



## NOTES OF NO GAS STORAGE MEETING 19/01/18

**Please note, these notes were taken by a participant at the meeting and have not been agreed by all sides and so in this respect are unofficial notes. Any corrections or additions welcomed.**

**Chair:** Claire-Rimmer-Quaid (CQ)

**Halite Energy Platform Party:** Keith Budinger (KB), chief executive

Ian Gloyne-Phillips (IP), Marine Ecologist, NIRAS Consulting

Colin Harding (CH), chartered geologist and project director

Adrian Smith (AS), project management and stakeholder engagement.

**Apologies:** Cllr Paul Moon

**Present:** Approximately 150 people. In general Councillors have been named as having asked questions but other members of the public have not as they have not been expressly asked.

CQ opened the meeting and asked questioners to be brief, as the Halite representatives could only stay for an hour. The Halite team, in fact, answered questions for more than two hours.

KB thanked residents for coming. He said it was a requirement of the Secretary of State's 2015 Consent Order that they set up a Community Liaison Panel (CLP) consisting of members of the community with different interests. Halite was committed to the CLP running throughout the duration of their programme. If people wished to join, they should contact Halite. Members of the public would also be able to attend as observers. KB said he himself was a local resident – he lives at Prospect House, Preesall.

KB stated that the Consent Order was one of the most complex ever granted because of the history of the project. Halite had tried to address all the concerns of the community. There had been major consultation in 2011-12, which had included those living in the local impact zone. Their subsequent application was turned down by Energy Secretary Ed Davey, but the company applied for judicial review.

KB said that after he became involved, the company had spent £10 million between 2012-15 in trying to prove that the project was safe. Halite had inherited 104 former brine well caverns which it had to manage – a legacy which it took extremely seriously. They spent a lot of money ensuring they were maintained safely, and were themselves monitored by the Health and Safety Executive. The 19 new caverns which the company had permission to build would be constructed nowhere near the old caverns.

He said safety issues were the most prominent during their consultation, but brine discharge had since emerged as a major concern. Halite had to comply with the requirements of key stakeholders such as OFGEM and the Environment Agency and they also had to comply with the Consent Order.



They were determined to do so, and he urged residents to “hold their feet to the fire” if they failed to do so.

The Consent Order was for 19 caverns, but in similar projects they were never all built at once. Halite’s aim was to break ground on scrub clearance and the access road next month (February, 2018). The main activity would be the construction of the new road from the A588 down to “the marsh,” as Back Lane and other roads in the area were not suitable for heavy traffic. When that was completed, they could start to build the platforms for the drilling rigs and construct the caverns themselves. There would be 7 caverns in the first phase, which would take five years to complete. The Health and Safety Executive (HSE), which he described as a tough and stringent organisation, had to sign off all their plans, and sign the caverns off as safe to use after they had been washed out and tested.

A member of the audience asked if Halite was a COMAH registered operator – ie, one covered by the Control of Major Accident Hazards (COMAH) Regulations 2015. KB said Halite was owned by a group of investors and was now forming a joint venture to build the project. After construction was complete, an operator company would be set up which would have the necessary experience. This would be COMAH registered.

He said the Preesall saltfield was very shallow – 300 metres below the surface, and reaching depths of 800 metres. (Elsewhere in the country, salt was not reached until 1,000 metres). This meant that they could fill and empty their caverns a lot quicker than elsewhere in reaction to peaks and troughs in demand. The Rough Centrica offshore storage project, which provided 70% of UK gas storage, was closing this year.

A member of the audience asked if KB had experience of projects of a similar size that were discharging brine from the caverns-washing process into the sea. KB said his experience was in the US, where domed salt, rather than layered salt, was the main feature. CH said they were using a lot of consultants and contractors. Costain Energy and Process Ltd had done a great deal of work in Cheshire, and RESPEC had experience in designing caverns. He himself had experience with salt in Cheshire and Ireland.

