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Wed, 5/26 12:19PM • 1:29:58

00:04

Good morning and welcome everybody to today's issue specific hearings 16 for East Anglia, one North and East Anglia to offshore wind farms. Before we introduce ourselves, can I just check with the case team that you can hear me and that the recordings, live streams and live captions have started.

00:24

I can see you and that recording, see and hear you and the recording has started. And the live stream is working as well.

00:34

Thank you very much, Liam. I'm sorry to interrupt introductions. I am Caroline Jones, a member of this panel, which is the examining authority for the East Anglia one North offshore wind farm application. And another panel which is the examining authority for the East Anglia to offshore wind farm application. I am in the chair today and will be leading the questioning in respect of agenda items three. I'm now going to ask my fellow panel members to introduce themselves.

01:01

Good morning everybody. JOHN hoppy here panel member. Today I'll be leading the questioning on item two and item three d Thank you.

01:11

Good morning, everybody. My name is Ren Smith. I'm the lead member of these panels. I will mainly be observing today but may ask questions as and when they arise.

01:23

Good morning, everybody. My name is Guy Rigby, panel member also. And I will also be observing today but may ask questions as they arise. Thank you.

01:36

Thank you very much everyone. You will know that the full panel is not here today. And this is to allow the other member of our panel to continue working on other matters that are not being dealt with in the hearing today. Can I also introduce our planning Inspectorate colleagues working with us on these examinations. Liam fedden is leading the planning Inspectorate case team today and you will have met him in the arrangements conference this morning. Liam is accompanied today by two case officers, Kj Johansson and Caroline Hopewell. The published agenda sets out our and your reasons for being here this morning. And that is to hold an issue specific hearing on the proposed substation site with particular regard to the substation designs, principle statement and flood risk and drainage. At this

point, I would just like to reiterate the preamble in the agenda that is that issue specific hearings to 411 underwritten process have examined aspects of the proposed substation sites for the projects, and that these hearings do not intend to recover such areas. Their primary purpose is to consider the latest evidence and developments relating to design flood risk in drainage matters, and any resulting effects on matters such as landscaping, and historic heritage. I'm now going to hand over to my colleague John Hockley, who will ask our participants to introduce yourself.

02:50

Thank you very much, Mrs. Jones. Morning, everybody, again, John Hopkins, a panel member. Shortly I'll be running for our list of participants and asking them to confirm who will be leading their contributions this morning. But before I do just a few things to note, today's hearing is being live streamed and recorded. The recordings that we make are retained and published. Therefore they form a public record that can contain your personal information, and to which the general data protection regulation applies. Does anyone have any questions about the terms on which our digital recordings are made?

03:20

Not seeing any raised hands or seeing or hearing anybody so we'll move forward on the basis that that's all understood. Thank you.

03:27

Turning to this morning's meeting, I will now ask the participants to introduce themselves. If organisations attending today have a number of representatives attending could I ask that you nominate a lead representative to introduce your team on behalf of your organisation?

03:41

It would also be helpful if you could let us know at which point in the agenda you anticipate participating. So firstly, could I check the name of the main speaker that we have representing the applicants today please?

03:53

Yes, good morning, Sir Colonists. I'm a partner in the law firm of Shepherd Wedderburn, and I'm here appointed on behalf of both Africans and instructed by Fiona Coil of Scottish Power Renewables, what are posters, I've got a number of parties who are going to be potentially participating today. What I propose to do is introduce them at the relevant sections when they're likely to speak, rather than having a lengthy initial session. Thank you. Thank you very much, Mr.

04:21

Okay, so if you could move on now to Suffolk County Council, please.

04:28

Good morning, Sir. My name is Michael Bedford Queens Council. I'm instructed by the county council and I will be joined today by Mr. Matt Williams, who you heard from before the flood drainage engineer

with county council. We expect speak primarily on item three, but may have something to say on item two.

04:52

Thank you very much. Mr. Bedford. Hi, good morning.

04:56

For East Suffolk council today, please

05:00

Good morning, sir. My name is Isabella Tefal, and I'm a barrister representing the Suffolk Council. And I have a number of council officers with me who may contribute also, would you like me to go through their names now? Yes, please. Yeah, that'd be useful. Sure. We've got Naomi goal to you've heard from before senior energy projects officer, Mark Kemp, who's the Environmental Protection officer, Nicolas Newton, who's the landscape manager, Carolyn Eastman, the design and conservation officer and James Mayer, the ecological officer, and we intend to speak on agenda items two and three. Thank you very much, Mr. For and goodbye.

05:40

Next on my list, I have Friston parochial church Council, please.

05:48

Good morning. My name is Mark Lauder. I'm the rector of the old sanderlings benefits, which includes Friston and therefore I'm the chairman of St. Mary's Kristen's parochial church Council.

06:02

I'll be joined this morning by Simon Ive who is the secretary of St. Mary's Kristen's parochial church Council, and we intend to pay particular attention to item three under historic heritage.

06:16

Thank you very much, Reverend. Good morning.

06:19

Next on my list, I have a Stacey's please.

06:24

Good morning, sir. My name is Richard Turney. I'm instructed by Stacy's to represent them and the wider local community.

06:35

I have with me today, in particular, was there's a wider group in particular three experts which are Mr. Clive carpenter, who deals with flood risk and drainage, Michele Bolger on landscape, and Richard Hoggart dealing with heritage matters.

06:53

Thank you very much, Mr. Attorney, and good morning.

06:57

And then finally, on my list, I have C's please.

07:05

Good morning is Gary Gill making on behalf of C's on my own state. And I'm here mainly to them. But I do reserve the right to speak if there is something. Thank you very much. Thank you very much Miss Gilmore, and good morning.

07:25

Okay, that's everybody I had on my list. So I'll just I'll just double check if there are anybody who's here who I have not introduced yet, please.

07:36

No. Okay. We'll proceed then. Thank you. As just as a general reminder for all our speakers today, each time you speak if you could please say your name and who you represent. And this will help anyone watching the hearings to follow the proceedings. Anyone who's not directly in a session but is observing it is welcome to set out any observations about what they hear today in writing by deadline 11, which is Monday, the seventh of June. Okay, the introductions are now complete. And I'll hand back to my colleague Mrs. Jones to lead the next part of this session.

08:03

Thank you, Mr. Hartley. This morning, we are holding issue specific hearing sixteenths for both the East Anglia, one North and East Anglia two projects in parallel, there is a single agenda for both hearings wish which was issued on the 12th of May, as we have done in previous hearings to make the most efficient use of the time, we plan to deal with the two applications together as we work through the agenda. But we do have the discretion to discuss any matters that are unique or specific to just one of the applications as they arise. In terms of our hearing today, we plan to have a short break at around 1130. And then we will look to take a break at lunchtime if the content if the hearing continues until that time. So before we move on to the main business of the agenda, does anyone have any questions of a preliminary nature about today's hearing?

08:51

not seeing any hands raised so we'll assume that means we can now move on to item two which is designed matters. And I will hand over to Mr. Mr. Hockley, who is leading on this item today.

09:02

Thank you, Mrs. Jones. Okay, so this agenda item will focus on the applicant substation design principle statement that I'll refer to as estps. From now, and the comments and observations refeed received upon it. In common with previous hearings. What I intend to do on this agenda item is to ask the applicant some questions upon the SDP s, and then I'll open the floor to other parties for their views at the end of my questions before we return to the applicant.

