

Unconventional Hydrocarbons in Cumbria – Update

31 July 2014

Introduction

On 28 July, the Department of Energy and Climate Change (DECC) announced the opening of a new round of onshore licensing (the 14th Round). This opens a 90 day period in which companies seeking new onshore licences can submit applications.

The 14th Round material (with a map of the area on offer) can be viewed here:
<https://www.gov.uk/oil-and-gas-licensing-rounds>

What are onshore licences?

Licences for the onshore exploration and exploitation of shale gas, shale oil and coal bed methane, are called Petroleum Exploration and Development Licences or PEDLs. They are issued by DECC and give an operator the exclusive right to search for oil and gas (including coal bed methane, shale gas or shale oil, conventional gas and oil and even for pumping out methane from abandoned coal mines) within the licensed area; however, a PEDL does not allow underground coal gasification, that process falls under a different regime.

PEDLs are delineated by 10km x 10km Ordnance Survey grid squares, not by the extent of the resource (see large map at Annex A). Applicants are free to apply for any area they wish that is not already licensed, though DECC has indicated that it will not consider applications for more than 200 square kilometres in a single application.

What does the launch of the Round mean in practice?

European Law requires that the issue of licences should be through a publicly advertised process, open to all qualified entities, and that invitations to apply for licences should be open for a three month period, in order to give operators time to prepare their application. The announcement on 28 July was the start of that period; it will close on 28 October 2014.

In making their applications, companies will set out their exploration proposals. At the end of the three month period, DECC will assess all applications received; they must reach DECC's requirements for technical competence and financial capacity. Where two or more applications are received for the same area, the applicant who has made the best application will be preferred.

Before any licence is awarded, the requirements of the Habitats Regulations will need to be considered. These may result in the exclusion of part(s) of the areas applied for, or the application of conditions limiting the activities that can be carried out in particular part(s) of the licence.

The technical evaluation of the applications is likely to take some months; it is not possible to say how long the Habitats Assessments will take. There is no requirement in the Petroleum Act for consultation on the award of licences. Where Habitats Assessments are necessary, there will be appropriate consultation on the results of the assessments.

PEDLs do not confer any exemption from other legal and regulatory requirements. All oil or gas developments are subject to the requirements of The Town and Country Planning Act, administered by the Mineral Planning Authority where the proposed development is located. As part of the planning process, further assessment may be required through Environmental Impact Assessment (EIA), which assesses the likely environmental impacts of the proposed development. Other relevant requirements include: environmental scrutiny by the Environment Agency (in England); the Health and Safety Executive will scrutinise the safety of all proposed operations; and any drilling operations will require DECC's consent.

Where activities proposed include hydraulic fracturing for shale gas or oil, DECC will require the operator to carry out an environmental risk assessment (ERA) of the proposal, before planning permission can be applied for. In such cases, DECC will also require submission of a fracking plan, showing how seismic risks will be mitigated.

What is new in this Round of licensing?

The Environmental Awareness Statements required with the application (to demonstrate that the applicant is aware of the specific environmental sensitivities of the area applied for and is appropriately prepared to address these) will have to:

- demonstrate consideration, where relevant, of certain specific mitigations or mitigation strategies identified in the Strategic Environmental Assessment; and
- provide particular detail and comprehensiveness for unconventional hydrocarbon activities in or adjacent to any National Park, The Broads, any Area of Outstanding Natural Beauty or any World Heritage Site; and to demonstrate the applicant's awareness of the implications of the new planning guidance on unconventional hydrocarbon developments in such areas (published by DCLG 28 July 2014: http://planningguidance.planningportal.gov.uk/blog/guidance/minerals/planning-for-hydrocarbon-extraction/determining-the-planning-application/#paragraph_223).

The situation in Cumbria

The geology of Cumbria is complex. There is a narrow band of shale rock across Allerdale and Carlisle districts, skirting the top of the Lake District National Park (see Annex B). It is also known that there are black shale deposits at some of the existing, limestone quarries in the very south of the county, and it is likely that these lie at the very top of the Bowland Shale formation. These Cumbrian deposits have been detailed, but not mapped out at depth, by the British Geological Survey (BGS) memoirs and maps that cover the area; however, due to a lack of exploration data, it is not presently possible to map the shale rock deposits at depth in detail.

