



Planning Inspectorate
Arolygiaeth Gynllunio

Hearing Transcript

Project:	Light Valley Solar
Hearing:	Recording of Issue Specific Hearing 1 (ISH1) - Part 2
Date:	30 July 2026

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FULL TRANSCRIPT (with timecode)

00:00:07:06 - 00:00:20:06

The time is now 1130. And I'd like to welcome you back to this issue. Specific hearing one. The Light Valley solar project. Now just check that everyone can still hear me in the room and online. Okay?

00:00:24:04 - 00:00:30:06

Yes. And can I just check back of the room that the live streaming and recording has commenced?

00:00:32:04 - 00:00:40:08

Yeah. Thank you. So now move on to agenda item four, which is environmental matters. And I will pass over to Mr. Willis.

00:00:43:00 - 00:01:04:04

Thank you. So under the first item of 4.1 proposed development, got a subheading of site selection and alternatives. Um, I'd like to briefly discuss the applicant's approach to site selection under this item. And I'll also be asking some questions in relation to agricultural land. So again, just if you can make sure that you've got your relevant advisors at the table are helpful.

00:01:06:20 - 00:01:40:04

So environmental statement chapter three, which is app 041 and the site selection report which is appendix 3.1, set out the approach taken to site selection and the alternatives. Now I have reviewed those documents. And so I don't feel it necessary for the applicant or to provide an oral summary of that today. Um, however, there are just a few questions I've got that I'd like to explore. So the first really relates to the starting point, relates to the 25 kilometre search radius that was used by the applicant when identifying the site.

00:01:40:14 - 00:01:48:20

Um, could the applicant please expand upon this and explain why distance of 25km was considered to be the maximum distance suitable for this proposal?

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On behalf of the applicant in terms of the 25 kilometre search radius. Um, this is generally a general approach to site selection with large scale solar DCO projects. Um, generally consistent across multiple projects being within that range. Obviously, the starting point and the driver for the scheme is proximity to the point of connection and that radius being drawn from then in terms of that search area, I think generally that 25 kilometre length cable route corridor takes into account, um, electrical elements in terms of efficiencies and cable length.

00:02:40:04 - 00:02:47:09

And obviously, um, considering sort of the viability of the scheme in terms of that distance from the point of connection.

00:02:49:14 - 00:03:27:04

Thoughts about that? If I can just add to that, uh, that um, considering precedent here, which is, um, on other schemes. There has been debate about the distance. Um. Um, but that has been because it's been far less than what we have done. So, for example, on the recent one, uh, solar farm decision, the applicant went in with ten kilometers and then did a sensitivity for 25 to 15. Um, and the Secretary of State thought that that was appropriate. There has been decisions on, um, admittedly smaller schemes like, um, Helios, um, where ten kilometres was considered acceptable.

00:03:27:13 - 00:03:38:23

Um, so I would argue that we've gone more than, um, just those examples. Um, and that's the appropriate distance in the context of the factors that we spoke to.

00:03:40:01 - 00:04:06:09

You kind of preempted. One of my questions was, how does that compare to other schemes? But you've just given me a couple of examples there, so I don't need to flush that out any more. Um, you talk about and I understand you mentioned that that distance takes into account, Um, effectively with distance, increased losses and costs. Um, is there a point at which, um, an increased distance does make a scheme unviable? And if so, what would that be?

00:04:12:12 - 00:04:43:29

Simon, get it for the applicant. Um, so it is true to say that, um, that schemes which are close to the points of connection are more viable, and schemes with sites which are further away from the point of connection are less viable. But there are a number of factors that feed into that viability assessment. And so it's not possible. There's no sort of threshold or or watershed, um, in terms of the electrical connection. Um, and I know this is an issue that has come up at, at other schemes.

00:04:44:01 - 00:05:13:20

It might be worth getting on the table that the applicant's assessment of the transmission losses over the longest period of transmission, longest distance of transmission within this scheme is 0.16%, i.e., nine over 99% of the electrical power generated at the scheme will make it to the point of connection. And that's just a point to sort of context how losses fit into that overall site selection piece.

00:05:14:16 - 00:05:19:15

Okay. Thank you. And is that that number you've cited is that somewhere in the documentation at all?

00:05:20:09 - 00:05:32:27

Um, it is not in the documentation. So it's a number which we've asked for in preparation for this, um, for this hearing. But we can follow up as a in our written summary and explain what that is.

00:05:33:10 - 00:05:49:09

And if I can just add to that. So I think also conceptually, I would say that the further that you go, the more land to take that would require. Um, and so getting to the point of justifying more and more land being included for compulsory acquisition purposes.

00:05:51:06 - 00:06:20:06

Okay. So that was the main point about that. So then with regard to now, what measures specifically have been taken to reduce the effects on high grade agricultural land, you know, following your site

selection? Again, I've read the site selection approach, so I understand the general principle. But following the selection of this site, what design refinements have been undertaken to avoid or minimize locating elements of the development on the highest quality of agricultural land within the individual sites?

00:06:27:21 - 00:06:36:01

Can you hear me? Okay. Ruth Jackson for the applicant. Um. Forgive me. Uh, please, could you repeat the question so I can be clear? I'm going to answer it.

00:06:36:03 - 00:07:12:07

Yeah, certainly. So my question is following. I understand the general approach to how the site was selected in terms of broad, broad location. What I'm looking specifically for is following the selection of the site. Um, what design refinements have been undertaken to avoid or minimizing elements. Locating elements of the development on the highest quality agricultural land within those individual plots. So when you've looked at those identified the sites, how we venue, um, the design, the scheme to ensure what measures you've taken to ensure that those elements are in the least are higher grade, if you like.

00:07:12:09 - 00:07:44:17

Certainly. Well, um, agricultural land was one of the parameters that was considered when you're once we have the site established, we go through a process of defining, um, parameters where we would avoid, um, any, uh, constrained areas. Um, and we were working initially with publicly available information on best and most versatile land. And then the design team includes, um, agricultural land specialists. So surveys were carried out in consultation with the local authorities.

00:07:44:19 - 00:08:09:27

So that information layered into the process as we were going through. Um, so really, in terms of best and most versatile land and lay layouts within the scheme, we were for best, most versatile and most focused on elements like the bears and the substations, rather than the solar panels, which are quite light touch in terms of impacts on best and most versatile land.

00:08:11:10 - 00:08:11:25

Okay.

00:08:12:03 - 00:08:47:07

Sorry. Just to add to it, apologies there. Um, it was just I wanted to reference, um, app 216 a design approach document. Um, particularly 3.8 points, seven paragraph, which kind of concludes the points that Mr. Jackson was just speaking to. But throughout that document, it talks about the process from the point in time, essentially of site selection onwards, and talks about how agricultural land was a factor that was considered in, in the development process within, within the site by way of example, um, the bears and it being a factor for that.

00:08:47:09 - 00:09:21:03

Um, I wanted to emphasize that so that within, um, obviously within the site selection report, we talk about the fact that most of us land is one factor amongst many that we're considered. And that is also true to say within the order limits. Once the selection process was, for example, sequential approach

to design of flood risk, uh, needs to be taken into account alongside the policy requirement about best and most versatile land. So we have done that, and I think the design approach document explains and and Jackson's explanation.

00:09:21:05 - 00:09:29:22

But the kind of the point that's made the site selection also applies to site design in terms of balancing a number of factors, including, of course, um, impacts to local receptors.

00:09:30:18 - 00:10:06:02

Yeah. And I think the point about the bears, I understand that because I think from memory, looking at the site, you've obviously identified the footprint for that. And that that bears compound sits in agricultural land, one and two from them, from memory within that same solar development site. There are pockets or areas of still best and most versatile, but it's grade three, I think. Um, you know what? It will be three, eh? Um, but the bed is not located on those. But I think from your response, it's you're saying that's because that then takes into account other factors

00:10:08:01 - 00:10:08:16

like that.

00:10:08:23 - 00:10:27:19

So for example, if you if you were to look at table three six, did that design approach document that talks about all the various factors that were taken into account. And paragraph three, seven, 19 explains essentially how we've chosen the site taking account of those factors.

00:10:30:19 - 00:10:50:06

Okay. Thank you. That's understood. So but given that at the moment so some of the proposed layouts are indicative and not fixed. So certain areas are defined lateral limits by work orders. Other areas are not so much. I'm just wondering. So, um, for example, within the environmental statement, um,

00:10:52:01 - 00:11:21:07

there's certain elements which aren't obviously fixed, like the conversion units, for example, where they're being identified as being located on best and most versatile land, mostly in grades two and three A but if the number and the locations of those are subject to change at detailed design stage, how can we be certain about the actual extent of the effects on agricultural land in those locations, and therefore that the conclusions about the loss areas is, um, accurate?

