



Hearing Transcript

Project:	H2 Teesside
Hearing:	Recording of Issue Specific Hearing 3 (ISH3) - Part 3
Date:	14 January 2025

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TRANSCRIPT_H2TEESSIDE_ISH3_SESSION 3_14012025

00:04

Welcome back, everybody. The time now is 1145 and I'm resuming this second session into the issue specific hearing three in relation to environmental matters. Can the case team please confirm that everybody who wishes to be here has rejoined and that the live streaming and digital recording has recommenced, please?

00:30

Yes, I can confirm that. Thank you.

00:32

Thank you. We're going to recommence with Agenda Item five, which is air quality and emissions. But before we do, I would just like to ask whether we can bring Agenda Item seven forward. So once we finished Agenda Item five, can we bring Agenda Item seven forward, which is climate change? We're conscious that Dr Boswell is not going to be available between 130 and three o'clock, which is highly likely to be the time when we get to that agenda item. And rather than him not being able to make his representations orally, we were wondering whether or not we could bring the agenda item forward. Does anybody object to us doing that, I'm getting no indication. Mr. Philpott,

01:25

so no, just to confirm, with no objection to that being thought forward. Thank

01:30

you. Thank you very much. Okay, so in that case, what we're going to do is we will finish Agenda Item five, hopefully. Dr Boswell is still online. Can you confirm you're still here? Dr Boswell,

01:46

he's, he's on the attendees list, is still present in the room, although I've got no response from him. We'll, we'll, we'll see what happens when we get to to the end of agenda item five. Hopefully Dr Boswell will be able to respond by then. If not, we'll we'll revise our position and see what happens. Okay,

02:09

so back to

02:10

miss Bennet Matthews to resume with Agenda Item five, please.

02:15

Okay. Thank you, Mr. Bucha, for that. So turning now to bullet point five, because agenda item five. Now this question is for the applicant. Can the applicant explain what progress there has been in regards to any key issue, any 29 Teesmouth and Cleveland coast, triple si and nature national nature reserve, scope of police pollutants considered in the construction operational assessment and any 31 Seasmouth and Cleveland coast, triple si and national, national, national, national nature reserve, air quality impacts of pollutants, a triple s i, including Triple S eyes on the European designation, providing a timescale for the progress in relation to this matter, I would also like to turn to any deadline five submission where they've raised a couple of issues, or some points in relation to any 29 now, I'm aware that the applicant has already addressed the issue raised in respect of any 29 which relates to clarification on whether an updated narrative on the implications of the triple fi habitats, With regard specifically to the June coastal, coastal during grasslands being prepared. And this was dealt with in respect to bullet point one and issue any 28 with regards to the applicants, cumulative assessment. However, in addressing this question, can I ask for confirmation from the applicant on whether it is in a position to comment on the the other points, which is raised by any in issue, and E 31 and I'll just summarize for the benefit of other interested parties in this hearing, any states that he says, provided advice to the applicant in rep four zero, 28 on the approach to the assessment of likely impacts with regards to key issue. And E, 31 I don't propose to read out that advice, because it's clearly set out in the deadline, five, deadline, five, eight submission before us, but I would ask the applicant to comment on whether it agrees with the advice and the approach provide proposed by any with regards to the assessment of impact. Secondly, I note that any discipline. Reason the applicant's approach to screening out the projects from in combination assessment adopted in the current report to inform the habitats assessment. That's rep five, zero, 11, any states that the applicant is due to submit an updated report at deadline six, a clarification is therefore sought from the applicant on whether it considers the updated report is likely to address the concerns of any and if so, how and a summary to that point will suffice. So can I ask Mr. Philpott to provide a response on those points.

05:46

Yes. Madam Perry, with Philpott on behalf of the applicants, I'm going to turn to Dr Riley to respond to this. The in combination assessment was submitted at deadline five, so that that's something where we'll be expecting natural England's comments, but I'll pass on to Dr Riley to provide an overview.

06:12

Thank you, madam. Dr James Riley, on behalf of the applicant, yes, with regard to the in combination assessment and the cumulative assessment, I think this covers this covers some points that we've already picked up on earlier on in the discussion, as with regard to, for example, the conclusion, with regard to the approach of the wheeled and case, and not discussing or excluding, I should say, in their point of view, A particular in combination assessment on particular features, there a full in combination a cumulative assessment, I should say, because let's keep that separate. There's a cumulative assessment with regard to triple Si, and then in combination assessment, which is a separate term, with regard to the European sites. The technical assessment, of course, is the same in terms of modeling. And until we receive further guidance from Natural England on six A with regard to specifically what they want to raise, if anything on that matter, our view is that the cumulative assessment that we submitted and the modeling that we did at deadline five should cover everything with regard to atmospheric exhaust emissions from traffic and from Stack emissions, which is the specific issue that

