

TRANSCRIPT_BRAMFORD_ISH1_SESSION 2_14092023

00:06

So shall we start? So this is seitan 3.3.

00:14

Do you want me to just clarify on the Oh, yeah, that's the place. We raised the drawing. It's it's a, it's a, it's a good spot find Mr. Wilde, but it doesn't. And he wasn't suggesting otherwise it doesn't change anything. The plan was a historic plan that was showing the various options for location of the GSP. And for some reason, I do not understand why the existing 132 kV line was just shown as a 400 kV line and all the other plans of the actual assessment. It's of course correctly shown that on this historic plan, someone's put the wrong legend on the existing line, but all the all the plan is doing is saying, Oh, look, we considered a location here and we considered a location here and we considered a location here. So nothing changes in terms of the assessment, but as I say, it's a very good spot.

01:20

Thank you, Mr. Frese for confirming Thank you. So in terms of the limits of deviation, the purpose of this agenda item is for the applicants to describe this limited deviation approach and why it is needed. So as an example, near assing turn an overhead line. Please, could you summarise the works, which are shown on work plan, sheet 17, which is app dash zero 10 and explain the reasons for the limits of deviation vertically and horizontally.

02:10

By rebuilding the national grid the limits of deviation as identified in the glossary of app acronyms application 06. It's an allowance for the final positioning of the permanent infrastructure. The draft DCO sets out the limits of deviation in article five of the draft that DCR application 34 limits the deviation allow us to avoid localised or constrained, unknown or unforeseen ground conditions. With the overhead line it allows us to move the tower out of its own footprint to avoid any unforeseen or unknown ground in addition to support the structure. With the cables section, we've got a limited deviation which does allow us to spread the cables and avoid mature oak trees or unforeseen items of equipment as we go through the roof. So in ashington here, as you can see on the screen behind you, this is a generic linear section. The limited deviations there, as I say, allow us to move horizontally, horizontally out of the footprint of its own piece of equipment. There's not really a lot else it does in this location is the standard area.

03:44

Yeah. Maybe if I can elaborate. So I will typically has a base that is a 10 metres by 10 metres. And you're looking for a working area of 40 metres by 40 metres. So looking at the order limits, and the limits of deviation, the pace of the pylon, I couldn't stand in terms of micro siting. I you identify that in

the planning statement. recognises that a pylon may need to be moved slightly for geotech technical reasons the reasons that you've briefly summarised how however, if we're looking at the purely the definition of oneness, a deviation could pile on base right next to the or the limits. So there's a fair extreme micro sighting, which may not necessarily be the best micro sighting. So I'm trying to understand why is there a need to have such a large extent of moving

05:01

dribble, from failed and national grid, we can provide a drawing, identifying the principles of the limits of deviation to see if that will help. But as a quick sort of overview, in this area, we couldn't pick a tower and move it directly next to the order limit, the the the limits of deviation allow for the swing of conductors between towers as well, and that that's circa 30 metre swing in mid span. So effectively, we might have 100 metres wave of limited deviation, but 60 metres or that is the conductor swing 30 either side so that the rest of it is being able to position tower outside of its own footprint.

05:50

If we took the example maybe the 43, which is a central line of work number four, which is the 400 kV. Yeah, bearing in mind the base of the pylon being the 10 metres by 10 metres. RB 43, could move in either direction, east west, north or south within the village deviation Shona.

06:18

Yes, so it's quite hard to see the limit deviation to the north there, but it's actually underneath the green line that's being removed there. So it could effectively move north or south by 20 metres. But bearing in mind, the design principles of an overhead line is you don't move individual towers you you have a pylon. So you have a tension pylon, and align pylon. Now this is a suite of line pylons here, and you if he was to move your tension pile on 20 metres north, that would then reduce as you come through the alignment here, okay, on the movement of that tower,

07:00

in the context of the tension pylon, which is not shown on this particular drawing. But if we went on, not suggesting we do, it's just a theory land trying to understand if we went further to the east, there would be a tension pile on there. And then if we went to the west, there would be a tension Island. In general, it's still the relatively straight line between those two tension pylons. Exactly. So you mentioned something like a deviation of 20 metres maybe. Is that an indicated anywhere in the application documents that from micro citing the island base, the 20 metre deviation from micro citing? That's something that that's included in the application

07:57

is I think so it's in a sense, it's implicit because there are these issues with Was it not? Your it's very tempting to think when you look at the plan, and you have the tower there and the line looks straight, but of course, the line might not be straight, the line can sway and particularly when the lines are hot, or whether believe they, you know, they sag a bit more and there are clearance requirements. And if they then sway obviously, have to have regard to that as well. So I think, in effect and, you know, and after many, many national grid development consent orders, this is the sort of tolerance that is necessary, I think. Mr. Feldon explained that we could perhaps produce a diagram or some other small explanation

for you, and I know it's it's not immediately intuitive. But But But to do that, to explain how much tolerance there is in in this.

09:02

Thank you, Mr. Humphries. That would be really helpful if you could provide that information. With regards to the needs of deviation vertically, in particular, downwards. Have there? Has there been a specific distance nation specified? Or could could, could you? Is there a limit downwards? That's the question really, until the limits of deviation.

