

Lindholme Village Action Group

Response to Questions issued to Scottish Power

Hatfield West Gas Storage Extension



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Planning

1. What is the difference between the two planning acts – Town and Country Planning Act and Gas and Electric Planning Act? Which Act does ScottishPower intend to follow and how do they intend to push it through the planning system?

For clarification the two pieces of legislation being considered are the Town and County Planning Act 1990 (TCPA) and the Gas Act 1965.

ScottishPower intends to submit a planning application to Doncaster Metropolitan Borough Council (DMBC), under the TCPA in the summer of 2009. The concept of planning permission is that it authorises only the development of land for a purpose; a further authorisation to store gas requires separate consent under the planning (Hazardous Substances) Act 1990 and in turn requires that the operator controls the land in question.

ScottishPower will continue to consult with local landowners to secure "Option" agreements to store gas in the existing Hatfield West reservoir. Should ScottishPower be unable to secure all landowners consents then it would seek to secure these rights in the form of an application to the Secretary of State for the Department of Energy and Climate Change (DECC) for a Storage Authorisation Order (SAO) under the Gas Act 1965. Compulsory Purchase Orders (CPOs) would also be sought for use of the underground strata. Although the Gas Act option takes longer, it secures all the necessary storage rights and Planning consents required to implement the project. ScottishPower will review the progress with land agreements and decide whether it is necessary to progress with a separate application for a SAO under the Gas Act 1965 around autumn 2009. Under this route ScottishPower would no longer make discretionary payments to landowners.

2. What expertise is being brought in to advise the council so they can make a judgment on our behalf – in relation to planning application?

We are unable to answer this on behalf of DMBC. However, DMBC consults widely with all key consultees and experts including, Natural England, Royal Society for the Protection of Birds (RSPB), Health & Safety Executive (HSE), Highways Agency, Hatfield Town Council, Coal Authority, Environment Agency (EA), National Grid (Gas) and members of the public.

Impact on properties

3. What work has ScottishPower undertaken in relation to assessing the devaluation of residents' properties in Lindholme Village based on a new gas storage facility planned in the neighbourhood?

ScottishPower commissioned an independent and experienced land valuation surveyor to review the potential impact on land valuation both around our own facility at Hatfield Moor/Lindholme and at other operational onshore gas storage facilities in the UK.

There is no evidence to support any adverse impact on land valuation due to the presence of underground gas storage operations.

The law provides the right for property owners to claim compensation through the appropriate channels if they can prove their property has reduced in value as a result of the lease agreement, the designation of planning permission or a Storage Authorisation Order being awarded. Signing the lease agreement does not remove this right.

We have been advised that properties in the area will not be reduced in value due to the extension of the existing facility as the reservoir is deep underground, has co-existed with properties and the operation of the facility does not adversely impact on the properties over or within the proximity of the storage facility.

4. How will having a gas storage facility impact on our house insurance?

There is no evidence that household insurances will be affected by the gas storage proposals. There have been no reported issues in relation to other storage facilities in the UK where households or businesses are located above naturally occurring reservoirs. Independent insurance advisors have confirmed this view. We are also not aware of any issues with respect to our existing operations at Hatfield Moor/Lindholme.

We would advise householders to seek independent advice from their own insurers.

Surveying and gas pressure

5. What seismic surveying has been undertaken in the area, when was it undertaken and where are the results? And how reliable is the survey?

Extensive seismic surveying work was carried out during the 1980s to establish the structural forms of the Hatfield Moor and Hatfield West reservoirs.

Prior to ScottishPower acquiring the site in 2006 from Edinburgh Oil and Gas, RPS Energy were commissioned to undertake due diligence of the gas reservoir boundaries of both Hatfield Moor and Hatfield West.

RPS Energy derived the existing storage boundary using well proven industry standard mathematical modelling software. The results of this work were displayed in the plans presented at the public exhibitions.

6. We are concerned that the seismic survey that has been undertaken could be wrong, even out by x no. of metres. We need SP to provide us with evidence of the reliability of the survey that you are using? We are concerned that the plan in SP promotional material is an old licence plan.

The reservoir boundary presented in the plans shown to date do not relate to an old license plan but have been sourced from the modelling work carried out by RPS Energy on behalf of ScottishPower in 2006.

We have subsequently employed an independent specialist engineering firm to review the RPS 2006 report and they have also concluded the RPS interpretation can be fully justified. There is no intention to amend the current reservoir boundary plan.

7. The survey you are basing your decisions on was carried out in 2006 by RPS using data, which is three years old. Why hasn't a more recent survey been undertaken?

The 2006 report by RPS has also been reviewed by an independent specialist engineering firm and we have no concerns with the accuracy or adequacy of the report.