I'm looking to there. So I think we have covered all that and provided all of the other plans and projects that we have covered in there. So I think the last paragraph naturally disagrees with the approach screening at the project, recombination assessment, I think relates to what we were just talking about, with regards to the wheeldo case, until they gave us further information, I think that must be all it relates to, because I'm not aware of anything else, particularly with regard to air quality and exhaust emissions that that relates to, with regard to the broader point about any 29 and the therefore the nitrogen impacts on the triple Si. So you're just so clear, the special protection area and the triple si are designated for quite different features, although they are geographically coincident with one another, and the back and forth we've had with, naturally, with regard to the European sites, has mainly been procedural rather than substantive, with in terms of where in the HRA, one should dismiss implications at the screening stage or the appropriate assessment stage. So it's, if you look at the various updates we've made to the HRA and the one that will be coming at six a it's it's more to do with moving information around, and then, as we discussed earlier, presenting more explicitly data with regard to acid deposition and things like that, as explicit tables in the screening section. So that's the special protection area with regard to the triple Si. This is designated for its vegetated sand dunes, among other things, and those are close to the main site. The applicant's view on the triple si impacts remains that if the total nitrogen deposition rate, including our scheme and other plans and projects cumulatively, will remain lower with our scheme consented than it has been historically, or when the triple si vegetation interest generally developed, which was back well, roughly the 1940s onwards, because the vegetation that's developed there is essentially slag material, rather than, you know, traditional sand dune, if you like, it's slag material from the industrial operations there that ceased and they placed it all, that's it placed, dumped it all on the foreshore, and that has then Developed dune vegetation. But nitrogen deposition rates were much higher then than they are now, or than they will be with this project is operating then, so the vegetation interest has developed during that time, and taking into account the fact that the deposition rate will remain lower than those historic patterns, even with our project, in our view, it can't be argued that the scheme will be harming the. Rest of the triple si even by impeding restoration. And that's particularly the case because the contribution of H 2t side, the contribution of our specific project, is at the level for being dismissed as imperceptible, what we call the Wump center, the critical load level, and is therefore not a significant contributor to the overall nitrogen deposition even cumulatively. Moreover, there are other factors other than nitrogen deposition that will be key to this, to the restoration of the best ecological interest to these dunes, in particular, controlling recreational pressure, which I alluded to earlier, recreational pressure, you can very clearly see there is a great deal of recreational pressure in this area. There are clear desire lines. There's a lot of erosion from trampling and things like that. And anything that you do beyond what we're already has built into our process to address nitrogen deposition is going to have a minor impact on the restoration potential compared to getting a handle on recreation, which there's no indication is going to be handled, or is anything in there at the moment? So, you know, our view remains that we would not have a likely significant effect because we're now talking about the Triple S. I not European sites on the Triple S. I interest features, even within the context, limitation, recovery, mitigation and item deposition from our development has been embedded in the design, including controlling stack emissions through process design and selection of appropriate stack heights to deliver effective dispersion of residual emissions. And that's what's got our contribution down to, to, you know, around 1% of the critical load, well, basically below, actually. Now we understand that Natural News concern as expressed to us is not specifically with the emissions of H 2t side itself, but with the cumulative emissions of a range of developments that are

going to be happening around Teesside. So even if Natural England did not agree that no likely significant effect could be concluded as the contribution of the proposed development to a cumulative impact is so small as to be imperceptible, the applicant considers that it would not be appropriate for any additional mitigation beyond what we've already built into the design of the facility, stack heights, etc, to be applied to address the residual effects of the personal development. As I just mentioned, we obviously talked earlier about pulling together a little technical note that will bring together the data that that is already out there, but putting it together into a single updated note for natural consumption, and we will do that, and it will set out what I've just said, but, but effectively our position is, is what it is. I don't know, you know, I don't know if Mr. Philpott has anything to say on that, but to my mind, that that is our position with regard to nitrogen deposition on the triple

12:40

Si. Okay. Thank you. Thank you very much for that. Dr Riley, I think what you've alluded to, there is a lot of technical information and a technical note summarizing what your position is with regards to the issues raised in agenda. Bullet point five of agenda five would be, would be very useful. I just want to clarify, because I'm taking notes listening at the same time. Can I refer to Mr. Philpott with regards to the technical note, I'm pretty certain that we did specify a timeline for the submission of that. Did we or are we talking about a

13:16

deadline? We indicated deadline seven, because naturing and are providing further comments at deadline six. A,

13:22

okay, yes, we did deadline survey.

13:32

Thank you for that. Thank you for that response. Dr Riley, I am being told by the case team that we do now I just want to double check. If you would just bear with me one moment so I can just double check that we do have Dr Boswell in attendance. So what I'm going to do now is I am going to and the other IPs that I'm going to move forward, if I can in my list, I'm just moving down to agenda item seven, which is climate change. I know that the applicants conferred that they have no objection to that

14:19

the other IPs. Can I Can I just double check, did we open up the end of the last agenda item to any other interested parties that wanted to make

14:29

comments? Oh, thank you very much. Mr. Bucha. I do apologize. I'm jumping ahead of myself moving across the agenda item. Can I just check, with regards to Agenda Item five, bullet point five, whether any interested parties have any comments in relation to the response provided by the applicant. Thank you. I'm getting no show of hands, so I will move swiftly onto agenda item seven, which relates to class. Change. So turning to bullet point one of agenda item seven,

15:17

I can just highlight that. Thank you. I was just checking that that that was a question to the applicant. Thank you. Can I Can I just first check before I move on to that agenda item? Do we have Dr Boswell in attendance?

15:31

Yes, Madam, I'm here. Thank you very much for rearranging this to this moment. Thank you.

15:39

Okay. Thank you. Dr Boswell, if you'd just like to turn your camera off for the second, I have a question. I'm going to address the question first to the applicant. So the question for the applicant is in the light of climate Emergency Planning and Policy. DL, four submission. Rep four, zero, 38 I will ask the applicant for a detailed explanation of the 95% capture rate of the proposed development, including its assessment and evidence bases, and in particular, the assumptions relating to the 5% on a basic carbon dioxide emissions. So if I could address that to the applicant. At first instance, thank you.

16:25

Thank you. Harry wood, Philpot Casey, on behalf of the applicant, Madam, I'm going to turn in a moment to Dr Adrian Mallory to respond to this that the evidence that he'll give, of course, needs to be understood against the explanation given by Mr. Nixon earlier of the nature of the process. So we won't seek to repeat that, but we'll be drawing upon the nature of the process in explaining the answer to this question. So can I turn please to Dr Adrian Mallory. He he is a principal sustainability consultant at ACOM.

