Planning Inspectorate
Arolygiaeth Gynllunio

Hearing Transcript

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Hearing:	Issue Specific Hearing 1 (ISH1) - Part 3
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AUDIO_TWEENBRIDGE_ISH_SESSION3_150426

Wed, Apr 15, 2026 2:44PM • 1:15:46

00:05
Okay, thank you.

00:10
It's now 1:15pm

00:13
and the hearing is resumed. And can I just confirm that live streaming has started.

00:23
Yes, good, okay,

00:26
so in terms of agenda item 4b I have a couple of general flood risk questions and two questions on the application of the sequential test. These will be directed at the applicant, but I would welcome views of the council's Environment Agency and other interested parties, should they wish to comment. I will be referring to the following documents. So could the applicant please be ready to show these on screen. They are NPS, en one,

00:58
the environment agency's relevant representation, which is exam Library Reference R, R, 009,

01:08
the flood risk sequential test and exceptions test,

01:13
which is reference exam Library Reference A, P, P, 186,

01:20
and national grid electricity transmission PLCs relevant rep, which is reference, R, R, 021,

01:34
okay, so firstly, could the applicant please just summarize? I know this information is somewhere in the application documents. But for everybody's benefits, everyone's benefit, just summarize the proportion of land

01:48
approximate within the order limits which would comprise flood zones, three, a, 3b, two and one.

01:58
Tom McNamara, on behalf of the applicant, sir, I'm going to ask Miss Alida to respond to that.

02:08
Good afternoon, speaking on behalf of the candidate, sorry, the applicant.

02:16
The majority of the site is located within flood zone three according to the environment agency's flood map for planning.

02:25
However, we have also looked at the

02:29
basically the environment agency's flood modeling data in depth. So part of the site is located in flood zone 3b a small section of the site associated with the river Thorn hydraulic model.

02:44
The site is also part of it is within flood zone three A and flood zone two.

02:51
Okay. Thank you. So a small section, do we know? Do we have an area or approximately, approximate area within 3b

02:59
we don't have the exact areas, but we can confirm that. Okay, is there a plan, a specific plan, that I can refer to,

03:09
distinguishes between three A and 3b Yes, we have provided plans in the we will actually we have updated their flood risk assessment once as we received the latest modeling data in February 2026, from the Environment Agency that flood risk assessment is due to be submitted as part of deadline one, okay, and that plan shows

03:35
the figures for flood zone three A and 3b Okay,

03:41
so you don't have a percentage for the proportion of the site located in 3b we can, we can provide that information. Okay,

03:51
all right, that's fine. Thank you. And so this update to the modeling, how has that affected

04:02
the conclusions of the FRA has it had any effect? No. There has been no effect. In fact, the 2025, updated model for the river Thorn shows much reduced flood extent for basically, for one in 100 year plus climate change allows as comparing to the previous data we had from the river torn as well as the 2023 river trend. Okay. Thank you. And if we could please display MPs, em one paragraph, five, point 8.41,

04:37
on screen,

04:40
I'd be grateful. Thank you so mpse m1 paragraph, five point 8.41,

04:47
states in full,

04:49
energy projects should not, not normally be consented within flood zone 3b or zone c2 in Wales or on land expected to fall within the.

05:00
Zones within its predicted lifetime.

05:04
This may also apply where land is subject to other sources of flooding, for example, surface water,

05:10
however, where essential energy infrastructure has to be located in such areas for operational reasons, they should only be consented if the development will not result in the net loss of floodplain storage and will not impede water flows. So that

05:31
paragraph is effectively saying energy projects shouldn't normally be consented in flood zone 3b unless there are operational reasons which justify its location in flood zone 3b and I'm not sure that that's been addressed in the application documents. I'm not sure it's really necessarily a flood risk assessment point. Might be more of a planning point,

05:56
but I'd be interested to know where that has been addressed that paragraph the requirements

06:02
of that paragraph,

06:05
and if it hasn't been addressed, could you address it now?

06:12
Tom on behalf of the applicant, so I think it is addressed within the planning statement,

06:19
specifically at

06:22
Section seven,

06:26
point

06:31
7.13,

06:36
and what I can do, sir, is put out this. I haven't got the specific paragraph references within that section to hand, I can offer two things. So one is that we can pull out those references

06:48
within our summary of all submissions of this hearing. And if we think that there is a need to embellish what we've said in there as to compliance with that paragraph of the NPS, then we can do that.

07:01
And again, we could do that as part of our

07:04
written submission of deadline one.

07:15
So you're saying that that specific paragraph is addressed and the operational

07:21
justification for locating in 3b is addressed in that section to

07:27
make them on behalf of the applicant, yes, sir, I think it is. I'm just on the

07:33
hoof. I haven't been able to find the specific paragraph references. I can't see any reference to operational, for example.

07:42
So can you leave that one with me? Yes, please, and

07:48
whatever the answer is, we'll provide the clarity that you need at deadline. One, okay, thank you. And would city of Doncaster Council like to comment on whether they consider there to be an operational reason for locating part of the part of the development in flood zone in 3b

08:09
i couldn't comment at this stage, sir, but we'll have a look at we have any thoughts, we'll let you know. Would anyone else North Lincolnshire? Do you have a view on that?

08:21
Paul Skelton, North Lincoln chair, I think similarly, we'll take that away. Respond to it in the LIR.

08:28
And

08:30

yes,

08:33
oh, I think you need to turn your microphone on.

08:39
David Hornsby, city of Doncaster, Council. It's just an observation, sir. I'm not a I'm not an expert on

08:48
flagress school or whatever, but we have a, as I mentioned earlier, we have an area

08:57
of farmland that has been intensely farmed and being controlled. And one of the controls has been to drainage. And my

09:11
observation is really that if you change

09:17
what's been the practice with getting on for 200 years,

09:24
there are potential problems for flooding as a result of the scheme.

09:29
I don't know whether that is something that could be addressed, but it's certainly something that is a consequence, or potentially a consequence of the of the scheme.

09:42
That's just the point. I want to Okay, thank you. So I think we're focusing specifically on NPS, em, one paragraph, five point 8.41, and whether there are operational reasons which justify locating part of the development in flood zone. 3b, does the environment?

