

Ⓔ

CARBON DIOXIDE APPRAISAL
AND STORAGE LICENCE CS028

ENERGY ACT 2008

SECTION 18

CARBON DIOXIDE APPRAISAL AND STORAGE LICENCE

THE OIL AND GAS AUTHORITY

AND

SHELL U.K. LIMITED

ESSO EXPLORATION AND PRODUCTION UK LIMITED

LICENCE

in respect of exploration of a controlled place with a view to selecting a site for
the storage of carbon dioxide.

This licence, made **04 SEPTEMBER 2023**
 between the Oil and Gas Authority, of the one part and the company listed in
 Part 1 of Schedule 1 of the other part witnesses as follows: -

Interpretation etc.

1.—(1) In this licence, the following expressions have the following meanings—

“the Act” means the Energy Act 2008;

“controlled place” has the meaning given to it in s.17(3), s.17(3A)(b) and s.17(4)(b) of the Act;

“Appraisal Term” means (subject to clause 6 (*Extension of Appraisal Term*) and clause 8 (*Termination of Licence*)) the period specified as such in Part 2 of Schedule 1;

“Half Year” means the period from 1st January to 30th June in any year and the period from 1st July to 31st December in any year;

“injection” means the injection of carbon dioxide streams into the storage site;

“Licensed Area” has the meaning given to it in clause 3;

“the Licensee” means the person (or all the persons) specified in Part 1 of Schedule 1 as licence holder (or joint licence holders);

“the OGA” means the Oil and Gas Authority;

“Operational Term” has the meaning given by clause 7(1) (*Operational Term and Post-Closure Period*);

“Storage Operator” means the single Licensee named as the operator in a Storage Permit;

“Petroleum” includes any mineral oil or relative hydrocarbon and natural gas existing in its natural condition in strata but does not include coal or bituminous shales or other stratified deposits from which oil can be extracted by destructive distillation;

“Post-Closure Period” has the meaning given by clause 7(2) (*Operational Term and Post-Closure Period*);

“the Regulations” means the Storage of Carbon Dioxide (Licensing etc.) Regulations 2010;¹

“Start Date” means the date specified as such in Part 2 of Schedule 1;

“Storage Permit” means a permit granted in accordance with clause 9 (*Application for a storage permit*);

“the Termination Regulations” means the Storage of Carbon Dioxide (Termination of Licences) Regulations 2011;²

“Work Programme” means the programme specified in Schedule 4.

¹ SI 2010/2221

² SI 2011/1483

“Well” includes borehole.

(2) Any reference in this licence to a numbered regulation is to that regulation of the Regulations.

(3) Any expression used in this licence which is defined in regulation 1 or in the Act and not otherwise defined in this clause has the meaning given by that regulation or by the Act.

(4) Any reference in this licence to a clause or Schedule is a reference to a clause of, or Schedule to, this licence; and any reference in a clause to a paragraph is to a paragraph of that clause.

(5) Any obligations which are to be observed and performed by the Licensee shall at any time at which the Licensee is more than one person be joint and several obligations.

Grant of licence

2.—(1) In consideration of the performance by the Licensee of all the terms and conditions hereof, the OGA, in exercise of the powers conferred upon it by the Act, hereby grants to the Licensee exclusive licence during the continuance of this licence and subject to the provisions hereof—

- (a) to explore the Licensed Area in accordance with clause 5 (*Appraisal and storage activities*); and
- (b) if the Licensee is granted a Storage Permit in respect of a storage site within the Licensed Area, and subject to the terms and conditions of that permit, to store carbon dioxide in accordance with clause 5(2); and
- (c) to establish and maintain installations for these purposes.

Licensed Area

3.—(1) The Licensed Area is the area for the time being in which the Licensee may exercise the rights granted by this licence and is, subject to paragraph (2), the area and, where applicable, the volume the co-ordinates and details of which are set out in Schedule 2.

(2) Where a storage permit is granted under this licence, on the grant of the storage permit the Licensed Area shall be as set out in clause 9.

Term of Licence

4.—(1) This licence shall commence on the later of

- (a) the Start Date; and
- (b) the date on which this licence is granted.

(2) Unless sooner determined or revoked under any of its provisions, this licence shall continue—

- (a) for the Appraisal Term;
- (b) for the Operational Term; and
- (c) for the Post-Closure Period.

Appraisal and storage activities

5.—(1) During the Appraisal Term, subject to the terms and conditions of this licence, the Licensee may, subject to the provisions of clause 12, carry on the following activities—

- (a) exploration (including test injection of carbon dioxide) within the Licensed Area with a view to, or in connection with, the carrying on of activities within section 17(2)(a) or (b) of the Act; and
- (b) the establishment or maintenance of installations for the purposes of such exploration.

(2) During the Operational Term and the Post-Closure Period, subject to the terms and conditions of this licence and of any Storage Permit granted under it, the Licensee may carry on the following activities—

- (a) storage of carbon dioxide (with a view to its permanent disposal) within section 17(2)(a) or (b) of the Act (including any ancillary monitoring);
- (b) exploration within the Licensed Area with a view to the carrying on of activities within section 17(2)(a) or (b) of the Act; and
- (c) the establishment or maintenance of installations for those purposes.

Extension of Appraisal Term

6.—(1) At any time not later than three months before the expiry of the Appraisal Term, or such shorter notice period as the OGA may in its discretion permit, the Licensee may, subject to performance of the terms and conditions contained in this licence, give notice in writing to the OGA that it desires that term to be extended for a further period.

(2) Where notice is given in pursuance of paragraph (1) of this clause, the OGA may in its discretion direct in writing that the Appraisal Term be extended for a period and subject to such conditions as the OGA may determine, and paragraph (1) shall apply to the Appraisal Term as so extended.

(3) Where the Appraisal Term is extended under this clause, clause 4 (*Term of Licence*) shall apply in respect of that term as so extended.

Operational Term and Post-Closure Period

7.—(1) The Operational Term shall be the period beginning with the date on which the Storage Permit is granted and ending with the closure of the storage site.

(2) The Post-Closure Period shall be the period beginning with the closure of the storage site, and continuing until this licence is terminated pursuant to the Termination Regulations.

Termination of Licence

8.—(1) The Licensee may determine this licence or, with respect to clause 8(1)(a) only, surrender any part of the Licensed Area by giving to the OGA not less than one month's notice in writing to that effect—

- (a) before the expiry of the Appraisal Term; or
- (b) before the expiry of the Operational Term, but before the commencement of injection,

and such notice shall specify the date, no later than the expiry of the Appraisal Term or the commencement of injection as applicable, on which the determination or surrender (where applicable) shall take effect.

(2) Such determination or surrender (where applicable) shall be without prejudice to any obligation imposed upon, or liability incurred by, the Licensee under the terms and conditions of this licence.

Application for a storage permit

9.—(1) An application for a storage permit may be made, in accordance with the Regulations, in respect of a storage site situated in the Licensed Area ('Storage Permit').

(2) If a Storage Permit is granted:

- (a) it shall be annexed as Schedule 5 to this licence;
- (b) subject to regulation 12, the conditions set out in Schedule 3 to this licence shall apply in respect of the storage site authorised under that Storage Permit; and
- (c) unless the OGA directs otherwise, with effect on and from the date of grant of the Storage Permit the Licensed Area shall be reduced such that the Licensed Area shall be the area, volume or both as applicable of the storage site, details of which shall be set out in Schedule 5, and Schedule 2 shall be amended accordingly, and this licence shall cease and determine in respect of any area or volume that no longer forms part of the Licensed Area but without prejudice to any obligation or liability imposed upon the Licensee or incurred by them under the terms of this licence prior to that date.

