation. This would again tend to lower the annual payment shortfall and lessen the likelihood of mutualisation being triggered.

Under this option, the amount of obligation that suppliers would accumulate before being required to settle part of their obligation would be reduced from 19 months to 6 months, which we determine as the 3-month accrual period, plus a 3-month settlement period during which the next quarter's obligation would accrue. In other words, if a supplier failed to fulfil one of its quarterly obligations and/or underwent disorderly market exit, the maximum amount of unmet obligation that it could default on (and which would contribute to the scheme's annual payment shortfall) would be 6 months. This is an improvement of 13 months on current arrangements. A summary of the Option 1b timelines is given in Table 3.

**Table 3: Timelines associated with the Option 1b proposal under which suppliers would discharge their annual obligation on a quarterly basis (Q1 – Q4).**

	Q1	Q2	Q3	Q4
Obligation accrued	Apr – Jun	Jul – Sep	Oct – Dec	Jan - Mar
ROCs issued	Late Jul – late Sep (Q2)	Mid Oct – mid Dec (Q3)	Mid Jan – mid Mar (Q4)	Mid Apr – mid Jun (Q1 Y+1)
Present ROCs/buy-out payments before:	1 Oct (6 months obligation at risk)	1 Jan (6 months obligation at risk)	1 Apr (6 months obligation at risk)	1 Jul (6 months obligation at risk)
ROCs available at ROC deadline	Apr – Jun  (i.e. 3 months' worth issued Jul – Sept, plus banked ROCs)	Apr – Sept  (i.e. 6 months' worth issued Jul – Dec, plus banked ROCs)	Apr – Dec  (i.e. 9 months' worth issued Jul – Mar, plus banked ROCs)	Apr – Mar  (i.e. 12 months' worth issued Jul – Jun, plus banked ROCs)

On the proposal to abolish the late payment period (which we also suggest as a variant to the Option 1a proposal), we recognise that many suppliers currently take advantage of the opportunity afforded to them to delay settling their obligation by a further two months. Consequently, if this opportunity were removed, they would have no option but to settle earlier. However, we also recognise that in providing suppliers with a “second chance” to meet their obligation, suppliers might be encouraged to engage in riskier business practices than would otherwise be the case – we understand that the 5% interest charge above the Bank of England base rate that is levied on late payments is considerably lower than borrowing rates that suppliers might face, and as such may not act as a disincentive. In any case, we currently see little justification in suppliers being given the opportunity of an additional two months to make payment on top of a settlement deadline that already falls some months after the obligation period to which it relates. Consequently, we think its abolition, as proposed under Option 1b, and suggested as a variation to Option 1a, could be justified.

## Assessment of the Option 1a and 1b proposals

In its assessment of our proposals, Cornwall Insight concluded that both of the options described above could be implemented without fundamentally undermining the design and functionality of the scheme. We broadly agree – outwardly the scheme would continue to operate in much the same way that it does now, with many of the activities that currently take place on an annual basis instead taking place on a quarterly basis.

However, Cornwall Insight also drew attention to some potential challenges, most notably concerning the availability of ROCs. Having given further consideration to the way that ROCs are generated, issued and traded, we share their concerns about how suppliers might comply with the arrangements set out in the Option 1a and 1b proposals. We have further concerns about the impact that supplier compliance with these proposals might have on the ROC market. These concerns are outlined below.

### A requirement for earlier ownership of ROCs

Whilst the design and functionality of the scheme might remain broadly unchanged under the Option 1a and 1b proposals, suppliers intending to meet a new requirement for quarterly settlement with ROCs would need to take ownership of ROCs much earlier than is currently the case. Under existing arrangements, ownership need not take place until 17 months after beginning of the obligation year in question. In contrast, under the Option 1 proposals, this would be reduced to 6 or 8 months. However, ROCs would continue to be issued to generators predominantly on a monthly basis throughout the obligation year. Consequently, suppliers would have access to a much smaller pool of ROCs than is currently the case, where a full year’s worth of ROCs is potentially available. This is illustrated in Figure 1 which sets out the theoretical availability of ROCs at the Q1 settlement deadlines under the Option 1a and 1b proposals.

**Figure 1: Availability of ROCs under the quarterly settlement arrangements of the Option 1a and 1b proposals for the Q1 ROC deadline.**

The coloured shading shows how ROCs are issued to generators no earlier than about 3-months after the month to which they relate. For example, ROCs which relate to renewable generation which took place during April – June (i.e. Q1) are typically issued in July -September (Q2) - issuance may occur later but not sooner. (A description of the figure is given in the text below).

	Q1			Q2			Q3		
Month	A	M	J	J	A	S	O	N	D
ROCs generated									
ROCs issued to generators									
Q1 ROC deadline (Option 1a)				← 5 months' worth of ROCs available →					
Q1 ROC deadline (Option 1b)				← 3 months' worth of ROCs available →					

## Shortages in the availability of ROCs

Figure 1 shows that under the Option 1a proposal, suppliers wishing to settle their Q1 obligation with ROCs would potentially have access to ROCs issued in the months of July to November (i.e. issued in respect of generation that took place in April – August) at the point their Q1 obligation was due for settlement. In other words, five months' worth of ROCs would potentially be available to settle three months' worth of obligation.

Under the compressed arrangements of the Option 1b proposal, suppliers would have access to ROCs issued in the months of July - September only (i.e. issued in respect of April – June generation) at the point their Q1 obligation was due for settlement. In other words, only three months' worth of ROCs would potentially be available to settle three months' worth of obligation.

Despite the fact that at each of the quarterly deadlines suppliers would have accrued a much smaller obligation than under current annual arrangements, suppliers would nevertheless face shortages in the supply of ROCs (i.e. shortages in excess of the expected 10% shortage<sup>5</sup>) at the quarterly settlement deadlines if the Option 1a and 1b proposals were introduced. These shortages would be felt most acutely under the Option 1b proposal at the Q1 and Q2 settlement deadlines. There are two main reasons why such shortages in the availability of ROCs should be expected.

- Renewable generation from the RO supported technologies is not constant throughout the year - for the non-fuelled technologies it is reflective of prevailing weather conditions. Consequently, the generation and issuance of ROCs is highly seasonal. For wind ROCs, which account for about two-thirds of all ROCs issued, the seasonal low in ROC issuance (i.e. the period when it is below the annual average) tends to occur during Q2 and Q3, reflecting below average wind speeds during Q1 and Q2. As discussed above, ROCs issued in Q2 and Q3 would be the main source of ROCs for Q1 and Q2 settlement under the Option 1a and 1b proposals.
- Whilst Ofgem's ROC issuance schedule makes it possible for all ROCs to be issued within three months of generation, actual issuance is usually less than 100% of theoretical issuance. Delays in the issuing of ROCs can occur for a number of reasons. For example, when generators fail to submit generation data or supporting information before the two-month deadline, it is not possible for ROCs to be issued the following month. Outstanding queries in relation to a generating station also prevent ROCs from being issued, resulting in delays. These queries typically relate to fuel measurement and sampling or compliance issues. Cornwall Insight found that the proportion of ROCs issued within three months ranged between 94% and 98%, depending on the time of year.

Shortages in the supply of ROCs could be offset to some extent by ROCs banked from the previous obligation year, and by seasonality in the amount of electricity supplied to customers

---

<sup>5</sup> The methodology for setting the level of the obligation includes a "headrooming" mechanism which inflates the level of the obligation by 10%. This aims to ensure that ROCs will remain in short supply to avoid a ROC price crash (which would impact generators' returns). See Annex A for further details.