09:36

Yes, the limits of deviation downwards, you know, as as as far as is necessary. In broad terms, why Mr. Pilgrim can perhaps comment on this but for headlines of this length, the problem very often is is ground conditions. Do you need special foundations for example that need to be go down a long way in order to make a tower secure bearing in mind, obviously, the enormous loads that they are under and because going down doesn't have any additional environmental or other effect. Clearly, we're not going to go down, you know, kilometre or anything like that. Because there's no effect and because again, this is an uncertainty, a lot of these limits of deviation are to deal with uncertainties, unknown unknowns, that formulation is the one that has has been used as as same as to Hilton may be able to kind of help you with a kind of examples, the kinds of things that can kind of happen.

10:56

We have a national grid as Michael states, going down with with a tower height, we still got a statutory duty to keep safety clearances from ground. So I think midspan full sag is about 8.4 metres from clearance. So it all depends on on the tension or the span at the point and the design temperatures. It's quite a complex calculation to get those clearances.

11:29

Okay, thank you,

11:30

sir, just to be don't need you to wait, I want to put it up now. But to elaborate on this point of the limits of deviation, and, and swing, and so on, if one was to look at the equivalent land plan to the one we were looking at, which I think was sheet 17, you'd see that class to compulsory acquisition of rights extends to the limit of deviation, and therefore the swing needs to be within the area that we have a land right to swing over someone's over someone's land. And you can you can see that sort of co relation so that beyond that there is class six, within the rest of the Order, order limits, but within the limit of deviation for the work, we have the class to right, which is you know that that right to have a tower to have over headlines and so on. And so that that's probably part of the puzzle if I can put it like that.

12:41

Thank you very much, Mr. Humphries. Can I just come back to one particular point about downwards, and you mentioned something as far as necessary, and that going down doesn't really have any environmental effects with possibility situation arise? Whereby, because there are no controlled nations, there may be an opportunity for somebody to extract any minerals. And those minerals could

potentially be utilised for aggregates and they induced or maybe a whole road. So what control measures would you have in place to ensure

13:32

Yes, I don't think mining of aggregates would be within the scope of this order. There's no power for us to fine aggregates. This is simply a power of where we can in the case of Article Five one be in respect of pylons deviate vertically, to such extent downwards as the undertaker considers necessary this simply allows us to, to put the pylon in, or in this case, the the foundation of the pylon.

14:06

And it might be useful if you can maybe provide a note just to draw our attention to safeguard that there is something the possibility then, because the environmental effects potentials of excavating for minerals or aggregates.

14:26

Yes, I don't. I don't think there's consensus as a specific safeguard as such the safeguard is simply that this is not an application that allows us to mine for aggregates and therefore you know, it's not part of the authorised the authorised development and we we can't use the powers in the order for ulterior purposes. And so in a sense, we're constrained On that, I mean, clearly if you were carrying out construction and as part of construction of building a, you need to move earth that's, that's, that's that's one thing but the mining of our grids is quite a different form of development and it's not authorised, okay? draft order.

15:17

Okay, so you feel pretty confident there that it doesn't facilitate no limits or downwards. It doesn't facilitate the extraction or aggregates to utilise the whole rose as an example.

15:34

Yes, I am. I mean, it's an interesting sideline firm and get to PLC, but I don't think it's one that they've explored and they certainly haven't instructed me to include it in this order.

15:47

Thank you. And please, perhaps if we can, unless anybody has any comments or observations to make, I'm just looking around the room not seeing any show of hands now virtually either. So if we can then move on to the work shown on cable ceiling and compound is this tower Valley East and that's shown on works plan sheets 19 which is AP, zero 10. And there's also a design and layout and style valleys cable ceiling and compound which is on AP dash zero 25. So she could just summarise the works on

16:36

rebuilding National Grid, we'll start with the application zero 10 work plans and I'll just describe the order. It's a deviation here. So you've got the cable ceiling in compound or three quarters of the way across to the left of the screen. To the right of the cable ceiling combined, you'll see the limits of deviation, excuse me. In Orange, that's for the overhead line. To the left of the screen you see the

limited deviation in blue for the cable and around the cable ceiling compound you've got a nonlinearly Demeter deviation in pink the principles behind the limits of deviation here you've got a 25 metre buffer around the cable CNN compound to allow the main works contractor to utilise their design and position in there correctly. And the overlapping of the two linear limits the deviation is to allow for that movement during design. Okay if we move on to the cable ceilings on power and detailed design these application 25.

18:27

So on the left hand side of the screen you can see a plan review of the proposed design of the cable sealing compound. You see the cables coming in from the left hand side and the overhead line from the right hand side. It's about a 45 by 70 metre compound on the right hand side you can see a cross sectional view or an elevation view of that this plan doesn't show any limits of deviation on it.

19:10

Sorry, you have any question on that?

19:12

Yes, I was just checking it is so. So you briefly touched on the limits of deviation that the size of the compound was something like centimetres by 45 Something like that. But the limits of deviation appears to be approximately something like 125 metres by 100 metres, but that minutes of deviation seems to show encroachment across the track. So the question is, is it likely because of that relative deviation? It would result in that track being stopped.

19:57

Sorry, on if we should go back to the gas

20:24

I'll be honest from this distance, I can't see it encroaches over the track

20:38

Yes, from filling National Grid there is there is a track that runs across there. This particular location is quite an undulating area. So there would be a lot of colour wheel here. Any track that we would stop up or weak or utilise would be diverted around within the order limits. So probably around the back of the cable sealing compound at this location on maybe to the right hand side of it.

21:10

So any tracks that may require diversions are they shown where on the application

21:25

internal farm tracks are not shown. So I don't believe this ones are public right away, you know. So something

21:36

okay, maybe just something to consider, in particular, establish rights on a particular track if they're being listened, extinguish. Yeah, so how do we can? How would you communicate that? Coach to general public?