Provision of contact details to the OGA

10.—(1) A notice, direction or other document authorised or required (in whatever terms) to be given to the Licensee by virtue of this licence is treated as given to the Licensee if it is given to the person specified by the Licensee under paragraph (2) at the address so specified.

(2) The Licensee must supply the OGA with the name and address of a person to whom notices, directions and other documents are to be given.

(3) The Licensee must ensure that, where there is a change in the person to whom, or the address to which, information should be sent in accordance with paragraph (2), the OGA is notified of the change as soon as is reasonably practicable.

(4) If the Licensee fails to comply with paragraph (2) the OGA may give the Licensee a notice which—

- (a) requires the Licensee to comply with paragraph (2) within the period of 30 days beginning with the date of the notice; and

- (b) states that, if the Licensee fails to do so, the Licensee will be treated as having supplied under paragraph (2) the name and address specified by the OGA in the notice.

Keeping of accounts

11.—(1) The Licensee shall keep within the United Kingdom full and correct accounts in a form from time to time approved by the OGA of—

- (a) the quantity of the carbon dioxide stream injected into the Licensed Area;
- (b) the composition of the carbon dioxide stream injected into the Licensed Area;
- (c) the name and address of any person who has supplied the carbon dioxide stream to the Licensee, the quantity so supplied, and the place the carbon dioxide stream was conveyed from pursuant to the agreement for such supply; and
- (d) such other particulars as the OGA may from time to time require.

(2) The Licensee shall within two months after the end of each Half Year in which this licence is in force and within two months after the expiration or determination of this licence, subject to the Termination Regulations, deliver to the OGA an abstract in a form from time to time approved by the OGA of the accounts for that Half Year or for the period prior to such expiration or determination as the case may be.

Working obligations

12.—(1) If a Work Programme is specified in Schedule 4, the Licensee shall before the expiry of the Appraisal Term carry out the Work Programme in accordance with the deadlines specified therein.

(2) If at any time the OGA serves a notice in writing on the Licensee requiring them to submit to the OGA, before a date specified in the notice, an appropriate programme for exploration with a view to selecting a site for carbon dioxide storage in the Licensed Area during a period so specified, the Licensee shall comply with the notice.

(3) For the purposes of paragraph (2), an appropriate programme is one which any person who, if that person—

- (a) were entitled to carry on the activities authorised by this licence;
- (b) had the competence and resources needed to carry on those activities to the best commercial advantage; and
- (c) were seeking to carry on those activities to the best commercial advantage,

could reasonably be expected to carry out during the period specified in the notice, and that period must be within the Appraisal Term.

(4) If a programme is submitted to the OGA in consequence of a notice served under paragraph (2), then—

- (a) the OGA shall not be entitled to revoke this licence on the ground that the programme does not satisfy the requirements of that paragraph (“the Relevant Requirements”); but
- (b) if the OGA is of the opinion that the programme does not satisfy the Relevant Requirements it may serve a notice in writing on the Licensee stating its opinion and the reasons for it.

(5) Where notice in respect of a programme is served on the Licensee under paragraph (4) the Licensee shall within a reasonable period beginning with the date of service of such notice submit to the OGA a further programme which satisfies the Relevant Requirements.

(6) The Licensee shall carry out any programme submitted by them under this clause in respect of which the OGA serves notice in writing on the Licensee stating that the OGA approves the programme and any programme approved by the OGA under this paragraph shall be deemed for the purposes of this licence to satisfy the Relevant Requirements.

(7) Where, in consequence of any breach or non-observance by the Licensee of any provision of paragraph (2), (5) or (6), the OGA has power by virtue of paragraph (1) of clause 33 (*Revocation of licence*) to revoke this licence, it may if it thinks fit exercise that power in relation to such part only of the Licensed Area as it may specify; and where it does so the rights granted by this licence shall cease in respect of the specified part of that area without prejudice to any obligation or liability imposed upon the Licensee or incurred by them under the terms of this licence.

(8) Where the Licensee has a duty by virtue of this clause to carry out a programme during a part of the Appraisal Term, the OGA may serve notice under paragraph (2) in respect of another such part.

Amendments to the Work Programme

13.—(1) This clause applies if a Work Programme has been specified in Schedule 4.

(2) This clause applies to an amendment to be made to the content of the Work Programme (including to the deadline for taking an action).

(3) At any time not later than three months before the deadline for taking an action in the Work Programme the Licensee may give notice in writing to the OGA that the Licensee desires an amendment regarding that action, and the notice shall describe the proposed amendment.

(4) The OGA may in its discretion permit a shorter notice period than the period of three months specified in paragraph (3).

(5) Where notice is given, the OGA may in its discretion direct in writing that the Work Programme be amended as proposed.

Relevant Works

14.—(1) The Licensee shall not erect or carry out any Relevant Works in a controlled place, either in the Licensed Area or elsewhere, for the purposes of—

(a) the storage of carbon dioxide within section 17(2)(a) of the Act in the Licensed Area; or

(b) the conveyance of carbon dioxide for storage in the Licensed Area, except in accordance with the consent in writing of the OGA.

(2) The document in which that consent is given may be a storage permit.

(3) The document in which that consent is given may specify—

(a) any conditions to which the consent is subject; and

(b) a period to which the consent is limited.

(4) In this clause, “Relevant Works” means any structure and any other works (of any kind) which are intended by the Licensee to be permanent and are neither designed to be moved from place to place without major dismantling nor intended by the Licensee to be used only for exploring for places suitable for the storage of carbon dioxide.

Commencement and abandonment and plugging of Wells, and test injection

15.—(1) The Licensee shall not commence or recommence the drilling of any Well, or undertake the test injection of carbon dioxide, without the consent in writing of the OGA.

(2) Subject to paragraph (6), the Licensee shall not abandon any Well without the consent in writing of the OGA.

(3) The Licensee shall ensure compliance with any conditions subject to which any consent under either of the foregoing paragraphs is given.

(4) If any such condition under paragraph (1) relates to the position, depth or direction of the Well, or to any casing of the Well or if any condition under either paragraph (1) or paragraph (2) relates to any plugging or abandoning of the Well, the OGA may from time to time direct that the Well and all records relating thereto shall be examined in such manner, upon such occasions or at such intervals and by such person as may be specified by the OGA’s direction, and the Licensee shall pay to the OGA such fees and expenses for such examination as the OGA may specify.

(5) The plugging of any Well shall be done in accordance with a specification approved by the OGA applicable to that Well or to Wells generally or to a class of Wells to which that Well belongs and shall be carried out in an efficient and workmanlike manner.

(6) The OGA may at any time give the Licensee a notice requiring a Well drilled pursuant to this licence to be plugged and abandoned in accordance

with paragraph (5) within the period specified in the notice (but this paragraph is subject to paragraphs (8) and (9)).

(7) The Licensee shall comply with any notice under paragraph (6).

(8) A notice under paragraph (6) may not be given less than one month before the expiry or determination of the Licensee's rights under this licence in relation to the area, or the part of the area, in which the well is drilled.

(9) A notice under paragraph (6) may be given only in relation to a well which has not been used within the period of one year ending with the day on which the notice is given.

(10) Subject to paragraphs (6), (7), (11) and (12), any Well drilled by the Licensee pursuant to this licence shall be plugged and abandoned in accordance with paragraphs (2), (3), (4) and (5), not less than one month before the expiry or determination of the Licensee's rights in respect of the area or part thereof in which that Well is situated.

(11) A direction by the OGA may be given by notice in writing to the Licensee not less than one month before the Licensee's rights in respect of the area or part thereof in which the Well is situated expire or determine so as to relieve the Licensee of the obligation imposed by paragraph (10) of this clause to plug and abandon the Well.

