TRANSCRIPT_ISH1_SESSION3_DRAXPOWER_18012023

00:02
Okay, good afternoon, everyone. And welcome back to this issue specific hearing one on the scope of development for the Drax, bio energy and carbon capture and storage project. Can I just confirm with Mr. Harrell, that the live streaming and recording of this event has commenced? Thank you.

00:23
You were on to Item five of our agenda, which is context of the East Coast cluster.

00:32
Just to the applicant in the in the first instance, the needs and benefits statement states that in October 2021, the East Coast cluster was named as one of the UK is first clusters and that this would be led by the northern endurance partnership, supporting both the net zero T side and the zero carbon Humbert industrial, decarbonisation proposals, and this project would form part of the zero carbon hunger proposal.

00:58
Could you just provide us with an overview of the wider picture please, including all the different entities involved, the different consenting processes, the individual elements to all of that and unknown timescales? If you've got them?

01:14
Good afternoon. I will pass over to Mr. Ian Harris, who is the applicant CC, es cluster development manager to help answer that question in the first instance.

01:30
Thank you, Ian Harris, Drax. So zero carbon humba is a collection of a partnership between companies in the Humber region who are all driving towards creating the world's first netzero industrial cluster by 2040. It has two members on within zero carbon Humber who represent the northern insurance partnership, those national grid ventures and equinor.

02:01
So the zero carbon Humber as it is has been given funding by the IFC it is CF grant or the industrial structure challenge Fund grant by Ukri for the feed studies for the pipeline going through the Humber which will connect to the northern insurance partnership, partnership and their storage facility in the southern North.

02:26

The

02:29
the northern insurance partnership or NDP is comprised of BP National Grid ventures equinor, hotel, and shell and they will be delivering the entirety of the transport and storage system both in zero carbon Humber and for and for net zero T side. So in

02:51
in 2021, both zero carbon Humber net zero T side and the northern insurance partnership came together to to bid to be a track one status industrial cluster to the government and they were being successful and being awarded that and since then, the parties, the northern insurance partnership, parties have been progressing with the transport and storage system and negotiating with governments in telling how that will work

03:24
with reside with regards to consenting and timescales. So the pipeline and the Humber

03:31
is being taken forward by National Grid

03:35
ventures who are leading the work currently on the DCO and the field studies there on behalf of the Northern insurance partnership as a whole. And they are their timeline was published in the statutory consultation for their DCO last year, and that is that they by mid

03:56
2023, the route for the pipeline is now out there. And there they are. After the statutory consultation, they're considering the responses currently,

04:09
the DCO submission they have timed for around bids 2023 for the DCO to be determined in late 23, and 23 and 24.

04:23
Construction in August 24. And by 2026 completion of the project at the very earliest in terms of the consenting so that's that's the DCO for the for the onshore onshore pipeline elements for the for the offshore side, the offshore pipeline, I believe is is going to be the

04:47
the PWA the pipeline works authorization which is

04:52
through the North Sea and transition authority. The storage facility is going to be again through the North Sea transition authority

05:00
The

05:01
BP National Grid ventures and

05:06
equinor are all on the licence which is held for the storage site, the insurance storage site.

05:14
They're going to be looking to apply for a permit. So they have a licence to source co2, but you need to amend that licence for the permits. And they're going to be applying for that. It should be I believe it was in the NZ ZNZT On net zero T side DCO. That that's going to be the end of

05:34
well, yes, around

05:36
q3. q3 this year, it takes around six months to determine.

05:43
Okay, it's extremely helpful. Thank you. And in terms of the storage, which is the the aquifer, isn't it? Yes. And what's the lifespan of that of that storage capacity? Depending on the moment, we're in the position that we are waiting to have determined by government who the who the emitters connecting to the various pipelines, both in Teesside and Humber R. And that will, of course, determine the overall capacity of the store at the moment, I believe, is through their assessments.

06:19
around 450 million tonnes,

06:23
about around 17 million tonnes a year will be coming from Teesside through the Humber low carbon co2 pipeline. So you've got you've got quite a quite a lifespan there. But they've also BP have applied for and been successful in getting licences for potential build out fields if they needed to extend the lifespan.

06:46
So is it based on that storage capacity? And what's known as going in from from T side? And from M Humberside? I mean,

06:56
is there a possibility that that storage will become full within the life lifecycle of this project?

