

Ince Park Community Forum

Minutes: 4 February, 2015

7:00 pm Ellesmere Port Boat Museum

Present:

Voting Members:

Cllr. Tony Mills, Elton Parish Council (Chairman)
 Cllr. Roy Greenwood, Little Stanney and District Parish
 Cllr. Tim Lloyd, Ince Parish Council
 Cllr. Andrew Eardley, Ince Parish Council
 Cllr. Andrew Dawson, Fordsham ward Cheshire West & Chester Council
 Mrs. Fran Miller
 Cllr. Justin Madders, Ellesmere Port Town ward Cheshire West & Chester Council
 Cllr. Sarah Temple, Helsby Parish Council

Advisers:

Jane Gaston, Peel Environmental
 Lois Kay, Peel Environmental
 Simon Allin, BWV
 Mark Degg, Ogen UK
 Des Mitchell, Ogen UK
 Keith Butterick, Secretary

<u>Items on Agenda</u>	<u>Discussion</u>	<u>Action by</u>
1. Apologies	<p>Cllr. Graham Heatley, Elton ward Cheshire West & Chester Council Cllr. P. Merrick, Rossmore ward, Cheshire West & Chester Council Rod Brookfield, Cheshire West & Chester Council Alex Sutherland, Environment Agency Clare Appleyard, Cheshire West & Chester Council</p> <p>Cllr. Martin Dickinson was introduced by the Chairman as the replacement for Helen Coy.</p>	
2. Minutes of Last Meeting	The minutes of the 1 October 2014 meeting were accepted as a true record.	
3. Matters arising	There were no matters arising.	
4. Progress Report	<p>Jane Gaston provided a progress update.</p> <p>An <u>infrastructure tender</u> pack for contractors was being prepared for the environmental mitigation and infrastructure work. The planned starting date is July 2015 <u>though some works may be undertaken from April through and early works contract to open up access to plots.</u></p>	

	<p>Links were being developed with Thornton Science Park (part of the University of Chester). Possibilities being considered include – Ince Park marketing suite for Ince Park. Research & development. Placement for students.</p> <p>JG confirmed that planning decision would not be signed until the section 106 agreement was in place. This was being finalised with Cheshire West.</p> <p>SN: Asked for clarification on the Bottom ash plant, the rail link and ship berth.</p> <p>JG: Not looking to take the ash plant forward in phase1. The planning changes for phase 1 do not affect the overall scope of the proposal only the phasing of the rail and the berth – these will be included in phase 2 of the development.</p> <p>AD: Situation on the footpath. JG: There is a commitment to do what is possible – looking at the practical issues</p> <p>FM: Suggestion that any community benefit fund generated by Ince Park should go to the two communities most affected Ince and Elton. Following a discussion about a community benefit fund it was agreed that this be an agenda item for the next meeting.</p>	<p>JG/KB</p>
<p>5. Presentation by Northern Biopower</p>	<p>Matt Deggs and Des Mitchell from Northern Biopower introduced the company and plans for the revised scheme.</p> <p>NBP was taking over the biomass at Ince. Currently working on three projects with Peel. All plants are based on waste wood. Fuel for the biomass plant would be waste wood from across the North West supplied by a national contractor.</p> <p>The NBP plant would be a smaller one that proposed by Peel Energy. MD said the design has been improved – eg adding a new subSUDS-pond in front of the plant. The height of the stack is the same 85 metres – this helps with dispersion. As the waste wood would be prepared before arriving at the plant, the volume in each lorry would be lower. The plant would be resourced locally – materials for construction would be as far as possible resourced locally. Operatives for the plant would be recruited locally where possible. Estimated about 20-30 people would be working full-time at the plant. It was not the intention of NBP to have a regular presence on the Forum, their interests would be represented by Peel Environmental. The company would attend as and when necessary.</p> <p>DM in response to a question from AD explained in detail the generation process (We will supply this information</p>	

	<p>separately along with a link to the plans).</p> <p>Air Quality Issues The plant would be required to monitor 24 hours a day – seven days a week and operate under strict control by the Environment Agency. Background monitoring would start 12 months before the plant is commissioned. A monitoring station would be installed at Elton as agreed with Cheshire West & Chester Council.</p> <p>This led to a wide-ranging discussion about air quality issues which included points about the wider air quality monitoring.</p> <p>It was agreed that a meeting of the Ince Park Air Quality Forum be organised as soon as possible to discuss the issue.</p>	
		JG
6. Presentation by BWV	<p>Simon Allin, Business Director of BWV gave a presentation on the company. A background information sheet on the company was sent with the agenda for the February meeting. The powerpoint presentation was sent to all members with the minutes.</p> <p>Key points:</p> <ul style="list-style-type: none"> • The new EfW would be smaller than the proposed Covanta plant • BWV will be represented at the Forum • Committed to the air quality monitoring proposals <p>Questions/Issues that arose from the presentation:</p> <p>Currently in discussions with a number of potential fuel providers – including local authorities and commercial suppliers. The fuel supply will be the critical element in developing the plant.</p> <p>Looking to start on site – sometime in 20152016</p> <p>Incinerator Bottom Ash plant – one option but BWV looking at other options.</p> <p>Unlikely to use the port berth or the rail link – supply would come in by road. However, there would be fewer lorry movements because the plant will be smaller.[JG1]</p>	
7. Forum website	<p>TM: Would complaints about the development be placed on the website LK: This would be looked at</p>	
8. Any other business	<p>MD: Requested clarification on the pedestrian rights of way. This was a popular walking place for residents and important to ensure access was maintained...</p>	

9. Date of the Next Meeting	March 18th 2015	
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Ince Community Forum Briefing

Overview

Timber Resource Recovery Centre.

