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Hearing Transcript

Project:	Mona Offshore Wind Farm
Hearing:	Issue Specific Hearing 6 (ISH6) – Part 3
Date:	10 December 2024

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FULL TRANSCRIPT (with timecode)

00:00:02:00 - 00:00:32:00

Okay. It's, uh, 2:00. Everybody. Welcome back. This hearing is now resumed. Um, just before we move into item six, I just want to let everybody know that based on where we are in the agenda, um, and what we've got left, we're going to make the decision, um, to finish at item eight today. So we will finish with noise and vibration this afternoon. And we will start from item nine, which is the draft DCO two tomorrow morning.

00:00:35:01 - 00:00:36:18

Does everybody okay with that?

00:00:41:25 - 00:00:45:20

Mr. Perry, just before we move on, are you still with us?

00:00:47:07 - 00:00:49:29

Uh, yes. Griff. Perry. Um. Hi.

00:00:50:08 - 00:01:11:28

Harry, I know you. You said you wanted to raise something in any other business, but I'm conscious that we probably won't reach that until the end of, uh, tomorrow morning. And I just wondered if it was something that was worthwhile. You're raising with us now, and perhaps for the applicant, if there's anything that we can, um, go away overnight and give you any answers on, for example, is it worth raising what you wanted to raise with us now?

00:01:14:17 - 00:01:19:14

Um, I'm content to wait till tomorrow. That's fine. Okay. Thank you.

00:01:19:16 - 00:01:26:14

No problem. Yeah. Okay. Okay. In that case, then I'll hand over to you, Mrs. Powis.

00:01:29:04 - 00:01:59:18

Thank you. Okay, so we're now on item six, which is other offshore infrastructure and activities. And, um, the main substance of item six is on the potential for weak effects on existing offshore wind farms. And here we're talking about the potential for the proposed development to lead to a reduction in energy yield at other existing wind farms. Um, I know we have a request to speak from, um, the Orsted IPPs represented by Mr. Ennis and Mr. Elderfield, and I'm sure we'll hear from the applicant.

00:01:59:20 - 00:02:02:05

Is there anybody else who wants to speak on this item?

00:02:04:11 - 00:02:35:29

Okay, so we have explored lake effects in some detail at issue specific hearing for. And we've examined the topic in writing in uh, our rounds of written questions. So we've heard and understood the evidence thus far and we don't need it repeating today. Our focus today is on trying to move forward on this topic, so that we're able to report fully to the Secretary of State. And ideally, that could mean some kind of agreement being reached. But failing that, our task is to examine the evidence on both sides so that we can reach a reason to view on the issue.

00:02:36:01 - 00:03:06:04

And it's our strong desire not to leave this for the Secretary of State to try and unpick. So if further contemplation of the issue is required in the decision stage, then that could have implications for the timeliness of the decision. Um, so in terms of the structure for this session, um, it's going to be in three parts, starting by looking at the evidence in relation to potential weak effects, then touching on a policy compliance matters, which I hope will be relatively brief. We've already done a lot of that in our previous hearing.

00:03:06:06 - 00:03:29:08

And then thirdly, to look at ways forward, bearing in mind that we are now at an advanced stage of the examination with about one month remaining, and we are aware that these matters are also being discussed on a number of other live examinations. And so the parties may wish to refer to evidence that's in the public domain on those other cases. And if you do so, we will ask you to submit any documents that you refer to so that we have them before us as well.

00:03:32:10 - 00:03:37:14

Um, before we dive in, does the applicant wish to make any initial comments on that.

00:03:38:19 - 00:04:09:00

Uh, list done on behalf of the applicant? Um, I think just probably just a couple of comments. Appreciate splitting it out and and being very clear. And, um, thank you for that. I suppose the first point to make is we only received the, uh, the, report, the Upward Self Starred Report when it was put up onto the Planning Spectrum website on the 5th of December. So we have done a very initial review of that, but obviously haven't been able to.

00:04:09:02 - 00:04:39:28

I know it was requested that would be provided to us in advance, but it wasn't. Um, so we we've only had it since, uh, last Thursday, which is obviously less than a week. Um, uh, the other point I would like to make, and I do appreciate that, um, that this examining authorities looking to try and resolve this matter. But it is quite important that this matter is also being considered across another four, uh, round four DCO um, examinations at the moment in different ways.

00:04:40:04 - 00:05:16:23

Um, uh, as Mr. Innes and I will know, we've appeared in different examinations, uh, arguing these points. Um, and, um, I appreciate the examining authority's view that, you know, you want to be able to present a clear position to the Secretary of State. But, um, we are concerned that this is being dealt with on a project basis differently across different projects with different information, uh, different representations being made, different approaches being taken.

00:05:17:05 - 00:05:47:11

Um, and, um, I think fundamentally, our view is that this isn't the right way to be dealing with it on a project by project basis without, um, clear guidance or a clear approach as to actually what is, uh, what the expectations are or what indeed is required. Appreciate that isn't going to happen before the close of this examination. And, um, we are doing our best to respond to the points that come forward.

00:05:47:13 - 00:06:10:15

But, um, our view is that this is a this is an industry matter and and that trying to push too hard in any individual examination to resolve issues. Um, is um, it, it has some inherent risk in it. And that's probably all I want to say.

00:06:10:25 - 00:06:45:25

Okay. Thank you. Um, on your first point, um, you preempted my first question, which was to ask you how long you've had those to report. Um, thank you for answering that. On the second point, obviously, um, we take your point. And as kind of planners, certainly, you know, a strategic approach is always preferable. But, you know, then we are as an examining authority in a particular position, and we we need to deal with the case in front of us. So take your points and we'll see where we go today with this, um, discussion. But I will say on the basis of what we know, that you haven't had that report for very many days at all.

00:06:46:05 - 00:07:23:01

Um, we will stick to principles today. We're not, um, you know, the best place for you to respond to any of the detail is going to be in writing for deadline six. Um, it's only fair that you have longer than a few days to look at the report. We, um, got a few questions on it today, but they'll be mostly directed to the Orsted IPS anyway. But there are some things we're interested to just kind of, um, test out. And, you know, all of this discussion is, you know, we understand your in-principle position. Um, but we also do need to test the evidence. So sometimes you may feel, why are we going down this avenue? But, you know, we have to we have to exhaust looking down different avenues today because.

00:07:23:05 - 00:07:53:05

Because of where we are. So, um, that's why we're doing what we're doing. Um, so I will start then just by looking at, um, the report has already been mentioned, um, which is an, um, it's the I can see you've put it on your desk there, the big W on the front. So it's the awak impact assessment report undertaken by Whitfield on behalf of the Orsted IPPs. And this is basically the first time that the modelling behind the figures that we've seen in headline terms earlier in the examination has been provided.

00:07:53:24 - 00:07:54:09

Um.