00:11:25:00 - 00:11:42:23

Um, with Jackson for the applicant. So as, as far as as possible at the stage of design we have we have sought to locate the infrastructure, the associated infrastructure, like the substations and the compounds. Um,

00:11:44:17 - 00:12:19:04

in most suitable locations. When we get down to the those those smaller units that are distributed across the scheme, we are looking to ensure that we put those in the most suitable locations. But we, for example, would probably put more weight towards, um, avoidance of areas at risk of flood because these are, uh, flood sensitive pieces of equipment. Whereas with best and most versatile land,

there is flexibility there because we have gathered quite a lot of data, um, through the surveys to inform that exercise.

00:12:22:02 - 00:12:23:09

Okay. Thank you.

00:12:25:22 - 00:12:57:03

So just moving on then, um, again, just want to look at the assessment insofar as how it's assessed. Um, permanently sealed aspects. So the environmental statement talks about 19.1 hectares of agricultural land has been identified as permanently settled as a result of the development. I think that's primarily associated with the battery energy storage system substations, and it's obviously the environment that has assessed those areas as effectively permanently lost for the purposes of the environmental statement that's understood.

00:12:57:26 - 00:13:26:20

Um, in addition to the those areas, however, there's landscape and ecological measures such as woodland planting that's been proposed, hedgerows and the bird mitigation area and those themselves also resulting in loss of areas of agricultural land. So my question is really, um, would those areas be retained post operation? And if so, has the area of agricultural land lost by the inclusion of those elements been quantified and assessed within the environmental statement as permanent loss?

00:13:30:18 - 00:14:02:07

Sites and part of the applicant. Um, so the secures that um, we would be returning the land to its current use doesn't and other disciplines would want it to be. Committing that, we would just leave things there, which has been done on other schemes. But but here what Adam says is that the land would be returned to landowners, as is currently the case today. Um, so no, no, that hasn't been included. Permanent loss, because the assumption is that any planting would be removed.

00:14:02:18 - 00:14:37:19

Any planting would be required as well, because that was my specific point. I understand the point about elements such as the beds has been assessed on the basis that those elements would be decommissioned and returned. But what about specifically those measures where woodland planting hedgerows have been put in as part of the scheme in 60 years time? My question is, how have you assessed the loss of those areas potentially being sterilising that agricultural land if you saw it being returned? Because it's unlikely, I imagine that those areas will be taken out as part of a decommissioning.

00:14:37:21 - 00:14:49:29

So my question is, have you really quantified or taking into account landscaping ecological aspects of the scheme as well as the physical elements of the project, and if so, where is it and is it quantified?

00:14:51:13 - 00:15:02:06

The applicant then we haven't because the presumption is that they would be removed, i.e. we've thought that the hedgerows would be taken out.

00:15:02:18 - 00:15:04:21

And woodland block planting for example.

00:15:12:21 - 00:15:30:11

Can I just check is that explicit. Because I my memory serves is that it talks about the permanently lost elements. Sorry. Yeah. So it talks about the bears and the other elements, not the ecological. So it would be helpful if you could just check that and clarify it for me.

00:15:32:00 - 00:16:04:10

I'm sorry, Mr. Fox. Applicant. The the, um, the agricultural chapter itself doesn't assess it as permanent because it's just assumed, I suppose it doesn't need to set out assumption, because that assumption is already in chapter two. The assumption in chapter two, i.e. the description of proposed development and as is reflected in the damp, is that upon decommissioning, aboveground physical infrastructure will be removed and the site restored to current current use.

00:16:05:03 - 00:16:08:00

So it's not a permanent loss.

00:16:08:02 - 00:16:21:17

But just on that point, you just said physical infrastructure are you including landscape works and ecological work? Is physical infrastructure or landscape, you know, mitigation and enhancement for example.

00:16:23:04 - 00:16:24:00

So um,

00:16:25:18 - 00:16:32:16

this will it goes on to say this will include the areas of agriculture, land where the agricultural resource has been maintained for operation and established habitats.

00:16:34:08 - 00:16:38:10

Um. I'm just, um, chapter two up as well. Sorry. Um.

00:16:52:00 - 00:17:04:18

I said that as well. So we can take this. I think it's better to take this away. Um, but I think the answer to your direct question is we have assumed they are returned, and therefore, it's not assumed it's a permanent loss.

00:17:04:20 - 00:17:29:10

Yeah. I mean, I think what I'm getting at is effectively, I understand the assessments considered long term permanent removal of elements of form the scheme. But what I'm particularly interested is, is as part of the scheme, there's a number of hedgerows, woodland planting, various landscape features that are being created which in and of themselves take up or occupy agricultural land.

00:17:30:27 - 00:17:48:02

A query whether then at the end of the project life, those areas have matured, established, whether it's realistic to assume that those areas would be removed and therefore if it isn't realistic, how has that been reflected in terms of permanent potential loss of that land.

00:17:48:21 - 00:18:24:24

For the applicant? So absolutely, take your point and the proposed description chapter and then recognise that that is a possibility. I've just noted that. So what I suggest we do so as an action is a sensitivity test. Um, which says uh, if that land was uh, lost as a result of um, lost, but it's not returned to agriculture because the land is designed to keep the, um, to keep the, um, planting in place. Or, for example, the species has moved in so we can't knock it down because the bats are there and that would reach a licence, that kind of thing.

00:18:24:26 - 00:18:27:18

Um, so we will do a sensitive test of that.

00:18:27:20 - 00:18:28:23

Okay. Thank you.

00:18:35:17 - 00:19:10:23

Okay, as I say, that's really all the matters. I wanted to talk on such selections as I have read the documentation on that, so I don't really want to say anything more. That's not to say that we won't come back to this at another time. Um, a future hearing or through any future written questions? Um, I don't think anybody actually, the introduction has to speak to this particular item on site selection. I've got. I can ask the council first before just considering. Was there anything specific I know you didn't indicate, but I'll just ask North Yorkshire Council or anything you want to comment at this stage.

00:19:11:28 - 00:19:22:22

Yeah. Thank you sir. Darren Holgate, North Yorkshire Council um, not from a general planning aspect. Um, just defer to my colleagues if they've got any questions or comments. Thank you.

00:19:27:24 - 00:19:49:24

Everybody in North Yorkshire Council. Yeah. We would welcome the recognition that the ecological baseline at decommissioning is maybe substantially, hopefully substantially, uh, more valuable than the existing baseline. And also, we would welcome further consideration being given to the retention and legacy of habitats established through being the limit and the mitigation area.

00:19:56:29 - 00:19:59:03

Did you want to come back, Mr. Fox, do anything.

00:20:00:18 - 00:20:20:29

On behalf of the applicant? I mean, the the base position with this, sir, is that when we decommission the scheme, we are no longer there and we can't. It's not appropriate for the DCO to impose controls on landowners who are receiving their land back. Um, as agricultural and the possibility we've been talking about.

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I thank you. I do see a hand up at the back. Is that. Can I just emphasize the question? It relates to the issues that we've been talking about just this morning.

00:20:34:18 - 00:20:51:19

Oh, yeah. Nicholas, resident of Skipwith. Um, I was going to ask a question under agenda item 4.5. Um, but here in the debate now, I think it's probably more appropriate to ask it under this session.

00:20:53:19 - 00:21:15:06

The question is, uh, from the applicant response to the open session yesterday, it was stated at 900 hectares of land associated with the scheme, 272 hectares of that was used for anaerobic production.

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So

00:21:19:18 - 00:21:54:18

assuming that that anaerobic production is is not replaced, it's Displaced, so that has to go elsewhere. And at just the question I'd ask is, has an assessment been done on the impact of that, um, anaerobic production on the land quality and ecology and all the rest of the aspects that go with it?

00:21:57:13 - 00:21:58:24

This fox was anything you want? Yes.

00:21:59:13 - 00:22:31:28

Yes. Thank you, sir, Mr. Foxworth, the applicant. So just to clarify, the figure I gave yesterday was not just emanation to anaerobic digestion. It was the combination of anaerobic digestion and sustainable farming initiatives. Um, on that point about, uh, indirect impact of it no longer being used for supplying anaerobic digestion plant, um, it would be for the landowner to decide, um, how and if you wanted to keep that anaerobic digestion plant operating.