07:05
Within the lifecycle of this project? No, I don't believe so.

07:10
Yes, it again, it, it will depend on the number of pipelines that are connected to the storage facility, of course, and their rate of annual injection. It will also depend on that evolution of understanding of the storage site as they continue to operate it.

07:28
If that were to be the case, you say that they're already looking at alternatives. Absolutely. As part of this being a cluster. And there being sort of a natural monopoly in terms of the storage facility, because it's a cluster that they're looking to add various other options if if they weren't able to progress with the current current storage facility.

07:54
Thankfully, not able to progress, but if you know, if it's if they're needed further capacity.

08:01
Thank you for that. Does anyone in the room have any comments based on that overview of the context of this project in light of the cause?

08:13
I guess at this price, I didn't appropriate

08:18
time to common to know whether you come with questions later.

08:23
And no, no, please do. Please comment. I think the only thing that I was going to add it's the just little corrections, the National Grid carbon limited who promoting the humble low carbon pipeline, which is part of the national grid ventures division within national grid. And I just want Dausa to add about the the timescales.

08:45
As

08:47
was correctly pointed out, the kind of the latest position is in the consultation material published on the website and National Grid carbon Limited has carried out a second round of consultation in October 2022, which has closed on fifth of December, and national grid are currently considering the feedback received and will be probed before progressing the application further. So that's kind of the current timescales and there's no update on that but

09:21

I'm sure you'll have questions in terms of the interface between the proposed schemes and we could comment on that in a little while when we come to that. That would be helpful. Thank you Miss price

09:39
please move on to the next. These ones.

09:44
I'm going to come back to

09:49
Okay, so I firstly have a question

09:54
on the relationship and dependency between drugs and

10:00
Zero Carbon Humber parts of the cluster and to so is the viability of zero carbon has been dependent on the development of backset Drax.

10:16
So, the the Humber partnership is, as I said, they are striving to make Humber the first decarbonize netzero industrial cluster anywhere in the world and that's that is the objective. There's something called the Humber industrial cluster plan, which is due for publication I believe in in March, which which we are a part of, and all the various parties and zero carbon, Humber, I believe, are a part of as well, which sets out various routes for decarbonisation of Humber. All of them consider Drax to be a key part of the decarbonisation elements. One of the elements of Drax being part of this is that we are going to be hopefully producing around a million tonnes of co2 per year in the pipeline capacity, that's 17 million tonnes per per annum for for storage. So effectively, we allow the, by by operating baseload

11:18
and continually producing and producing a high level of volume as allows far more operability of the of the pipeline and, and

11:26
scale to allow other projects to be accommodated by the pipeline.

11:34
Okay, thank you. That's helpful. And Could I could I ask Miss price if she has any comment on?

11:42
On that on on the dependency on the development of, of this project that tracks

11:51

in I miss price for National Grid carbon limited? The position is at our separate schemes and not the pipeline itself is not dependent on any individual transmitters, proposed schemes as such, but obviously the Low Carbon pipeline has been designed to accommodate the possibility of those transmitters connecting on on the route.

12:21
Thank you. That's helpful.

12:26
So in the event of a problem with the pipeline, what happens to the captured carbon? And I think this is this is a question for the applicant.

12:42
So

12:44
is it proposed that the jet the generating stations with carbon capture applied are turned off in that case? Or would they run without the carbon capture plant operating? This is a question is about a few

13:00
can't run off for Drax.

13:03
I suppose that depends on the ultimate final design of the power of x business model that base have consulted on and outlines how paradex projects would be commercially supported. But the exact design of that will tell us whether if there was a problem with the pipeline, whether you continue running and generating power, or if the main goal is generating negative emissions. And we understand that the priority is that negative emissions generation, but ultimately, base will decide exactly what for what's happened in that slim

13:37
scenario where the power station should operate. And that's what we would follow.

13:43
Would it also be controlled by the Environmental permit requirements for 95% per year capture? Maybe the Environment Agency, Chris called Environment Agency? Yes, in part, we will have to discuss with Bay's around the 95% capture level that we talked about earlier,

14:07
as to whether it's bad, best available technique to allow the plant to operate without the carbon capture facility being available to it. And whether those emissions count to or they don't count to the 95% limit that will be in the permit. So we do need your cooperation and discussion with based on that.