(12) Where the OGA terminates or revokes this licence, any Well drilled pursuant to this licence shall—

- (a) be plugged and abandoned in accordance with paragraphs (2), (3), (4) and (5), as soon as reasonably practicable; or
- (b) if the OGA so directs when giving the notice of termination or revocation, be left in good order and fit for further working together with all casings and any Well head fixtures (where applicable) the removal whereof would cause damage to such Wells.

(13) Any Well that, pursuant to a direction by the OGA under paragraph (11), has not been plugged and abandoned, shall be left in good order and fit for further working together with all casings and any Well head fixtures (where applicable) the removal whereof would cause damage to such Wells.

(14) Unless the OGA directs otherwise, all casings and fixtures forming part of a Well and left in position at the expiry or determination (whether by termination, revocation or otherwise) of the Licensee's rights in respect of the area or part thereof in which that Well is drilled, or at the completion of any works required of the Licensee under paragraph (12) (whichever is the later), shall be the property of the OGA.

Control of Development Wells

16.—(1) The Licensee shall not suspend work on the drilling of a Development Well, or having suspended it in accordance with this paragraph shall not begin it again except with the consent in writing of the OGA and in accordance with the conditions, if any, subject to which the consent is given.

(2) When work on the drilling of a Development Well is suspended in accordance with paragraph (1) of this clause, the Licensee shall forthwith

furnish the OGA with such information relating to the Well as the OGA may specify.

(3) The Licensee—

- (a) shall not do any Completion Work in respect of a Well in the Licensed Area except with the consent in writing of the OGA and in accordance with the conditions, if any, subject to which the consent is given;
- (b) shall furnish to the OGA, in accordance with the provisions of such a consent, particulars of any Completion Work done by the Licensee in respect of the Well; and
- (c) shall not remove or alter any casing or equipment installed by way of Completion Work in respect of a Well except with the consent in writing of the OGA and in accordance with the conditions, if any, subject to which the consent is given.

(4) In this clause—

“Completion Work”, in relation to a Well, means work, by way of the installation of a casing or equipment or otherwise after the Well has been drilled, for the purpose of bringing the Well into use as a Development Well; and

“Development Well” means a Well which the Licensee uses or intends to use in connection with the storage of carbon dioxide in the Licensed Area, other than a Well which for the time being he uses or intends to use only for activities pursuant to clause 5(1).

Distance of Wells within boundaries of Licensed Area

17. No Well shall, except with the consent in writing of the OGA, be drilled or made so that any part thereof is less than one hundred and twenty-five metres from any of the boundaries of the Licensed Area.

Extraction of stored carbon dioxide

18. The Licensee must not (and must not permit any other person to) extract stored carbon dioxide from the storage site except with the prior written consent of the OGA and in accordance with any conditions subject to which any such consent is given.

Avoidance of harmful methods of working

19.—(1) The Licensee shall maintain all apparatus and appliances and all Wells in the Licensed Area which have not been abandoned and plugged as provided by clause 15 (*Commencement and abandonment and plugging of Wells, and test injection*) in good repair and condition and shall execute all operations in or in connection with the Licensed Area in a proper and workmanlike manner in accordance with methods and practice customarily used in good industry practice and in particular the Licensee shall take all steps practicable in order to prevent damage to adjoining strata. The Licensee shall give notice to the OGA of any event causing the escape or waste of Petroleum or the escape of carbon dioxide from the carbon dioxide stream or

damage to any petroleum-bearing strata or any carbon dioxide storage site forthwith after the occurrence of that event.

(2) The Licensee shall comply with any instructions from time to time given by the OGA in writing relating to any of the matters set out in the foregoing paragraph.

(3) In this clause, “good industry practice” means the exercise of that degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from a skilled and experienced operator engaged in an activity consented to or authorised by or under this licence.

Appointment of exploration operators

20.—(1) The Licensee shall ensure that another person (including, in the case where the Licensee is two or more persons, any of those persons) does not exercise any function of organising or supervising any activity described in clause 5(1) (*Appraisal and storage activities*) in pursuance of this licence unless that other person is a person approved in writing by the OGA and the function in question is one to which that approval relates.

(2) The OGA shall not refuse to give its approval of a person in pursuance of paragraph (1) if that person is competent to exercise the function in question, but where an approved person is no longer competent to exercise that function the OGA may, by notice in writing given to the Licensee, revoke its approval.

Fishing and navigation

21. The Licensee shall not carry out any operations in or about the Licensed Area in such manner as to interfere unjustifiably with navigation or fishing in the waters of the Licensed Area or with the conservation of the living resources of the sea.

Training

22.—(1) The OGA may from time to time (after consulting the Licensee) give to the Licensee instructions in writing as to the training of persons employed or to be employed, whether by the Licensee or by any other person, in any activity which is related to the exercise of the rights granted by this licence, and the Licensee shall ensure that any instructions so given are complied with.

(2) The Licensee shall furnish the OGA with such information relating to the training of persons referred to in paragraph (1) of this clause as the OGA may from time to time request.

Licensee to keep records

23.—(1) The Licensee shall keep accurate records in a form from time to time approved by the OGA of the drilling, deepening, plugging or abandonment of all Wells and of any alterations in the casing thereof. Such records shall contain particulars of the following matters—

- (a) the site of and number assigned to every Well;
- (b) the subsoil and strata through which the Well was drilled;
- (c) the casing inserted in any Well and any alteration to such casing;
- (d) any Petroleum, water, mines or workable seams of coal encountered in the course of such activities; and
- (e) such other matters as the OGA may from time to time direct.

(2) The Licensee shall keep within the United Kingdom accurate geological plans and maps relating to the Licensed Area and such other records in relation thereto as may be necessary to preserve all information which the Licensee has about the geology of the Licensed Area.

(3) The Licensee shall deliver copies of the said records, plans and maps referred to in the two foregoing paragraphs to the OGA when requested to do so either—

- (a) within any time limit specified in the request; or
- (b) if there is no time limit specified, within four weeks of the request.

Returns

24.—(1) The Licensee shall furnish the OGA with such information and in such manner as the OGA may from time to time request about any of the activities authorised by this licence.

(2) The Licensee shall comply with any such request either—

- (a) within any time limit specified in the request; or
- (b) if there is no time limit specified, within four weeks of the request.

Licensee to keep samples

25.—(1) As far as reasonably practicable the Licensee shall correctly label and preserve for reference for a period of five years samples of the sea bed and of the strata encountered in any Well and samples of any Petroleum or water discovered in any Well in the Licensed Area.

(2) The Licensee shall not dispose of any sample after the expiry of the said period of five years unless—

- (a) the Licensee has at least six months before the date of the disposal given notice in writing to the OGA of its intention to dispose of the same; and
- (b) the OGA or any person authorised by it has not within the said period of six months informed the Licensee in writing that it wishes the sample to be delivered to it.

(3) The OGA or any person authorised by it shall be entitled at any time—

- (a) to inform the Licensee in writing that it wishes the whole or any part of any sample preserved by the Licensee to be delivered to the OGA; or
- (b) to inspect and analyse any sample preserved by the Licensee.

(4) The Licensee shall forthwith comply with any request for the delivery of the whole or any part of any sample which is made in accordance with the preceding provisions of this clause.