00:22:32:00 - 00:22:50:21

That's not in our control. And in terms of the kind of energy that that plant is providing to the grid. Um, that's something that the grid would National grid would decide how to replace, uh, that energy supply. And we can possibly begin to estimate or assess what approach to grid would take to that.

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The way I see it is that there's been an increased production growth of maize all around on the farmland, and it's basically, as I understand it, this maize is grown to the anaerobic, um, burning

00:23:15:15 - 00:23:43:27

in, uh, power plant, things like that. So there's quite a bit of land now being taken up, uh, for the growth of my age, and I thought was such an amount that hundred and 72 hectares wouldn't be just the, um, the anaerobic production plant as the crops that have to be grown to be used in that.

00:23:45:04 - 00:24:03:23

Okay. Thank you. I think, as I say, I think Mr. Fox provided a response note of what you said, but thank you for that. Um, I'm going to move on. If there's no other questions in that case, can I move on to is it related specifically to the site selection?

00:24:09:26 - 00:24:15:11

If. Well, yeah. You can. Yeah. Raise the question and I'll decide whether it's relevant. But yeah.

00:24:15:24 - 00:24:40:04

Perry Carter from South Milford Parish Council, uh, just on the comment that was made about the decommissioning decommissioning aspects of this project. Will that include the cabling? Will that be removed from the land? Because I was told at the consultation phase that it wouldn't be removed. And I just think that that needs to be included as well, because that land will be permanently damaged. Thank you.

00:24:45:27 - 00:25:08:04

As I say, I think I've got at that point, I think what I'd suggest there is, um, reference to that within the environment. I'm sure Mr. Fox would probably give you the direct reference I've got in front of me, but there is reference to that particular matter. Um, I am proposing. I'll move on. It might be worth, Mr. Fox, if you got that to hand, just to give it as a site. And then maybe Mr. Carter can take that away and have a look.

00:25:08:12 - 00:25:23:24

Yeah. Mr. Watson, that begins. So if you look at the outline decommissioning management plan, uh, paragraph 2.1 point 5 to 6, talk about our approach to that point. I won't get into detail, but that's where to go. If you have concerns, then you can make wraps on it.

00:25:24:17 - 00:25:48:14

Thank you. I'd like to move on, if I can, then please, to design parameters and good design. Um, there's a few points here. Just I'd like to, to look at. And specifically those that are listed in table 2.1 of the S chapter two, which I think app 040. And I've asked I think of 400 like that on the screen if I could please just might help for the purpose of running through a few points.

00:25:55:06 - 00:26:25:13

Thank you. So I appreciate it. Might be a bit difficult for some people to see, but um, I just want to quickly go through some of these. I've got a few questions around elements of the screen. So the first one is in relation to the conversion units. So again for the purposes of assessment the applicant is understood to have assessed both integrated and disaggregated conversion units. But just to appreciate a brief very brief summary really as to why Different options are proposed. And what factors may influence which option is chosen and why.

00:26:25:15 - 00:26:27:24

It can't be therefore fixed at this stage.

00:26:32:07 - 00:26:53:21

There we go. On behalf of the applicant, the applicant has included flexibility in the design such that they can take advantage of changes in technology. It should be granted, and therefore I've considered both integrated and disaggregated conversion units to enable that flexibility.

00:26:55:27 - 00:27:05:04

So what you're saying is effectively integrated or disaggregated depends on the technology that may be available, whether the house or not housed effectively.

00:27:05:21 - 00:27:06:21

Correct, sir.

00:27:10:00 - 00:27:30:08

And in terms of certainty, that's then confirmed at the detailed design stage as to which particular type you would be utilising on site from a. And I'll ask this mainly from a from a visual perspective. Then there'll be certainty about the visual aspects of which emphasis or which elements of infrastructure you'd be using. Correct, sir. Okay.

00:27:30:12 - 00:27:47:29

For the assessment example, the visual assessment they have taken to account the maximum parameter for that assessment and whether that be disaggregated or aggregated, um, so that there is flexibility in the assessment to allow for that, allow for that choice later.

00:27:49:03 - 00:28:06:09

Okay. Thank you. Moving on to switch rooms. Again the purposes of assessment I think the application says the assessment is considered they are interchangeable with the conversion units. Again just very briefly could you just explain as to why they're interchangeable and you don't require both.

00:28:08:18 - 00:28:32:02

There we go. For the applicant they're interchangeable in the sense that they are the same size. Uh, and other related parameters and therefore the locating is flexible because any location that we have assessed as housing either of those components, we can then interchange at the detailed design stage to develop consent for granted.

00:28:32:25 - 00:28:58:08

Okay, so on the on that point, I think the, uh, table 7.5 or 7.5 of the planning statement talks around 123 of these units being identified as part of the project. So just so I'm clear that 123 is either conversion units or switch rooms. Not. But potentially you could have 123 conversion units and 123 switch rooms.

00:29:00:12 - 00:29:01:20

Correct, sir.

00:29:08:27 - 00:29:40:19

Okay. So then turning now to the height and the size of the switch rooms and conversion units. Um, these are being cited within the table, I think, as a maximum of 3.5m. However, unlike other elements

such as the PV panel, so photovoltaic panels and the battery energy storage system, this is not defined as being above ground level. Um. I also note that the depth sited for the concrete plinths upon which these may be sited is not, um, is not defined.

00:29:40:27 - 00:30:01:02

So I'm really just looking for clarification as to whether the 3.5m height for the conversion switch rooms takes into account foundation debts, and therefore takes into account any freeboard that might be freeboard, that might be required for flooding, for example, that may potentially therefore add to that overall height.

00:30:02:13 - 00:30:25:10

There we go for the applicant. The applicant has assessed a maximum parameter for the solar development sites. In this instance they have assessed 4.5m for panels. Therefore, if the ultimate and foundation level were to increase to account for flood level, it would still remain within that 4.5m.

00:30:26:11 - 00:30:39:21

So so clear then. So what you're saying is because it will still be below 4.5, which is the height of the panel. You've argued that the assessments considered the worst impact from the elements of the project. Correct.

00:30:39:23 - 00:30:42:29

So they have considered an envelope of 4.5oz.

00:30:44:23 - 00:31:01:15

Let me talk about that and just add just briefly on the on the point about deaths you raise and switch room should note that the Design Parameters and commitments document, which is up um, 2.7 um, does have a sentence in relation to deaths and that's what's secured.

00:31:02:01 - 00:31:11:03

Okay. Thank you. I'll say I think there is maybe one of the questions was about consistency sometimes in where things are cited in some tables and not in others, but you're saying it's in the.

00:31:11:23 - 00:31:23:22

Story? Actually, no, I realized that what I'm thinking, what I'm thinking you mean by debts. It's the same sentence as on the screen right now. Um, which does refer to the maximum depth of 0.8m.

00:31:28:04 - 00:31:36:24

So I suppose I'll reframe my statement as question as to which which depth is it that you're worried about in the context of that sentence?

00:31:38:04 - 00:32:11:04

The point of the question that I think has been answered was the height of the conversion units cited in their readers, 3.5m, but that's the switch room then. Plus plinth. The three one question is, is the 3.5m takes into account the plinth as well, or is it just the conversion unit sat on the plinth? So is it arguably 3.5 plus 0.4 plus potentially any increase height you might have to have because it's in the flood risk area.

00:32:11:06 - 00:32:14:19

It needs to be raised up x millimeters for example.

00:32:14:21 - 00:32:18:10

There you go for the applicant. I believe you I've already covered that in my response.

00:32:19:12 - 00:32:35:10

And you're confident and you're confident therefore that there's no areas where these could be located that could potentially push that above the 4.5 in total because of a need to increase above the flood level, plus the Plymouth plus the conversion unit that could put that above that parameter height.

00:32:35:22 - 00:32:49:01

There you go for the applicant. Yes, we are confident and in addition could locate conversion units or similar infrastructure differently to avoid areas of flooding. Should we go above the assessed envelope?

00:32:52:14 - 00:33:10:17

Okay, that'll do for now. I'll move on very quickly then to substations. It's a fairly simple and short one, really. Um, I notice in this particular table you've got identified in regard to fencing, both palisade fencing and I think deer fencing. Question. Simple question. Do you require both?

00:33:21:13 - 00:33:26:12

On behalf of the applicant. We have assessed both. So we could implement both if required.