10:00
Agency have anything to say on that particular point?

10:04
Danielle McLean Spencer, Environment Agency,

10:08
no, sir, we have no specific comments to make in respect of the operational need for development in flood zone 3b Okay,

10:17
all right, so I'd appreciate if parties could establish their positions on that point, and then perhaps that could form part of the local impact reports, for example.

10:29

And yes, if the applicant could direct my attention to whether it's addressed in the application documents, I'd appreciate it. Thank you.

10:38
Okay, moving on critical flood level. So the next question relates to the critical flood level, could the applicant please bring up the environment agency's relevant representation, which is reference RR, 009, paragraph, 7.8

11:01
Okay. Thank you. This states in part, table 10, two of chapter 10 and paragraphs, 5.29 to 5.39 of the submitted fra address the critical flood level, which is a residual flood risk recommended in North and North East Lincolnshire strategic flood risk assessment, otherwise known as the sfra. And

11:27
it goes on whilst we acknowledge that it is an unlikely event, we do highlight it as a recommendation of the sfra.

11:37
The fra does not propose to raise critical equipment above the critical flood level in terms of meeting the requirement of national policy statement em one which outlines that development must be designed and constructed to remain operational in times of flood, we defer to the examining authority and Secretary of State to decide whether this approach is acceptable with respect to managing flood risk.

12:07
I'd like to know what the applicant's view is on whether it considers raising infrastructure above the critical flood level to be necessary in planning policy terms

12:21
and in general flood risk terms. I mean, how common is that as a requirement?

12:28
Is it unique to this

12:32
strategic flood risk assessment area? If you could just give me your point of view on that, I'd appreciate it.

12:42
I a little speaking on on behalf of the applicant, I can, I can talk about the flood risk element of it, if that's all right.

12:52
Yes, we've had extensive discussions with the environment agencies and and Doncaster City Council, as well as the North Lincolnshire councils regarding this matter.

13:04
And our understanding is that this is an extremely cautious approach to use this critical flood level.

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It represents a catastrophic event. It's a highly precautionary residual risk scenario based on engineering judgment, rather than hydraulic modeling.

13:23
It assumes this, basically in this scenario,

13:27
it assumes where there are no maintenance of pump stations and flood defenses, where all, basically all mitigations stop working within the system of AX home, basically all of AX home system, and based on the discussions we've had more recently with the Environment Agency, our understanding is that it will take up to nine years for the oil of exome system to reach up to this critical flood level. So it's not an overnight flood event, and it does not represent basically single or standard design event, similar to normally what we use as a design event to set up to set our proposed mitigations against. So once this flooding happens, the entire area of Isle of ex home system would basically form a single, large flood sale, and the flooding will be permanent. It will be persistent, and it won't be self drained. So because the oil of ex home sits basically under the riverbed level, so it will need, it will depend on pump system to drain the entire water. So it will affect the entire wider area, not just this site,

14:42
as part of the

14:44
discussions that we've had with the Environment Agency, we basically agreed with the Environment Agency to set the proposed mitigation measures against the above the flood levels for one in 1000 year, plus 100 miles of free or.

15:00
Level, which is based on the model, the hydraulic model for the river trend and the river trend is already basically a very conservative model. The flood levels for this from this hydraulic model is already greater and deeper than the river tone model, so we've already used a conservative approach to make sure that the proposals are basically resilient to the flooding. I can justify why we haven't used it from the

15:29
engineering and environmental point of view, but if no, I think that's quite helpful. So the critical flood level is that unique to

15:39
the Isle of Axel because of the pumping station situation. That's right. So in what instance would that actually occur, if it would take up to nine years to come to fruition?

15:54
Why would that occur? Surely, that would have to be a conscious decision to switch the pumping stations off. Is that correct? It's Ronald speaking on behalf of applicant, yes. So it's basically, it represents a catastrophic event where there are no maintenance of public and public pump stations, or maintenance of flood defenses for the for the water courses. So it's a, it's a very precautionary approach,

16:23

assuming that there won't be any any basically maintenance or funding. And in such a scenario, presumably residential areas would be completely flooded, the entire area, the entire oil of Exxon, not just the site. So what say, Who strategic flood risk assessment is this, who produced this? It's it's a shared document. It's not a shared document. This recommendation comes from north and east Lincoln share strategic flood risk assessment as well as Doncaster City Council strategic flood risk assessment refers to it as well. Is that something that would have been produced by the lead local flood authorities? And okay, well, I'll establish the rationale in the moment. So what is the I know you will come to you shortly.

17:15
The Environment Agency have deferred judgment on that. But what is your view on the necessity, or otherwise, to raise above the critical flood level, just out of interest,

17:29
Danielle McLean Spencer on behalf of the Environment Agency, so it is a residual risk that we advise in line with

17:40
for sort of essential infrastructure developments to remain operational in the

17:46
event of flooding.

17:49
So we advise on this risk that

17:54
for these nature of development that they should aim to raise critical equipment above the critical flood level to ensure that in this sort of event of

18:07
the pumping system going down, that the infrastructure will not be impacted. And if I could just defer to my flood risk colleagues for any additional comments on that, are

18:21
there any comments from any of the Virtual Environment Agency attendees online on this subject? And I'd also like to know actually, whether the same advice applies to other types of development, like residential development, for example.

18:37
Yes. So

18:40
sorry, introduce yourself. Sorry, go on, that's okay. Paul Goldsmith speaking on behalf of the Environment Agency. So in terms of the critical flood level, the rationale behind the critical flood level is that the

18:55

art of vaccine is managed by a series of risk management authorities. So you've got the internal drainage boards, the lead local flood authorities and the Environment Agency, all of which have various pieces of infrastructure which contribute to the ongoing drainage of that low lying basin.

19:18
So for example, the IDB would, generally speaking, help with the drainage of that farmland

19:26
and low level carriers that would then go to, in some instances, pump stations that would then go into sometimes ordinary wards, courses that outfall into main rivers, which the EA deal With and eventually pumped back into the river Trent.