21:57

Yes, I don't these are not so far as I'm aware, I would need to share but not public right away these aren't tracks that the public can go on these days. I think these are as the spilled and said internal farm tracks now stand to be corrected, but obviously, we need to check that one is that one so that we can give you a most helpful answer we got come back rather than as as we said earlier, rather than granulating on on things. Thank you,

22:33

would it be normal practice in that situation to agree and discuss with the landowner with diversion might be taken.

22:43

Yeah, so, it may well be and that may well have may well have happened

22:54

if we can now move on to trenchless crossings. And if you could summarise your approach to that perhaps sheet 20 of PDA dash 002 You may also want to make reference to the design and layout plans horizontal directional drill, which is a PP dash zero 33. So, if you could just summarise the works associated with the trenchless crossings

23:30

refer to the national grid if we start with application 33 the cross section on the cable installation

23:43

sorry.

24:01

So, this is this is showing a cross section of a non dig technique. This one is horizontal directional drill. Now, when you instal 400 KV cables, the deeper you go with them, the less I dissipate the heat, so, you have to spread them out over to to get that dissipation of heat. So, we've done a design principle of what the HDD distances would be the weight for cross and then allowed. I think that temi is either side of that for any movement in between the drills. If we go on to application 10 sheet 20

25:37

So, where the hand just was on the right hand side of the screen, you can see the two purple 400 kV. lines that identify the cables, they start to spread. That's where we start to use our non, our trenchless crossing techniques, those are just the centre lines of the three cables per phase on each side. So each one of those is about I've lost the top 40 metres wide, I think off the top my head, we've got a cross sectional drawing somewhere. So that's how we've identified there's a scent alarm we've worked out and then we've gone to our limits of deviation. north and south of that.

26:29

Okay, thank you to follow on question here to the applicant. So in order to avoid disturbance to the river habitats, and geomorphology cool features project description up dash zero 72 refers to embedded measures and those being en dash e 05. And en Deus Geo for being trenchless crossings. The riverbanks and the river style piece and that is nature's intrinsic to and built into the design and are listed within the camp the construction environmental management plan, Appendix B table two point on of the register of environmental actions and commitments, which is app dash zero dash 179 Sorry, app dash on some nine. So compliance with the R EA C, which is the register of environmental actions is secured and the requirement for of the draft development consent order. So, and I did measures the n m 05 for the box and the N dash g 04. For Real Estate our both refer to the Dr. Pitts will be located outside of flood zone three, were practical, or will be managed in accordance with the flood risk Action Plan, which is w 08. In the code of construction practice, please come the applicant then explain how references to these embedded meshes give confidence to the examining authority, that there would be no effect on surface water quality or groundwater. So perhaps maybe use two and three smite one to these others?

28:38

Well, I suspect it will be others who will give the technical solution in part, I suppose this relates to the question that was raised on Tuesday where you very helpfully clarified what was meant by modifying language and they raised the point about wherever possible. So I think it may be a combination of Mrs. White and Mr. Fields more on the technical aspects of of these things

29:20

shall light on behalf of the applicants. So the code of construction practices are the register of Environmental Action commitments, and currently has the wording as you read out, which is where practicable, the contractor would avoid working within the floodplain which would be preferable generally for a contractor just to avoid working in wet conditions or at risk of flooding during construction. But without a main works contractor. We don't know for sure that they could definitely you know, we don't know what method they would use or how exactly they would do that. So that's why we've got the where practicable in that instance, we have got that are supported by the secondary part, which is if it wasn't, they would need to come up with a flood plan to identify how they would work within the floodplain safely and not cause those surface water issues. And in addition to that, the riverbanks on the reverse store because they are main rivers, they would need a flood risk activity permit from the environmental agency because of works under over a near the floodplain and the main river. And so any methodology would need to be agreed through that process as well. So the detailed method would be put out at that time.

30:39

Can I draw your attention to the habitats regulations, assessment reports, which is app dash, zero 57. So that that actually mentions that with regards to measures that would disrupt the pathways to effect and reduce the likelihood of an incident occurring, such that the potential impact upon surface water quality and groundwater, at European sites, through pollution and sedimentation in symptoms is avoided. So where we see words such as were practical or will be managed, obviously, the hospital

regulations and assessment reports is giving the impression that it will be avoided the pathways are the likelihood.

31:36

A will. So clearly the way it's been drafted is in deed intended to to do exactly that. Either. They will work outside those areas, or if they have to work in those areas, they will come up with an appropriate an appropriate plan. And it's not unique that developments do take place in these sorts of areas. But the important point is that, you know, appropriate measures are taken not just for the environment, but also the safety of those undertaking the work. So this would be I'm sure, uppermost in the contractors minds, I don't know whether mas might wants to add to that.

32:20

Now, I don't have anything to add at this point. Okay, thank you

32:33

could we move on to temporary bridges, which is yes figure 4.1 sheets 20 PDA dash 002. And you may want to refer to design and layout plans a temporary project file access, which is AP dash zero 31.

33:04

Build a national grid. In a moment, you'll see a generic temporary bridge design on the screen. And the guards to the limits of deviation, the limits of deviation and not associated with a temporary breach because it's not permanent infrastructure. The designation you can see there, WG five is the location that we're proposing to put the temporary breach that's along the centerline of the cable route as it is using non trenchless crossing technique around the bridge. Thank you.

33:49

With regards to the temporary bridge, how long does it generally take to be put in place and then become operational.