00:33:29:15 - 00:33:33:18

With the detailed design. Determining whether or not both are required.

00:33:42:06 - 00:34:14:12

Okay. Moving on to the battery energy storage system compound again. Um, I think within the table here and I'm just talking about the parameters here. We've got another item later on the bed itself. Um, again, these are essentially containerized units mounted on a concrete raft. But I think the suggestion is that there could be on a foundation up to 15m. And I'm questioning it again. Why so deep? And why can't there be some more certainty around foundation type at this stage, given that the best compound has been identified as specific works area?

00:34:26:10 - 00:34:33:29

The applicant, just to confirm that the um, sentence that talks about the, uh

00:34:35:29 - 00:34:46:21

two metre deep foundation, up to 50 metre depth piles foundation is being removed from the next version of the design parameters and Commitments document that one has.

00:34:46:23 - 00:34:48:25

Already actioned effectively then. Okay.

00:34:53:19 - 00:35:05:10

Okay. Thank you. That's all I've got on the design parameters at this stage. Uh, again, our very brief. Is anything specific from parties on these particular matters before we move forward. Anyone want to Comments.

00:35:07:12 - 00:35:36:16

I'm not seeing any. Um, the next item on the agenda was regarding construction period. But I'm mindful of time and we've kind of briefly touched on some of that earlier anyway. Uh, I think the point I had have we can probably defer to a written question anyway, so I'll move forward on to that particular point. So that just moves on to grid connection capacity and uh, over planting. Um, so the connection agreement allows for the import and export of up to 500MW AC

00:35:38:04 - 00:36:13:02

alternating current. Um, I understand that over planting is proposed. And note that table 5.1 of appendix 14, one of the environmental statement, which is app 178, identifies potential generation capacities for each of the solar development sites, which total roughly 608MW. So can the applicant confirm what is the proposed installed capacity of the development. Is it the 100 608MW that's been identified, referenced in the table, and also whether that figure relates to AC or DC?

00:36:14:03 - 00:36:46:26

Sir Simon Gillet for the applicant, and you'll be aware that the applicant has, um, included flexibility for single access tracker or for fixed south facing panels. Um, the, uh, the land density of those two layouts is different. Um, and therefore within the application there are actually two numbers for the indicative, the current indicative, um, installed capacity. And I can provide those to you now. So fixed south facing the indicative design is a 662.

00:36:49:06 - 00:37:04:24

Megawatts DC of installed capacity. And that is a measure of the capacity of the panels to generate DC current. And the 608 number is also a DC number. And that is based on the indicative layout for single axis trackers, sir.

00:37:12:15 - 00:37:14:20

Okay. Thank you. Um.

00:37:17:18 - 00:37:37:25

So in terms of those figures, again, I think if you just clarify on how that has been derived. So the statement of need, I think refers to over planting ratios between 1.3 and 1.6. Um, what do you know what ratio has been assumed for the purposes of this assessment? And does that therefore explain the reasons for the numbers you've just cited?

00:37:39:14 - 00:37:44:11

Um, yes, sir. Simon did it for the applicant. Um, the statements of need.

00:37:47:02 - 00:38:23:01

At section 7.6 talks about over planting. And it provides some technical context to what over planting is. Um, why over planting is rational, but why over planting? Too much is is is not a sensible thing to do. And the the ranges that you just stated, the 1.3 to the 1.6 indicates a rational range for for over a over 1.6 is starts to get less efficient for reasons that I won't go into now because I'm not sure that's, um, the angle of your, um, of your questioning.

00:38:23:07 - 00:38:59:08

Um, the, the n_3 , nps, n_3 defines, um, over planting as the ratio of, um, the installed DC capacity versus the grid connection capacity. So it's kind of the nameplate capacity of the of the solar panels versus the grid export capacity. So the over planting ratios are two fractions. Um, the first fraction for fixed south facing based on the indicative design is $662/500$, which is approximately Two.

00:38:59:14 - 00:39:15:03

If my maths is correct, and for the single axis tracker 608 divided by 500 , which is approximately 1.21 maybe. Um, but don't mark my numbers wrong if they're slightly off.

00:39:17:05 - 00:39:48:15

Okay. And that kind of leads me a little bit onto the next bit. So you mentioned about Ian three National policy statement and three and it talks around in terms of land use efficiency that solar farms currently required between 4 and 5.6 acres per megawatt of output. And as you said, this statement of need states that there is illustrative design is more land efficient than this. Uh, with under three acres per megawatt, I think is the figures that have been cited excluding environmental mitigation land.

00:39:49:11 - 00:40:06:13

Um, so again, so, so can you just because I've missed it, how how is it under three acres per megawatt figure being calculated. Has this been based on the 500 megawatt export capacity, or has it been based on the installed capacity of the project?

00:40:06:27 - 00:40:43:14

So the applicant has followed the approach that was agreed by the examining authority and the Secretary of State for Mallard Pass solar farm, uh, which is um uh pins reference N 010127. Um, and that uh, that approach is to use the nameplate capacity either DC capacity, installed capacity, um, divided by the um, acreage of land, sorry, all the way around, acreage of land divided by the DC capacity. And that acreage of land excludes um mitigation and um enhancement areas, sir.

00:40:44:14 - 00:40:55:01

Okay, I bet you said it's based on the DC capacity of the installed capacity of development is how you've derived to the three acre per megawatt. Is that?

00:40:55:04 - 00:40:56:00

That's correct, sir.

00:40:57:23 - 00:41:07:19

Okay. Thank you. That's again. That's all the questions I've got. So before I move on to the next item. Is there any questions for any parties on this particular item?

00:41:11:11 - 00:41:12:12

Not seeing any.

00:41:16:14 - 00:41:49:27

In that case. Um, I'll move on to agenda item 4.2, which relates to Greenbelt. Um, the questions really on this are primarily aimed towards the applicant and North Yorkshire Council. Um, and what I particularly want to focus on today's North Yorkshire Council's position with regard to this matter, it wasn't clear to me from the relevant representation. Um, however, before I move on to North Yorkshire Council on that point, I've got a question for the applicant, so I'll start there.

00:41:50:09 - 00:42:30:05

Um, looking specifically at the cable route corridor. The applicant has considered the works and the development associated with the cable route corridor to be engineering operations, and so not inappropriate development in the greenbelt now, as well as underground cable laying works themselves. I do know that there's a cable corridor compound shown as being proposed along the section of Cable Connection four to the point of connection, I think, located off of Field Lane. Um, so my question is, what would the compound comprise of? What would it contain? And does the applicant consider such elements to also fit within the meaning of engineering operations, and if so, why?

00:42:32:28 - 00:43:08:02

So Ruth Jackson for the applicant, I didn't introduce myself properly. I'm a town planner. Um, so, um, in the context of the greenbelt, um, our assessment in the planning statement, as you have seen, um, indicates that the cable corridor roof is below ground. But your question, if I'm just clear, relates to construction compounds, which of course are temporary. And so in that case we would give less weight to that. Can I just clarify again, your question was very specific, though, about the nature of the construction compound and what it comprises.

00:43:08:04 - 00:43:08:26

Is that correct?

00:43:08:28 - 00:43:47:02

Well, I think the point I've made is, as you've said in I think within my understanding of the submission, is that you've drawn a distinction about the cable corridor works and the solar development sites in terms of how it's been laid out. My point, which I'll come on to as well, is that the cable corridor works have been classed, if you like, as engineering operations for the purpose of the greenbelt, and therefore not included within your Great Belt assessment. However, there is the compound of itself, the cable compound, which I believe sits within the great green belt boundary, which as it stands at the moment, I.

00:43:47:11 - 00:44:09:00

Those wouldn't appear to have been included or considered As part of the application assessment because effectively it's not part of the solid development science assessment, and it's been dismissed as or included as engineering approaches. So the question is do you consider the compound to be engineering operations? Within that definition.

00:44:09:02 - 00:44:13:26

We would consider the compounds to be temporary engineering operations.

00:44:14:24 - 00:44:49:25

Okay. So on that point, regarding the durations of the works, um, that's been said to be short term and as a consequence of the preserve openness and not conflict with the purposes of the greenbelt purposes, including land within the greenbelt, those compounds, albeit you've mentioned, are temporary. Um, they've been identified. Again, we've talked about this briefly as preliminary works. So, um, how long would those works associated with the cable corridor take place? How long will they in place.

