

SCRUTINY COMMITTEE FOR ECONOMY, TRANSPORT AND ENVIRONMENT

MINUTES of a meeting of the Scrutiny Committee for Economy, Transport and Environment held at County Hall, Lewes on 19 November 2014.

PRESENT: Councillors Richard Stogdon (Chair), Frank Carstairs (substituting for Cllr. Mike Pursglove), Claire Dowling, John Hodges, Pat Rodohan, Rosalyn St. Pierre and Barry Taylor.

LEAD MEMBERS: Councillors Carl Maynard (Lead Member for Transport and Environment) and Rupert Simmons (Lead Member for Economy).

ALSO PRESENT: Rupert Clubb, Director Communities, Economy and Transport; Karl Taylor, Assistant Director Operations; Tony Cook, Head of Planning; Sarah Iles, Team Manager Planning Policy & Development. Alexandra Doyle, Department of Energy & Climate Change; Michael Turner, Environment Agency; Tony Almond, Health & Safety Executive.

Scrutiny Lead Officer: Martin Jenks

22. MINUTES OF LAST MEETING

22.1 The minutes of the meeting held on Monday 10 September 2014 were agreed.

22.2 RESOLVED – to approve as a correct record the minutes of the meeting held on 10 September 2014.

23. APOLOGIES FOR ABSENCE

23.1 Apologies for absence were received from Councillor Mike Pursglove.

24. DECLARATIONS OF INTEREST

24.1 None.

25. URGENT MATTERS

25.1 None notified.

26. SHALE GAS AND OIL EXPLORATION – PRESENTATION ON IMPACTS AND REGULATORY ARRANGEMENTS.

26.1 The Director for Communities, Economy and Transport introduced the report. Shale gas and oil is part of the energy mix of the United Kingdom (UK). The UK is a net importer of gas with 80% being consumed by domestic users for heating and cooking. Energy security is becoming a key issue and this is where onshore unconventional oil and gas energy supplies could play a significant role.

26.2 The Head of Planning outlined East Sussex County Council's (ESCC) position as the planning regulator for oil and gas developments in its role as the waste and minerals planning authority. The South Downs National Park Authority is also a waste and minerals authority and will determine any planning applications within the boundary of the National Park that are in East Sussex. Planning policy WMP16 is the relevant planning policy within the Local Plan.

26.3 There are no existing permissions for gas or oil exploration or production in East Sussex. There are no current applications or requests for pre-application advice. Cuadrilla has recently given up a large petroleum exploration licence and only 1.2% of the County's land area (approximately 27km²) is within a current petroleum exploration licence. The Weald Basin has little shale gas potential. There is a limited potential for shale oil in East Sussex, but the areas to the west of the County have a higher potential for shale oil.

Presentation by Alex Doyle, Department of Energy and Climate Change (DECC)

26.4 The role of the Office of Unconventional Gas and Oil is to promote exploration, develop regulation policy, and to ensure public engagement. Gas is used for power generation and for domestic use. There is a gap between the amount of gas produced domestically and the current demand, which has to be met by importing gas. The Government considers shale gas to be important to the security of UK energy supplies and the economic benefits that it can have e.g. increased employment.

26.5 The British Geological Survey report on the Weald Basin Shale rocks indicates there are prospective reserves in the deeper shale rocks around Mid Sussex. These are classed as 'unconventional' sources of oil and gas because they are bound within the shale deposits and are not free flowing like conventional oil and gas fields. In order for the gas or oil to be extracted from shale rock, techniques such as hydraulic fracturing need to be used to release the gas or oil.

26.6 There will be local impacts from the exploration and production of shale gas and oil. The UK Onshore Operators Group, which represents the industry, has agreed a Community Engagement Charter. It has also agreed to give the local community £100,000 at the exploration stage for each well site and 1% of revenues for each well in production. The percentage contribution from revenues has been set in advance of knowing what the viability of the onshore industry will be and may be revised at a later date.