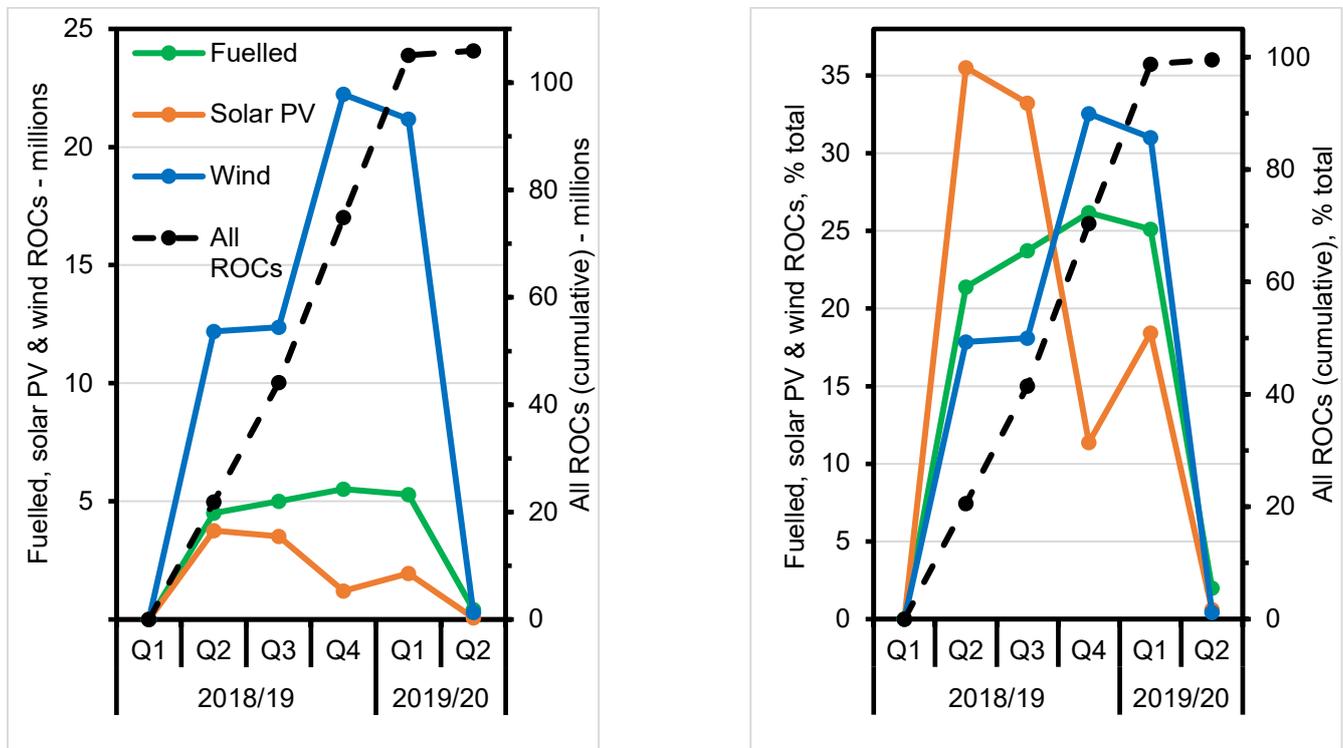
(since each supplier’s obligation is proportional to the amount of electricity it supplies to customers, and electricity supply volumes tend to be lowest during Q1 and Q2). However, these factors are unlikely to be sufficient to mitigate shortages in the supply of ROCs. First, banked ROCs cannot be relied upon from one year to the next, and in any case, they are unlikely to be available in sufficient quantities to offset supply shortages. Second, the seasonality in electricity supply volumes varies between years, and, like banked ROCs, is unlikely to be sufficient to mitigate shortages in the supply of ROCs.

### Application of the Option 1a and 1b proposals to historic ROC issuance data

The concerns set out above about the availability of ROCs are supported by historic ROC issuance data. Figure 2 presents data for ROCs issued in respect of renewable output from 3 technologies during the 2018/19 obligation period (the most seasonal of recent years), for which 98% of all ROCs issued in respect of that obligation year were used in settling that year’s obligation.

**Figure 2: Issuance of 2018/19 ROCs during the 2018/19 and 2019/20 obligation years.**

The left-hand chart shows absolute ROC issuance figures. The right-hand chart shows ROC issuance as a percentage of all ROCs issued for each technology. Data for All ROCs (which relates to all technologies supported under the scheme) is shown on a cumulative basis in both charts. (A description of the charts is given in the text below).



The charts show that ROC issuance for the two non-fuelled technologies is highly seasonal. Issuance for solar PV generation is highest in Q2 and Q3 of 2018/19 (accounting for 69% of all solar PV ROCs), reflecting the occurrence of the sunniest months of the year in Q1 and Q2. For wind generation the opposite is true, with ROC issuance at its highest in Q4 of 2018/19

and Q1 of 2019/20 (accounting for 64% of all 2018/19 wind ROCs), reflecting the windiest months of the year in Q3 and Q4. In contrast, ROC issuance for the fuelled technologies shows little seasonality.

The charts illustrate the risks that quarterly settlement arrangements, and in particular the compressed arrangements set out in the Option 1b proposal, would introduce for those suppliers largely dependent on ROCs from a single source. This is best illustrated by considering wind ROCs, where only 18% of all 2018/19 wind ROCs were issued by the end of Q2. Had the Option 1b arrangements been in place, a Q1 settlement ROC shortage would have been highly likely. The implications of this are discussed in the following section.

The situation does not improve for Q2 settlement either as only 36% of all 2018/19 wind ROCs were issued by the end of Q3. In fact, by the end of Q3 (when 2 of the 4 quarters would have needed to have been settled), only 41% of the year's ROCs had been issued (see "All ROCs" cumulative data series in the right-hand chart for details). Since about 64% of all 2018/19 ROCs were wind ROCs, it is likely that the ROC shortage issue outlined above would have been widespread had Option 1b arrangements been in place.

### Potential impact of ROC shortages on the ROC market

If a shortage of ROCs were to materialise, some suppliers who had intended to settle their obligation with ROCs could be left with no option but to settle their quarterly obligations either in part or in full with cash payments. This would inflate the buy-out fund and could result in an oversupply of ROCs later in the year. Some ROCs might then remain unsold or banked for use in the next obligation year. This would have a negative impact on their value and could contribute to an oversupply of ROCs the following year. Those ROCs that did get submitted in settlement of suppliers' Q1 – Q4 obligations might then attract higher-than-expected recycle payments because a bigger-than-expected buy-out fund would be recycled amongst a smaller-than-expected number of ROCs. This would be an undesirable outcome - some generators would see their returns increased, whilst for others the opposite would be true. Additional measures might therefore be needed to mitigate this risk, and these are considered in a following section.

### Additional factors that might limit the availability of ROCs to suppliers

In addition to the ROC issuance concerns outlined above, two additional factors could further limit the availability of ROCs to some suppliers. The first relates to the proximity of the quarterly ROC settlement deadlines to the ROC issuance date. In most instances the settlement deadline would fall just one or two weeks after that month's ROC issuance date. Some suppliers might find that this provides insufficient time for ROCs to be purchased ahead of settlement. In these instances, the availability of ROCs to impacted suppliers would, in effect, be cut by a month. Consequently, for the Option 1b proposal, suppliers might practically only have access to 2 months' worth of ROCs ahead of the Q1 settlement deadline.

The second, and potentially more important factor relates to the way that ROCs are traded. In its assessment of our proposals, Cornwall Insight noted that the overwhelming majority of ROCs are currently traded through long term Power Purchase Agreement (PPA) type

contracts. Consequently, suppliers who found themselves short of ROCs at the quarterly deadlines might find it difficult to acquire ROCs on the open market since those ROCs that had been issued would mostly be tied up in long term contracts. Suppliers who are reluctant to settle their obligation with buy-out payments might therefore need to purchase ROCs from other suppliers who find themselves with excess ROCs.

We further understand that some of these PPA-type contracts provide for the delivery of ROCs to suppliers just ahead of the current ROC deadline, i.e. on an annual basis. Contractual arrangements such as these would clearly create further problems for some suppliers in settling a new quarterly obligation as their ROCs would be supplied too late. Consequently, they might need to renegotiate their ROC supply contracts to provide for earlier delivery. However, we understand that there might be some reluctance amongst suppliers to do this since it could open up other aspects of ROC supply contracts for renegotiation.

## Further options for mitigating the risks that ROC supply volatility might introduce to the scheme

In the preceding sections we set out how, under quarterly settlement arrangements, suppliers might find themselves exposed to shortages in the supply of ROCs. We explained how this could impact their ability to settle their quarterly obligations with ROCs, and what secondary impacts this might have, in terms of the functioning of the scheme and the ROC market. In the following sections, we give consideration to some additional measures that might be introduced to address these potential impacts.

### Give ROC supply contracts parity with ROCs

We have given consideration to giving contracts for the future supply of ROCs parity with ROCs insofar as quarterly settlement is concerned. This would allow suppliers to present such contracts in fulfilment of their Q1 – Q3 obligations. A supplier's annual obligation would subsequently be settled by the presentation of ROCs or cash to Ofgem on or before the Q4 settlement deadline. These arrangements would mean that suppliers would avoid having to renegotiate ROC supply contracts to provide for their early delivery or being forced into settling their obligation with buy-out payments.

After careful consideration of this arrangement, we concluded that it would not be appropriate to give a contract for the supply of ROCs parity with ROCs or cash. Our reasoning was that a supply contract would not provide for a supplier's obligation to be settled in the event it should subsequently default. In any case, a contract for the supply of ROCs offers no guarantee that ROCs will be issued. For example, they could be withheld by Ofgem due to inaccuracies in the generator's ROC claim, or due to compliance issues. Furthermore, in the event of supplier failure it is likely that the contract would be terminated. Consequently, whilst these arrangements might offer flexibility to suppliers in demonstrating quarterly compliance, they do not offer sufficient assurances nor lower the amount of obligation that a supplier could default on. For these reasons we do not propose to pursue these arrangements.

## Require only a fraction of each suppliers' obligation to be settled at each quarterly deadline

We have given consideration to an arrangement under which the obligation placed on suppliers in respect of the first three quarters of each obligation year would be for an amount equivalent to less than 100% of each quarter's accrued obligation. Under this arrangement, suppliers might be required to settle, say, 80% of Q1 – Q3 obligations on or before the Q1 – Q3 deadlines, and then true-up their annual obligation on or before the Q4 deadline.