34:01

Role Play on national grid, the actual landing of the bridge is probably a couple of days. to land the bridge. It's the preliminary works to build the abutments either side that are a number of weeks. The bridge with them once it's been laying would be operational within a week. Thank you.

34:25

Thank you. This is just a point of clarification that you may wish to take back to the applicant and it's regarding particular notes on up dash zero 31. So it makes reference to the details in this drawing are illustrative only the final position and design will be within the parameters contained with a DCO with reference to the work plans I don't think currently the position or the temporary bridges are shown on the work pods. They're shown on the Yes, pickers that reference

35:11

fairly National Grid. They're also shown on the general arrangement plans.

35:24

So, before I move on to construction Matters has anybody any other comments or observations to make on what we've discussed so far? Not seeing any unfaced. Sorry, Mr.

35:42

microbead for Suffolk County Council. So we didn't have any comments, we wanted to make about limits of deviation or related matters in relation to the two locations that you'd identified in this part of the agenda. That's to say Essington, and the still Valley cable sealing compound and related matters, we do have some concerns elsewhere about the approach that's taken to limited deviation, and micro citing, we've referred to those in our written representation. I'm happy to say something briefly about this now, but it will be covered in our local impact report. Or I'm happy to leave it to the part of the agenda. Item seven when we're dealing with the DCO. Simply to illustrate the point, I say I'm in your hands as to whether you want to hear anything about it. Now you want to leave it to item seven or you want to leave it until you're told in writing in the LIRR.

36:50

Just check with my colleagues come back

37:00

we'd be happy to have it in the local impact report. Can I just check when you made reference to the written record written representation was is irrelevant represented

37:11

in our relevant representation, which I think is RR 006. Okay. I can give you a paragraph number if you get that would be helpful. Just give me a moment. It was in I said, I said paragraph number for whatever reason, we've got letters, numbers, and it's item h of r 006.

37:44

Thank you Mr benefit.

37:50

We shall move on to agenda item for them construction matters. So, the purpose of this agenda item is for the applicants to give an overview of the temporary measures that are sought for the construction of the works and the construction techniques that could be applied. So, it will be appreciated if you could explain the phasing of the works for the underground works. And it would be helpful if you could make reference to the cable working area cross section design and layout plans cable working cross section which is AP dash zero 27.

38:44

Build a national bridge and the cable working cross section drawing should appear behind you in a moment. And with regards to the phasing of the of the cable installation, we will be doing our enabling works installing a temporary or road or a temporary access route through the middle of the cable route. We would then have gangs go through strip the topsoil and put that to the side. They would then strip the subsoil and excavate lay CBS cement and sand into the trenches and cable ducting. Then reinstate

with CBS topsoil at subsoil and topsoil as I go through. This will be in sections circa a kilometre long and at these points of resort kilometre or so we would have a joint by location where we would pull cables from and join cables.

39:52

Okay, so would you straight take and backfill would that be done daily?

39:59

We don't have a moment As contracts are on board, but it's envisaged that it would be a rolling daily process that the guys strip dig up, they'll probably go through strip then there would be a team that digs instals backfills laelia

40:15

Yes Chapter Four project description at dash zero 72 gives the impression that the works of Dec installed on backfill would be done daily so I'm just highlighting appears to be the assumption made the yes thank you okay thank you

40:42

if I can make reference to while still having in mind this particular cross section, table 2.1. The construction activity plant a nice data rich is AP dash 136 does not appear to reference to any need for dumpers during site preparation and topsoil strip. So do you envisage the need for having any dumpers to generate the the section shown that

41:21

got filled in National Red? Again, we don't have a main word contractor appointed, it's likely that it would just be excavators that move it to decide. So I don't envisage dumpers at the moment but I can't rule it out until we've got a maintenance contract.

41:45

So, in terms of the excavated soils Yes, Chapter Four project description again, at dash zero 72 and paragraph 4.7 point 10 refers to any excavated soils would be placed stockpiled, at a minimum distance of 1.5 metres from the edge of excavation. However, if you look at this particular cable working area cross section, you'll notice that the subsoil mound platform is 3.5 metre wide. So, if you were applying a minimum distance offset of one and a half metres from the age of excavation, then that would suggest that the subsoil mound at the bottom would be only half a metre wide. So, the construction Environmental Management Plan which is app dash 177 Paragraph 11 point 3.23 refers to sub soils not exceeding five metres in height. So, based upon the area available, what effect will this have on the cross section? So, if I was trying to maybe summarise what appears to be in the ies suggests or implies that you may not have sufficient land to undertake the section work shown

43:33

to reveal the national grid take on board your comments and hopefully we can come back to you with a suitable solution with that. My initial thoughts are that it's a slight misrepresentation in the way that's

drawn because you depending on the depth of your excavation, you're unlikely to batter back like the drawing shows. So it would be a straight trench exploration

43:57

Okay. Can I also just highlight that he shows up Seiler heights of two metres. But if you cross reference to the construction, environmental management plan, up dash one Sansan paragraph 11 point 3.23 refers to topsoil stockpiles would not exceed three metres in height. So in terms of consistency, what effect will this have on the buffer distance either side and the toe of the top side?

44:33

think the reason there's an allowance for three metres sorry repelled and the reason there's allowance for three metres is when we go through narrow sections of working area and we're constrained we would increase the height of the topsoil storage and subsoil storage at those points to not to narrow the cables in and not have such such a large gap between them.