Cumbria contains, in whole or in part, two National Parks (Lake District; Yorkshire Dales) and three Areas of Outstanding Natural Beauty (Solway Firth; Arnside and Silverdale; North Pennines) - in total, these designations cover 49% of the county. The Government has confirmed that applications for unconventional hydrocarbon development in these areas will only be allowed in exceptional circumstances. The new planning guidance, referred to above, reiterates policy contained in the National Planning Policy Framework (NPPF) in regard to major development in National Parks and AONB: i.e. that great weight should be given to conserving landscape and scenic beauty in these areas (including adjacent areas if they affect the setting) and that

planning permission should be refused for major development except in exceptional circumstances, and where it can be demonstrated that it is in the public interest.

The large map at Annex A, illustrates where the 10km OS grid squares are located in Cumbria, and the insert map broadly shows their relationship to the National Parks and AONBs. Several of the grid squares identified for offer in the 14th Round of licensing, lie wholly or partly within one of these landscape designations – and given this, the restrictive approach outlined above would apply in these areas.

There is a much larger resource of coal under Cumbria, both deep and shallow, which runs across the northern half of the county and into Scotland and over to the Pennines. Therefore, it is more likely that coal bed methane extraction will occur onshore, rather than shale oil/gas extraction.

There is an existing Petroleum Exploration and Development Licence (PEDL) area held around Longtown (the yellow area on the large map at Annex A). Within this licensed area, four coal bed methane planning applications were granted by Cumbria County Council, between 2002 and 2010, for drilling, appraisal and extraction. The site at Moat was never drilled; the site at Carwinley has been fully restored and is back in agricultural use; and the other two sites, at Englishtown and Becklees Farm, are in the process of being restored by the Licence Holder.

There have never been any planning applications for shale oil or gas in Cumbria.

Conclusion

The NPPF sets out minerals planning policy. It makes it clear that Minerals Planning Authorities should identify and include policies for extraction of mineral resource of local and national importance in their area - this includes both conventional and unconventional hydrocarbons. It also expects minerals planning authorities to ensure that mineral extraction does not have an unacceptable adverse impact on the natural or historic environment or human health. The NPPF's supporting Planning Practice Guidance, provides guidance on a range of planning topics, including hydrocarbon extraction – this is where new paragraph 223 sits, regarding hydrocarbon activities in or near certain landscape designations.

As the upper tier Local Authority in Cumbria, the County Council is the Minerals Planning Authority, and is statutorily required to prepare a plan covering minerals and waste. There are two existing policies on oil and gas and coal bed methane in the current development plan documents – the Core Strategy and the Development Control Policies (both adopted 2009) - as well as in the draft Minerals & Waste Local Plan (February 2013) that will eventually replace the adopted documents. It is expected that the next draft of the Local Plan will include a policy that encompasses fracking – for whichever type of hydrocarbon extraction. Text in this document will also be updated to reflect the current shale gas, coal bed methane and offshore underground coal gasification situation.

At present, the known geology of Cumbria shows little shale rock that can be exploited for shale gas or oil. It is expected that British Geological Survey (BGS) will do further work across the UK, at which time there will hopefully be a clearer picture of the resource in Cumbria. Cumbria's geology does, however, include large deposits of coal in the north of the county, so coal bed methane exploitation is more likely to be

