



**MINUTES OF THE TWENTY FIRST MEETING OF THE
DRAX POWER STATION CONSULTATIVE COMMITTEE
HELD AT DRAX POWER STATION ON WEDNESDAY, 22 APRIL 2009**

Present

Drax Power Limited ("Drax")

Peter Emery, Production Director (*Chairman*)
Sean Barry, Materials Handling Manager
Oliver Baybut, Environment Coordinator
Nigel Burdett, Head of Environment
Sean Ebnet, Head of New Business
Rachael Hudson, External Affairs Officer
Melanie Wedgbury, Head of External Affairs

North Yorkshire County Council ("NYCC")

Councillor Gillian Ivey
Councillor Chris Pearson

Selby District Council ("SDC")

Councillor Ian Chilvers
Councillor Kathleen McSherry
Diana Adamson

Barlby and Osgodby Parish Council

Councillor Duncan Rimmer

Drax Parish Council

Councillor Ian Fenton

Gowdall Parish Council

Councillor Mike Hughes

Long Drax Parish Council

Eric Ketley

Newland Parish Council

Councillor Stephen Greenwood

Environment Agency

Ian Foster
Kathryn Richardson
Leigh Sayers

DB Schenker

Amanda Wilson

Freightliner

Matthew Caygill

Natural England
David Carter

Apologies

North Yorkshire County Council
Councillor John Fort (Vice Chairman)
Councillor Margaret Hulme
Councillor Jim Snowball
Russell Hall
Vicky Perkin

Selby District Council
Councillor Jude Thurlow

Carlton Parish Council
Mrs J Lemm, Clerk to the Parish Council

Hemingbrough Parish Council
Councillor Jan Strelczenie

Forestry Commission
Rudie Humphrey

Welcome and Introductions

1. The Chairman welcomed members to the meeting.

Minutes of the Meeting held on 9 April 2008

2. The minutes were accepted as an accurate record of the meeting held on 9 April 2008.

Matters Arising

3. Reference paragraph 5: Natural England had been approached and were represented at the meeting.
4. Reference paragraph 6: Freightliner had been approached and were represented at the meeting.
5. Reference paragraph 7: the Road Haulage Association had been approached, and although not represented at the meeting had indicated that they would be in future.
6. Reference paragraph 11: given that confidential information is not disclosed at meetings of the Consultative Committee, it was proposed that paragraph 12 of the Constitution and Terms of Reference be amended to read:

“Draft minutes, agreed by the Chairman and Vice Chairman after consultation with Selby District Council, will be circulated to the members and bodies represented as soon as practicable after the meeting and will comprise a public record.”

Members agreed that the proposed amendment would be appropriate. It was agreed that a copy of the amended Constitution and Terms of Reference would be circulated with the minutes of the meeting.

ACTION: DRAX

7. Reference paragraph 12: the Constitution and Terms of Reference were circulated ahead of the meeting.

Business Review and Update on Power Station Operations

8. The Chairman gave a presentation covering a review of the Drax business and the power station operations.
9. Opening with an update on the market, it was explained that the electricity sector was no exception to the changes witnessed in the economy at large. The demand for electricity by end customers had seen an unprecedented reduction (year-on-year) of around 5-6%. The decline in demand from the industrial sector of the economy accounted for much of the reduction, although some could be accounted for by household response to high energy prices. Reduction in demand, leading to excess supply, had in turn led to lower wholesale prices and prices generally had come down.
10. The economic climate had had an impact on the electricity generating sector, although, to date, had not been “business critical” for Drax. The strategic drive and commitment to the business remained.
11. Amidst volatile markets in 2008, Drax had delivered a good performance, and earnings of £454m were reported for the year.
12. Operationally, there had been strong safety performance relative to international benchmarks during 2008. The injury rates for 2008 were significantly lower than for 2007, which was a commendable performance given the significant increase in man-hours worked during the year. Safety was very much a priority at Drax and international benchmarking assists in the move towards achieving a world class operation.
13. It was reported that Drax had been prosecuted on 21 April 2009 for two minor breaches of The Work at Height Regulations 2005, and fined £2,000. The Court determined that the offences were “low level” and referred to Drax’s good health and safety record, the full cooperation given to the Health and Safety Executive, and the early plea of guilty as clear mitigating factors.
14. The implementation of new environmental legislation from 1 January 2008 (the Large Combustion Plant Directive) had put pressure on the coal and oil-fired power stations in the sector in terms of emissions of sulphur dioxide and nitrogen oxides. However, through active management and investment, Drax was fully compliant under the new regime at the outset (unlike some other power stations) and this was one of the factors in enabling the highest load factor for 12 years.
15. Availability of the plant was high during 2008 and benchmarking had shown that five out of the six units at Drax were in the European top quartile for performance and four out of six in the World top quartile for performance.
16. A summary of the status of the major projects either recently completed or underway was presented.