14:27

Okay, thank you. That's helpful.

14:33
So then, question on the interface with the pipeline. So I understand from the relevant representation from National Credit Card Unlimited, that the precise nature of this interface is still to be defined. And there are two options on the location of that connection, and that's outlined in the environmental statement as well. So I'd like to ask both national group carbon limited and the outcome

15:00
What factors are in consideration in determining which option of the interface is chosen, whether it is within the drag site, or outside of the tracks station site.

15:13
I'll come to the applicant first on that.

15:19
Jim Doyle tracks power. So we we've looked at an option within our sites work number two, what package number two. So that would include the pipeline from our compressor system into an above ground installation that National Grid carbon would own. And then if you remember, on the slides that I showed, there were four options A, B, C, and D, which are outside of our fence line. So fundamentally, there are options, one of them within our site. And four of those options outside of our site at National Grid carbon have consulted on I think, as you heard earlier on, so they're effectively five.

15:58
We have provided a land area for the above ground installation within work patch number two, and the connections within work package number number two, in a way it is now I guess, if National Grid think that that's the optimum solution, then they will be within our site boundary. If they don't think it's the optimum solution, then they will look at one of the four options that they've consulted upon.

16:24
Okay, thank you. And can I ask Miss price? Do you have any comments on this?

16:30
Yes, thank you Miss price. On behalf National Grid carbon limited. The above ground installation, as as was shown on the plan

16:40
will have the word called pig, the pipeline inspection gauge and there are four options as as was just set out. And at the moment as consulted the option D is preference of National Grid carbon. But as we're still considering the feedback that may or may not change going forward. But in any event, National Grid carbon limited as set out in our relevant representation of fifth of September. And in the statement of common ground, which is before the examination, we consider that the applicants drafting of work number two, which considers both options.

17:22
Whatever happens in the future is it is appropriate.

17:27
The only thing to add as the metering facilities and filters as describing work. And number two, a Roman four and five of the draft DCO would be provided by the applicant. And this is again set out in the statement of common ground between the applicant and National Grid carbon.

17:51
Thank you. That's helpful. Mr. Gryphon, thank you very much, because I'm part of the opportunity. But yes, just to expand on that. So work number two

18:00
to B to A is the.

18:14
Compound on Traxxas land and therefore build out work number two a the order at Article Six provides national grid carbon limited with that benefit of that work number.

18:30
If they don't, as has been outlined there, Option D is their preferred option the moment then the how the order works is that to be would kick in, which is the carbon dioxide delivery pipeline, which then has a board work area that will then plug into the terminal point, which national grid of the Northern joins partnership would have to then

18:54
research into book you had a little technical issue with our visual participants that I just don't want them to miss anything that you're saying. So can I just double check that we can get them back? All sorted. We're all sorted. Sorry about that mistake with that's not a problem.

19:10
I don't quite know what people heard on virtually but also some just to repeat the last bit of National Grid PC option D then to be kicks in which is the pipeline with a board area within our order limits and work area. And that will then plug into a terminal point on our order limits boundary with national grid or Northern joints partnership providing the other half outsider or delimits to plug into it. So the two red lines dovetail in that way.

19:42
Okay, thank you. And then my next question on this is whether

19:47
the interface and and whether it's work number two, A or B. Whether that will be defined. It's anticipated that that could be defined within the timescale of the next

20:00
examination? Or is it proposed that both options are kept in

20:07
Richard Griffiths on path presents, given status of the pipeline DCO application, I think it's sensible for both to a and to B to remain in the order to advise that flexibility.

20:24
I'm obviously I'll keep that under review during the examination of this application over the next six months. But at the moment, we'll be saying that to a nice stay in until there is until we have a national the national grid has to comfort that they will not under any circumstance want to build out to a

20:44
Okay, thank you. And I'll just check if Miss price has anything to say on that.

20:48
Yes, Miss price on behalf of National Grid carbon limited. And I Mr. GRIFFIS very rightly summarise the position. And Nash good position is that this this should stay for the time being as we're considering the feedback and there is no decision as to which option would be chosen.

21:08
Anything.

21:10
Okay, thank you. So

21:15
just have one more question. But we have really touched upon it. And I don't really want to ask you to do repeat of him. We did talk about the key B three requirements, which also includes the part which prevents development from commencing. I think until consent is granted, I think for the the pipeline. I know you've already answered this, in part this morning for me, Mr. Mr. Griffith says I know you're going to go away and consider that in any case.

