

Submission for Deadline 4 - May 25th 2023

Site selection and size

Carey - ISH 1 Part 3 - Why Wisbech? (emphasis mine):

*"we very much look for sites that have **true potential** for this thing called CHP,"*

*"So we're very much looking for sites that have this ability to enable combined heat and power with **a good demand for heat** rather than a trickle of heat. So that's very much what we look for."*

"So that really was what drew us in the first place"

I have three sets of questions for the Applicant regarding the export of heat from the PD.

They are deliberately general so as not to be side-stepped by claiming commercial confidentiality.

1. Regarding MVV's facility in Plymouth.

In order to give an indication of "a good demand for heat" and provide comparative figures:

- i. What is the average supplied requirement from the Devonport Naval Base and Dockyard?
- ii. What is that supplied requirement as a percentage of the facility's total capability?

Given this has been ongoing for several years, fairly accurate figures would be available.

2. Regarding the Proposed Development:

MVV's second selection criteria (after identifying a capacity gap) is looking for a site with true potential for a good demand for heat. At ISH 1 Part 3 Carey didn't make it clear whether he started talking to the landowner in 2010 or 2014, for this we can just say the outset was around 2014.

At the outset, to gauge that this specific location had a good demand for heat, and, more importantly, that a sufficient level of interest existed in order to fully satisfy their second site selection criteria:

- i. How many companies expressed **sufficient interest at the outset** to provide details of their then current heat/power usage?
- ii. What was the average requirements of each of these potential customers?
Total demand would suffice to avoid any claims of commercial confidentiality
- iii. What was the combined requirement as a percentage of this PD's total capability?
- iv. In the intervening years since the initial contact (around 2014), what increase or decrease of interest has there been?

3. If there are significant benefits for nearby companies to use the PD's heat/power, would the Applicant help us to understand why no one has bitten their hand off to take it, given any company could provisionally agree to take it if the DCO is granted, without any legal commitment issues?

- i. How many potential customers have been contacted in total?
- ii. What reasons have they given not to, or what reasons have they given for their reluctance?
(For example: prohibitive upfront costs or they simply don't want this PD on their doorstep)

4. Carey - ISH 1 Part 3 -

"I recognised this site way back in 2010. I have been with the company that long and I met the owner of the land, but it took me until 2017, before he became satisfied that we were the right partner for that site. So since 2017 we have been working with him, negotiating with him."

- i. Why did it take the owner of the site seven years before he would even start negotiating?
What aspects was he so dissatisfied with and gave him cause for concern?

Carey - ISH4 part 4: *“It's our company policy that we would prefer to always find opportunities to also supply heat to displace the use of natural gas so we've specifically chosen this site”*

Carey - The benefit might not come along for five years because there may not be a suitable demand until five years time. *So you shouldn't look at it as just a single point in time.*

If that's the case anywhere would fit the bill - MVV wouldn't have “specifically chosen this site” in the hope that a large heat user locates nearby in 5 years time. Carey said Rivenhall site had no customers for CH&P, who's to say there won't be demand there in 5 years time or from the paper de-inking plant for example.

Carey - *So all of that is being built in. And what is required is **the willingness of a customer** to have the steam at the other end. To that end, as I mentioned **yesterday**, we're not prepared to breach commercial confidences, but I can tell you that we have identified four potential customers now and we have asked them for data on their current energy demand, and some of them have given us that information. And that has enabled us to be confident that the steam pipeline that we would build and the size of the extraction point on the side of the turbine is adequate to supply those customers.*

This rather implies that asking them for their heat demand is a recent move, but if having customers for heat was actually important enough, it would come as a part of the site selection - before advancing further - first to determine what actual heat demand was there, and second to determine the willingness of potential users to become customers.

Therefore the questions regarding heat demand become important, not only in order to gauge the size and scale of need for its location at this site, but also the identified needs, not simply having potential customers of unknown demand. Demonstrating this should have been an important issue when first looking at this site before any ‘negotiations’ started with the owner in 2017, particularly as not operating in CH&P mode is less efficient and emits more GHG emissions.

“As I said, we look for these across the country. And when it comes to that heat demand, there is a lot of information out there available.”