09:28

So I'd like to start off with a question to the applicant please. And this is regarding their response to a proposal made by se C's in a number of their submissions that an independent power engineering review be undertaken as part of the process of achieving good safe station design, where you state that an independent power engineering review is wholly inappropriate and the design principles set out within the st. PS. And as parameters set out in the draft decio provides sufficient commitments to good design of a substation associated with an offshore wind farm. So

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The positions of the parties are also understood. But my question was, can the applicants consider requesting that the design review body includes a suitably qualified power engineer on the design review panel, set up proper consideration is given in the design review to both aesthetic and technical considerations. With such an arrangement included within the sdps.

10:28

Brian mcneillis for the applicants Good morning.

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I don't believe that scenario would be materially different to the proposal that was raised, and particularly by by classes, the procurement process, the detailed design process that it's undertaken, that is undertaken over an extensive period of time and follows an extensive resource from the applicants in order to develop that detailed design. And it's at that point that we will engage with members of the public under the substation same principle statements as identified with within that document. So that it is very much a very long duration activity, the concern would be that that form of design review could ultimately set the project back quite considerably,

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through potentially means to frustrate the progression of the development or, indeed, challenge to some, perhaps of the safety mechanisms, for instance, that the substations themselves are designed

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with safe security for most domain

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and the applicants are welfarist in the equipment required to to be incorporated within that substation layer.

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Okay, so you wouldn't see any benefit from that proposal.

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We wouldn't what we have committed to within the substation, same principle statement is that we would explain to members of the public during the consultation process the measures that we have undertaken in order to arrive at the the same configuration that is established.

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And that that we see is filling the gap it's a it's a

12:18

we will be justifying both of those consultation sessions and also within the the submissions to fulfil their they obligations under requirement 12 we will be then find a process that we have on to go on higher we have challenged the design in order to reduce the footprint to reduce the sample off the onshore substations and the National Grid substations. So, that that information that information will be made available, but that that is very much

12:48

a position statement rather than a reopening of that very, very extensive the same process, which

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also involves obviously very sensitive commercial matters also, that the design of the substation itself, you cannot simply cherry pick elements within the substation sign and say, Well, why can you not use the specific equipment for that because Tucson different substation elsewhere, the design of the substation itself has to be an integrated solution, not only within each sub section but also between the stamina to standard wall north on national grid substations that there is coordination between between all of the elements. So it is very much an integrated design solution. And as I mentioned, the substation same principles statement will will ensure that we communicate to members of public and local authorities. The measures we've taken to reduce the the footprint and scaling of the substations. Okay, thank you, your your, your initial response, you mentioned, the risk of delay, and so on and your response there you've you've gone through possible scenarios where design might change or design you wouldn't be allowed to change if you like.

14:05

How would you respond to any advice

14:09

arising from the design review panel itself in that respect? Surely any advice and advice could result in some delay.

14:20

get curious about the outcome. I was just going to come back on that specific point I'm going to miss McGrath has made it effectively the design of this substation, in itself is a project that is going to go through a process part of the design processes procurement lead, and simply put wants to that that is why it's so essential that we put in place the design principles because they drive the procurement of and the design of the equipment. And, and through that process. It's very hard to then to come to the

end of the process where, for example, we've employed specialists design contractors to build particular parts or quit within that procure

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for subsequent to come back and say, Well, actually, we don't like this could you start again, the process will take time and and the difficulty with that is having it at the end of the process of some sort of design review, after it's completed, is too late the project will have been largely the equipment will have been procured. That's why we've got quite a lot of store in relation to setting out what are the design principles, because they're going to drive, essentially, the procurement process in relation to two matters. And I do post them servant, paragraph 4.5 or vn one, but it's very much for the applicant, essentially, to have a whole load of other factors that has taken to account to design, it's how it fits and how it looks is as an important component part, but also the regulatory and other constraints. And and operational safety and security requirements are all specifically mentioned in this particular MPLS. At that is very specific to the type of facility that would be at a substation, because we will have security that we have to take into account, we will have health and safety to build into the project. And on top of that, as we've alluded to, in terms of the earlier hearings, when we were talking about technology, that these will have to be very specifically designed for this project. So it's a very bespoke, it's not trying to just say that the equipment is off the shelf, a lot of them the matters will be designed very specifically for this project. The time to influence that design is upfront through the discussion on the design principles, which then feed into the the effectively that procurement process. And that procurement process includes the design. So what we're talking about here is our procurement process about equipment that includes the design of the equipment, there's no point in changing the principles at the end, the discussion about what those principles are, and what we're trying to achieve collectively, at the substation site has to be established to the design principles rather than at the end, one party who would potentially struggled to get access to all the information, because as I say the the matters are quite commercially confidential in terms of some of the procurement aspects. So in essence, I think that the challenge for this is it can be superficially quite attractive to say, it would be quite nice at the end to check that the applicant with a technical specialist has done x, y, and Zed when actually the key aspect is making sure that the key issues and design are set out in the principles which drive the procurement and which design drive the what the applicant is seeking to achieve through the substation design. And I think it's it's that whole point about At what point are you trying to be to, to influence matters and drive matters. And we've been very clear that one of the problems about suggesting this sort of design review is that by the time you're at the stage of our of our product, that's under a substation that has been designed, a lot of that electrical work has already been effectively heavily influenced to design printers, what we can and can't achieve. And having regard to its all the other factors of operational safety and security. And of course, in terms of these, this technology is already been through an initial technology sift through the coin process, it will have to go through a further process in relation to off gem, which is subsequent to that. And that's an obligation which we've previously set out in the offshore transmission licence regulation. So there's a whole process about the design of the substation that will have to go through those processes as well. So we'll be also checked at that stage to see whether matters have been

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the technical matters. So ask them as our primary position here is, we're not trying to be unhelpful, but what we're saying if you want to influence the design, it really needs to be up front and design principles are not at the stage much further down the line, where in terms of timing of the project, we wouldn't have time to go back and redesign the transformers. It's too late in the process to look at that at the end of the process and say, well, could you could you achieve X and Y? It is a principle of matter.

19:21

Okay, thank you. Yeah, your position there is is noted. Thank you, Mr. Ennis, what I will do is I said I wouldn't do this at start, but as this question was largely informed by se C's, and I can't see your hand by Mr. Attorney, but I will ask Mr. Attorney for you to comment before coming back to the outcome. So Mr. Tony, please.

19:42

Thank you, sir. Richard attorney for spaces. And I think there's a bit of a misunderstanding on the part of the applicants as to what spaces are proposing. And as I understand it, what was said just now was that by the time that the public are consulted on the design,

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The power engineering elements will be fixed because they would have already been procured. Well, I can make a comment that that is, of course not really consultation if there's no ability to influence the outcome. But

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that that's noted. What he says is, though have been asking for is the prior to the procurement prior to the settling of the design for the application for deeds, any detailed approvals that are required, the applicants have independent power engineering review, to ensure that the project is being designed in a way that minimises its impacts through the power engineering design. And that is a pretty fundamental point.