21:45
We can obviously talk about that tomorrow if if the time is right. But I think that perhaps what it might be worth doing is to ask you to put something in writing to us as well, once you have considered it. And you can confirm this tomorrow. If you don't consider something like this is appropriate, the reasons why and why it's different to the key v3 development consent order. Yes, thank you. As I mentioned at the committee meeting yesterday, and subject to seeing your timetable,

22:14
we are anticipating at the moment to submit a revised and updated developed consent order at deadline to so earlier than the current timetable to take into account tomorrow's hearing. And

22:24
we will intent we will, alongside that part explain our decision as to whether what moment our position is that no requirement is necessary for the reasons I've set out before lunch. And that is what our main opposition with the reasoning and we'll explain that in writing deadline. Alongside that draft DCA, which is deadline two,

22:47
which I think is probably appropriate rather than deadline one.

23:00
Does anybody in the room have any comments to make on based on anything they've just heard?

23:10
Okay, and that case, I'll hand over to Mr. North over for items that

23:19
I thank you. So Item six is the consideration of alternatives. Chapter Three of the environmental statement, which is a PP. 039 describes the consideration of reasonable alternatives. I'll come on to some questions I have on this. But firstly, without repeating what we already have in that chapter in writing, is there anything that the applicant wanted to say on the consideration of alternatives?

23:50
Just as a brief overview, on the approach the applicant took, I'll pass to Catriona Reynolds, who I just for the record, I don't think we should introduce her title, and I didn't introduce her this morning. So Catriona is the senior back strategy and Engagement Manager

24:06
and Jim Doyle, to discuss the approach that the applicants taken to deciding both post combustion technology and then why the

24:17
location within the drug site

24:24
capitals for drugs, I suppose, just to start, we've already talked a little bit about the policy today, but there are specific reasons why you would choose her Abex over other greenhouse gas removal technologies, and those are set out in some of the recent policy documents that have been published over the last year or so by Bayes. So I suppose the first one we've already mentioned is the net zero strategy which sets out government's ambition to have 5 million tonnes of engineered greenhouse gas removals deployed in the UK by 2030. They then go on to say specifically about power backs that backs technologies will include

25:00

retrofit applications in the parent industry sectors that could be deployed by the late 2020s and potentially achieve ambitious contributions to our NDCs nationally determined contribution targets by 2030. This theme has developed through subsequent policy documents. So another one we've spoken about today, the August 2022. Bay's power backs business model consultation. That also explains very clearly the Russian that let me find my place.

25:35
The rationale for deploying power backs projects it says again, it's it's worth noting, noting the significance of timing and the current window of opportunity recognised by government. There are biomass plants currently providing bioenergy with a potential capability of converting to power backs projects within this decades by installing carbon capture and storage equipment. And it goes on to say very clearly, by harnessing the opportunity to reutilize existing infrastructure and expertise, there is potential to accelerate progress in supporting the existing contribution to energy security, and the scaling up of engineered greenhouse gas removals this decades, there are other greenhouse gas removal technologies. But again, I think if we say see, in the same consultation, they set out the advanced technology readiness of power backs, specifically when compared with other greenhouse gas removal technologies.

26:32
And say that power backs is best positioned to begin delivering on the 5 million

26:38
tonne per year target for engineered removals required within this decades. And we can give you those page numbers and references if we haven't already done so in writing. So we think there's a very clear rationale for choosing power backs as a greenhouse gas removal technology over over any other options that there might be out there.

27:00
And I'll let you ask any questions and then pass over to my colleague, Jim to talk about the specific technology type choice, Drax power station, I think continue and then I'll come to the questions that I did have Thank you.

27:16
Jim Doyle, Drax power, so although there are a number of engineering routes to remove carbon dioxide from the combustion gases generated through power generation, the most widely applied best understood and most optimised involves post combustion capture technology, applying a solvent to capture and track the carbon dioxide prior to the flue gas being released to atmosphere. post combustion capture technology is currently the most widely used and applied carbon capture technique and offers one of the best solutions for scalability

27:49
allowing for a retrofitted solution to existing generating plant as well as integrating existing connections to cooling water infrastructure, grid connections and power trains.