Reports to be treated as confidential

26.—(1) All records, returns, plans, maps, samples, accounts and information (in this clause referred to as “the specified data”) which the Licensee is or may from time to time be required to furnish under the provisions of this licence shall be supplied at the expense of the Licensee and shall not (except with the consent in writing of the Licensee which shall not be unreasonably withheld) be disclosed to any person not in the service or employment of the OGA or the Crown—

Provided that—

- (a) the OGA shall be entitled at any time to make use of any of the specified data for the purpose of preparing and publishing such returns and reports as may be required of the OGA by law;
- (b) the OGA shall be entitled at any time to furnish any of the specified data to the Natural Environment Research Council and to any other body of a like nature as may from time to time be carrying on activities of a substantially similar kind to the geological activities at present carried on by the said Council;
- (c) the OGA, the said Council and any such other body shall be entitled at any time to prepare and publish reports and surveys of a general nature using information derived from any of the specified data;
- (d) the OGA, the said Council and any other such body shall be entitled to publish any of the specified data of a geological, scientific or technical kind either—
 - (a) after the expiration of the period of three years beginning with the date when the data were due to be supplied to the OGA in accordance with clause 23 (*Licensee to keep records*) or 24 (*Returns*), or if earlier, the date when the OGA received those data;
 - (b) after the licence ceases to have effect, whether because of its determination, revocation or termination pursuant to the Termination Regulations; or
 - (c) after the expiration of such longer period as the OGA may determine after considering any representations made to it by the Licensee about the publication of data in pursuance of this sub-paragraph.

(2) This clause shall not prevent the publication by the OGA of the results of any monitoring required by any Storage Permit granted pursuant to this licence.

Inspection of records etc.

27. The Licensee shall—

- (a) permit any person who is appointed by the OGA for the purpose to inspect, and to take copies of and make notes from, all books, papers, maps and other records of any kind kept by the Licensee in pursuance of this licence or in connection with activities about which the OGA is entitled to obtain information in pursuance of clauses 22(2) (*Training*) and 24 (*Returns*) of this licence; and
- (b) furnish that person at reasonable times with such information and provide them at reasonable times with such reasonable assistance as that person may request in connection with or arising out of an inspection in pursuance of this clause.

Rights of access

28. Without prejudice to the OGA's rights under the Regulations and the Act, any person or persons authorised by the OGA shall be entitled at all reasonable times to enter into and upon any of the Licensee's installations or equipment used or to be used in connection with the activities authorised by this licence—

- (a) to examine the installations, Wells, plant, appliances and works made or executed by the Licensee in pursuance of the licence and the state of repair and condition thereof; and
- (b) to execute any works, to carry out any monitoring or to provide and install any equipment which the OGA may be entitled to execute, carry out or provide and install in accordance with the provisions of this licence or in the execution of any powers under the Regulations or the Act.

Power to execute works

29. Without prejudice to the OGA's rights under the Regulations and the Act, if the Licensee shall at any time fail to perform the obligations arising under the terms and conditions of either of clauses 15 (*Commencement and abandonment and plugging of Wells, and test injection*) or 19 (*Avoidance of harmful methods of working*), the OGA shall be entitled, after giving to the Licensee reasonable notice in writing of its intention, to execute any works and to provide and install any equipment which in the opinion of the OGA may be necessary to secure the performance of the said obligations or any of them and to recover the costs and expenses of so doing from the Licensee.

Transfer of licence etc.

30. The Licensee shall not, except with the consent in writing of the OGA and in accordance with the conditions (if any) of the consent, do anything whatsoever whereby, under the law (including the rules of equity) of any part of the European Union or of any other place, any right granted by this Licence or derived from a right so granted becomes exercisable by or for the benefit of or in accordance with the directions of another person.

Change in control of Licensee

- 31.**— (1) This clause applies if—
- (a) the Licensee is a company, or
 - (b) where two or more persons are the Licensee, any of those persons is a company,
- and references in this clause to a company are to such a company.
- (2) A change in control of a company is not permitted without the consent of the OGA.
- (3) There is a “change in control” of a company if a person takes control of the company, not having previously been a person who controlled the company.
- (4) If a change in control of a company is contemplated, the company must apply in writing to the OGA for consent at least three months before the date on which it is proposed that the change would occur (if consent were given).
- (5) The OGA may—
- (a) consent to the change in control unconditionally,
 - (b) consent to the change in control subject to conditions, or
 - (c) refuse consent to the change in control.
- (6) If the OGA proposes to grant consent subject to any condition or to refuse consent, the OGA must, before making a final decision—
- (a) give the company an opportunity to make representations, and
 - (b) consider any representations that are made.
- (7) The OGA will normally aim to make its decision on an application within three months of receiving it, but the OGA may delay its decision by notifying the interested parties in writing.
- (8) Conditions as mentioned in paragraph (5)(b) may be imposed on the person taking control of the company (as well as on the company), and may include—
- (a) conditions relating to the arrangements for the change in control, including the date by which it must occur,
 - (b) conditions relating to the performance of activities permitted by this licence, and
 - (c) financial conditions.
- (9) The OGA’s decision on the application, and any conditions as mentioned in paragraph (5)(b), must be notified in writing to the interested parties.
- (10) In this clause “the interested parties” means—
- (a) the company,
 - (b) the person who (if consent were granted) would take control of the company, and

- (c) if the company and another person or persons are the Licensee, that other person or those other persons.

(11) For the purposes of this clause, “control” of a company is to be construed in accordance with sections 450(2) to (4) and 451(1) to (5) of the Corporation Tax Act 2010, modified as specified in clause 31(12).

(12) The modifications of sections 450(2) to (4) and 451(1) to (5) of the Corporation Tax Act 2010 referred to in paragraph (11) are—

- (a) for the words “the greater part” wherever they occur in section 450(3), there shall be substituted the words “one-third or more”;
- (b) in section 451(4) and (5), for the word “may”, there shall be substituted the word “must”; and
- (c) in section 451(4) and (5) any reference to an associate of a person shall be construed as including only—
 - i. a relative (as defined in section 448(2) of that Act) of the person;
 - ii. a partner of the person; and
 - iii. a trustee of a settlement (as defined in section 620 of the Income Tax (Trading and Other Income) Act 2005) of which the person is a beneficiary.

OGA’s power to require information about change in control of licence holder

31A.—(1) The OGA may by notice in writing require a person within paragraph (2) to provide the OGA with any information that it requires for the purpose of exercising its functions in relation to a change or potential change in control of a licence holder which is a company.

(2) The persons within this paragraph are—

- (a) the company;
- (b) the person who (if consent were granted) would take control of the company;
- (c) if the company is a joint licence holder with another person or other persons, that other person or those other persons;
- (d) any person not within any of paragraphs (a) to (c) who appears to the OGA to have information that it requires as mentioned in paragraph (1).

(3) The power conferred by this section does not include power to require the provision of any information that would be protected from disclosure or production in legal proceedings on grounds of legal professional privilege or, in Scotland, confidentiality of communications.

Indemnity against third party claims

32. The Licensee shall at all times keep the OGA effectually indemnified against all actions, proceedings, costs, charges, claims and demands whatsoever which may be made or brought against the OGA by any third party in relation to or in connection with this licence or any matter or thing done or purported to be done in pursuance thereof.

Revocation of licence

33.—(1) Without prejudice to the rights of the OGA under the Regulations and the Act, if any of the events specified in paragraph (3) occurs then the OGA may (by giving the Licensee notice in writing to that effect) revoke this licence with effect from the date specified in the notice.

(2) If the OGA exercises the power in paragraph (1), the rights granted to the Licensee by this licence shall cease and determine; but subject nevertheless and without prejudice to any obligation imposed upon, or liability incurred by, the Licensee under the terms and conditions of this licence.