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As it stands, there's no incentive and no check on the applicants to ensure that the power engineering design minimises the impact on the local community. And it's very straightforward, I don't quite understand why the Africans won't engage with the proposition before you buy your kit, you must undertake independent design review, to ensure that the impacts are minimised through the selection and design of the power engineering. And

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Mr. New says, Well, that's potentially holds us up. But of course, many other major projects do this. It's encouraged by the national infrastructure commission, it's encouraged by the Treasury.

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It to take one example, which is of particular high profile, high speed to before any structure is procured. That falls within its remit. There's a design review panel, and it includes engineers, structural engineers, as well as architects and landscape specialists and so on. So this is not a novel proposition.

It's one that other infrastructure projects have accommodated. And quite simply, the applicants haven't presented any reason why they can't do that post consent, but before procuring the equipment and finalising their any applications for detailed approval, and any further engagement with the local community. And Mr. Ennis says, Well, we need to settle the design principles now. But unfortunately, for the reasons we've explained this, the systems that are proposed are not properly parameterised. We haven't seen a clear justification for each of the heights. We haven't seen a clear justification for the proposed layouts. The applicants have defended flexibility in their proposals, in particular in respect to the National Grid substation, flexibilities to the point of a very significant difference of scale.

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But they weren't with that flexibility, except that there needs to be some monitoring refers to how they use it. So we say very simply, before we have a fixed design, there needs to be independent review, including from a power engineering perspective. And so if the applicants can't see the way through that,

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in the design substation design principles, then we will look to propose to you a requirement for such design review, because it's only through that, that we will be able to do it. So I do encourage the applicants to look again at the question of power engineering review before they procure the equipment to ensure that the impacts are minimised as far as possible within the constraints of the engineering solution. And if not, we'll propose a requirement that will address that problem. I have more to say obviously, about the detail of branches and so on. But that that's on the principle of design review.

24:01

Thank you, Mr. Attorney. You will have further opportunities later on. Obviously, it was I can't get back to you on that question, because obviously it was prompted by submissions from yourselves.

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Mr. Ennis, is there anything you wish to come back on there?

24:20

Yeah, curious about the outcome. I think one of the things that it's very easy to talk about this apparent engineering review.

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And I suppose word it sounds simple, but the reality of a substation design and the complexity involved, that's not one person that's capable of doing that. That's a design team working for months. So to put it in context, that's what involved in a substation design is not some simple view that one person could come along and do a review. There's a series of specialists that will be involved, all with their particular expertise. And as I say, It all sounds very simple. Let's have a review. It's a very simple exercise something a power engineering does.

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Line review. The issue with that is that in terms of what it actually involves, is multidisciplinary teams working for months to produce these specifications and working with contractors as well. And for the

idea that somebody externally comes in and just says, Well, I've done a review of the output of that process, unless you're involved or unknown, have access to all the information and all the different parameters, it will be virtually impossible to achieve. What we have said, and we put it in the document is that we will report the outcome of all that information to as part of the design process. So it's already in design principles, that those that that process should be properly reported, and to explain how we've come through that process to the outcome of that design. So there is the commitment already to undertake that review with the project team and report it. And through that process, we're able to then demonstrate through the various stages of the design process, how we've implemented the design principles relative to the power engineering design, the difficulty with coming along at the end and saying, we can do a single review is it doesn't will not happen like that. It will be an iterative processes as they develop. And there's interrelationships between the various elements. And that's the problem because it doesn't really work as a design process at the end. And we that's why we have said that we will report the process that has gone through in the context of that design. But as I said, I don't think it's as simple as just expressing the view that a simple power engineering design could be easily undertaken. Because of the the way in which is procured. I'm just going to hand over briefly to Brian mcgillis to follow up on that, to grasp it.

26:48

Thank you, graham crackers for napkins, there are two points I'd like to flag one is, again, within the substation, same principle statements, the importance of the same champion in this process. So the appointed the same champion is Mr. Johnson call, who's the managing director of abduhah, renewables offshore wind division. So Mr. Cool will be that the same champion, he will be responsible for ensuring the coordination between the different sine functions and between the applicants and national grid and the drave. Within that the same champion process that the objective of that same champion position is the coordination of have to have the design and also driving down the footprint of the substation standards. That's part of the fabric that's fundamental and that same champion rule. The other thing like flag is this isn't the first scheme that scottishpower renewables has been involved in these tangling one project, for instance, has gone through the similar process in times in terms of the the design evolution. And we have demonstrated with the East Angular one offshore wind farm project substation, the reductions that we have been able to achieve, for instance, we have achieved a seven metre reduction in the maximum height of the building between the consent and the as built details. But that doesn't come away, simply by chance that comes about through the design teams challenging internally, the the deliverables from the, from the procurement process, working with the suppliers to drive down the environmental impact of the projects. And that's something that we will absolutely continue on on the estate attorney standard. Well, North projects, and others embedded within the fabric of the substation, the same principles statements that we have submitted to examination.

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Thank you, Mr. Ellis. I just want to pick up one item there. But which I think to be fair, might be Mr. Ennis, when, and it might be an issue of wording. But

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the wording, I think use was the reporting was used a lot. Whereas in the sdps, we have

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a phrase that the

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be informed by Design Review. And I wondered if there was any difference between the two that

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caused by Africa, Africa, I don't think it was only a touchstone for the to be different. So no, I don't there's a difference. We're

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that's fine. Thank you.

29:23

Okay, thank you, Mr. Ellis. I think I have all on that issue. So I'll move on to the next question.

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And to the applicants again.

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And this is a point raised by Suffolk County Council and supported by Suffolk Council. And it won't come as a surprise to the applicants because it's been in representations obviously, advanced by them initially at deadline five, and they suggest that the sdps could be improved by new principal which would state the detailed design for the project and the procurement processes that support it will both engage with respond to an insofar as practicable adopt and adapt

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Any new opportunities arising from emerging new technologies and changes to legislation and regulations in order to minimise the harms to the receiving environment and maximise the benefits of the project through good design, engagement with the opportunities that may be offered from emerging technological, regulatory and legislative change is a fundamental principle that will be applied at all times during the design procurement and development process. Could I ask the applicants to reiterate and elaborate, if necessary, what their objections to the inclusion of this statement are?

30:33

From our ground support applicants, we do not see within the scope of the applications. So within the the authorised project within the order limits within the project that has been assessed that any new technology would be forthcoming. That would provide that icon, in essence that the application before the department before the secretary stance is is what we have applied for. And we do not see any

31:01

significant change to the to the technologies that would be available to facilitate the projects done and before before the panel today. Thank you, I suppose my next question leading off and that was I

understand your position there, obviously. But there are certain caveats within that, within the suggested wording from the county council such as, so far as practicable.

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So I suppose my next question would be what where would the harm be in incorporating that that statement, we're in the sdps

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brymer crowdspring applicants, one of our concerns that we discussed with the consoles is setting up expectations, we we do not want to misrepresent what we are trying to do within the substation same principle statement, we do not want to misrepresent the fact that there may be

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the expectation through that through that principle that alternative solutions could be could be provided for the for the for the projects substations. So, that is one fundamental concern. The other aspect is if there are any modifications to the, to the equipment that is provided, that will be picked up through the procurement process. And I'll be picked up through the other measures within the substation, the same principle statements, where we have a very clear principle of seeking to reduce the footprint and the scale and indeed the noise received noise levels as far as practical and cost effective to do so. So in terms of the the end goal, the outcome that is already secured within the substation, the same principle standard. Thank you, Mr. Madoff's? That's noted. Before I move on, just check, because obviously, I did revert to se C's on the last question this So this question is largely drawn, drawn from submissions from the county council. So I should just check if Mr. Bedford if you if you wish to add anything at this point.