00:07:57:03 - 00:08:19:12

So to Mr. Innes then, um, we've read and generally understood that report. So I'm not going to ask you to present it in detail, but we'll just check a few matters with you if that's okay. Um, as we work through and, um, maybe if Mr. Chappell driving the documents today, able to bring something up for us. Is

00:08:21:03 - 00:08:21:21

that possible?

00:08:22:00 - 00:08:23:05

Yes. Yes. Yes.

00:08:23:09 - 00:08:32:18

Could we have, um. Could we have that report, which is rep 5120 and we're looking at table 5.4, which is on page 36.

00:08:35:28 - 00:08:42:12

And this is just to get an initial, uh, make sure we've got all on the same page in terms of what this report is showing.

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Mr..

00:08:45:11 - 00:08:45:28

The hosted.

00:08:46:00 - 00:09:16:26

IPS prompts. Um. Um, before we get into the meat of discussing the report, I could introduce Nick. Nick Elderfield to you. Um, he is a principal offshore engineer with over 23 years of professional experience, and he is currently an associate director with Intelsat, heading up the climate analytics loads and meta ocean department, delivering wind, wind resource, energy yield layout optimization and wider site conditions for the offshore wind farms.

00:09:17:05 - 00:09:54:04

Um, and I think in terms of this report, this works entirely, um, the work of tilt. And I'm going to get Mr. Elderfield to, to talk to any questions you may have arising from the report. And I suppose just as a way of introduction, the reason why I brought us to the field here today is that I knew the applicant would not have had sufficient time to fully respond to it, and I do not expect them to have had that time, but there might have been questions that you had, um, arising from the report on a preliminary basis to understand some general concepts and ideas.

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And that may either form, um, further interrogation that you might through written questions or alternatively for the applicant as well. So that's the basis on which Mr. Elderfield has been brought forward, is essentially to aid that process. And that was the very purpose of bringing him here today. And I will, um, hand over to him, uh, to respond to to questions relating to the report. The report. Thank you.

00:10:19:24 - 00:10:53:00

Thank you, Mr. Ennis. I should have let you introduce Mr. Elderfield. Good afternoon, Mr. Elderfield. And, of course, we knew you're on the attendee list for this afternoon. So we kind of we knew that we could expect somebody who had been behind the production of the report. So, um, so, yes. So I just wanted to start by bringing up this table, which essentially, well, in my understanding, is a summary of the findings of the report. We understand, I think, the parameters of the report and the fact that, you know, we understand the brief you've been given and the things it is supposed to do and is not supposed to do so.

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But this table here, I think, gives us for the first time, um, the all stripes position in terms of what might be the additional weight loss for each of the wind farms in the Orsted portfolio in the Irish Sea. And we're looking here at row three, um, which is the scenario of the baseline, the current position plus Moana, um, and then takes across to the column on the final side, which, um, looks at it as a total additional weight lost on all of the projects put together.

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And then we're also looking at the final row, which is the cumulative position, which is if you added in all of the proposed wind farms in the Irish Sea, including our well and more.

00:11:39:13 - 00:11:49:27

Um, so I just wanted to make sure that we are that that that's my understanding of this table. And for me personally to start by asking myself that. That's a correct understanding of the figures that are being presented here.

00:11:52:00 - 00:12:24:09

Yes. In simple terms, yes it is. Um, we obviously have a baseline which shows zeros, but then Moana on row three, as you say. So the second white row, um, is showing for the individual farms. So the loss is associated with Barrow, Walney etc. across. And then the final column is the total weight loss on all of the assets based on that scenario. And we've split it out so that there's Mona Morgan Morecambe. And then the cumulative impact in scenario four and then the cumulative including also hourly more in scenario five.

00:12:24:18 - 00:12:39:27

Thank you. And these figures are estimated effect on the annual energy production. So they're not we're not talking about any absolute values in terms of this report. But it's just about um the percentages representing the net loss in energy yield compared to a business as usual situation. Is that correct?

00:12:40:12 - 00:12:42:11

Yes, completely. That's our baseline scenario.

00:12:42:21 - 00:13:03:00

Okay. Thank you very much for that. You can Miss Chappell you can take that report down. Um, now so just coming to the applicant then for a moment, um, do you are you in a position to give us any kind of initial reaction to the work that you've seen, presented now from, in this report from wood tilted.

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Uh, less done on behalf of the applicant. Um, we are I think it's very much sort of drawing out, um, uh, sort of things that have cropped up to us about sort of looking at that report on a, on an initial basis. And I think one thing that just jumped out at me, again, looking at the table that we were just looking at is I'm not clear why in the baseline there isn't any there isn't any reference to the effects that the projects are having on each other at the moment, which is something that we'd raised as being an important consideration to understand exactly what the what the current baseline is in terms of, of those, the, the interaction between those projects, but also that obviously hourly more is a consented project.

00:13:49:15 - 00:14:23:03

Um, and the other projects are non consented projects. So if you were doing this assessment, uh, in the way that you might do it, uh, in a, in a sort of logical way, it would be to, to understand, first of all, what the impact between those projects on each other is and then put hourly more as the first project, because actually it is the project that's got consent. Um, uh, and also noting that the IPS didn't object or participate in the hourly mall examination.

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So this is information for hourly more that hasn't come forward previously. And obviously those arguments weren't uh, weren't made during the hourly more examination. So just in terms of sort of other points, um, uh, that that sort of have jumped out to us, I think on that, that very initial review, I think, um, there's quite a lot in the in the sort of words used in the report that are slightly concerning to us. Um, it talks about this being an independent study. Um, it's not independent because it's been commissioned by the IPS on the basis of substantiating weight loss claims.

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So I think, I think appreciate it's been done by a third party organization. But it's not it's not independent in that sense. It's also not, um, been um, unlike where you've got environmental impact assessment, where you have those sort of recognised methodologies and standards that that are used in terms of undertaking an assessment. Um, obviously it has not been done in that way because there are no recognised methodologies and standards. There is a um, uh, there is a weight loss assessment.

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Uh. A tool that's been used. Um, but there's not an awful lot of detail about the assumptions and things that have gone into that, that method. It also says that industry standard methodologies have been used. But, um, I think the applicant pointed out on a number of occasions that there aren't such things as industry standard methodology. So I just I think when reviewing this document, um, there does need to be a degree of caution, uh, applied to it, about the statements that are made around, um, around its independence, the kind of recognised approach that's in there.

00:16:16:03 - 00:16:47:23

Um, and, um, obviously the the applicant had made, um, submissions or has made submissions about why it considers that a realistic assessment or an accurate assessment cannot be undertaken. Um, there is nothing here, um, about the operating performance of the Orsted IPPs wind farms. Um, and, um, apart from hourly more, uh, it obviously it it considers hourly more.

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It doesn't consider any of those other, um, wind farms coming forward. Um, there is a there is a real lack of transparency over the data input. So I know it was something that that you'd raised as to the ability for information to be put in on a confidential basis. Um, that information around operational data from the Orsted IPPs projects how the weight loss model has been set up, the user settings applied, which I understand were very important. Uh, none of that information has been provided, so it's actually very difficult to verify anything, uh, in terms of this report.