(3) The events specified by this paragraph are—

- (a) any breach or non-observance by the Licensee of any of the terms and conditions of this licence;
- (b) in Great Britain, the bankruptcy or sequestration of the Licensee;
- (c) in Great Britain, the making by the Licensee of any arrangement or composition with its creditors;
- (d) in Great Britain, if the Licensee is a company, the appointment of a receiver or administrator or any liquidation whether compulsory or voluntary;
- (e) in a jurisdiction other than Great Britain, the commencement of any procedure or the making of any arrangement or appointment substantially corresponding to any of those mentioned in sub-paragraphs (b) to (d) of this paragraph.
- (f) where a statement has been made by the Licensee which is known to be false in a material particular, or recklessly makes a statement which is false in a material particular, for the purpose of inducing the OGA –
 - (a) to grant this licence;
 - (b) to grant a consent under this licence; or
 - (c) to grant an approval under this licence,

and where two or more persons are the Licensee any reference to the Licensee in sub-paragraphs (b) to (f) of this paragraph is a reference to any of those persons.

Revocation of licence re change in control

34.—(1) This clause applies in connection with a change in control of a licence holder which is a company (see clause 31).

(2) In the event of—

- (a) any breach or non-observance by the company of the terms of clause 31,
- (b) any breach of a condition (imposed in accordance with clause 31) subject to which the OGA gave its consent to a change of control of the company, or
- (c) any failure to provide full and accurate information in response to a notice given by the OGA pursuant to clause 31A

the OGA may, giving the company and any joint licence holders notice in writing, revoke the licence with effect from the date specified in the notice.

Power of partial revocation

35.—(1) This clause applies where two or more persons are the Licensee and an event mentioned in clause 33(3)(b), (c), (d), (e) or (f) occurs in relation to one of those persons.

(2) Where this clause applies, the OGA may exercise the power of revocation in clause 33 to revoke the licence in so far as it applies to the person mentioned in paragraph (1).

(3) If the OGA exercises the power in paragraph (2), the rights granted to the person under this licence cease, but without prejudice to any obligation imposed upon, or liability incurred by, the person under the terms and conditions of this licence.

(4) Where this licence is revoked in relation to one person under this clause, it continues to have effect in respect of the other person who constitutes, or persons who together constitute, the Licensee and in relation to whom it is not revoked.

Partial revocation of licence re change in control

36.—(1) This clause applies where two or more persons are joint licence holders and any of them is a company.

(2) If any event mentioned in clause 34(2)(a), (b) or (c) occurs in connection with a change in control of the company, the OGA may exercise the power in clause 34 to revoke the licence in so far as it applies to that company.

(3) Where this licence is revoked in relation to one person under this clause, it continues to have effect in respect of the other person who constitutes, or persons who together constitute, the Licensee and in relation to whom it is not revoked.

Ministry of Defence

37.—(1) The Licensee shall give the Ministry of Defence six months' prior notice of any installation movements within the Licensed Area.

(2) The Licensee shall give the Ministry of Defence six weeks' prior notice of any seismic survey within the Licensed Area.

(3) The Licensee shall, at the Licensee's own expense, install and maintain underwater sonar beacons to Ministry of Defence specifications on any structures that may be temporarily within the Licensed Area provided that there shall be no requirement to fit such beacons to fixed and charted installations.

Relationship with fishing industry

38.—(1) The Licensee shall appoint a fisheries liaison officer who shall agree suitable arrangements with the seismic survey and supply vessel owners employed by the Licensee, their masters and the organisations or individuals which represent the local fishing industry in order to promote good working relationships between the various parties. The setting up of the arrangements shall be the responsibility of the Licensee. In particular the Licensee shall—

- (a) consult the organisations which represent the local fishing industry about the sea routes to be used by supply vessels;
- (b) after informing the OGA of the result of such consultations, agree with the OGA which routes shall be used to minimise interference with fishing activities without thereby unreasonably increasing transit times;
- (c) ensure that the agreed routes are used unless safety of navigation or security of cargo considerations dictate otherwise; and
- (d) take all reasonable steps to ensure that a responsible person who is fluent in English is a member of the crew of the supply vessel.

(2) The Licensee shall make every effort to locate and remove, without unreasonable delay, any debris resulting from the licensed activities. The Licensee shall consult the relevant fishing organisations on the method of clearance and inform the OGA of the result of such consultation. If as a result of such consultation the OGA determines that the method of clearance of debris should be modified, such modifications shall be observed by the Licensee.

(3) Claims for damage to or loss of gear or loss of fishing time arising from reported debris shall be dealt with promptly by the Licensee.

Relationship with other users

39. Without prejudice to clause 37 (*Ministry of Defence*) and clause 38 (*Relationship with fishing industry*), when planning any activity or operation under this licence, the Licensee shall take into consideration any activities being undertaken, or likely to be undertaken, in the licensed area or that impact, or are likely to impact, such licence activities or operations.

Discovery of Petroleum

40.—(1) This paragraph applies where the Licensee—

- (a) becomes aware, whether by means of a geological survey or otherwise, of the presence of any amount of Petroleum at a place within the Licensed Area;
- (b) is not the holder of a Petroleum Licence entitling the holder to search and bore for and get Petroleum in and from that place; and
- (c) has not entered into any agreement with the holder of such a Petroleum Licence, and in accordance with its provisions, entitling the Licensee to the Petroleum got from that place.

(2) When paragraph (1) applies the Licensee shall, as soon as is reasonably practicable—

- (a) notify the OGA of such presence of Petroleum in writing; and
- (b) comply with any directions given by the OGA.

(3) For the purposes of paragraph (1), “Petroleum Licence” means a licence under section 3 of the Petroleum Act 1998 or section 2 of the Petroleum (Production) Act 1934.

Arbitration

41.—(1) If at any time any dispute, difference or question shall arise between the OGA and the Licensee as to any matter arising under or by virtue of this licence or as to their respective rights and liabilities in respect thereof then the same shall, except where it is expressly provided by this licence that the matter or thing to which the same relates is to be determined, decided, directed, approved or consented to by the OGA, be referred to arbitration as provided by the following paragraphs.

- (a) The arbitration referred to in the foregoing paragraph shall be by a single arbitrator who, in default of agreement between the OGA and the Licensee as to its appointment, shall be appointed by the Lord Chief Justice of England for the time being.

(2) This clause does not affect the power of the OGA to institute (or authorise the institution) of criminal proceedings, to apply for an injunction, or to give any direction or notice, under any provision contained in Chapter 3 of Part 1 of the Act.

(3) This clause does not apply to any matter arising under the provisions of the Storage Permit.

Counterpart Execution

42. This licence may be executed in any number of counterparts with the same effect as if the signatures on the counterparts were a single engrossment thereof PROVIDED THAT this licence shall not be completed until each party has signed a counterpart.

**THIS IS SCHEDULE 1 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

PART 1

Companies

Shell U.K. Limited, with registered address of Shell Centre, London, SE1 7NA
(registered number 00140141).

Esso Exploration and Production UK Limited, with registered address of
Ermyn House, Ermyn Way, Leatherhead, Surrey, England, KT22 8UX
(registered number 00207426).

PART 2

The **Start Date** is 1 September 2023.

The **Appraisal Term** is the period 6 years beginning at the Start Date.