Answering a further question about experience with marine brine discharge, KB said his own experience was with inland sites, where 60-70 truckloads of brine a day had to be taken away by road. This was more damaging to the environment.

CQ said it was noted that the questioner felt his query had not been properly answered and this would therefore be re-submitted.

Halite was asked about its planned abstraction of water from Fleetwood Fish Dock. The questioner maintained that Halite’s license had run out in June, 2016. She said they were required to sample for glass eels and smelt, which would be running up-river in the coming weeks. If sampling had not already started, it would be too late to do so this year. KB said the extraction license was renewed early last year, and was very similar to the previous one. He would forward copies.



The questioner asked if mitigation measures were in place. The sampling would involve both the fish dock and the marina, as these were linked. She herself had done sampling there and found smelt and glass eels. It was not possible to sample during or after the summer because these species would not be migrating then.

A Halite representative said measures were intended to prevent fish getting into the pumps. CH said they would not be abstracting this year. If sampling needed to be done in January next year, that was when it would be done.

A questioner asked why senior management at Heysham's two nuclear power stations had not been informed of such a large project nearby. KB said that back in 2011 the company held a Sec 47 consultation. They contacted all the strategic stakeholders, local businesses and infrastructure operators and gave them the opportunity to find out more. It was simply incorrect to say they were not informed.

A questioner asked why the brine created in the cavern washing process could not be pumped into ships and discharged into the Irish Sea. KB said brine discharge had not come up as a major issue during the 2011-12 consultations. All the statutory stakeholders had different requirements and the company complied with them, went through the necessary processes and undertook the modelling expected of them. After a four-year process involving all these experts, they received consent for the project. They had done everything that was needed to ensure safe salt disposal into the Irish Sea. It was not for Halite to guarantee that there would be no problems – it was their responsibility to comply with the terms of the 2015 Consent Order, and that was what they intended to do.

A participant said the provisions needed reviewing as new information was available. KB said they had been through a rigorous process and the boxes had been ticked by the experts. If the experts said it was safe for them to discharge the brine within certain limits, why should Halite be forced to do more than was required under the regulations? CH added that they were obliged to comply with the abstraction license, which required them to discharge at a specific Ordnance Survey reference point.

A questioner observed that both Wyre Borough Council and Lancashire County Council had opposed the project, but Halite had gone against the democratic process and the wishes of local people and had sought a judicial review. KB said he had nothing to do with the original application by Canatxx as he had come to the project later. Eighty per cent of Lancashire used gas for cooking and heating and the UK as a whole needed more gas storage. Democracy worked both ways – companies trying to do something for the national good had rights, too. They had received 127 letters of support for their programme in 2015. Halite had been through a legitimate process but did not get a fair crack of the whip and were wrongfully turned down, he alleged. They won their judicial review on all five grounds – in particular, the Secretary of State's "irrationality." They would be creating 800 jobs a year during the construction process and were "taking kids off the dole."

A questioner said that a document from the Conservative government's energy department clearly stated that there was no shortage in the provision of gas storage. She claimed that Halite's aim was



to buy gas when it was cheap and sell it when the price was higher, at the expense of the safety and the environment of local people. Many fishermen were saying there had been a lot of changes in the Bay. How valid now were surveys undertaken a number of years ago, she asked. IP said that further surveys to establish a baseline of marine life for the pipeline and brine discharge would take place in the coming year. If monitoring showed brine levels were above the levels in the regulations, the discharge would have to be reduced until the guidelines were met. Halite would do their own surveys, but the Environment Agency would enforce the conditions.

A questioner said it was impossible to pour “that amount of crap,” including mercury and heavy metals, into the sea without causing damage. Did the company not realise they would be devastating the area? KB said they were using experts in all the areas of contention. “We have to comply with the Consent Order. That is all we have to do. If you are an expert, then give us your feedback.” CH said that the statutory agencies had agreed on the method for baseline surveys. They had already conducted some of them – including unexploded bomb surveys – and the results would be with them shortly. The caverns would be created in virgin salt and would not involve the disturbance of residues dumped by ICI. ICI had disposed of mercury in Brinewell 107, which was a considerable distance from their area of operations. That brinewell was managed by NPL Estates, which owned the land in which it stood.

