AUDIO_ISH3_SESSION1_FOSSEGREEN_11_03_26

Thu, Mar 12, 2026 8:53AM • 1:44:14

00:00
Uh,

00:05
good morning, everyone.

00:08
I'd like to welcome everybody to this issue specific hearing on environmental matters for the proposed FOSS Green energy project. Can I just confirm that everybody in the room can hear me?

00:27
Hi. My name is Graham Gould. I'm a charter town planner and

00:31
an inspector with the planning Specter, and I've been appointed by the Secretary of State to be the lead member of the panel to examine this application. And now going to ask my colleague, Mrs. Wilkinson, to introduce herself. Thank you. Good morning. My name is Francis Wilkinson. I'm also a charter town planner and planning inspector, and I have been appointed by the Secretary of State to be a panel member for the examination of this application. Thank you.

01:00
Together, we constitute the examining authority

01:03
for the examination of this application.

01:06
I'd also like to introduce members of the planning inspectorates case team who are also assisting us,

01:13
who you may already met today.

01:17
That's Simon raywood, the case manager and Jessica Dunlop, the case officer also present at this hearing are two other colleagues from the planning inspectorate, Sunil gonga and Craig Laughlin. Mr.

Gonger and Mr. Lachlan are here in the capacity of observers as part of the planning inspectorates commitment to continuing professional development.

01:40
And while they are inspectors, they will play no part in either the examination of this application or in the making of any recommendations to the secretary of state. Additionally, in attendance, we have technicians from

01:53
the production company, production 78 who are contracted by the applicant to provide live streaming and recording services, if for any reason you see either Mrs. Wilkinson or I speaking to anybody from the production 78 team today, that is because we will have encountered some kind of technical issue that we're trying to resolve.

02:15
Just turning to a few general housekeeping matters, can everybody please ensure that you've got your devices and phones set to silence

02:25
the toilet, toilets for the venue are behind me, to the right in the corridor. There's a set for ladies and a set for gentlemen.

02:35
We're not expecting any fire alarm test today, so if for any reason the alarm sounds, we're to vacate the building using the most appropriate exit and then gather out, apparently, location between gates one and three and a week for staff to give us instructions about re entering the Building.

03:00
Today's hearing is being undertaken in a hybrid form, meaning that some attendees are present here in the venue, and others will be joining us online.

03:13
We will make ensure that however you are participating, that you have a fair opportunity to participate.

03:25
For those of you who are participating online, we'd ask that you remain muted and also set your devices to whatever quiet mode you've got and that when

03:40
and only unmute when you're participating actively in a discussion.

03:49

For those participants online, if online, if you would raise your hand, either using the the online function in teams, or if you can't make that work, then just raise your hand physically, and we'll bring you into the discussion at an appropriate point.

04:08
A recording of today's hearing will be made available on the foster green energy section of the natural infrastructure planning website as soon as practical following this hearing, with

04:20
that in mind, would you please ensure that you speak clearly into a microphone, stating your name and who you are representing if you're with with an organization, with an organization,

04:32
and I'm afraid we ask you to do that on each and every time that you speak, that assist anybody who is watching the recording at a later date.

04:43
If you are not at a table and wish to speak, a roving microphone will be brought to you, and we would ask that you wait for that microphone to arrive before you start speaking.

04:54
For those of you at a table with a microphone in front of you, would you please ensure.

05:00
That you've got the microphone as close to your voice as possible, and that will aid the audio visual equipment picking up what's being said. I think from the first round of hearings, there were a few issues, both with the nature of the venue, because of the echo in that room, but also some people were a little distant from the microphones, so

05:24
a link to the planning Inspectorate privacy notice was provided in the notification for this hearing. We assume that everybody is familiar with those privacy Well, the detail of the privacy notice and

05:39
that establishes how the planning Inspectorate will deal with personal detail, deep data I the recording.

05:50
If you're unclear about anything to do with the data protection side of things, would you please speak to the case team,

05:59
as I indicated earlier, the hearing is being recorded and live stream.

06:04

The recordings are retained and published and kept as a public record. Under the regulations the

06:10
inspectorates practice is to retain the recordings for a period of up to five years following the decision that is made by the Secretary of State. Consequently, if you participate in today's hearing. It is important that you understand that you'll be recorded and that you're giving your sent consent to the retention and publication of the digital recording. The

06:33
examining authority will only ever ask for information to be placed on public record that we consider is important

06:42
and relevant, it will only be in the very rarest of circumstances that we ask you to provide any personal information of a type that most of us would prefer not to be in the public domain. Therefore, to avoid any need to edit the digital recordings, we would ask you try your best not to say anything in public that you'd wish to be kept private.

07:03
The only official recording of today's hearing will be the recording that is placed on a project website.

07:09
If anyone anyone wishes to record this hearing, then you're free to do so, but please ensure that you do that in a manner that does not interfere with the proceedings and is respectful of those participating. Now going to hand over to Mrs. Wilkinson,

07:25
thank you.

07:27
This hearing will generally follow the agenda published on the national infrastructure planning project website on the third of March, which is examination Library Reference, Ev 5001,

07:41
and we are proposing a tweak to the running order of the agenda, but I'll come on to that later and explain the reason why. But it would be helpful just for today's proceedings, if you can have a copy of the agenda in front of you, the agenda item, the agenda is for guidance only, and we may add other considerations or issues as we progress through the hearing,

08:05
we will conclude. We will conclude the hearing as soon as all relevant contributions have been made and all questions asked and responded to. But if the discussion can't be concluded, then it may be necessary for us to prioritize matters and to defer other matters to questions. Likewise, if you cannot

answer the questions being asked or require time to get the information requested, then can you please indicate that you would need to respond in writing?

08:36
I'm now going to ask those of you who are participating in the hearing today to introduce yourselves when I state your organization's name, could you introduce yourself, stating your name and who you represent in which agenda item you want to speak on,

08:53
if you're not representing an organization, please confirm your Name, summarizing your interest in the application and confirm the agenda item upon which you wish to speak

09:07
when you introduce yourself. It would be helpful for us if you could also let us know how you want to be addressed. So Mr. Ms, Mrs. Doctor and so on.

09:16
So I'll turn to the applicant. First of all, if you could introduce yourselves, please. Thank you.

09:24
Adam, thank you. I'm representing the applicant today. My name is Reuben Taylor. I'm of King's Council. Reuben is spelt r, e, u, B, E, N, and I'm instructed by one walk bond Dickinson. I have a large team of people with me today. I'm not proposing to introduce them now, what I'll do is ask them to introduce themselves when they first address the examination. Thank you.

09:56
I'll turn now to the District Council. Please, if you could do.

10:00
Introduce yourselves. Thank

10:02
you. Thank you. My name is Ben Hunt.

10:06
I am charter town planner and NCIP consultant for the District Council.

10:12
To my left is Mr. Nick Feltham,

10:16
who is development manager in planning at the council,

10:20

and Mrs. Gina Johnson hurt, who is leisure and cultural services manager at the council,

10:30
I can, in advance of

10:33
discussions on topic, give the apologies from Mr. Chris Harrison, who is Council's biodiversity net gain expert. He left to go on holiday late February, but it's been they'll be unable to return due to the crisis in the Middle East. So he's unavailable

10:53
today. Thank you. Thank you.