19:43
So it's very difficult to establish what sort of the pressures on the other. RNAs, risk management authorities, in terms of their budgets,

19:57
various infrastructure reaching end of life.

20:00
F and how much it might cost to replace that, and it's difficult to work out

20:06
what the localized impact of a loss of a pump station may be. So the only thing we we could do at the time was to apply some engineering judgment and look at a wide scale sort of catastrophic event where funding, which is already extremely large each year, from the environment agency's point of view, if we reach the end of lifetime for some of those major pieces of infrastructure, for example, key B, or something like that, which is a large pump station that essentially takes all of the water from the Three Rivers which the torn is part of, and pumps that in, back into the river Trent.

20:49
If we were to be unable to fund that, then, then you would start to kind

20:55
of see those, those cumulative impacts build up over time. It is very much

21:02
a residual risk. It's something which we hope will never happen.

21:08
But that's, that's the that's the rationale behind it. We are undertaking, we are hoping to work with the other RMAs it, but not until 2030 when we're looking to put together a model which will then be able to take into account what the loss of one or two pieces of infrastructure might look for localized impact. So it's going to be a lot more detailed. But until we've got that, we've taken this real broad approach.

21:36
So that's the kind of rationale behind it. Is very much engineering judgment, okay? And for in terms of how you apply the critical flood level, or how you would advise

21:50

the critical flood level applies to residential development. Is that the same with the same advice?

21:57
Would you Yes,

22:00
yes, yeah, we we, generally speaking, we would ask for finished floor levels to be raised to the critical for level with a 300 mil, 300 millimeter free board. So you'd be looking at a 4.1 meter AOD above ordinance datum finish floor level. Now it's depending on where you are in the Isle of action that can be quite difficult to reach because of the nature of the low lying land.

22:31
So there are other mechanisms in place where we do kind of look at each individual application its own merits. So have they taken a sequential approach to the building, for example, I put in all sleeping accommodation on the first floor above.

22:47
I think our concern with with this now, it's always, always been highlighted to the applicant, was, while it is residual in nature,

22:55
essential infrastructure is designed to be operational during times of flood. So we do

23:02
still, like we would do for a breach of a defense, for example, that is residual in nature. It's unlikely to happen in line with a development. However, we still ask people to, if that's a householder, for example, we'd ask them to mitigate to what those breach events would be. So it's the same type of approach

23:24
in ensuring they remain operational during times of flood. And in practice, how are you finding developers who are actually responding to this? And are these sort of recommendations coming to fruition

23:40
or not?

23:42
Yeah, generally, generally speaking, we do have,

23:47
the majority do reach the, at least the critical for a level of 3.8 meters, with some where they can't raise it that extra 300 mil, they will put in some mitigation, like flood proofing, or something like that.

24:03
So it is a common ask, and they do regularly get to that. We're a little bit more relaxed with commercial development, but we kind of, what we call paint the wet picture to cut to essentially say, you know, ideally you would raise it, but, you know, we can allow it. So it's things like

24:25
factories and that need level access for lorries and things like that, where we were a bit more lenient.

24:34
Okay,

24:36
so in effect, is this all about mitigating a potential disaster and reduce because obviously you've already got lots of development below that level. And in an extreme scenario where this occurred, you'd have to do you'd have to that would be

24:53
economically

24:56
damaging, and you'd obviously try to limit that damage.

25:00
From this point forward. Is that right? Yes, yeah, yeah. I mean, it's each, each ongoing year is a is a continual battle in terms of maintaining that, because every year that goes by we we are closer to

25:15
what is perceived at the end of life of various assets. Some assets are,

25:21
are deemed to be have gone beyond that already. So it's a lot of the work is to

25:26
kind of patch up and make, make, make best what we've what we've currently got, while we look at different strategies to for the long term, sort of flood mitigation, things like Humber strategy, that's that's ongoing at the moment, looking at kind of the source of of

25:46
the water within the Trent so especially when we're looking at tidal surges and things like that. Okay,

25:53
all right. Does the applicant want to come back on any of that comment? Lamar, on behalf of the applicant, thank you, sir. Yeah. I've got three points, maybe quite brief, but if one looks at the

26:06
NPS test here,

26:09
I'm at five point 8.36 and there's a list of bullet points. This is NPS, CN, one, sorry.

26:19
And five point 8.36, amongst other things, says in flood risk areas, the project should be designed and constructed to remain safe and operational during its lifetime

26:30
without increasing flood risk elsewhere. So that's the test,

26:34
and we heard from Ms salad add that

26:39
the mitigation is highly conservative. It's designed to a one in 1000 Year event. So so we say that that being the case. Clearly, the project is designed to remain safe and operational during

26:57
during its lifetime. On any reading, one in 1000 years, is, is a,

27:04
is a very conservative mitigation strategy, strategy.

27:10
And point three, I think we heard from Mr. Goldsmith that the critical flood level is difficult to reach in many cases.

27:19
And we talked about the fact that it represents a catastrophic flood event. So essentially, what we'd be saying is that we have an entire area that would effectively be underwater, houses, roads,

27:32
any number of things, and yet a

27:35
solar farm that would be

27:37
above the water and operational. And that seems like a curious result. I think we also need to talk about, and I'll maybe pass over briefly to ms alledan to just address what the implications would be

27:49
if we were raising the panels to that extreme level, because I think there are several

27:57
highly relevant factors that would come into play and would create more problems than it would answer. So I'll just pass over to Ms evident to address that point.

28:08
Rana halidad is speaking on behalf of the applicant. Yes, I would like to mention that as part of the updated flood risk assessment we have prepared, there's a plan that shows basically the general ground levels across the site and the wider area. So the levels across the site varies from minus point two meter AOD to say, 2.2

28:36
2.4 meter. AOD, so raising the levels, raising the lower edge of the solar panels to this 4.1 meter. AOD, that means that in some areas, the lower edge of the solar panels needs to be raised by nearly four meters. And this is basically it's not sustainable. It's not a standard practice in solar panel development. It would introduce substantial environmental landscape visual engineering and cost implications.