17:13

Thank you, Adrian Mallory, on behalf of the applicant, so as detailed in the environmental statement app dash 072, the proposed development is assumed to operate at a 95% carbon capture rate. This is to be secured through the environmental permitting regime, and is fundamental to the business case of the low carbon hydrogen standard compliance, which is fundamental to the operations of the proposed development in operation The proposed amendment is actually designed to capture 97.1% of the carbon, and this figure is to be published during the consultation process associated with the environmental permitting regime, but we have selected 95% throughout the assessment as a reasonable worst case. And so the reason for this multiple one of this is the environmental agency, guidance on blue hydrogen production sets that any blue hydrogen production facility should be capturing 95% of carbon as a minimum. So that is why we have set that as a reasonable. Worst case is that's the minimum amount that needs to be captured for that best practice set out by the Environment Agency, the fundamentals in terms of how we approached it is that we've taken the hourly emission rates from the design team for the operation and scaled that up for 8760 hours per year. So that's assuming that the plant is operating at all times throughout the year to get the kind of worst case maximum emissions to the atmosphere. This is detailed for our nine tables, 19 seven to 19 nine of the environmental statement app 072, yeah, so that's the position in terms of the reasoning around the 95% figure, and how we've technically approached the design of it.

19:10

Thank you, Dr. Dr, Manuel, does that complete your response?

19:16

Yes, initially, unless you have any questions,

19:19

okay, just one, just one question. You did mention a figure, and I didn't quite get that figure. You stated that the fundamentals in terms of how you approached the assessment for the 95% capture rate was based on the plant operation, and you said it was scaled up and you presented a figure. I didn't quite catch that figure for the year, or I didn't quite catch the figure and how that was assessed. I think you alluded to the fact that the client would be operating at all times, but I didn't quite understand how that figure that you quoted over. Didn't feel the figure, and I didn't quite understand how the figure, the assessments of the figure, and how it would be representative of the clients operating at all times. Sorry, if you could just explain that again to where it is in the evidence. Sorry, yeah,

20:16

so the detail of that method is throughout then tables 19 seven to 19 nine of the climate chapter, app 072, fundamentally, it's that the design data is at an hourly emission rate, and we've used a figure to scale it up to get annual emissions over the operation of the plant over the life cycle. So that's detailed from table 19 seven free to 19 nine, as to how we scale it up from hourly operating figures free to annual to get the emissions to the atmosphere.

20:50

Thank you very much. I'm going to refer to my colleague, Mr. Butler, who I believe has some comments or questions to raise on this, this agenda item.

20:58

It's not a comment or a question. It's just to make everybody aware that we received an email from the Environment Agency this morning, which will be published as an additional submission today or shortly. It confirmed that they would not be able to attend today or tomorrow, but they did make a statement, which I'm going to read out in full, just so people are aware, because they're relevant to all of the questions I believe in this section, and may aid or assist people or not, as the case may be. So it says, with respect to the hearings on Tuesday the 13th, obviously the wrong date for environmental matters agenda item seven, climate change, carbon capture efficiency is a technical parameter consisting of the determination of the environmental permit application. The the Environment Agency will determine whether the environmental permit application is the best available technique. And then we've put in brackets bat, which is the inaccura on this matter, by referring to our non statutory guidance on emerging techniques relevant to this technology. And that's a document called hydrogen production and carbon capture emerging techniques. And then it's held on a government website if we decide to grant the permit. And that's the Environment Agency, obviously, because I'm quoting this, the Environment Agency will set conditions in line with our guidance and the conclusions of our determination of the best available techniques on this matter. Carbon capture rate should be a matter for the environmental permit, and it is not required to be duplicated in the development consent order. So that's a quote from the Environment Agency. And I just thought in relation to agenda item sevens,

everybody should be aware of that. We have accepted it as an additional submission, and it will be published shortly. Okay? And that's all I've got to say. So I'll pass back to Mr. Miss Bennet Matthews to carry forward, please.

23:04

Okay, thank you. Thank you, Mr. Butler, thank you for highlighting that submission by the Environment Agency, which prioritize the position on this point, with regards that submission from the Environment Agency, I would just like to ask the applicant at this point, because they've just responded, whether they have any comments in relation to the submission by the Environment Agency, before I move on to Dr Boswell for his questions or comments.

23:36

Madam Harry would fill pot Casey on behalf of the applicant so far as the environment agencies, most recent contribution is concerned, that comes as no surprise to us. It's consistent with that the normal approach is consistent with the submissions that we've been making all the way through the examination. And it also brings us back to the submissions we made in the issue specific hearing two, where we dealt with this matter, and those are reflected in our summary, which is rep four, zero, 16, and the only other points I'd make before I know you're going to go to Dr Boswell, just to supplement what was said by Dr Mallory. The first point is that, in addition to the summary of all submissions in the last hearing which are relevant to this, and I won't repeat and Dr Nixon, Mr. Nixon's oral explanation of the process and the precedent for the use of this process in the production of gray hydrogen and the levels of purity that are achieved in that process and their relevance to the percentage figure. It's also. Worth drawing attention back to the response we provided to the first round of written questions. Question one, point 5.6, which is rep two, zero, 23, which is also relevant. And then the final point is, you were told by Dr Mallory that the proposed development is designed, in fact, to capture 97% of carbon, but that makes the 95% figure assume, for the purposes of EIA, a reasonable worst case. At the moment, we don't know exactly when the Environment Agency is going to commence consultation that's within its gift. We anticipate it could it should be fairly soon and within the lifetime of the examination. So as and when that consultation commences, we will provide and put into the exam.

26:07

Sorry, Mr. Philpot, I've lost connection with you there. I'm not sure if it's just me or whether it is everybody else. Can I just just clarify.

26:22

Yes. He has he has frozen on the he

26:24

has frozen. Okay, thank you, Mr. So we have you twice on the screen. Sorry. Feedbacks from me, which is very helpful.

26:49

Apologies, that was a brief loss of internet connectivity. Yes, I'm going to say

26:55

I think we probably lost the last 20 seconds of what you were explaining with regards to the permits and timescales for that, sorry, so if you just want to reiterate that,

27:09

I'll repeat that, yeah. So at the moment, we don't know exactly when the Environment Agency is going to commence consultation on the permit application. We explained that it's been duly made, but we think it's going to be soon. We anticipate it will be before the end of the examination, and as and when that material is published for consultation, we will put in a copy to the examination so that you can see the context of what we heard from Dr Mallory about the design level of capture, and how that relates to the environmental impact assessment, which assumes a slightly lower level of capture, and therefore we say is a reasonable worst case.