10:56
I'll turn now to the county council. Please Good morning. My name is Sheil Sheik. I'm of Council. I'm instructed and act on behalf of Lincolnshire county council. I have to my left, Miss Amy Charlesworth, who's the council's senior infrastructure officer, and just behind me, to my left, Miss Justine Foster, who's the infrastructure manager, and then a number of others, which are I'll equally ask them to introduce themselves at the appropriate moment. Thank you.

11:24
So I'll now move on to individuals and organizations that have given their notice of their intention to speak. We'll start with the people in the room. First of all, so I think we've got Mr. Lyons,

11:38
good morning. Yes. Nick Lyons, Chairman of Thorpe on the Hill parish council,

11:44
happy to be referred to as Mr. And I would like to speak specifically on agenda items, 3.1

11:53
3.2

11:55
and 3.3

11:57
Thank you.

12:00
Thank you Mr. Lyons,

12:03
do we have Mrs. Brewer from Colby parish council

12:10
I'm not seeing anybody in the room.

12:13
Thank you.

12:15
Marianne Overton, Thank you, Councilor, Mrs. Marianne Overton, MBE and I am the chair of the cliff villagers solar Action Group, and also a local district and county councilor for a part of the area within this application. I'm not speaking on behalf of the district or county councilor. I'm acting because we have a very good team for that. I'm acting as a local representative. Thank you. Thank you.

12:54
Do you have Mr. Philip heard?

12:57
Yes. Thank you, ma'am. Philip heard I'm a resident of nathanby, but I'm here today and as a capacity, as a member of the cliff villages solar Action Group. I won't mention any specific agenda items, because I'd like to have the opportunity, if possible, to comment on any as may be appropriate.

13:15
Thank you.

13:18
Do we have Mr. Martin elfin?

13:27
Mr. Mr. Elvin, could I just ask you to wait till we've got the roving mic? Thank you just for the live stream. Thank you.

13:35
Thank you. Yeah, Mr. Martin Elvin from Digby,

13:41
also here as an interested party in FOSS green, and I'd like to speak on any of the items as they come up

13:53
that I've seen on the agenda for this morning

13:57
as and when, if that's all right.

14:00
Thank you.

14:06
We have Mr. Gordon kolbish,

14:16
hello. Good morning, everybody. Yes. Gordon Kirby, I'm a resident of Thorpe on the hill.

14:24
I wish to speak as and when, if anything crops up during the day, but I understand that I am number 16 in the talk this evening, because as a resident, I consider that Thorpe on the Hill is probably the most affected village

14:42
with this proposal. Thank you. Thank you. Mr. Corpec,

14:47
do we have MS, Miss Abrahams, i.

15:00
Rams,

15:02
resident of Thorpe on the hill, I'd like to reserve the right to speak on any item that comes up.

15:10
Thank you.

15:14
We have James Gallagher.

15:18
He sends his apologies. He's coming later tomorrow, rather Thank you.

15:26
James Kirby,

15:30
not seeing any hands and Mr. Campbell,

15:36
likewise, he's coming this afternoon. Apologies for this morning. Thank you,

15:42
Mr. Coonan, Thank

15:50
you, madam. Good morning. Carl Curlin, a resident of Thorpe on the hill, similarly, as previous colleagues have said, I will contribute when I deem appropriate. Thank you. Thank you.

16:03
Susan McIntyre Sanders,

16:09
not seeing any hands, and I've got Andrew Keeling down, but I think you might be coming tomorrow rather than today. Thank you. That's right. Thank you. Bye.

16:27
That's all the interested parties that I've got registered. I'll turn now to the non interested parties that have indicated that they want to speak. I've got Mr. Alistair King.

16:41
Alistair King, resident of brand Broome, that's in within nkdc,

16:48
I'm interested to say something on the landscape and visual section. Thank you.

16:56
Then I've got Mr. Charles Overton, yeah.

17:03
Thank you. Councilor Peter Overton, also known as Charles Overton, I represent swindeby and withamson Hughes Ward, which also covers the village of Thorp on the hill and Auburn. And I would like to reserve the right to speak as appropriate as a as the day goes on, thank you.

17:23
Thank you. And then I think online we had Dame Andrea Jenkins indicated,

17:33
not seeing any hands,

17:35
okay,

17:41
before we move on, is there anybody else in the room or online who haven't registered an interest but would want to speak?

17:50
Okay, I'm seeing some hands.

17:55
Yes. Mr. Luke Daniels resident of Auburn interested party, as I live in Grange cottage, which is right in the middle of the development, so I'd like to reserve the right to speak as and when something comes up appropriately. Thank you. Okay, thank you, Mr. Daniels,

18:19
thank you, Mrs. Helen Powell, and I was a councilor previously, not at the moment, but I've just very, very interested in the land loss and loss of food growing. So I would like to retain the right to speak at any point if I sort of so felt necessary. Thank you.

18:40
Thank you, Mrs. Powell, is there anybody else in the room or online who would wish to speak?

18:49
I'm not seeing any hands.

18:52
If anybody does decide during the course of the hearing that they do wish to speak, then obviously, please let us know, and when you do so, if you can similar to what we've done this morning, please introduce yourself and let us know what items you would want to raise.

19:15
Yes, before I move on, I'm just going to turn to the applicant. Obviously, we'll have a number of action points as the hearing goes on, I would just turn to the applicant to see whether you would have anybody in your team that could take any points down for us that we can cover later on.

19:31
Ruben Taylor, for the applicant, yes, we do. We did that last time. We're happy to do it again. Thank you very much.

19:40
So that covers item one on the agenda. I'll just turn to item two now, which is the purpose of the hearing.

19:47
So the purpose of today's hearing is for the examining authority to hear evidence concerning a range of environmental matters. Please be assured that we are familiar with what you have already submitted.

20:00

To us so you don't have to repeat at length anything that you've already put to us in writing. Submissions carry equal weight, regardless of whether they are made in writing or orally.

20:12
When you're answering the access questions or our questions, please ensure that you provide succinct answers where a question is deserving of a yes, no type answer, then please respond accordingly, followed by any amplification as necessary.

20:29
We will be concluding today's discussion at four o'clock this afternoon, and that's to allow us to accommodate the holding of our first open floor hearing, which is due to start at five o'clock this afternoon. So

20:43
I mentioned earlier that we're going to have a slight tweak to the running order of the agenda that was published, and that's because both councils have identified to us some limitations with Officer availability for the population effects item on the agenda, which is item 3.3

21:01
so to accommodate that, what we're proposing to do is to start off with item three, one on the agenda, but we'll then move on to Item three, three, which is population effects, but we will focus on items D and E, which is the wider socio economic

21:23
issues. We will then return to item 3.2

21:28
subject to timing, obviously, which is landscape and visual impact. And we will then pick up on the remainder of the population effects item tomorrow morning. So hopefully that's accommodating the council's staffing availability.

21:46
But before I move on, obviously, just want to sort of

21:51
ask if there was any questions there. Mr. Lyons,

21:55
yes. Nick Lyons, Chairman Thorpe on the hill,

22:00
specifically the topic 3.3 relating to tourism

22:06

and visitor economy.

22:09
My colleague

22:12
Andrew Keeling was not able to join and that's an area where he specifically wanted to make a contribution. He provided me with the

22:23
with his input, and happy to represent that,

22:29
if you are happy to accept me verbally, covering that on his behalf today, yes,

22:36
Mr. Leahs, that would be absolutely fine with us. Thank you. Thank you.

22:40
And just on that point, if there's anything that Mr. Keeling perhaps picks up having listened to the recording at a later stage, he can always put something in writing at the next deadline. I think he's already preparing to do that so, but he would like to make the verbal input today because he's prepared something. So I'll do that on his behalf. Thank you.