33:01

Thank you, sir. Michael Bedford, Suffolk County Council. Obviously, you've seen our submission, making that point in reiterating it at deadline nine in rec nine over 47. You picked up obviously the point that we said it's only insofar as reasonably practicable. So that's the the safeguard is in there. It's really just a question of priority. We know what Mr. McGregor says about well, these things will be looked at and it will be picked up in the procurement process. And therefore if there are changes, they can be accommodated through that means etc. But this is really telling everybody that this is a priority. And therefore, it's something which needs to have emphasis given to it. You're absolutely right with respect in saying it does no harm, but it actually does good by prioritising something which is important, particularly in the context that we know that we've got a changing environment, I mean, regulatory technical, as well as everything else. And secondly, we also know that there is still a lot of flexibility built into this project, in terms of the matters which are set within limits of deviation and so on. And therefore, we don't see ourselves as imposing an undue restriction on the applicant in requiring them to take this on board. I mean, that's really just the same as we've already said, but there we are. Now, thank you. Mr. Bedford as usual, Mr. McGregor, so is there anything you wish to come back on that?

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primer grasper napkins, just to reiterate our very first design principle is seeking to reduce the fiscal impact of cancer substations, National Grid substations and cable ceiling and components. So again that that will that principle is the is aimed at achieving the angle that the the consoles have

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proposed for the director

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Additional the same requirement.

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Okay, thank you Mr. Gross. If we can move on then and while I have you my next question is probably for yourself as well.

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You state that comparisons between as built designs such as East Anglia one and preliminary designs are misleading and there are likely to be further opportunities to reduce footprint during the detailed design process. Could you outline for me what sort of further opportunities could arise to reduce the footprint during the detailed design process

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primer groundspeed applicants

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at this stage we can't be specific in terms of component x could be reduced by y height or whatever for prints. But again, through through the experience on these Angular one project, we have demonstrated that reductions are possible.

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Again, going back to the seven metre reduction on the maximum building height that was achieved between the between the consent and the actual as built the

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different suppliers, there's not a huge number of suppliers of equipment for substations, but they are they are quite different

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depending on the on the supplier, but supplier of particular equipment may have an influence on noise parameters may have an influence on height and may have an influence on footprint. Again, it goes back to this integrated approach of the overall substation saying that it's essential in order to deliver the end objective riches at a substation safe and efficient and with as little environmental impact as as as possible.

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The we have also instigated a process within

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within the applications whereby we are drawing upon a an external consultancy to actually undertake some of that conceptual design work. Now, that in itself is an important aspect for from from the applicants perspective, because that is also introducing an additional challenge to to our own in house procurement and

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the same function and that that will be an immensely useful process in order for us to assist in driving down environmental impact of the of the onshore substations but as I say it is it's too early at this stage to identify individual components that may be subject to reduction. But there are certainly key areas that we will be focusing on such as the GIS building height harmonic, filter heights, etc. And obviously, the footprint of the substation itself and the the ground level within the substation, but they are all detailed design matters that can only be established post consent within the context of that detailed design and procurement process.

37:57

Okay, thank you. You mentioned earlier the external consultancy could you summarise or How wide is their remit or their brief

38:08

primer grasper napkins. So their their remit is to assist our internal design function to bring together various elements of the substation at the same. So, they will provide support during our procurement process as an example, they will for instance, there are multiple splat multiple suppliers supplying equipment into the into the substation. So, they will they will assist in the coordination of all of that work to ensure that there knows unintended consequences of

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procuring equipment x, which potentially they may there may have an unintended consequence of equipment wide, which may need to be twice the size to accommodate that particular

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triggering possessors

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increment x Zed, so again, it just reinforces that that integrated approach and having having having that oversight in addition to our own in house

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support will be very useful.

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Very useful skill sets job was in that project. Thank you. If I could just nip back there. You've obviously you've mentioned East Anglia one and the stps includes quite a few details on East Anglia What did East Anglia once footprint reduce post consent? I know you've mentioned the heights quite a bit but one thing about the footprint if that reduced and if so, by how much and why?

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Roma girls for delicates the footprint for the substation that that reduce the application for printers 150 by 190 metres.

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But yeah, I can confirm that that did not there just during the during the detailed same process. It was a quite very tight

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footprint initially.

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Yep. Okay, thank you. Let's useful

40:00

And so if I move on now, you mentioned that it's not in the applicant's interest to oversize spatial footprints in some of your representation as it increases cost. And what I wanted to just understand is why that was the case, is it just the cost of the additional

40:18

cotton field the drainage the hard standing, or conversely, could a operationally and more spread outside be cheaper to construct and maintain

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parama grounds for delta since we do not believe in more spread our site would be cheaper to construct and maintain, we would have consequential

40:39

impacts with bigger, larger footprints such as surface water management, a lot lounges, landscaping aspects. So again, it's it's the, it's the overall master planning but is important also, Arif clearing For instance, if you have a

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one for every square metre reduction, we don't need to clear if we don't need to lay foundations, we don't need to build super structures. So that within within that within that space, so all things being equal to smaller substation would result in a more efficient

41:14

and more cost effective. substation. Thank you. That's useful. And if we move on to a slightly different topic, now, Stacy's provide information on the high Earth capacitor banks, they raised this deadline nine and at deadline 10 In fact, which is rep 10 058.

41:34

Is there a case for split height banks, which may reduce overall height and has this or Will this be considered as an option?

41:45

Regardless for napkins, absolutely, yes, that is all part of the detailed same process again going back to the this actually very good example, split tights would require a large footprint. So can the substation accommodate that larger footprint? Will they split eight be of any benefit to the overall impact of the of the substation For instance, if the maximum height is the same as maximum height of the GIS building, sort of the GIS building remains 14 metres in height with a reduced harmonic filter actually, registered official impact of the of the of the answer or substations. So it is again, that that balancing act between the will come to the fore during the during the detailed science, but that is absolutely one of the considerations that will be will be conveyed here. Yeah, thank you. So obviously, there's a balance you mentioned there for the same height as the GI substation message. Is that the difference between the visual impact of a building to more open electrical kit if you like, so that'd be taken into account in balance as well.

42:47

Brian Kraus with Elkins, absolutely, yes. Okay. Thank you.

42:52

Okay. I now have some questions regarding the proposed National Grid substation. Now we did the examining authority did invite national grid, electricity transmission and get

43:05

to attend today, but unfortunately, they're not with us. We've published eight reasons why as an additional submission, but bearing this in mind, I will ask questions of the applicants regarding and get intentions as far as they're able to answer. But we will also put questions in for and get in the action list for these hearings for answers by deadline 11 and responses to anybody else by deadline. 12. I should just move on with these. I can see your hand up Mr. Turney. But we I'll come back to you once I've asked these questions. That's okay. Thank you.

43:36

Okay, so firstly, to the applicants, the end get answer to x q two, point 10.6. Seems to state that is highly unlikely that proposed National Grid substation would be it is one for your experience of working with and get is this a fair statement?