Exploration

26.7 At present the industry is at the exploratory stage, where it is seeking to establish what potential the gas and oil bearing shale rocks have. DECC awards petroleum exploration licences to companies in an application process every 2-3 years. The most recent petroleum exploration licencing round closed on the 28 October 2014 and the results will be announced in early 2015. As part of the licence application process, DECC checks the financial viability and technical competence of each company applying for a licence.

28.8 Once the petroleum licences have been allocated, planning permission and other licences have to be obtained. The exploration stage can last up to six months. If a well goes into production, it could be operational for a period up to 20 years. Well decommissioning and restoration can take place at any stage.

How Safe is Hydraulic Fracturing?

26.9 There are two key independent reports that look at the safety of hydraulic fracturing and the impact on health. The Royal Society and Royal Academy of Engineering Report “Shale gas extraction in the UK: a review of hydraulic fracturing” published in June 2012, looked at the experience in the United States of hydraulic fracturing. It concluded that the risks from hydraulic fracturing could be managed (i.e. they were low) if the operations were well run, used best practice, and were regulated properly. Most of the recommendations from this report were implemented by DECC.

26.10 The Public Health England report “Review of the Potential Public Health Impacts of Exposures to Chemical and Radioactive Pollutants as a Result of the Shale Gas Extraction Process” June 2014 came to a similar conclusion that the risk from hydraulic fracturing was low, provided best practice techniques are adopted and there is robust regulation. The main risks were from operational failures and a weak regulatory system.

How is Hydraulic Fracturing Regulated?

26.11 The regulation process starts with DECC awarding petroleum exploration licences. The operator then must seek planning permission and obtain the relevant licences/permits from the Environment Agency (EA). The operator will also have to obtain approvals from the Health & Safety Executive (HSE) for the well design, well construction, and the safety of drilling operations. If the operator plans to use hydraulic fracturing, they will also have to submit a fracturing plan. Once all these permissions and approvals are in place DECC will issue a well consent.

26.12 DECC has developed a regulatory “road map” (available on the DECC web site) to help operators and members of the public understand the regulatory process. DECC continues to work on the regulatory process and encourages companies to talk to regulators, planning authorities and local communities at the earliest possible stage.

26.13 In response to the issues that arose in Lancashire, DECC has introduced a “Traffic Light” seismic monitoring system which is very stringent. Where there are no seismic effects from hydraulic fracturing, operations can proceed (Green). Where earth tremors are experienced up to 0.5 on the European Macroseismic Scale (EMS), operations can proceed with caution and increased monitoring (Amber). If earth tremors exceed 0.5 on the EMS scale, operations must cease immediately (Red).

Impact on Climate Change

26.14 A number of studies have been carried out to look at the impact on climate change of shale gas. Emissions from shale gas will come under the CO₂ climate change targets. The early monitoring of sites has shown that CO₂ emissions from shale gas sites are very slightly higher than they are from natural gas sites, but are lower than imported liquid natural gas (LNG). Electricity generation from gas has a significantly lower CO₂ footprint than the use of coal. The Government also remains committed to the use of renewable sources of energy with significant investment in this sector.

Government Efforts to Promote Development

26.15 The UK Government is taking a number of steps to promote the development of the onshore shale gas and oil industry. These include:

- The 14th licensing round for petroleum exploration licences which includes DECC conducting a Strategic Environmental Assessment (SEA).
- A lower tax of 30% on shale gas to encourage the development of the industry.
- The retention of business rates for shale gas production sites by local authorities.

- Changes to access rights outlined in the Infrastructure Bill currently going through Parliament, so that companies have a right of access below 300 metres. Any surface development and access will still be subject to land owner agreement.

Conclusion

26.16 The Government believes that the UK needs shale gas to bridge energy supply requirements whilst low carbon alternatives are developed. Shale gas provides potential energy security, economic growth, job creation and tax revenues. The industry is subject to robust regulation and green house gas emissions are lower than imported liquid natural gas and coal fired energy generation.