Alternatively, a sliding scale could be introduced whereby suppliers would be required to settle, say, 70% of their Q1 obligation by the Q1 deadline, 80% of their Q1+Q2 obligation by the Q2 deadline, 90% of their Q1+Q2+Q3 obligation by the Q3 deadline and 100% of their annual obligation by the Q4 deadline.

The arrangements described above (or a variant thereof) would lower the likelihood of there being insufficient ROCs available to suppliers at the quarterly settlement deadlines, e.g. due to seasonality in ROC issuance. However, their efficacy would depend on the percentage requirement at each deadline. Less stringent settlement requirements would decrease the likelihood of there being a shortage of ROCs, meaning suppliers would be less likely to be forced into meeting their obligation with buy-out payments. However, these arrangements would leave bigger sums at risk in the event of supplier default. For example, a requirement for suppliers to settle only 70% of the obligation accrued during Q1 by the Q1 settlement deadline would put almost an additional months' worth of obligation at risk (e.g. the amount at risk under option 1b would be increased from the equivalent of 6-months' worth of obligation to nearly 7 months'), and the risk of a ROC supply shortage would not be eliminated.

Furthermore, these arrangements would only be effective in mitigating (or partially mitigating) some of the supply shortages relating to the issuance of ROCs - they would do nothing to address shortages relating to contractual arrangements between suppliers and their ROC providers. For these reasons, we do not propose to pursue these arrangements.

## Provide suppliers with additional flexibility in settling their quarterly obligations

We have given consideration to an arrangement which would give suppliers additional flexibility in the way they settle their quarterly obligations. Under this arrangement, suppliers would be permitted to settle their Q1 – Q3 obligations with a standby letter of credit (LoC). Suppliers choosing to avail of this option would be under a further requirement to substitute any LoCs, submitted in settlement of their Q1 – Q3 obligations, with either buy-out payments or ROCs, on or before the Q4 settlement deadline. Should they fail to comply with this further requirement, Ofgem would draw-down on any LoCs submitted by that supplier, with the proceeds being put towards settling that supplier's obligation. Ofgem would then have the option of taking regulatory intervention as appropriate.

In addition to the new LoC option, suppliers would be given a further option of substituting buy-out payments, submitted in settlement of their Q1 – Q3 obligations, with ROCs. Any substitution of buy-out payments would need to take place on or before the Q4 settlement deadline.

The arrangements which are set out above would give suppliers greater flexibility in meeting new quarterly settlement requirements. Notably, they would enable suppliers to bridge any gaps in the supply of ROCs (both short term and long term), but without forcing them to commit to alternative cash payments when their intention may have been to settle their obligation, either in part or in full, with ROCs.

In our view, this arrangement provides the best solution for addressing some of the issues that might arise under the proposals outlined under Options 1a and 1b. We therefore take this arrangement forward under the proposal set out in Option 1c.

### Option 1c: Increased settlement frequency – settlement arrangements compressed, exchangeable cash/standby letter of credit

As discussed above, there is a risk that under the proposals set out in Options 1a and 1b (and particularly under Option 1b), electricity suppliers intending to settle their quarterly obligations with ROCs might struggle to do so if the supply of ROCs is delayed in any way. This would not only impact the suppliers in question but could also have wider implications for the functioning of the scheme and the ROC market.

Consequently, under this Option 1c, we maintain the Option 1b arrangements (i.e. a requirement for quarterly settlement, with settlement arrangements compressed and the option of late payments abolished), but propose that suppliers are given additional flexibility in the way they settle their obligation. As detailed in the previous section, this would enable them to meet their Q1 – Q3 obligations with a LoC, conditional on them substituting any LoCs with ROCs or buy-out payments on or before the Q4 settlement deadline. They would also be given the further option of substituting Q1 – Q3 buy-out payments with ROCs, on or before the Q4 settlement deadline. Whilst this could provide greater flexibility for suppliers, further consideration would need to be given to how these arrangements might work in practice – in particular, substitution arrangements would need to be tightly defined to ensure that the increased regulatory burden remained manageable.

Settlement timeframes and all other aspects would remain the same as under Option 1b. Consequently, the maximum amount of unmet obligation that a supplier could default on would be **6 months**.

### Questions on options 1a, 1b and 1c

- 1. How, and to what extent, would a requirement for more frequent (and therefore earlier) settlement impact any commercial arrangements you have in place for the supply/receipt of ROCs?**
- 2. Do you foresee any difficulties in how suppliers might comply with the quarterly deadlines as set out in the Option 1a – 1c proposals and if so, can**

**you suggest how these might be mitigated (e.g. through scheme design or by change in supplier practice)?**

- 3. How, and to what extent, might more frequent/earlier settlement impact the operating costs of your business?**
- 4. How, and to what extent, might more frequent/earlier settlement impact competition in the supply sector?**
- 5. How, and to what extent, would the abolition of late payments impact your business?**
- 6. This consultation only considers quarterly settlement – should consideration be given to monthly settlement to further reduce sums at risk?**
- 7. Are there any alternative settlement models that should be considered as a way of addressing supplier payment default? Please provide details.**
- 8. Under the Option 1c proposal, suppliers would be given the option of settling their Q1 – Q3 quarterly obligations with a standby letter of credit (LoC), conditional on them substituting it with ROCs or buy-out payments ahead of the Q4 settlement deadline. Is a LoC the most appropriate alternative to exchangeable buy-out payments, or should other measures be considered? Does a LoC offer any benefits over exchangeable buy-out payments?**
- 9. Do you agree with our assessment that a contract for the supply of ROCs does not offer sufficient assurance that a supplier's accrued obligation will be met in the event it exits the market?**
- 10. Do you agree with our assessment that the introduction of sub-100% compliance at the quarterly deadlines to accommodate shortages in the availability of ROCs would be an inappropriate course of action?**
- 11. If one of the Option 1 proposals were to be introduced, how much notice should be given to participants ahead of its introduction?**

## Option 2 – Ofgem led solutions implemented through the electricity supply licence

We have also given consideration to a licence-based approach for addressing supplier payment default. Under this option, we propose that electricity suppliers would be placed under a new licence requirement to periodically protect sums at risk of mutualisation under the RO. These protections would provide for a supplier's obligation, or a fraction of it, to be settled in the event they were either unable to settle it when it was due, or unable to meet new licence requirements for additional protections to be put in place (i.e. at the first instance of supplier failure to meet with a requirement, any existing protection measures the supplier had put in place would be drawn on). This would lower the potential level of default which would be of benefit to both suppliers and generators.

Under a licence-based approach, suppliers would choose a method of protection from a 'menu' of options. The level of protection would relate to the amount of obligation they had accrued, or would be likely to accrue, during a specified 'protection period'. There would be a requirement for protections to remain in place until obligations were settled in full, i.e. they would need to align with the RO settlement timetable.

The protection period and protection arrangements would be implemented via a change to supplier licence conditions. The licence-based approach would achieve a similar outcome to the legislative approach of more frequent settlement, but through a different process (although supporting legislative changes may be required). However, the impacts, implementation issues, and challenges of this approach will need to be considered. These are explored in the following sections.

### General approaches for protecting sums at risk

The requirement placed on suppliers to protect sums at risk of mutualisation under the RO could be on either a forward-looking or backward-looking basis:

- **On a forward-looking basis:** this would require suppliers to put protections in place at the start of a specified 'protection period', i.e. before their obligation had accrued. The protections would provide for a supplier's accrued obligation to be settled in full in the event it should exit the market, or fail to put protections in place when next required to do so (i.e. at the start of the next protection period). Since suppliers would be required to protect their obligation before it had accrued, they would need to estimate their electricity supply volume for the forthcoming protection period – this would enable them to determine their likely RO liability for the period and ensure the correct level of protection was put in place.

- **On a backward-looking basis:** this would require suppliers to put protections in place at the end of a specified ‘protection period’, i.e. once their obligation had been accrued. Should a supplier exit the market or fail to put protections in place when next required to do so (i.e. at the start of the next protection period), any existing protections that that supplier had put in place would be used to settle its accrued obligation. Since the obligation would be protected retrospectively, there would be no need for a supplier’s electricity supply volume to be estimated. However, a certain amount of a supplier’s obligation would remain at risk of being unrecovered in the event of default, and the extent of this would be dependent on the length of the protection period and level of protection required.

## Protection measures

We have identified a number of different protection measures which suppliers could put in place to lower the potential level of payment default. Suppliers would choose which measure was most appropriate for them from a ‘menu’ of options. The appropriateness of the various measures may depend on the sums being protected and individual supplier circumstances – including size, commercial structure and business model.