00:44:50:01 - 00:45:07:26

Um, how long will it take for those, uh, the cable corridor works take to complete and where it's set out. And if it's not, then how have you assessed that those works be temporary for the purposes of ensuring that there would be, um, no impact on the openness of the greenbelt.

00:45:08:08 - 00:45:22:02

I think there are fair questions. Um, if I may take an action away to to follow that up and give you something in writing to that, to that point so that I can confirm some of the questions you raised about the durations and the nature of those compounds.

00:45:24:24 - 00:45:55:04

Mr.. I'm sorry. I just I just want to add add to that, um, in those submissions, I think we will also set out the legal position on does it matter if something's temporary or not? If, for example, you disagreed with us that it's a it's not an engineering operation and therefore it is development where you have to ask yourself whether it's inappropriate or not. Um, so just to clear on that, because that's part of the question was about, as a matter, if it's temporary or not, I think we can touch on that in the submissions.

00:45:55:15 - 00:46:19:16

Okay. Thank you. I was going to then invite North Yorkshire Council whether they've got any comments. First off, um, do you agree that the cable corridor works themselves are engineering operations? And secondly, any comments in respect to, uh, the cable compound that's in the greenbelt and whether that also, in your view, falls within the definition of engineering operations.

00:46:20:23 - 00:46:45:04

Thank you sir. Um, Diane Holgate, North Yorkshire council. Um, we agree with the applicant's approach that the cable corridors are underground in there and also, um, engineering operations. Um, before commenting about the above ground works. Um, again, we'd like to see the, um, applicant's written response to on that before making a comment. Thank you.

00:46:47:08 - 00:46:48:12

Okay. Thank you.

00:46:51:03 - 00:47:28:04

So if I can move on to then the gray belt and we briefly touched on it. So again the assessment as I understand it is then considered the solar development sites in respect of um, whether or not the land that's affected constitutes gray belt. Uh, sorry, this is a question for North Yorkshire Council primarily, um, as I say, because it wasn't clear from your relevant representation. So again, um, I was just looking for a view as to whether North Yorkshire Council agreed with the applicant that the green belt land affected by the solar development sites meets the definition of grey belt.

00:47:30:19 - 00:48:04:11

Thank you sir. Diane Holgate, North Yorkshire council. Um, I haven't seen the previous representations provided by my colleague. However, um, North Yorkshire Council agree with the applicant's approach. It seems reasonable within the um the assessment under app 209. Um. Our policy team have advised me that we would have liked to have seen, um, a little bit more detail about each individual parts of the site that fall into the green belt and whether they make that strong, medium or weak contribution.

00:48:04:13 - 00:48:22:20

However, that said, um, none of the sites, um, are close to any of the um recognised main towns within the area. And so therefore, um, we've we feel in general, um, the sites would meet with the grey belt tests. Thank you.

00:48:22:27 - 00:48:50:12

Thank you sir. I think that was my next question. Just but just for certainty. So the first question was, do you agree that the solar development sites meet the definition of grey belt landfill first and then secondly, I guess, do you also agree with the applicant's submission that they are therefore not inappropriate development, having regard to the definitions within the NPF regarding that. So I think that I think that's what the answer you get. But I just want to seek clarification on that.

00:48:50:17 - 00:49:00:10

Yeah. Diane Holgate, North Yorkshire Council yes, we agree that the sites are great and that if defined as grey belt, they're not inappropriate development.

00:49:01:04 - 00:49:01:19

Okay.

00:49:01:21 - 00:49:02:27

Thank you, thank you.

00:49:05:12 - 00:49:18:13

But again that's helpful for now. And I can I just check I trust this position will be clear within the local impact report which is due to be submitted deadline. One is I just checked that's the case and it will be very clear on these points.

00:49:19:17 - 00:49:34:16

Yeah. Thank you sir. North York council, Diane Holgate um, yes. We are also working with the applicant on the statement of common ground, and we'll make sure that those matters are addressed in there and the local impact report. Thank you.

00:49:35:07 - 00:50:03:03

Okay. Thank you. Um, again, that's that's all I really wanted to cover on the green greenbelt, um, today. Is there any questions from anyone else specific to that point before I move on? Not seeing any, uh, just mindfulness to Fox. I didn't give you an opportunity to come back there, but did you want to, like. Okay, okay. In that case, I'll pass it over to Mr. Medlin, who's now going to deal with the next item on the agenda.

00:50:05:27 - 00:50:06:17

Thank you.

00:50:06:19 - 00:50:38:26

We will now move on to agenda item 4.3, which will be questions concerning noise and vibration. Again, questions are aimed primarily towards the applicant as well as North Yorkshire Council as the local authority. If any IPS do have comments or points to raise. Having heard the applicant's response, there will be an opportunity to comment later on. Can I first just check that the applicant has representatives here and Mrs. Holgate, um, from North Yorkshire Council.

00:50:38:29 - 00:50:44:01

Do you have any noise specialist either in the room or online.

00:50:47:14 - 00:50:50:03

I'm sorry. You just remained.

00:50:50:28 - 00:50:59:16

Yeah. Darren Holgate, North Yorkshire council. Um, I don't believe we do. Apologies. Um, due to leave, etc.. We couldn't get anybody to attend today.

00:51:00:19 - 00:51:37:16

No. Okay. That's absolutely fine for now. Um, there will be obviously opportunity to follow up following the hearing. I don't need anything specific on the screen for this, but I will first turn attention to construction noise. Noise and vibration before or so on. Construction noise and vibration. Examining authority notes a number of relevant representations which raised issues around the impact of construction, noise and vibration on their villages.

00:51:38:01 - 00:52:07:14

These were received from various parties, including certain parish councils as well as individuals. I won't go through them in detail. My first question to the applicant is could you please begin by briefly explaining which construction activities are predicted to generate the highest noise levels and identify the receptors expected to be most affected? Fairly briefly please, because I will then turn on to further questions.

00:52:10:01 - 00:52:32:06

Thank you sir. David Hiller for the applicant. Um, I'm an acoustic, um, chartered engineer and member of the Institute of Acoustics. Um, if I could just have a minute to look for the information to respond to the question. Um, there is a list, um, in, um, um, appendix 11.2 of the, um, construction.

00:52:32:08 - 00:52:33:05

Assumptions.

00:52:33:07 - 00:52:41:16

And the predicted noise levels from the construction works, all the receptors. I don't know if it's helped. Is it helpful for me to go through all of those at this point?

00:52:41:27 - 00:52:50:19

I think for the for the purposes, if you if you, if you just repeat that document so that I can make the note of it and then summarize those key receptors for me.

00:52:50:21 - 00:52:52:00

Yes. Of course. So it's um.

00:52:52:02 - 00:52:58:21

Appendix 11.2 as at 117. Thank you.

00:53:05:27 - 00:53:19:18

Um, so the way the results are presented is to look at each, um, individual assessed receptor in a table in table 2.1 of that appendix. Um,

00:53:21:12 - 00:53:31:22

we've used the British Standard 5228 part one um ABC method, um, for assessing construction noise impact.

00:53:33:28 - 00:53:36:10

The ABC method sets a number of.

00:53:39:05 - 00:54:01:15

Categories of impact at different sound levels. And they're related to the, um, the baseline ambient sound level in those locations. For every location for this project, we've assumed the lowest category. So assuming it's the quietest effectively at each location to give a worst case assessment,

00:54:03:12 - 00:54:19:21

the table of data, um, presents the predicted construction noise levels for all the various activities and the um exceedance or otherwise, of the um threshold category based on the ABC method.

00:54:22:26 - 00:54:36:10

Uh, and if I can just perhaps look, um, I don't think I've got a list of what activity creates, um, which which Noise level, I'm afraid. Um,

00:54:37:27 - 00:54:58:28

I can tell you that the high the activity sauce levels. But that's not quite the same as the level that affects any individual receptor. You understand that? Um, so the highest levels come from, um, the

various pieces of equipment set out in table 1.1. Um, for the construction of the electrical infrastructure

00:55:00:25 - 00:55:40:20

and, um, energy storage site construction, um, is a similar sort of level. They're presented as a sound power level, which isn't the sound level that's experienced. It's a characteristic of the source, which, like a one kilowatt heater, tells you something about the source. It doesn't tell you how hot it makes a room. Um, and the sound power level is sort of sort of analogous to that. Okay. Um, the receptors we've assessed are shown on figure 11.2, um, and the, um, sound levels on the.