44:58

So the maximum height of the top Soil would be three metres, not two metres,

45:03

it would be three metres in locations, not two metres as shown on the drawing. Great, we've got some tolerance to allow us to do that. Thank you.

45:14

So obviously the these are very, very detailed questions about construction and insofar as we may need to come back to you, we will obviously, you will know as well as I do that the purpose of an environmental statement and environmental impact assessment is to identify likely significant effects. legislation doesn't talk anything about worst case effects or, or any other effects. And we genuinely believe what the representations are the likely significant effects but clearly, you know, there may be very localised areas where it's necessary to do things slightly differently. But insofar as we need to come back to you, we will do that. Okay.

46:00

Thank you. Are you able to maybe advice on the total length of the whole route for the proposed development and the thickness of the whole room payment, and the estimated volume of aggregate required that might serve best as a response as an action by the cable working area? Sorry, Mr.

46:34

I don't know whether Mr. Fields didn't has those numbers available, but I suspect that it's something that we would have to dig out or or calculate. And obviously, we'd be very happy to do that for you and Mr. Field, and maybe he

46:54

said, Rob, build a national grid. Again, we don't have a bank where it's contractor appointed, we can calculate the assumptions that we've used for the amount of aggregate for the whole roads and the

links that we've proposed on our plans. I think in general, between we're looking to be a maximum of 350 mil deep. When you say haul roads, do you mean the full temporary construction routes throughout the project or just for the cable sections?

47:24

No, you appear to be utilising providing to four metre wide hole rows and seven metre wide haul roads. So it would be helpful if we were able to be able to quantify. So

47:42

it may be pertinent for you to note that although it's identified as a haul road or metres wide, it may be subject to the main work contract to be appointed be a temporary access trackway. So we've based it on a worst case solution of using aggregate but it could be trackway. Okay, thank you

48:12

and finally, on this caper working area cross section, the whole road shown under Section seven metres but you have a vergence of six and a half metre wide on either side. So, if you're trying to compare it with something that's comparable to one lane of a motorway perhaps Yeah. So, if you can just maybe provide a quick overview on why that is required

48:47

to upload a national grid. So the width is required, because the cable drums we have assumed are 400 KV 2200 Square mil aluminium, those cable drums are kilometre long and come on a low loader which is effectively six metres wide. So we've allowed a whip there and a tolerance for the vehicle to go along and turn about dropping off the edge of the road. Okay,

49:20

thank you for explaining that. Thank you. It's clear if we can now move on to the phasing of the works for Brantford substation. And if you can just give an overview of that facing words please

49:37

pay rebuild. And again, for substation, we would look to do the enabling works as it's an existing substation there's already access into there. We would excavate instal foundations instal HV plant instal gantry gantries And instal instal shunt reactors, then we will instal the busbars back to the gas insulated switch or I was going to use an acronym I do apologise. Effectively that's that's the full extent of the works of ramp stage. Oh, sorry. And the removal of the 400 KV overhead line there. That's the full extent of the works at Brampton substation. That

50:33

temporary, public right of way, diversion appears to protect existing bridleway at that location. And it shows the figure shows a four metre wide access route you're looking as well as for meats and soil storage. So the question is, is it possible to have the temporary diversion of a bridle the rolling along side in what seems to be a narrow corridor

51:00

to rob field and National Grid? Sorry. Engineering, I deem that as part of the overhead line project, it's that access is not actually for the brand for substation that's required for the construction of the towers, to the east of the substation. Now, it's a generic design for me arriva for me, it's oil storage that we've applied throughout the project. However, this bridleway is probably six metres wide, already stoned. So this is unlikely to be sort of storage, we may have to widen slightly to allow to offset the bride away from our construction traffic.

51:41

Thank you. Thank you. I'm just checking to see if anybody has any observations or will wishes to question anything on regard to that particular item. Hello. If you could introduce yourself.

52:03

I'm Claire Dixon, Operations Manager for boatswain access for Suffolk County Council. My question on there will be we would need to check what the definitive whip of the public bridleways at that point. I understand the applicant has our spatial data, but obviously there are with descriptions on there. So we would need to clarify that just in case that saw Bundys in impacting on the whips of the public bridleway.

52:32

Thank you very much for that observation, which is extremely helpful. And we have another show of hands virtually.

52:45

Thank you, Ben Curtis for Babor and mids up at District Council's it was just going back to the last point about the HDD works, please, if that's okay, just picking up point. Thank you, sir. Just picking up from a point of community concern? Is it possible to clarify the point at which we will be likely to see details of the location and design of the jointing bays? These and an explanation of why that falls were in the process would be helpful. Thank you.

53:14

Thank you, if I can ask the applicant to respond.

53:20

Yep, Rob fill in national grid. So again, the actual locations of the Joint Base won't be defined until we've got a maintenance contractor on board and they've completed their detailed design. The application is designed with a three cables per phase solution in mind. It's not beyond the capability of our contractors to actually utilise different techniques and potentially reduce the number of cables per phase. So once once that's been done, we would know the lengths of cable drums and the locations of joint base. Thank you

54:05

just checking if there's any other further comments to make.

54:09

And I just have sorry for jumping about a little bit kind of just take us back to the bridleway running alongside the Bramford substation. We've heard from the County Council's right away people about the stretch tree wits and so on. And we've discussed your generic design, maybe not eating solid storage in amongst all of that mode and action point for you to come back and have a look at that again and explain to us how you achieve that. But could you also highlight in that how it will be achieved within the order limits? Which do seem to be quite tight at that point?