27:53

Okay, thank you very much. Mr. Philpott for that clarification there with regards to the issues raised on that agenda item. What I want to do now is I would like to go to Dr Boswell to comment on the points raised at point one agenda item seven, Dr Boswell, I would also ask you, if you have any comments on the submission raised by the Environment Agency, if you would like me to reiterate the comments to assist. I can do so, although I appreciate you might have taken some notes as we've gone through. So can I, can I? Can I ask you, first, please respond to bullet point one, agenda item seven, and then what do you have any comments or questions on the submission by the Environment Agency?

29:00

Yes, certainly. I think it's probably fair to say first that I will make a written submission later, because I need to go through, obviously in detail and the Environment Agency email. I think I caught the gist of it, but obviously only just heard it further? Yeah. So I'm not really going to say a lot, to be honest, but just some broad brush points, which I will fill out with a written submission later. Can I just

29:37

stop you there? So what you're proposing to do, I suppose to deal with the agenda item as set out, and then, with regards to the submission from the Environment Agency, you propose to to make a formal written submission into the examination? Can I propose that any written submission? And would be dealt with a deadline, six A, which is the 22nd of

30:09

January. Yeah, okay, yeah. I mean, it would be, I think what you normally the, the written, sort of submission for the is three, is h3 it would be in that form, wouldn't it? It would take form as a written submission, extend

30:32

written submission. Yes, it would do indeed, yeah.

30:34

So by deadline, six, a, Yep, yeah. So that's some point, yes, okay, yep, yep, that that's fine, yeah, as I say, I mean, very broad brush, really, because I've dealt with a lot of this in rep four, oh 38 and to be honest, we seem to be going around in circles. And some respects the I mean, the point, Mr. Mallory said, was that the 95% would be secured by the Environmental Agency permitting scheme. That is a point which I don't accept, and I've laid out the reasons in rep four Oh 38 essentially the permitting scheme, I would say, is a monitoring scheme, but it is not an enforcement scheme, and that's the key point, that it doesn't actually secure that carbon capture rate. It's a monitoring scheme. It may have various things which happen if the carbon capture rate falls below that, but those don't necessarily fully secure the carbon capture rate, and I've laid that all out. Essentially, the only way that the carbon capture rate can be secured is the technology is proven to deliver, and there's been no proof of that as yet given to the examination. In fact, the proof is still sort of speculative, and in the future now, the proof is sort of well, the Environment Agency consultation on the permit scheme might provide that proof, but to my mind, that's inadequate for the reasons I've already laid out, but I'll sort of lay them out again as necessary in my written follow up.

32:34

I think I might have lost connection with you there.

32:36

I don't think you have. I just stopped to check that's fine. I wasn't sort of rambling on too quickly, and you caught everything. No, that's absolutely fine. Yeah, I don't think I've got any other comments, actually, on what's been said so far.

32:58

Okay, thank you very much. Okay, on that point, can I just check whether any other interested parties wish to comment on the response by the applicant and the response from Dr Boswell? I

33:23

I've got no indication of any hands and therefore, what I'm going to do is I'm going to go back to the applicant for a final response on the comments made there by Dr Boswell, and in particular, whether you've got any comments on the approach adopted by Dr Boswell that the environmental permit is a monitoring, rather and not enforcement, enforcement scheme.

33:55

Thank you, madam. Harry wood, Philpott Casey, on behalf of the applicant, first of all, we don't, we don't accept that that's simply a monitoring regime. We have to operate in accordance with best available technique which sets the percentage for capture rate, and the Environment Agency will enforce non compliance with that. But more broadly, this comes back to the point and to the key point that we made in response to Dr Boswell's deadline for submissions. And you recall we dealt with this in our deadline five responses, which are rep five, zero, 51, in Section seven, we deal with Dr Boswell's points and a key matter which, so far, Dr Boswell hasn't understand responded to, because it's a deadline five submission, but we look forward to seeing what is said is that taking his point at its highest. Uh, one has to assume, then that either he is anticipating something being added to the face of the development consent order, which is inconsistent and different to the regulation of capture in the

environmental permit, which was, we know we'll deal with this, which, if that is the case, is a quintessential example of one of the key reasons why we don't duplicate controls across different regimes, so as not to providing consistency. But if it is to be consistent in recognition of the factors which lead to the approach that is reflected in the environmental permit, then it is also a quintessential example of why you don't duplicate controls, because then it is purely duplicating a control. It's introducing something which is either identical and therefore pointless, or it is different and therefore creates inconsistency, which would be obviously not appropriate, and indeed would likely to be unreasonable in the wensbury sense. So we look forward to seeing whether there is a response to that point when Dr Boswell responds to put in a deadline five, and if so, we'll pick it up. But the Environment Agency has made very clear that this is a matter it will regulate through the permit and it doesn't see that it ought to be duplicated on the face of the development consent order. That's our position, and we think that that's an entirely unsurprising and conventional approach.

36:38

Thank you. Thank you very much for that response, Mr. Philpot, I'm going to come back to Dr Boswell to see whether he's got any comments or responses in relation to what's been put forward by the applicants, and then I'll go to any interested parties, and then I'll go to a final response from the applicants. So can I come back to you, Dr Boswell, for your comments? Yes, sure.