Presentation by Michael Turner, Environment Agency (EA)

26.17 The Environment Agency (EA) is the environmental regulator for the onshore oil and gas industry. The EA's role is to manage risks that arise from exploration and production. This is achieved through a system of permits and active monitoring of the permit conditions. The permits apply to conventional and unconventional oil and gas exploration/production.

26.18 The EA has a history of regulation in Sussex that includes conventional wells. It has also had the experience of regulating Wytch Farm in Dorset. This site was developed in the 1970's using hydraulic fracturing techniques.

26.19 If an operator wants to drill for oil or gas they need to obtain a range of permits, depending on the location and the type of operation. For example, there may be naturally occurring radioactive materials that are released as a result of the drilling. If above the permitted level, the resultant waste will require a permit and a safe means of disposal. Similarly if flaring is necessary, a separate permit will be required. Before a well goes into production an operations permit is needed.

26.20 The permitting process is similar to the planning process. There is a pre-application phase when the operator can discuss their proposals. There is a consultation phase before permits are issued, the determination and issue of permits, followed by a process where permits are surrendered once operations have ceased. There are two types of permit, one with standard conditions and a bespoke permit with non standard conditions.

26.21 The permit conditions are designed to control the potential impact on land, air quality, water quality and people. The permit conditions cover things such as:

- Drilling additives, technical assessment
- Well design, groundwater protection
- Surface operations, including the use of an impermeable membrane
- Surface water drainage
- Storage of materials on site e.g. chemicals and fuels
- Environmental monitoring
- Flaring (using best available techniques) rather than venting

26.22 The principle responsibility for monitoring the permit conditions rests with the operator, but EA also carries out check monitoring. They undertake joint site visits with the Health and Safety Executive (HSE) and carry out deeper audits of operations. EA also works with partner organisations such as the planning authority. It will liaise with the local community and follow up any reports of pollution.

26.23 Operators tend to apply for planning permission before applying for permits. The EA is a statutory consultee in the planning process and this ensures there are no gaps or overlaps in the regulatory process. The EA are happy to give advice to Planning Officers and attend Planning Committees. The EA believes the risks from hydraulic fracturing can be managed through permits and robust monitoring.

26.24 At present there is no hydraulic fracturing planned or taking place in East Sussex. It is more likely that exploration will take place for conventional oil.

Presentation by Tony Almond, Health and Safety Executive (HSE)

Regulatory Regime

26.25 The Health and Safety Executive (HSE) regulates all health and safety in the UK. It regulates the onshore and offshore oil and gas industries and has many years of regulation experience. The HSE works very closely with the EA to regulate the onshore oil and gas industry. The UK has a very robust regulatory regime, probably tougher than anywhere else.

26.26 The main risk is the loss of well integrity. Therefore the construction of the well is very important. The HSE looks at the construction of the well and the work place safety issues. It does this through the Health & Safety at Work Act (1974) and two other sets of regulations:

- The Borehole Sites and Operations Regulations 1995.
- The Offshore Installations and Wells (Design and Construction etc.) Regulations 1996.

The HSE can enter a site at any time without notice to carry out an inspection. It can issue improvement notices, stop notices and prosecute operators.

Regulatory Approach

26.27 The HSE works with operators to set industry standards on the best available techniques. It looks at individual wells and adopts a lifecycle approach to regulating wells. It jointly regulates well operations with the EA and entered a memorandum of understanding with them in 2012.

26.28 Before any work starts on site the operator has to provide the HSE with a range of information on:

- Well design, drilling muds, fracking fluids and all equipment on site.
- Details of the well borehole design including the three levels of casing.
- The geology and how the design of the well has taken into account the risks presented by the geology.