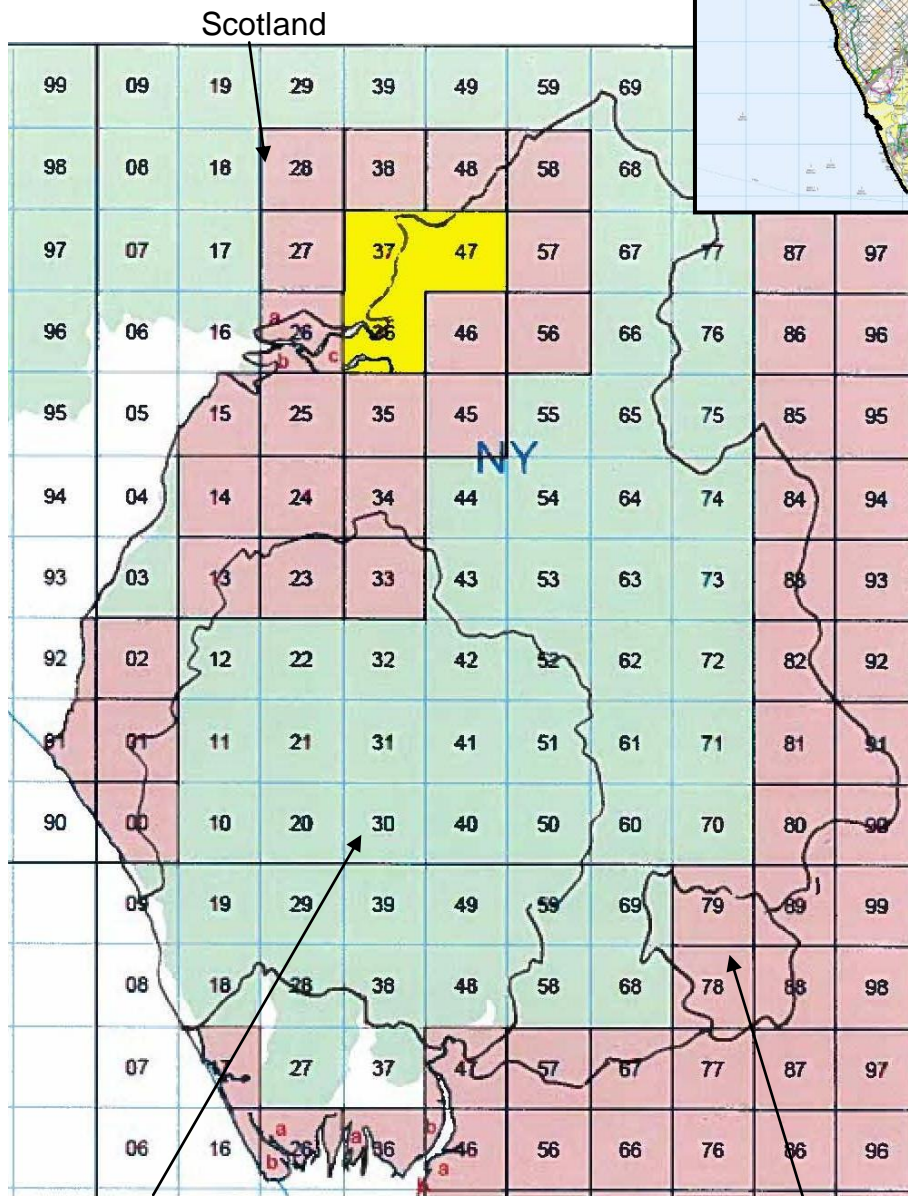
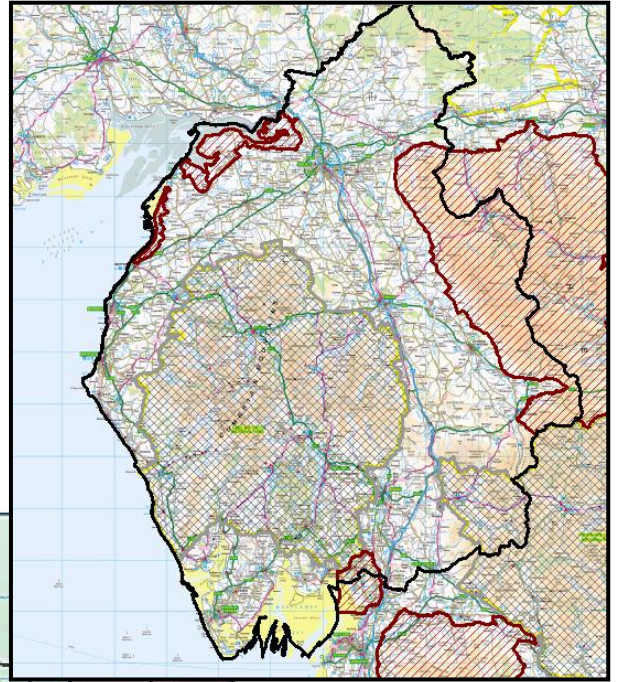
proposed if any PEDLs are sought in the county, in this current Round of licensing offers.

