Department for
Business, Energy
& Industrial Strategy

CONTRACT FOR THE PROVISION OF PS21066 GENERATTION COSTS FOR EXTENSION AND REPOWERING OF RENEWABLE ENERGY PROJECTS TO THE DEPARTMENT FOR BUSINESS, ENERGY AND INDUSTRIAL STRATEGY

Purchase Order Number: To follow

DUNS Number: [redacted]

This Contract is dated 10th September 2021 and is made between:-

1. **The Secretary of State for Business, Energy and Industrial Strategy [("the Authority")]** of 1 Victoria Street, London SW1H 0ET, acting as part of the Crown;

   and

2. **Ove Arup and Partners Limited** (the "Contractor") whose registered office is at 8 Fitzroy Street, London,W1T 4BQ

INTRODUCTION

(A) On 22nd June 2021 the Authority issued an invitation to tender for the provision of Generation costs for extensions and repowering of renewable energy projects this including the specification a copy of which is set out in Schedule 1 (the "Specification").

(B) In response the Contractor submitted a proposal dated 13th July 2021 explaining how it would provide the services a copy of which is set out in Schedule 2 (the "Proposal").

The parties agree as follows:-

1. SUPPLY OF SERVICES AND PRICE

In consideration of payment by the Authority to the Contractor of the sum of £61,963.00 exclusive of Value Added Tax) (the "Contract Price") and in accordance with (a) the Specification; (b) the Proposal; and (c) the Authority's Standard Terms and Conditions of Contract for Supplies/Services (the "Standard Terms" (a copy of which were issued by the Authority with the Invitation to Tender and are attached at Schedule 3); the Contractor shall provide the Services described in the Specification and the Proposal to the Authority.

2. COMMENCEMENT AND CONTINUATION

This contract shall commence on 10th September 2021 and subject to any provisions for earlier termination contained in the Standard Terms shall end on 31st January 2022.

3. TERMS AND CONDITIONS

3.1 The Standard Terms shall form part of this Contract.

3.2 The Contractor's Standard Terms and Conditions of business shall not apply to this Contract.

3.3 This Contract is formed of these clauses and the Schedules hereto. Any other attachments are provided for information purposes only and are not intended to be legally binding. In the event of any conflict or inconsistency, the documents prevail in the following order:

a) these clauses
b) the Standard Terms
c) the Specification
d) and finally, the Proposal

Clause 18(7) Indemnities and Insurance
"The amount of liability under this clause 18(7) is [redacted]".

4. CONTRACTOR'S OBLIGATIONS

4.1 Where the Contractor is supplying goods to the Authority these shall be delivered to the Authority in full compliance with the Specification and shall be of satisfactory quality and fit for purpose. Where the Contractor is performing services for the Authority it shall do so in accordance with the Specification and exercise reasonable skill and care.

5. MANAGEMENT AND COMMUNICATIONS

5.1 The Contractor shall deliver the Services under the direction of the Authority.

5.2 Any direction by the Authority may be given by [redacted] (the "Contract Manager") who is an officer in [redacted], 1 Victoria Street, SW1H 0ET or such other person as is notified by the Authority to the Contractor in writing.

5.3 The Contractor appoints [redacted] Ove Arup and Partners Limited, 8 Fitzroy Street, London,W1T 4BQ to be the Contractor's first point of contact for this Contract. All queries to the

Contractor from the Authority's Contract Manager shall initially be addressed to the Contractor's first point of contact.

5.4 The Contractor's first point of contact and the Contract Manager shall meet as often as either the Contractor or the Authority may require to review the Contractor's performance of the Contract.

6. INVOICES AND PAYMENT

6.1 Subject to the Contractor providing the Services to the Authority in accordance with this Contract and submitting invoice/s to the Contract Manager in the manner reasonably required by the Contract Manager payment will be made by the Authority to the Contractor in accordance with (as referred to in Condition 11 of the Standard Terms & Conditions).

Contract price is payable according to the following schedule:
50% on receipt of the draft report and 50% on receipt of the final report.

7. TRANSPARENCY

7.1 The Authority is required to publish information about this contract within the Official Journal of the European Union and through the Governments Transparency website, Contracts Finder.

The Authority's decision not to publish full details of the contract does not however preclude it publishing such information in the future (subject to applicable redactions)and the Authority may be required to disclose such information under the Freedom of Information Act 2000, the Environmental Information Regulations 2004 (EIR) or other legal requirement. In such cases, the Authority would need to consider disclosure in the context of the particular circumstances of the request or requirement concerned.