37:06

Yeah, two comments on that, and also, yes, I will submit something on rep five, oh 51 I think it was. And the points made on that just now by the applicant. I come back to the applicant just saying the Environment Agency will enforce non compliance. I don't think that's been established, and previously, the applicant used the net zero T side environmental permit as an example. And in my rep four Oh 38 I actually show how there's a loophole in that that yes for the net zero T side environmental permit, there's monitoring and so on, and there's reports and various things happen. But it's not conclusively watertight. Effectively, there is a loophole in that the the plant can go on under the desired rate of carbon capture. It should 90% for the net zero T side, not 95 as in this one, but it can, it can go on operating, even if at that lower level. So it's actually a matter for sort of argument at the time that there isn't a secure mechanism which actually enforces non compliance, and that's my point. Now, what we're being told now is, well, the environmental permit or the H 2t side. We don't even have a copy of that to look at, and it's we're going to get a consultation version within the time scales of the planning examination, but we probably won't get the final copy of it within the planning examination timescales. So it's very unsatisfactory, in that sense, that the model we had from net zero T side doesn't show some secure enforcement non compliance, and we haven't been given any evidence that this new permit, which is coming along for this scheme is going to be any improvement on that? That was the first point. And the second point was on the best available technique, terminology, which is being thrown about in the discussion. Again, I have documented quite clearly that the Environment Agency themselves have down scaled their advice and non statutory guidance from best available technique to emerging technique. They actually had one document. It's all detailed in my rep four Oh 38 and previous doc. Documents. But they had one document, which was that best available technique status, but it was actually downscaled last year, I believe. And then the other document is that, anyways, never been more than emerging technique. So I think we need to be very cautious about this best available

technique terminology being thrown around, because that doesn't seem to align with the environment, agencies, documentations as they currently stand. I think that's all I had. Madam, okay,

40:38

what I'm going to do is Dr Paul as well. I'm going to go to the other interested parties and ask them as to whether they have any comments or questions in relation to the points which have been raised by yourself and the applicants at this stage. So I'll ask that to other interested parties. I note that there are no show of hands. What I want to do is just go back to the applicant to see whether the applicant, Mr. Philpot on behalf of the applicant, has any final response into what's being said by Miss Dr Boswell, sorry.

41:21

Thank you, madam. Harry wood Philpott, on behalf of the applicant, first of all, in relation to best available techniques. This is, as you'll recall, the language used by the Environment Agency themselves in their email to the examining authority this morning, where they explained that they will determine whether the permit application is to best available techniques by reference to their non statutory guidance. So that's the that's the way the regulator puts it, and that consistent with the answer that I gave a moment ago. So far as enforcement action against permits is concerned, we will pick that up in writing, in due course, once we've seen the way that Dr Boswell puts it in his responses. But we I would also just emphasize the point, another point that we made in rep five, zero, 51 in response to Dr Boswell that it was Dr Boswell may have concerns about how the permitting regime works in practice, and he may, he might like to see a different regime operated in that sphere of regulation. The fact is that this is the this is the system of regulation that Parliament has put in place and entrusted with the task of regulating this matter. Representations about the adequacy of that and whether it ought to be a tougher regime are not for the not for this application, their matters that Dr Boswell should take up with representatives in Parliament if he wishes to have the system changed. This is not the appropriate vehicle to supplement a regime that Parliament has put in place by means of duplicating it and changing it in the development consent order. So beyond that, we'll wait to see what Dr Boswell has to say, and then we'll respond in writing.

43:29

Thank you, Minister kelpa, and of course, I know your points regarding the regimes environmental permitting or the legal regime for the environmental permitting, Dr Boswell, will I have stated that Dr Boswell submit a submission of deadline six, to give him the opportunity to deal with the today's submission from the Environment Agency, and no doubt, those points, but enforcement. And emerging, emerging techniques and definitions can be picked up with regard within that further submission by Dr Boswell, I note that Mr. Butler is online. Can I take any comments? Mr. Butler, do you have any comments? Or

44:22

all I was going to say is, obviously, Dr Boswell raised his hand that was a final response from the applicant. So if Dr Fauci has anything further to say in relation to question 71 then if he would like to put it in writing and submit by deadline six A we would be grateful if you would do that. Thank you. Okay, thank you.

44:45

Thank you. Now I'm going to turn to what I have as bullet point two of Agenda Item seven. I hope that's correct. Now, if it's asking the. The Environment Agency to explain the mechanism by which the environmental permit will ensure the monitored carbon capture rate does not exceed the 95% threshold. Of course, the Environment Agency has stated that they're not in attendance. They have provided a submission for today, which my colleague, Mr. Chris Butler, kindly read out and alluded to previously. However, this item is on the agenda. So I just want to quickly ask the applicant whether they have any further comments in relation to this agenda item on a proposal, because it's been largely answered. So if I can turn first of the applicant, Madam

45:43

Harry, with Phil but on behalf of the applicant, no, we don't have any further comments. We've addressed this as far as we're able to. And as I said, we're expecting there to be a consultation version available, and hopefully that will either answer the question or go a long way towards doing so. Thank

45:59

you very much, Mr. Philpott, if I could just ask any interested parties whether they have any comments in relation to this item.

46:09

Can I come in?

46:12

Thank you, Mr. Dr Boswell, yes. I

46:14

mean just to say that it's rather unsatisfactory. I think that the Environment Agency haven't come to this. I'd like to explain this further, because it is quite a critical matter, really, and just provided an email which has only been read out, so we haven't really had time to look at it properly. But anyway, we follow it up, as you suggest, by deadline six A Yeah,

46:45

I'd say in response to that, Dr Boswell, is that clearly, although the Environment Agency were invited, we have no power to compel them to attend, and it is at their discretion, effectively. So it is, as you say, unfortunate, but they did submit something this morning, very last minute, which has been read out. It is now available on our examiner in our web page. So if you need to find it, you can find it in there. But if you do have any response to that, or indeed any further comment in relation to Agenda Item, five, two, sorry, seven, two, then, by all means, put that in writing by dead by six. Six A, which is the 22nd of January. Thank you very much.