6.1.2 The heat consumption in 2020 and estimated consumption in 2050 by non-domestic and domestic sectors **for the East of England**, as extracted from the NCA, is presented in Table 6.1 Heat consumption in the East of England. This shows that:

i. heat consumption is greatest in the domestic sector;

ii. heat demand from the non-domestic and domestic sectors is below the national average;

MVV's facility in Plymouth

“Under an energy services agreement with the Ministry of Defence, MVV Devonport will supply 24MW of electricity and steam to the adjacent Naval Dockyard, the largest naval base in Western Europe.” (Clearly not deemed commercially confidential)

Despite having a customer with a good demand for heat, with fluctuations in need, MVV's much smaller 265,000tpa plant in Plymouth appears to still have much more capacity to supply.

In a January 2016 article in letsrecycle.com:

“Paul Carey, managing director of MVV Environment Devonport, said plans to develop a local district heating scheme for residents living close to the site were again “under review”.

The strategy was previously thought to have been scrapped, following a feasibility study with Plymouth city council which found the size of the heating scheme would make it impracticable.”

Carey was more specific in ISH1 when he wasn't being questioned because in ISH3 he was ducking and diving the issue of heat customers:

*“So as a company, that is always our policy to to have facilities that are capable **or** actually do supply heat as well as electricity. .. we do that in Plymouth and we also do it. We'll be doing it up in Dundee where we have another facility.”*

*“I'll need to check whether or not we are permitted to do so with any non-disclosure agreements that we might have first, ... As I said, it's often the case that people won't want to enter into any detailed conversations until we know that we have a project that we can deliver. In other words, we have a development consent order to allow us to build the facility. **So we do not expect to go into any great detail with anybody at this stage.**”*

“As I've said before, I'm not going to reveal commercially confidential discussions, and it's unusual for any company to commit to anything ahead of a facility being given consent to build.”

However, later, he was more than happy to answer directly and provide something they actually had:

Examiner: *“And have you had conversations with those?”*

“Yes, we have. And we've had expressions of interest from those companies that would like to send us waste should we get consent. So we happily provide some of those in evidence to you, but they are private.”

In what appeared to be a bail out:

Claire Broderick for the applicant. *It might also be helpful just to reiterate the tests that are set out in national policy ... does allow for a situation **where there are not any existing customers that have expressed a firm commitment to take any steam or power, but where there could be customers in the future, which is the situation that Mr. Kerry has described here**, where there isn't an ability to provide necessarily written confirmation at this stage in the process, but **where it's possible for an applicant to reach an agreement with a potential heat customer during the lifetime of the facility, ...** We've obviously designed the proposed development to be ready **So I think it's important to appreciate that the policy does provide for the current situation.***

“There are no formal agreements in place for the export of heat from the EfW CHP Facility at this stage.”

*6.3.2 Discussions with the potential heat users are in their preliminary phases, and there are currently no heat supply agreements in place between the heat users and the Applicant. However, this is not unexpected as **heat supply agreements** are typically only entered into once the Applicant is able to make guarantees as to the heat supply which can only happen once the necessary consents (including the DCO) and permits for the EfW CHP Facility are in place.*

6.3.4 The Applicant is committed to pursuing potential opportunities and will continue to engage with the proposed heat users to progress heads of terms. Once the Proposed Development has received the relevant consents and permits, the Applicant is confident that it will be able to progress these opportunities further. It is also anticipated that once the Proposed Development obtains the relevant consents and permits, additional nearby heat users are likely to express an interest in a connection to the CHP Connection Corridor. Potential connections to users not directly on the CHP Connection Corridor will be subject to additional planning consent(s) which will be the responsibility of the potential customer(s)

Referring to “heat supply agreements” at this stage appears to be very misleading. Any potential user with a serious interest could easily have provided an expression of interest or signed draft heads of terms with the Applicant without any comeback. If they have not done so since 2014 it suggests there is no interest and the site is not in the right location for this PD. The average company finds the upfront costs far too prohibitive – the MOD in Plymouth uses taxpayers’ money.

Carey mentioned the paper factory in relation to the cancelled King's Lynn project, which MVV unsuccessfully bid for in 2009 - Palm Paper signed draft heads of terms with both of the final two bidders for the contract in 200, two years before planning was even applied for.