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Signed by the parties' duly authorised representatives:-

For the Secretary of State for Business, Energy and Industrial Strategy

Signature:

Print Name: [redacted]

Job Title: [redacted]

Date: 07/09/2021

For the Contractor

Signature: ……[redacted]…….

Print Name: [redacted]…….

Job Title: [redacted]…….

Date: 15 September 2021

The following Schedules form part of this Contract:

Schedule 1	The Authority's Specification
Schedule 2	The Contractor's Proposal
Schedule 3	the Authority's Standard Terms & Conditions of Contract for Supplies/Services
Schedule 4	Data Processing

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Schedule 1 - The Authority's Specification

Background

The UK's new 2050 net zero emissions target means that we will continue to require substantial amounts of new, low carbon power sources to be built before 2050. This increased deployment will require developing new sites, but is likely to also involve the extension and repowering of existing sites in the UK. The government's main mechanism to support the deployment of large-scale renewable projects is the Contracts for Difference (CfD) scheme. Given the likely increase in the number of extensions and repowering projects expected to come forward, BEIS is considering reviewing their treatment of these types of projects within the CfD scheme, and the role of these types of project in the wider context of net zero.

Currently, developers seeking to extend existing projects (adding further capacity) can apply for a CfD in the same way as those developing new sites. It is possible these extension projects may come at a lower cost when compared to new sites, due to shared operation and maintenance approaches with the original project and, in some cases, might also benefit from existing infrastructure such as sharing transmission links. For projects seeking to repower at the end of their initial lifetime, eligibility to bid for a CfD is more complicated. Repowering projects may also face lower costs than new sites due to existing infrastructure and improved site knowledge. Therefore, in order to ensure the CfD provides appropriate levels of support we are seeking to improve our cost assumptions for these types of projects.

More broadly, the evidence gathered through this research will improve our understanding of the potential for these types of project to deploy on a merchant-only basis (e.g. without subsidy), and their contribution to achieving net zero.

This research project should determine a suitable and robust definition of 'extension projects' and 'repowering projects' for use in the CfD scheme and should distinguish these projects from greenfield (new) sites The successful applicant should set out the characteristics, costs and risk profiles associated with each project type (greenfield, extension, repowered).
The outputs of the work will be used to inform whether, and if so how, these types of project could be supported through CfDs or any other government mechanism.

The research project should develop a robust definition of extension and repowering low-carbon electricity generation projects, as well as developing an evidence base and modelling tools for estimating the generation costs associated with these types of projects and how they differ from developing and operating new sites. This will provide a robust basis for future policy decisions on how to treat these types of projects in low-carbon electricity generation schemes such as the Contracts for Difference (CfD) scheme to ensure appropriate support and value for money for consumers, as well as improving the department's evidence base for renewable electricity pathways to net zero and associated costs.
The aim of this study is to improve the evidence base for estimating generation costs of low-carbon electricity generation projects, specifically extension and repowering projects as compared to developing and operating new sites. It has four main objectives:

i. To deliver robust characterisation and technical definition of what constitutes low-carbon extension and repowering projects.

ii. To deliver evidence-based cost estimates for extension and repowering projects relative to new sites, for eligible low-carbon electricity generation technologies.

iii. To identify and explore how the key cost components for extension and repowering projects differ by technology, size and geographical aspects.

iv. To develop a methodology to estimate the generation costs for extension and repowering projects for low-carbon electricity generation technologies.

Specifically, the research questions are as follows:

RQ1: How should extension and repowering projects be defined for low-carbon electricity generation technologies?
The successful bidder will consider the following:

- What are the key characteristics of these projects which differentiate them from new sites?
- How does this differ across renewable technology types?

RQ2: How do the generation costs for extension and repowering projects differ from those for new sites?

- What evidence is there to suggest the generation costs of extension and repowering projects are different to those of new sites?
- What are the key components of costs which we would expect to differ for extension and repowering projects?
- What are the key characteristics of extension and repowering projects which significantly affect their costs relative to new sites?
- Which technologies are most likely to carry out extension and repowering projects?
- How do the cost components change across technologies and locations?
- Which infrastructure components would be re-used in extension/repowered sites and which components would be replaced and why? (i.e. turbines/cabling/other components).
- Is there expected to be any other differences in extension and repowering projects which may emerge as they become more widespread?

RQ3: How can we estimate the cost of extension and repowering projects for low-carbon electricity generation technologies?
The successful bidder will be provided access to the BEIS Levelised Cost Model in order to inform their work in this section.

- How can we adapt the current BEIS generation cost modelling methodology to estimate the costs of extension and repowering projects?
- How will the costs of extension and repowering projects change over time (i.e. learning rates) and how can we estimate this?
- What data sources can we use, and what assumptions can we make for different cost components?