23:06
So as the morning progresses, we will have a break of around 15 minutes at a convenient point, subject to where we are up to in the discussion that we're having. So before I pass back to Mr. Gold to start us off with the main items on the agenda. Is there anything that anybody wants to raise on the procedural matters that we've covered so far? I'm seeing a hand at the back.

23:40
Elizabeth Parker, resident of naven Bay, I would just like to say that the screenwriting is so small it can't be read from back here. Would have been really nice to have had the side screens, but I understand that the venue is very cramped.

23:54
Thank you. Noted your point down. Thank you.

24:00
Any other points before we move on? I'm not seeing any hands in the room or online, in which case I will pass back to Mr. Gold to start us off with the main items on the agenda. Thank you.

24:22
Thank you.

24:24
Just before we start decision that we'll turn to the applicant to do some introductions.

24:36
Reuben Taylor for the applicant for

24:41
this this session of the

24:43
agenda. I've got my immediate right, Mr. Snedden,

24:47
who I think you already know, deals with many of the technical aspects. I think I can fairly say of this application and and then to his right, we have Mr. Gates, i.

25:11
And turning to North Kesteven first, who's likely to be responding on any items under three? One? Ben hunt, North Coast, even District Council, it would likely be myself.

25:32
And for Lincolnshire, Chairman shape, for Lincolnshire county council, will be Mr. Dan Clark, who sits two to my left, who's the council's infrastructure ecologist. Do

25:48
but if for any reason, either the applicant or the council's need to bring anybody else into discussion, by all means do so as we go along, I would say, perhaps for the benefit of the public that a lot of the questions that we're going to be asking, not just for this subject, but for other agenda items, may seem a bit HOTCH botch, but that's largely because the examining authority, having had opportunity to see relevant reps, written representations, responses to written reps and relevant reps is now, if you like, on a Bit of a mission to fill in gaps in our understanding of parties cases.

26:26
So as MS Wilkinson said earlier,

26:30
we have been through a lot of evidence. We generally understand most parties

26:38
general positions. As I say, this round of hearings is very much about gap filling. So our questioning might seem, I say, rather random to some of you, but there is a purpose to it. As I say, we are filling in gaps in our understanding of cases,

26:59
to the first case with bad question, which probably isn't just one,

27:05
because this question is directed at the applicant, at least to start with,

27:10
from the identification of the gross and net operational amount of land within the within the order limits identified for each of The proposed works. And we find that information in table one, in appendix A of

27:26
rep 140, zero, 45 which was your compulsory acquisition summary. And then in Table six, hyphen one in

27:36
rep two, hyphen 033, which is the for sure, I'll call it the Solar Technical Guide.

27:45
The

27:46
examining authority considered it's becoming clearer what the anticipated operational land take the proposed development would be,

27:55
and that would either be 906.5

27:59
hectares with a centralized best work number two or 910.8

28:06
hectares, with a decentralized best, which is work number three,

28:13
compared to

28:16
total order limits of 13 155

28:19
hectares. First question is, is very brief. It's just a bit of math

28:25
in table, 6.1 in rep two, two.

28:29
Rep so I start again, rep two. Hyphen, 033,

28:34
which is the technical guide?

28:38
There's a figure of of 914.6

28:41
hectares quoted.

28:44
But when I got the calculator, I think what that figure does is it includes both best, best variants, rather than one or the other.

28:59
You have table 6.6

29:01
hyphen, one. If I'm correct either one or the other, it shouldn't be a gross when you take the band into account. Duncan Sneddon, on behalf of the applicant. I think the reason for that is, is, if we were to do the centralized best, the areas for the distributed best remain within work number one. Work Number One effectively overlaps

29:26
those areas. So if they weren't best, they would still be within the solar work number area. And therefore we would count that as both.

29:40
If it was quite a challenge to put that table together because of the way that the work numbers overlap each other, which is quite standard amongst many. DCU is so it was quite tricky to

29:52
check where the decimals go when we're going to come on to how works have been defined, both in the order and.

30:00
It was throwing the works plans, because I've seen it done multiple different ways, across different project types, not just energy, but transport. And I think that's perhaps where some confusion is coming as highlighted, I think by the way I've interpreted what's in table one,

30:18

I

30:29
that really it does neatly take us on to what was, or is my next question

30:35
in terms of the way, particularly the works have been shown on the works plans,

30:43
where, for instance, in the array areas, you've got multiple works. You've got the actual

30:49
energy generating side of things, which is Work Number one,

30:53
you've got some cable, which is work number six. You've also got some landscaping and or biodiversity, which work number nine

31:05
and decentralized best which is work number three.

31:10
That does seem to be quite a complicated way of showing the works, because if we take just as an example, the solar array areas. What is the principal function of that area? To our way of thinking, the principal function of that area is work number one. It's energy, energy generation with some ancillary

31:35
perhaps cable,

31:38
perhaps landscaping. But the primary function

31:44
is work number one.

31:46
You in Snedden on behalf of the applicant, Yes, correct. The primary function of that area is the solar areas work number one. And

32:00
however, I think it's important to remember that the ancillary works

32:06
do fall under another work number.

32:09
And therefore, for completeness, it should be shown where those work numbers extend to,

32:16
particularly if those areas, for example, the decentralized best those areas of work, number one, where we would not be

32:26
suggesting that decentralized best could go,

32:30
particularly when it's in an area closer to residences or

32:36
within flood areas where we have secured to not put the decentralized best in there. Hence, we have two separate work numbers that largely overlap, but it's the bits that they don't overlap that we're trying to highlight by overlapping those work numbers to make it clear that there's areas of the site where the applicant is not intending to put something like a distributed best, where it's either closer to the local residents or in an area of heightened flood risk,

33:15
and it is quite challenging Making those work plans to try and make it clear what you're doing.

33:25
So I do understand some of the confusion.

33:34
Yeah, just just keeping

33:37
with that matter

33:40
within the array areas, for instance,

33:44
is there a need within the definition of work number one to refer to cables, which is, I think, Item e, where you've also got, as I understand, under work Six, that's low voltage cables, up to 33,000

34:01
KV.

34:04

But within the array area, there was going to be some caving, I think everybody would understand that that's ancillary to the array,

34:12
and particularly the generation side of things. So is there a need say within work? Number one for work like item E to be listed and or then separate work number six, I think you're going to say there is a need for separate work number six, because some cabling is going to have to come out of the array areas link up the various array areas before getting to the main cable corridor.

34:41
But I'm just wondering whether, then perhaps needs to be a bit of a review of the works in the draft order and see whether any tidying up can be done.

34:52
Because it does seem that that may be where some of the confusion is coming about as just how much land this project seems to be required.

35:00
Firing, and we're going to touch on the comparison with some of the other projects a bit later on in this session. But is that something the applicant can go away and have a look at?

35:11
Reuben Taylor for the applicant, certainly. So we will go away and do that. But I have to say the way in which the the order has been formulated

35:24
certainly reflects other orders that have been

35:29
approved by the Secretary of State. So we're

35:33
we followed effectively what has been done in the past. But of course, if there's a better way of doing it, we'll look and see if we can find,

35:46
yeah, I think what might be happening, which is a bit of an evolution with solar, is that some applicants are going with options of centralized best or decentralized. And I think that's perhaps something fairly new may not yet be coming through the made orders. Yeah, I think there are probably a number queuing up for decision at the moment, either with the Secretary of State, or they're still in reporting with their examining authorities, where

36:16
there may be this

36:19
new avenue developing. But certainly when I've looked at the numbers, then try to look at the works plans, look at what's in the schedule. Some of what I'm seeing is different to what I've experienced previously. With a number of cases that I've worked on, and have had to scratch my head a few times, I think Mr. Fairly has said this morning that when he was trying to compile the tables, he was finding a little tricky to get to in effect, the net land take, which is really what we're interested in.