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Um, it also doesn't include information about other, uh, wind Upwind farms in the Irish Sea, so projects like go into more real flats, North Hoyle, all of which are obviously off at, you know, are relevant in this context or anything around Irish Sea projects. Um, there's also this strange inclusion of hourly more as a consented project, which, as I've said, um, wasn't a project that the, the Orsted IPPs, um, were involved in.

00:17:57:09 - 00:18:27:14

Um, it says it's included that as a consented project. It then says it hasn't included Orsted's own proposal proposed more than in project on the basis that it's not consented. But neither Mawgan, Moana or Morecambe are consented at this point either. Um, so it seems it's that seems quite odd in that perhaps the Orsted IPPs think assessments needed for other schemes, but not their own, which is concerning to us.

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It raises issues around fatigue. Um. Um, in terms of, you know, increased weight, uh, with other projects being an issue. Um, but there's also supporting evidence in the report about distance of effects, which actually contradicts the claim that this is this could or even be relevant. Um, and so I think that for us, there are a number of, of concerns around it. It talks about things like the Mona project having a large effect.

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But there is what what's a large effect. We have no we have no context or baseline or anything in which to quantify, um, the effects that are claimed, um, to, to potentially be resulting here. Um, there are some issues around the, the hub heights and rotor diameters that have been assumed. This. There's a lot in there in terms of, um, of those sorts of uncertainties, uh, and issues and, and as I say, um, it, I think from, from our perspective so far in terms of what we've looked at, it doesn't actually take things much further than the provision of those initial numbers that were provided at deadline for in terms of saying this is where, you know, here's some numbers.

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Um, what do you think about them? Uh, we've got a bit more around the numbers, but but fundamentally, um, as I've said, there are there are so many areas where there is information and detail lacking, um, that, um, it gives us concern and then these very generalized conclusions made around how we should be considering this report, um, that don't have context or, um, or really a way of challenging or considering them as anything else.

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That's probably it from us is that initial overview.

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Thank you. And there are some points in there that we'll, we'll come back to and we'll pick up as we go through. Um, I suppose we've already discussed there is no single agreed methodology. There is no doubt, um, areas of the report that will be open to question, etc.. Um, I don't think we want to sit and discuss methodologies and assumptions and data. Um, we could do that for many more months, I think. I'm not sure it would get us much further. So we've got what we've got a month left. Um, I suppose what we want to know, firstly, is whether, on the basis of what you've seen now, the applicant is able to give any view about whether you think that there's what the figures provided here are reasonable estimates as to the effects on, on annual energy production or whether you're, you're you're going to, um, dispute that scale of effect.

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To cost on behalf of the applicant. I don't think we're going to dispute it. I just don't think based on as, as, um, Mrs. Dunn has said that we're in any way able to validate or, um, or repeat the results there. So we're not in a position to dispute it because we're not able to run those calculations and validate it ourselves. I think I think the important point is it's it's there are a number of, um, inconsistencies and

errors in the input assumptions and uncertainties in the modeling assumptions. So, so those would all need to be, you know, sort of solved in order to, for this report to stand alone in its own sense.

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But, but, but even then, um, it would only be one of multiple different approaches that could be taken to understanding this issue. Um, and all of those other ones would have equal validity. None of those other ones are presented. We don't have the information, as we've said repeatedly, confidential information to be able to undertake and all of those other approaches that could be taken. And there is a whole myriad of different modeling approaches, setups, assumptions that you could take, an almost endless variety of different outcomes that would come forward from this.

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And frankly, we don't know where this report sits in that sort of, you know, overarching understanding of the issue. So, um, I don't think dispute is the right word. It's we don't understand where where this where this sits in, in the the overall realm of possible outcomes. What we do know, and it's, it's obviously repeating the points we've made previously is that we don't think this is a relevant way of looking at this issue.

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Okay. Um.

00:23:08:01 - 00:23:43:23

I suppose we definitely don't want to get into, um, you know, I think I could probably predict what Mr. Ennis would say next, which is that he would have preferred the assessment have been undertaken by yourselves. We know your position on that. Um. We have what we have. We are where we are. So I suppose, um, we have we've talked a lot about what the policies say and whether the scale of the effect, whether whether your position is that there would be no effect or that there might be, um, a significant effect or there may be something in the middle, there may be some, um, effect that doesn't have any material, um, implications.

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But, um, I think what we're looking at here is, uh, you know, an estimate that says that if you look across the whole of the Orsted schemes, there's, um, the potential for an additional weight loss of 1.38%. We know if we zoom out and look at what's happened in recent cases, we know that, um, in the in your case, um, a roughly 2% weight loss in that case to justify the imposition of a requirement which, um, which, uh, stipulates that a full weight assessment should be undertaken, I suppose.

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These are the questions in our minds. We don't want to get into arguing about scale and, um, you know, into the finite detail, but we do sort of want to look at this in the context of does this do you look at this and say, that's absolutely. I mean, you know, you must have done some level of work yourselves. You obviously have your own modelling for doing your own, um, your own planning. That does 1.38%, um, make you bulk or does it make you think, you know, that's it. That's seem sensible.

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I mean, we're just looking for something from you in terms of how you react when you see those numbers.

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Uh, Paul Carter, on behalf of the, um, applicant, I we've never said or claimed that, uh, we would have, you know, 0.00 effect on other projects from, from, from weak effects. That is not been part of our arguments today. So the fact that there is a number above 0.0 in the right hand box is not a surprise what that number is. I don't think we can give you a view on that number, particularly because of all of the uncertainties that we've outlined.

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And we also, as I said earlier, couldn't place that value even if all those uncertainties were fixed for this methodology in in where that would sit in an understanding across a whole different range of models. So it's very hard for us to be able to to give you a response to that, I'm afraid.

00:25:50:15 - 00:26:20:04

Thank you. Um, just turning them briefly to Mr. Elderfield. It might be the best person to answer the question. A couple of questions. The first is about, um, my understanding of this. This doesn't base. It's not based on the maximum design scenario of the Mona scheme. From my understanding of what? Of the hub heights and rotor diameters and things that have been programmed into it. It's not it's not seeking to look at the maximum design scenario of the moment project. Is that correct?

00:26:21:12 - 00:26:53:04

Yeah. So the basis, um, case for the scenarios is a 15 megawatt turbine, which gets you to just below the 1.5GW of of the farms, because that's the most available power curve that we have. Uh, it's based on a publicly available 15 megawatt power curve. And that's an important part of that idea of understanding the the AEP. So that was why we picked the 15 megawatt turbine. And yes, you're right, it is below. We did do sensitivity on a larger one which does go over the 1.5GW again based on information that we had about power curves.

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So that was a constraint within the method.

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Thank you.