47:38

Okay, thank you, Mr. Butler. Do you have anything else to add? Or no, I've seen that's enough. Okay? Thank you. I presume so, but I just wanted to ask in any event. So Turning now to the next agenda

item, which is bullet point three, and I am just keeping abreast of the time, so hopefully we can probably move through these agenda items on climate change. Of agenda item seven, the I note the draft statements of common grounds with the Environment Agency, which, if Simon, we've probably discussed some of this already, but I've still gone through the agenda item so so I note that the statements of common ground with the Environment Agency, which is rep zero, rep four, zero 19, which, if signed, would confirm that it has agreed the 95% capture rate will be monitored by the environmental permits. And we've discussed this. However, irrespective of previous submissions on this matter, including all submissions at issue specific hearing two, I would ask the applicant to further explain why the proposed development should be distinguished from similar developments concerns orders such as net zero Teesside and key b3 both combined cycle gas turbines, where firstly the required carbon capture rate was included in the in Article Two interpretation of the development consent order. See article two interpretations, carbon capture plants in relation to net zero seaside dcl and article two interpretations, carbon capture and compression plans of the key PB three, DCO. Secondly, a requirement, requirement 31 related to net zero, and requirement 33 relating to TB three, was included within the DCO that prevented critical elements of the proposed development not being brought into commercial use with with other critical elements relating to carbon capture and its transportation also being brought into commercial use in responding to the above mentioned question, I acknowledge that the applicant's response to deadline. And four submissions, which is rep five, zero, 51 especially its comments regarding the submission of climate change, emergency policy and planning, which is rep for dash zero, 38 Can I pose this question first to the applicant? Please.

50:22

Thank you, madam. Thank you. Philpott Casey, on behalf of the applicant, I'll deal with the two provisions in turn. So first, the carbon capture rate, and secondly, the use of the proposed development without other critical elements. So as to the first at deadline five, the applicant has included drafting in the development consent order which achieves the same objective as the drafting in the key b3 and net zero T side. Development consent orders, which is at the hydrogen production facility, must be designed to capture a minimum rate of 95% of the carbon dioxide emissions of each hydrogen unit operating at full load. And you'll have seen that in the deadline five version, in schedule one, in the definition of work, numbers one, A, one and one, a, two. Now the wording, the critical wording used for all the projects, is the same. The approach is only different in the following respects, for key b3, and net zero, t side, the reference in those development consent orders is to the generating station operating at full load, and that reflects the fact that they're both electricity generating stations, whereas HGT side is a hydrogen production facility. And for both of those other development consent orders. The wording was added to the definition of carbon capture and compression plant or CCP, respectively, rather than directly into schedule one, as has been done for the draft development consent order here. And the reason for that, as you've heard explained earlier by Mr. Nixon, is that for both of those other two schemes, they were they involved post combustion carbon capture, and they therefore had specific separate pieces of equipment that was involved in the carbon capture process, where the carbon capture rate would be achieved, and these specific pieces of equipment were separate. Schedule One works numbers to the main CCGT turbine plant. The contrast here is that h 2t side, as you've heard, involves pre combustion carbon capture. And that means that the process of carbon capture happens as part of the wider hydrogen production process within the same facility, which is why the different aspects of the process are listed under each of work numbers one, A, one and work one a two. And as

such, it's appropriate for the overall hydrogen production facility to be designed to capture 95% and that's the reason for the slight difference in terms of where it's located. But the key point is that the same end result is achieved across all three projects, and the differences in drafting approach don't affect that. So we say that brings us into effectively complete alignment in terms of legal effect with those other two DCOs, and so there's no distinguishment there in terms of the draft development consent order in the light of those changes. So I then move on to the second point, which is about the requirement. Now here, the practical position for h 2t side is different than the position as it existed for net zero T side at the time that it was consented, and also for key b3 so for the purposes of the H 2t side development it is In it is intended to connect into the northern endurance partnership transport and storage network. Now the onshore carbon gathering network was consented through the development consent order for Net Zero Teesside and the offshore carbon pipeline and the. Associated store, which is known as endurance, has now been consented through its own separate offshore consenting process, and the final investment decision has been taken on all aspects of the Northern endurance partnership scheme, so that position, in terms of the assemblage of the relevant consents the final investment decision, means that that project is now moving into the stage of preparing to implement and dealing with discharge of requirements and matters of that sort. And that means that in practical terms for this project, there is very little doubt that the carbon storage sites are coming forward and will be available to serve the development now, just pausing there. That is a very different factual scenario to the one that existed at the time that the net zero Teesside development consent order was being examined and being determined, because at that stage, the offshore consents were still at large had not been determined and no final investment decision had been taken in respect of those components of the scheme, or Indeed, of course, the net zero Teesside development consent order and the components of the scheme that it authorized. So far as key b3 is concerned, that is due to connect to a further gathering network that not only,

56:40

sorry, Mr. Philpott, appears to have lost you just then the connection

56:45

back and again. Apolog apology. Yes, you are great, so

56:49

you probably just need to repeat what you just said. Sorry. Indeed,

56:52

I'll start the key b3 text again. So key b3 is due to connect to a further gathering network that not only does not yet have consent, but the project to deliver that has not yet advanced beyond statutory consultation. So it is at a much earlier stage of the process. It doesn't have consent, therefore no final investment decision in relation to it at the level of uncertainty, in that case, significantly greater and also very different from the position here. So that that means that the factual position is very different in terms of the certainty that the transport and storage network will come forward. In addition, as we've explained in rep five, zero, 51 carbon capture will be dealt with through the permitting regime. And so that provides an additional means of securing the objective that such drafting would be intended to achieve. But in any event, and notwithstanding our position that it is unnecessary, we have provided,

without prejudice, drafting in response to second round written question two point 9.7 that provides that no part of work, one a one or one a two hydrogen facility could be brought into commercial use following commissioning without work number seven, carbon dioxide export pipeline being brought into commercial use following commissioning and being connected to an operational carbon dioxide storage site. So in the event that the examining authority and the Secretary of State take a different view as to the question of necessity, notwithstanding the submissions we've made, we've provided drafting that would achieve the objective, if that was considered appropriate. So

59:04

um, thank you, Mr. Philpott, for that comprehensive um response on that point. Um, yeah, I don't think I have any further questions to ask, so I'm going to go to the interested parties. Actually, what I'm going to do is I'm going to go to Dr Boswell first and ask whether you have any comments or questions on the points raised by the applicant. To apologize. No. Thank you.