54:47

Yeah, I'll come back to you on that. Thank you. Okay,

54:53

can we now move on to the main site compound? And if the applicant could explain to me uses for locating the Maintain compound at this location and summarise the phasing of the works for forming the compound and how the compound would operate

55:15

repelling National Grid the main site compound has been identified to be off the side of the a 134, which is a good flat agricultural field with central to the project. With no office environmental constraints, it would utilise the welfare, the offices and be used as the main storage. And it would be the main construction compound for the project.

55:52

Is there a typical detail showing the layout of the site compound? For example, say the offices would you be able to provide that detail to us is it going to be a single a two storey site cabins, the number of car parking your approach to lighting, I think it could be useful if a sketch showing an indication of that layout.

56:17

So that's quite an exhaustive list of information that we would get from our main works contractors as part of their detailed design under their CDM plan, they would produce that it would although my thoughts at the moment are it's likely to be a tarmac entrance with a number of parking bays, modular cabins, I wouldn't think they would go any more than two storeys high, I don't think I've ever seen a more than two storeys high. We generally use single story, but until we got my work contract, I can't understand that it would be in storage and welfare cabins drying rooms and things like that. And a stoned area for the yard, the laydown area,

57:06

okay, in terms of this determining the extent of the compound, and if your own, if you haven't got the details from the main contractor, how were you able to determine the extent to that.

57:19

So during the preliminary design, we spoke with our fee contractors and and to understand the size of the storage area that would be required for the number of cable drums, or the number of staff that we've got in our assessment and cabins that would be required for that. And they sort of identified a

square. I can't remember the square metre of it at the moment on my head, but they identified a square that size and believe that would be suitable for all of the construction.

57:52

Okay, in the context of the access point of the A on three, four, what assumptions have been made with regards to that point to the access into the main compound?

58:12

Sorry, rebuilding, I'm not sure what context you mean by the assumptions. But we've assumed that we can get it's on quite a straight bit of the one three ball. We we've assumed that we can get sufficient sightlines along the a 134. And we've also there is an existing access there, but we've offset from that access, because that's directly opposite a property.

58:34

Okay. Normally, where where you have a preliminary design, you have something like a road safety audit for that particular stage is a road safety audit in existence, and are you able to share that information?

58:56

I don't believe we've done a road safety audit on that location yet. We'll take that away. I'm not sure whether that would be part of our main roads contractor scope at this moment in time.

59:08

Can I maybe ask the local authorities, they've got any comments to make on access points, in particular from say, main compound? So would that be that they get a book?

59:31

No, sir. The local highway authorities Suffolk County Council apologise. So that's microbead for Suffolk County Council. But rather than hearing from me on this length, if I can just say that, in principle, we accept the choice of the location adjacent to the A 134 It's not ideal in the sense that as you will have gathered from the local road Network, since there are very few places that are ideal, but we accept that, given that constraint, this choice is an acceptable choice. But there are issues with the a 134. And I'll bring in now, Mr. Steve, Mary, obviously, me, double R Y. He's the ENSET, highway manager for the county council. And as you can see, he's on your screen now. And he can explain more particularly the concerns about access the sort of information that the county council would like to see, to be able to be comfortable that the tech biotech this works.

1:00:43

Hello, good morning. Steve Murray, Suffolk County Council. Yes, we would be looking for some more information the a 134 at that point is a D restricted a class road. So I see later on, you've got a question about design standards. So in terms of design standards, we're probably looking for sort of design manual for roads and bridges, visibility display, based on it's a high speed road rather than a manual for streets design. For example, and I do note, looking at the Google Images, there's quite a lot of vegetation there, and telegraph poles that need to be assessed. I'd echo your comments about

requiring a road safety audit. And there is we will be making some more specific points in our local impact report on the individual accesses. But as becomes clear in the conversations today is there's a lack of information about what each axis can be used for, and the amount of construction traffic with a lot of it being delayed until the contractor is appointed. And those figures coming forward. Again, we're sort of going off the topic a little bit, but for example, the access routes in the construction traffic management plan, which is application 180. It does refer to the construction routes in page 18. And page 40 has only been agreed once the contractor is appointed, with no reference back to local highway or planning approval of those routes. So it's just a point I'd like to make.

1:02:12

Thank you. Thank you, Michael Bedford, Suffolk County Council, if I can say that we did want to pick up that point later on in your agenda, because that's a wider point, but at least we put a marker down now.

1:02:26

Thank you. So Michael humpers. Again, for National Grid. Obviously under agenda item five construction and operational access and traffic, we'll have the relevant traffic people in the room and they may want to comment on this. Obviously, there's no requirement to have a road safety audit at this stage, but I just made the general point, you will you will see from the plans at the way that the order limits have been drawn, do give us a lot of flexibility on that access and and and the ability to make sure that it you know can can pass any relevant Road Safety Audit, but as I say it may be that when Kate carpenter comes along later that she may want to add to this and indeed you may want to ask her a question.

1:03:29

Thank you have no further questions and this particular agenda items. So, I would like to move on, if we can to the construction and to do. So, it would be appreciated if you could give an overview of the construction schedule, which is shown on PPP dash 091 illustration 2.1 baseline construction showed you and highlights the key differences with illustration 3.1 alternative scenario

1:04:15

is rebuilding and leaking shared construction schedule, the alternatives sorry, the baseline, sorry. So the baseline construction schedule will appear behind you in a minute. I think what is quite important to note here is that although the project says its construction from late 24 to 2028, as you can see by the document on your screen there the majority of the construction is actually between 25 and 26 The reasoning behind that is 24 is enabling works 25 and 26. Yes construction ready for the transposition around hintlesham. Woods in 2027. So in 2027, we need our edges to be able to change the approach at Brown would modify and complete a transition north and south of Kenosha and woods, and complete the realignment south of Twin City to new cable sealing compound. So there's there's a large amount of works under our teaching 20 over a long duration of works under outage in 2027, which is not really construction in earnest. It's switching of circuits. 2028 is effectively just to come back and remove a temporary tower north of the woods and put the system into its final configuration.

