

Fracking for gas allowed in UK despite earthquakes

Panel of scientists recommends mining process continues, but with tight guidelines

Michael McCarthy - Tuesday 17 April 2012

Fracking, the controversial natural gas extraction technique which sometimes causes earthquakes, can go ahead in Britain –but only with tight restrictions on the process, a panel of independent scientists will tell the Government today.

In particular, a "traffic light" earthquake early warning system must be put in place, which would halt operations even in the case of very minor seismic movements, the group said.

The panel was set up to look at the implications of the two earthquakes in the Blackpool area in April and May of last year, which were caused by fracking – the fracturing of shale rock formations deep underground –by the energy company Cuadrilla Resources. Cuadrilla has discovered a substantial shale gas field in that part of Lancashire, which it claims holds 200 trillion cubic feet of gas, enough to power Britain for more than 50 years.

But the company has admitted that operations at its Preese Hall well near Blackpool were responsible for two earth tremors, of magnitude 2.3 and 1.5, which occurred on 1 April and 27 May 2011 and were felt in the area, although nobody was injured and no structural damage was caused. Cuadrilla accepts that 50 seismic movements were caused by its operations, most of them tiny.

The panel –consisting of Professor Peter Styles, of Keele University, Dr Brian Baptie, head of seismology at the British Geological Survey, and Dr Christopher Green, director of G Frac Technologies Ltd –was asked by the Department of Energy and Climate Change (DECC) to review Cuadrilla's own report and to make recommendations for "the mitigation of seismic risks in the conduct of future hydraulic fracture operations for shale gas". The experts say there is no reason why fracking should not continue, but that a stringent earthquake precautionary regime should be put in place, based on a traffic light

system of proceeding freely, proceeding with caution and halting.

Operations should be stopped, they said, if an earthquake of magnitude 0.5 is caused – a very low tremor which might even be undetectable by people on the surface – when investigation should take place with action to mitigate the future risk. The threshold is very much lower than that suggested by Cuadrilla's own consultants last November, who put forward a figure of 1.7 for halting operations. But yesterday a spokesman said the company was "very comfortable" with the new figure.

Cuadrilla has suspended drilling at Preese Hall since the earthquakes and will not resume until new official guidelines are laid down. There will now be a six-week consultation period during which the Government will listen to other opinions and a final decision will be made by the Energy minister, Charles Hendry.

Fracking is carried out by pumping a mixture of water, sand and chemicals under very high pressure into underground shale deposits, which blows them apart and releases the natural gas they contain.