HOW THE DEPARTMENT FOR THE ECONOMY ASSESSES A PETROLEUM LICENCE APPLICATION

Why the Department for the Economy issues Petroleum Licences

The Department for the Economy (DfE) licenses the search for, drilling for and extraction of hydrocarbons. Hydrocarbons (oil and gas) are currently the dominant fuel source for the Northern Ireland energy market, but these are all imported via ship (oil) or pipeline (gas). The future discovery of any potential indigenous oil or gas supply would benefit the local economy and additionally provide improved security of energy supply. Hydrocarbons are the principal current source of energy for most nations and, although it is government policy to increase the use of renewable energy and reduce greenhouse gas emissions, there is likely to be an ongoing need for oil and gas to meet demand, particularly in the heat and transport sectors.

The most prospective areas for hydrocarbon resources lie in areas called ‘basins’ that have thick accumulations of sedimentary rock. Some of these basins contain sedimentary rocks at depths of several kilometres where organic-rich source rocks may have reached thermal maturity and generated hydrocarbons. In addition to mature source rocks, a working petroleum system needs porous and permeable reservoir rocks to hold the hydrocarbons, overlain by low permeability caprocks to seal the reservoir trap below. The geological history – that is, the sequence of geological structural trap formation, hydrocarbon maturation, expulsion and migration into the reservoir trap – has to be favourable for oil and gas to accumulate and be preserved through geological time.

In Northern Ireland exploration started in 1965 but only 16 wells have been drilled and no commercial resources have yet been discovered. Despite this, the presence of favourable geology, with similarities to that of the East Irish Sea Basin which has hosted numerous conventional gas and oil fields, suggests that there could be significant oil and gas resources in Northern Ireland. Traces or small amounts of hydrocarbons have been discovered whilst drilling which mean that areas of Northern Ireland still remain prospective for oil and gas in permeable sandstones at depths of 1-3 km in the Larne, Lough Neagh and Rathlin basins. Of particular significance in this respect was the recovery of good quality oil to the surface from the 2008 Ballinlea No. 1 well in the Rathlin Basin.

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1 Hydrocarbons are organic compounds comprising carbon and hydrogen that are found in geological rock formations below or rarely at the Earth’s surface. They include gases such as natural gas (methane) liquids such as petroleum but also waxes and low melting solids. Hydrocarbons form through the burial of organic organisms like algae, and plankton.
Other hydrocarbon energy sources, such as coal bed methane and shale gas have an as yet unproven potential within Northern Ireland, although numerous gas shows have been recorded from wells in Fermanagh and the Carboniferous shales are regarded as having shale gas resource potential. However, the use of high volume hydraulic fracturing in the production of shale gas resources makes the potential development of these resources a somewhat controversial issue.

**Petroleum Licensing Arrangements in Northern Ireland**

Any person who wants to explore for, drill for or extract oil or gas in Northern Ireland must hold a Petroleum Licence granted under the Petroleum (Production) Act (Northern Ireland) 1964 by DfE. The Act vested ownership in petroleum, in its natural state in Northern Ireland, in the Ministry of Commerce (a predecessor to DfE), with some exceptions, and gave it the power to grant Licences.

DfE is responsible for granting Petroleum Licences for all areas of Northern Ireland including the internal waters adjacent to Northern Ireland (although these internal waters have not yet been made available for Licence applications). The Oil & Gas Authority is responsible for granting Licences in the offshore waters adjacent to Northern Ireland.

Details of current PetroleumLicences in Northern Ireland and a copy of Licence documents can be found on DfE’s website for information. [https://www.economy-ni.gov.uk/publications/petroleum-licence-documents](https://www.economy-ni.gov.uk/publications/petroleum-licence-documents)

A Petroleum Licence does not grant the Licensee carte blanche to carry out all petroleum-related activities. A number of activities, such as drilling, are subject to further individual controls by DfE, and a Licensee remains subject to all controls by other bodies such as the Health and Safety Executive Northern Ireland (HSENI), the Northern Ireland Environment Agency (NIEA) and planning permission must be sought where required. Furthermore, the granting of a Petroleum Licence in no way waives the requirement for the Licensee to get necessary permission from the landowners to carry out exploration activities on that land. It is the Licensee’s responsibility to be aware of, and comply with, all regulatory controls and legal requirements, but they must demonstrate this prior to any permission to drill being given by DfE.