00:55:41:01 - 00:55:41:17

Um,

00:55:43:13 - 00:55:50:09

relevance to, uh, the levels relevant to the assessment thresholds are given in table 2.2.

00:55:50:11 - 00:55:56:08

Okay. Okay. Thank you for that overview. I think on the on.

00:55:56:10 - 00:55:58:09

The sorry, could I just correct myself, sir?

00:55:58:26 - 00:55:59:12

Absolutely.

00:55:59:14 - 00:56:15:03

Yeah. Well to expand on that, the daytime assessments are given in figure in table 2.1, the evening and night time for the occasions where that sort of works might be needed at those times of day. That is in table 2.2.

00:56:15:05 - 00:56:46:18

Okay. On that basis, could you also take us through the assumptions used within the assessment. So that would include construction duration, the working hours and that would be relevant to what you've just said out there about evening noise? Um, any horizontal directional drilling and planet requirements and how, in your view, what it has been assessed is in the realistic worst case scenario?

00:56:48:07 - 00:56:53:29

Thank you. Sir. Um, in terms of the, um.

00:56:55:23 - 00:57:02:15

Sorry, sorry. Forgive me. Could you just repeat this in a number of questions? Can I just take a note at this time? I'll try and answer them in turn.

00:57:03:22 - 00:57:24:16

So. So what I'm looking for are the assumptions used within the assessment to arrive at the or represent in the assessment the realistic worst case scenario. And that would be items that you you touched on in your previous response, such as working hours or hours that.

00:57:24:18 - 00:57:35:20

Would that these activities would be undertaken the construction Duration and aspects of construction, such as horizontal directional drilling.

00:57:37:08 - 00:58:10:22

Thank you sir. Sorry for that. Um, so the, um, source noise levels are based on the assumptions of, um, what particular items of plant will be required for each of those, um, construction categories, construction activities or other? Um, and for each of the pieces of equipment required, there is a sound power level or a a sound pressure level applied to each piece of kit. And then in the main, derived from British Standard five, 2 to 8 part one.

00:58:11:00 - 00:58:41:15

Um and examples of equipment in there. We we've drawn on the experience of of the applicant to understand what processes, what equipment and so on would be required for those activities. Um, for each of those with the assigned sound levels. Um, we've then looked at what likely percentage on times are required, so all the plant isn't working all the time over a construction period. Some things are used more, um, for longer periods than others.

00:58:41:17 - 00:59:00:04

Um, some things, like generators, for example, might be running all day for powering site cabins and the like, but something like a, I don't know, a roller might just work for part of the day and for periods of it. So the calculations take into account those different periods of time that they're working for.

00:59:02:03 - 00:59:32:03

My thoughts about that. And just to add to that, so in terms of, I suppose, the more general assumptions around working hours, um, where HDD is going to be or other techniques are going to be taking place, seasonal restrictions, things like that. Uh, the assessment in the noise chapter, um, as all the other topic chapters will be taking those assumptions from chapter two and the measures set out in the camp. And so they're not necessarily repeated every time in every chapter. So the starting point is the assumptions that take account of what's in chapter two.

00:59:32:05 - 00:59:32:20

Okay.

00:59:32:22 - 00:59:35:05

So chapter two is that the source.

00:59:35:07 - 00:59:35:22

For.

00:59:35:24 - 00:59:36:09

The.

00:59:36:11 - 00:59:36:26

Some.

00:59:36:28 - 00:59:39:13

The the overarching assumptions around.

00:59:40:01 - 00:59:40:16

What's.

00:59:40:18 - 00:59:45:26

Then in what's then has been set for construction activities in terms of noise. Fine. Okay.

00:59:45:29 - 00:59:57:08

And then within the chapter, obviously the Embedded Mitigation Sector section summarizes some of the key key mitigation measures, for example, that are in the camp okay commitments, the avoidance areas, etc.. Thank you.

00:59:57:21 - 01:00:03:08

So move on now. Still remaining with construction noise.

01:00:07:03 - 01:00:43:16

Uh, I'd like to ask the applicant to explain or signpost will do both. Whether the cumulative construction noise has been assessed in combination with other developments or infrastructure projects that may be under construction during a similar period. Um, the cumulative noise assessment, sir, is, um. Um, section. If I can just just check. It's a section 11.14. I think in this case 11.14 in chapter um, 11 of the of the environmental statement.

01:00:43:27 - 01:00:54:15

Um, and we've looked at what other sites are permitted. Um, or in, in development. Um.

01:00:57:22 - 01:01:25:14

A lot of the time, obviously, we don't know exactly when this project will commence. Um, and the active works will commence, and we don't know, perhaps more so when other developers project will commence. So establishing what a cumulative effect of the various sites might be during the construction phases is particularly difficult. That's noted in the chapter. Thank you. Okay.

01:01:26:08 - 01:01:26:23

Okay.

01:01:26:25 - 01:01:32:06

Could I just remind you to introduce yourself? Forgive me. David Hiller, the applicant, every time you speak it. Thank you.

01:01:34:04 - 01:01:34:19

Okay.

01:01:40:10 - 01:02:06:02

Just to add to that, I think not to speak, Mr. Hillier, but I think it's a truism to say that at least in the construction phase, each development would, um, be in using best practicable means under the control of pollution. So that is a core assumption of this project. And, um, and considering the other impacts is that it's essentially a statutory requirement for the PM to be employed.

01:02:07:09 - 01:02:21:23

Thank you for that clarification. Okay. Thank you sir. David Hiller for the applicant. Again, just to our table, 11.23 sets out the, um, um, cumulative assessments. Thank you.

01:02:23:20 - 01:03:09:08

Before seeking any input from North Yorkshire Council, I'm just going to turn to the control document, the Outline Construction Environment Management Plan app one, line two and the associated requirement 12 within the draft DCO. Could the applicant set out how these relevant controls the relevant control document and requirement secures necessary mitigations? Um, in particular, I'd like you to set out any topographical mitigation and to explain how the topography of the area has been incorporated in arriving at the mitigation.

01:03:12:21 - 01:03:45:00

Um, I'll answer the first in terms of the general point to allow the area to talk about the specifics, but just in terms of how the secured in general terms. Obviously, the DCA requirement requires that the. Before we begin, commence, commence construction, um, that the detailed construction environmental management plan, um, has to be approved by the local planning authority, which must be in substantial accordance with the outline cap. So the measures in the um outline camp, um, essentially the starting point for what must be put into the detailed plan.

01:03:45:06 - 01:03:48:29

And I personally said, let's talk about the specifics of the measures of being put in place.

01:03:50:09 - 01:04:20:13

Thank you. Um, so in terms of the topography, um, the construction, all the environmental noise modeling that we've done takes into account the, um, topography, um, barrier effects and so on, have receptors between source and receptor and so on. Um, the construction sources have been assumed to be at a representative locations within the site at which they would, Um, be operating.

01:04:20:24 - 01:04:51:03

Um, mitigation has assumed there will be some, um, barrier effects, whether that's part of buildings or whether that's, um, specific barriers, um, to, um, screen sources from local receptors where needed. Um, all that obviously depends on where the receptors are and where the works are taking place. But the mitigation will be set out, as, um, Mr. Fox said in the, um, in the Kemp.

01:04:53:25 - 01:04:54:23

Thank you.

01:04:56:11 - 01:04:58:16

Just going to invite any.

01:04:58:18 - 01:04:59:03

Comments.

01:04:59:05 - 01:05:02:18

From IPS, including North Yorkshire Council, should.

01:05:02:20 - 01:05:03:05

They.

01:05:03:07 - 01:05:18:04

Have any comments to make now on construction noise, including the construction Environmental Management Plan and the relevant requirements for securing this? Mrs. Holgate, I know you said that there was

01:05:19:29 - 01:05:20:14

okay.

01:05:23:08 - 01:05:28:27

I'll turn to any other North Yorkshire Council representative. Should you have anything to comment?

01:05:31:02 - 01:05:37:29

Any comments from other IPS on construction noise before I move on to operational noise?

01:05:46:02 - 01:05:53:06

In that case, I will take us on to the next subtopic within this item, which is operational noise.

01:05:56:20 - 01:07:00:24

So can the applicant explain the principal operational noise sources across the development and identify the receptors expected to experience the greatest levels of effect? Could you please set this out with reference to impact on public rights of way Users, including where the PV panels may use tracker systems. Could you take the opportunity, please, to elaborate on the tracker system and the tracker motor noise? Identify where and how this source has been assessed? And also, could you enlighten myself as to how these motors work in practice? So I'm thinking here of an early morning or early evening walker on a public right of way, how they may be affected by multiple rotations, multiple panels and motors, whether they're in sync or consecutively.