36:55
Did either the Councils want to comment at all in terms of

36:59
how things are being shown on works, plans versus how things are being described in The draft order.

37:06
Nothing from Lincolnshire County, anything. No. Okay.

37:30
Expect again, again, start with with the applicant. I think this is probably another Mr. Slender

37:37
question, and it gets a bit wordy, so apologies for that in responding to a number of written representations. For example, those are the cliff villages solar Action Group relating to the site selection process.

37:53
It's been commented

37:56
in rep to hyphen 30 at I'm going to say electronic page 34 because there's this page numbering and then there's cover sheets. So whenever we refer to electronic page numbering, it's literally what you see when you open the document online.

38:16
There's reference to sites of over one hectare or 2.47

38:21
acres.

38:23
Being identified.

38:25
Sites over one one hectare or 2.47

38:29
hectares were identified. However, none of those sites was large enough to provide a viable land parcel for at least 40 hectares or 99 acres, the applicant identified 40 hectares, 99 acres as this is the size that would constitute one circuit at a chosen medium voltage of three and three, sorry, 33 kilovolts for the proposed Development which would avoid the need for splitting circuits between smaller parcels involving higher environmental impact, for more interconnecting cables and avoids the need for more third party land.

39:15
Can you elaborate in non tech, technical language, if possible, on what the effects of splitting circuits would be if parcels of less than 40 hectares have been relied on in designing the proposed development.

39:31
Now, if this is perhaps going to be a lengthy explanation, I might suggest that perhaps this is something that is added to a new version or an updated version of the technical guide,

39:45
we have asked a written question. Think along similar lines, is there a quick answer, or does it get a bit technical? You inspired on behalf of the applicant? Do.

40:00
In a bit two mics, I can do a short explanation. I think, in effect, if you had less than the 40 megawatts, or let's say you had 220 megawatt areas that were

40:16
several kilometers apart,

40:19
the extra cost and the losses within the extra cabling that you would have to effectively connect those two parcels together for half the power that's flowing down the cable doesn't really justify itself for a scheme of this scale. It would be perhaps better to connect each of those two parcels, which I'm sure given their brownfield sites, would be viable for solar,

40:47
to an individual connection into the distribution network,

40:52
which might be a more cost effective way to develop those areas for solar. In effect, we wouldn't want to have an extra several kilometers of cable

41:04
networking around the whole of the area.

42:05
Thank you,

42:06
Mr. And you referred to 20 megawatt area urine effect, it's splitting.

42:15
So it will be

42:17
a 20 megawatt would be 20

42:21
hectares.

42:23
Yeah, approximately Yeah,

42:27
yeah. You've been standing on that for the applicant, Yes, correct. I roughly work off one megawatt. One hectare is close to around that, depending on exactly how you do it. And obviously, as you compounded that into more smaller areas that interconnection network ables get even larger, taking up more land, more third party land, more disruption.

42:54
Thank you.

43:16
On some of these more technical questions I'm not proposing to go around the room, unless anybody particularly wants to raise a point.

43:27
Mrs. Overton, Thank you.

43:30
I don't accept that the cost of the cable

43:34
is the reason, because when you look at what's there already, it's already spread over some eight miles. And I think that the cost of the cable is

43:45

it helps you make obviously more profitable. But actually we have to balance that against the impact on our environment and against the impact on people and the landscape character. And therefore

44:01
the cable is actually at least part of that.

44:07
The second thing that just if I might ask, also on the basis of the a the

44:13
number of hectares covered,

44:16
and the reason why it seems to be such a large area compared to the megawatts produced.

44:24
I'd like to know how much of that area is in the landscape restoration project, which has been put forward to Defra for grants for to cover the biodiversity improvements. And is that included in this application, and does it conflict with the application? Thank you. We that matter is straying away, really, from what, what will later, well, not necessarily,

44:54
but if it's if the point that you want to raise arising out of this hearing, put it in writing and.

45:00
And the applicant, no doubt, at a later point will be able to provide a response.

45:16
You instead, and on behalf of the applicant, am I okay to respond to councilor Overton, if, if you feel able to, yeah, I accept your view. Councilor Overton, around the cable and the cost, and

45:30
I'm not saying that that is the defining factor for us, is that, but efficient use of the land is kind of what we're trying to do here. If we had, you know, this split up into,

45:44
effectively, small parcels like that, we would be looking at,

45:49
you know, almost 100 small parcels.

45:54
And then if we were to do

45:56
interconnecting cables across hundreds of parcels over a much wider area, I think you'll find this kind of impact locally on that would probably be much higher than what we have at the moment. Yes, we're spread out across several miles with large parcels, but at least there we can, you know, restrict the disruption to smaller areas. If we were to do this over a much wider scale, I think you would be questioning me why I would have chosen to do that at the hearing in the hypothetical thought of us having proposed that

46:35
just gives more options. That's all. Thank you.

47:12
And just one briefly, quite quick question in relation to batteries, things, no doubt so.

47:22
With respect to the operation of the best once a battery has been fully charged

47:30
and is therefore at full capacity, which in this instance, you're looking at up to

47:36
two hours, or 480

47:39
megawatt

47:40
in terms of capacity in the DIS in the absence of any discharging of the battery for for intentional purposes, because it's being exported, how long can the energy be stored without there being any deterioration, loss of energy before it's converted back to electricity

48:04
you instead. And on behalf of the applicant, there is a limit to my knowledge. I don't know exactly the answer to that. There is

48:13
what we would call a parasitic load within the

48:17
battery units. They do have sort of monitoring and air conditioning and cooling that is very often run from the battery. So if the grid supply cuts off, then that equipment can continue to manage the battery.

48:33

It's definitely an answer. I can go and ask our battery specialist and get an answer to but I'm not the Oracle or nothing. You've disappointed me.

48:43
I'm sorry.

48:47
Yeah, it would be helpful, because you'll recall from

48:52
first round of hearings and then through responses that parties are raised about scaling. It's just useful to know

49:01
what is going on

49:04
in terms of how frequently there might be a discharge?

49:09
And talk about it to zero, how frequent there might need to be a topping up, because there's been, in effect, natural loss,

49:21
as you also refer to the parasitic side of things.

49:26
Some drawing down is taking place just to keep the kit operational.

49:32
Yeah, and again, I think that would be usefully end up in in the technical guide, because it keeps all that sort of information in one place. You and Snedden, on battery, up in the air. We can do that. I know it's very low. It kind of the ones charged, they were cut off. It

49:49
would be days and days and days before a ran out of power. The load is is very low as a proportion of the battery capacity. But I'll get an actual answer for you. Do.

50:00
I see you have a question on screen as well,

50:03
because I can't see that. I've noted that down as the first action point. I think rising Adam is

50:17
hearing Ruben Taylor for the bill. I think it's Mr. Gillette for the for the applicant. So it may be that he has an answer.

50:27
So Simon, good for the applicant. Indeed.

50:31
Sorry, I can see you on screen, and it feels like I'm talking behind you.

50:36
Hopefully you can. It's okay. We can see on a small screen in front of us. Great. Thank you. I do have an answer, a practical answer for you, sir.