The application and licensing process is underpinned by a range of Petroleum Regulations which, among other things, set out the arrangements for making and determining applications, permissible terms and conditions for granting a Petroleum Licence and the Model Clauses which may be incorporated in a Petroleum Licence. They also specify the current criteria for determining applications for Petroleum Licences.

These Regulations are:

- **The Petroleum Production Regulations (Northern Ireland) 1987**
  
as amended by
  - the Petroleum Production (Amendment) Regulations (Northern Ireland) 2010;
  
and
  - **The Hydrocarbons Licensing Directive Regulations (Northern Ireland) 2010**.
Petroleum Licensing Terms and Conditions

Petroleum Licences cover exploration, appraisal, development and production of oil and gas.

In Northern Ireland, a Petroleum Licence has the following periods:

i. a five-year Initial Term, during which an agreed Work Programme of exploration must be carried out;

ii. a five-year Second Term, during which a Field Development Programme must be approved; and

iii. a 20-year Third Term, called the Production Period.

DfE is required to ensure that the above periods are sufficient to allow the activities for each period to be completed, but do not extend beyond such time as DfE determines to be necessary to properly perform the activities for the appropriate period.

There are also a range of Model Clauses which may be incorporated in a Petroleum Licence and these are set out in Schedule 2 to the Petroleum Production Regulations (Northern Ireland) 1987, as amended by the Petroleum Production (Amendment) Regulations (Northern Ireland) 2010. However, DfE can offer Petroleum Licences on modified terms, e.g. explicitly requiring the Licensee to seek permission from DfE to conduct exploration activities in or near to Areas of Special Scientific Interest or extending the advance notice required before undertaking certain activities.

DfE recognises that, as Northern Ireland is relatively under-explored, there is potential for small and start-up companies to be granted a Petroleum Licence before attracting the necessary operating and financial capacity to fully explore and exploit the Licence area. As a consequence, the Initial Term of most Petroleum Licences includes a ‘Drill-or-Drop’ commitment. In the first three years the Licensee will carry out the exploration necessary to locate a suitable drilling target. If they complete this work to the satisfaction of DfE they may notify DfE of their intention to drill an exploration well in the final two years of the Initial Term. In this case DfE will assess the company’s financial, technical and managerial capacity to carry out a drilling programme. Drilling operations would be subject to a range of permissions from different regulatory authorities. On the other hand, if they do not find a suitable target or decide that they do not wish to proceed to the drilling stage then they will relinquish the Licence at the end of Year Three.

Petroleum Licence Application Requirements

Only applicants with the requisite financial and technical capacity, and appropriate environmental awareness, will be considered for the granting of Petroleum Licences. Each application must therefore be supported by evidence that the applicant meets the required criteria.

An application may be made by a single company or by a group of companies. To be granted a Petroleum Licence, an applicant must be registered in the United Kingdom, either as a company or as a UK establishment of a foreign company. The application must include the Registered Name, Address and Number of each company that is to have a stake in the Petroleum Licence. Where a Petroleum Licence is held by a group of companies acting as a single applicant, each company bears full joint and several liability to DfE.
Required Documentation

All applications for Petroleum Licences contain the following forms and documentation:

- map showing the area applied for, usually at a scale of 1:50,000;
- audited accounts and any additional information to enable a Financial Viability Assessment to be conducted;
- original signed Financial Capacity Form(s), to enable a Financial Capacity Assessment to be conducted, together with one copy of the supporting financial information about each company;
- Technical Information Form including a copy of a proposed Work Programme;
- Environmental Awareness Statement;
- Any additional supporting information which DfE requests (for example, interim balance sheets, corporate structure, etc); and
- a payment covering the application fee (£1,000)

Departmental Safeguards

Before DfE can accept an application as valid there are stringent criteria that the applicant is required to meet. These include:

i. Financial Viability - DfE must be confident that any applicant that is granted a Petroleum Licence is likely to continue in sound financial health for the foreseeable future. Each applicant must therefore demonstrate its basic financial viability. DfE will apply financial checks to individual companies (‘Licence Partners’) within an applicant group so each company must provide its own audited accounts.