29:13
And so for this reason, I can, I can carry on and say how

29:19
it will affect in terms of increasing visual effects, in terms of having greater wind loading, longer pile lengths, higher costs, reduced generation efficiency due to altered panel configurations. All this will have an impact, and also, for instance, from the landscape point of view, the height of solar panels in the UK is also defined by the height of the edges, sorry, hedges that can be grown to screen them.

29:50
And we have increased this slightly on this project to 3.6 meter. So anything above that and beyond that is going to be make it extremely.

30:00
Difficult.

30:02
So I would like to say that we have taken a proportionate approach in this case, and which is adapted in line with NPS en one policy with basically

30:15
the edge of solar panels and the associated infrastructure to be raised above flood level for this one in 1000 Year, which is already an extreme design flood event, plus another 100 millimeters of free board, and that will ensure that the proposals remains operational and resilient to flooding.

30:36
Okay? Thank you,

30:39
Mr. Brooke, did you want? I mean, at the moment, we're talking about the very specific aspect of flood risk, okay, the critical flood level. Did you have anything to say on that? Yeah, Michael Brooks, off the drainage board, local farmer who has to put up with all this. You say one in 1000 years flooding, we've been flooded three times in the last 20 blooming years, the water cannot get from it has to be pumped three times, and

31:07
they're going to do away with four pumps in this area. So that makes it a lot more critical. If

31:15
we went out, if we didn't have kidby, we'd be under 15 foot of water. So you won't see a panel. Then would you

31:23
we're still subsiding. We on the edge, edge of the coal field. There's some land across from us. It's gone down 10 feet

31:33
at Dale's mount farm, and it's still going down on high levels and some of the low levels. And we get shrinkage from the peat at the moment as well,

31:42
we have four main EA drains to take the water east

31:49
the first one, the North soak, which is the north of the canal, which deals with all that at Twin bridge, where the wind turbine farm is,

31:58
Elmers pump there, on The boundary of the Moors is one of the first to be going

32:04
under rationalization.

32:07
And that's come through to me at a Trent meeting

32:12
that drains all the water. So all that water at that side in the north soak has to go towards kidby at the north side of the canal, and you'll only be left with the EA pump at New Zealand and the major pump,

32:27
and coming across to high levels, they're doing away with high levels north the coal board pump, if they can get past

32:36
the Doncaster Water Act, what was put in for subsidence to help farmers against flooding.

32:44
They're going to do that one that

32:47
that middle section on high levels goes east to dirtness pump. Okay? They're going to do a dirtness pump because it's, it's ready for refurbishment now, and that's going to be the next big EA spend

33:00
to the east of that

33:03
is the Belton Grange one, which I mentioned yesterday, right on the which is on the crap soil

33:11
the crawl end of this project

33:14
to do away with that pump, that land will be underwater straight away. And that's all the water to the north

33:21

of the Hatfield waste drain, what comes across from the motorway.

33:26
And then we'll go, finally, on to the south side, where most of my land is of the motorway.

33:34
And that goes to low levels pump at Santos, and they're going to do away with that. And so all the water is going to have to have to go to dirtness. Well, it can't cope at the moment, because 14 months ago, the engine drain that takes it onto the Three Rivers was full. So he switched dirtness off. So east of Green Bank and down on the on the Santos road, we were flooded out

33:58
right with that critical at the moment, we can't we've got to get the water away every every drainage board diet has to be done away. If you're going to plant hedges, don't plant hedges next to drainage board diets, because we need the view to get the clean them out, all the silt and everything. So from the green tree, it's the western end of high levels and low levels that's going to be really seriously affected.

34:25
Not kidding you. Okay, no. Thank you very much

34:30
to the applicant. Do you want to come back on that? But I think yesterday, you said there were no plans to rationalize the pumping stations, so that must be a separate process that isn't part of this application. But did you want to respond on any of the other points? Tom McNamara on behalf of the applicant, thank you, sir.

34:51
I did say that yesterday. We have done a bit of research overnight just to see what we can find about that. So I may pass over to Ms alidad for that. But.

35:00
The fundamental point is that this scheme does not increase, does not present a significant flood risk,

35:07
and doesn't increase flood risk elsewhere. And so any proposals related to the switching off of pumping stations that are those, those proposals are exterior to ours. We're not involved in doing any of those things, but I'll pass over to Ms aldad, perhaps just to hopefully provide a bit of clarity about what's

35:31
going on there. Thank you, Ronald, that is speaking on behalf of the applicant.

35:35
Yes, I would like to reiterate that the proposals this scheme is not increasing flood risk elsewhere. We have basically designed this scheme to ensure that it's above the flood design flood level, and we are not basically proposing ground raising and what with regards to pumping stations. We've had extensive consultations with the Environment Agency, with the councils, with the IDB and

36:03

removing of a pumping gas station has never been raised or discussed, so it does not concern this particular site. But as my colleague mentioned, we basically we've done some research overnight just to understand what's the context, and based on the publicly available data. I understand that, based on the oil of ex home flood risk management strategy, the oil of ex home and North Nottinghamshire water level management board, with the IDB, we are in the process of rational rationalizing, rather than simply removing pumping stations to ensure long term cost effective flood protection. So the strategy in that document emphasizes rationalization of smaller stations to make the system more efficient, rather than simply removing them. If they are removing any pumping station is the ones that are basically near their near their end of life expectancy.

37:02
So and they're also looking to convert some of their systems from main rivers to ordinary water courses, to manage them locally. That's the information we've we've found about the wider area, but there is no

37:15
specific information about about the site, and this does not apply to the site, okay? Thank you. And to the Environment Agency. I mean, is this a multi Are you involved? Is it a multi agency situation? And presumably you take, you take any plans like that into account in assessing a development like this. Is that right? Danielle McLean Spencer, Environment Agency, if I could defer to my flood risk colleagues to comment on

37:49
anything regarding professionalization,

37:53
please, yes.

37:55
Are there any Environment Agency

38:00
participants who are participating virtually, who would like to explain what they know about this rationalization approach whether it's relevant to this proposed development and whether it something that you would take into account in your

38:16
assessment of the effect of this development. In any case,

38:21
Sarah street Environment Agency, I might ask my colleague, Paul Goldsmith to come in on this as well. There's

38:29
various projects within the environment agency at the moment, within our team to look at the flood risk across the Alabama home and rationalize the pumping station network to make it more sustainable into the future, I think, financially and with carbon emissions.