50:45
The battery energy storage system proposed at the scheme is

50:51
ideally suited to what's called a short term energy storage scheme, which means that its operation is focused really on hours and days, meaning that if the scheme, if the battery was to be stored today,

51:06
it would likely be discharged within 24 hours. That's not a rule. It's just a kind of a market application. It may help you, sir, to know that the leakage over that 24 hour period, which I think is what you're alluding to would be negligible, and therefore, effectively,

51:26
once round trip efficiencies are taken into account, all of the energy stored can be discharged. The use case for batteries sitting fully charged but idle for periods during which leakage may be significant, which could be

51:48
many days or weeks or months. That is not a valid use case for the technology proposed. So hopefully that helps.

52:00
It it does. I think it will be useful in the technical guide.

52:04
If you can give some explanation about, I was

52:10
going to say the economics, that's not quite right, but the logistics of how the battery is managed, the most efficient way to use a battery, so that we've got a better understanding of that, because

presumably that there are going to be occasions, particularly the height of summer, where the battery can

52:30
be fully charged in the middle of day.

52:34
Are you basically saying that it will be discharged overnight or perhaps the following day, depending on what the demand was, if

52:45
which would be, which would be a different scenario to whatever might go into the battery during, I don't know, late autumn into the winter. Presumably,

52:57
late autumn winter, there might not even be enough being generated to actually be diverted to the battery.

53:05
So Simon Gillette, for the applicant,

53:09
the use of the battery is dependent on a number of factors, including how sunny it is, what electricity demand is at the time, what the constituent parts of the UK energy system are in terms of how much wind is on the system, how much solar is on the system, in terms of capacity, also how windy it is, whether we're importing, whether we're exporting at the time, and all sorts of factors.

53:38
The purpose of the battery system is to support the solar to ensure that the solar can be made available to the market when that energy is needed.

53:49
And the battery is a short, as I say, a short term

53:54
energy storage energy balancing system. So

54:00
I take your your request to describe this more fully in the technical guide, so I won't, hopefully, kind of talk for too long on this. But during the summer, a valid use case is that

54:15
peak solar is captured, stored and exported overnight when we all want to cook our dinner.

54:22
A valid use case in the autumn might be if it is windy on the system that peak solar is still captured, held over or held until the sun goes down and is still dispatched that evening to meet

54:37
a period of higher demand, where it might be less windy or more cookers might go on more tea cups, tea might be boiled and the sun's gone down. But all of those the common theme between those uses as they are, short term

54:54
uses. It's not inter seasonal, it's not week to week. It's.

55:00
Short term, and that's what the battery economics supports and what the battery use case also supports.

55:13
Thanks. Christina, yeah, I think it will be helpful if you can give a bit

55:19
more of an explanation in

55:22
the next version of the technical guide, and it provided that explanation.

55:29
You address seasonal variation, also give some explanation, as as you say, that things may be different if there's a lot of wind on the system versus when there might not be so much wind,

55:42
and how that also relates to when there may or may not be

55:48
so or much solar in the system.

56:02
Not heard Mr. Gill, they say no to that. So I think,

56:08
sorry, sorry, good. If the applicants, I just take it as read the term,

56:12
yeah, but yes, thank you.

56:16
Okay, we might have a couple of questions for your social just hold on the line. Mrs. Overton, Thank you very much. Councilor, Silverton,

56:26
village of solar Action Group and local councilor, the question I wanted to raise was if, as you said, this is to take power off the grid when the wind is providing energy, so in other words, from elsewhere in the grid. This is to support the grid, not necessarily just the solar. If that's the case, then how does that connect with the fact that the government has said we are already three times over supplied with battery storage systems for the whole system.

57:00
So this, as you said, supports the system, and the government has said they don't need any more. They've got the moratorium effectively on at the moment, not quite that word, but effectively. Thank you. Thank

57:24
if, if the applicant is able to give a quick reply, but my understanding of what was said from the first round of hearings, I think it was an answer Mr. Snedden gave, or it might have been Mr. Gillette. Is that this project, because of the review that niso has undertaken has been counted in the need for batteries going forward.

57:51
In short is, is that that's correct is factored in to the projections for up to 2050 Mr. Snedden, on behalf of the applicant, that was correct for the solar

58:04
we've already answered Mrs. Overton's questions previously, on our with our relevant reps and in the previous hearing,

58:21
apologies.

58:52
Mrs. Overton, then very quickly, thank you. I know you did say that, and I respect that, but I haven't seen the evidence we have written to NIS to ask for that, and we haven't seen the way in which the niso has done their calculations. This was proposed for 2035

59:13
and we're now talking, you know, now if it's 2050 that may be different, but that's not in the visible calculations from niso, I haven't seen any evidence. I look forward to receiving some Thank you.

59:28

Well, yeah, sounds like that's a point for you to rate directly from niso, and if you're not getting reply, perhaps you need to chase them for a reply.

59:39
Yep, so there's Mike just behind you,

59:44
Carl Kern and Thorpe on the Hill. Mr. Snedden mentioned noise with the batteries,

59:52
whether this is appropriate at this particular point, but I know from requirement 16 operational noise, from the questions you put.

1:00:00
Up to the applicant. This is no part of the authorized development is to be bought into operational use until an operational noise assessment for that part of the authorized development has been submitted, etc, etc. This would be of particular interest to residents of Thorpe on the hill, because I'm going to stop you there, because I think the point that Mr. Snedden was making was that the applicant is seeking flexibility in the way they prepared the

1:00:30
works plans, so that

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it's known that if they go the decentralized best route,

1:00:40
a decentralized best can be located in whichever field they've shown on the works plans, or, I think it's the

1:00:49
landscape environmental management plan that is a broad parameter for where

1:00:57
a battery, decentralized battery, might be located there will then, through the detailed design, be a need to ensure that the noise levels that have been stated in the relevant chapter and the environmental statement, which set the parameter for that location, can then be met.

1:01:17
And it might be that when the detailed design is undertaken, they have to slightly relocate what is currently shown on

1:01:27
outline type drawings to ensure that they do meet the noise parameter.

1:01:33
So there will be various management plans at the detailed design stage, if this project is consented, which all have to line up to achieve

1:01:45
this. I was going to say standards. That's not right, that the targets that have been set environmentally within the environmental statement, it's quite a complex process, sometimes making all the ducks line up. Then do you want to respond in more detail on that you in Sneddon on behalf of the applicant, correct? So the idea would be that the detailed design would be undertaken that would inform that operational noise model that is then secured as part of

1:02:20
the the management plans, which are submitted through the local authority for approval, so that the local authority have the

1:02:30
power to question us on whether we meet the requirements in our environmental statement or not, and the requirement that you're Speaking about in particular is about the operational noise levels that we would do further detailed modeling on from the detailed design once we know exactly the equipment and the locations that we're selecting. Thank you. Mr. Said, and thank you. So the reason I raised this point is that Thorpe on the hill gets and during August, there's a festival near swindabby called the Lost Village, where the noise from the festival is clearly audible within the village. So that would account also over to Auburn, etc. So this would be quite a significant impact. And this isn't just one weekend in August. This would be all year round. Thank you.

1:03:27
Thanks. Thank you. Mr. Conan,

1:03:58
right. Next question is for the applicant and again, I suspect it's Mr. Snedden.

1:04:06
I should be very disappointed if it's not.