There is now a concerted effort in the UK and indeed throughout Europe to meet targets for the use of renewable energy. Biomass is being seen as a key component in the achievement of this goal.

Biomass can take many forms and is often associated with virgin wood. There is however an increasing problem in the UK associated with the disposal by landfill of wood products which have been used in all types of construction, for example housing and furniture.

The facilities developed by our team are primarily designed to handle any type of biomass including virgin and waste woods, that are currently being disposed of by other means such as landfill.

What happens in a Timber Resource Recovery Centre?

Pre-prepared biomass “the feedstock” arrives at the facility in a form ready for use in the gasification process. This material may, due to its source, still have some valuable ferrous and non-ferrous metals included in the deliveries. The first stage is to recover these materials from the feedstock using a combination of magnets and eddy current separation. These recovered materials are then removed from the facility and also recycled.

The remaining prepared/cleaned timber feedstock is then transferred into a gasification chamber where it is heated in a low oxygen environment (gasification) to a point where the material is forced to drive off its valuable gasses. These gasses are where the process derives most of its energy.

As the gasses leave the gasification process they enter a combustion chamber where they are ignited to produce a sustainable and consistent energy level. This energy (heat) is then passed through a boiler to produce steam.

The steam generated is produced at a temperature and pressure sufficient to power a turbine connected to an alternator for the production of renewable electricity which either goes directly to local businesses who can use it with any remaining output sent directly to the National Grid.

Remaining gasses from the process pass through an advanced cleaning process to remove any potentially harmful emissions and particulates to a level below that regulated before exiting the plant via a chimney stack. All emissions are monitored and controlled by the Environment Agency under an Environmental Permit to ensure they do not permit any form of harmful emissions to be released through the facilities operation.

Where possible all residuals (e.g. recycled metals/ash from the gasification process) from the plant are products with a value to other market sectors and these are also recovered and reprocessed.

Representation on the Forum: Will NBP have a direct representative on the Forum or will this be carried out on their behalf by Peel?

NBPL are at tenant on the wider Peel development and form a small part of the overall scheme. Initially we believe that Peel will continue to be the main representatives at the forum meetings however we will make ourselves readily available as and when required.

Where will the fuel for the biomass plant come from?

The material used as the fuel for the facility at Ince will be sourced from licensed contractors who process demolition and construction wood from primarily industrial and commercial sources as disposed in civic amenity sites. The wood consumed in the facility would otherwise be disposed of to landfill which is no longer seen as environmentally acceptable. It is anticipated that all the fuel will be supplied from within a 50 mile radius of the facility.

Who is NBP and what is their experience of running power stations?

Northern Bio Power is a project company consisting of Carbonarius (O-Gen UK, the UNA Group) plus shareholding directors. Carbonarius a leading company in the development of Renewable Energy facilities using Advanced Conversion Technology considered by the Environment Agency and other Regulatory bodies as BAT (Best Available Technology) for the advanced thermal treatment of Wood based fuel with a biomass content.

Carbonarius is currently developing similar facilities in Plymouth, Welland, Stoke on Trent and Tyseley, Birmingham, all of which are in varying stages of the process.

While NBPL develop these projects, the operation of the plants are undertaken by experienced Operation and Maintenance (O&M) Contractors with proven track records in operating similar facilities in the UK and globally.

Do they have examples of similar plants to the one at Ince?

NBPL and Carbonarius have similar smaller facilities under construction in the UK. A notable scheme is being developed in the heart of Birmingham, adjacent to housing and businesses. Schemes of a similar size are also planned for other parts of the country, however this development is based on proven technology which is being successfully used in other areas of the world and has an installed reference list of more than 100 facilities.

How important is community relations to the company?

NBPL believe that the community is important and will make itself available to the forum as required.

When will construction start?

It is intended that following financial closure that the EPC contractor be engaged and commence the preliminary works and site establishment early in Q2 2015.

When will the air quality monitoring begin?

During the build of such a complex project a programme of works will be identified which will define a proposed date for the hot commissioning of the plant. It has been agreed that the local air quality monitoring will commence 12 months prior to this hot commissioning date at a location agreed with the Council. This monitoring will then continue for a 12 month period beyond the commissioning of the plant. The Ince Bio Power facility will however remain under scrutiny of the Environment Agency for its life with continuous emissions monitoring being a requirement as part of its operating permit which imposes strict limits on any emissions from the plant and has statutory legal powers to enforce controls in the event of breaches of any limits.