**THIS IS SCHEDULE 2 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Licensed Area

A polygon, the boundary of which is defined by parallels of Latitude and Meridians joining the following points, as defined on European Datum First Adjustment 1950 (ED50):

- | | | |
|-----|---------------|----------------|
| 1) | 53° 05' 00" N | 000° 28' 00" E |
| 2) | 53° 06' 00" N | 000° 28' 00" E |
| 3) | 53° 06' 00" N | 000° 27' 00" E |
| 4) | 53° 08' 00" N | 000° 27' 00" E |
| 5) | 53° 08' 00" N | 000° 26' 00" E |
| 6) | 53° 10' 00" N | 000° 26' 00" E |
| 7) | 53° 10' 00" N | 000° 27' 00" E |
| 8) | 53° 12' 00" N | 000° 27' 00" E |
| 9) | 53° 12' 00" N | 000° 26' 00" E |
| 10) | 53° 16' 00" N | 000° 26' 00" E |
| 11) | 53° 16' 00" N | 000° 25' 00" E |
| 12) | 53° 18' 00" N | 000° 25' 00" E |
| 13) | 53° 18' 00" N | 000° 24' 00" E |
| 14) | 53° 19' 00" N | 000° 24' 00" E |
| 15) | 53° 19' 00" N | 000° 23' 00" E |
| 16) | 53° 20' 00" N | 000° 23' 00" E |
| 17) | 53° 20' 00" N | 000° 22' 00" E |
| 18) | 53° 22' 00" N | 000° 22' 00" E |
| 19) | 53° 22' 00" N | 000° 21' 00" E |
| 20) | 53° 23' 00" N | 000° 21' 00" E |
| 21) | 53° 23' 00" N | 000° 20' 00" E |
| 22) | 53° 25' 00" N | 000° 20' 00" E |
| 23) | 53° 25' 00" N | 000° 19' 00" E |
| 24) | 53° 27' 00" N | 000° 19' 00" E |
| 25) | 53° 27' 00" N | 000° 18' 00" E |
| 26) | 53° 28' 00" N | 000° 18' 00" E |
| 27) | 53° 28' 00" N | 000° 17' 00" E |
| 28) | 53° 30' 00" N | 000° 17' 00" E |
| 29) | 53° 30' 00" N | 000° 16' 00" E |
| 30) | 53° 34' 00" N | 000° 16' 00" E |
| 31) | 53° 34' 00" N | 000° 15' 00" E |
| 32) | 53° 38' 00" N | 000° 15' 00" E |
| 33) | 53° 38' 00" N | 000° 14' 00" E |
| 34) | 53° 40' 00" N | 000° 14' 00" E |
| 35) | 53° 40' 00" N | 000° 13' 00" E |
| 36) | 53° 42' 00" N | 000° 13' 00" E |
| 37) | 53° 42' 00" N | 000° 12' 00" E |
| 38) | 53° 43' 00" N | 000° 12' 00" E |

**THIS IS SCHEDULE 2 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Licensed Area (continued)

39)	53° 43' 00" N	000° 10' 00" E
40)	53° 44' 00" N	000° 10' 00" E
41)	53° 44' 00" N	000° 09' 00" E
42)	53° 45' 00" N	000° 09' 00" E
43)	53° 45' 00" N	000° 08' 00" E
44)	53° 46' 00" N	000° 08' 00" E
45)	53° 46' 00" N	000° 07' 00" E
46)	53° 47' 00" N	000° 07' 00" E
47)	53° 47' 00" N	000° 06' 00" E
48)	53° 48' 00" N	000° 06' 00" E
49)	53° 48' 00" N	000° 04' 00" E
50)	53° 49' 00" N	000° 04' 00" E
51)	53° 49' 00" N	000° 03' 00" E
52)	53° 50' 00" N	000° 03' 00" E
53)	53° 50' 00" N	000° 02' 00" E
54)	53° 51' 00" N	000° 02' 00" E
55)	53° 51' 00" N	000° 01' 00" E
56)	53° 52' 00" N	000° 01' 00" E
57)	53° 52' 00" N	000° 00' 00" E
58)	53° 53' 00" N	000° 00' 00" E
59)	53° 53' 00" N	000° 01' 00" W
60)	53° 54' 00" N	000° 01' 00" W
61)	53° 54' 00" N	000° 02' 00" W
62)	53° 55' 00" N	000° 02' 00" W
63)	53° 55' 00" N	000° 03' 00" W
64)	53° 56' 00" N	000° 03' 00" W
65)	53° 56' 00" N	000° 04' 00" W
66)	53° 57' 00" N	000° 04' 00" W
67)	53° 57' 00" N	000° 05' 00" W
68)	53° 59' 00" N	000° 05' 00" W
69)	53° 59' 00" N	000° 06' 00" W
70)	54° 00' 00" N	000° 06' 00" W
71)	54° 00' 00" N	000° 07' 00" W
72)	54° 03' 00" N	000° 07' 00" W
73)	54° 03' 00" N	000° 03' 00" W
74)	54° 04' 00" N	000° 03' 00" W
75)	54° 04' 00" N	000° 00' 00" E
76)	54° 02' 00" N	000° 00' 00" E
77)	54° 02' 00" N	000° 16' 00" E
78)	54° 00' 00" N	000° 16' 00" E
79)	54° 00' 00" N	000° 18' 00" E
80)	53° 58' 00" N	000° 18' 00" E

**THIS IS SCHEDULE 2 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Licensed Area (continued)

81)	53° 58' 00" N	000° 20' 00" E
82)	53° 56' 00" N	000° 20' 00" E
83)	53° 56' 00" N	000° 22' 00" E
84)	53° 52' 00" N	000° 22' 00" E
85)	53° 52' 00" N	000° 23' 00" E
86)	53° 50' 00" N	000° 23' 00" E
87)	53° 50' 00" N	000° 24' 00" E
88)	53° 48' 00" N	000° 24' 00" E
89)	53° 48' 00" N	000° 26' 00" E
90)	53° 46' 00" N	000° 26' 00" E
91)	53° 46' 00" N	000° 34' 00" E
92)	53° 36' 00" N	000° 34' 00" E
93)	53° 36' 00" N	000° 38' 00" E
94)	53° 32' 00" N	000° 38' 00" E
95)	53° 32' 00" N	000° 40' 00" E
96)	53° 28' 00" N	000° 40' 00" E
97)	53° 28' 00" N	000° 44' 00" E
98)	53° 27' 00" N	000° 44' 00" E
99)	53° 27' 00" N	000° 47' 00" E
100)	53° 26' 00" N	000° 47' 00" E
101)	53° 26' 00" N	000° 50' 00" E
102)	53° 25' 00" N	000° 50' 00" E
103)	53° 25' 00" N	000° 53' 00" E
104)	53° 24' 00" N	000° 53' 00" E
105)	53° 24' 00" N	001° 02' 00" E
106)	53° 22' 00" N	001° 02' 00" E
107)	53° 22' 00" N	001° 04' 00" E
108)	53° 16' 00" N	001° 04' 00" E
109)	53° 16' 00" N	001° 02' 00" E
110)	53° 10' 00" N	001° 02' 00" E
111)	53° 10' 00" N	001° 00' 00" E
112)	53° 08' 00" N	001° 00' 00" E
113)	53° 08' 00" N	000° 58' 00" E
114)	53° 06' 00" N	000° 58' 00" E
115)	53° 06' 00" N	000° 54' 00" E
116)	53° 04' 00" N	000° 54' 00" E
117)	53° 04' 00" N	000° 52' 00" E
118)	53° 03' 00" N	000° 52' 00" E
119)	53° 03' 00" N	000° 48' 00" E
120)	53° 02' 00" N	000° 48' 00" E
121)	53° 02' 00" N	000° 44' 00" E
122)	53° 03' 00" N	000° 44' 00" E

**THIS IS SCHEDULE 2 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Licensed Area (continued)

123)	53° 03' 00" N	000° 38' 00" E
124)	53° 02' 00" N	000° 38' 00" E
125)	53° 02' 00" N	000° 35' 00" E
126)	53° 02' 00" N	000° 34' 00" E
127)	53° 05' 00" N	000° 28' 00" E

The lines joining coordinates (1) to (127) are navigated by loxodromes.