1:04:11
Now want to look at some of the information that was provided in table 10, one of the Solar Technical Guide,

1:04:27
yes, yes, madam,

1:04:29

thank you. It was just a quick question, having a job to hear, but I did gather that this, this has all got to be, can I just help everybody? It's the examining authority that puts the questions. In a session like this, you can raise a point, yeah, and the applicant can potentially respond just a point of clarification. Then really, when you were talking about it being discussed and with the when the planning application goes in, as soon.

1:05:00
Assuming that that's the enforcement officer that we're working in tandem to make sure what he was just saying they're going to do either or the process is, if this

1:05:11
development receives permission, there'll be a development consent order within the order in one of the schedules, schedule two, there would be

1:05:21
what we call requirements for the purpose of the order. They are like planning conditions. Yes, yeah. Once the detailed design is completed, the applicant makes a submission to whichever the relevant either North Kesteven or to Lincoln, Chicago's because there is a split and as to who's going to determine it's completed. After it's completed, if there were no no sorry, that's after the order is made. But before work start, various conditions requirements have to be discharged to one or other of the Councils the

1:05:56
developer then has to build in accordance with whatever the detailed has been agreed, I understand that thereafter, if there were an issue in a location, suddenly things seem noisier than ought to have been the case, then it would be down,

1:06:14
presumably as North kesterman As the HOST local authority to enforce using its enforcement powers. Yeah, okay, which are discretionary realize, yeah. Thank you. Thank you.

1:06:30
Mr. Felton, did you want to say anything in that regard?

1:06:41
Yes, so we're gonna have a quick look at table 10.1

1:06:46
in the solar techno technology Guide, which is where you did

1:06:52
a comparison between the proposed development and various other projects.

1:06:59

Now I've got, I'm going to, only going to look at four examples, so we're not going to turn this into a

1:07:06
housing needs type debate that you might get a housing case on appeal, where we can spend hours going through lots of housing numbers.

1:07:17
If you're you don't feel able to answer the question here this morning.

1:07:23
That's perfect, in order to do it right in writing, post hearing,

1:07:27
but I'd like to turn first to Springwell,

1:07:31
because Springwell is just a million miles away

1:07:36
from the site for this application.

1:07:40
Can you account for why the proposed spring well solar farm, as

1:07:45
I say, a potential near neighbor

1:07:48
with a connection capacity of by my math, 3.33

1:07:53
times

1:07:56
that of the post development, but with order limits of 12 180 hectares. How that all compares with what's been proposed for your project,

1:08:08
where we've got a grid limit of 240 megawatts and order limits of 13 155 hectares.

1:08:17
You in Sneddon, on behalf of that, we can

1:08:21

Yes, so in investigating Springwell, in particular, for this table, it was quite tricky. There's some conflicting information. And we looked at their

1:08:32
inspect,

1:08:34
their examination,

1:08:36
and they had that the applicant, this was part of one of their answers that they considered over planting, the way that their scheme developed, their land take reduced to such that there's there's no over planting, and it's the applicant's understanding that the

1:09:00
spring well development is going

1:09:04
to renegotiate its grid connection because they're currently

1:09:10
unable to achieve 800 megawatts given the land take that they have.

1:09:15
I know that their original application was split into two phases,

1:09:21
so um,

1:09:27
so that that's my understanding of that one in particular. I know Mr. Gillette had some information on that as well if he wanted to come in and welcome it.

1:09:42
So sim get it for the applicant, just to confirm that it's difficult sitting there in a different room to Mr. Sen, but

1:09:49
absolutely

1:09:53
the the examining authority or questions the examining authorities, questions to Springwell are answered, confirmed.

1:10:00
Being

1:10:01
limited over planting, and therefore the installed capacity of the scheme is not necessarily

1:10:10
the full

1:10:13
grid connection scale.

1:10:18
Further information will be available at the detailed design for that scheme. So therefore that's not publicly available information. But at present,

1:10:33
and the point that's been raised about Springwell potentially having to go back and renegotiate a good connection, is that in the public domain, as far as springwell's application is concerned or not,

1:10:49
we just have to be careful about how we actually report on that if we find it necessary to make any comment about Springwell in that regard,

1:11:02
believing there their response, it says the applicant will seek to optimize the use of the scheme's grid connection capacity at the detailed design stage,

1:11:17
rather than take too much time this morning. Can I ask that perhaps the applicant review this point in terms of whatever is in the public domain for Springwell, and

1:11:27
as a rising out of this hearing, when you do your write up, just comment on what you have been able to establish that's in the public domain, we will and there are some other issues that I think that you need to be aware of too. Sorry. It's Ruben Taylor for the applicant. So in terms of ensuring that there is a fair comparison being undertaken.

1:11:51
So one of the other aspects and key differences between the proposed development in this case, and the other developments relates to,

1:12:07
I think three matters, really. And

1:12:11
Mr. Stanmore correct me. If I get this wrong, I'm sure that, firstly, more bird mitigation is land is needed for the FOSS green scheme then, is typical, and that's as a result of the ecological baseline,

1:12:26
and that results in a need to create large areas of suitable habitat to mitigate the likely significant effects. That's the first element. The second element is that the landowners in the present case, requested that bird mitigation land is delivered within a wider geographical area, so that the land can be rotated over the 60 year period across fields under their control, rather than fixed to specific locations, and that facilitates their preferred farming methods, and assists with the continuation of Arab farming as much as possible, alongside the solar farm.

1:13:13
And so that's the second element, and that integration

1:13:19
of

1:13:21
the project with retained farming is a matter which we understand is supported in npse. And three will provide you with the relevant paragraph. I don't have it to hand. The third element

1:13:37
relates to the interconnecting cables.

1:13:42
There's 610 hectares of retained arable grassland in the principal site, and that doesn't contribute to the bng score, because the bng assessment took a worst case approach and assumed that the land would remain arable.

1:13:59
So there's there's no land within the site specifically for B and G, but it's delivered as grassland. If it's delivered as grassland, it would have a positive effect on the score that that lands included, because buried cabling or infrastructure is required between the solar PV areas and to provide flexibility

1:14:20
where these assets would be located, and so very little of that area would be required for built infrastructure in the detailed design when that comes forward and some of these other projects. So, for example, veneck or Mallard pass or Springwell don't have the same spatial separation between the solar PV requiring interconnecting very cable.

1:14:49

I've got the reference to Ian three. It's paragraph 210, 32 is the paragraph that talks about the need to integrate schemes with.

1:15:00
Farming practices.

1:15:02
So that's another element generally, when one is thinking about

1:15:08
about this comparative exercise. So I hope that's helpful.

1:15:41
And you in Sneddon, on behalf of the applicant as well, just on that final comparison with Springwell,

1:15:48
obviously, spring wells a lot closer to the grid connection point.

1:15:52
So the land that we have within ours for our grid connection corridor

1:15:59
is much less for Springwell Because of their location relative to naven Bay.

1:16:08
Thank you.

1:16:36
Surbiton,

1:16:38
thank you very much indeed. Councilor Surbiton privileges, whole action group, I would like to just take the points you've made. And I do think there is a greater amount, you know, there is considerable,

1:16:52
some amount of mitigation and farming remaining of some sort with, albeit with dug up in the meantime, with cables, which I understand has a, you know, obviously a construction, damage to drainage and all of those things. So it may not be farming as we would expect, and I'm not sure that's taken into account. And secondly, it doesn't what you've not what you say. It doesn't account for the 1.6 times over planting, which is unusually high, so with a grid connection of 240 megawatts, and you're creating, I think, 381 megawatts, you know, it's an oversupply for the grid connection you've got. And I'm not sure you've answered that entirely with the mitigation measures. You know, I asked before. I'm interested how much of that is actually part of the landscape restoration project, which is a separate thing that's going on at the same time on the same land. Thank you.