1:06:05

Mr. Hilton, could I just so that the inspectors understand you've mentioned the outage that is required, it includes some words, and obviously the inspectors will have, you know, understood that from the documents. Can you just explain the point about the timing of that and outages and how that works within national grid? Is it possible to just have an outage at whatever time you want or other constraints? And perhaps you could just explain that because that also goes back to the general points about urgency in timing?

1:06:48

Yep, probably on a national grid. So outages in national grid are generally between clock changing the summer periods when there's not so much requirements on the network. I've been at National Grid 13 years now, and this project is probably the only project I've seen. It's not probably it's the only project I've seen that is actually got out wedges throughout the whole year and the abutting months either side, because of the criticality of achieving this. Once we start to unpick the network, and we start the transition, we've got to get it back into a stable situation ready for the winter. So yeah, it's quite critical that the construction is complete by 26. Very early 27 Because outages start in March 27th and go on till October 27. Okay.

1:07:48

Sorry, can I just ask for a little bit of clarification, just for the layperson, including me, when you talk about outages, are we actually talking about disconnecting customers from electricity supply, we talk about rerouting electricity supply through other methods. So wrong

1:08:03

building a national grid. So yeah, people on around the room and on the call don't need to worry, we will not be switching anybody off. It's effectively we turn off one of our circuits because obviously the overhead lines are a double circuit on either side, we will turn one side off, the power will be rerouted around a country bar our system operator will move the circuits across commission and energise that, and then we'll look to move the other circuit. So Italy's will stay on. Thank you.

1:08:41

Is it possible for you to device if enabling works, which is under the general setup heading this this the same works as pre commencement operation, which is an interpretation given in the traffic development consent order.

1:09:04

reuploading National Grid yes, some of the works are classed as enabling works are the same as pre commencement works. Okay.

1:09:13

And then I noticed that there will be a need to undertake some archaeological strict map and sample. Has this been taken into consideration in this construction? sheduled? And if so, where is it identified?

1:09:32

a posture of bearing or partially across my colleague, I swipe

1:09:37

a child White on behalf of the applicant. And the programme that is on screen at the moment is obviously the key phases of development of the project. And in terms of the detail, we haven't got the details. We haven't gotten my worst contractor at the moment. So the exact phasing of those works. We don't have at the moment but we do have enough time in advance of Suppose enabling worksite. And to do that, and we're looking at the times when they could be phased as we go forward, depending on what, what mitigation is required on the archaeological side as we go forward.

1:10:13

Where we see for example, quarter three in 2024 indicates compound setup. With that mean, then a predecessor of that activity would be strict elements of Ark archaeological works.

1:10:34

At char White's on behalf the applicants, though the archaeology, mitigation is set out within the outline written scheme of investigation of what we what measures we would propose in certain locations. So that identifies the locations where we are proposing to do strip, map and sample. So the different components, so they're not in all locations. So we would look at the specific parts of the work and make sure that the the archaeology is investigated in the right way before those activities start. But because of the length of the project, there are different areas where you can start works, and then the main West contractor would look at that detailed basing to make sure that they have got the right mitigation in place before they start the works in that location as as set out within the outline region skin investigation.

1:11:25

Okay, so what I'm interpreting is that where you've got main compound setup, you wouldn't necessarily be able to start in 2024. q3 until you've done the archaeological strip sample.

1:11:41

If, if the strip map and sample is required at that location, we would need to do that first. Yeah,

1:11:45

okay. Okay. Rather than do it earlier, in the end, say q 120 24.

1:11:52

The exact timing would be when Yeah, when we when the main worst contractor needs to come on board and whether we've got time to the surveys beforehand, but it would be done before the enabling work start and

1:12:05

can I move swiftly on to construction houses? These. So it appears that the likely core weekly construction hours would be in the region of something like 70 hours, if you take into account breaks. So yeah, if you could maybe just describe your approach to workers and community well being in the context of those 70 hours of work

1:12:43

out so the call working hours as identified in the construction environment management plan, application 177. And the call working hours that we've requested in a DCO, our draft DCR required to meet the 2028 delivery is essential that we make that 2028 delivery. And the programme that we've produced, use the standard industry working hours to to deliver the project within those timescales. So

1:13:20

okay, I'll probably ask further questions, but not at today's hearing on that. So if I can just clarify a few things regarding the cars hours. So references made to operational construction plant equipment that would not form part of the startup shutdown activities. So I'm just wondering how you would control and monitor that those types of works wouldn't begin or finish outside these particular hours? Because the distance is something like 29 kilometres. So what control measures would you have in place,

1:14:05

rockville in this grid, our maintenance contractors that would be delivering the work would control that via their site supervisors, there site managers, they would be near misses the opportunity to fill in near miss cars if that work was to go outside of those hours. And there is a public telephone line that members of the public can report things through as well. Okay.