Given there is a world of difference between a facility that is capable of supplying heat and electricity and one that does, just as there is a world of difference between potential users, interested users and heat customers, it would appear the Applicant's 'essential criteria' for site selection was not complying with a company policy to have heat customers but simply complying to what could be deemed an 'essential criteria' in planning policy, by having the potential to supply heat and the site they wanted merely having potential users.

Examiner - *So first of all, can I ask the applicant to provide a brief overview of the alternatives considered, particularly focusing on technology, location, size and scale?*

David Kenyon for the applicant. *with regard to site location, as we discussed at a previous, um, issue specific hearing, the applicant identified a number of essential and desirable siting criteria, um, against which it compared this site. **in other words, the applicant did not consider alternative sites.** this site met the criteria that the applicant looks for when selecting a site.*

Examiner - *If I may, just clarify, so in terms of criteria that you have just mentioned to us now? So, no further work was actually done in terms of finding or searching for sites where at the locations where those criteria might actually be met. Just to clarify on this point.*

David Kenyon for the applicant *That is correct. Yes.*

*Can the plant supply the selected identified potential heat load (i.e. is the identified potential heat load within the 'CHP envelope')? - **Yes, but not deemed 'Good Quality' CHP as detailed in section 8.2 of the Heat Plan.***

*CHP mode net electrical output at proposed operational plant load - **47.92 MW***

*Is the new plant a CHP plant at the outset (i.e. are there economically viable CHP opportunities at the outset)? - **No***

If not, is the new plant a CHP-R plant at the outset? - Yes

Once the new plant is CHP-R, is it BAT? - Yes

- *Capacity Market for electricity supplied by the EfW CHP Facility*

7.1.2 *Under the Capacity Market (CM)¹⁷, **subsidies are paid to electricity generators** (and large electricity consumers who can offer demand-side response) to ensure long term energy security for the UK. Capacity Agreements are awarded in a competitive auction and new plants (such as the EfW CHP Facility) are eligible for contracts lasting up to 15 years. Based on the eligibility criteria of the mechanism, the EfW CHP Facility would potentially be eligible for Capacity Market support.*

7.1.3 *As Capacity Market support is **based on electrical generation capacity, which would reduce when operating in CHP mode, these payments will act to disincentivise heat export.** Therefore, Capacity Market support has not been included in the economic assessment.*

The Applicant considers a key project benefit is that the Proposed Development includes a CHP Connection - in terms of planning, weight and benefits, simply including a CHP connection, and being located close to companies with heat demands but with no interest since 2014, should carry next to no weight in its favour. It also adds a negative effect to the weighting for GHG emissions.

Even if there were a capacity gap in the east of England region, the Applicant has not demonstrated any legitimate need for it to be located on this site, in a FZ3, in this small market town with its current inadequate infrastructure even before the enormous burden this PD would place on it, and has not consider alternative sites

Waste hierarchy

Carey - *it is, as a matter of fact, the purpose of the proposed development to take residual waste, which would otherwise be going to landfill.*

Clare Broderick for the applicant. **at the outset of this hearing, our fundamental basis upon which we're sort of resting our need case is on the amount of waste that goes to non-hazardous landfill and diverting that material from non-hazardous landfill.**

Whilst the Applicant is basing their "need" case on landfill, to accord with NPS, that certainly does not appear to reflect their actual intentions. Carey couldn't have made his intentions any clearer.

Carey - *in terms of choosing the size of the facility, this is because, as we've discovered already, there is more than enough residual waste that's currently going to landfill that would need to be diverted further up the waste hierarchy.*

*If you **take Norfolk as an example**, they currently send all of their waste past Wisbech to Bedfordshire. Now that is on a contract that was initially for seven years. By the time we get built, if we get consent, we would be in a position to tender for that waste and it would therefore be **if it came to us** be complying with the proximity principle in that it would be dealt with much closer to Norfolk*

*Currently Norfolk County Council (NCC) transports most of its residual waste to Bedfordshire, which the UK continues to export waste for management abroad.(sic) The Proposed Development therefore **delivers project benefits in the context of moving waste up the waste hierarchy** and supports the principle of proximity in the treatment of waste.*

Norfolk's waste is not "currently going to landfill" in Bedfordshire, it's going to the EfW incinerator at Rookery Farm. For this PD to Incinerate waste that is currently incinerated elsewhere, no matter where it's done, is not serving a capacity gap neither is it moving waste up the hierarchy - perhaps Carey would like to explain how he arrives at this as a benefit given neither Bedford nor the PD have heat customers?