- The £100m turbine upgrade project was now just over one-third complete. When completed in 2011 it would deliver a 5% overall efficiency improvement and save one million tonnes of carbon dioxide each year.
 - The £80m biomass co-firing project was well underway. The first two units were due to be commissioned by the end of the year and the remaining four by mid 2010. When fully operational, and alongside our existing co-firing capability, 12.5% of Drax's output would come from renewable biomass materials.
 - The control room was now fully modernised allowing optimisation of operations, with clear environmental performance benefits.
 - Re-tubing the condensers on the three older units had been completed and had resulted in reduced water consumption.
 - Replacement of the high pressure heaters had delivered an improvement in the quality of the plant's operation.
17. Mr Ketley asked if the reduction in demand provided opportunities to take units off load and carry out maintenance work. It was explained that the running regime of Drax did not tend to be affected Monday to Friday. Discussions were held regularly at Drax over opportune times, particularly overnight and at weekends, to conduct any maintenance work, but this had to be traded off by keeping units available should National Grid require them to meet system demand, as these would tend to be economically beneficial opportunities.
18. Cllr Greenwood asked if Drax would be interested in acquiring Eggborough, if the rumours were true that it was due to be sold. It was stated that Drax does not comment on market speculation, and never rules anything in nor out.

Update on Ash Management

19. Sean Barry gave an update on the Drax ash business, reporting that the market for ash had improved due to a reduction in the availability of furnace slag as a result of a worldwide reduction in steel demand. Drax was currently selling every tonne of EN450 ash produced, and a number of customers were building their businesses based on the logistics of buying ash from Drax.
20. It was reported that the "flat store" for ash with state-of-the-art road and rail loading facilities was fully operational and a key part of the supply chain. The focus was now on growing the rail market and customers further afield are being considered. Members were reminded that the use of ash in cement manufacture avoids the use of primary aggregates, which has benefits in terms of carbon dioxide reduction as quarrying is an energy intensive process; the alternative to selling ash being to landfill on the Barlow ash disposal mound.
21. An update on activities at the Barlow ash disposal mound was provided. The Skylark Centre, which provides facilities for schoolchildren to undertake National Curriculum science-based studies, had been extensively upgraded and was attracting more interest from local schools. General landscaping works had been conducted, including the development of a new tree plantation with 5,000 trees of various types. The installation of a new drainage system to recover rain water, which is then used for dust suppression purposes was working well. Finally, an excellent relationship was reported with the tenant farmer, who is using the land to graze sheep.
22. Cllr Hughes asked why a screw conveyor, rather than relying on gravity, was necessary to move the ash. It was explained that it was the relative position of the silos that dictated

the method used. To rely on gravity would have necessitated raising the silos which, given the size and weight of the structures, was not the preferred solution.