1:14:32

Possibly we can ask further questions and listen. During the examination, the construction Environmental Management Plan, which is a PP dash one Sampson, and that's paragraph two. Point 3.12 refers to operations outside the call working hours. So the completion of operations commenced during the call Working hours, which cannot safely be stopped. So can you give an example of what this means us completion of operation has wide connotations.

1:15:13

So reviewing national grid as an example, when completing, stringing pulling conductor between towers, obviously, the conductor starts at one end on a on a winch and the other end on a tensioner. It goes through. So what we make sure is, if we were partway through on a day, we would make sure it was completed to the end so that we could catch it off and make safe overnight.

1:15:43

Presuming that there would be risk assessments and method statements in place beforehand, this to ensure any works that aren't used, could safely be stopped as well. And then, within the camp, there's reference to completion of works delayed or held up by severe weather conditions, which disrupt or interrupt normal construction activities. So this also has wide connotations delayed define anywhere. So for example, is delay to the critical path on the construction sheduled? Or is this a delay to work so that you're trying to complete on that particular day? And then severe weather conditions? Is that defined anywhere? What's the difference between disrupted and interrupted? And could you define normal construction activities? And what would be unusual construction activities? It's a lot to digest. And maybe it's something that you can deal with a written response.

1:16:54

I'd welcome a written response on that, because that is quite a lot to digest. Oh, thank you.

1:17:00

If I can maybe, finally move on to construction worker numbers. So the worst case scenario for construction worker numbers is based upon the alternative scenario, which is presented in the ES construction schedule with a grid supply point substation being included as part of the dcl Yes, chapter four, Project Description A P, P, dash, zero, Sam to paragraph four point 4.54 indicates a peak in q3 2025. For the purpose of completeness, please could the applicants advice what the construction workers profile would look like for baseline scenario?

1:17:51

Again, if I were building this, if I could take that away and come back to you with a written answer by thanking

1:17:59

the illustration 4.1 in ES chapter four, project description, a PP dash zero sum two shows up to 350 workers per day, a peak, which is cost the 320 25 across the project. So just wanted, it's possible if you could clarify the term worker does, for example, include staff, and visitors coming to site

1:18:30

repelling letter S workers is defined as staff and visitors to site category involved in the project.

1:18:41

Are there any assumptions that be laid on workers shift patterns?

1:18:48

There are some written assumptions that have been made on worker shift patterns. If I could come back to you with those, that'd be great.

1:18:54

And similarly, if you could note these down as well, if you could explain the peaks shown in q3 2026, the peak shown in q2 2027. And it appears that no estimated construction workers have been shown for 2029. The construction of sheduled both scenarios shows manscaping and planting works in 2029.

1:19:24

That note why? Thank you very much.

1:19:26

Okay. Finally have just two further bullet points that I would like to draw attention to and then we'll ask if there's any other observations. So the shedule hasn't considered third party diversion works. And what effect would have this have on the estimated construction worker number profile shown on illustration 4.1. And if you could confirm the estimated construction work and endless profile weather It shows UK Power Networks 132 KV worked

1:20:06

royal blue and national grid. So the diversion works are not factored into the numbers I don't believe but that is just for the 11 and 33 KV diversions the 132 KV removal is factor because that would be part of our work. Okay. The diversions of the 3311 kV, a normally four to five men in a gang at the very most. Okay.

1:20:34

Thank you. Okay. So I'll just check if anybody's got any observations, any queries to make see if I can start with the council's please.

1:20:45

Thank you, sir. Michael Bedford Suffolk County Council. So yes, on both of the topics of construction hours, and construction work and numbers, the county council does have some concerns in relation to construction hours, and cert, as well as being referred to in the CMP. It's dealt with by requirements seven, in sheduled. Three, and we certainly echo were your questions about the, as it were precision of the language and some of the exemptions. But we're also concerned at, in particular, the regular allowance of working on Sundays, and bank holidays. That effectively for the affected communities, there is seven day working without respite. There are obviously slightly different hours, referred to between the Monday to Friday and sell on. You will also note that in addition to the exemptions that he has raised questions on requirement, seven subparagraph. Three, it says that the call working hours referred to exclude startup and closed down activities up to one hour either side of the core working hours. So you've got that as a shadow period outside of the the core period set, we note what the applicant says about the urgency of the project. But I'm afraid at the moment, we're not persuaded that that does require this degree of intensity across the whole of the project in order to deliver the project. And I say we will elaborate perhaps a bit more in our local impact report on our particular concerns for affected communities. But that's one issue in relation to the worker numbers. That obviously is a particular concern in terms of the construction traffic effects. Of that, we know that you've asked a number of questions that the applicant is going to respond to and it's probably more fruitful for us to wait until we see in the written elaboration of that before we come in further.

1:23:30

Thank you, Mr. Bedford. And the applicant, do you want to respond to what you've heard from?

1:23:37

I don't think so at this stage, clearly, we're going to have the local impact report written representations and we can respond appropriately at this time. I'm also conscious that, you know, we've got a very long agenda today and wanting to get through and that's no disrespect, obviously to Mr. Bedford, but just he's clearly going to explain his points and we'll have an opportunity to comment on.

1:24:00

Thank you, Mr. Humphries. So can I just check if anybody else in the room. So we have a hand up, please?

1:24:07

Sir Matthew, our branch District Council, I just want to echo comments, Mr. Suffolk on the working hours for and obviously happy to pick that up at a later point. Okay.

1:24:18

Thank you for your comments. Have we any other? I'm not seeing any raised hands here. You're virtually either. So shall we bring this particular agenda item to a finish? And we'll reconvene at 145 145 Please. Thank you