In regard to the proximity principle, how does Norfolk waste being sent past Wisbech differ from Essex waste being sent past Rivenhall?

If whoever won Essex' tender were either going to dispose of the waste at Rivenhall or Wisbech, it cannot be said the PD would be moving waste up the waste hierarchy because it was never destined for landfill.

In fact by expressing an interest to those tendering for Essex waste disposal contracts, and competing on price for feedstock that would potentially go to Rivenhall, it could be seen not only to be taking waste to treat further down the waste hierarchy, but financially influencing others to do the same.

Rivenhall is not just an EfW incinerator, it is intended for the 595,000tpa EfW plant to be part of an 'integrated waste management facility.' This proposes to also have a de-inking and paper pulping facility, an anaerobic digestion plant, a materials recycling facility, and a mechanical biological treatment facility.

Clearly, sending waste to this integrated waste management facility at Rivenhall would be treating the waste further up the waste hierarchy than straight incineration at the PD.

It's all becoming rather tenuous - someone has to win a tender and then MVV has to win the tender from them before they're even in with a shout of getting the waste!! All the mights and maybes.

The reliance is on competing on price, that in itself does not suggest this PD is serving a capacity gap, neither does sourcing waste from Norfolk or Essex suggest waste is being landfilled or that this PD will treat waste further up the waste hierarchy.

Norfolk is currently sending around 180,000 tonnes to the EfW at Rookery Farm, Bedford, because they competed for it on price, and Suffolk missed out because they were too slow to agree a deal.

A recent 2021/22 analysis of Norfolk's waste showed 36% of the contents of general waste across Norfolk was organic waste such as food waste and liquids, between 25% - 30% of all plastics found in the general waste could be recycled, in some areas of Norfolk, 99% of glass found in general waste could be recycled, with 56% of glass in general waste across Norfolk being glass bottles....

Whilst Norfolk clearly need to pull their finger out, if they were to be tempted by price to send their waste, with its high recyclable content, to the PD, it would be burning waste down the hierarchy given Norfolk's need, opportunity and intentions to recycle more.

Tendering to others for local authorities' waste contracts across the east of England, such as those around Bedford, would be competing solely on price for waste that would or could be incinerated more locally, as in the case of Essex, which not only breaches the proximity principle, but removes feedstock from other EfW facilities, which may necessitate a need for them to source from further afield. This does not add to energy grid supply either, it replaces it.

● **One final, very important point on the waste hierarchy:**

Claire Broderick, the applicant. it is for the Secretary of State to decide whether or not a requirement meets the necessary tests **and a waste hierarchy requirement similar to the one being proposed was considered appropriate and acceptable by the Secretary of State in the Cory, Riverside DCO.**

And that is the example that we are using to justify our proposed requirement for this particular project

For the Applicant to use Cory Environmental's case for Riverside is beyond belief - presumably they did so simply because they wanted a facility of similar size. It goes a long way to explaining why this planning application appears so amateur, why the Applicant lacked the ability to adequately demonstrate anything when asked in the recent ISHs, and their only get out was to keep referring back to policy statements, because the projects are like chalk and cheese:

- i. Cory already had the disposal contract for the London boroughs
- ii. Cory were disposing that waste in their own landfill sites and therefore knew, first-hand, the tonnages they were dealing with, and
- iii. Cory had their own clearly proven and demonstrable need.

Consequently, when Cory applied for a DCO for Riverside, it was immediately apparent they were going to be treating the same contracted waste further up the waste hierarchy, and they were fully utilising the river for the vast majority of the transport needed.

Furthermore, the Riverside facility also incorporated an on site materials recycling facility, so they treat the waste further up the waste hierarchy before they burn the residual.

This begs the question:

- Why did the Applicant not include an upfront MRF in their own proposal? It really should be a necessary requirement of a facility of this size and carry weight over one that simply burns everything, which in itself leans this PD to go against the waste hierarchy.

It appears that whilst the Applicant says their needs case rests on the amount of waste that goes to non-hazardous landfill, they have by their own admission, based their case on another entirely different DCO in order to satisfy planning policy for their own, and that their intention, should they be granted the DCO, is not diverting that waste from landfill, but sourcing waste from Norfolk, Essex and other local authorities across the east of England, through financial competition, for waste going to other EfW incinerators.