1:18:01
So you and Snowden, on behalf of the applicant, I think, within the Solar Technical Guide, sir, we submitted

1:18:09
a section outlining the over planting ratio for the scheme, which is, you know, as council Overton highlighted just under 1.6 1.59

1:18:22
and it shows that the

1:18:25
energy lost is relatively low and and that's in a year one estimate, and we've also got within the over planting

1:18:38
Section, shows how the over planting ratio over time reduces due to the degradation of panels. And I feel it shows that that over planting ratio is justifiable in this case for the scheme, and

1:18:55
in the applicant's opinion, it makes best use of the land

1:19:00
and the grid connection that we have. Thank you,

1:19:14
sir, thank you. Philip heard on behalf of Cliff villages solar Action Group, further to what Mr. Snedden just said in the technical summary at table 5.2

1:19:26
for quote, a nominal operating cell temperature conditions which the same chapter

1:19:34
comments that these are the preferred conditions for for UK, the table actually commences at an over party ratio of 1.17

1:19:47
for no CT conditions ending up with 1.02

1:19:53
at the third year mark. Therefore, given that the applicant has said that no CT is the correct.

1:20:00

Conditions to use, there is no justification to be hard to have a higher over planting ratio than 1.17

1:20:09
if that was rounded up to 1.2

1:20:12
it results in a reduction of 139,250

1:20:18
solar panels for the fixed south facing option. Can the applicant potentially justify that over planting ratio?

1:20:32
You and Sneddon, on behalf of the applicant, I think there's a perhaps a slight misunderstanding the 1.17

1:20:40
effective over planting at the Noct

1:20:44
is that number of modules.

1:20:47
That's not saying that there's less modules. Is, in fact, it's like the modeling parameter around them. So rather than using the laboratory test output of the panels, it's using a realistic output of the panels, given the more typical real life conditions that are published as part of the data sheet, so that 1.17

1:21:14
is the same as the 1.6

1:21:18
it's just effectively the measure and the measuring

1:21:25
conditions are different. For the module, it's the same number, it's the same module,

1:21:32
it's the same number of modules.

1:21:38
So are you happy for me to comment?

1:21:44
On behalf of the cliff village solar Action Group. I don't really understand

1:21:51
the the explanation. There are two columns for the two conditions. STC, conditions, and which I'm not sure what it stands for. Actually, off top my head and no CT,

1:22:02
one starts at 1.56

1:22:05
I believe, and the other starts at 1.17

1:22:08
and they both go down to circa 1.02

1:22:13
at the 30 year mark. I don't understand why 1.17 is equivalent to 1.6 I'm just being thick. I'm afraid.

1:22:24
It's not that there is a very peculiar way

1:22:29
that,

1:22:31
because I had this in a previous examination, it took a bit of time to for it to be explained as to what, particularly STC

1:22:40
standard test conditions, which are a laboratory set of conditions which will never be achieved in the field,

1:22:48
but they're a way of if I understand correctly, Mr. Senna will put me right if I'm wrong. It's a judging standard so that if you buy one panel from one manufacturer and another panel from some different manufacturer, you can compare

1:23:04
whether or not they will do the same sort of job in practice, but that but STC will never be achieved, certainly in this country.

1:23:15
But then, no doubt, can provide fuller answer and where no TC comes in.

1:23:22

Thank you. Mr. Snedden, for the applicant, sir, you're correct. STC stands for the standard test conditions. And I said that's like the laboratory test conditions for the module. It's an incredible how the test is performed as they go into like a light box in climate controlled conditions. And there's an incredibly bright flash of light, basically, that's equivalent to 1000 watts per square meter of illumination. And then the modules are then tested at that that tells you what voltage and what current comes out of the each panel. And it's a way that you can compare like for like between different manufacturers. So it's like a

1:24:07
standard test that they can do all the manufacturers. Can have our

1:24:12
properly calibrated test kit within their factory, and they can put them out. It's a bit like if you imagine you could have a test for the power output of a car engine. That's effectively, you take the engine and you connect it directly to a dynamo, and you measure that output,

1:24:35
and it's done it certain temperatures in the room, certain air pressures, exactly the right fuel mix, and then the Noct is a bit more like, well, what does that car do once you put it on a road and it's got wind resistance, it's got variable temperature air,

1:24:56
and that obviously produces, you know.

1:25:00
Maybe a lower horsepower or higher fuel cost for the car. So effectively, if you imagine it, the standard test conditions is very highly controlled. Lab condition test, Noct, is a bit more like the real world expectations of what the output of the panel would be,

1:25:19
day in, day out.

1:25:21
The standard test conditions.

1:25:25
And occasionally, like you get close to them in real world terms, but incredibly rarely

1:25:34
within the UK,

1:25:37

the Noct is is very frequently experienced so effectively, and that's what those two effective over planting ratios are. And I know that this says 1.56 there. Now Marianne Overton correctly pointed out that it was 1.59

1:25:58
effectively, this is the end of the year test. So effectively, it's modeled what's happened to the panel over the year

1:26:07
and solar modules when you first expose them to light, the photons of light entering the cells does cause some damage to the cell, and again, usually it's about a 2% decrease in efficiency in that first year, followed by a much, much lower decrease in efficiency over the remaining lifespan of the module. Typically about point five is what the manufacturers will guarantee. It varies between manufacturers, depending on their confidence of what they're going to offer is effectively an insurance, and that's why that over planting reduces as the years go on, as the effective output of the modules reduce.

1:26:54
The

1:26:55
basis of what the applicant wants to do is look at effectively we are all paying for grid upgrades. The one It may even be that, you know, the applicant is directly paying for, but effectively all consumers are paying costs into this is for a 240 megawatt grid connection. For this project, we want to be able to deliver 240 megawatts through that connection as often as can.

1:27:27
Not just the year after we build the solar farm, if it's consented, but ongoing within the further years afterwards, we want to try and build a solar farm in year one that can still supply 240, megawatts through that grid connection when the sun is available in year 30, in year 40 in year 60, of the consent, otherwise we feel like we're, you know, effectively paying for infrastructure that's not getting used to its best capabilities. And therefore the way to do that is to over plan the solar scheme when you build it.

1:28:05
Thank you,

1:28:09
sir, if I may flip it on behalf of the act. Sorry, sorry, I'll be off on solar action group. So I think we probably done this to death. Can I request for you, sir, that maybe the

1:28:22
applicant could explain how 1.17

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for no CT conditions, which are, quote, real world as Mr. Sense, as you said,

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compares to 1.6 which is what reality is going to happen, that bit I just still don't understand. And maybe the applicant can

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please put that in the, your permission, sir, in the in the upgraded technical guide.

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I think I saw a nod from Mr. Snedden.

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We're even Taylor for the

1:29:00
applicant. We're already revisiting the technical guide, so I'm sure, if we can make it clearer than it is on that particular issue, we will

1:29:08
all I would say, having experienced this, not quite this issue I didn't encounter nhtc previously. It is quite a if you're not familiar with the technology, and it is one that's evolving it. It does take a bit of

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exercising the mind to get your head around it.

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And I know in a previous examination, which I'll touch on very briefly in a minute,

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I think it took the second iteration of what was for that project, the technical guide to get a much clearer understanding of what's going on.