26.29 Once construction has started, the operator has to provide weekly reports including details of the depth and diameter of the well; the depth and diameter of the casing; the pressure of the drill fluid and its density; and details of any work carried out since the last report. When a well is de-commissioned, the operator has the responsibility to provide a similar weekly report throughout the process.

26.30 In addition, the operator has to appoint an independent well examiner from a separate company. The independent well examiner's role is to ensure that the operator complies with the regulations and best practice throughout the lifecycle of the well.

QUESTIONS

Economic Benefits

Question: Are the economic benefits from shale gas in the UK overstated and is it economically viable?

26.31 The economic benefits will depend on the size of the resource. Current estimates are based on the British Geological Survey report, but more exploration is needed to prove the size of the resource and hence the economic viability. The Institute of Directors and Ernst Young are working on a scenario to calculate the economic benefits. If the shale gas industry can be established the Government expects there will be economic benefits, but this depends on how the industry grows.

Exploration Activity

Question: How much exploration is currently underway?

26.32 There are a number of planning applications in Lancashire. There are likely to be approximately 10 wells in the next few years. There is no exploration currently taking place in East Sussex. There is no conventional oil or gas activity in East Sussex.

Regulation and Planning

Question: What happens if planning permission is granted first but permits are refused?

26.33 In these circumstances, the development will not go ahead. Usually EA's comments would be included within the planning permission as a statutory consultee. Permits tend to be more detailed and it is the operators risk if they cannot get the relevant permits. A permit can change the detail of the way operators run a development, so it would be preferable for the planning permission and permitting processes to be carried out at the same time.

Question: As planning authority, how can ESCC be sure of the quality of the operator?

26.34 DECC has issued national planning guidance to assist local authorities and ESCC should assume that the other agencies will fulfil their role in checking the competence of the operator. DECC will be able to assist ESCC if a planning application is made and help to explain the role of each of the bodies to the public. DECC will also check that all bodies are meeting their responsibilities.

Question: Does ESCC have sufficient capacity and technical expertise to deal with a planning application for shale gas or oil exploration?

26.35 Yes the department has appropriate capability to deal with planning issues locally, but will apply to have additional resources e.g. services of consultants, if necessary.

Question: Is hydraulic fracturing safe?

26.36 DECC does not want to overstate the case for hydraulic fracturing, but the UK has over 50 years regulatory experience from onshore and offshore operations. The UK has one of the most stringent regulatory regimes and has a good track record. The Royal Society & Royal Academy of Engineering, and, Public Health England Reports suggest risks from hydraulic fracturing can be managed and will be low, if best practice is adopted and operations are well run.

Risks and Impacts from Exploration and Production

Question: What fluids are used, and is there a risk they can migrate away from the well head?

26.37 The mixture of fluids used for hydraulic fracturing will vary, depending on the site conditions. They are usually largely water, with sand and a lubricating chemical additive. The EA will pre-approve the mixture or reject it prior to drilling starting on site. There is the potential for the operator to recycle hydraulic fracturing fluids and drilling mud on site. If the water use on site is more than 20 mega litres per day, the operator will need an abstraction permit, if it is using a local water source. If the water comes from a water company, it will be included in the existing water company abstraction permit. The water use for a hydraulically fractured well is less than the summer water use for an average golf course.

26.38 The monitoring of the potential for fluids to leak from a well head will depend on the hydrology of the area. Wells are lined with a triple casing that will go down as far as there is a risk to permeable geology. Unconventional oil and gas sources can be very deep and the overlying Weald clay also acts as a confining layer. The risks of drilling in shallower levels for conventional oil and gas are higher, but there are risks from any borehole. If there was a potential risk of fluids migrating from a well head, then EA would be unlikely to issue a permit. In addition, EA will not permit drilling through a drinking water aquifer.

Question: Do sites have to be bunded?

26.39 The well head has to have an impermeable membrane drained to a sealed tank. So yes, sites do have to be bunded to prevent ground and ground water contamination.

Question: What happens if the well casing fails and the gas or oils leaks and there is an explosion/fire?