44:00

from across but applicants, I wouldn't comment on whether it's a fair statement or not, it is NGS submission to your examination must be taken. taken on that on that basis. Sorry, I like to just demean

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in terms of the the National Grid design process. The they haven't reduced the footprint or the maximum height of buildings within the the National Grid substation at this stage because they are not at that detailed same stage of their, of their project. And that's a very important

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element for for national grid. During the detailed design process. They have a

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philosophy they refer to is linked the same, battling the same philosophy is very much about reducing the scale and mass of what it is that they are actually constructing for me.

45:00

Any customer including EA t in the year well north. So, again Never will see a similar process through to SBR and that they will challenge internally the the footprints and the scales and sizes of the equipment that is required for our projects. And again, the National Grid substation is specifically for our projects. So, so that that process will absolutely go forward. But it is a detailed science stayed detailed same process as and part of that is the decision process as to whether he is ArcGIS is adopted for the for the for the National Grid substation.

45:34

Thank you. That's useful. I suppose my next question would be in your experience of working with National Grid at other sites East Anglia, one or others?

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Do you consider

45:45

this

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is to be highly likely it? Is GIS a possibility for National Grid substation, I guess is what I'm trying to get at.

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Regardless, for the applicants, I think that's a question that should be directed to and yet themselves. But we can refer to their previous submissions, which essentially says that he is and GIS still remain on the table. They have issues over the deployment of GIS due to SF six gas, for instance. And I believe to have a policy that by 2024.

46:21

There are restrictions on the deployment of new new equipment using using GIS. But yeah, I would suggest suggest that's a question we should be posed directly to the NGO. Thank you. We don't as I

mentioned, we have Well, we will put those in the action list of questions for and getting that is one of the questions that we will ask them. But that your answer then Mr. McGinnis leads meltem. net to question so thank you for that. And their reasoning for AI is overdue is stated in that answer to execute two point 10.6. As you've mentioned, there is partly based on climate change. They state that GIS technology contains sulphur hexafluoride SF six, which has the equivalent impact of 10 times a carbon equivalent of AI s technology and their current policies to reduce its greenhouse gas emission gas emissions by 80%. In advance of 2030 and as you said there they have pledged not to procure any gas insulated switchgear contained in SF six after 2024. I just wondered whether the same reasoning or

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if not, why not really would apply to your to propose substations

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regardless for the applicants. So, two points, one, the use of SF six technology is still permitted.

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There are measures in place within governments various initiatives through to seek to justify the use of SF six then

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within within the industry, but today, it is still absolutely permitted. And absolutely

47:53

yeah, permitted to utilise SF six anti gas technology. The benefit in using SF six sorry to benefit using GIS technology for the onshore substations is a matter of visual impact and footprint. So the use of five GIS technology would has significantly reduced the footprint of the of the onshore substations and we view that as being an important consideration. Also, not only on the standard tuning standard of all North projects, but also as we demonstrated on the east Angular one project where GIS technology was adopted for that project also. Okay, thank you. That that helps. My next question is again about the National Grid substation. And I think you may have you may have already touched upon the answer to it or not the answer to it, but is there been any design evolution for the design of national grid substation or the ceiling and compounds during the applications process?

48:53

Regardless, for the applicants of this national grid have submitted and previous representations, they have yet to go through the detailed design process for their for the projects.

49:03

So the answer to that is no. But embedded within the substation, same principle statements under under corporate link the same philosophy. One of the key aspects of the National Grid the same process will again be to challenge the skill and footprint of their of the of the equipment and off their substations that they're deploying and that that extends to the cable ceiling and components also, which are part of the return incorporated within the substations the same principle.

49:32

Thank you. And I suppose my next question is, is like similar questions in your experience of working with them on other projects, has a design design review resulted in reductions to footprint or heights mass

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recalls for the applicants.

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It has an indeed in this project in particular, to be involved in the project since

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Pre application days, I can

50:04

absolutely do both the onshore substation and the National Grid substation itself has reduced in size during the pre application process during our internal reviews and during the the the preliminary results of the environmental impact assessments where we felt we needed to apply

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different design techniques or different measures to actually adjust the scale and footprint of both towns or substations, National Grid substations. So what simply on the basis of what we have seen through the pre application process, it has reduced in footprint already. And we would be we would be hopeful that there will be opportunities for for to reduce again during the digital design stage.

50:48

Thank you

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have some further questions on the plans that were submitted last Friday for the draft plans as a result of overall 17 questions. But what I think I'll do now, so thank you for that Mr. meadows, is just open the floor to other parties to see if they there's any issues that we've just discussed that they want to raise. And then Mr. Turney had his hand up previously.

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So we will go to Mr. 30. Now, please.

51:20

Thank you, sir. Richard tourney for sizes. I just had a few points that are raised from the most recent submissions.

51:29

First of all,

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the applicants answer the question about our proposition on split banks. And I think, in a sense, whilst we welcome the confirmation that that will be explored, it really is a case in point, because who will review to see that these things have been achieved, and the best solution balancing the needs of the project with its impact have been delivered. And really, this needs to be supervised. And it's not enough to say we will look at that. Because as your questions exposed, there will be competing considerations and the way in which that settled needs to be the subject of some proper scrutiny, given the extreme sensitivity of the site.

52:18

In that respect, Mr. Gross, referred to the design champion, but I think we need to be absolutely clear that that is not design review. The design champion is a solicitor by trade, he has corporate responsibility for delivering the project. In other words, he's accountable to shareholders for delivering the projects. I don't understand we didn't understand how it could possibly be claimed that he is better placed than an independent engineer to review whether the best job has been done of minimising the impacts on the local community in the way in which the scheme is designed. That the second point I make is a general one on national grid. They've chosen not to attend today, which is extremely regrettable, but really the point the point is a fundamental one, this is the applicants proposal, they need to be able to answer the questions that are posed in respect to the design of the National Grid equipment, and it's extremely disappointing that they are unable to do so given that they are seeking development consent for it is not National Grid application it is their application.

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And on the question of AI s vs. G is

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Mr. McGregor's gave something but answer but obviously is differ international grid

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are sent says his strong sense is that national grid have identified material carbon climate change dis benefits from sulphur hexafluoride.

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It's unclear exactly how those have been assessed by the applicants. And I think we would welcome confirmation that they've been taken into account in considering the carbon benefits and dis benefits of the proposals. But if they are such profound dis benefits as a suggested it's unclear why the secretary of state would want to authorise the construction and operation of offshore wind farms that may result in significant adverse climate change impacts from the use of sulphur hexafluoride in a particular type of technology. In other words, the sector of state will want to rule on this. And we would welcome that clarity. Obviously, the the impact of AI s and GIS are different. AI S is much larger in footprint that GIS is much higher in terms of the equipment that's there. And by narrowing this, we will have a much better sense of what it is that is proposed and we'll be able to better address the impacts of it.