- **Parent company guarantee:** is a form of security provided by an ultimate holding or intermediate company, making them liable in the event of default. This could be a cost-effective way to implement the requirement, but it would only be available to a small subset (and typically the largest) of suppliers.
- **Third party guarantee:** is a form of security provided by another party, which will cover agreed liabilities in the event of default. This could have high direct costs as a third party will seek to offset the risk of providing the guarantee. Also, the costs will vary greatly across supplier size and business models depending on independent assessments of risk.
- **Funds in escrow:** is an account or agreement where funds are held by a third party until payment is due. As well as the direct cost of putting this protection in place (largely associated with the administration of an escrow account) suppliers would likely need to raise alternative sources of working capital.
- **Other:** we could also provide suppliers with the opportunity to propose alternative means for protecting sums at risk. For example, this could include allowing ROCs to be posted as collateral or allowing early settlement with ROCs or buy-out payments, thereby lowering the amount that needs to be protected.

## Assessment of the Option 2 proposal

### Cost effectiveness of proposed measures

We expect a backward-looking approach to be less costly to implement than a forward-looking approach. Suppliers would be able to base the amount protected on a level closer to their

actual obligation. Furthermore, and as addressed in the ‘Impacts’ section, suppliers would retain access to customer revenues for a longer period. However, in contrast to a forward-looking approach, it would mean that if the supplier failed within a ‘protection period’ (i.e. before protections for that period had been put in place), any obligation accrued during that period would be unprotected. Any resultant payment shortfall would then be at risk of mutualisation. Nevertheless, if the requirement was, say, for a quarter’s worth of obligation to be protected one month after the quarter to which it relates, the sum at risk would be equivalent to 4 months’ worth of obligation (3 months plus 1 month). In other words, at the point at which a supplier failed to meet this new requirement, and potentially exited the market, it would have accrued up to 4 months-worth of unprotected obligation. This is an improvement of 15 months compared with current arrangements.

In contrast, a forward-looking approach would be likely to be more costly to implement because suppliers would be denied access to their revenues for longer. However, under this approach, the risk of supplier payment default would be reduced. The costs of the protection measures and wider costs are set out in the impacts section.

### Design and implementation issues

There are a number of design and implementation issues that need further consideration, and which we would also want to seek stakeholders’ views on. For example, we would need to carry out further work to determine the efficient level at which to set the protections, i.e. what proportion of a supplier’s accruing, or accrued obligation should be protected. We would also need to determine what would be the appropriate frequency for protections to be updated, i.e. should it be on a monthly basis, quarterly basis etc. We would also need to consider implementation timelines and whether it is appropriate to phase these protections in over a period of time to mitigate the impact on suppliers’ business models from implementing such a proposal.

### Further challenges

In addition, there are a number of other issues and challenges which remain to be resolved with these options. For example, the electricity supply licence applies to electricity suppliers across Great Britain only, which means that the licence-based approach would not have effect in Northern Ireland. We further note that Ofgem may need to be given additional powers, via the RO legislation, to enable funds (or ROCs) arising from a supplier’s protection measures to be transferred into the scheme, potentially in fulfilment or partial fulfilment of a failed supplier’s obligation. If such changes to the RO legislation are required in addition to changes to the electricity supply licence, then the licence-based approach would not have effect in Scotland, because the RO legislation applies to England and Wales only. There also remains some uncertainty about how the protection measures set out above might interact with insolvency law and the extent to which these measures could be protected from other creditors in the event of supplier insolvency.

## Questions on option 2

- 12. Should supplier payment default under the RO be addressed via the legislation, the electricity supply licence, or neither? Please explain your answer.**
- 13. How, and to what extent, might a new requirement for suppliers to protect sums at risk of mutualisation impact competition in the supply sector?**
- 14. Do you have a preference for a forward-looking or backward-looking approach to protecting sums at risk of mutualisation? Please explain your answer.**
- 15. How, and to what extent, might a new requirement for suppliers to protect sums at risk of mutualisation impact the way in which your company complies with the RO?**
- 16. Are there any other methods of demonstrating compliance with a requirement to protect sums at risk of mutualisation that should be included within the 'menu' of protections?**
- 17. How, and to what extent, might a new requirement to protect sums at risk of mutualisation impact your company's operating costs? For this question, assume that the requirement would be for an amount equivalent to 100% of a supplier's obligation to be protected, on a quarterly basis, one month after the quarter in question and remain in place until the RO settlement deadline has elapsed.**
- 18. Can you foresee any additional issues or challenges with the Option 2 proposal, in particular the menu of options, that need to be considered?**
- 19. If one of the Option 2 proposals were to be introduced, how much notice should be given to participants ahead of introduction?**

## Option 3 – Continue with existing policy

The emergence of supplier payment default under the RO has led to mutualisation being triggered on three separate occasions and nearly £173m in unmet obligations being passed onto other suppliers to pay. The single biggest shortfall occurred in 2018/19 when £88.1m was mutualised.

In response to these recent events, Government legislated to amend the way the mutualisation threshold is calculated. It will now be determined as 1% of scheme cost to suppliers. For the 2021/22 obligation year, it has increased from the previous level of £15.4m to £63.7m. This means that electricity suppliers will be less likely to have to meet the obligations of supplier who have not met theirs. Meanwhile, and as noted earlier, Ofgem has introduced changes to the electricity supply licence conditions which aim to increase supplier standards of financial resilience.

Neither the amendment to mutualisation arrangements nor changes to the electricity supply licence have yet had chance to take effect. However, had the mutualisation threshold already been determined as 1% of scheme, mutualisation would only have occurred for 2018/19 – on the other occasions the shortfall would have been insufficient to trigger mutualisation. In other words, the total cost of mutualisation to date would have been £88.1m. Furthermore, there is an expectation that the new licence measures will lower the likelihood of suppliers defaulting on their obligations - Ofgem also retains the option to introduce further binding conditions, pursuant to recent licence amendments, to further reduce the likelihood and scale of mutualisation.

These are relevant considerations since any new measures which aim to address supplier payment default are likely to increase the operating costs of suppliers, due both to increased compliance activities and through loss of working capital - further details on why this is the case are given in a later section.

Consequently, given the costs and benefits of taking further action to address supplier payment default, as well as the risks that some of the options presented pose to the ROC market, there remains a case for maintaining the status quo and continuing with existing policy. This would mean allowing the recently introduced legislative changes and licence changes to take effect.

### Questions on option 3

- 20. Do you agree or disagree that supplier payment default under the RO is a matter that warrants action beyond the recent steps that have been taken to increase the mutualisation threshold, and Ofgem's supply licence reforms? Please explain your reasoning.**

**21. What would be the costs and benefits associated with further action aimed at addressing supplier payment default under the RO?**

# Impacts

## Non-administrative impacts

### Impacts on suppliers

The RO represents a significant but predictable cost to electricity suppliers. It presents an opportunity for suppliers to increase revenues collected from customers, and in turn these revenues act as a source of interest-free working capital. This lowers the operating costs of those suppliers who rely on credit to run their businesses since some of their borrowing costs are avoided. If access to this source of capital were restricted, alternative sources would be required, and it is unlikely they would be available on equivalent interest-free terms.

Consequently, any new measures which seek to mitigate supplier payment default, and which restrict suppliers' access to RO revenues are likely to increase operating costs. This applies equally to the Option 1 proposals under which suppliers would be required to settle their obligation more frequently, and the Option 2 proposal under which suppliers would be required to protect sums at-risk of mutualisation.

In addition, there may be further costs associated with the various protection measures we have identified, e.g. arrangements costs, and some measures may be less costly than others. For example, it might be less costly for the largest suppliers to demonstrate compliance using a parent company guarantee, whilst this option might not be available to smaller suppliers. Similarly, some suppliers might find it more expensive to obtain letters of credit than others. However, we seek stakeholders' views on this.

Any increases in suppliers' operating costs are likely to be reflected in increased customer tariff prices. However, since borrowing costs vary from supplier to suppliers, the impacts are also likely to vary from supplier to supplier. This might therefore create pressures on some otherwise viable supply businesses, potentially weakening competition. This could lead to consumer detriment.

The extent to which the finances of individual suppliers would be impacted is less clear since it is dependent on a number of factors. These include the particular approach that suppliers take towards discharging their RO, and the extent to which they rely on credit for day-to-day operations and borrowing costs. Consequently, at this stage we are unable to estimate with any certainty what the cost impact for suppliers might be, other than that there would be an impact, and that it would vary from supplier to supplier. Equally, we are unable to predict with any confidence what secondary impacts there might be in terms of competition between suppliers and retail market diversity. In order to better understand the distributional cost impacts of any new measures, we require further information from suppliers on how they manage their revenues and fund their businesses.

In contrast to the potentially negative impacts on suppliers outlined above, measures which lower the likelihood and level of supplier payment default would also lower the likelihood, and

impact, of mutualisation. Suppliers would be less exposed to the unmet obligations of other suppliers and it should be expected that this would lower their operating costs.