28:00
Tracks are successfully applied and

28:03
drugs have successfully applied a solvent based technology to 100% biomass feedstock to capture carbon dioxide utilising the pilot plant facility at Drax power station.

28:19
Thank you, so I have a few questions on the various areas where

28:25
alternatives were considered. So firstly, was layout of the site. So the

28:34
chapter three sets out a North option and a south option that were considered and so in choosing the location for the carbon capture plant and additional supporting infrastructure? Was there an assessment of relative environmental mental impacts between these options? Or was the decision more driven by the operational efficiency of proximity and reuse of existing infrastructure?

29:04
Jim Doyle tracks power. So you're right. So we did initially consider a South solution. We looked at that option. The reason why we ended up looking at a North based solution was largely to connect into existing infrastructure. So the cooling water infrastructure, which serves units five and six as we discussed earlier on today, which will be decommissioned. That cooling water infrastructure will be teed into for the Becks plant. Hence, we moved from a South solution to a North solution.

29:41
Also, as we saw on the slides earlier on today, the footprint of the main Beck's plant will be on the the FTD facility which serves units five and six, and we'll be reusing some of the piles that exists there for the FTD the flue gas desulfurization

30:00
The facility that's currently on site at a Drax

30:05
also the North solution minimises the pipe run carrying carbon dioxide from the compressor station the compressor plant out to the connection point into the transport and storage system. So, it minimises the pipe brand carrying high pressure carbon dioxide across the site, it was a Southbay solution as you if you can remember the orientation of the of the plant and where the connection point into the transport storage system will be that co2 pipeline carrying high pressure co2 would run the entire length of tracks power station. Ideally, you want those pipelines to be as short as possible.

30:44
Okay, thank you. Are there? Are there any

30:47
potential adverse environmental impacts of the North solution that you have chosen over the South solution that Jim Doyle tracks about? As far as, as far as I'm aware? I don't hear any adverse impacts from from the North Bay solution compared to the south based solution.

31:09
I'm gonna if I may, can I bring in Nicola Ashworth, who's

31:13
environment environmental assessment and consensus Associate Director at WFP, who carried out the

31:19
EIA and the alternatives circling past Nicolette is to answer particularly that that question over the difference, environmental impacts, Nicola is with WFP with included some brief text within Chapter Three in terms of the differences between the northern and the southern options, overall, the likely environmental impacts for the North option are less than the southern option for some of the reasons that Jim has explained. In terms of the Southern option, we have a great, slightly larger footprint. We don't reuse the piles from the FTD demolition, we have longer pipe runs. And there are some slight differences in noise in terms of bringing some of the noise sources closer to this

32:08
sensitive receptors to the south of the scheme. So overall, the northern option is slightly better for an environmental perspective. But the differences are not significant.

32:22
Thank you that that's helpful.

32:25
So the next area was to do with the solvent technology. And just a point of clarification, first of all, is the solvent makeup used in the 2020 pilot facility for the same as is proposed for this development? Or has it progressed from then?

32:48
Kristin was direct. So we've tested two solvents. In the development case, one was the initial and Ks 21, which is the proposed solvent for the project. So they've been both tested on our flue gas.

33:05
Okay, thank you, as it's still the case that non Aimin solvent technology is not sufficiently advanced to be a viable option.

33:17
Jim, do all tracks powered that that's the case? Yes, we're seeking an aiming based solvent solution. Okay, thank you.

33:27
Moving on to the steam sauce.

33:32
And

33:34
I wonder if this this is partly covered earlier in, in when we were talking about the energy penalty.

33:44
But so perhaps it's just a point of clarification to check whether. So,

33:50
in chapter three, it explains that relative to the other options considered there as a reduced power output from units one and two associated with that the steam extraction, and so is

34:07
is that this is this makes up the energy penalty that was discussed earlier.

34:13
That's not Christmas drugs. Yeah, that's correct. Is that penalty? Okay, thank you.

34:20
So, we note that there's a number of design options still in consideration and these are described in in chapter two,

34:31
including, as we've heard that carbon dioxide delivery compounds,

34:36
the construction programme and the

34:39
the abnormal, indivisible loads route to cross the M 62. Is there any progress on change to any of these matters? From what is in the application documents that the applicant would like to mention?