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Finally, on national grid design, one of the fundamental points that we would like

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To be addressed is the need for the extent of the cable, the number and extent of the cable ceiling and compounds. Now,

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Mr. McGregor says Well, that's a matter of cable sealing ends is still to be subject to detailed design. But it would be helpful if he could just explain to us today, why it is that there are three cables seeming and compounds for two projects. And leading on from that why it is that by removing one project, we've seen on the plans, the number of cables seeding and compounds stay the same. And the further point is that the northwestern cables eating em compound and we suspect we'll come on to the plans later, the Northwest and cable scene and combat is scaled very differently from the other two cables, CDM compounds, it contains a circuit breaker, which so far as we can establish is wholly unrelated to the EA one and an EA two projects, we can see no link between that. And what's proposed. In other words, we have potentially whole ceiling and compounds and certainly substantial parts of a ceiling and compound that are wholly unrelated to this project. So National Grid need to answer and in their absence, the applicants need to answer why it is that

56:23

even at this level of design, there is a need for this number of compounds and why they need to be in this position of this scale. So those are the sort of basic points on what's just been said. Thank you. Thank you very much. Mr. Turney is very useful. Before I can see a hand up from Mr. For for the Suffolk Council, please.

56:44

Thank you very much, sir. I just wondered if this was the opportunity before you move on to look at the drawings just to raise some comments on behalf of the council in respect of the design principles statement? Yes, it is. Yes, please. Thank you. Firstly, as you know, we've made representations on the latest iteration of the sdps are deadlines nine and 10. So I wonder if I might just briefly outline the the points that we welcome that have now been included in that statement, and then touch on areas where we think there's still some outstanding work to be done.

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So firstly, we welcome the commitment to seek further reductions in the visual extent to the online substations and to locate their cable sealing compounds adjacent to fill boundaries where possible, which is a matter we'd raised with the applicant previously, as well as the commitment to minimise the noise rating level below that, setting the limits in requirement 27 of the decio. And the commitment to engage directly with a number of properties in Friston, we noted that there were

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a number of relevant properties that have been emitted from that list, we've raised that with the applicant, and they've confirmed they're going to be included. So we're grateful for that.

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As you know, we have requested an assessment of GIS technology. We have been provided with some information, but we still think there's further outstanding assessment required. And we welcome the applicants commitment to provide that by deadline 11. And obviously, we'll review and comment in due course. And finally, we welcome the engagement that the applicant has undertaken with their supply chain, to seek reductions in the maximum parameters and their commitment to continue to do that through to detailed design stage.

58:40

In terms of outstanding matters in the sdps, we think that there's still a need to include reference to the impacts of operate operational noise or non human receptors. That's in particular. And I know that's been discussed at a previous noise hearing. And that's a matter that we've raised with the applicant, and we're engaged in discussions with them. And we're hopeful that that will be included.

59:07

We have requested in the past and remain of the view that the SDP should include parameters for maximum ground levels.

59:17

We support the county Council's request for the additional design principle which was discussed a moment or two ago. And we would like to see a commitment not just by the applicant, but also from National Grid, to commit to engage with their supply chain in order to seek reductions in maximum parameters of the substation, in the same way that the applicant has committed to do.

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And finally, and I know this is a matter that you want to deal with primarily through written representations. So I'll just make the point that we remain of the view that further information is required in terms of a cumulative impact assessment.

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Thank you. Thank you very much Mr. Tibor. Before I revert to the applicant on the sdps. Does anyone else wish to raise any matters just on on that specific document and what we may have heard this morning.

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Okay, I'm not seeing any further hands on that basis. We'll go back to the applicant. Now, please. And then your comments on those made by Mr. Turney for safeties and Mr. For, for a Suffolk place.

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konosuba, half the applicant.

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There's one missing point Mr. Tony's submission, which is that requirement 12

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expressly states that the details of lab scale and external appearance of the onshore substation must be submitted and approved by the relevant planning authority. In that context, there is a direct mechanism for the those matters that have been considered or submitted by him to be considered during that process. Equally, in terms of the details submitted, they have to be in accord with the substation design principle statement. In that context, they have to have gone through that process which we have outlined in the design principles statement. So in the combination is one where through the design statement process, there's engagement both with

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local residents,

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but also with the formal consultations, including the council's and in that context, it is anticipated through that process, that effectively the concept tees will be taken along through the design process. And that's why there's reporting statements within the design process. Because what that is, it is a process whereby there is engagement. And by the time that final details are submitted, it's been through that whole process and discussion, and that is how we seek to effectively ultimately discharge those very specific requirements on land scale and then an external experience of the substations. So, there is a clear requirement that has to be discharged in relation to those matters.

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If I could now move on to

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the second point about SF six, which is unfortunate, Matt have had to deal with rather extensively on a range of projects. Now.

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Insofar as the current regulatory framework is concerned, it is permissible in relation to electrical equipment to use SF six and the reasons for it is that it is one of the safest means in insulating

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electrical equipment and ensuring safety and therefore, in terms of the process, it is still approved and still being widely applied. What is also fair to say is that the industry is also working to find other ways of

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achieving the same purpose without the use of SF six. And for example, spr. Three, the development of East Anglia one offshore lead a global leader in the first offshore switchgear that didn't include SF six, so there is development ongoing.

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But what I would say is that the the current framework is that they're still using SF six in terms of a lot of electrical gear to ensure that it's safe. Now, the consequence of that is is very tight regulations over

monitoring its use, and it is in sealed units. And it also has to be monitored for escapes. So the whole thing is highly regulated to ensure that the SF six is retained and used for its purpose rather than leaked, and because the consequences that Steve and I are well known, so the equipment has been very manufactured to a very high degree. And equally, it is monitored to ensure that there is no escapes from the equipment that utilises SF six. So that's a matter of regulation for the government. And it is not being as I understand that being regulated and individual decisions, it is a matter that's dealt with over the industry. And the regulations exist as an industry that deal with it. So most of it is not being dealt with individual projects is being dealt with effectively on an industry wide level and by a regulatory framework by government.

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In terms of other matters, the harmonic filters were specifically referenced. And I think in response to that very particular matter. The the actual design of the homework filters, if they're required on site is absolutely site specific. It it's not a generic height or anything else. It's site specific and would have to be designed for the very specific purposes of the site, and again, will be subject to the approval.

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of the external experience of that. So, in my submission, the scale and accent of external appearance is already covered. I'm not going to hand over to Mr. McGillis, who's going to just deal with that I think Stacy's was struggling with the how, why the national good infrastructure was there. And I appreciate that. I think Mr. Grasso respond on that matter. I think the

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prime primer calls for the applicants just touching on the point of the cable cnn components.

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So the final position, location and orientation of the additional tires required for the

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party grid connection

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will affect the roots of the donor leads from the from the, from the, from the target students countries,

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that there are statute electrical clearance obligations that need to be maintained between the dine leads and the tyres.

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The ultimate between the dine leads and any other objects that oversell AI, such as the fence or other equipment within the cable ceiling and combine

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the doughnut leads must leave the overhead lanes at the correct orientation and the correct direction to the gable ceiling complaints.

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And ultimately from cable ceiling and combined to then need to travel on the ground to the to the National Grid substation itself. So So there are a number of factors that influence the positioning and the sizing of those cable Sealand components. We have three cable dedicated cable ceiling components within the master plan.