### Generators who claim ROCs on a monthly basis

As noted earlier, more frequent settlement by suppliers would also mean earlier settlement. This would create an earlier demand for ROCs, so those generators who claim their ROCs on a monthly basis might expect to receive earlier payment for their ROCs. Those generators who already sell their ROCs early in the obligation year might be able to demand a higher price for them (so long as existing commercial arrangements for the provision of ROCs allow) - we understand that under current arrangements, ROCs sold earlier in the year tend to be discounted. A similar outcome might be expected under the Option 2 proposal if suppliers were able to post ROCs as collateral. However, by providing suppliers with alternative options for settling a new quarterly obligation (e.g. exchangeable cash or letters of credit) or for protecting sums at risk of mutualisation, the extent to which generators might benefit under the Option 1 and 2 proposals could be limited.

Consequently, whilst it seems likely that generators would be beneficiaries of any new measures which would increase the demand for ROCs early in the obligation year, the extent to which they might benefit is less clear. This would depend on how much flexibility was offered to suppliers in fulfilling their obligation/meeting new licence requirements, as well as the compliance strategies adopted by different suppliers and the ability for existing contracts to be rewritten.

### Generators who claim ROCs on an annual basis

Owners of generating stations with a declared net capacity (DNC) of 50kw or less have the option of claiming their ROCs on an annual basis. For these generators, ROCs are issued no earlier than the end of June following the obligation year to which they relate. Under the Option 1 proposals (i.e. quarterly settlement), these ROCs would therefore only be able to be used in settlement of a supplier's Q4 obligation or banked for use in the following obligation period. This new limited use window might impact the price they command, especially if the Q4 ROC demand were lower than expected, either due to lower than average electricity supply volumes or if there were an excess of ROCs.

### Third parties

Not all ROCs are sold by generators directly to suppliers. Some ROCs are transacted multiple times before they are presented by a supplier to Ofgem in fulfilment of their obligation. We would expect intermediaries to adjust their positions to reflect any new arrangements demanded by sellers or required by buyers, subject to contractual arrangements.

Some ROCs continue to be sold at auction, typically on a monthly basis. Any new requirement for more frequent settlement, or a licenced-based equivalent, is likely to result in greater within-year auction activity, although this could be tempered by the availability of flexible cash/credit-based alternatives.

## Administrative impacts

The introduction of either of the proposals set out in Options 1 and 2 would bring about significant changes to the way the RO operates. As noted earlier, increased settlement frequency, as proposed under Option 1, would impact suppliers' compliance activities, increasing their operating costs. Increased settlement frequency would also have a significant impact on Ofgem's administration of the RO scheme, since it would increase the frequency of some compliance processes that Ofgem has to complete for each settlement round. For example:

- **Determination of supplier obligations:** Under current arrangements, Ofgem receives electricity supply volume data from Elexon, Northern Ireland Electricity (NIE) and EMR Settlement Ltd (EMRS) on an annual basis for the purposes of the RO. It then processes this data into a format that is suitable for suppliers. The data is then shared with suppliers who confirm their individual supply volumes with Ofgem. Ofgem then verifies this data and takes up any discrepancies individually with suppliers, before confirming their obligations. Under the Option 1 proposals, this process would move from being carried out once per year to four times per year.
- **Submission of ROCs:** This activity involves suppliers presenting ROCs to Ofgem and Ofgem tracking those ROCs against individual supplier obligations. This is currently carried out once per year but under the Option 1 proposals it would be carried out four times per year.
- **Receiving buy-out payments:** This activity takes place once per year and involves Ofgem tracking payments against obligations, dealing with instalment payments, payment issues and queries. Under the option 1 proposals this would move to four times per year. In addition, if suppliers were given the further option to substitute letters of credit and/or buy-out payments with ROCs and/or buy-out payments, Ofgem would expect to see a significant increase in administrative activities.

Consequently, the legislative approach outlined in the Option 1 proposals would be likely to result in an increase in both suppliers' operating costs and Ofgem's administration costs. Given that Ofgem's costs are taken from the buy-out/late payment funds, this would lower the amount available for recycling back to electricity suppliers.

In contrast, measures which seek to lower the likelihood and level of supplier payment default would also lower the likelihood, and impact, of mutualisation on other suppliers. If mutualisation were not triggered in future years, or non-compliance were significantly reduced, then Ofgem would expect to see some decrease in the enforcement activities undertaken in the event of serious non-compliance. Additionally, if mutualisation were not triggered, Ofgem would no longer have to run the quarterly mutualisation cycles (i.e. the process of collecting, and redistributing, mutualisation payments).

On balance, we consider it unlikely that the anticipated decrease in compliance activity would be sufficient to offset the overall increase in the RO administration costs, especially those

increases which would be brought about by increased settlement frequency and which could result in up to a four-fold increase in compliance activities.

Given the territorial extent of the Option 1 proposals (i.e. they extend to England and Wales only), it is possible that Ofgem could be required to adopt a different approach to the administration of each of the three RO schemes (i.e. RO, ROS and NIRO). This would increase administrative complexity and therefore Ofgem's administration costs.

Similarly, the Option 2 proposals would give Ofgem a new role in ensuring that sums at risk of mutualisation are sufficiently protected, monitoring these protections, and taking compliance action (and potentially enforcement action) if licence requirements are not being met (e.g. no protections in place; insufficient protections in place; protections in place but late). The Option 2 proposals would also introduce new compliance activities for suppliers. For example, suppliers will need to ensure they have appropriate and sufficient protection measures in place.

## Questions on impacts

- 22. How, and to what extent, might the Option 1 and 2 proposals, if implemented, increase RO compliance administration costs for your business?**
- 23. How might quarterly settlement impact the income of generators who receive ROCs on an annual basis? Please explain your reasoning and explain when and how annual ROCs are traded.**
- 24. The territorial extent of this consultation is England and Wales (i.e. it relates to matters contained within the RO only). What impacts do you foresee on participants in the interlinked Scotland and Northern Ireland schemes (i.e. the ROS and NIRO) if any of the Option 1 or Option 2 proposals were to be implemented through the RO only?**

## Fixed Price Certificates

In its 2011 Energy White Paper<sup>6</sup> and subsequent Technical Update<sup>7</sup>, the government of the day signalled its intention to transition the RO from a scheme based on the trade of ROCs to a fixed price certificate (“FPC”) scheme from 2027. The FPC scheme was proposed primarily as a means of addressing ROC price volatility that was expected to emerge as generators began losing their eligibility to receive ROCs. Primary powers to enable this transition were provided in the Energy Act 2013 (“EA2013”).

Under the envisaged scheme, a newly installed purchasing body would be placed under an obligation to purchase certificates from generators. The 2011 Technical Update mooted a quarterly purchasing arrangement which would likely require suppliers to make more frequent and therefore earlier payments to the purchasing body. EA2013 provides that the costs of doing so would be funded by a levy on electricity supplies, made in respect of supplies of electricity that have either been made or are expected to be made.

Government notes that these arrangements would lessen the likelihood of mutualisation and could significantly reduce the sums that suppliers would be able to default on. Government intends to issue a call for evidence on FPCs in due course. Nevertheless, we would welcome the views of stakeholders on their introduction for the purpose of addressing supplier payment default.

## Questions on fixed price certificates

**25. What are your initial views on the introduction of the fixed price certificate based scheme that was envisaged in 2011 in terms of addressing supplier payment default?**

## Call for evidence on mutualisation amount

Alongside its December 2020 consultation on the level of the RO mutualisation threshold, Government also sought the views of stakeholders through a call for evidence on a revised approach to the way the mutualisation amount is calculated. Government is still giving consideration to how it should proceed on this matter and will provide an update when it has considered responses to this consultation on supplier payment default.

---

<sup>6</sup> Planning our electric future: a white paper for secure, affordable and low-carbon energy. July 2011. <https://www.gov.uk/government/publications/planning-our-electric-future-a-white-paper-for-secure-affordable-and-low-carbon-energy>

<sup>7</sup> Planning our electric future: technical update. December 2011. <https://www.gov.uk/government/publications/planning-our-electric-future-technical-update>

# Summary of consultation questions

Here is a summary of all the consultation questions:

## Questions on options 1a, 1b and 1c

- 1. How, and to what extent, would a requirement for more frequent (and therefore earlier) settlement impact any commercial arrangements you have in place for the supply/receipt of ROCs?**
- 2. Do you foresee any difficulties in how suppliers might comply with the quarterly deadlines as set out in the Option 1a – 1c proposals and if so, can you suggest how these might be mitigated (e.g. through scheme design or by change in supplier practice)?**
- 3. How, and to what extent, might more frequent/earlier settlement impact the operating costs of your business?**
- 4. How, and to what extent, might more frequent/earlier settlement impact competition in the supply sector?**
- 5. How, and to what extent, would the abolition of late payments impact your business?**
- 6. This consultation only considers quarterly settlement – should consideration be given to monthly settlement to further reduce sums at risk?**
- 7. Are there any alternative settlement models that should be considered as a way of addressing supplier payment default? Please provide details.**
- 8. Under the Option 1c proposal, suppliers would be given the option of settling their Q1 – Q3 quarterly obligations with a standby letter of credit (LoC), conditional on them substituting it with ROCs or buy-out payments ahead of the Q4 settlement deadline. Is a LoC the most appropriate alternative to exchangeable buy-out payments, or should other measures be considered? Does a LoC offer any benefits over exchangeable buy-out payments?**
- 9. Do you agree with our assessment that a contract for the supply of ROCs does not offer sufficient assurance that a supplier's accrued obligation will be met in the event it exits the market?**
- 10. Do you agree with our assessment that the introduction of sub-100% compliance at the quarterly deadlines to accommodate shortages in the availability of ROCs would be an inappropriate course of action?**