59:40

Also thank Mr. Philpott for a very clear explanation. I obviously need to look at the latest draft DCO and the other material, and we'll reply in writing, if I may, I assume by the deadline, six A again. On what's been said,

1:00:03

yes, yes, you may yeah as a

1:00:05

formal submission, so no oral comments, no. Thank you. Yeah. Thank you. Dr Boswell,

1:00:11

just to be clear, the the requirement that Mr. Philpott was talking about that's in their response to a written question, not within the DCO, because they're not proposing to include it. They are proposing to they're proposing their DCO as it stands currently, which is the rep five version of the the development consent order. But we asked them at deadline second written questions for without prejudice requirement. Should we consider it's necessary? And they've included that in their response to the written questions. So when you're looking for the two, don't be surprised if you don't see it in the draft development consent order, because it's not there in response to the second written questions. Thank

1:01:05

you very much for that clarification. As you know, I've been a bit ill, and I haven't totally caught up with all the bits of documentation, so that's very helpful. Yeah. So it was question 297, on the second one was there on the first point about the carbon capture rate, was that a different question I should look to or

1:01:30

there, if I may help her with Philpot on behalf of the applicant that the that is dealt with within the deadline five DCO itself, okay, yeah, the capture rate point is in schedule one of the deadline five draft

CCO. The distinction is that that wasn't put forward on or without prejudice basis. But as the examining authority has explained, the draft requirement was okay.

1:01:58

Thank you very much. So, so

1:02:01

item item one is in the DCO item two on this question is, is not item two can be found in the response to the written questions.

1:02:10

Oh, yes, yeah, okay, that I understand that. Thank you. Thank you very much. All right, thank you.

1:02:16

Thank you, Mr. Butler and Mr. Sopul for that clarification.

1:02:21

Um, that

1:02:27

Sorry, can I just, can I just clarify the position? Sorry, I'm just checking where I am in the running order list. Can I clarify whether any interested parties have any comments or observations in relation to that agenda item on climate change,

1:02:50

I see an indication of no hands that being the case, we can now move back to agenda item six, which relates to biodiversity, ecology and nature conservation, including or miss or mythology and marine ecology.

1:03:12

So if I move on to bullet point one of agenda item six, thank you. Any maintains that further specific information is required regarding the treatment pathways and composition of effluent streams, both aerial and liquid, before it can agree with the conclusion of no adverse effect on the integrity in relation to its key issue, any 18 and any 20, any advises that these impacts remain to be assessed alongside any excessive exaggeration, exacerbating, sorry, Getting tongue twisted. I do apologize. Getting tongue twisted effects. Of reduced water availability before any mitigation measures can be identified and greed, I would ask the applicant, firstly, to advise on the progress concerning resolving these matters, explaining what is what is being done to address and satisfy any in this regard and providing timescales for reaching such a resolution agreement on these matters, I will, I will also draw reference to any said line Five a submission in relation to issue any 18, where any have requested details of the closed loop system. But I note that the applicants already dealt with this and responded to this issue in relation to agenda item five in bullet point two, in relation to any 12, so I don't really. Opposed to revisit this issue here, honestly, the applicant thinks that there might be anything additional to add. I also note from any deadline five, a submission that key issue any 20 is now agreed with the applicant, and would ask the

applicant in responding to this agenda item to please confirm the position. So if I could pose that question or agenda item to yourself, Mr. Philpott on behalf of the applicant, thank you.

1:05:34

Thank you. Madam Perry, with Philpot on behalf of the applicant, before I turn to the person who's going to deal with this item, which will be in a moment. Ms Tamara Percy, who's technical director at ACOM. Can I just say how we would propose to deal with item six? This first matter is slightly different, but once we move beyond the first sub item of item six, we move into a series of matters which have sort of common themes in terms of how they relate together. And what I was going to ask, with your permission, is that, after we dealt with the first sub item, it might be helpful if I ask Ms Kirsten Aldous, who's an associate ecologist at AECOM, to provide an overview of where we are in terms of these HRA matters, as with Natural England. And that, I hope, will provide a useful context and may save time when we're dealing with the other separate sub items. In due course, I wanted to raise that now so that if that's acceptable, come back to that after this first sub item,

1:06:50

I'm perfectly happy with that proposal from yourselves as the applicant. I would ask if any interesting parties have any comments on on the proposal? I see no indication of hand, so I'm perfectly happy with that approach. Thank you very much. Mr.

1:07:10

Phil COVID, thank you, Madam in that in that case, so far as this first matter is concerned, I'll pass over to Miss Percy. You

1:07:30

apologies, am I on right? Thank you. Thank you very much. Tamara Percy, on behalf of the applicant in relation to relevant rep, any 18, the this is related to the closed loop process that we were discussing earlier, related to any 12, which I think we've addressed under Agenda Item five, two. So I would not go back over that in terms of any 20. This is related to nutrient neutrality, and we've agreed and reported in the socg, we can confirm we have agreed that with Natural England, and both parties are satisfied now, so that's quite short response. Thank you.

1:08:16

Okay, can I ask whether any interested parties have any comments to make. With regards to this submission item, I'm getting no response there. So what I'm going to do is I'm going to turn to bullet point two of agenda item six, we've had no response. I'm keeping an eye on the time because we're due to break at 115 for lunch. Sorry, Mr. Philpot, have you come on to respond to this agenda item? And do you have any other comments,

1:09:00

madam, I'd come on as a matter of courtesy simply to explain that this is where we would what I would propose that Mrs. Would provide her overview. I've seen the text that she intends to deliver. It will be comfortably over before we get to 115 and there may even be an opportunity for more after that, but if

it's convenient, this would be a suitable thing to deal with, certainly before the lunch adjournment. That's the only point I was seeking to come on screen for.