01:07:01:10 - 01:07:06:01

And just then, please confirm that this has been fully assessed against the baseline.

01:07:11:21 - 01:07:40:09

Um, thank you sir. Um, for the applicant. Uh, in terms of the principal noise sources, they're largely, um, around the the best site, but also the conversion units, um, and substations that are elsewhere within the, the development. Um, you can see all those illustrated on in figures. Um, 11 point, um

01:07:42:06 - 01:08:16:04

11.5. Um, I think just sorry. Bear with me. Yes. 11.3 and 11.5. We've got two sets of noise maps. Um, 11.3. Um, looks at this. The, um, predicted operational noise levels at height of four meters above ground level. And that's to assess the impact of, um, noise on first floor windows To prove it, to provide a worst case, um, for me to highlight.

01:08:16:06 - 01:08:16:23

Um,

01:08:18:18 - 01:08:39:15

there's likely to be less screening of any screening of any, um, obstacles in the path. Um, that's why we look at for meter height. Um, we've also looked in figure 11.5 1.5m height, because that's more representative of users of public rights of way in the like, um, to assess, um, impacts on those receptors.

01:08:44:12 - 01:08:45:01

Sorry.

01:08:45:24 - 01:09:05:27

I was just, um, interrupt your flavor in terms of your questions about the tracker panel specifically, I just wanted to draw your attention to paragraph 11.9.42, which sets out the assumption of the motor sound. Um, and your question there about, um, what's the characteristics of how it operates?

01:09:06:23 - 01:09:07:08

That's it.

01:09:07:10 - 01:09:33:14

Yeah. Yeah. So that's the point that it's a quiet noise, operates intermittently for a short duration, and it's essentially almost kind of until they're following the sun. So yes, as the sun rises, they'll be accounting for where the sun is in the sky. And then doing very small movements. Follow it as it goes through the course of the day. Um, so it's not like it's doing one massive big movement anyway.

01:09:35:15 - 01:09:37:20

Understood. I suppose the.

01:09:37:22 - 01:09:44:06

Question really is about multiple the quantification of the multiple.

01:09:44:23 - 01:09:45:15

Sources.

01:09:45:17 - 01:09:46:27

Arising from those.

01:09:46:29 - 01:09:47:21

Many.

01:09:47:23 - 01:09:48:16

Presumably.

01:09:48:18 - 01:09:49:28

Many motors.

01:09:50:23 - 01:09:57:28

And the sequence of those, whether or not each panel, which is in a different location, will be following the sun at a slightly different

01:09:59:15 - 01:10:26:18

angle, and therefore the synchronization really about those motors running and how that has then been assessed. Um, David Hiller for the applicant. I'm not entirely sure I can answer the detailed question about how they actually work, but, um, as my colleague says, um, the sound level from those is, um, from the information we've received is around about 50dB at one metre. Um,

01:10:28:16 - 01:11:01:14

uh, from from each of those motors, if we move out to how, where the public rights of were in the like are um, they will be quite some distance outside the, um, outside where the actual panels are. Um, I think in all if not most cases. So it'll be quite a bit of attenuation from each, uh, the sound from each of those trackers. Um, in broad figures, you might expect between 3 and 6dB each.

01:11:01:16 - 01:11:37:05

Doubling of distance. If we assumed it was a point source for each one, which is probably most appropriate, that'll be six decibels for each doubling of distance. So if you move two meters away from each one, you would be down to 44dB. For example, four metres it would be 38. So very, very low levels of noise from each one and each one is at a different distance from the receptor. So really it's only the closest um tracker motor that would affect or closest few perhaps that would affect any individual, um, listener experiencer of the sound.

01:11:37:21 - 01:11:57:29

Um, obviously one can't say something's not audible because we all perceive sound differently and have different hearing. Um, but it would be a very, very low level of noise now how simultaneously. Otherwise they might work. I couldn't comment on, I'm afraid somebody on the engineering side perhaps would need to respond to that. Okay.

01:11:58:18 - 01:12:00:18

Would it be possible to understand?

01:12:01:17 - 01:12:39:18

I think you understand. The question that I'm trying to get to is it's where the assessment takes account of that multiple panel motor noise generated and the impact on users of public rights of way, potentially even residential receptors. Accepting that the noise drop off would be in the order of the

decibels that you set out, would the applicant be able to take away that as an action and provide a summary of examples of the this drop off in noise and the way in which these motors potentially could work?

01:12:42:03 - 01:13:02:19

With fox mouth applicant. Certainly, sir, I think we can disagree with me, but we could say the worst. The closest point to the most amount of fixed tracker panels. Then if you moved away from that, what that would mean. Just so you're seeing the first example of it, some context about how that would, would change. But um yeah.

01:13:02:23 - 01:13:35:05

Okay. Yeah. Sorry, sir, for David Hill, for the applicant. If you can just add to that. Um, yes we can. We could provide a noise map or something. We could put those sources in. We haven't assessed them for the environmental statement because they are such a low level of noise. Um, the closest I understand is, um, from my from my colleague here. Um, the closest will be 15m from any of the Prowse, um, and 30m from any houses with the current plans. Thank you for that clarification.

01:13:35:07 - 01:14:16:28

That that, um, that does address my next point about residential receptors and setback. So I think this action point, if you could also address residential receptors, whether or not there is a need for a greater setback of panels from residential receptors in light of if tracker system on a on a panel was to be Used. So understanding exactly what the noise implication is for residential receptors adjoining 30m setback distance on residential receptors would would be covered by the action point.

01:14:18:27 - 01:14:19:15

Thank you.

01:14:20:06 - 01:14:20:21

Thank you sir.

01:14:29:00 - 01:15:01:24

So I have a couple of further questions on noise. Just checking the time. I think I will follow up by asking a question on Operation Noise at the site. So at the open floor hearing yesterday, I recall a resident of Monk Friston concerned living a mile or so from the beds and looking at the operational noise and how that would be heard and experienced within the village.

01:15:01:26 - 01:15:12:06

In that particular instance it was monk Friston. But other relevant reps have also raised this and the impact on other villages.

01:15:13:26 - 01:15:19:01

So at the open floor hearing, we were referred to

01:15:20:24 - 01:16:15:17

the table in 11.3 on Operation Noise at the base, which is, I believe, about 91dB at the point of the bears. And that's in app 100. Mr. Fox, you pointed us to the impact of that then on residential

receptors within app 173, I'd like to ask the applicant to explain how residential receptors have been assessed, including characteristics of tonality, intermittency or impulsiveness, how they have been considered within the assessment, whether these could material alter the perceived impact on nearby receptors, and how the applicants proposed would propose to introduce future controls on operational noise at residential receptors.

01:16:21:23 - 01:16:55:27

Thank you, Sir David Hiller for the applicant. Um, just on the on the first point about the the sound level that um, was referred to in the hearing in the session yesterday morning, I think it was, um, a level of 91dB at the site was mentioned. I think this comes back to the sound power and sound pressure level. Um, so 91 is from table 2.1 of, um, that appendix and appendix 11.3 and is a sound power level, not a sound pressure level.

01:16:56:07 - 01:16:56:25

Um,

01:16:58:26 - 01:17:18:24

So the sound power levels of those sources are all put into our, um, three dimensional, um, noise mapping software, and that predicts the sound levels from the site out at all the receptors. And then we interrogate those calculations for what their noise impacts are likely to be.

01:17:21:11 - 01:17:40:06

We've done our assessments based on British Standard 4142 um, which is the appropriate standard for sound sources, noise sources of a um, commercial or industrial character, and is applied typically to building services, plants and the like, and is equally applicable here.

01:17:43:20 - 01:18:18:13

Um, the approach that's taken in there is to compare the, um, predicted noise from the plant, um, with the background sound level that exists in the environment. And we've looked separately at daytime and nighttime. For those, um, we've established, um, baseline sound levels from a survey that we had, um, loggers out at various locations, which are illustrated, I think, in figure 11.2.

01:18:19:03 - 01:18:19:22

Um.

01:18:22:08 - 01:18:57:07

And um, in the appendix 11 point, appendix 11.3, rather than figure 11.3, we've tabulated all the the levels of impact just following four on four two method. And coming to your point about your question about character, we've assumed for decibel correction or penalty, if you like, for the predicted sound level from all the equipment for decibels has been taken, uh, again, from the standard as representative of a um,

01:18:58:25 - 01:19:05:23

um, clearly perceptible. I think the wording is clearly perceptible tonality in the sound that's perceived as the receptor.