00:27:01:19 - 00:27:31:09

Um, and then just looking at these figures in a wider context and you're like, you'll be um, very familiar with work in this area. So I'm just we are not, sir. So I'm just trying to understand the wider context of those potential reductions. And one of the factors, obviously, there are things from year to year. I'm assuming annual energy production from any wind farm will vary depending on things such as wind conditions, but also potentially maintenance regimes and things like that. Is that a fair a fair statement?

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Yeah, it's a fair comment. Um, those are exclusive of this. What is inclusive though, is the seasonality. So when we do the measure, correlate predict process, we look at a long term series of data sets for the for the model data basically. So it looks that seasonal variability. So we capture that within that over multiple years but operational no okay.

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And so in terms of the scale of normal fluctuations in annual energy production in a typical wind farm, is there a rule of thumb in terms of the percentage that you might expect the annual production to vary year to year?

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Uh, yeah. Off the top of my head, I haven't got one number there, but I think it's important that these numbers are considered as the difference to the baseline. So relatively disconnected from what you would see as a variance within a year. So I guess it's about trying to explain it as a um, yeah. As a difference really in production. Um, I think the other things that we have seen is other assessments that are publicly available have talked about 3% for similar studies.

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That's the RWA study that we make reference to in our conclusions. That is from June this year. So it's relatively new information. Um, but that's also, um, they've validated the modeling approaches that have been used in here against measurements. So I think that's probably the best comparison we can provide. But we can go look at the, um, uh, you know, data that we've got perhaps to give you something a better feel for that variability within a year.

00:29:07:05 - 00:29:33:02

That, that that would be useful. I'm talking year, two years. Um, I suppose what I'm trying to do is look at if we're looking at, say, scale of 1.38%, um, an effect of that, that magnitude, how does that compare to normal, the normal range of fluctuations you might expect in your annual energy production in, in the wind farm? That's the question I suppose I'm asking. So if you have some data on that, um, then that would be helpful.

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Does the applicant want to come back on that particular point? It's about contextualizing the figures, really.

00:29:42:10 - 00:30:22:18

A forecaster on behalf of the applicant. I think we would come back on that, um, maximum design scenario point. And it's certainly something that we picked up from this. And I think it was one of the points that we made in previous representations about, um, the difficulty, um, of undertaking an assessment of this nature and the fact that there aren't power curves available for the maximum design scenario, turbine sizes. Um, as we are future gazing at what the turbine market will provide in the timescales that these projects come forward. So the fact that you can't assess the maximum design scenario is inherently a very difficult point to deal with, when that is the approach that is normally taken through examinations of this nature.

00:30:24:11 - 00:30:35:21

Thank you. And any, any comment on that point about that question of how these, um, estimated effects in a normal fluctuation of what a windfarm might produce year to year.

00:30:37:15 - 00:31:32:27

Paul Carter, on behalf of the applicant. No, I mean, I agree, it's a very relevant point to understand. It's also and I think as Miss Mr. Stannard said earlier, very relevant to understand what the annual variability of the effects of the individual projects in these sort of cluster is on each other, as that will change from year to year, um, based on different wind directions. And also obviously the point raised there about um, and again, this was a point that we made in our submissions around the difficulty of undertaking an assessment. This is about pure wind rather than about the actual operation of a wind farm, and to look at the effects of the operation of the wind farm, you have to take into account all of those other factors that influence the end energy output, which is around operational downtime,

around operations and maintenance activities, around outages for grid and all the other long host of sort of, um, issues that will affect the ultimate energy production other than just the wind climate.

00:31:34:22 - 00:31:35:13

Thank you.

00:31:39:18 - 00:31:40:03

Um.

00:31:42:23 - 00:32:17:00

I'd want to then look briefly at, um, we've looked a bit at the scale of the loss that's being alleged there, and I should say that the cumulative figure that's being quoted is 3.8%. The project alone figure is 1.3%. And that's looking at the looking at the Orsted, um, wind farms together just to look a little bit at the duration because, um, if you then sort of the next question that arises is in my mind is if you were looking at the the anticipated commissioning date for the moment project, I'm presuming is 29, 20, 29, 2030.

00:32:17:02 - 00:32:22:12

If we were looking at on normal, on the current construction, uh, timescales that we've got before us.

00:32:23:23 - 00:32:26:10

On behalf of the applicant, correct? Yeah, that's a reasonable assumption.

00:32:27:02 - 00:33:04:22

Um, and so, of course, we've got a table provided by the Orsted IP, an earlier deadline which sets out, um, the earliest what's referred to as the earliest decommissioning dates for the existing Orsted projects. Some of them have been operational for some years. Um, and so we've got some that are at least timetabled to be, um, decommissioned at the earliest in 2030, 20, 31. So, um, I suppose the next question is to sort of look at, uh, the, the temporal overlap between these schemes, because there's the potential that, um, some schemes could come offline as Mona came online.

00:33:05:09 - 00:33:23:08

Um. just a question to the AusAID IPS, and it may be Mr. Innes is better placed to answer this one. Um, when you refer to the earliest decommissioning dates for those projects, can I just clarify that they are. That's the end of the original expected operational lifetime of those projects. Is it.

00:33:24:17 - 00:33:41:11

Uh, some part of the IPS? Um, that was the primarily, uh, view of lifespan and as set out, is that it is intended it is anticipated that the assets will have a longer lifetime than that.

00:33:42:21 - 00:33:54:20

And is there a process? Is there a is there a financing aspect to this? So, um, if they come to the original, the end of that original life does does refinancing have to occur if there's a lifetime extension?

00:33:55:20 - 00:34:29:12

That's a commercial aspect. What has to potentially happen is as you move generally off, um, regimes where you get market support, the dynamics changed towards the end of the life of the project, where it's selling in a different way, and having to essentially balance the ongoing operation and maintenance costs against the projected income yield. I think one thing we've talked about today is it's

quite hard to look forward, but unfortunately that is what everyone has to do in this scenario. You do have to project forward, and that's no different from the commercial view.

00:34:29:24 - 00:35:04:27

Um, that effectively, um, the operators will have to do at points in the future. And in essence, that's one of the the key concerns relating to the Orsted IPPs is that, um, is the figure of estimated yield loss, one which was of a scale which could impact upon those commercial decisions about continuing the extent of the operation and the position that we set out in response to 2 to 19.4.

00:35:05:02 - 00:35:43:09

It is a direct response from the stripes, which is that they do believe that the material increase in weight could be sufficient to tip the balance in decision making. It's of a scale that is sufficient to potentially tip the scale in that decision making, in that future judgment call that we're now looking at in, you know, over five years time. Um, but we're not saying and we're not saying that the instant response to, um, uh, the, um, uh, the new schemes collectively would uh, uh, immediately render all projects non-viable.

00:35:43:11 - 00:35:52:28

Not at all. What it is is that question of the extent to which the scale of impact would be a material consideration in the continued operation?

00:35:53:25 - 00:35:54:10

That's, um.

00:35:54:22 - 00:36:07:20

That's really the best you can say at that. And, uh, the IPS positions, the scale of of the cumulative facts, certainly is of a scale that is, um, of significant concern.