- 11. If one of the Option 1 proposals were to be introduced, how much notice should be given to participants ahead of its introduction?**

## Questions on option 2

- 12. Should supplier payment default under the RO be addressed via the legislation, the electricity supply licence, or neither? Please explain your answer.**
- 13. How, and to what extent, might a new requirement for suppliers to protect sums at risk of mutualisation impact competition in the supply sector?**
- 14. Do you have a preference for a forward-looking or backward-looking approach to protecting sums at risk of mutualisation? Please explain your answer.**
- 15. How, and to what extent, might a new requirement for suppliers to protect sums at risk of mutualisation impact the way in which your company complies with the RO?**
- 16. Are there any other methods of demonstrating compliance with a requirement to protect sums at risk of mutualisation that should be included within the 'menu' of protections?**
- 17. How, and to what extent, might a new requirement to protect sums at risk of mutualisation impact your company's operating costs? For this question, assume that the requirement would be for an amount equivalent to 100% of a supplier's obligation to be protected, on a quarterly basis, one month after the quarter in question and remain in place until the RO settlement deadline has elapsed.**
- 18. Can you foresee any additional issues or challenges with the Option 2 proposal, in particular the menu of options, that need to be considered?**
- 19. If one of the Option 2 proposals were to be introduced, how much notice should be given to participants ahead of introduction?**

## Questions on option 3

- 20. Do you agree or disagree that supplier payment default under the RO is a matter that warrants action beyond the recent steps that have been taken to increase the mutualisation threshold, and Ofgem's supply licence reforms? Please explain your reasoning.**
- 21. What would be the costs and benefits associated with further action aimed at addressing supplier payment default under the RO?**

## Questions on impacts

- 22. How, and to what extent, might the Option 1 and 2 proposals, if implemented, increase RO compliance administration costs for your business?**
- 23. How might quarterly settlement impact the income of generators who receive ROCs on an annual basis? Please explain your reasoning and explain when and how annual ROCs are traded.**
- 24. The territorial extent of this consultation is England and Wales (i.e. it relates to matters contained within the RO only). What impacts do you foresee on participants in the interlinked Scotland and Northern Ireland schemes (i.e. the ROS and NIRO) if any of the Option 1 or Option 2 proposals were to be implemented through the RO only?**

## Questions on fixed price certificates

- 25. What are your initial views on the introduction of the fixed price certificate based scheme that was envisaged in 2011 in terms of addressing supplier payment default?**

## Next steps

The consultation is open for 3 months and closes on 9 November 2021.

The Government and Ofgem will give careful consideration to all the responses received before it publishes a decision on how to proceed.

## Annex A - How the scheme operates

### An obligation on electricity suppliers to acquire and present Renewables Obligation Certificates (ROCs)

Renewables Obligation Certificates (ROCs) are issued by Ofgem, the scheme's administrator, to generators accredited under the scheme for each MWh of renewable electricity they generate. Electricity suppliers are under an obligation ("the Renewables Obligation") to obtain a certain number of these ROCs in relation to the amount of electricity they supply to customers during each obligation year, which runs from April - March. Suppliers must present these ROCs to Ofgem to settle their obligation. The number of ROCs that suppliers must obtain in relation to their electricity supply volume (i.e. ROCs per MWh) is referred to as the level of the obligation.

Typically, suppliers agree a price with generators for their ROCs in a bilateral agreement – this enables generators to receive a premium payment in addition to the wholesale price of their electricity. Some suppliers purchase ROCs from brokers who contract with generators for the supply of ROCs. Electricity suppliers recover the costs of meeting their obligation from their customers.

### Alternative cash payments

As an alternative to obtaining ROCs, suppliers may make a cash "buy-out" payment to Ofgem in lieu of each ROC. The buy-out price, which increases annually in line with the Retail Price Index (RPI), is £50.80 for the current obligation year (2021/22). The scheme is designed in such a way that, on average, about 10% of the RO can be expected to be met with cash payments.

### The recycling of cash payments

Cash payments, net of Ofgem's administration costs, are recycled back to suppliers on a per-ROC presented basis, giving ROCs additional value. The notional value of a ROC is determined as the buy-out price plus the per-ROC recycle value. There is a working assumption that, one way or another, recycle payments are passed onto generators. For example, a ROC purchase agreement between a generator and a supplier might specify that any recycle payments received by the supplier shall be passed through, either in part or in full, to the generator. Alternatively, where there is no arrangement for recycle payments to be passed through, the expectation of recycle payments is likely to drive an increase in the price that a supplier is willing to pay for ROCs (whether this is via a bilateral purchase agreement or at auction) and this will provide the generator with a ROC premium over and above the buy-out price.

## Setting the level of the renewables obligation

As noted earlier, the obligation which the scheme places on electricity suppliers is expressed in terms of ROCs per MWh electricity supplied to customers during the obligation year. The level of the obligation is set by Government on an annual basis and published six months in advance of the start of the obligation year to which it relates. This enables suppliers to make preparations to fund meeting their obligation either with cash payments or ROCs.

The level of the obligation is set with reference to two inputs:

- the number of ROCs expected to be issued to generators during the obligation year to which it relates (sometimes referred to as the ROC forecast); and
- the amount of electricity expected to be supplied to consumers during the same period (sometimes referred to as the supply volume).

The obligation applies to all electricity which is supplied to customers during the obligation period<sup>8</sup>.

The methodology for setting the level of the obligation is provided for in legislation. It includes a “headrooming” mechanism which inflates the level of the obligation by 10%. Headrooming aims at ensuring that ROCs will remain in short supply - an oversupply of ROCs could lead to a ROC price crash which would impact generators’ returns. In contrast, a shortage of ROCs means that some suppliers will be required to meet their obligation with alternative cash-payments. These payments are recycled back to suppliers on a per-ROC presented basis, increasing their notional value. Whilst the head-rooming mechanism protects the incomes of generators, it does so at a cost of around £600m per year.

---

<sup>8</sup> Some allowances are available for electricity supplied to energy intensive industries (EIIs).

## Annex B – RO settlement

### Supplier compliance

Once the obligation year has ended (31st March), suppliers have until 1st September to settle their obligation with ROCs and/or buy-out payments. Suppliers are given a further two months to settle their obligation with permitted “late payments”, but these attract interest charges which are levied at 5% above the Bank of England base rate. Suppliers may not present ROCs during the late payment period, meaning that if a supplier has not settled its obligation by the 31st October annual deadline, its default is expressed in monetary terms. Annex D illustrates the scheme’s timelines.

The 5-month delay between the end of the obligation year and the 1st September deadline for presenting ROCs and/or making buy-out payments provides time for a number of activities to be undertaken. It enables:

- the last of that year’s ROCs to be issued (they are typically issued about 2.5 months after the month to which they relate, although a small percentage are usually issued later);
- electricity supply volumes to be provided to Ofgem;
- suppliers’ individual obligations to be confirmed by Ofgem;
- ROCs to be traded and transferred; and
- compliance activities to be completed via Ofgem’s online Renewables and CHP register.

The late payment period, which runs until 31st October, was introduced into the scheme so that suppliers could avoid becoming non-compliant if they failed to meet the earlier deadline.

### The risk of unsecured credit

The scheme’s annual obligation period and deferred settlement deadlines work to minimise volatility in the ROC market, i.e. they ensure that seasonality and intermittency in the supply of ROCs (e.g. caused by weather events) do not have short-term impacts on ROC prices. However, there is no requirement in either the legislation or the electricity supply licence for suppliers to protect their accruing obligation against the risk of default. As a result, these settlement arrangements mean that suppliers are able to accrue, and then default on up to 19 months’ worth of obligation.

This creates a “moral hazard” as the revenues which suppliers collect from their customers (for whatever purpose) can be considered to be an interest-free and unsecured source of working capital. Indeed, these arrangements could even tempt suppliers into pursuing riskier business practices than they otherwise might. The only absolute requirement insofar as revenues are

concerned is that suppliers must fulfil their obligation on or before the scheme's 31<sup>st</sup> October late payment deadline.

Inevitably, some suppliers will fail and exit the market, and when they do a shortfall is left in the buy-out/late payment funds. The diagram in Annex D shows that a supplier which fails to fulfil its obligation on 31<sup>st</sup> October will have accrued 19-months' worth of unmet obligation – i.e. 12 months from one obligation year, plus 7 months from the next – with the entire obligation (and potentially more if the supplier continues to trade) likely to remain unsettled.