26.40 Hydraulic fractured wells do not have a huge amount of pressure, so it is likely to be a limited type of incident, confined to the well head itself. This might result in the release of fluids into the environment. The operator is required to liaise with the emergency services and have an emergency plan in place.

Question: Would local authorities be liable for the cost of dealing with an emergency?

26.41 The liability for meeting the costs of an emergency rests with the operator. The operator is required to have sufficient insurance to cover all liabilities. So the financial liability for dealing with emergencies does not rest with local authorities. DECC is looking at the issue of what happens if companies go bankrupt, or a successor company/well owner cannot be found, in the case of abandoned wells.

Question: What are the impacts of developing a well on the local community?

26.42 Usually the well head is 1-2 hectares in size and can be developed successfully in environmentally sensitive areas e.g. Wytch Farm is in a Site of Special Scientific Interest (SSSI) and an Area of Outstanding Natural Beauty (AONB). There are a number of impacts associated with well development which will vary depending on the site and the availability of utilities e.g. water and power supply etc. They include:

- Site construction – installing permeable membrane, concrete pad, fencing etc. including transport of equipment and materials onto site.
- Drilling – There will be a number of weeks of drilling noise, vehicle movements for equipment transport etc.
- Hydraulic Fracturing – this may take 1-2 days and will require significant quantities of water and additives, which may result in more traffic.
- End of Drilling Phase – Removal on equipment from site (drilling head, storage tanks etc.)
- Production Phase – For gas the well head is quite small and ongoing production infrastructure needs can be quite low. In addition the gas or oil produced will need to be taken off site.

26.43 The period of intense activity at a well site tends to be a number of months, but is usually less than a year. The construction phase usually lasts between 6 weeks and 3 months. The length of time will depend on each site. The operator will provide details of the planned length of activity to the planning authority when it applies for planning permission.

Seismic Monitoring

Question: How do you know whether earthquakes are due to hydraulic fracturing or naturally occurring?

26.44 In the case in Lancashire, DECC used a number of experts to look at the seismic monitoring data that the operator had collected. In this case there was little doubt that the seismic activity was due to hydraulic fracturing operations, which produced tremors of between 1.5 and 2.3 on the EMS scale. This was due to an existing fault in the rocks slipping. Tremors associated with hydraulic fracturing are usually below the level anyone would notice and lower than coal production induced seismic activity.

Question: What is the insurance companies' view of the risk from earthquakes and will the Government underwrite the costs?

26.45 The operator will be responsible for the risk and payments for any damage.

Question: How will this affect individual's insurance premiums?

26.46 The Association of British Insurers (ABI) view is that the risk is low and does not need to be specifically covered in policies.

Question: What is the expected impact on premiums?

26.47 This is something that DECC can ask the Association of British Insurers (ABI).

Abandonment of Wells

Question: What are the ongoing monitoring arrangements once a well has been plugged and sealed?

26.48 The long term monitoring of a well is carried out by EA, but there may be a need for post abandonment monitoring of wells. This is something that EA is reviewing. The review is looking at all previously abandoned wells and the arrangements that have been made. The operator has to prove there is no residual risk to the environment as part of the de-commissioning process.

26.49 There is an independent piece of research being led by Newcastle University and Durham University by ReFINE (Researching Fracking in Europe) which is looking at abandoned wells and well design to reduce the need for ongoing monitoring. Usually when a well is sealed the concrete plug goes down many hundreds of metres.

26.50 RESOLVED: - It was resolved to note the information on the impacts of shale oil and gas exploration.

27. RECONCILING POLICY, PERFORMANCE AND RESOURCES (RPPR)

27.1 The Director of Communities, Economy and Transport introduced the report and outlined the financial challenges facing the department and the authority in coming years. The medium term financial plan has sought to save £60m across the Council. When thinking about the RPPR process, it is important to put it in the context of the Council's four cross-cutting priority outcomes. In this respect, the work of the RPPR Board is really important and significant.