23. Mr Carter asked if there had been any observed impact on reducing the water flows as a result of the new drainage system. Oliver Baybut reported that no ill effects had been observed and that the system was working well.
24. Cllr Pearson asked if there was any 'escape' of dust during the movement of the ash to and from the silos. It was explained that the systems were air tight and fitted with filters, and that there had been no dust escape.
25. Cllr Ivey although pleased to hear that ash sales had increased, expressed concern over the potential increase in road transport due to the increase. Cllr Ivey was reassured that Drax was enthusiastically exploring the movement of ash by rail. By pursuing larger volume contracts rail transportation becomes commercially and environmentally more favourable compared to road transportation.
26. Mr Caygill asked if larger ash-related projects were being progressed. It was reported that some seven to eight such projects were under consideration.
27. Cllr McSherry asked if a consequence of rail transportation would be an increase in dust levels. It was explained that the ash is transported in isolated containers end-to-end which mitigates the escape of dust.
28. Cllr Fenton asked for a breakdown of the ash sales by type. It was reported that 1.6 million tonnes of ash had been produced in 2008, of which (to the nearest 100kt) 700,000 tonnes of EN450 quality ash had been sold to the cement industry, there was 200,000 tonnes of residual ash, 200,000 tonnes of FBA had been sold to the construction industry and the remaining 500,000 tonnes had been disposed of to the Barlow ash mound.
29. Cllr Pearson asked about the impact of landfill costs. It was confirmed that the drivers to sell rather than landfill ash were not only economic, but also environmental.

Environmental Update

30. Nigel Burdett gave an update on environmental performance for 2008. The year had been good from a compliance point of view. Changes in environmental legislation had required a lot of changes to site procedures to ensure compliance, but these had been implemented successfully.
31. An overview of emissions of sulphur dioxide (SO₂) and nitrogen oxides (NO_x) showed that emissions levels and rates were well within the compliance limits. On SO₂, the flue gas desulphurisation (FGD) equipment continued to operate well. On NO_x, the completion of the boosted over fire air technology retrofit to the boilers dramatically reduced emissions.
32. On carbon dioxide (CO₂), the use of biomass had led to a reduction of around 675,000 tonnes of CO₂ emissions in 2008. A variety of biomass had been burnt during the year, although wood pellets made up the vast majority. It was noted that on completion of the two major carbon abatement projects – turbine upgrade and biomass co-firing at the end of 2011 – over three and a half million tonnes of CO₂ would be saved each year. This would give an emission rate for CO₂ of 0.7Mt/TWh; the average for UK coal-fired plant being 0.9Mt/TWh.

33. It was reported that air quality in the Aire Valley had improved over recent years, with no exceedances. Dust levels locally were well within the limits set, and there was no evidence to suggest that Drax has a negative impact locally. Monitoring of nickel and vanadium levels, which had been put in place exclusively for the petcoke trial and had been continued under the commercial burn arrangements, had continued to demonstrate no observable impact on the local community. Finally, on water abstraction it was reported that fine mesh had been fitted to the water abstraction system to protect the lamprey population which is abundant in the River Ouse.
34. Cllr Ivey asked for clarification of the acronym DDGS. It was explained that it stood for Dried Distillers Grains with Solubles, which was a co-product of ethanol production from wheat.
35. Cllr Ivey asked if there were any limits placed on emissions of CO₂ and, if so, were we achieving them. It was explained that CO₂ emissions are part of a cap and trade system – the EU Emissions Trading System – which is a market mechanism designed to incentivise carbon abatement by putting a price on carbon and, therefore, on emissions of CO₂. The system follows the ‘polluter pays’ principle.
36. Cllr Ivey drew attention to the fact that during the petcoke trial it had been a requirement for petcoke to be stored underground, and therefore, what confidence did Drax have that it was safe to store blends above ground. It was reported that following a trial under the direction of the Environment Agency there is confidence that petcoke blends can be stored above ground with no discernable impact on local air quality. A report had been submitted to the Environment Agency on that basis. SDC also had a copy of the report. It was explained that it had been necessary to move to above ground storage with the move to commercial burn and the greater storage area required to facilitate that.
37. Cllr Fenton asked for clarification of the units used on the CO₂ slide in the presentation. The chart was wrong and should have read 0.7Mt/TWh not 700Mt/TWh for the 2011 CO₂ target.
38. Cllr Pearson questioned whether the need for fossil fuel plants to be on standby for wind turbines was sensible from efficiency and, therefore, CO₂ emissions considerations. It was confirmed that fossil fuel back-up was required to underpin wind power, due to the intermittent nature of wind generation, and that fossil fuelled plant was at its most efficient when running baseload. Therefore, using fossil fuelled plant as back-up would not be using it in its most efficient mode, however, it was not certain what the overall impact resulting from the trade-off would be.
39. Cllr McSherry asked how often the nickel and vanadium measurements were taken in Hemingbrough. It was reported that the monitoring was continuous.