8. How stable is the gas reservoir?

The gas storage reservoir has a proven integrity for containing and storing gas. Both Hatfield Moor and Hatfield West gas reservoirs have stored gas for millions of years.

There is a comprehensive regulatory framework covering the safety and approvals of gas storage facilities in the UK. Operators are required to demonstrate to the relevant authorities that the storage facility is designed, constructed and operated to meet the required standard, this will include providing evidence on the integrity of the reservoir(s). The operator is also required to demonstrate that a suitable safety management plan is in place and that the operator is competent.

9. What will be the pressure of the gas entering the gas storage facility?

Gas entering the Hatfield West reservoir will be limited to a maximum pressure of 41.6 barg. The maximum operating pressure of the reservoir will be regulated by DECC and the HSE. The approach generally taken is that the reservoir would not be operated above the pressure that originally existed.

10. How stable and safe is this site as a gas storage facility, please provide evidence?

See question 8 above

11. What guarantees can you provide that the existing pressure in the facility will not be exceeded? If it was exceeded, what danger would this pose?

Reservoir pressure will be maintained in exactly the same way as for our existing operations at the Hatfield Moor facility. Maximum reservoir pressure will be restricted by an integrated control system and backed-up by an automatic quick closing valve. This safety integrity system cannot be manually adjusted by operators and is regularly checked and tested under the existing maintenance system.

This system of protection and control will be assessed by the HSE as part of the operational permitting process for the facility and the system will be risk assessed and designed to meet existing UK standards.

The risk of exceeding the pre-defined maximum reservoir pressures with the current control system is low and the system has an automatic safety protection systems providing back-up.

12. What 3D and/or 2D precise image of the underground gas storage facility – Hatfield West – in relation to all the properties in Lindholme Village can you provide?

As explained above the seismic data and the expert interpretation we have commissioned have been used to identify the red line boundary. The data used does not generate images.

External consultation

13. What discussions have taken place with Lindholme and Moorland Prisons?

ScottishPower has held discussions with HMP Service with regard to the proposed development.

14. What response have you had from the Home Office or other relevant government departments to these developments?

ScottishPower has had two meetings with officers acting for the Department of Energy and Climate Change (DECC). The purpose of these meetings was to brief them on our intended proposals and to discuss the process of an application under the Gas Act 1965. No meetings with any other government departments have taken place to discuss these specific proposals.

It is widely recognised and documented that the government supports the need for more gas storage in the UK, this view is also supported by the energy regulator (Ofgem).

15. What consultation/discussions have taken place with Natural England?
What has been their response and please provide evidence?

Natural England has been consulted as part of the EIA process. No significant concerns have been raised by Natural England with respect to the proposal. We will continue to work with them to ensure that any environmental issues are sensitively and appropriately addressed.

Details of their response will be included in the Environment Statement that will be submitted to the Council with the application. Their response is public information.

16. What consultation has taken place with the Highways Agency, particularly as the gas storage facility, according to the survey that you are using, sits above?

The Highways Agency was consulted as part of the EIA process. No issues were highlighted with respect to the location of the reservoir. Their response is public information.

Compensation

17. Why have you offered some residents in the neighbourhood compensation payments and not others?

No compensation payments have been offered to any residents. Option agreements have only been offered to property owners within the reservoir boundary where we are required to secure land rights. These payments are essentially a goodwill payment that recognises the time and inconvenience ScottishPower would incur should property owner's consent not be secured and the Gas Act 1965 route is used to secure consent and land rights.

ScottishPower is currently offering £1,500 to landowners who sign an option agreement for ScottishPower to store gas in the sub strata. Should ScottishPower move to the Gas Act 1965 route to secure the required consents then the option payment would be withdrawn.

ScottishPower's lease offers a one-off payment of £50 to property owners in the event that the option agreement is executed and the lease is entered into. This is consistent with the approach taken on other similar cases that have been determined by the Lands Tribunal, should CPOs be sought.

18. What are the reasons behind these compensation payments?
Please see above (response to question 17).

Examples of other similar developments

19. Where are other gas storage facilities located in this country and what has been the impact/affect on residential house prices in those areas? Please provide evidence.

Schedule 1 (below) lists the other operational gas storage projects within the UK.

ScottishPower's land agent has spoken to the agents involved in other depleted reservoir gas storage projects, who have all confirmed that no evidence has been produced to them by any property owner to demonstrate any diminution in property value.

Our agent has also recently spoken to the three leading independent estate agents based in Louth, Lincolnshire, who operate in and around the area of the Wingas gas storage project at Saltfleetby. They have all confirmed that they have not found any difference in the saleability of property, nor do they in any way adjust the price of properties marketed, within or adjacent to the project area.