38:47
So I can find out more information about that and get that information to you. The

38:54
in terms of assessing individual applications, we wouldn't consider the pump rationalization project, because

39:02
that's a separate project. When

39:05
we're looking at development, we just look at the critical flood level, because all the pumps, as Paul's Goldsmith, my colleague, was saying, because they're all interconnected, it's very difficult to understand the impact of changing different pumps within the network. So if you know one pump changes, then the levels of the water around that pump would change, which has knock on impact. So

39:29
at the moment, our modeling has no complexity in it. It's just this set critical flood level which which represents a worst case.

39:37
But as Paul mentioned, we are hoping to do more modeling which provides a mixture of scenarios, which shows a bit of a more detailed picture of flood risk across the Alabama. I don't know if Paul, you've got anything to Well, hang on. So in that context, you mentioned a critical flood level, in the context of the rationalization. So it's not just.

40:00
Critical fellow doesn't just relate to the catastrophic event. It's also part of

40:07
proposals to

40:09
rationalize the pumping stations and a to a tool, if you like. Is that right or not?

40:16
So the net the area is drained by the pumping network.

40:22
So the pump rationalization project is about managing that network of pumps. The critical flood level represents a complete breakdown of the entire pumping network over a long period of nine years. But that's the only

40:38
flood height that we have that represents a pump breakdown scenario. So the critical flood level represents a catastrophic pump breakdown scenario. But we don't have any more fine detail of flood scenarios for changes within that pumped network, is what I mean. I think what I'm getting at is, if you're, I mean, I don't know, you have no one's answered me on whether it's a multi agency approach, or whether the EA are responsible or but this whole rationalization

41:09

approach is it, is there potentially going to be a scenario where you're looking at, well, we're going to turn this pump off, and therefore this whole area is actually going to be underwater, but it doesn't really it doesn't really matter, because there's nothing there, and the fact you've got this critical flood level, all that's aimed at avoiding scenarios where there is development in that area

41:33
to see, see what I'm saying. Yeah, I'm sure there would be, not, there would not be an intention within the pump rationalization project to

41:43
to increase flood risk to anyone. It's about maintaining, maintaining flood protection and pumping. But I don't know the detail about and I'd have to find out more. So there's not, it's not some strategy where you're looking at, well, what can we effectively get away with? It's more we're going to maintain the current situation, and we're going to have to do it

42:04
by, you know, different means, rather than That's my understanding. But there might be other people here that, like from the

42:13
local councils, that are involved, because it's multi partner work. I can see Paul's, come on.

42:19
Yeah. Paul Goldsmith, Environment Agency, the I think that the whole point of the the

42:28
rationalization, is to, like Sarah said, We, it wouldn't be to look at something and think, right, we, we're just going to turn, we're just going to turn this pump station off. It would be to weigh up what the potential impact would be to third parties. But it also looks at things like where you've got one of the larger pump stations that you are

42:54
looking at more efficient, more efficient pumps, for example, that could pump a greater degree of water for a longer period of time,

43:05
and being able to take some of that burden that was on the smaller pump station. So there's quite a lot that goes into it, but the intention isn't to once that's gone, that means that we just leave that area to to kind of rack and ruin it's it's to assess what would happen across the network and then work out the best solution that is the most cost effective and least polluting.

43:33
Okay, all right,

43:39
okay, I, I'd like parties to provide me with as much information as they can on this subject, if possible, in their representations,

43:49
written representations,

43:52
because

43:55
it sounds like quite a unique flood risk issue, and I want to know,

44:01
I want to know, I want to understand the association between these rationalization proposals and the critical flood level, and how, whether they're related in any way.

44:15
Because at the moment, the critical flood level is being pitched as a sort of Armageddon type event, but I'm not sure that's necessarily the case. I think it sounds like it's being used as a tool to assess economically, well, what's the impact of x? What's the impact of y? So I'd like to understand a bit more whether I'm right or wrong about that from all all parties, really.

44:41
So I think we'll leave. Yeah, do you want to add something? Miss Brooke.

44:46
Samantha. Brooke, sorry, I just wanted to just put in when they've done their calculations, what are they basing as the base level for Greenfield runoff?

45:00
Rate, because,

45:02
because it's so low lying and heavily pumped when they're doing their calculations to say there won't be an increase to run off rate, what? What is the baseline of that, that they're going from, because the runoff rate there is entirely different to a nationalized just general runoff rate,

45:21
okay, I do think that's a slightly different point, but I was going to wrap that up, that critical flood level issue up.

45:31
Could the applicant respond on that, on that point regarding runoff time

45:37
out of our on behalf the applicant, it's a technical point. I'll just we can provide an answer Yes. Miss all the dad's going to do

45:44
that? Ronald speaking on behalf of the applicant, yes. So we have used Q bar in our calculations in the hydraulic model, which is one in two year, and just to make sure the runoff has been basically attenuated to one green Greenfield runoff rates.

46:00
This calculation has been provided in the flood risk assessment, okay, right?

46:07
And also just point on, introduce yourself every month, sorry. Just another point I wanted to make, just in case we're moving off from

46:18
there is extensive underground drainage pipes across the fields that they're going to be putting the solar

46:28
in

46:30
that unmarked so majority of that older, unmapped drainage system throughout the field, when they're doing The cable trenches, they're going to damage the existing drainage system within each field. So just seeing what is going to happen, how are they going to mitigate that, that they haven't done the damage, and if they have done the damage, to how they can repair that, just to make sure it doesn't back up the water, because dad's fields are on their own. Jason fields and it's that's going to cause a problem. Thank you. Okay, yeah. I mean, Mr. Brooke raised this yesterday, underground pipes being affected by the development, presumably, piling of panels and things like that. Could the applicant provide a response on that?