00:36:08:12 - 00:36:25:03

Thank you. We may come back to that point in a moment. Um, I suppose while we're talking about it just you've said in your submissions that to extend the lifetime of those developments wouldn't require consent. Is that can you just explain that a bit? And also, does that also mean marine licence?

00:36:25:14 - 00:36:42:10

Uh, colonies are part of the prototypes they have. Um, they also have undertaken a review and the original consents weren't time limited. Um, uh, there may be O&M licences may need to be extended, but the actual fundamental consent is not time limited. Okay.

00:36:45:11 - 00:37:27:04

Thank you. And so, um, I suppose the lifetime extensions just put that aside for a moment, just on the basis of the information we have, um, about those schemes. Now, I suppose we're, we're looking at, um, for the first time, some numbers against each of the projects. And we also have some information about some of these projects are relatively recently consented. So like the warning extensions and by extension the some of the others are older schemes. Um, is it now possible that you, that you're able to look at those across that portfolio of projects and say, do you know what? Um, there's a relatively lower effect on this scheme and its lifetime is much as much less time remaining in it.

00:37:27:06 - 00:37:33:00

And therefore, we are able to start to discern which of our projects are actually likely to be more effective than others.

00:37:34:26 - 00:37:56:29

But I suppose the fundamental point of some of the Orsted eyepieces this is that it's the fundamental yield loss, um, towards the end of any project's life, uh, becomes more problematic in terms of whether it continues. And that relies on ultimately decisions at the time based on.

00:37:57:09 - 00:37:57:24

Uh.

00:37:57:28 - 00:38:14:21

What the. What? We're getting paid for the energy, uh, against the essentially the underlying costs of operating and maintaining, uh, the, uh, plan going forward. Um, and those, uh, certainly, um,

00:38:16:18 - 00:38:26:00

there are some severe concerns about the extent of generally the effects of, in combination, um, at the scale that's been set out and the modeling.

00:38:31:00 - 00:38:36:17

Okay. Um, with the applicant, like to come back on any of that before we move on?

00:38:42:09 - 00:39:24:29

To costs on behalf of the applicant. Um, I think we we obviously understand what's been what's been said there. I think we would sort of say that this is, would be one of a great many factors that would go into any decision making on how long a project would operate for. And I think to say that this is some sort of tipping point, um, might be overstating things, but obviously it's for an individual operator to make those decisions. And that's and we are not the operator of those projects. So, um, that that is obviously for the all stripes to say, um, I think what is really relevant in this discussion is, um, how the decommissioning of each of those individual projects would affect any energy yield of the remaining projects.

00:39:25:05 - 00:39:54:00

Um, as those projects, as we have said, are going to have far greater impact on each other than this project will on any of them, given the proximity of those projects to each other and really the impact of whatever the number that would come out at the end of this is from the Moana project would be somewhat immaterial to the unknown changes about how each of those projects would affect, and this is the wrong word. In effect, um, uh, each other as decommissioning takes place.

00:39:56:10 - 00:39:59:25

Thank you, Mr. Chairman. Would you like to come back on that point?

00:40:02:11 - 00:40:15:11

I think I might want to comment on poverty or said I might want to consider that and come back on that one. Actually, yes. I don't want to just make things up as we go along. I think I will have a discussion to see if we can come back more substantial at that point.

00:40:15:14 - 00:40:46:10

Thank you. I think it is a point. I put a fair point. Um, a final one, um, on the report in terms of its content, is this point, um, Miss Dunn's already picked up on, which was the kind of secondary, uh, matter of increased turbulence leading to increased fatigue or structural loading. So there's sort of a

secondary, um, effect that's been noted in the report that might cause additional downtime for turbines. Um, which of course would mean additional interruption to electricity production. Um.

00:40:48:15 - 00:41:13:24

I'm just I suppose I'd like to check with Mr. Elderfield. Perhaps, um. how much evidence there is about this as an effect in, you know, in the real world and whether in your professional opinion, there could be, uh, that sort of level of effect even at the distances we're talking about here. So a minimum of 30km away, weather turbulence could affect schemes in this way that you discussed the the fatigue and structure loading.

00:41:16:03 - 00:41:52:00

Yeah, I think there's there's a fair amount of evidence for a, um, within a windfarm, uh, level. So turbine to turbine within wind farms, uh, to the extent that, you know, minimum separations are set, there's, you know, wake steering approaches that are dealt with to deal with that. Um, in some locations, we're also seeing curtailment to minimize loads on gearboxes, etc., as options in that, in that sphere. I think that at the longer scales, the longer distances there's limited evidence. Um, but in the same way we're seeing it now with energy yield and wak effects, uh, between clusters becoming more prevalent.

00:41:52:02 - 00:42:27:19

I think our point and, you know, it was a relatively short comment in there, was to say that there were other effects. It is relatively unknown at this stage. There's not a lot of work that has been done to our knowledge on that. Um, in terms of that far field, uh, assessment. And the challenge is always about, you know, the measurement of those things. Um, I certainly know the work has looked at it in terms of the patterns of production. Um, and that's between, um, Triton Knoll project and Cameron Bank in Germany. So they've got two examples, but there's no mention of the, the, the impact on on turbulence within those.

00:42:29:24 - 00:42:35:12

Thank you. With the applicant. Let's come back on that point to review. Already made your points on

00:42:37:00 - 00:42:38:22

turbulence and structural loading.

00:42:39:04 - 00:42:50:03

Uh, pool costs on behalf of you know, I think I think that has covered our point. I think this is one we it may be a little beyond my technical understanding. So something that we will come back on when we respond to the report in detail.

00:42:50:17 - 00:43:24:21

Thank you. I want to move on then to look a bit at, um. We've heard quite a bit about the practicalities of undertaking an assessment and, um, the difficulties around sharing commercially sensitive information. Um, I don't think there's much benefit in revisiting those arguments today. Um, there does appear to be a need for some strategic guidance in this area. And I know that various through various routes, this is being raised with Department and Crown estate, etc., but that's obviously we are um, going to have to deal with this in the absence of any guidance on that front.

00:43:25:06 - 00:43:45:11

Um, I'm not going to ask any more questions about the practicalities of undertaking an assessment, unless anybody wishes to make any note. Okay. Um, quickly then, moving on to the sort of policy

compliance angle, which is to conclude, hopefully some of the points we've we've been discussing, uh, over the last months.

00:43:47:03 - 00:44:22:24

Um, firstly just on para 2.8 0.197 of Empson three. We've definitely talked about this one enough, but I just wanted to. We've heard the arguments about close and the definition of close. We don't need anything else on that. Um, I would just like to look at the second part of um, so obviously it talks about where a potential windfarm is proposed close to existing operational windfarm operational infrastructure or has the potential to affect activities.

00:44:23:01 - 00:44:41:13

We've talked about you've talked about your, um, interpretation of licence in that context. But putting that aside for a moment, I just wonder if the applicant, just for the avoidance of doubt, really, is it your case that the the proposed development does not have the potential to affect existing offshore wind activity in the Irish Sea?