ii. Financial Capacity - DfE must be satisfied that an applicant has the financial capacity to meet its commitments under a Petroleum Licence.

iii. Technical Capability - DfE needs to be satisfied that an applicant has (i) the ability to carry out its obligations under a Petroleum Licence (including the Work Programme); and (ii) has the resources to do so. DfE also needs to be satisfied as to the applicant’s understanding of the acreage (including work done), its evaluation of prospectivity and its proposed Work Programme.

iv. Environmental Awareness – applicants will also be assessed against a general criteria in legislation concerning the “way in which the applicant intends to carry out its exploration under the Licence.” One way in which DfE consider this is through an Environmental Awareness Statement, which forms part of the application, through which applicants for Petroleum Licences are expected to demonstrate an awareness of relevant environmental issues and regulatory requirements.
The Work Programme

Each application must include a Work Programme which details the minimum amount of exploration work that the applicant will carry out if it are granted a Petroleum Licence. The Work Programme will be discussed and agreed with DfE in advance of the award of a Licence, although the final Work Programme may be subject to modification in the light of consultee and stakeholder representations, if appropriate.

The Work Programme is a crucial part of the application and will form an important part of the Petroleum Licence itself. The Petroleum Licence will expire at the end of the Initial Term (or earlier if the Licensee decides not to drill) if the Work Programme has not been completed by then. Along with the technical work already carried out, the proposed Work Programme is one of the main criteria that DfE will use to judge between any competing applications.

DfE Assessment of Applications

DfE’s policy objective is to maximise successful and expeditious exploration and exploitation of Northern Ireland’s oil and gas resources, and all decisions will be made with regard to that policy. The Petroleum (Production) Act (Northern Ireland) 1964 gives DfE discretion to decide whether or not to grant a Petroleum Licence and, if so, to whom and on what conditions. DfE has full discretion to make decisions on applications for Petroleum Licences, but will make them in line with the legislation, published policies, objectives and criteria. DfE is also entitled to refuse to grant a Petroleum Licence, but must ensure that, in doing so, it does not discriminate unfairly against any one applicant.

The Consultation Process for a Petroleum Licence

Although there is no statutory requirement to do so, once the application for a Petroleum Licence is deemed valid DfE will consult with a range of regulatory authorities, stakeholder organisations and the wider general public on each Petroleum Licence Application (PLA). DfE will undertake these consultations in line with best practice.

The first stage involves DfE consulting with a range of statutory and regulatory organisations. The next stage involves DfE publicising the consultation by placing a Public Notice in all relevant local and regional press and on the DfE website. DfE will also provide public access for people to view all the relevant documentation at the DfE Minerals and Petroleum Branch office in Dundonald House and at local council offices in the area applied for in the PLA. DfE will also issue the relevant documentation and the Public Notice directly to a number of statutory and non-statutory bodies including for example all NI government departments. In line with best practice, the consultation will remain open for a minimum of 8 weeks.

As responses are received DfE will consider any issues/concerns raised and, where necessary, seek expert advice from other government and non-government bodies to address these issues/concerns. This process will continue throughout the consultation period with the aim of identifying and responding to each separate issue/concern. Once the consultation period has ended a document detailing all issues/concerns and DfE responses will be placed on the DfE website and issued as appropriate to individual respondents.

DfE will then assess the PLA and make a recommendation to a Minister as to whether or not a Petroleum Licence may be granted. It is often the case that issues/concerns
highlighted as part of the consultation process will lead DfE to determine that it is prudent to include specific conditions in the Terms of a Petroleum Licence, in addition to those Model Clauses set out in the Petroleum Regulations.

The Minister will consider the recommendation, including the specific conditions and make a decision on whether or not to grant the Licence. If granted, the Licence will be signed by both the Licensee and DfE. Throughout the Licence term, DfE will monitor the work of the Licensee to ensure that activities being undertaken are done so in line with the agreed Work Programme and in accordance with all relevant legislation and regulations pertaining to petroleum exploration in Northern Ireland.