As is described in more detail in Annex C, the scheme features a mutualisation mechanism which seeks to limit the impact that supplier payment default can have on the buy-out fund, and therefore on the value of ROCs (since payment default results in lower recycle payments). In general, it works to the advantage of generators by transferring the risk of supplier payment default to other suppliers. But the absence of any requirement for suppliers to protect sums at risk of mutualisation ahead of settlement means that the equity holders or creditors of the defaulting supplier avoid any such risk.

Nevertheless, it should also be noted that the interest free credit which the RO provides to suppliers ahead of RO settlement has a monetary value since it means they can avoid the costs of borrowing which they might otherwise be exposed to. This lowers their operating costs. This value should be considered alongside the costs associated with supplier payment default.

## Annex C - Supplier default & mutualisation

### The mutualisation mechanism

As noted earlier, when suppliers fail to discharge their obligation, a shortfall is left in the buy-out/late payment funds, and suppliers who met their obligation with ROCs will receive less in recycle payments than would otherwise have been the case. This will have a cost impact on those suppliers who met their obligation with ROCs but who do not have a pass-through arrangement with a generator – it is likely therefore that such suppliers will factor this recycle-risk into the price they are willing to pay for ROCs. A shortfall will also impact those generators who were expecting to receive pass-through payments from suppliers.

To prevent excessive shortfalls in recycle payments from occurring, the scheme features a mutualisation mechanism which requires suppliers who fulfilled their obligation in part or in full to pay the unmet obligations of those suppliers who failed to fulfil theirs. Mutualisation is triggered when the shortfall is equal to or in excess of a threshold – if the shortfall is less than the threshold, it remains unrecovered. Until 2020/21 the mutualisation threshold was set at £15.4m, but Government recently updated mutualisation arrangements so that in future the threshold will be calculated annually as 1% of scheme costs. Further details are provided in a later section.

Once mutualisation has been triggered, the entire shortfall, up to a maximum of nearly £306m for 2021/22 (England and Wales) is mutualised. Each supplier's contribution is based on its share of the obligation during the obligation year to which the shortfall relates. The first of four quarterly payments is due before 1st September the following year. Payments received from mutualisation are recycled back to suppliers in the same way as buy-out and late payments, i.e. on a per-ROC presented basis.

### Recent mutualisation events

The failure of 12 suppliers to meet their obligation under the RO meant that mutualisation was triggered for the first time in 2017/18 when the shortfall in the England & Wales buy-out/late payment funds was £53.4m. It was triggered again in 2018/19 (21 suppliers, £88.1m) and again in 2019/20 (13 suppliers, £31.4m).

On each of these occasions, the full shortfall was mutualised because it exceeded the £15.4m threshold that was in place at the time. Once mutualisation payments have been made, they are recycled back to suppliers on a per-ROC presented basis. Table 4, row 5 shows the mutualisation recycle value for 2017/18, 2018/19 and 2019/20 (which assumes that the full mutualisation amount is recovered and recycled). Row 6 shows this as a proportion of the notional ROC value.

**Table 4: Significance of RO mutualisation in relation to other scheme metrics**

	2017/18	2018/19	2019/20
<b>Nominal UK scheme cost (total obligation x buy-out price)</b>	£5.37 billion	£6.03 billion	£6.35 billion
<b>Buy-out price per ROC</b>	£45.58	£47.22	£48.78
<b>Buy-out/late payment fund recycle value per ROC</b>	£5.85	£7.82	£5.65
<b>Notional ROC value</b>	£51.43	£55.04	£54.43
<b>E&amp;W mutualisation recycle value, per ROC</b>	£0.52	£0.82	£0.27
<b>Mutualisation recycle value as fraction of notional ROC value</b>	1.0%	1.5%	0.5%

## Causes of mutualisation

As noted earlier, mutualisation under the RO occurs when the shortfall in the buy-out/late payment funds exceeds a threshold. Whilst mutualisation occurred in each of the last three obligation years, it did not occur in any of the previous years since the mutualisation mechanism was introduced into the scheme in 2005/06.

In addition to those features of the scheme which enable suppliers to default on significant levels of unsecured obligation (i.e. the single annual settlement which follows on several months after the 12-month period to which it relates), two other factors appear to have contributed to this recent emergence. These are summarised below.

### The erosion of the mutualisation threshold in proportionate terms

Since mutualisation was first introduced into the scheme in 2005/06, the mutualisation threshold, expressed as a fraction of the cost of the scheme, has fallen from about 1% to about 0.25%. This fall has been largely due to scheme growth, and a threshold that has failed to keep pace, meaning that it has become increasingly easy for mutualisation to be triggered. Government recently legislated to address this as detailed in a following section.

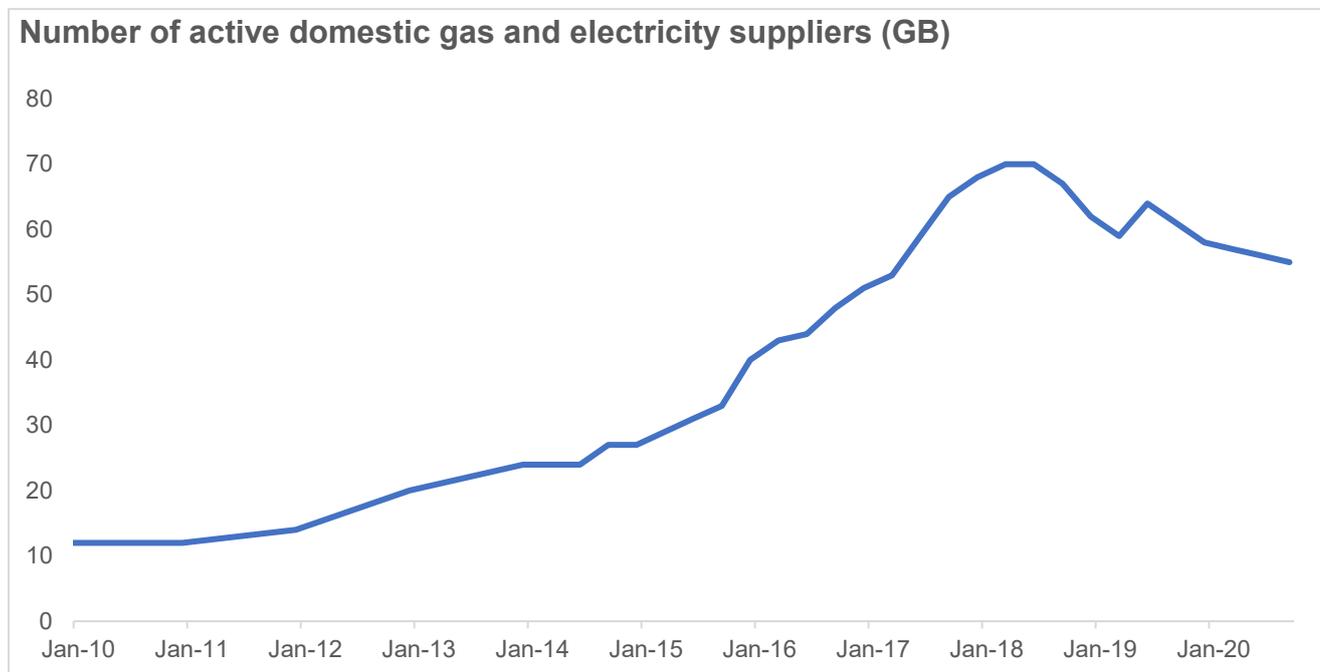
### Increase in supplier failure and market exit

The Energy Retail market has become increasingly dynamic and competitive in recent years, with a large number of new entrants providing a greater variety of consumer offerings and business models. This has brought increased choice for consumers and increased the extent to which suppliers must compete to serve customers in both price and quality of service. At the

same time however, increased competition in the market means that not all suppliers and business models can survive, and in recent years several suppliers have exited the market, including through insolvency.

As illustrated in Figure 3, Ofgem have reported<sup>9</sup> that the number of active suppliers in the domestic (residential) market grew from 12 at the end of 2009 to 70 in mid-2018, but has since fallen back to 55, as of September 2020. There were 30 supplier exits in the domestic (residential) gas and electricity retail market between 2016 and September 2020 – this includes suppliers which have exited the market through trade sales, mergers and insolvencies.

**Figure 3: Number of active suppliers in the domestic retail market, 2010-2020.** (A description of the figure is given in the text above)



In this context, the recent instances of supplier payment default under the RO have typically been associated with the supplier insolvency, both before and after RO payment default took place.

When a supplier fails, Ofgem may use the Supplier of Last Resort (SoLR) procedure to appoint a new supplier to take over the supply of gas and/or electricity to the insolvent supplier's customers. However, a number of the failed supplier's liabilities are not covered by the SoLR process and may need to be mutualised across other suppliers. This includes any outstanding obligations under the RO, and also any consumer credit balances and liabilities linked to other government schemes, such as the Energy Company Obligation (ECO). While other suppliers

<sup>9</sup> Taken from:

<https://www.ofgem.gov.uk/data-portal/retail-market-indicators#thumbchart-c23042756505310535-n95432>

that remain active in the market face the direct cost of mutualisation, the redistribution of all these costs across the market may have implications for consumer prices.