47:21
Ronald speaking on behalf of the applicant, so we will, basically, we will do surveys, GPR surveys at the time, just to ensure that there are basically no pipes, etc. So all of this will be assessed as part of detailed design. All the surveys will be done. Okay, so Mr. McNamara, is that controlled in the DCO? Are those surveys controlled anywhere in the DCO? Tom

47:47
McNamara on behalf of the applicant,

47:50
so I'd need to check the answer to that. But yes, I did refer to the outlying construction Environmental Management Plan, which does include a number of measures relating to potential impacts on drainage infrastructure and ensures that sensitive construction techniques would need to be deployed. And that document is a secured document, and compliance with it is a legal requirement of the order, okay, so Mr. Brooke

48:18
and Miss Brooke, these pipes? Are they an unusual feature? Is it to do with the drainage situation?

48:28
Michael Brook, it's this area with it suffering from some sadness and such like that. There's been various schemes over the year. When I were a nipper hour, I put them in by hand. I was telling some of these gentlemen earlier, and now we're actually draining some today that's subsiding. We've got the machine and again, the Black Bull on the 18 today, well, I'm still sinking.

48:53
And these pipes are of they've been put in over generations. And some of these old ones work like the crazy. They were better than some of the new ones like, but they only need to if they get silted up and

various things like and with, with the red ochre in the peat and such like that, it gets in and it clogs all the system up, so we have to jet the pipes out regular.

49:17
But no, it's, it's probably more intensely the western end, where it suffers from society, will be more intensively under drain than probably anywhere else in the country. But these parts are these pipes running below the fields. It's not just your field every 12, every 10 or 12 meters, yeah. So every single

49:39
field, every field on that on this map will

49:43
thank you. Thank you. So if the applicant could make sure that they've identified whether suitable and sufficient surveys are stipulated within the CEMP or elsewhere and how they would be can.

50:00
Troll. That would be

50:02
useful. That'd be great. Thank you. With that within that context as well, okay,

50:10
sure, yes, we've heard that. Just follow one moment.

50:16
Yeah, I've just, I've just been formed, and it's in mind what I said yesterday. This is, this is something that we dealt with at the we dealt with at the post content stage, pursuant to the management plans that are secured by the order, but we can, but I think it's quite unique, yeah, so it needs to be controlled in some way, in a specific Yes, and it will be, sir, it's just that I, I will need to pick out the specific references for you. All right. Thank you very much.

50:46
Yes, think

50:50
Mr. Hornsby, David Hornsby, city of Doncaster, Council. Thank you, sir. It's just a number of observations again that I would like to make and probably seek some clarification from what previous speakers have said.

51:07
Unfortunately, I'm a commoner, gardener, surveyor, so say My expertise is not in the theory of flooding, but also but I do have practical experience of field drainage in my professional capacity, or past professional capacity, I can echo really what Mr.

51:30
Brooks has said, that systems of drainage evolved over many generations.

51:37
But one point I would like to just clarify, if the applicants could clarify, talking about raising the

51:48
panels by four meters

51:51
is above a standard figure. What I'm trying to get at is the height of these things

51:57
when they're in situ. Because obviously this does have a bearing on the on the landscape, the visual impact and whatever. So that's one point that I I've got. And

52:11
the next point follows from what the gentleman from the Environment Agency mentioned something about off site works.

52:22
I I'm not certain whether the scheme would involve off site works for

52:28
facilitating better drainage, but also the the other point that I I need some clarification on is whether or not you're going to put in or the applicants going to put in additional drainage into the field to take off

52:46
run run off water from the panels, which is going to be concentrated in certain areas, rather than what you've got at the moment is a steady

52:58
run off of water, Brain water on the land, you're going to get different areas where there's going to be more water put on to it. And I think that's an important aspect, and whether or not, in doing that, you're going to interfere with the with the ditch drainage as well. So they're just points of clarification. Okay. I mean, I think a lot of those points are addressed in the applicant's documentation, but if you could respond with reference to those documents, that would be useful. Thank you. Thank you, sir. I can definitely answer one and 2.3

53:37
around temporary date drainage proposals I might look to

53:41
to

53:43
point one. I think, I think the issue raised here was whether the raising of the panels to four meters or I think, I think this is bringing back the critical flood level issue.

53:57
My understanding is that the measure against which one considers height there is against ordinance or Statum.

54:04
So that's the reference point. But the fact of the matter is, we're not proposing to raise the panels to that height. So we haven't assessed the landscape and visual impacts of raising panels to that height.

We've we've assessed them differently based on the one in 1000 Year event plus 100 mills of freeboard, which we say is sufficient, more than sufficient, in fact, to ensure the scheme will be,

54:29
will be resilient to flood risk during its lifetime.

54:34
Point to

54:36
there are no off site works proposed to facilitate better drainage. All of our proposals are

54:44
on sites. And then point three was around temporary depth drainage proposals, and that's where I'm going to need to turn to

54:56
miss Ali dad, speaking on behalf of the applicant. I.

55:00
And in terms of raising the edge of solar panels, as we said, this is the point we said, about critical flood level, it's not sustainable, and I agree we we don't raise the panels to that level. We raise the panels to one in 1000 Year design event, plus 100 millimeters of freeboard, as was agreed and discussed and agreed with the Environment Agency

55:26
in terms of drainage. Yes, we are not proposing to have additional drainage for for the solar solar panels themselves, it's maintained grassland, and the grassland basically acts as

55:41
maintaining betterment and basically it drains the water so it doesn't need to have that extra drainage. We are not proposing to introduce near New drainage ditches across the site. The

55:55
drainage will be basically captured and it will be discharged into the into the water courses

56:02
at Greenfield runoff rate

56:06
and the drainage strategy. I just wanted to add that it's basically is included in the flood risk assessment. Part Two of a flood risk assessment, a, PP, a, PP, one or nine documents so it can default. Explanation is there?

56:20
Okay. Thank you very much.