01:19:08:29 - 01:19:23:27

I think that's the that's the. Of those various characteristics that you mentioned, sir. I think that's the one applicable here. I don't think, um, intermittency, um, would be relevant. These things will be

01:19:25:14 - 01:19:38:08

continuous in, in those terms, continuous, um, while they're operating rather than, um, rather than rapidly on and off over. Short term, short period, on and off times.

01:19:41:00 - 01:19:51:19

That tonality affects people's perception of the sound. Um, it's not actually a higher level, but in terms of assessing the magnitude of the impact.

01:19:54:11 - 01:20:05:28

Applying those penalties to get the rating level gives you more, um, representative assessment of the impact on people as people's perception.

01:20:10:16 - 01:20:25:12

Thank you. There was a question in there, um, also about the any future controls that would be put in place, uh, feature controls. Sorry. Yes, yes. Um,

01:20:27:05 - 01:20:59:24

it will be for the tonality. Um, that that level of control can't really be assessed to the individual items of plants are understood fully. We've assumed there's that tonality. It may or may not be present and perceptible at receptors. Um, there are a number of sources for each of those. So it may or may not be that, um, by the time they're audible against the background sound at the receptors, that those tones are actually perceivable perceptible.

01:21:00:04 - 01:21:00:20

Um,

01:21:02:08 - 01:21:40:21

we've assumed various, um, attenuators and so on on the, um, conversion units to reduce sound levels where needed. Um, and they can be used to control, um, frequency, uh, to, to um, control frequency content if necessary. Um, we've also assumed barriers around the, the, the site at um site to, um, to enclose the whole, whole best site, uh, and to provide screening within the best site, but, um, to limit the noise to the receptors where that's where that's appropriate.

01:21:41:05 - 01:22:09:16

Um, we've also looked at orienting the pieces of equipment. So the sources point generally away as far as practicable from the receptors so that where things are directional in their generation of sound, they're, um, using self screening and directionality of the sources to minimize the impacts. And that all that will be worked up in, in a detailed design once the particular plant and so on are established.

01:22:10:26 - 01:22:11:16

Thank you.

01:22:13:21 - 01:22:14:06

Hey.

01:22:14:28 - 01:22:46:21

Mr. Fox. Um, I just wanted to make two quick points. So, firstly, um, I've just said to me that the I know they're not here, so I'm only I'm saying this, um, but we have had quite positive engagement with the environmental health officer at the council on this. So that will be recorded in the same the common ground as the headline three. Um, obviously they will make their impact report, so you'll see that for yourselves. But from our perspective we feel that engagement um, having positive. Um, and then additionally, I was just going to reference to the commitments that we have.

01:22:46:28 - 01:23:07:11

Um, given some of the finer points Mr. was talking about. There in our table, 39 of the outlined Operational Environmental Management Plan, which talk about how we mitigating the impacts of the final detailed design, doing a reassessment to check that conclusion. No subsequent effects stands.

01:23:07:26 - 01:23:21:20

Okay. Thank you. Just going to see if any other IPPs want to comment on operational noise. I know it's something that came up at the open floor hearing.

01:23:27:07 - 01:23:29:01

I have a hand up.

01:23:31:07 - 01:23:38:25

If you could introduce yourself and respond to operational noise. Stuart Stockdale, resident.

01:23:38:27 - 01:23:39:12

Of Monk.

01:23:39:14 - 01:23:58:25

Friston. So I was the person who raised this point yesterday. Thank you for bringing it up again today. Um, My understanding. From what I took from that answer, the response was there is likely to be a continuous noise from this site

01:24:00:21 - 01:24:07:03

that but that you intend to try to mitigate it. Um.

01:24:09:11 - 01:24:30:13

But my question is, is there a sort of minimum? Are you going to impose a sort of. Yes, there is a hum. Yes, it can be heard. But this is so low that we just you're gonna have to live with it. Or is the aim of the mitigation to completely eliminate that from human perception?

01:24:31:15 - 01:24:35:15

Thank you. Um, ask the applicant to respond.

01:24:36:10 - 01:25:13:20

Thank you for the question. David Hillier for the applicant. Um, we will mitigate and minimize, as required by government policy as far as Ours is practicable. And that's the approach we've taken in designing the mitigation we've imposed so far. Um, there are some properties, particularly very close into site two that have an identified adverse impact. But in terms of the government policy, um, approach that looks at, um, the change and based on the 44142 assessment approach.

01:25:14:04 - 01:25:45:00

Um, which sets out that typically um, five decibel level above background would be an adverse or is likely to be an adverse impact, um, depending on the context, um, and attendance available background will be a significant um observed impact, um, a likely significant adverse effect. Sorry. Um, um, again, depending on the context.

01:25:45:22 - 01:26:24:15

So in terms of contextualizing it, we've looked at what those, um, exceedance is of background mean in terms of the absolute sound levels. Um, as well as the relevant, um, in relation to background, to conclude that there's not significant effects arising as a result of any properties, including those closest in ones and certainly as far away as Munk Friston, for example. Um, as I say, I can't one can never say something's inaudible, but I will be I wouldn't expect anything to be audible against, particularly against other sounds in the sound, in the soundscape.

01:26:24:17 - 01:26:28:19

Night and day. Um, that, um, might exist.

01:26:30:19 - 01:26:32:04

Thank you, Mr. Fox.

01:26:32:15 - 01:27:05:24

Sorry. Thank you, sir. Mr. Fox and the applicant, I would just, um, also want to reference that, um, in our Design parameters and Commitments document, um, which is up to T1 seven and which is secure via the DCO i.e. when we submit a detailed design, we have to show how we've taken into account. There are specific commitments that are made in relation to this issue. For example, that that we will orientate the plant so that other buildings and structures would be a barrier and position noise emitting items such as funds away from sensitive receptors.

01:27:05:26 - 01:27:12:11

So there are specific commitments there. What is the noise barrier um, on this issue.

01:27:14:09 - 01:27:22:21

Okay. Thank you. Thank you for that. I think in the absence of any further IPS.

01:27:24:26 - 01:27:31:12

I've got one more question on this, and then I'm going to move towards, um, a break.

01:27:33:07 - 01:27:46:15

My name is Robert Tombs. Uh, Hensel Parish Council. The problem with any inverter or transformer is. It'll hum. It's a constant.

01:27:46:17 - 01:27:47:02

Rate.

01:27:47:07 - 01:28:06:19

But when it's being loaded, especially when it's outputting or inputting, then the it will be more increased with the hum that you get from it or the vibration, and also it will vibrate through the concrete base as well, which will, uh, you'll be able to hear that as well through the ground.

01:28:09:19 - 01:28:18:27

Thank you for that comment. I will invite the applicant just to respond very briefly to how that has been assessed through the environmental statement.

01:28:19:05 - 01:28:53:10

Thank you. David Hiller for the applicant. Thank you for the question. Um, in terms of the vibration side of it. Yes, correct. There will be vibration, a very small amount of vibration, typically into the ground. If these were things were sat on top of a building or very close to a building, then one might expect that to give issues inside the building. but the distances away from any properties of any of these sorts of facilities, the the transmitted any residual vibration from the plant that transmitted through the ground will be, um, negligible.

01:28:53:17 - 01:28:57:02

Um, by the time it got to, to any residences,

01:28:58:29 - 01:28:59:20

um,

01:29:01:12 - 01:29:26:04

in terms of the noise levels. Yeah, correct. They, they make a sound level and all those sound levels have been assessed in those noise maps, um, which set out exactly what those levels are. Um, and then to account for the hum, um, the four decibel tonality penalty, um, is, is there for specifically that purpose.

01:29:28:03 - 01:29:38:15

And just to add Mr. Fox and half the applicant. So the issue of operational vibration was agreed to be scoped out of the ES, um, by the Planning Inspectorate and at the stage scoping extension.

01:29:40:08 - 01:29:41:14

Okay. Thank you.

01:29:56:28 - 01:30:21:16

Okay. Thank you. That brings us to the end of my questioning on noise and vibration. As I intimated, it's now 1:00, and that will be an opportunity now for a 40 minute break. So this issue specific hearing one will now be adjourned until 140. Remember, if you are watching on the live stream to refresh your browser. Thank you.