**THIS IS SCHEDULE 3 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

**General Conditions applicable to a storage site authorised under a
Storage Permit granted under this licence**

Closure of storage site by the operator

- 1.—(1) The Storage Operator must close the storage site where the conditions for closure set out in the Storage Permit are met.
- (2) The Storage Operator may close the storage site if—
- (a) the consent in writing of the OGA has been given following an application under sub-paragraph (3), and
 - (b) any conditions attached to that consent have been met.
- (3) An application for the OGA's consent to the closure of the storage site must—
- (a) be made in writing and sent to the OGA, and
 - (b) contain the reasons why the Storage Operator proposes to close the storage site.
- (4) However, a storage site may not be closed under sub-paragraph (1) or (2) until the terms of the post-closure plan for the storage site have been determined under regulation 13(3) of the Regulations.

Post-closure plan

- 2.—(1) Prior to the closure of the storage site in accordance with paragraph (1) or (2), the Storage Operator must submit a proposed post-closure plan to the OGA for approval.
- (2) That proposal must be based on the provisional post-closure plan, subject to any modifications proposed by the Storage Operator.
- (3) In deciding whether to propose any such modifications, the Storage Operator must take into account—
- (a) an analysis of the relevant risks;
 - (b) current best practice; and
 - (c) any improvements in the available technology.

Post-closure obligations

- 3.—(1) After the storage site has been closed and until the licence is terminated, the Storage Operator must continue to—
- (a) monitor the storage site in accordance with the conditions of the Storage Permit relating to monitoring, including the monitoring plan,

**THIS IS SCHEDULE 3 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

**General Conditions applicable to a storage site authorised under a
Storage Permit granted under this licence (continued)**

- (b) comply with its reporting and notification obligations in accordance with the conditions of the Storage Permit relating to reporting and notification of leakages and significant irregularities, (with the exception of the requirement to report on the quantities, properties and composition of the carbon dioxide stream registered by the Storage Operator), and
 - (c) comply with its obligations to take corrective measures in accordance with the conditions of the Storage Permit relating to corrective measures.
- (2) However, for those purposes any reference to the monitoring plan or the corrective measures plan is to be read as a reference to the post-closure plan.
- (3) The Storage Operator must seal the storage site and remove the injection facilities in accordance with its obligations under Part 4 of the Petroleum Act 1998.

**THIS IS SCHEDULE 4 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Work Programme

1. Early Risk Assessment

1.1. The Licensee shall in respect of both the South Store and the North Store:

- a) within **29th February 2024** submit an Early Risk Assessment Report in writing to the OGA;
- b) within one (1) month after submitting that Report, convene a Risk Assessment Workshop at a mutually suitable date/time/venue with the OGA and relevant external technical experts as agreed with the OGA; and
- c) within one (1) month after the Risk Assessment Workshop demonstrate to the OGA's satisfaction that any further risk reduction measures agreed following the Risk Assessment Workshop have been added to the Licensee's approved work plan.

1.2 The Early Risk Assessment Report will include at a minimum:

- a) an analysis of potential threats to capacity for, and injectivity and containment of, carbon dioxide;
- b) assessment of the uncertainties in defining the storage site and storage complexes including injectivity and capacity; and
- c) identification of any further studies, data gathering and/or appraisal required to address any risk or uncertainties.

2. Proprietary Seismic Acquisition and Processing

2.1. The Licensee shall:

- a) By **31st August 2024** reprocess a minimum of 1500 kms 2D seismic to cover the full Licensed Area.
- b) By **31st August 2024** complete a monitoring feasibility study for 4D seismic, based on modelled acoustic response of brine-filled and carbon dioxide -filled sands within both Bunter and Rotliegend reservoir units.
- c) By **31st August 2024** obtain, reprocess and interpret, a minimum of 500 sq kms 3D seismic.
- d) By **28th February 2025** obtain and interpret sufficient onshore geophysical data such that its interpretation adequately characterises the connected onshore Bunter aquifer.
- e) By **30th June 2026** shoot and process a minimum 200 sq kms of (fully migrated) proprietary (towed-streamer) 3D seismic data. The Licensee shall release the proprietary seismic data to the public via the National Data Repository (NDR) three years after processing is complete.

**THIS IS SCHEDULE 4 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Work Programme (continued)

3. Firm Well – South Store

3.1. The Licensee shall by **31st May 2026** complete the drilling of an appraisal well on the South Store to a total depth no less than 50 metres into the Carboniferous interval and acquire data such that the key uncertainties pertinent to the potential storage of carbon dioxide within the Bunter and Rotliegend storage intervals are addressed, including but not limited to the taking of core and injectivity testing over the Bunter and Rotliegend reservoir intervals and sampling in the Zechstein and Haisborough Group stratigraphy to help understand seal capacity.

4. Contingent Appraisal Well - North Store

4.1. The Licensee shall by **30th November 2026**, in respect of the North Store, hold a Well Investment Engagement with the OGA to evaluate the viability (including technical and economic factors) of the storage site to be appraised.

4.2. The Well Investment Engagement will, where relevant, include at a minimum:

- a) technical evaluation of storage sites including seismic and geological interpretation;
- b) a summary of data quality, suitability and availability;
- c) a risk assessment summary including injectivity, capacity and containment;
- d) chance of success and capacity assessment;

With the following included where there is a positive recommendation to drill the well (in accordance with paragraph 4.3 below):

- e) the proposed well location, trajectory, and TD criteria;
- f) appraisal rationale and well objectives;
- g) data acquisition proposal including formation logging,
- h) plans for coring (reservoir and top seal) and injection testing;
- i) planned timings of well operations;
- j) abandonment plans; and
- k) a post-well analysis programme.

**THIS IS SCHEDULE 4 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Work Programme (continued)

- 4.3. The Licensee shall by **29th February 2028**, contingent on whether the well drilled under paragraph 3 above supports reservoir injectivity at a rate sufficient for a carbon storage development, complete the drilling of a well on the North Store to a total depth no less than 50 metres into the Carboniferous interval, and the data acquisition and formation evaluation programme in respect of such well will address the key uncertainties pertinent to the potential storage of carbon dioxide within the Bunter and Rotliegend reservoir intervals, provided that the Licensee shall not be required to drill such a well on the North Store if the OGA confirms in writing that the Licensee has demonstrated to the OGA's satisfaction, on the basis of the analysis and other work presented at the Well Investment Engagement, that the North Store is not technically viable.
- 4.4. The Licensee shall, except where the proviso in paragraph 4.3 applies, within 6 months of the drilling of the well hold a post-well engagement with the OGA. The post-well engagement should address the rationale and well objectives presented during the Well Investment Engagement and provide a containment assessment.
- 4.5. Where the proviso in paragraph 4.3 applies, within one month following the OGA confirming it is so satisfied that a well is not required to be drilled on the North Store, the Licensee shall, unless the OGA decides otherwise, give notice to surrender the part of the Licensed Area which includes the North Store.

5. Assess/Pre-FEED Plan

- 5.1. The Licensee shall submit to the OGA an Assess/Pre-FEED phase activity plan and schedule for the South Store three (3) months prior to entering the Site Characterisation review phase or, if earlier, prior to entering the Assess/Pre-FEED phase of the project.
- 5.2. Unless the Licensed Area covering the North Store has been surrendered under paragraph 4.5, the Licensee shall submit to the OGA an Assess/Pre-FEED phase activity plan and schedule for the North Store three (3) months prior to entering the Site Characterisation review phase or, if earlier, prior to entering the Assess/Pre-FEED phase of the project.