The reality around this PA is that this PD's capacity means it has the potential to treat all the waste from the London boroughs current collected and served by the Riverside facility, but delivered to a small, sparsely populated area of the flat, low-lying Fens, inadequately served by road or rail.

Carbon capture and storage elements

Carey - "it's part of our general corporate policy to minimise carbon emissions and we intend to. The company as a whole has very strong targets, commitments to be climate positive by 2040. And part of that would require us to do something at Medworth. A lot depends on the way the government chooses to support these projects and other aspects around carbon taxes, etcetera. But we have reserved land space on the site in the right location close to the chimney in which we could build a carbon capture plant."

In relation to dumping the carbon captured out at sea through the Bacton project:

"if they don't receive government support, then the dynamics change slightly, probably meaning that it might take longer before they can start their work. But so we can't commit to doing something until we know that at least they have their support or their commitment to go ahead."

This implies the whilst the Applicant is exploring the feasibility of carbon capture only through the planning requirements, they have no desire to pay for it, and will not make any commitments without government handouts of taxpayers' money or the requirement through legislation.

Greenhouse gas emissions

Firstly, the Applicant based their without the proposed development case as waste collected and transported to landfill sites and gone on to conclude the PD will have a beneficial, significant effect.

Using a baseline case of landfill is disingenuous given Carey has already admitted the high likelihood that the PD will be sourcing waste that is already going or will be going to an EfW site- then the baseline case should be EfW incinerators elsewhere, not landfill.

The baseline load without the PD in this location is zero - this PD will bring large quantities of waste currently (or through future proximity eg. Rivenhall) being burnt around the east of England to one single location in Wisbech, adding a significant concentration of greenhouse gas emissions, which did not exist before, thus contributing a potentially significant negative effect to local authorities.

Secondly, with regard to the waste composition:

Carey - Firstly, the size of this facility and the WFAA is not based just on local authority waste arising it's based on commercial and industrial waste, which comes from a variety of sources.

As we know, C&I waste has a massive impact on emissions and has a very unknown element. If the size of this PD is relative to the amount of C&I waste the Applicant intends to source, then there will be more uncertainty around the composition and therefore the emissions - notwithstanding 'modelling' will always 'mitigate' away any issues, any potentially higher levels of C&I aspect does not appear to have been considered adequately

Thirdly, with regard to the carbon content and calorific value:

Matt Sunderland on behalf of the applicant. The calculation of the indicative carbon content and calorific values of main waste types found in residual waste was undertaken by using their greenhouse gas calculator for municipal waste, These calculations were compared to the indicative carbon content and breakdown of residual waste using energy for waste facilities from a zero Waste Scotland study, The Carbon Trust report for Cory Riverside Energy from Waste Facility and the DEFRA carbon modelling of UK waste streams.

Cory Riverside's carbon report should be ignored - with a dedicated front end recycling their calorific value will be very different to the PD which will burn recyclable materials, with a higher carbon content - Cory Riverside and this PD are incomparable and the Applicant should have been more aware of Cory Riverside's history before basing their own planning application on Cory's DCO.

Fourthly, there doesn't appear to be any allowances made for the diesel used by the PD.

From Environmental Statement Chapter 6 Traffic and Transport 6-48

Residues/Consumables: 4. Diesel (import). "Based on the maximum throughput of 625,000 tonnes, it is anticipated there would be a requirement for 161,613 litres of diesel to be imported to the site each month."

This equates to around 5,387 litres/day, nearly 2 million litres of diesel per year – presumably for its 40+ year lifespan. From a greenhouse gas perspective this fossil fuel element cannot be considered clean combustion yet it has not been acknowledged.

Lastly, by simply having a CH&P connection the PD does not become more efficient, if it's not taken then there is zero project benefit, and without running in CH&P mode more fuel is required and more greenhouse gasses will be emitted. The Applicant has had since 2014 to establish interested users, the DCO is being considered now, on the evidence or lack of evidence before it, not on assumptions, and not what may or may not happen in 5 or 10+ years down the line.