00:44:44:00 - 00:45:17:06

Less than on behalf of the applicant. Um, I think you have to read that in the context of its activities for which a license has been issued by the government. So it isn't it isn't just activities within the Irish Sea. It's activities for which a licence has been issued. I don't think you can you can read that, um, outside of that context. Um, and, and we've made it very clear. Um, I know I keep banging on about the words in this paragraph, but they're really important because they wouldn't be there if they didn't have an importance to them.

00:45:17:16 - 00:45:44:28

Um, uh, and, and it does say for which a licence has been issued by government, and we've made our representations on the considerations of the licences that, um, uh, it's certainly our understanding, are required for an offshore wind farm, um, and that those aren't affected, um, by this project. And therefore it is our position that, that that paragraph just isn't engaged by it just isn't engaged.

00:45:45:12 - 00:45:55:03

So if I asked you to consider a different interpretation of license in that context, or if we think that perhaps in the wider sense it's talking about a license or consent, would that change your view?

00:45:55:11 - 00:46:33:07

No, no, it doesn't change my view because because the, the, the consent or the license is, is the ability to install a project. It doesn't guarantee generation from that project. It doesn't guarantee a flow of wind. Um, I think I made submissions on this in, in the last hearing. There are licenses which are granted which allow the exploitation of a particular resource. So a minerals extraction license, for example, where there's a very specific, um, activity that's being undertaken.

00:46:33:09 - 00:46:55:28

And, and it is not the case that, um, that, that the licenses that are granted for offshore wind projects are to um, construct and operate those projects. They don't guarantee a revenue stream from those, uh, or a um, or guarantee a wind in that sense.

00:46:57:00 - 00:47:06:12

Okay. I think we've taken that as far as we're going to, to be able to take it. Um, Mr. Ellis, do you want to come back on on that and we'll have your submissions.

00:47:06:25 - 00:47:43:22

Or comments about for us today? Um, simply put, that, um, uh, construction is far too narrow. I think it's perfectly clear it deals with those which exist. And the concept of licensed in that concept is dealing with, um, activities that haven't yet been built. Um, and that's our, our position on it, um, and trying to reach, uh, the narrow interpretation into it flies in the face of the words around it and the general thrust of, of the whole purpose of this section of the N3, which is understanding the relationships that a project will have with other users in the sea.

00:47:44:12 - 00:48:14:29

And simply put, it is unduly, narrowly construction. And you have to then say, well, what is where's what's the line drawn out? If the effect was it was three kilometres away. Is that close four kilometres, five kilometres? What is close? If it had a 50% effect, would that be something? If it was at ten kilometres wasn't close? I simply put, the narrow interpretation here is simply not borne out by the rest of the text within the overall section.

00:48:15:01 - 00:48:57:06

And I suppose looking at this point for today's purpose, um, I would like to have a look at it on the assumption that our analysis is right and you need to look at coexistence. What does it say that should be done? Because that then points, I think, to some of the the matters that then flow into the third section of the agenda today. And I appreciate that. uh uh, Mr. Duncan doesn't agree with that interpretation. But on that hypothetical exercise, I'd be keen that we could perhaps explore that aspect which are of interpretation as well, so that you have it, because it's quite important that you and the Secretary of State potentially have that position.

00:48:57:08 - 00:49:01:13

And also, as I say, it takes you into, um, how matters might be dealt with.

00:49:02:12 - 00:49:10:21

Thank you. I think we will come to a bit of that. Um, but when we get there, you can, um, you can surely come in, um, and.

00:49:10:23 - 00:49:44:11

I can I just sorry. It's less than half the applicant. Can I just make one further point around, um, around this, this policy, um, wording, which is that it is the same policy that was in place in 2010 when, uh, so this isn't new to the revised national policy statements. This is the same policy wording that was in place, uh, in the original national policy statements in 2010. And, um, it is only now I know Mr. Innes and I have rehearsed this argument, uh, on another, uh, examination.

00:49:44:13 - 00:50:18:21

But it is only now that this policy is being interpreted in this way, that through all of the round three projects, um, brought forward on the East Coast, this has not been raised as an issue where you had projects in, in far greater proximity to each other than you are here with the, uh, with the AusAID IPS projects and Moana. Uh, it wasn't raised as an issue. And I think our position is this is if this genuinely was a policy requirement, first of all, uh, it would have been, um, addressed at that point.

00:50:18:23 - 00:51:02:09

And secondly, um, the the Planning Inspectorate accepts um, and it has a very rigorous process for determining whether environmental impact assessments are, uh, are um, uh, full and uh, effectively contain all the information they need to to take. Um, to take into examination. Um, and um, certainly Mona was accepted for examination without any consideration of this being a requirement for an EIA

to be carried out, as have tens of offshore wind projects that have been brought through this process without any, uh, requirement for that policy to be in place.

00:51:02:11 - 00:51:36:09

And it simply cannot be the position that something that's been in policy for the last 14 years is suddenly, uh, being triggered. It either was a policy or a requirement and has been a policy requirement all that time. Uh, or it's not. And our position is that it's not for all the reasons given and for the fact that it's only in the last, uh, 18 months or so that this has been raised as an issue, if it genuinely was the intention that this is how the policy should have been interpreted.

00:51:36:12 - 00:51:45:18

That would have been the case for all those projects coming through, through the extensions projects, through through round three projects. And that simply hasn't been the case.

00:51:47:05 - 00:51:56:02

Including, as Mr. Carter has reminded me, of projects that Orsted brought through itself, uh, in the, uh, on the East Coast and through the Hornsea project.

00:51:57:01 - 00:52:00:26

Thank you. We've heard, um, those points. Um,

00:52:02:11 - 00:52:26:11

I don't think we need to go back over, you know, the, the history of we're all very aware of it. And we're also aware of the our annual report, which did note that although that was this was a precedent set by putting that requirement on that DCO. They did also note that it may be an issue, an increasing issue of importance in future cases, as noted in the recommendation report. Um,

00:52:27:29 - 00:52:29:08

Mr. Ennis, would you like to come back

00:52:31:07 - 00:52:31:22

today?

00:52:31:24 - 00:52:47:20

I'm not going to to take your time up with it, but I don't think that was a wholly accurate description. Um, we'll come back and writing in at, uh, the next deadline with information relating to that. So as I say, I'll come back on that, but I appreciate you want to keep moving forward. Thank you. Thank you.

00:52:49:05 - 00:52:49:24

Um.

00:52:55:18 - 00:53:26:24

I just want to test one final thing before we move off this paragraph, which was, um, we've obviously in the report that's been provided by the IPS that we've been giving figures for projects alone and also cumulative, which is a sort of, um, reasonable approach. However, I do want to sort of seek views on this policy and really whether there is whether you think there is any policy basis for looking at effects beyond the project alone on the basis of this paragraph, because I think on a straightforward reading, it talks about the effects of the proposed development.