34:54
The applicant and recruiters on behalf the applicants near the application Currently, we have just summarises the

35:00
composition. Okay, thank you. Does anyone else have anything they'd wish to say on alternatives?

35:10
Anyone virtually?

35:13
I'm not. I'm not seeing any hands.

35:16
Mr. Hewitt.

35:19
It's more of a clarification. The past station was constructed in two phases. One is getting quite ancient. I wonder which of the units are the ones which are being proposed for the biomass? One and two, are they in the north or the south.

35:38
And the other one is, the flue gas desulfurization unit has been removed.

35:44
Sulphur in the pipeline, if there's any humidity in the pipeline, understand is corrosive. And one doesn't want the pipeline to rupture. Because it's nice, it's the end. And people nearly died last year, or two years ago down in South RT, Mississippi. I'm just wondering whether I know that coal is different

36:06
from wood. It's got more sulphur in it. But I just wonder if the sulphur aspect of it has been fully considered. Thank you.

36:17
Could the applicant respond to those two points, please? So I think the first question was which units are looking to have expertise in sort of a units one and two. So those are first half first off units.

36:29
Second question about sulphur. So we were biomass, he has much lower sulphur content than didn't cold. And solos that we don't have to run flue gas desulfurization on the biomass units, so that sulphur emissions from a biomass unit are much lower to now from a call unit.

37:02
Thank you, was there anyone else on

37:06
alternatives?

37:09
Okay, so move on to item seven.

37:12
On the agenda, which is issues and actions.

37:17
So before we do that,

37:19
I just made Richard Griffiths nonprofit applicant. We raised a question earlier about the temperature at the stack exit. I was asked if we could clarify, I think was a question actually from Valentin by comment. But now because we do have an answer to that. So if it's helpful, we can answer that question now before you progress with the actions. Yes, please. That would be helpful. I will therefore pass to Beth and takut Jones from ws P.

37:49
Excuse me, who's technical director on air quality.

37:54
Beth and ticket Jones, Ws P,

37:57
you asked the question or a question was asked about the temperature of the flue gases

38:03
with the existing units and with backs installed, or CCS installed and the temperature of the units is currently 144 degrees centigrade at the point of exit from the stack, which is the temperature that's relevant to the dispersion characteristics with CCS that would decrease in its basic form to eight degrees centigrade.

38:29
But as part of the mitigation plan for the

38:34
to reduce air quality impacts, that the Bloom is being reheated slightly, with some heat recovered, and its temperature will be 103 degrees centigrade. Post CCS at the point of exit from the stack. We've actually for the air quality assessment, this has been modelled at 100 degrees centigrade. So we have a little bit of conservatism inbuilt.

39:02
Thank you. And is that information contained within chapter six? Index? Yes, yes. It's in chapter six. Yes. Okay. Thank you.

39:17
Okay, so, Item seven issues and actions arising. We've been taking, taking down the actions of today's meeting. So I'll, I'll read through those now.

39:32
Roughly in the order that they they came up. So first one was an action for the applicant

39:39
to provide a statement clarifying the calculation of negative emissions for the whole plant.

39:46
And could we have that deadline one

39:51
second action, again for the applicants to provide

39:58
extract of the IPC

40:00
See guidance regarding the calculation of

40:04
co2 of combustion of biomass.

40:09
Again, deadline one, please.

40:13
Third action again for the applicants a statement addressing the what's said in the biomass policy statement regarding, including the eventual store in the calculation of greenhouse gas emissions.

40:29
And if we could have that at deadline one.

40:35
Number four, for the applicant to provide relevant extract from imi, I am a guidance regarding reporting of countries GHG emissions

40:51
deadline one.

40:54
And then we had an action for Mr. Boozman to provide extracts from the reports he referred to regarding the calculation of greenhouse gas emissions. And if you could provide that deadline one, that'd be good. Thank you.

41:13
And then items,

41:16
number six for the applicant

41:20
to provide an assessment of the harm of the development commencing without the environmental permit being approved.

41:38
That is, well, it potentially is a deadline to but it's not a deadline to yet that the it's basically to come in with your your first version of DC post hearing tomorrow. That is correct. As I said, we would provide that justification with the updated DCA, which we're suggesting that D two subjects your decision on the timetable.

42:04
And then the final action I have is, again for the applicant to outline

42:12
their position setting up rationale of of the proposed development being considered under Section 104 of Planning Act 2008. And also the applicants position if the examining authority consider it to be a section 105 case? And if we could have that deadline one, please.