1:09:31

Okay, just go with me one second. I just want to check with our case team, right? That's absolutely fine. I was just checking I haven't changed the times of the lunch hour. Can I just clarify so we're turning now to bullet point two of agenda item six, which we have before us, and the additional submissions from a. A Natural England, which I will quickly summarize. So the applicant is proposing to present an overview all the issues with regards to this item, is that what we're saying that

1:10:13

there are a number of outstanding issues relating to HRA with Natural England. This is one of them. There are others that come up later in the agenda. Was a context, starting off with that overview, so that you get a sense of the overall picture, hopefully, and then going on to deal with the specific point that's raised in this

1:10:39

second. Thank you. I just want to clarify, too please, because I was just slightly confused by that. So my understanding is you were going to bring somebody else in about Agenda Item one shortly, but Miss Percy was going to give an overview in regard to all of the items. And then we come back to item one to discuss whatever your representative was going to say

1:11:02

so that we've heard from Miss Percy on sub item, one which, as I said, is a slightly different has a slightly different theme remaining sub items. So at this point, I was going to ask Miss Elvis to come in provide an overview of the position as against between ourselves and he on the outstanding HRA issues. Provide an introduction to sub items two and follow it. Yes, yeah, once I've dealt with the overview, if there's time, we then go on directly into responding to sub item two, and then back over to the normal routine of question and response. Okay,

1:11:44

absolutely fine. I think that leads on while. So if we do the overview, that's fine. I think we'll then be breaking for lunch, and then we can then deal with the the individual gender item questions. Mr. Fauci, thank you very much. Thank you. Thank you for that explanation and clarification. Thank you. I'll

1:12:03

pass on to miss Aldous. Thank you. Yes.

1:12:12

Hello, Kirsten. Aldous, on behalf of the applicant, the applicant is working with Natural England to resolve concerns about noise and visual disturbance impacting the water bird assemblage. In the report to inform HRA, the applicant discussed impacts upon birds on a sector by sector basis, the sector surveyed as shown on figure four within the report to inform HRA, this approach was chosen due to the large area which the proposed development covers and the complexity of the construction program, the

applicant concluded that with timing of works and mitigation measures including noise and visual screening in sensitive locations, there would be no adverse effect on the integrity of the teesmouth and Cleveland coast. S PA and Ramsar. During the course of examination, Natural England have requested further information on how different stages of the project could impact the water bird assemblage through multiple activities occurring in different locations at the same time, it has taken a number of meetings to agree the methodology to be undertaken to provide this the applicant has completed additional work to assess this issue, which will be Presented in Annex J of the deadline six A iteration of the report to inform HRA to calculate the percentage of the water bird assemblage which could be disturbed. The applicant has summed the monthly peak counts of water birds in the ornithology count sectors where construction will occur. The applicant has then considered if the whole of the sector will be impacted, or just a proportion of the sector, and reduce the bird numbers proportionately. Finally, the applicant has considered the reductions in affected bird numbers which could be achieved with mitigation applied in the form of noise and visual screening. Timing of works to avoid the most sensitive periods has been embedded into the construction program wherever possible. However, as the water bird assemblage is a year round feature, it is not possible to time works to avoid birds completely. The updated HRA will outline the Indicative program for the proposed development the outline program shows that there are temporal overlaps between the construction taking place at the main site and the river tees crossing. There is also potential for work at cowpen Beaulieu to overlap with the main site and the tees crossing, and work at the brine fields and gretham Creek areas to overlap with work at the main site and the river tees crossing. Some of the highest count sorry, some of the highest Bird Counts have been recorded at Brown sands lagoon DAB home gut and the mud flats on the north bank of the river. Tees. To minimize disturbance, the applicant proposes to use rotary piling rather than percussive piling on the main site. Piling is not required in other parts of the site. So. This will be secured within an update to the framework CEMP submitted at six a alongside the HRA, the piling is proposed to take place between April 2026, and July 2026 on the main site, the tees crossing is proposed to take place between october 2026, and November 2027, so there'll be no overlap between these activities taking place. Noise and visual screening are proposed during construction to minimize disturbance of brown sands lagoon, dab home, gut and the mud flats on the north bank of the river tees. The effects of this mitigation have been modeled and will be shown in figures within the updated report to inform HRA, in addition, a technical note has been prepared in response to relevant representation. Ne five, with additional information on the predicted indicative LA, Max noise levels as gretham Creek is important to both breeding and non breeding birds. The most disturbing activities have been restricted to a three month window between September and November. The brownfields and kalpa Beaulieu areas are mainly used by wintering birds, so works are proposed to take place between May and September in these areas, figures 14 a and 14 B within the HRA show the seasonal restrictions and proposed locations for the noise and visual screening, and the measures are secured by the framework CEMP. Overall, the applicant considers that with careful timings of works embedded into the construction program and with additional mitigation in the form of noise and visual screening, there'll be no adverse effects on the integrity of the teesmouth and Cleveland Coast SBA Ramsar as a result of noise and visual disturbance of water beds.

1:16:49

Adam Harrowed filper, on behalf of the applicant, that was the overview that we wanted to provide so you can get a sense of where we are and we're now in your hands as to how you would find the most convenient to deal with the individual sub items.

1:17:04

Okay? Thank you very much. Thank you for that overview that's proved to be very useful. I just want to check up this further, whether I have no questions at this moment on the overview, I just want to check for the moment whether any of the interested parties have any questions on the overview, I see no hands raised. I think, as it's three minutes past one, it's a convenient point to break for lunch. And then what I will do is, when we resume, I think we have 45 minutes for lunch. So according to my calculations, it's going to be around about 145 then I'll set out how I propose to deal with the next agenda items. If that's that's that's okay. So this, Kirsten, thank you very much. Thank you.

1:18:08

Okay, so what we're going to do is we're going to adjourn, then we're going to adjourn. The time now is three minutes past one, and we're going to adjourn until 13. 50, if that's all right, so 1:50pm if that's possible, please, and we'll come back then. So we're now adjourned. You.