00:53:26:26 - 00:53:47:02

It's not because it's not talking specifically about, um, an EIA type of effect. It's not talking about looking at the cumulative picture, it's more looking about the effect of the proposed development itself. So I just wanted to seek views from maybe starting with the Orsted IPS on that one.

00:53:49:12 - 00:53:55:02

Is there on basis of this paragraph, any policy basis for looking at the effects beyond the project alone?

00:53:56:14 - 00:54:35:27

Well, um, on comments on behalf of the IPS, um, the position in relation to this must be that when considering such a facts, one, when one gets the conclusion about whether things can coexist successfully, that must be in the environment, which is uh, uh, the baseline and forecast. And in relation to matters such as offshore wind, where the Crown Estate awards leasing rounds and there are other applications at the same time being examined. Uh, then I think it would be wholly unreasonable for the Secretary of State to individually consider each individual effect and then say, well, they're individually all okay.

00:54:36:12 - 00:55:08:21

Um, and equally, um, if you take that line and there's a and there is a necessity to do something about it, um, if you take the smallest project last, it will have no ability to do anything to mitigate or offset the effects that the cumulative scenario gives rise to. So where it is foreseeable, I say that the Secretary of State must take into account the potential for further development to come forward, and for those cumulative effects to be properly evaluated and considered.

00:55:08:23 - 00:55:43:24

The failure to do so would essentially mean that the policy would not operate in the way that the Secretary of State. Ultimately, uh, the ultimate objective of this in two, eight, two, three is that the collective sea users coexist, um, and where there is a future Your anticipated program of development to not understand how that would relate, but simply failed to comply with the policy objective which has been set down here and in my submission would be again, far too narrow a prescription.

00:55:44:00 - 00:56:17:13

Um, and for example, um, you could make the point about navigation, but clearly you have to understand the picture as it emerges cumulatively may have impacts. So impacts on sea users have to be considered against the context of what is reasonably foreseeable. And in this context, we have three projects at examination at the same time. And against that background in my submission, it would be wholly unreasonable of the decision maker to fail to understand the various relationships.

00:56:17:15 - 00:56:41:23

And indeed, the reports are likely to come to the Secretary of State at fairly similar times, with slight gaps, but within a time frame, um, that is relatively narrow. So yes, I do think this, this, this. If you realize the purpose of construction, which is to coexist, you need to understand the relationships which are likely to emerge in the near future. That would give rise to any issues of coexistence.

00:56:42:18 - 00:56:46:11

Thank you. Mr.. Would you like to come back on this question?

00:56:47:12 - 00:57:24:05

Thank you. Liz. On behalf of the applicant, um, I, I, I would like to sort of go back and, and I know we keep going back to 28197 um, and 28198, but I think those have to be read together. Um, I think

the fact that there's the word assessment in, um, notwithstanding our position that it isn't triggered, but if you're just looking at it from a pure policy perspective, it says the applicant should undertake an assessment of the potential effects. And then it says the assessment should be undertaken for all stages of the lifespan of the proposed wind farm, in accordance with the appropriate policy and guidance for offshore wind.

00:57:24:22 - 00:57:55:21

I don't think you can read those paragraphs, um, separately. Um, and, uh, and we've made submissions on the fact that there isn't any policy or guidance for offshore wind that deals with this issue. Um, I think the question of cumulative effects, um, is, is an interesting one. Um, and clearly, if you are looking at it from an EIA context, understanding cumulative impact is important because that is how an assessment would need to be carried out.

00:57:56:00 - 00:58:26:23

Um, uh, but as we say, there isn't any guidance in terms of undertaking this scope of assessment for an EIA. And another point I'd just like to make here is that, um, when we think about those environmental impact assessments being undertaken and the policy and guidance that sits around them, they are driven by the regulators. So where you are looking at, um, a new type of impact. And we're obviously going through that.

00:58:26:25 - 00:58:57:27

Um, in, in another sphere on this project, you have different regulators who produce their guidance as to how assessments should be undertaken. Um, and there is very clear policy and driver from those, uh, regulators to be saying these are things that you need to be considering and this is how it needs to be done. Um, we simply aren't in that context here. It is not the UK government that is saying, um, this is how this needs to be undertaken. This is a commercial entity saying we think you need to be doing it.

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So there just isn't that framework and there isn't. We would say that policy driver or um, or regulatory requirement for this to be done in this way, in terms of cumulative, we probably it probably starts to go into our discussions around mitigation. Um, in terms of the sort of second part of, of looking at policy, but it is very difficult to conceptualize how with a number of schemes coming forward.

00:59:31:17 - 01:00:04:00

It could or should be the responsibility of those projects to seek to mitigate the impacts and how that could be done on a cumulative basis and ultimately what the outcome of that would be. Um, I think we've made some submissions already around the the kind of the balance that ends up being struck where you the, the kind of the key, the key, um, the key factor that you can bring into play here is distance between projects.

01:00:04:02 - 01:00:44:28

We know that inter project um or inter scheme impacts are the greatest because the turbines are closest together and the further away you get the less of an impact there is. That's simply physics as I understand it. Um, uh, so if the thing you have is to increase distance. Um, I think our position is that that we are limited in terms of what can be done there. But at the same goes for each of those other projects. So you create a situation where you're squeezing new generation in order to try and create some potentially very minor benefits to that existing generation.

01:00:45:00 - 01:01:11:01

And that's where you need to be looking at that in a kind of in a, in a very holistic way. Um, so yes, as I say, cumulative is, is is, I would suggest quite complex in this, in this scenario and really starts to drive at what the ultimate aim of mitigation or indeed, um, what it is the Orsted IP is, are seeking to achieve um, out of it.

01:01:13:27 - 01:01:34:26

Thank you. And so I think what I understand from, um, that last point, but the point before last was that if you were driven to increase distances between farms, then you would be likely to reduce the efficiency of the farm because of the inter or the intra farm weight effects that would arise because they'd be closer together. Essentially.

01:01:36:15 - 01:02:06:15

Food costs on behalf of the applicant. Yes, that that is correct. So we would be having to increase the density of uh, turbines within the uh, agreement for lease area or within the development consent order limits, uh, in order in a particular direction, in order to increase distance, the relative effects would be, uh, I daresay, unnoticeable on the outcomes of any, um, scenario assessment such as the one presented by Orsted here, the Orsted IPPs here.

01:02:06:26 - 01:02:38:27

Um, yet the impacts on the lake effects internal to the mono project would be highly noticeable and would reduce the overall and and the same for the other projects. Of course, if they followed the same, um, approach, um, uh, would be significant for those individual projects. And the key point is that this project is to bring forward, um, you know, renewable energy generation, the net effect of undertaking those mitigations on the UK output of clean, renewable energy would be negative.

01:02:38:29 - 01:02:52:20

The the benefits to the Orsted IPPs projects would be minimal. The impacts on the new generation would far outweigh those, those, um, tiny um, additional benefits to the Orsted IPP projects.

