UNDERGROUND COAL GASIFICATION (“UCG”)
POLICY STATEMENT FOR LICENSING BY THE COAL AUTHORITY
(DECEMBER 2009)

Policy Objective
The Coal Authority (“The Authority”) recognises the recent interest in UCG in Great Britain and its future potential for generating energy from its coal reserves. The Authority wishes to support its development and see UCG pilot operations established in order to assess the effectiveness and environmental impacts of this technology in Great Britain.

Statutory Duties
The Authority’s duties and obligations are set out in the Coal Industry Act 1994 under which it is given the power to grant licences for the carrying on of coal-mining operations including UCG.

This policy relates to applications for new UCG licences and variations to existing UCG licences but at this stage of development of UCG in Great Britain it is anticipated that applications will be for conditional licences.

Licence Areas
The Authority will normally only consider UCG conditional licence applications for :-

- Offshore areas. Offshore licence areas can also include an onshore access strip to facilitate the sinking of exploration boreholes during the conditional licence phase and for sinking directional access boreholes into the offshore UCG area during the operational phase. (see note 2)
- Onshore areas, but only where it can be demonstrated that the surface is suitable for piloting this technology. (see note 3)
- Areas where there are :-
  - no other Coal Authority Mining Licences & Agreements;
  - no existing Petroleum Licences;
  - no identifiable defence installations; and
  - no existing or proposed wind farm sites or other major structures on the seabed. (see note 4)
- A maximum initial application area of 10,000 hectares. (see note 5)
- Areas where the Department of Energy & Climate Change, The Crown Estate, The Ministry of Defence or other relevant bodies do not raise objections. Consultation will be undertaken by the Authority with these relevant bodies on receipt of a conditional licence application. (see note 6)

Licence Conditions
Licences will be subject to advertising by the Authority in order to stimulate competition.

The initial term of the Conditional Licence will normally be restricted to a maximum of three years.
The Authority will require Conditional Licence holders to undertake further discussions with the Department of Energy & Climate Change, The Crown Estate, The Ministry of Defence and other relevant bodies during the conditional period as they formulate the detail of their operations.

The conditions will include a requirement for the applicant to undertake an agreed programme of works during the term of the Conditional Licence. Failure to complete the agreed programme of works will result in the Licence being revoked unless the Authority can be satisfied that the Licensee is committed to the pilot project.

Where the proposed UCG operation and its ancillary activities have a potential to interact with or damage third party property interests then a condition will be included requiring the Licensee to provide evidence of the existence of a Commercial Agreement between the parties outlining the manner in which any interaction or damage so caused is managed, remediated and funded. (see notes 8 & 9)

Further requirements for de-conditionalising a licence in whole or in part will be incorporated into the licence conditions and are set out in more detail in the Authority’s Model Underground Coal Gasification Licensing Documents.

**Fees and Payments**

The licence application and grant fees will be the same as for underground and surface mining licence applications as published by the Authority.

The annual fee whilst the licence is conditional will be a fixed amount, currently £500 (reviewed and published from time to time) plus an agreed payment for holding an Option for a Lease of the property interest in the coal.

**Policy Review**

This policy shall be reviewed from time to time to ensure licence and lease terms are appropriate for developing technology.
NOTES ON POLICY

Licence Areas

1. The assumptions that the Authority has made are:

   1.1 The development of UCG will initially require pilot projects to evaluate the process in Great Britain. Once the process is proved in these conditions then larger scale projects may be established.

   1.2 At this stage of the development of UCG in Great Britain, it will be easier for operators to get all the necessary permissions and consents for offshore UCG operations than onshore, hence the emphasis on offshore.

   1.3 In addition to a licence from the Authority, consent for offshore UCG will be required from the Crown Estate for withdrawal of support from the seabed.

   1.4 A pilot project will require an environmental impact assessment prepared by the operator rather than a strategic environmental assessment.

   1.5 The syngas produced will be used for generating electricity or conversion to other petro-chemical products and the UCG operation itself will not require consent under Section 36 of the Electricity Act 1989.

   1.6 The process is outside the remit for carbon capture and storage.

   1.7 DECC do not require the applicant for a UCG Licence to hold a Petroleum Licence for the area applied for but at the operational phase will issue a simplified licence akin to an underground mine’s methane drainage licence to facilitate the lawful removal of any native methane in the strata in conjunction with the UCG operations.

2. The grant of an onshore access strip will be non-exclusive so as not to prevent conventional surface mining operations, exploration or coal methane operations in that area.

3. Onshore applications will only be accepted where the Authority considers that the applicant has a reasonable chance of bringing the project to fruition. By way of an example, an application for onshore UCG by, or with the agreement of, a surface landowner with ownership of all the surface land likely to be affected by the proposed UCG operation could be said to stand a reasonable chance of getting planning consent etc.

4. Limiting UCG licences to areas outwith existing Petroleum Licences, large or proposed seabed structures such as wind farms or Ministry of Defence installations will remove some of the potential objections to licence applications.

5. Introducing a size limit of 10,000 hectares for applications (unless there are site specific issues that dictate otherwise) limits UCG applications to areas comparable to existing or proposed underground mining operations.

6. Consulting with relevant bodies (DECC, Crown Estates and MOD etc) will minimise the risk of the Authority granting a licence for an operation that may turn out to be unworkable.

7. It should be noted that a licence can always be varied to include a previously excluded area after grant if, for example, a proposed surface installation isn’t built or an existing one ceases to operate.
8. The Authority has taken legal advice and it is still uncertain whether the provisions of the Coal Mining Subsidence Act 1991 ("the 1991 Act") apply to offshore installations. The Authority intends to adopt a comprehensive approach and incorporate provisions in the licence to ensure that no one suffers a loss from subsidence damage arising from the actions or failures of a UCG Operator, whether or not the 1991 Act applies.

9. The requirement of the Authority to have a Commercial Agreement in place where UCG and ancillary activities have a potential to interact with or damage third party property interests is intended to be similar to the approach adopted in the Petroleum Industry.

Licence Conditions

1. Limiting the normal initial conditional licence period to three years will enable licensees to evaluate a project without sterilising the coal for an unacceptable length of time. This period can be extended by agreement if the licensee demonstrates that the agreed work programme has been carried out and further works are proposed.

2. Agreeing a work programme mirrors the current arrangements with Petroleum Licences and ensures that coal is not acquired as an asset with no intention of progressing with the operation.

Fees & Payments

1. The Licence will attract a normal annual licensing fee whether conditional and/or unconditional, as is the case with Underground and Surface coal mining licences.

2. There will be an agreed annual payment for the Option rights whilst the Licence is conditional.

3. Once the Licence is made un-conditional and a Lease is granted then rental payments under the Lease will commence. At present it is intended that these rental payments are the equivalent of the Coal Authority’s standard Production Related Rent paid for the amount of coal gasified.

4. The method of assessing the amount of coal worked will be agreed with the Licensee prior to the Lease being granted. The options could include:

   4.1 a calculation from an agreed plan based on an accurate survey of the void(s) submitted to the Authority by the Licensee at an agreed interval; or

   4.2 a calculation based on an agreed formula relating the amount of syngas generated to the amount of coal worked; the syngas measurements to be supplied to the Authority at an agreed (monthly) period.