A questioner asked how many thousands of tonnes of salt would be wasted by being pumped out to sea. He asked whether the wastage of a national resource had been brought up during the approval process, and stated that salt would be needed by the country in the centuries to come. The glass industry in St Helens used 104,000 tonnes of soda ash annually – a product created from salt. KB said that Wyre Borough Council had asked them to find a use for the salt, but they could not find a buyer: “Nobody wanted it.” CH said the information about salt quantities was in the geological survey report. The questioner said it amounted to five million tonnes.

Cllr Derek Hudson said the discharge would “completely and utterly” destroy the Irish Sea and its fishing industry. A desalination plant would solve the problem, but Halite were simply looking for a “cheap way out,” he claimed. IP said they would know “pretty quickly” if salt discharge levels went above the requirements of the Consent Order. Asked about tolerance levels, and the requirement that there should be no impact on the shoreline, he said discharges would be monitored very intensively.

A questioner asked whether remote sensors would be used. AS said monitoring methods would be specified by a Brine Discharge Monitoring Group, chaired by the Environment Agency. Halite had a license and would meet the conditions of the discharge consent. The regulatory authorities were the people who had specified the discharge limits in line with what they felt would “work” for the environment.

Asked where the storage gas would come from, KB said it would be taken from, and returned to, the National Transmission System grid at Nateby. There would be an “entry-exit” agreement. The company would be able to suck it into the caverns at times of low demand and release it when demand improved. They would be a “strategic facility for the national grid,” he claimed. He said



there had been major national problems with supply before Christmas, 2017, and the gas price had doubled.

A questioner said Cantaxx had had planning permission for a Liquid Natural Gas plant at Anglesey, which would be linked to the Preesall complex by pipeline. No progress had been made at the time because the Preesall project had been turned down. He asked Halite to comment on their current position – Anglesey LNG Ltd is an associated company. KB said importing and storing liquid natural gas link had been the dream of Cantaxx's founders, but when he became involved it was felt there was no further need for LNG and the planning permission expired in 2013. They had since applied to renew it and were still in the renewal process. However, the economics of using LNG did not work out as had initially been hoped.

Turning to the way the project would be managed, KB said they intended to create a joint development organisation which would pull together the key construction companies which were needed to build it. This would involve firms with considerable experience of drilling, cavern washing and construction of facilities such as the Compressor Station. They would need to be able to deliver the different stages of the project on time. In terms of brine discharge, he stated that if they breached the Development Consent Order, work would have to stop. It would also have to stop if they breached noise requirements. He was aware that residents of homes on the Redrow development on the Fleetwood side of the river were concerned about this.

A questioner asked him to clarify the funding for the project. He said Halite Energy's last published accounts a year ago had shown they owed £248 million. Where would the £660 million development costs for the project come from?

KB said that since 2010 the majority of their investment had come from their New York-based parent company DE Shaw. As from today, he said, they were prepared to fund the project themselves. They were investing a lot of money up front. They did not intend to sell the project on – they wanted to bring partners in. A number of large oil and gas firms and pension funds were interested and wished to join them. DE Shaw had said they might need a partner, but right now they were prepared to fund the project themselves.

A questioner asked what regard had been given to fracking, and the earthquakes which had been caused locally – “a disaster waiting to happen.” CH said that seismic tremors larger than the ones caused by fracking were occurring all the time, and the design of the caverns took them into account. At 300 metres below the surface, movements would be just a millimetre or so. The Health and Safety Executive-approved construction process would take all these factors into account. KB pointed out that Halite already had permission for their caverns. Fracking companies applying to drill nearby would have to show that their work would not affect the gas storage facilities.