Incinerator Bottom Ash & Air Pollution Control Residues

ISH 3 Part 1

Fly Ash (APCR) is known to be extremely hazardous waste, containing heavy metals, dioxins and anything trapped by the filters.

Incinerator Bottom Ash (IBA) has the potential to be contaminated with hazardous materials and therefore requires testing to ensure its levels of contamination are below a certain level.

Their disposal and treatment are of significant relevance to this PA given that these are by-products which will be created as a direct result of the PD, and as such, the Applicant has a duty of care and must be required to address how these will be handled and treated under their duty of care in this DCO application, not left ...

If I hire a man with a van to dispose of material from my property and he fly-tips it, and I am identified as the source, I am held responsible, it's my waste, my lack of due diligence.

The same is true here. MVV cannot just absolve themselves from responsibility because it leaves their premises, they must be able to demonstrate in this application for a DCO that these by-products will be safely and responsibly treated within an acceptable distance from the PD site.

MVV Plymouth were sending their IBA to Holland to process until recently, they may still be, because they had nothing in place within a close enough distance at the time, and shipping it in large quantities to Holland was presumably more economically viable than hauling it any distance in the UK so how far away is the capacity Carey's so confident about from this PD, or is that capacity predominantly abroad?

Why is it ok for MVV to ship their IBA to Holland but not local authorities to do the same if they're getting a better financial deal doing so? What about the proximity principle? These need addressing.

Water Supply

Anglian Water's Submission ID: 16039

"The regulatory position is that demands for water for non-domestic purposes are not permitted to jeopardise current and future supplies for domestic purposes, whether to household or non-household premises. ...

The Applicant provided technical information to Anglian Water on 12th April 2023, which set out the water demands needed for the operation of the Energy from Waste facility. Based on this information, our water modelling and water resource teams have confirmed that there is currently insufficient water supply available in the Fenland Water Resource Zone to meet the maximum daily demand in the range of 0.12-0.29MLD (Megalitres/day) equating to 5-12 t/hr.

.... However, the current position means that water supply is now a matter that will need to be brought to the attention of the Examining Authority, with a view to Anglian Water providing further detailed evidence on our non-domestic water supply position by Deadline 4

- 25th May 2023. We will continue to engage with the Applicant to discuss this matter and any options available."

This is a serious matter affecting everyone in this Anglian Water area and cannot be allowed to be mitigated out because Anglian Water stand to gain a huge financial interest in it going ahead.

The Applicant should have been aware from the start that this area has one of the lowest rainfalls in the country they have had years to accurately supply any figures and produced their latest just last month. To accept any further revised figures the Applicant puts forward that appease AW at this stage would be not only morally wrong but totally unacceptable.

This planning application has lacked details one would not expect from this kind of facility, particularly given the supposed experience they claim to have in the EfW area.

On site fires are an unknown entity, we are hearing of more and more due to batteries, and the amounts of water that could be required on top of the submitted water demands over the next 40+ years is incalculable.

Emergency discharges by AW are all too frequent, the water from this PD will put an additional strain on an already inadequate system and any discharges into watercourses from this PD could have catastrophic environmental consequences for which "sorry" isn't enough.

The latest ISHs were disturbing, The Applicant seemed unable to grasp that it wasn't just a case for their planning application to sound like it complied with national policy, but that they also had to demonstrate how it would conform ...not just rely on their own assumptions, mights and maybes.

They did nothing for anyone's confidence that the Applicant could or would deliver this facility let alone deliver and operate it safely ..

In terms of planning, weight and benefits, the Applicant has:

Not demonstrated a need at this location - it could have been sited anywhere in the east of England region.

Not demonstrated an assessment of need for heat demand for CH&P in this location.

Not demonstrated a commitment to carbon capture unless it is required or funded by the government/taxpayer.

Not demonstrated how the by-product of IBA and APC residues would be handled and treated responsibly.

Not demonstrated they would be actually taking waste that would otherwise go to landfill - complying with the waste hierarchy.

Not demonstrated how their competing for waste as a subcontractor would adhere to the proximity principle.

Not demonstrated how their competing for waste as a subcontractor would not prejudice recycling

Not demonstrated how this size of facility, without an upfront MRF, would not not prejudice recycling.

Not demonstrated how the PD would contribute to less carbon - burning waste burnt/treated elsewhere.

Not demonstrated any benefits for Wisbech.