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We are connecting into four circuits, each project will connect them to four circuits on those existing overhead lines. The reason we only have three individual cable sale NAND components is because of the positioning of the National Grid substation, that alone is one of the circuits from the overhead line to connect directly into the National Grid substation. If we if we didn't have that ability, then we would need to force separate cable sealed and confined within within the master plan area with regard to the larger cable ceiling and combined combined with circuit breaker, that is an essential element of our grid connection national grid or grid operated grid code for the entire

1:07:24

transmission system within the New England Wales the

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what influences any projects ability to connect them to a 400 kV system is what is already connected onto that system elsewhere along the wider system itself in this particular instance, there are additional connections going into that particular circuit that the cable sail down combined with circuit breaker will will connect them to and because of our because of that existing constraint on the network and essentially as a constraint on that particular circuit. We then require a circuit breaker to be incorporated within within that connection. So it is absolutely fundamentally part of our grid connection. requirements for for for connecting top Fourth Circuit.

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And obviously with the circuit breaker incorporated within the cable sale NAND and stayed the cable cylinder is larger than the other three, give us an encumbrance.

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Thank you just I was going to come on to this later. But just whilst you're on the topic of the Sealand compounds, can I just check the point raised by Mr. Turney about the number of CDA compounds being the same

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in your D plans were only one of the projects to be constructed? Could you answer that one for me?

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Brahma girls napkins. So the routine and network security requirements for each project is that each project needs to connect into the four circuits with a new headlines on national grid in order for their effective and efficient management of the overhead system of the transmission system rather require doors for each project to connect them to those four circuits. So that so there's a redundancy or sub balancing that can be undertaken within the within the within the transmission system without the need to constrain off

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the den vigil offshore wind farm r&d constrained science well be and potentially science loss in the future.

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Okay, thank you.

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Before we move on, there was was there any more comments you wish to make on the comments from safeties from Mr. Turney. Specifically, he did raise the issue of the design champion. And also was there anything that you wish to come back on? From the comments from Mr. For for a Suffolk Council. Before we move

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on from Carlos for the Atkins just to English to the same Council, the guidance document that we refer to in the function of the

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substation design principles statements that was published post consent application to the national infrastructure, the

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design principles national infrastructure, which is February 2020. Identify specifically the design champion should be in a position whereby they deem their care considered to have the necessary authority to influence the design and the appointment of Mr. Johnson call. Absolutely it all start from the applicants perspective, he is the most senior representative representative for we can appoint to that position within within the business. He has the authority to ensure that the design principles are adopted and implemented and adhere to within the project and in

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an efficient and authoritarian way. That is the reason we've nominated Mr. Jonathan cool to be that the same champion in order to ensure that we have that that corporate oversight and

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focus within the design process.

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And in relation to the substation same principle statements, just to to clarify, perhaps I misinterpreted but the the National Grid substation and the cable Sealand components are absolutely embedded within the substations to same principle statement every the same principle applies to the National Grid substation and cables in and components as opposed to the onshore substation. So that the first principle for instance in terms of reduction of deficient impact of the

1:11:27

onshore substation that applies also to the National Grid substation on cables in non-complex.

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Thank you for that.

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I am aware that Mr. Turney you have your hand raised again, I will come back to you just just shortly, but if if you could make your point brief, that'd be appreciated. Thank you.

1:11:49

Rich attorney for says apologies for putting my hand up. But I just think we need to be really clear given where we are in the examination. Mr. McGregor has said that. Effectively the community engagement would come after the design had been fixed after the engineering design and the project has been fixed. And then Mr. Renison responding to my latest submissions, says that I have forgotten about requirement 12. And the approvals process, as I understand it, Mr. McGregor says case is that by that stage, it will be too late to influence the engineering design. So the applicants can't have it both ways. It's got to be one or the other either at the requirement 12 design approval, the local authority can review the engineering design and reject it as not the best solution or they can't because it's too late. And we need to know which one it is. So it's either Mr. Ellis's approach, it can all be dealt with by requirement. 12 or It's Mr. McGregor says by the time we come to consult the public, the design would have been procured and the power design will remain the same. Thank you. Thank you that Mr. Attorney, Mr. anisole, Mr. McGrady says everything you wish to come back on that point now.

1:13:16

Mr. Ennis, well, Mr. gratis, are you still with us?

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Prime McConnell is for the outcomes in terms of the public engagement and the government element, there are two aspects to that one, one is the procurement process of the the technical equipment itself, the transformer, the circuit breakers to the harmonic filters, etc. and that that that is that is where our regulatory requirements, our safety functions, the requirement to be cost efficient

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substation and National Grid substation, that's where that comes from for the consultation process that we've set out within the substation, same principle statement is about the aesthetics of the substation. It's and the structure that we have set up in terms of the the landscape master plan and the

architectural master plan that set out within the substations the same principles statement within appendix. Appendix A of that document sets out very clearly the measures that we will

1:14:23

consult upon, and also the engagement strategy itself. It's a three stage engagement strategy stage one being the direct engagement with stores, restaurants and immediate facility of the substation development. Engagement. Stage Two is where we undertake that independent design review process with the same council or similar body. We have wider parish Council on local residents engagement through through the hosting of workshops, where material various design material is made available. And then we have engagement stage fee, which is

1:15:00

feedback from the workshop feedback from the same console the further iteration of of that the same process. So, again, going back to the earlier point that the the evolution of the technical design of the onshore substation is what our design champion will also be involved in. It is about reducing the the scale and footprint of the of the onshore substation and National Grid substation. Where communities can influence matters in terms of substation design itself isn't in the technical detail of a transformer, it is around the aesthetic finish off the off the buildings, for instance, around around the GIS units within the within the onshore substation, it's those elements that are able to be influenced by members of the public. Say it's not just the specific technical design of, for instance, the transformer.

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Thank you. Regardless, that's useful. Obviously, for anybody listening or participating, you're welcome to come back to that point in writing, if you wish to do so. Okay, now if we can move on to the submitted draft plans that were submitted, as referred to earlier, our recent rule 17 questions. I should probably flag now that I've got a few questions on here and we will have our mid morning break probably point in the middle of these questions somewhere where time fits. But if we start off with that question to the applicant, and I realised that you may have already answered this before in some sense, but there's a question about why is the National Grid substation the same size if just one of the project substations is to be constructed?

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dam grellus for delicates, the National Grid have responded to that point, I believe one of their their previous representations is

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focused on the connection of a single project to four circuits with a new overhead lines where we were two projects are connecting those two projects are connecting to those four four circuits. So our onshore substation infrastructure is is all about gathering the data from the offshore wind farm,

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monitoring the power quality, etc, converting the voltage to 400 kV and then sending that essentially all offence to national grid to their national grid substation. It's down National Grid at the National Grid substation that then takes that power and inputs it into the four circuits. So for one project connected

into four circuits or two projects connecting them to four circuits, that differential that you will see in terms of the the data sets will be the answer or substations, you need one onshore substation, or three onshore substations, the National Grid infrastructure will remain the same because they are connected into the four circuits.