The project should primarily focus on offshore and onshore wind, but will also cover solar PV and at least one fuelled technology
As part of the competitive tender, we are encouraging applicants to propose their suggested methodology and outline how it would be used to answer the research questions. This should include the following steps:

1. **Familiarisation:** Review of BEIS' current definitions of extension and repowering projects and generation cost modelling methodology.

2. **Desk-based study:** Literature review (analysis of literature from academic, grey, and industry sources) to establish available data sources.

3. **Stakeholder engagement:** Expert opinion/interviews to gain insight into how costs of extension and repowering projects differ from new sites across technologies, from developers, suppliers, and other industry professionals (we would anticipate that the contractor will test their modelled estimates with these stakeholders). We would suggest that in order to obtain a suitable mix of views across a diverse range of stakeholders, at least 15 stakeholders should be contacted.

4. **Analysis:** Analysis of data from stakeholder engagement plus any existing data

5. **Modelling:** Development of tools to allow BEIS to estimate the cost of extension and repowering projects across low-carbon electricity generation technologies.

6. **Reporting:** Writing of a report documenting the findings of the research project and recommendations to the research questions. This should include literature review, approach to analysis, findings and implications.

The successful applicant will be required to work with BEIS flexibly and to accommodate changing requirements if and when they arise.
The deliverables that we expect are as follows:

- Periodic updates throughout the project and regular correspondence with BEIS to ensure that the project is on track
- Interim/draft report (including draft literature review)
- Final report (suitable for publication), including reviewed definitions of extension and repowering projects
- Assumptions log (including any model/methodological assumptions)
- Detailed cost assessment/spreadsheet model – this should allow BEIS to estimate the generation costs and levelised costs of electricity for extension and repowering of low-carbon energy projects, as compared to those for new sites. Cost estimates should be produced for onshore wind, offshore wind, solar PV and at least one fuelled technology. All underlying spreadsheets/models should be provided to BEIS.
- Suggested methodology note – this note should qualitatively explain the process for determining the costs of repowering and extension projects and should allow BEIS to apply it to all technologies.

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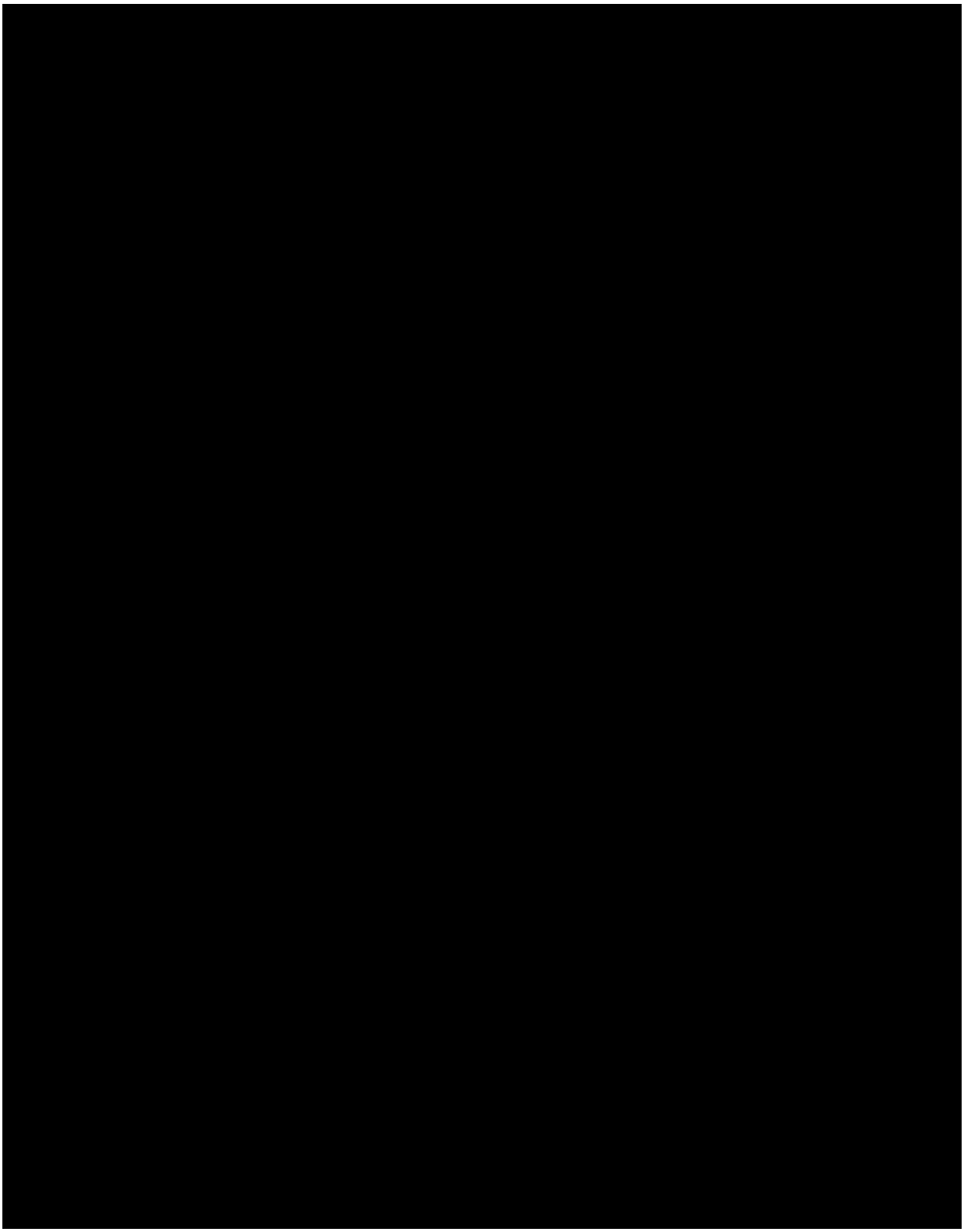
Schedule 2 - The Contractor's Proposal