Ince Park WtE Development Babcock & Wilcox Volund in the UK

Ince Park Community Forum meeting
February 4th 2015



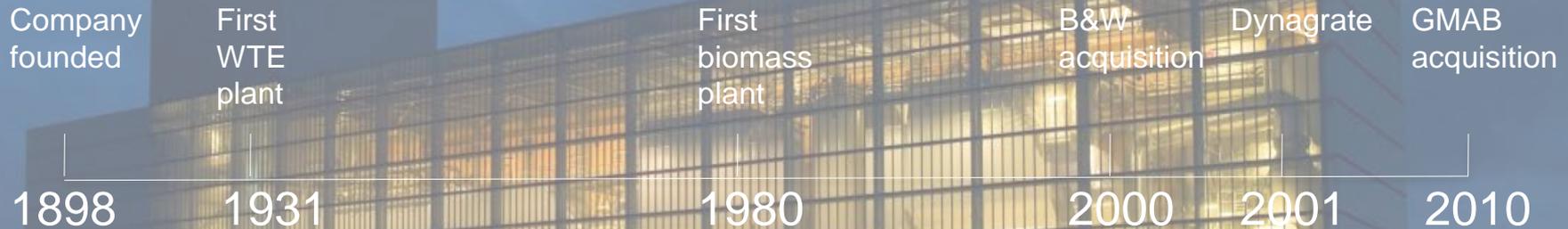
Simon Allin Business Development Director (Sales)



Presentation Overview

1. Company overview
2. Improving WtE technology
3. BWV's UK footprint
4. Community Forum
5. Project Progress/timetable
6. Peterborough and Armager Bakke – the Highlights
7. Summary

Babcock & Wilcox Volund



- Headquartered in Denmark
- UK a core market – Office in Birmingham
- 400 employees
- Provide all technology excluding turbine
- Installed over 500 lines in 30 countries
- Experience with a wide range of fuels – residual waste, waste wood, straw, multifuel, and biomass

Babcock & Wilcox

- Head quartered in Charlotte NC
- Quoted on NYSE
- Circa \$3 billion turnover
- 10,000 direct employees
- Nuclear, coal fired, and extensive service provision
- Diamond Power based in the UK
- BWV part of the Power Generation Group



Improving WtE technology

- Provide own technology other than the turbine
 - Includes flue gas cleaning (own company)
- Ongoing R&D program
 - Dedicated department
 - Ongoing Investment
 - Tested in Customers facilities
- Proven References
 - Can kick the Tyres (85k tpa – 900,000 tpa)
 - Environmental impacts fully tested and monitored
- Fuel flexibility – Key consideration
 - DynaGrate
 - Key funding requirement

Patented DynaGrate

- High fuel flexibility 6-22 Mj/kg
- No pre-treatment required (e.g accept contamination and metals)
- Air or water cooled
- Project contingency – can accept other waste streams (multifuel concept)
- Established operational references



Technology is moving on!



1931



Proven Technology ... and still improving!



2014



BWV's UK Footprint

- Waste to Energy
 - Peterborough (85k tonnes pa, under construction)
 - ARC 21 (190k tonnes pa – progressing)
 - Gloucestershire (190k tonnes pa – Planning approved!)
 - 300k pa plant at Dunbar in Scotland (EPC contract signed)
- Waste wood
 - Signed an EPC/Turnkey Contract to build a 40MWe project in South Wales. Includes 15 years O&M
 - Preferred bidder for two other 40 MWe projects
 - Fuel flexibility/DynaGrate
- Multifuel
 - Detailed submission 42MW project – Fuel flexibility/DynaGrate
- Wider capability – biomass (straw, wood chip, RDF)
- A number of other potential projects in pipeline

Ince Park Community Forum

- BWV fully committed to
 - attending meetings
 - keeping the Forum informed of project progress
 - Supporting the Air Quality Forum and associated recommendations
 - Listening to issues and concerns
- As project progresses reference plant visits can be arranged

Project progress/Timetable

- Current Focus

- Fuel supply discussions (residual household and C&I waste...regional facility)
- Initial design work

- Current thinking

- Downsize to one line circa 300k tonnes pa
- Possibly a second line – phase 2
- Front end treatment under review (glass and metals)

- Proposed Timetable

- 2015 (design/planning/funding; etc)
- 1st Quarter 2016 commence construction

Peterborough – The Highlights



- Small scale – 85,000 tonnes pa
- DynaGrate installed – first in UK
- Electricity only but CHP potential
- R1 value 0.77 – Classified as Recovery
- EPC Turnkey contract – Under Construction
- On time and an excellent Health and Safety record

Amager Bakke – The Highlights



- Large scale – 600k tonnes pa (2 lines)
- Replacing a 40 year old plant
- Can be seen from the Queen's residence!
- CHP scheme – 50K houses electricity and 120k houses district heating
- Yes it does have a ski slope!
- Under construction

Summary



- Robust, proven, and bankable technology proposed
- Technology offering improving all the time
- BWV have a strong and developing UK footprint
- Fully committed to the Community Forum and its aims and objectives
- Ongoing Project Development throughout 2015