1:17:57

Okay, thank you. That's useful. And could you elaborate for me? I know again, that you've you've mentioned this within your within your statement, but could you elaborate on why the National Grid substation even in its GIS form has to be in the location showed

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and why it can't move east or westwards? Essentially

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bramah girls parameterless for the applicants, two primary reasons, one we touched on this morning, which is to keep on seeing them. So we were taking advantage of the fact that one circuits contained directly into the National Grid substation, both in the GIS configuration and also the EAS configuration. If we were to relocate the substation, we could potentially lose that benefit, in which case we don't need a force kill Sydney and compound out with the National Grid substation footprint itself. The other consideration is in terms of the the cable running the efficiency of the substations themselves

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is positioning the National Grid substation

1:19:02

between the overhead lines and the onshore substations means that we have a natural flow of power from the wind farm to the onshore substation to the aspirin substation, to the overhead lines and that is a very efficient means of of conferring power. It minimises cable runs between between various substations are maxed out overall system design much more efficient.

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Okay, thank you. That's useful.

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Have any support as part of your your plans and your work on those plans have any alternative routes being considered for the proposed access road if only one of the substations was to be permitted or constructed

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primary routes but applicants know is the short answer just to expand on that the work areas within the onshore subsidy sorry, within the the the applications define a specific work area and work number for the operational access road. So that upper

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accessible route will remain coming from Saxmundham road

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entering the substation area within work area that we have assigned for that operational access.

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Okay, thank you then within the the substation configuration again not 10 will be a subject of detailed design in terms of optimising the actual

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approach to substations because that needs to take into account aerial movements etc landscaping, that is to establish the beautiful quality surface water drainage basins etc.

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Thank you.

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And if we turn to the your proposed substations, the one or the other.

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And I know your comments on why the eastern site would be chosen for a singular substation.

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Would there be any any advantages towards using the western site instead?

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In spatial terms,

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Brahma grasper napkins, we don't consider that there would be an advantage in using the western site if only a single project was to proceed. The the there are marginal benefits as we see it in the development of the Eastern substation, and the flexibility to reincorporate it within the DC 304. They interchange in if you like, of the of the substation locations, was brought about by after consultation with local authorities who wish to retain the flexibility and not one of the one project was to proceed. We had the flexibility in the DC or to yellow lab project to utilise the eastern footprint of the onshore substations

1:21:39

as useful if I could just get back to one of your previous answers about the positioning of the National Grid substation. And I think your words what that the proposed layout would make it much more efficient the power supply or the power flow. Should I say is can you quantify that at all?

1:22:00

parameters for the applicants? I can't? right here right now quantify that. It would be a function of the cost of cabling between between the substation state and 400 kV cabling for the National Grid we'll deal with

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will be

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somewhat more more costly than need the 275 gb cable in the Balkans we'll be we'll be dealing with for the onshore substation elements.

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We can we can follow up on that, if you wish. I doubt be useful. Thank you. Well, we'll put it in the Action List.

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Thank you.

1:22:37

I don't have enough. The last question I have on this topic was, again, was if only one of the substations was to be permitted or constructed, then there'd be a fairly substantial area of land within the order limits but not occupied by infrastructure, would that land still be required for the development or be required to facilitate or be incidental to the development?

1:23:00

Regardless, for the applicants, we will touch, I'm sure in your course on our real 17th submission. The we submitted on Friday that she was the master plans for a single project only solution and we are identifying additional landscaping and biodiversity measures within that within that footprint. So we will consider that that land to be to be used and utilised for for a single project solution. Awesome.

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So that the the that land would then be utilised for additional landscaping

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parameters for the outcomes. Yes, in part additional landscaping and parked additional biodiversity. Again, detailed design measures may may establish that there may be other facilities that we utilise that space for. That's the flexibility that is

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essential in during the detailed science niche.

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Okay,

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thank you for that. That's all the questions I have on this agenda item. So before we move on to what it'll be, it would be the break. But before we move on to the next agenda item.

1:24:07

Are there any other parties who wish to raise any comments on what we've just heard?

1:24:12

I can see one hand from Mr. Turney at the moment.

1:24:16

And that's also we'll go to Mr. Tony for Stacy's place.

1:24:21

Thank you, Sir Richard tourney first faces

1:24:24

on the submitted plans. Our general observation is that they highlight the fact that whilst there are two projects here, each of them has broadly the same scale and nature of impacts. In other words, when you come to advise the Secretary of State, the planning balance that's being struck, is between almost the totality of the impacts of the scheme, against the benefits of one project and then almost

1:25:00

Is the totality of the impacts of the scheme against the benefits of the other project. So

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that's probably an inelegant way of putting it. But essentially, the impacts are not materially reduced by not delivering half of the benefit. And that's a really important point when you come to assess the overall benefits. The further points we're making these. First of all,

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if, as Mr. McGregor has just said, the land of the unused substation site is required for landscaping and or biodiversity, then that indicates that there isn't enough land for landscaping and biodiversity in the two scheme. scenario, it's either required for that purpose and therefore can be compulsorily acquired for that purpose, or it's not required for that purpose. So in the two schemes scenario, there's obviously a deficit or is is not in fact required, and there's no justification for the land being acquired if both projects don't come forward. The next point is that when we look at the plans, it really shows that if only one project comes forward, it will be necessary and appropriate to redesign as a whole. All that these plans have done is delete. One of the substations and there's barely any resizing of other parts of it, it is just deleting one of the substations despite the fact that it would be to power only one of the projects and, and that leads on to a point which is been touched upon already about the scale of national grid infrastructure and about the number of cables in the end compounds, we can see no justification for for connections for one project. That is not what has happened on other offshore wind farms, where there have been a maximum of two connections for one project as we understand it, for example, a calliper.

And that was reduced to one connection. So we do not understand and we do not think the applicants have justified the need for for connections for one project. And if we don't need four connections, then if one project comes forward, even on the design shown to ceiling and compounds would be lost. And it would be possible to resize the National Grid substation.

1:27:21

In terms of landscape and heritage impacts. I won't try and bring in Michelle Bolger and rich target here, given it's 1127. But in summary, we say that the plans still show a lack of detail and still raise a very significant concern about those landscape and heritage impacts. And it may be that something you'll return to later in the agenda, but I'll just flag that now.

1:27:47

Thank you. Thank you. Thank you, Mr. Turney.

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Mr. Bedford, please for Suffolk County Council.

1:27:57

Thank you, sir. Michael Bedford, Suffolk County Council. It's just a short point to note because it relates to agenda item two, but the reasons for it relate to the matters, we're going to discuss in agenda item three, we have found it difficult to engage with the plans in draft as presently presented, because we have outstanding concerns as to the adequacy of the additional flood work that has been undertaken. We have a currently a disagreement with the applicants about the safety of factor,

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the factor of safety that they've used and a disagreement about the adequacy of the evidence on infiltration rates. Obviously, those points have then spatial implications for the drainage solution. But that equally then has spatial implications for other elements, whether it's landscaping, whether its location of built facilities, and so on. So I just wanted to put that down as a reservation. We haven't said very much about agenda item two, but that's because effectively we state so we see this is still work in progress, because of those outstanding concerns. But if we're going to deal with under agenda item three. Thank you, Mr. Better that that's, that's useful. And that's noted for the next agenda item.

1:29:19

What I propose to do is in a second is to break and then we'll come back after the break and now the the applicants their right of reply, but before I do, is there any other interested parties you wish to raise any outstanding items on the agenda item two?

1:29:36

Okay, I'm not seeing any hands. So that's what we'll do. We'll break for 10 minutes until 1140. And when we return it will be for the applicants to respond to those points raised by Mr. Lee and Mr. Bedford, if they wish. So we shall now adjourn till 1140. Thank you.