Ove Arup and Partners Limited.



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Schedule 3 - The Authority's Standard Terms & Conditions of Contract for Supplies/Services

DPF31 Terms and
Conditions for Service

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Schedule 4 - Data Processing

PS21066 Generation costs for extensions and repowering of renewable energy projects

Annex A - Data Protection

The Contractor will be compliant with the Data Protection Legislation, as defined in the terms and conditions applying to this Invitation to Tender. A guide to The UK General Data Protection Regulation (UK GDPR) published by the Information Commissioner's Office can be found here.

The only processing that the Contractor is authorised to do is listed in Annex 1 to this section by BEIS, "the Authority" and may not be determined by the Contractor.

Processing, Personal Data and Data Subjects

(1) The contact details of the Authority's Data Protection Officer are:

BEIS Data Protection Officer
Department for Business, Energy and Industrial Strategy
1 Victoria Street
London
SW1H 0ET

Email: [redacted]

(2) The contact details of the Contractor's Data Protection Officer are: [redacted]

(3) The Contractor shall comply with any further written instructions with respect to processing by the Authority.

(4) Any such further instructions shall be incorporated into this Annex 1.

Description	Details
Subject matter of the processing	Generation costs for extensions and repowering of renewable energy projects. The processing of names and business contact details of staff of both Contracting Authority and Contractor will be necessary to deliver the services exchanged during the course of the

	Contract, and to undertake Contract and performance management. The Contract itself will include the names and business contact details of staff of both the Contracting Authority and the Contractor involved in managing the Contract.
Duration of the processing	Processing will take place from 10th September 2021 and will end on 31 January 2022.
Nature and purposes of the processing	As part of the project, the contractor will be required to undertake a stakeholder engagement exercise, sourcing various types of information from different types of stakeholders, such as cost component data. It is not expected that any personal data should be involved (apart from the names of employees in some circumstances), but the contractor is expected to comply with all relevant data protection legislation throughout the process. The nature of processing will include the storage and use of names and business contact details of staff of both the Contracting Authority and the Supplier as necessary to deliver the services and to undertake the Contract and performance management. The Contract itself will include the names and business contact details of staff of both the Contracting Authority and the Supplier involved in managing the Contract.
Type of Personal Data	Name, email addresses and other contact details for stakeholders contacted as part of the project. Names, business telephone numbers and email addresses, office location and position of staff of both the Contracting Authority and the Supplier as necessary to deliver the services and to undertake the Contract and performance management. The Contract itself will include the names and business contact details of staff of both the Contracting Authority and the Supplier involved in managing the Contract.

Categories of Data Subject	Stakeholders contacted as part of the project by the contractor. Staff of the Authority and the Contractor, including where those employees are named within the Contract itself or involved within contract management.
Plan for return and destruction of the data once the processing is complete	The Contractor will provide the Authority with a complete and uncorrupted version of the Personal Data in electronic form (or such other format as reasonably required by the Authority) and erase from any computers, storage devices and storage media that are to be retained by the Contractor after the expiry of the Contract. The Contractor will certify to the Authority that it has completed such deletion. Where Personal Data is contained within the Contract documentation, this will be retained in line with the Department's privacy notice found within the Procurement Documents.

Where the Contractor is required to collect any Personal Data on behalf of the Authority, it shall ensure that it provides the data subjects from whom the Personal Data are collected with a privacy notice