56:25
Yes. Would you like to introduce yourself? Hi

56:28
Mike Smith, I'm the Lead local flood authority for North links Council. Sorry, I've I've never sat in one of these before, so I won't show over what the process was to speak, obviously, to consult my colleagues. Obviously, we're well, the applicant's proposing not to abide by the critical flood level. So effectively, we're going against like our designated and assigned sfra, which has been discussed intensively with the Environment Agency. We're still standing by the critical flood level by ourselves, and obviously deferred to yourselves, but we enforce that extensively for housing developments. We obviously give a bit of leeway for agricultural and commercial because they're obviously less less vulnerable under the NPPF annex three. But basically the PPG explicitly states that all the central infrastructure within a flood zone should be safe for the lifetime of flooding, and whilst there is a residual effect from the critical full level potentially coming into fruition, this is a substantial development. I mean, it's over 1800 hectares, I believe. And judging by a bit of quick calculation, I believe maybe around 100 hectares that could be in flood zone 3b

57:40
There's not really any proposals to mitigate against the critical follow if that comes in. I don't know how many people or how many developers businesses lives this could affect if the development fails, but I believe there's about 19,000 people or homes or businesses that are in the Isle of Axel, which should obviously be devastating and catastrophic. But then if you equate that into another potentially hundreds of 1000s. Hundreds of 1000s of houses that are left without power from the size and scope of this development failing from flooding, I guess the question is, is, is this the correct place if you can't mitigate against the relevant flooding to be placed in this development?

58:17
Okay? Thank you.

58:19
Does the applicant have a response, and could you consider the

58:26
planning balance and

58:28
critical national priority scenario so in the event that

58:36
you would deem to not meet the local, locally stipulated requirement, whether it's policy requirement or otherwise,

58:45
what is the overall balance taking into account critical national priority?

58:53
So is it the case that, yes, we haven't raised the critical flood level? In an unlikely scenario, there would be this catastrophic effect. But in any case,

59:08
NPs em one and em three refers to critical national priority which outweighs so is that something that would be outweighed in the planning balance in any case,

59:22
so I met them, naught on behalf of the applicant.

59:28
Can I just address the first part? Sir, I'm not. I'm not totally clear where on the question, but

59:35
the fact is, we, we have proposed to raise these panels, as I say, to one in 1000 year plus 100 mil free board. And that has been agreed with the Environment Agency.

59:49
We've talked in in some detail about the implications of going higher than that.

59:55
And the reality is, if we did go to those levels, one has to consider.

1:00:00
That it would be viable to proceed with this scheme. And so if the question that is can be framed in that way, sir,

1:00:09
that would mean if the viability of the scheme was undermined by having to raise the panels to that height, then this project would not be able to contribute to the Christian critical national priority that exists for solar there is it? There is a real risk of that, as Miss salida stated,

1:00:27
and so fundamentally, what we are saying is that the scheme is resilient to flood risk during its lifetime.

1:00:36
Okay, thank you. I think my point on critical national priority is that perhaps you can get your planners to

1:00:47
explain an even if scenario. So even if we accept this argument

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that we should be above this level and we're not,

1:01:01
we still think that the development consent order should be made because of what the NPS em one and three say about critical national priority. So if someone could work that

1:01:13
balancing judgment and submit it to me, I would appreciate it. Tom, at the moment, yes, I understand the point you're making now. So the answer that is yes, CMP does outweigh a highly

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I would even go beyond saying it's highly precautionary. I would say it's

1:01:35
it's an event that has such limited prospect of occurring that it, that, it, it's beyond the realms of what should be reasonably required in this case or or in other cases, potentially,

1:01:48
we can certainly provide that clarification in writing. That's what the answer will be, sir, I think. Thank you very much. I think we'll move on from critical flood level. I've got one more question on flood risk. It's associated with the sequential test. So the applicants sequential test and exception test, which is referenced a P, p1 86

1:02:13
if you could bring that up on screen, appendix one of that document.

1:02:36
Okay, thank you.

1:02:39
Can you get that? Is there a way of getting that full screen?

1:02:55
That's great. Thank you.

1:02:58
So this shows a very specific location labeled as site selection start point,

1:03:07
which I think is the light blue circle,

1:03:11
almost central in the in the figure, it also shows the 10 kilometer search area based on that start point and but presumably this is the anticipated location of the new substation referred to in the application documents. And obviously, as we established earlier,

1:03:34
the applicant does not know where the new sub new substation will be located, and

1:03:44
has also admitted that the

1:03:49
national grid electricity transmission PLCs obligations are not geographically limited in terms of where they need to build that new substation. So on that basis and that uncertainty over the precise location.

1:04:05
How can the applicant justify that that search area?

1:04:09
How can that search area be justified? Tom

1:04:15
McNamara, on behalf of the applicant, I have Mr. Roberts

1:04:21
on hand who can provide some clarity there.

1:04:28
Good afternoon, sir. I'm speaking on behalf of the applicant's My name is Mr. Gareth Roberts, so in terms of the sequential tests and exceptions test, yes, you are right that in terms of the starting point for the area of search is to the immediate east of the auto limits.

1:04:49
I was asked, as discussed earlier in the day, that that is based on the discussions which is ongoing between the applicant and enget.

1:05:00
Yes, what I will note is that in terms of the Angus

1:05:04
representation, they haven't said that the point of connection is not going to be to the east of the site. What they have said is that they're not going to provide the substation, because they haven't provided any commentary on whether or not this is going to be, this will be the location. So I think that is a key material consideration here. So in terms of the applicant's understanding, it has not changed since the application went in, and

1:05:33
in terms of discussions, is still

1:05:36
an area to the east of the Ord limits. I Duncan,

1:05:44
okay, but

1:05:46
this, this search radius, is based on the premise that that is the substation location. Is that correct?

1:05:57
So Mr. Gareth Roberts, on behalf of the applicants. Yes, it's a general area of search. Yes,

1:06:05
we don't know that that substation isn't going to be located

1:06:11
10 kilometers away. For example,

1:06:17
Tom McNamara on behalf No, sir, we don't. I think what you're driving at here is, why have we put the circle in that area when in circumstances where we don't have clarity whether that that's where it's going to be? And the simple answer that, sir is that this document was based on on

1:06:32
that assumption, because that's where the discussions were at that point in time. The reality is that we don't have any clarity now, so we have no basis for changing that,

1:06:44
that starting point, it still seems to us to be a reasonable,

1:06:51
a reasonable View to take, because it encompasses a wide area. So

1:07:14
sorry, Sarah, can you hear? Yeah, that's fine, at least battery powered. I think there might be, there's no cable coming out. Speaking so much, your battery has run

1:07:26
out, perhaps it's heard enough of me for one day.