A member of the audience said local roads were already in poor condition. Would Halite be responsible for repairing surfaces damaged by their heavy vehicles, or would the financial burden fall on Lancashire council tax payers? AS said Halite would have to enter into a Section 278 highways agreement to ensure the design of their new haul road met the county's requirements. If trucks



broke kerbs or scattered mud over adopted highways, the county council would have legal recourse against them. Halite's partners would have to comply with maximum axle weight and other standards required by the authority. KB said that in the past, drilling rigs had been so large that they would have to be brought up by boat. However, they were now looking at smaller rigs that could be brought in by road. Halite would be using the best equipment available at the time and would ensure that the noise levels were appropriate for the residents of Harbour Village.

A questioner said that the salt mines were still collapsing, and the site was sandwiched between existing fracking sites only 11 miles away and two nuclear power stations. How could they reassure residents that the project was safe? KB said the community already had to deal with the legacy of two mines and 104 old brine caverns, which had to be managed. From day one, he had made sure that the caverns they managed were monitored daily. They had to make sure that the pressures within them were right. Some caverns they were managing experienced 20 bars of pressure. One brinewell, no 106, was 600 metres deep. If these legacy caverns were not being dealt with properly, there would be significant issues for the community. The new caverns were being built well away from the old ones. If the Health and Safety Executive (HSE) were not happy they would be safe, they could not go ahead.

CH said that ICI had originally washed all the salt from their caverns up to the fragile mudstones near the surface, and had failed to top them up with brine. These factors had been responsible for the collapses, and there was nothing that could be done to prevent further problems with these wells. In the Sixties, they learned their lesson and left a layer of salt at the roof of each cavern, protected by injected air.

KB said that 74 caverns had been created in the UK for gas storage and not one of them had leaked. The HSE would make sure Halite's new caverns were completely safe. CH said problems in the United States with leaks from storage caverns were because the salt there was domed. In the UK it is layered.

A questioner asked if the proposed Wyre tidal barrage would affect their project. KB said detailed plans had still not been submitted. The company concerned would have to go through a consultation process and would have to show that their proposals would not affect Halite's project, which already had permission. CH said the main effect would be the weight of the barrage. However, this would be insignificant for Halite's caverns – there would be no impact at all.

A questioner said she had been attending Gas Storage meetings for 15 years, and at each one protesters had said the project was not safe. How come Halite felt it would not be dangerous? CH said the British Geological Survey had provided all the information they used.

A resident of Sunnyside, Cartgate, said the new haul road would be built alongside Grange Pool – a dyke passing under the A588 and into the River Wyre. This had overflowed on November 22<sup>nd</sup>, causing water to back up and flood 10 houses. Could the company guarantee that their houses would not be detrimentally affected by the road's construction? AS said there was a requirement



that the company dealt with drainage from the road. The Environment Agency was responsible for making sure the road did not create drainage issues.

Cllr Gordon McCann questioned whether the large amount of shale gas being found under the Fylde would render the project unviable. KB said the UK's North Sea supplies had been run down, and shale gas had been reported as a replacement for it. It would be a lot easier to transport than liquid natural gas shipped in from Asia. Halite's project was not about extracting gas but storing it. It would be a storage medium for the national grid. In answer to another question, he stated that the proposed new power station at Thornton was not linked to the company.

Cllr Peter Cartridge said Halite would be making a lot of money out of the project. What payback could the community expect? At the moment, it was all "take, take, take." KB said that large projects in gas storage and power, such as the new Hinckley nuclear power station, all did a tremendous amount of work in their communities. They would follow this example – "but I am not going to bribe the community. I am not going to give money in return for favours." He spoke of a scheme they had set up some years ago, when 20 young people had been taken off the dole and trained up to do construction work connected with gas storage. But how they would reinvest in future was yet to be determined. The Community Liaison Panel would be a vehicle in which proposals to help the local community could be put forward.