In November 2013, the County Council prepared a Briefing Note on unconventional hydrocarbons and, with the launch of the 14th Round of licensing, this has been updated. The Briefing Note gives more detail on shale gas and coal bed methane licensing and extraction processes and can be found on the County Council's web page for unconventional hydrocarbons: http://www.cumbria.gov.uk/planning-environment/policy/minerals_waste/MWLP/Unconvent-Hydrocarbons.asp

Annex A

Map of PEDL areas in and around Cumbria

National Parks and AONBs
in Cumbria



Lake District National Park

part of
Yorkshire Dales National Park



Blocks currently under Licence



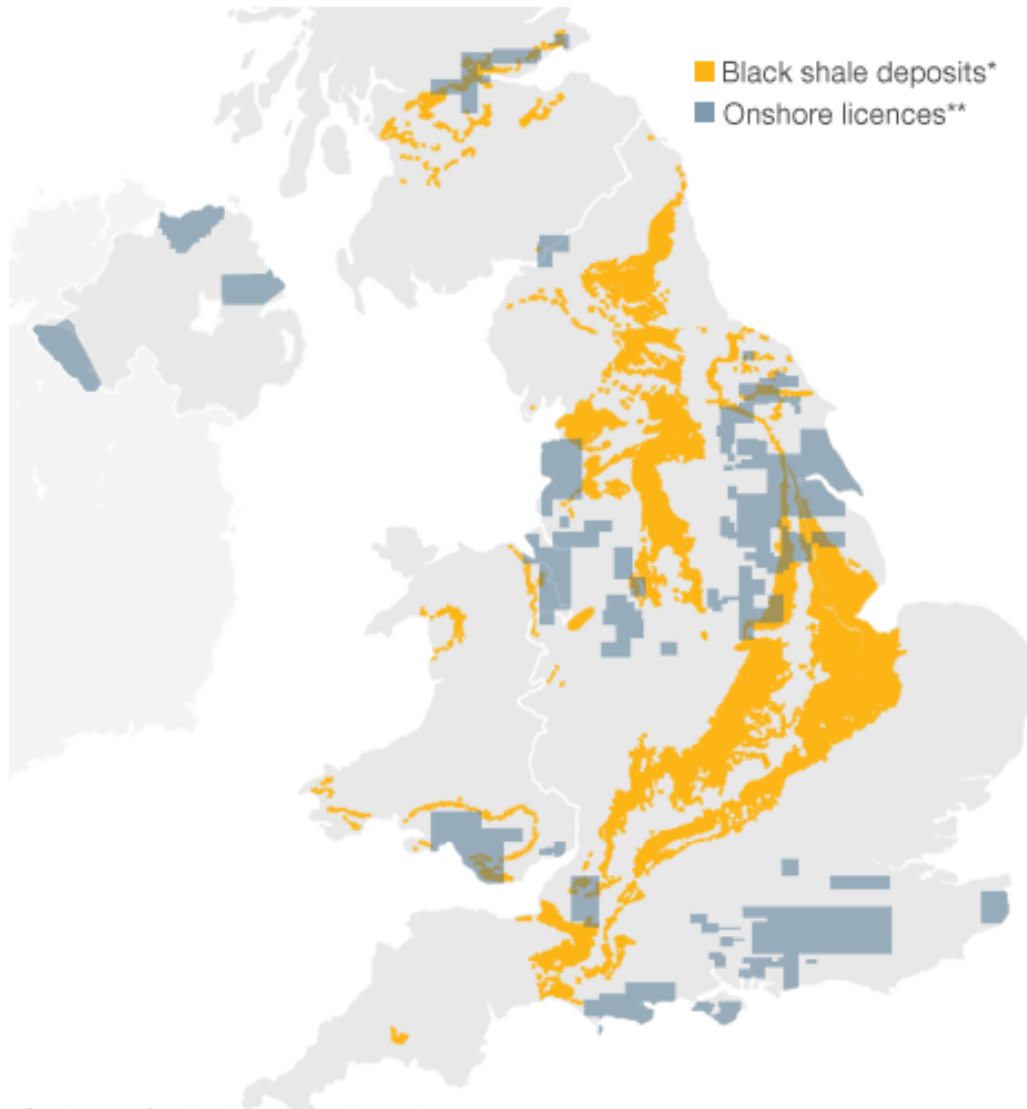
Blocks under offer in 14th Round

source: DECC

Annex B

Map of shale rock formations in the UK

Shale formations across the UK



*Shale data for Northern Ireland not shown
**giving exclusive rights to exploration and drilling

Source: British Geological Survey