1:07:32
Where was I? I think I was saying that

1:07:36
in the absence of any clarity as to where the point of connection is going to be, we don't have any basis for putting it somewhere else. We still think that 10 kilometer search radius is a wide area. We notice as well that even

1:07:49
if you were to assume it was somewhere else and that the 10 kilometers should be in a different area, or you expand it, we've got some urban settlements that make doing that problematic. So for example, you've gotthalk to the east, which act as a bit of a hard barrier to extending the search out to look at sites in that location. So we still think that that is a reasonable approach to take, in the absence of any

1:08:14
any clarity from enget about its substation siting policy.

1:08:21
Okay, I think as a general point, I know you're updating or you're providing a document in relation to the ES implications for ES in terms of the grid connection date, I'd also like some sort of document which addresses the uncertainty over the point of connection and its bearing on any

1:08:42
policy test which requires

1:08:46
an area of search or sequential approach. So I think obviously, in this instance, sequential tests for flood risk, and there may be other instances as well that would be useful

1:09:00
Tom at the moment off the applicant, yep, we can do that, Sir, I don't think that'd be difficult to do.

1:09:05
Okay, thank you. I do want to move on

1:09:10
from flood risk, because we haven't got a lot of time, and we still need to discuss cultural heritage and biodiversity. So

1:09:22
I would like a short break before moving on to cultural heritage. But does anyone have anything else to add on flood risk? Yes.

1:09:31
Hi Mike Smith from North links, Council,

1:09:35
sorry, I won't take up much time. It was just a couple of points I was raised previously about drainage channels underneath the fields and whatnot. It is quite standard practice to have extensive drainage, drainage channels underneath a lot of, majority of fields when it's been converted from previous uses into agricultural but because of the way the Isle of axle is and like it's been mentioned multiple times, is if you left it to be back to its natural standard, it would just flood and.

1:10:00
Would refill as a basin and become peatland again. So these fields are extensively drained underneath. And normally, solar panels don't generally have a bit have much of an increase in surface water runoff. They'd concentrate flows from the previous from the base of the panels, which are obviously, maybe all of them slightly and go into water courses. But if you then concentrate flows in in areas such as the Alva axon, you potentially bypass a lot of these during these perforated pipes that are underneath the agricultural fields and concentrating in areas and increase flood risk, just by default of doing that, because it's not dissipated along a massive area like it would be, not natural, it will say, but semi naturally will say,

1:10:39
if you then increase, if you put 80% of that becomes panels on the field. It might have a flow path in the front, but you're effectively concentrating them flows to go through, and you're bypassing a lot of these drainage channels that will still be present under the fields, even after the development, which will increase flood risk and will increase the flood risk in the drainage channels and have a subsequent impact of potentially flooding the water courses that are already has been mentioned quite heavily, stretched in a lot of cases, and flood quite often.

1:11:10
Okay, thank you.

1:11:13
Let's just hear from the applicant first in response. So the unless did you want to add something to that might be easy to do that. So I was just going to introduce yourself. Sorry. I was just going to add in at the end finish there, that it doesn't take scientists to work out that if you're putting solar panels across these fields, you're reducing the amount of permeable would you class it as land? So the runoff rate, I know they say in their calculations, their calculations think are a bit rich, but the runoff rate is going to increase. They're going to put in these new ditches that are going to go into the existing drainage

system, and our fields that are adjacent to it are going to be paddy fields in the event of heavy rainfall. And who's going to be

1:12:01
responsible for that, and we've lost fields and acres and acres of crops.

1:12:07
I suppose a bit of paddy field at the bottom of solar panels doesn't matter to you guys, but not getting the water away for us means a great deal. And so you're going to really put pressure on us more for the it doesn't matter if the solar panels, you know, is a bit damp and muddy underfoot, but it does to us. Okay? Thank you. I take your point. So could the applicant respond specifically on the drainage, the runoff point and where far the

1:12:37
below ground drainage

1:12:40
systems have been taken into account.

1:12:50
Ronalita speaking on behalf of the applicant in terms of the pipes mentioned earlier. This is, as we mentioned, it's something that we will be looking at during construction. It will be mapped, and they will either be maintained or looked at those pipes. So it's something that they will be surveyed, surveyed and mapped at this at that stage. So we are proposing new ditches

1:13:15
in terms of impermeable areas. Those basically areas that we mentioned, they are not impermeable. They are sitting on basically 300 millimeter of permeable sub base. So all of those areas are basically permeable in nature. So low ground storage will be accounted for, basically for the best and substation areas to make sure, to ensure that any, basically, runoff is stored within those storage units before being discharged into the water courses.

1:13:53
And the detail, as I mentioned, is basically included in the drainage strategy as part of the flood risk assessment report.

1:14:00
Okay, I think on the runoff point, I think Mr. Smith was suggesting that it's not a typical runoff scenario because of the existing below ground drainage and the concentration of the existing runoff, and the relationship between that and

1:14:21
likely run off from the panels. Is that correct? So I don't know if that's something you can address. Perhaps in writing, we can come back and write, okay, that would be good. Thank you very much. I think we'll move on now. There's plenty of time to make further representations of flood risk, and we may well have another issue specific hearing got the local impact reports coming on that,

1:14:48
but if we don't move on, we're not going to get through

1:14:52
would you like to say something just Andrew shiragoski Council, very, very briefly, so, because I want to carry on the discussion, but I think just bearing in.

1:15:00
Mind the discussion we had in this morning's session

1:15:04
and the discussion we've just had now in relation to the area of search, I think we'll probably make some additional comments on it. Yes, I appreciate want to move on, but we'll so make points based on what I've just said in terms of area of search, and it's bearing on certain tests and policy tests, okay,

1:15:24
right? So I think we will have a break. Cultural Heritage is coming up.

1:15:32
We'll reconvene at quarter to three. The hearing is now adjourned. Thank you. You.