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Back in those days, applicants were referring to something called

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Peak,

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which megawatt peak, which was also causing confusion. And actually, the government was asked for that approach, not.

1:30:00

Be used anymore through what said in en three, because that was also causing a lot of confusion about what numbers were actually being talked about.

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But Mr. Heard, hopefully, when you see the next versions Technical Guide, things will be somewhat clearer.

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I'd like

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before I ask my next I'll give one of the other case, cases in

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table 1010, one in the solar guide, as the solar guide is going to be update, updated, and table one looks like

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could be a candidate for a bit of updating Little Crow, which I think is the second entry. It's got a grid capacity limit of 99.9 megawatts. That was a case I examined, and some of those numbers are ingrained, and that's one that's definitely ingrained. And

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actually, because it's in effect, a 100 megawatt scheme. It makes it fairly easy to do some some land take comparisons,

1:31:07
which is where some of this interest in this area, from my perspective, has has developed, because, as I say, it's a nice, easy one to do, because, in round terms, it's 100 megawatt. But I'm not going to ask you any questions about Little Crow, because that's unfair, because I perhaps know lots

1:31:25
of backgrounds of that particular case,

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but I would like to ask about over planting in more general terms, because what you've been able to

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dissect from The projects where the information does seem to be available is that there is a vast range between some projects under one as low as I think was not point seven four, so no over planting

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all the way up to one of the projects, I think was 1.65

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and your project Being near the top end of that, are you able to give any explanation as to why there is such a huge range,

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you know, they're planting you instead. And on behalf of the applicant,

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can't give up

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a definitive nuts or your best,

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yeah, I was gonna say, Guess that your view of what's going on Sure. I think that,

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in my view, what's going on here is that the newer projects are generally going with a little bit of a higher over planting.

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I think

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my experience of the solar industry

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over the years has been that people have realized that over planting is more beneficial than previously thought.

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When I started

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many years ago, it was more typical to see over planting at 1.2 or 1.3

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a lot of that was to do with manufacturers of the inverters not being comfortable with higher over planting on their equipment and not honoring a warranty.

1:33:17
I think they've realized the benefit of it, because you get more energy out to the grid connection than you would at a lower over planting. So that's certainly progressed. The other thing, I think, with the ones that are lower than one, or even lower than 1.2

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I suspect a lot of this has come out of the environmental, environmentally led process of of a DCO,

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where,

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effectively they've started with a red line boundary, and they they've lost more land area for development than they would preferably have done, and they have not managed to replace that land.

1:34:01
And end,

1:34:05
and therefore that their DC capacity has reduced, leaving them short of their grid connection.

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I'm also being told that Mr. Gillette can come in and help on this. Yeah,

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Mr. Gillette,

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so thank you so I get it for the applicant. I just wanted to provide an additional view to that which Ms.

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Snedden has given, which is

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really in relation to government's targets to achieve a clean power system by 2030 maintain that power system is clean all the way through to 2050 to deliver net zero as well as

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the shortness, the tightness, if you like, in suitable and available grid connections for solar schemes and other schemes in order to reach those targets,

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it makes sense, given

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the unprecedented scale of solar capacity and the limited availability of grid connections to

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using layman's terms forgiveness, to put as much solar as is possible through the constrained grid connection to deliver as many low carbon, zero carbon megawatt hours to the grid as possible.

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Clearly, to do that

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does not involve stacking solar panels on top of each other. It requires more land, and so there are limits, as Mr. Snedden said, to the availability of land, but where there are no limits, or large enough limits to the availability of land, it is entirely consistent with governments aims to deliver that clean power system that a large capacity of solar, an over planted capacity of solar is connected through a grid connection.

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You see in table 10.1 a clustering, if you like, around the kind of 1.6

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area. And that's because it is possible to have too much of what I would call

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a good thing. I over planting, where the clipping related to a significantly over planted scheme

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means that the

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effectively, the output on a per panel basis, starts to reduce. So that doesn't make sense from an embodied carbon overall efficiency of a scheme perspective. So over planting is not limitless.

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It does have a soft cap. There's judgment involved in that cap. But what over planting does, where it is, where it is, deliverable through the availability of land and the suitability of that land and the environmental constraints around that land, it does go towards supporting the government in its in Its energy system and decarbonization and energy Security aims so

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thank you. Mr. Guinness,

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just conscious we've been sitting just over an hour and a

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hour and a half.

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I was going to look at a couple more examples in the table, but I think the answers that both Mr. Snedden and Mr. Gillette have given this morning and a bit of a reworking to the technical guide that's going to arise at what we've already discussed. I'm not going to go through those two other examples, so I think we'll take whatever point Mrs. Overton wants to raise. Then I think we will adjourn for mid morning. Mrs. Overton, Thank you very much. Councilor, Mr. Overton, village of server action groups. Thank you very much. I think it's been very useful. But just to round this off,

1:39:05
the comments made there are very much about Government's intention, and I think we suddenly realize that this application we're looking at is actually has to be according to the planning regulations, and it does say that proportionality is central to the planning balance and the scale is of this project has to be shown to be necessary.

1:39:29
What you're saying is it's not actually necessary. You're perhaps aiming to renegotiate with government or whatever, because you think there's a grid connection there. You might remember there's no grid connection there it is a open field with no permission for one thing, and secondly, you're talking about over planting by a considerable amount. Got to bear in mind also that this is all extra visual impact and damage to our environment and our community.

1:40:00
If it's unnecessary, don't do it. And I notice on just to close on table 5.2

1:40:08
on table 5.2 which we just been referring to right, go down right as far as year 30. If the panels last that long, it says effective over planting at the practical value, not your laboratory test. Practical value should be 1.02

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So there does not seem to be an expectation why this over planting should be so much higher than many other sites. Thank you. Thank

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Snedden or Mr. Gillette. Do you want to say anything in response to what Mrs. Overton

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has just said? Ruben Taylor, for the applicant,

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it's not the

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applicant's case that this scheme is not necessary or required. On the contrary, the scheme delivers significant benefits in accordance with government policy, for reasons that are set out in the material that are in front of the examination, and I'm not going to go into now in terms of that last point about over planting, what the table shows is that at year 30, in effect, because of the over planting, the scheme will still deliver the maximum amount that

1:41:31
in relation to its its grid connection. And so what it does is it maximizes the output of of the solar panel, and therefore the input into the grid in order to take advantage of the capacity, the limited grid capacity that we have.

1:41:51
If we were to to build that grid connection and then not use its capacity, we would be wasting money as a nation and as a community, we will be wasting an opportunity to take advantage of a sustainable source of energy. It would be a bit like building a three lane motorway and then only allowing cars to drive up one lane.

1:42:18
Thank you.

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Mr. Heard sir Phil heard Cliff village's solar action group

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just on a very, very final point on that

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at 240 megawatts an hour, if

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it was a three lane motorway, and it was going all the way time, the vehicles will be going up and down it all the time. Suddenly, with solar and with about a 10% efficiency, there will be next to no use of the grid connection in the winter months. So

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think that does bring us to the end

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series of questions that I had under

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this first section of agenda. Item, 3.1

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Yeah, 3.1 A, when

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we resume after an adjournment, we'll look at mitigation versus

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bng, biodiversity net gain in terms of a German

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are people comfortable with resuming at noon, which gives us, in round terms, 15 minutes. Unfortunately, there's not a clock in here, but hopefully most people have got access to computers and or watches that are fairly

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accurate. So hearing is therefore adjourned until God got noon. Thank you. Bye.