42:35
Are there any other

42:37
issues or actions?

42:52
So no, that's a comprehensive summary of the actions we also need to. Okay, thank you. Moving on to Item eight on the agenda, any other matters? I've haven't had any other matters notified to me under this agenda item that people wish to raise. Are there any items in relation to this scope of development or other relevant matters that anyone wishes to raise after what they've heard today?

43:18
Miss Brown?

43:21
Katie Brown for biofuel watch. It's going back to the point that James made, which I wasn't going to raise it now. But

43:27

it might be helpful now to ask for a bit more information because my understanding is that

43:34
biomass doesn't require the flue gas desulfurization because it contains less sulphur. So it's within the in the environment.

43:45
But because there isn't the flue gas desulfurization there is more sulphur contamination in what comes out.

43:55
I know that,

43:57
that can cause corrosion that James has talked about, and I think

44:02
can interact unhelpfully with that Amiens. And so I just wondered if it might be helpful to ask now, what's in place to, to mitigate, mitigate against the difference in the sofa? If you think that's a good time to ask that question. Thanks.

44:22
Is there anything that the applicant would like to say on mitigation of

44:29
software? Yeah, so I guess a couple of things here. So as we mentioned earlier, so biomass has a much lower sulphur content and cold we're not required but we don't run the flue gas diesel frozen.

44:43
In order to remove self from biomass, flue gas, it's not required for us to do that in order to meet our environmental permit levels.

44:52
As part of the operation of the quench column, there is a slight pH adjustment in the industry.

45:00
shouldn't run through the quench column, which will have some impact on the sulphur dioxide levels that actually then run through into the absorber to avoid the DVM insolvent being contaminated by sulphur dioxide emissions.

45:17
So, Mr. Giles, are you saying that, at present the flue gas from the biomass boilers doesn't use the diesel realisation? Plant? Is that correct? Like Thank you?

45:31
Does that answer your your question was?

45:35
I think partially.

45:38
Yeah, I'd be grateful for any more information on the details but aren't necessarily now. Thanks.

45:46
Mr. Hewitt, did you have

45:49
James Hewitt independent, I just wonder at what stage one was going to consider the the use of heat

45:57
at Drax at the moment is just a power only scheme. Denmark has combined heat and power very much more efficient.

46:06
Wood is a scarce resource. And it would be quite interesting if tracks were to be using that waste heat, perhaps in the greenhouses nearby, or if there are new housing developments and this sort of thing. I appreciate it's one of the floodplain so it's a bit awkward. Thank you.

46:25
Thank you, Mr. Here. I think, again, we have to remember what we're here to examine. And it is what is before us, and that is for carbon capture attached to the existing biomass boilers. What may happen if it drags in the future? Or isn't really for us and as an examining authority to to consider as part of this examination?

46:46
Yes, no, come back. I was I should have referred in three, I think it's close to point 527, which I think requires as much of the energy to be recovered as possible. But I may be wrong.

47:03
Is the Griffith Thank you. Yes, if I may, which groups on behalf of Africans. Again, this comes back to you, as you've highlighted what is before you this is an application not for a new generating station. Part, as I mentioned in my summary earlier, on en three and three, part

47:22
two, point five is on is talking about ca CHP to an application for a new biomass generating station that is not what this application is doing. The biomass generating station is already in existence, its existence it is already operating. What this examination is examining is a carbon capture plant that is an

extension to that generating station so it's outside the purview of the examination would be our answer to that.

47:55
Thank you, Mr. And just add to that, I've just been reminded that, that that position was agreed with the environment it has been agreed with the Environment Agency as well.

48:16
Okay, there's nothing more in any other business I will move to Close to close this hearing.

48:26
I would just like to say thank you to everybody actually for contributing so usefully and fully today, it has been extremely, extremely helpful to us as an examining authority and we will consider all submissions made today very carefully. The next hearings in this examination are the open floor hearing which is due to begin at 6pm. And this room here tonight and I know a number of you are also coming to that so we will see you there. And then tomorrow we have issues specific hearing two, which is into the draft DCU and that will begin at 10am. Also in this room. The time is now to 59 and issues as if a hearing one for the drugs bioenergy with carbon capture and storage project is now closed. Thank you