## Action taken to date on supplier default

### BEIS – updating mutualisation arrangements

The relative-terms fall in the mutualisation threshold from 1% of scheme cost in 2005/06 to 0.25% of scheme cost in 2020/21 represented a gradual and unintended tilting of the balance of risk associated with supplier payment default away from generators and towards suppliers. Government recognised this and legislated in early 2021 to restore the threshold in the England and Wales scheme back to the 2005/06 level (in relative terms)<sup>10</sup>. From 2021/22, the threshold will be determined annually as 1% of the cost of the scheme to suppliers. In real terms, this increases the threshold for 2021/22 from its previous level of £15.4m to £63.7m. But the threshold will rise and fall in future years as the cost of the scheme changes.

Alongside its consultation on the mutualisation threshold, Government also issued a call for evidence on whether it should limit the mutualisation amount to the sum in excess of the mutualisation threshold only, subject to an additional administrative threshold being exceeded. As noted earlier, Government is still considering how it should proceed on this front.

### Ofgem - supplier licensing review

Ofgem recently carried out a review (the Supplier Licensing Review – “SLR”) of electricity supplier licensing arrangements, with a particular focus on ongoing requirements and exit arrangements. In November 2020, it published its decision to introduce a package of measures to improve supplier standards of financial resilience and customer service<sup>11</sup>. This followed extensive stakeholder engagement over two years. The majority of the new licence conditions licence changes took effect on and from 22 January 2021<sup>12</sup>.

These reforms are part of a move to improve customer service standards and minimise the likelihood and impact of disorderly supplier failure. The measures are designed to (i) promote more responsible risk management, (ii) improve governance and increase accountability, and (iii) enhance market oversight. These changes build upon the enhanced entry requirements introduced in July 2019<sup>13</sup>.

The measures work together as a package to drive up standards across the energy retail sector. The changes are designed to strengthen the regulatory regime, drive up standards

---

<sup>10</sup> Renewables obligation: changes to mutualisation arrangements. February 2021.

<https://www.gov.uk/government/consultations/renewables-obligation-changes-to-mutualisation-arrangements>

<sup>11</sup> Decision on the Supplier Licensing Review: Ongoing requirements and exit arrangements. November 2020.

<https://www.ofgem.gov.uk/publications-and-updates/decision-supplier-licensing-review-ongoing-requirements-and-exit-arrangements>

<sup>12</sup> The only exception is the Customer Supply Continuity Plans requirement, which took effect on 18 March 2021.

<sup>13</sup> Supplier Licensing Review: Final Proposals on Entry Requirements. April 2019.

<https://www.ofgem.gov.uk/publications-and-updates/supplier-licensing-review-final-proposals-entry-requirements>

among energy suppliers and minimise industry and consumer exposure to financial risks and poor customer service.

### **Promoting more responsible risk management**

The Financial Responsibility Principle (FRP) introduced under the package is a new principles-based requirement for suppliers to make sure that they are managing their finances effectively and actively managing the risk of leaving costs to be mutualised in the event of their failure. The principle is complemented by the introduction of Milestone and Dynamic Assessments. These are new checkpoints for suppliers, determined by customer numbers and financial and compliance indicators, at which Ofgem will scrutinise suppliers' readiness for growth and ability to meet their regulatory obligations, including in relation to the RO. Ofgem will also be able to request an independent audit of suppliers' financial position and/or customer service systems and processes. There are a number of other elements, for example, the Operational Principle and the Open and Co-operative Principle that further strengthen the requirements on suppliers to manage their businesses effectively.

### **Planned activity**

The FRP, introduced as part of the SLR, will act as an over-arching obligation ensuring suppliers act in a more financially responsible manner and begin to take steps to bear an appropriate share of their risk.

However, it may not, by itself, provide sufficient certainty that suppliers have in place appropriate protections to prevent the need for mutualisation in the event of their failure. It is therefore important to explore the case for introducing binding conditions to further reduce the likelihood and scale of mutualisation.

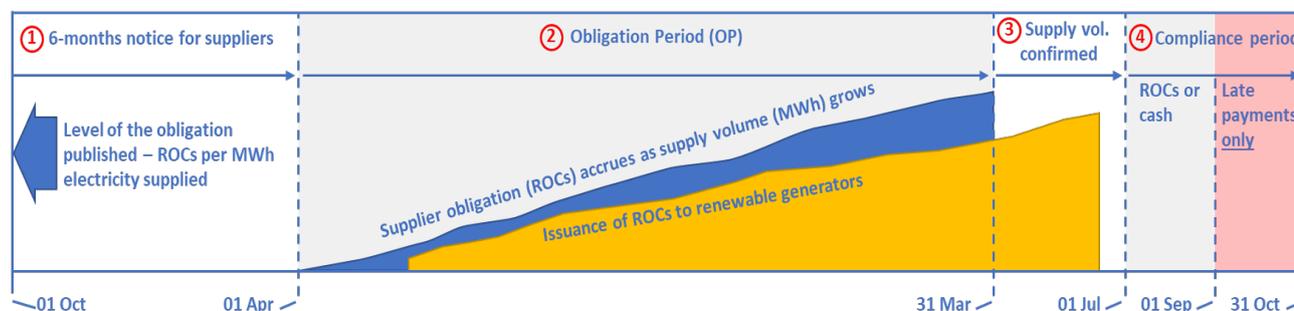
In addition to the options being explored in this consultation, Ofgem is separately consulting on whether further prescriptive cost mutualisation protections in relation to credit balances are appropriate. The consultation is exploring whether further changes to the supply licences are required to minimise the risk and level of mutualisation of the costs of protecting customer credit balances when a supplier fails<sup>14</sup>.

---

<sup>14</sup> Supplier Licensing Review: reducing credit balance mutualisation. March 2021.  
<https://www.ofgem.gov.uk/publications-and-updates/supplier-licensing-review-reducing-credit-balance-mutualisation>

## Annex D - RO timeline and key activities

**Figure 4: RO timeline and key activities.** (A description of the figure is given in the text below).



① Government sets the level of the RO – expressed as ROCs per MWh of electricity supplied – for the forthcoming obligation year. The level-setting deadline is the preceding 1<sup>st</sup> October. This informs suppliers how many ROCs, or cash-payments, they will need to present to Ofgem in relation to each MWh of electricity they supply to customers during the obligation year. It provides them with an opportunity to adjust their tariffs to accommodate their anticipated RO compliance costs.

② The obligation year runs from 1<sup>st</sup> April – 31<sup>st</sup> March. During this period, each supplier's obligation accrues as its electricity supply volume grows (blue shading). Typically, suppliers will collect revenues from their customers in line with their growing obligation – this enables them to fund the fulfilment of their obligation, either through the purchase of ROCs or by making cash-payments.

Meanwhile, RO accredited generators submit output data to Ofgem on a monthly basis. Ofgem then issues generators with ROCs - for free - on a per MWh basis (orange shading). There is around a 2.5 month lag between the end of month of generation and the issuance of ROCs (micro-generators may choose to receive ROCs on an annual basis). Suppliers may choose to purchase ROCs at any point in the year, or not at all.

Ordinarily, and as shown in the diagram, the supply of ROCs falls short of demand. The scheme is purposely designed so that this will nearly always be the case. This arrangement forces some suppliers to make alternative cash payments. This means that ROCs submitted in fulfilment of a supplier's obligation will attract premium payments as a result of the scheme's cash fund recycle mechanism. This gives ROCs added value (over and above the buy-out price) which ensures they will remain in demand.

③ Suppliers confirm their electricity supply volume (MWh) to Ofgem for the obligation year by 1<sup>st</sup> July. This enables their obligations, in absolute terms (ROCs), to be confirmed by Ofgem. The last batch of ROCs for the obligation year are issued in mid-June. Suppliers may continue to purchase ROCs should they choose to.

④ Suppliers discharge their obligation by making cash “buy-out payments” (31<sup>st</sup> August deadline) and/or redeeming ROCs (1<sup>st</sup> September deadline) with Ofgem. “Late payments” are permitted until 31<sup>st</sup> October, but these attract interest charges which are levied at a rate of 5% above Bank of England base rate, calculated daily. Cash payments are then recycled back to suppliers who met their obligation with ROCs, on a per-ROC basis, within 2 months of the two deadlines (not shown in Figure 4).

---

This consultation is available from: <https://www.gov.uk/government/consultations/renewables-obligation-ro-addressing-electricity-supplier-payment-default-under-the-ro-scheme>

If you need a version of this document in a more accessible format, please email [enquiries@beis.gov.uk](mailto:enquiries@beis.gov.uk). Please tell us what format you need. It will help us if you say what assistive technology you use.