Communities, Economy and Transport (CET) Budget Position

27.2 The CET department's revenue budget is similar in size to the Children's Services budget if you exclude school budgets. The Adult Social Care & Community Safety department tends to have the largest budget of all the departments. The CET budget has some constraints, namely the:

- Waste disposal private finance initiative (PFI) contract £25m
- Concessionary bus travel scheme £8m
- Highways contract costs £12m

27.3 The RPPR Board will meet on the 15th December 2014 and all Committee members will participate in the Board. At the RPPR Board Committee members will be able to review:

- Progress with the current year's budget savings.
- Any modifications to the 2015/16 budget.
- Possible implications for the years following 2016/17.

27.4 The Committee would like to see a range of options presented for planned savings where this is possible. The Committee can challenge the savings proposals, but will have to find alternative savings within the final year of the 3 year savings plan. There is also a corporate context to the savings plan, and the department cannot 'shunt' savings to other departments.

27.5 CET has sought to work with other departments and partners when looking to make savings. The Transport Hub is an example of this where school transport is being managed on behalf of Children's Services. This has led to the reduction in the use of more expensive forms of transport such as Taxi's, and a reduction in costs for the authority as a whole. The department is in discussion with partners such as Parish Council's and others through the Strengthening Local Relationships (SLR) meetings and the Community Self Serve initiative.

27.6 The CET department has already made significant savings and cost reductions through the Transformation programme and other initiatives. The department has worked to reduce the staff management overhead and the commissioning process for services incorporates zero based budgeting.

27.7 The Scrutiny Committee is invited to submit further ideas for savings at the RPPR Board meeting for the department to consider.

RPPR Review Board

27.8 The Committee agreed to convene a Scrutiny Review Board to consider the portfolio and savings plans. All Committee members will participate in the Board, which will be held on Monday 15th December 2014 following the Lead Member meeting.

27.9 RESOLVED: - It was resolved:

- 1) To note the report and;
- 2) Establish an RPPR Review Board.

28 SCRUTINY WORK PROGRAMME

28.1 RESOLVED: To amend the scrutiny work programme to include the following items:

MEETING TO BE HELD ON 18 MARCH 2015

Dutch Elm Disease Strategy Update.

A monitoring report to review how well the 'prioritised approach' strategy, endorsed by the Scrutiny Committee in March 2013, is working.

Safer Streets

A report on the Safer Streets initiative led by the Public Health department, which links to the Killed and Seriously Injured (KSI) performance targets and wider road safety issues.

Reconciling Policy, Performance and Resources (RPPR).

The Committee will review their input into the RPPR process, and make recommendations for improvements for the future RPP&R process.

MEETING TO BE HELD ON 1 JULY 2015

Scrutiny Review of School Crossing Patrol Alternative Funding

Update report on the progress in implementing the recommendations of the review.

POTENTIAL FUTURE ITEMS

28.2 The Committee discussed the following as subject as a potential future item for inclusion in the work programme:

Economic Development

A detailed appraisal of the impact and overall effectiveness of the Rural Growth and Employment Fund (RuGEF), ESCC Capital Budget for Growth, and Regional Growth Fund (RGF) programmes, looking at how different businesses have benefitted and the effectiveness of the programme.

Superfast Broadband Project

The Committee discussed receiving a report on the progress of the Superfast Broadband project, examining take up and the next stages of the project.

29. FORWARD PLAN

29.1 The Committee considered the Forward Plan for the period 1 November 2014 to 28 February 2015. Requests for information should be raised with the listed contact officer, and any scrutiny issues with the Members Services Manager.

30. URGENT ITEMS

30.1 No urgent items were raised for discussion.

31. NEXT MEETING

31.1 The meeting ended at 12:45 pm.

The next meeting of the Committee will be held on Wednesday 18 March 2015.

COUNCILLOR RICHARD STOGDON
CHAIR