**THIS IS SCHEDULE 4 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Work Programme (continued)

6. Site Characterisation Review - South Store

6.1. By **30th April 2027** in respect of the South Store the Licensee shall submit to the OGA:

- a) a Site Characterisation Review Report, which will include but not be limited to the Licensee's assessment as to whether its current database is sufficient and suitable to deliver subsurface characterisation of the proposed storage complexes and surrounding area(s) as set out in regulation 7 of the Regulations in a form and of a quality suitable for inclusion in an application for a carbon dioxide storage permit as set out in paragraph 10 of this Schedule, or if further data acquisition will be required and
- b) an updated version of the Early Risk Assessment Report referred to in paragraph 1 which shall demonstrate that an updated assessment of the uncertainties in defining the storage sites and storage complexes has been carried out and fully incorporate the outcomes of any new data acquired on or new information pertaining to the licence up to the date of such updated version of the Early Risk Assessment Report.

7. End 'Assess' Phase Review - South Store

7.1. By **30th April 2028** or, if earlier, prior to entering the 'Define' phase of the project, in respect of the South Store the Licensee shall undertake an End 'Assess' Phase Review, and shall submit to the OGA:

- a) a report accompanying the End Assess Phase Review including but not limited to:
 - i. that the storage site and storage complex characterisation is complete including identifying potential leakage pathways relating to the proposed storage site and storage complex, identification of hazards and impacts;
 - ii. a preliminary, qualitative risk assessment identifying proposed risk management measures, mitigating actions/monitoring requirements, safeguards or contingency measures; and

**THIS IS SCHEDULE 4 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Work Programme (continued)

- iii. an outline concept-select assessment of the pipeline/transportation, facility and well options being considered, a forecast range of injection volumes during the operational term, and the associated carbon dioxide phase management engineering considerations. The timing of well abandonment and facility removal should be considered;
- b) a preliminary monitoring plan considering operational monitoring of injection facilities, baseline measurement and monitoring activities. Post-closure measurement and monitoring requirements should also be identified;
- c) a corrective measures feasibility study, identifying the range of potential measures that may be required to address any significant irregularities or leakage identified by the monitoring plan;
- d) a provisional closure and post closure assessment study to address the abandonment of the injection facilities, the post closure monitoring and how the requirements for allowing handover of the CS Licence to the appropriate Minister will be met; and
- e) an activity plan and schedule for the Define/FEED phase.

8. Site Characterisation Review - North Store

8.1. Unless the Licensed Area covering the North Store has been surrendered under paragraph 4.5, by **31st July 2028** in respect of the North Store the Licensee shall submit to the OGA:

- a) a Site Characterisation Review Report, which will include but not be limited to the Licensee's assessment as to whether its current database is sufficient and suitable to deliver subsurface characterisation of the proposed storage complexes and surrounding area(s) as set out in regulation 7 of the Regulations in a form and of a quality suitable for inclusion in an application for a carbon dioxide storage permit as set out in paragraph 10 of this Schedule, or if further data acquisition will be required; and

**THIS IS SCHEDULE 4 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Work Programme (continued)

- b) an updated version of the Early Risk Assessment Report referred to in paragraph 1 which shall demonstrate that an updated assessment of the uncertainties in defining the storage sites and storage complexes has been carried out and fully incorporate the outcomes of any new data acquired on or new information pertaining to the licence up to the date of such updated version of the Early Risk Assessment Report.

9. End 'Define' Phase Review

- 9.1. No later than four (4) months prior to submission of the application for a Storage Permit to the OGA, the Licensee shall provide to the OGA, in respect of the South Store, an 'End Define Phase Review' of the Licensee's draft application for a storage permit demonstrating that the storage site(s) and storage complex(es) is/are integrated into a feasible project concept; including but not limited to a review of the storage site(s) and complex(es) development plan, including the carbon dioxide pipeline/transportation and injection facilities; containment risk assessment measures; monitoring plan; corrective measures plan ("CM"), and provisional closure and post-closure plan; and financial security.
- 9.2. No later than three (3) months prior to submission of the application for a Storage Permit to the OGA, the Licensee shall submit to the OGA end define phase draft documentation in respect of the South Store including:
 - i. Storage site(s) and complex(es) development plan; including the carbon dioxide pipeline/transportation and injection facilities.
 - ii. Containment risk assessment measures.
 - iii. Monitoring Plan.
 - iv. CM Plan.
 - v. Provisional closure and post closure plan
 - vi. Proposed financial security.

**THIS IS SCHEDULE 4 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Work Programme (continued)

9.3 Unless the Licensed Area covering the North Store has been surrendered under paragraph 4.5, no later than three (3) months prior to submission of the application for a Storage Permit to the OGA, the Licensee shall submit to the OGA a proposed Work Programme for the North Store or shall give notice to surrender the part of the Licensed Area which covers the North Store.

10. Storage Permit application

- 10.1. By **28th February 2029** the Licensee shall make an application for a Storage Permit in respect of the South Store in accordance with clause 9 and the application requirements, provided such application shall be supported by:
- a) a carbon storage development plan and such other necessary documents and other information as required by the application requirements in a form capable of the grant of permission by the OGA (if so minded) without further clarification, amendment or submission; and
 - b) a letter from the board of directors of the Licensee confirming that funds have been committed to the development of the storage site; provided that where the Licensee is two or more persons, the reference to the Licensee is a reference to each of those persons.

11. General

- 11.1. In the event of failure to comply with any of the obligations set out above by the specified deadline, the OGA may, at any time after that specified deadline, by notice direct that the rights granted by the licence shall cease and determine.
- 11.2. Fulfilment of the obligations set out above is separate from and without prejudice to the requirements for the submission of an application for a Storage Permit which must be made in accordance with the legal and regulatory application requirements at the relevant time.

Ⓔ

CS028

**THIS IS SCHEDULE 5 REFERRED TO IN THE FOREGOING LICENCE
BETWEEN THE OIL AND GAS AUTHORITY AND SHELL U.K. LIMITED
AND ESSO EXPLORATION AND PRODUCTION UK LIMITED**

Storage Permit

Execution Page

IN WITNESS WHEREOF, these presents typewritten on this and the preceding pages are EXECUTED AS A DEED as follows: -

Signed for and on behalf of the Oil and Gas Authority by:

[Redacted] (signature) [Redacted] (full name)
(Director/Secretary/other authorised person – delete as appropriate)

on 04/09/2023 (date), at [Redacted] (town),

and either:

_____ (signature) _____ (full name)
(Director/other authorised person – delete as appropriate)

on _____ (date), at _____ (town),

or in the presence of this witness:

[Redacted] (signature) [Redacted] (full name)
of [Redacted] (address).

Signed for and on behalf of Shell U.K. Limited by:

[Redacted] (signature) [Redacted] (full name)
(Director/Secretary/other authorised person – delete as appropriate)

on 29/08/23 (date), at [Redacted] [Redacted] [Redacted] (town),

and either:

_____ (signature) _____ (full name)
(Director/other authorised person – delete as appropriate)

on _____ (date), at _____ (town),

or in the presence of this witness:

[Redacted] (signature) [Redacted] [Redacted] [Redacted] (full name)
of [Redacted] (address).

Signed* for and on behalf of Esso Exploration and Production UK Limited by:

_____ (signature) _____ (full name)

(Director/Secretary/other authorised person – delete as appropriate)

on 29th August 2023 (date), at _____ (town),

and either:

_____ (signature) _____ (full name)

(Director/other authorised person – delete as appropriate)

on 30th August 2023 (date), at _____ (town),

or in the presence of this witness:

_____ (signature) _____ (full name)

of _____ (address).

*This deed must be executed by two authorised signatories (as defined in section 44(3) Companies Act 2006). They may be either two directors or a director and the company secretary. If only one authorised signatory signs, that person must be a director of the company and a second signatory must witness the director's signature.