Goole Pellet Plant Update

40. Sean Barry gave an update on the status of the Goole biomass pellet plant. It was reported that construction of the plant had been completed earlier in the month (April) and that commissioning was now in progress. It was expected that the first pellets would be produced by the end of the month, with full output by the end of June. The operation would be 24/7, with a total workforce of 13.
41. Cllr McSherry asked what would happen if the moisture content of the straw arriving at the plant was too high. It was explained that as the specification for the straw stipulated the moisture content, any straw that was not within the specification would be rejected.

42. Cllr McSherry asked if the operation of the plant would be seasonal. It was explained that storage of straw would smooth out any seasonal variation due to harvest cycles.
43. Cllr Hughes asked if this would be the first of many pellet plants in the area, and whether it was the intention to supply other coal-fired generators with biomass pellets. It was explained that this first plant was very much a pilot exercise and if successful then Drax would look to replicate it in other areas. The plant was being run as a standalone business and so customers for the pellets would be considered as part of the business case.
44. Mr Carter asked if the pellets would be processed further before being co-fired. It was explained that the pellets would be ground prior to the co-firing process, this final stage of biomass processing would take place at Drax Power Station in the new biomass handling and processing facility.
45. Ms Adamson asked what percentage of the total biomass requirement would be satisfied by the pellet plant output. It was reported that the pellet plant would meet around 5% of the co-firing requirements.
46. Cllr Ivey asked about the implications for road transportation. It was confirmed that rail transportation was a key focus for Drax and that efforts were being made to increase the movement of biomass by rail. Members were reminded that the planning permission for the co-firing facility at Drax included a condition which stated that "...should rail importation of biomass have not begun once biomass usage reaches 700,000 tonnes in total in any one year the rail options available for the site shall be reviewed between the local planning authority and the operators of Drax Power Station...".

Renewable Energy Plant Development

47. Sean Ebnet took members through the Company's biomass strategy, which was announced in October 2008. In partnership with Siemens Project Ventures, Drax intends to develop three 300MW dedicated biomass-fired power stations. Construction is planned over a 4-7 year period commencing in late 2010, and at an estimated cost of £2 billion.
48. The chosen technology (circulating fluidised bed/CFB) was commercially proven and capable of baseload operation. The market for biomass was relatively new, however, there were significant volumes of material available. Drax biomass demand is a small fraction of the commercially managed forestry potential.
49. Drax was at the forefront of biomass sustainability policy development. All biomass sourced, transported and burnt would meet stated principles, for example, to significantly reduce greenhouse gas emissions across the supply chain in comparison to coal-fired generation. Third party auditors would be used to ensure that biomass suppliers comply with the policy.
50. To date, two potential sites had been named for the power station developments - the existing Drax Power Station site and the Port of Immingham. Local benefits include up to 850 jobs during the three year construction period and 150 local jobs through direct and contract opportunities. The planning process had begun with the publication of the environmental scoping documents for each, and public exhibitions were due to start in the week commencing 27 April.

51. Cllr Hughes asked if Siemens' involvement extended beyond construction. It was explained that Siemens were an equity partner in the venture.
52. Mr Ketley asked what use the ash from the biomass plants could be put to, given that it would be a different composition to ash from coal combustion. It was explained that the ash would be organic matter and may have application in the fertiliser industry, but these details would need to be fully considered before any commitment was made.
53. Cllr Pearson asked how the proposed plants would differ from the Arbre development that had been unsuccessful. It was explained that the technology was entirely different, Arbre was a new and largely unproven, gasification technology, whereas the CFB technology for the Drax plants was fully commercially proven.
54. Mr Caygill asked whether there would be a need for additional processing plant at the new power station sites. It was explained that processed, 'boiler-ready' fuels would be used. However, should there be a compelling case for processing plant it would be considered.
55. Cllr Hughes asked where the third plant would be located. It was stated that the decision on that was yet to be taken.

Any Other Business

56. Cllr Ivey expressed her thanks to Drax for the hospitality and openness extended to members over the last four years.

Date of Next Meeting [post meeting note]

57. The date of the next meeting is Wednesday, 28 April 2010.