A participant asked whether the company would compensate residents who lost money when their property prices went down. KB said a research project had shown there was no long-term loss in house prices from similar developments. Their own land bank of 1300 acres had doubled in value in recent years. Insurance companies did not charge special premiums for properties near similar projects.

A questioner asked what they would be doing to combat terrorism, what evacuation methods would be used, and whether the planned fire-pond would have the capacity to control a significant blaze. KB said they had had full-time security on site since 2011, involving both overt and covert surveillance. CH said the issues raised would have to be dealt with under the COMAH procedures. Amongst other things, they would have CCTV, special fencing, and security patrols. Better protection would be provided than with current above-ground gas storage.

A questioner asked whether Lancashire and Wyre Borough Councils had asked for a clean-up fund for "when Halite walks away because (the project) is no longer profitable." AS said there was a requirement for a decommissioning fund that had to be agreed with the local authority. This was "incremental," its size depending on the stage the project had reached. KB said that if Halite went bust, the fund would remain in place to "clean up." For instance, if a cavern was washed out but could not be commissioned, the money could be used to put matters right.

Asked about expected profit levels, KB said that in 20 years gas storage investors had not really made money. They would be lucky to make single digit returns. The biggest driver for Halite was to ensure the UK had a gas supply. In 2006, 14 major incidents caused the UK grid to go into emergency mode. At one stage in 2013, the country was down to eight hours' supply of gas. The returns to



investors had not been that attractive. However, the shallow salt at Preesall gave the project the ability to withdraw and re-inject gas very quickly, giving it the potential to be profitable.

A participant said a single digit return on a £660 million investment seemed a pretty good one. Turning to brine discharge, he asked the company to name one other project where 19,000 tonnes of brine was being pumped out into the marine environment. KB said he did not have knowledge of that. "All I can say is that we can only apply for consents and follow procedures. If we fall foul of the consents, we are going to know pretty quickly and be pulled into line. When it comes to washing out caverns, if we breach (regulations) we will be punished for it. If you are not happy with the regulatory authorities, that is something you need to take up with them."

Asked why they wanted to continue with the development when they had no experience of certain aspects of it and there were no profits to be made, KB said he believed that "UK plc desperately needs this." The way the UK gas and electricity markets were changing, the country was going to face problems in 10, 20 and 30 years' time. The country would be very dependent on gas for the next two decades to keep the lights on.

A local resident said that when he had asked about safety and explosion risks in years gone by, he had been advised to "hide behind caravans."

Another questioner said that there had been nowhere in the UK where the amount of salt to be extracted by Halite had been discharged into the sea. A project in Northern Ireland had been stopped totally because of planned brine discharge. When salt leached into the sand, it stayed there – and Halite was planning to pump it out into waters only 1.4 metres deep.

KB said the caverns in Northern Ireland were planned to be a lot deeper. The Irish government were looking at what would happen post Brexit. The UK was getting 45% of its gas from Europe at the moment, but nobody knew what would happen after it left the EU. In terms of safety, the company had invested £10 million to try to prove its safety case. To get planning permission, they were required to do far more than any other company. The FSC would decide whether or not the caverns were safe.

Asked about the effect of tides in the wake of the recent problem of palm oil, which had been deposited all over Morecambe Bay, KB said the tides brought in all sorts of rubbish, which they cleared once a year.

Asked about the extension of the Liverpool Bay Special Protection Area (SPA), which will now cover waters off Rossall and Fleetwood, IP said they would not be required to submit another plan retrospectively. However, the Environment Agency would have to take the extension into account.

Asked whether public footpaths would be closed, KB said that in general they would stay open unless temporary closure was required for health and safety reasons. They would not be taking away people's right to walk the Wyre Way.



CQ thanked KB and his colleagues and the whole of the audience for attending. She said No Gas Storage would try to get together another meeting in February. This could look at issues such as traffic, noise, the brine outfall, dykes and flooding. The next Community Liaison panel is also due in February.

NF, 22/01/18

With thanks to Nic Fogg for taking these extensive notes.