Health and Safety

20. If the gas storage facility exploded what is the likely radius of the impact? Please provide evidence.

Explosions cannot occur in underground storage as a positive pressure prevents the ingress of large quantities of air that would be required for the gas to ignite.

Natural gas is extremely flammable but only under specific conditions. There must be a mixture of between 5-15% with air and there must be a source of ignition. It only has the potential to be explosive if these conditions exist within a confined area.

The HSE is consulted on safety aspects during the permitting process for the facility. As part of the HSE assessment they model a worst case release scenario to determine the potential unmitigated impact of an uncontrolled release of gas from the gas processing plant, gas wellheads and gas pipelines. The HSE will then assess the risk and advise the Hazardous Substances Authority (HSA) if it is appropriate for the plant and/or pipeline to be located in the area proposed.

Based on the modelling carried out by the HSE on the existing Hatfield Moor facility the outer hazardous zone is 204m from the gas wellhead and gas plant and 145m from the main gas pipeline. The proposed extension will have similar hazardous zones, these will not extend to residential areas. The nearest house to Hatfield West wellhead is over 330m away.

21. What are the plans should the gas storage leak or explode – evacuation plan? What costs are in place to cover any evacuation plan, such as re-housing residents?

ScottishPower already has an on-site emergency plan in place at Hatfield Moor/Lindholme sites. The Pipelines Safety Regulations 1996 (PSR) and also the Control of Major Accident Hazard Regulations 1999 (as amended) (COMAH) require that Operators have an Emergency Plan in place for pipelines and hazardous facilities respectively. These emergency plans include preventing emergencies; reducing risks, minimising and mitigating consequences and detail specific actions to be implemented in the event of an emergency. The emergency services are consulted in relation to the production of the emergency plan and will also be consulted with respect to changes to the emergency plan as a result to any changes to the existing facility. Emergency plans are reviewed and updated where required on a regular basis.

Due to the distance between the nearest properties to the gas processing plant and wellheads it is extremely unlikely that evacuations from residential properties will be required in the event of a fire at the facility. The decision to evacuate members of the public is a decision taken by the emergency services and there are well tested and proven guidelines relating to this.

22. What is the % risk of a gas leak in the area, please provide evidence?

In 2008 the HSE carried out a study and produced a report titled "Failure rates for underground gas storage". This study was commissioned to consider the impact on land use planning assessments. This report can be found on the HSE website:

<http://news.hse.gov.uk/2008/12/10/failure-rates-for-underground-gas-storage/>

When considering a leak from a gas storage facility, consideration is given to either a failure of man-made infrastructure "well failure" (well, valves, cement etc) or the failure of containment within the storage reservoir (or cavity). The rates calculated in the study conducted by the HSE are as follows:

Well failure (worldwide per well year)	0.00058% - 0.00083%
Reservoir failure (worldwide per well year)	0.0007% – 0.00099%

The risk associated with a gas leak from the underground storage reservoir is considered negligible according to the HSE report.

Monitoring systems are also in place to keep track of inventory in the reservoirs and to detect potential leaks.

23. How often will the facility and surrounding area be checked and assessed for leaks, movement and stability, please provide evidence?

The gas storage reservoir is continuously monitored for integrity. All parameters of the reservoir are constantly measured. These include, pressure, temperature, gas injected, gas withdrawn and inventory.

ScottishPower has in place a formal Safety Management System for the existing facility this is overseen by designated managers who ensure all of our operations adhere to strict safety standards and regulatory compliance.

As well as being subject to regular internal reviews and audits, all our operations are also monitored by various statutory bodies including the HSE.

Future stability of site

24. What happens if ScottishPower assigns the gas facility to an overseas company, or you get bought out by an overseas company that does not come under the jurisdiction of the UK government? What controls do we have as citizens?

Any company proposing to operate this type of facility in the UK must to comply with all relevant UK legislation and standards present at the time. There are no exemptions for overseas companies

Any new operator would also be required to demonstrate to the Department of Energy and Climate Change (DECC) that they are a suitably qualified and competent operator in order to secure the license required to operate the facility.

Schedule 1

UK gas storage operational facilities

Storage Project	Type of facility	Location	Operator
Rough	Offshore depleted field	Southern North Sea	Centrica Storage
Hornsea	Onshore salt caverns	Yorkshire	SSE Hornsea
Humbly Grove	Onshore depleted field	Hampshire	Star Energy
Hatfield Moor	Onshore depleted field	South Yorkshire	ScottishPower
Hole House	Onshore salt caverns	Cheshire	Energy Merchants Gas Storage
LNG Storage	Above ground tank storage	Various	National grid