01:02:53:27 - 01:02:58:17

Thank you. Mr. Williams. Would you like to come back on that point? Yes.

01:02:58:25 - 01:03:31:01

Comments about the Orsted IPPs and two points. Uh, first of all, in the EIA, we have made the very clear point about the relationship between, uh, continued operation of the existing wind farms relative to carbon emission losses. And and I'm not repeating that. As regards the additional points that we've made, I think we're slightly premature in terms of the guidance and and the policy in relation to, um, the issue about where we go next. And I would I would say that we haven't actually gone.

01:03:31:03 - 01:03:32:08

Through if.

01:03:32:10 - 01:04:06:19

There's an issue with co-existence, what should happen? Um, and I would rather do that structure than going leaping to a debate about who loses out most, um, at the end of a mitigation strategy because I think it's premature. Um, and I'll get there with that argument. But as I say, I haven't got to that stage yet because I'm still in the paragraph about, uh, other offshore infrastructure and activities, and we're about to assessment, and we seem to have leapt to the end game very quickly. And I quite like to take at least have the opportunity to say, how does policy.

01:04:11:03 - 01:04:35:17

Understood. We that's and that's fine. Oh, everything. Yeah. We seem to be all right. Um. That's fine. I have do have a few more questions on policy before we leap forward. It's just so tempting to get to that point, isn't it? Um, we do indeed have, um. And actually, you've just raised an the point, and I will come to that next because, um, we've talked about the relevance of the EIA regs to, to the effect assessments. Um.

01:04:37:18 - 01:04:59:22

In the applicant's response to EC2, you've indicated that you may be willing to use the Orsted figures to provide a calculation of the effects of the project on climate. So specifically this is about net effects on greenhouse gas emissions. This point we were just discussing, um, does the does the Wood state report provide you with enough information to perform that calculation?

01:05:02:15 - 01:05:43:10

A forecaster on behalf of the applicant, I mean, it's certainly our intention to review it on the basis of understanding whether it does have the right information to be able to do that, and we will look at whether, um, any updates or additional information can be provided in in that manner. I think, um, and I won't repeat at any length the points made in that response. But we, we believe that our greenhouse gas assessment, um, presented in the application, already has the capacity to handle this sort of uncertainty within it because we're talking about, um, abatement of future baseline emissions and what generation will be on the system in the future.

01:05:43:12 - 01:06:13:29

And, and the assessment is inherently uncertain in that regard. It uses an estimate based on a business long run marginal forecast. That forecast itself is it has inherent uncertainty within it. And therefore, the sorts of changes that the Orsted IPPs are highlighting here are, frankly, going to be lost in the noise of that long run marginal forecasts. It's what that is, what a forecast does. It looks at a various scenarios and makes an assessment on a on a range of assumptions.

01:06:14:01 - 01:06:21:10

But you know, what generation comes forward is this nature is is just one of those assumptions. And this is a very small part of the overall UK portfolio.

01:06:22:05 - 01:06:33:15

Okay. Understood. And so do you plan to. So you'll look at it to see whether you will need to do any. Or you will add anything in terms of a clarification, factoring in the numbers we have before us.

01:06:34:11 - 01:07:11:03

Full court on behalf of the applicant, I think, you know, we need to review that report in more detail the assumptions that were made in order to derive these numbers, and whether these numbers can be used to inform any useful update. I think the critical thing is, um, and I don't think anyone is challenging this. As far as I'm aware, it is not going to change the outcomes of our assessment, which say that Moana is going to have an overall, um, overwhelmingly positive beneficial effect on greenhouse gas. You know, irrespective of factoring in these, these small numbers, it isn't going to change the outcome of that assessment from an EIA perspective.

01:07:11:05 - 01:07:14:24

But we can look at whether an update is useful.

01:07:15:28 - 01:07:16:16

Thank you.

01:07:18:25 - 01:07:34:03

Um, the only other part of policy that I wanted to make sure we, um, quickly come back to was the Welsh National Marine plan. And we've talked about policy Saff zero one, which is about, again, a safeguarding policy. Um.

01:07:37:00 - 01:08:08:06

And we've talked before about the relevance of it. I suppose I just wanted to come back on the basis of what we've discussed today, which is. So it says in there about, um, proposals likely to have significant adverse impacts as kind of a test as to whether or not the policy applies, um, upon an established activity. And I suppose the question I just wanted to briefly explore with the parties is, uh, whether the the potential effects being alleged here constitute significant impacts in this sense. And I will start with your stripes.

01:08:13:03 - 01:08:58:20

Uh, comments about the stripes as set out in our response to questions. The level of impact is such that it could potentially impact upon future systems of life extension. On any view, that's a material scale. Um, and it's significant insofar as you're considering the future operation of assets. So in our submission, it's very clearly, um, of a material and significant nature, uh, both individually and by the time you get to cumulative, the concerns are very significant.

01:09:00:13 - 01:09:23:24

And as I say, the issue here is, um, you know, it is the combination that the individuals are alarmed but at. The combination is getting to two very, very significant scales in terms of of being a really material consideration in the future life extension and the life operation of the assets. But that is the position of the authorities.

01:09:24:06 - 01:09:27:12

Thank you. And the applicant.

01:09:28:28 - 01:10:04:16

List on on behalf of the applicant, I think you probably could guess our response to this. And in terms of sort of being able to determine whether an effect is significant, there has to be a framework against which you measure that taken out of out of context. These figures, um, are figures. Um, they don't they don't tell you anything. To be completely honest, there is no as I said at the start, there's no context for them. There's no determining, um, uh, how how big or small they could be.

01:10:04:18 - 01:10:47:20

And therefore where. Significance. It's it's it's it's without without that framework. It is it's impossible to determine the significance of an effect because it is just one party saying it's significant. Whereas in, in a context it may well not be significant. It it's yes, I think I think we go back to our submissions around, um, the fact that, um, the NPS policy talks about an assessment being undertaken in accordance with, uh, wind farm, I, um, policy and an EIA guidance, and there simply isn't anything there to measure these impacts against.

01:10:47:22 - 01:11:00:00

And in that context, with the marine, uh, the Welsh National Marine Plan policy, you have nothing to you have nothing to determine whether this is significant or not and therefore whether that policy is engaged.

01:11:01:20 - 01:11:12:15

Thank you. Okay. Um, I'm going to suggest we move on to the third part of this agenda item and let anyone has anything else specifically on policy that they wish to raise.

01:11:14:21 - 01:11:17:14

Okay. So. Oh, Mr..

01:11:18:16 - 01:11:55:02

Cohen, someone else did I. Peter, I want to set a contact for the last phase, if I may. Um, that is obviously our position is 2.80.203 engaged, um, which requires that engagement with, by the applicant with the affected party should take place and that solutions are sought to allow offshore wind farms and other users of the sea to coexist successfully. That's what the measure is. You've got to coexist successfully, and then it moves on. Ultimately, in the policy decision making at 2.80.345.

01:11:55:19 - 01:12:00:12

Um, and that's under the can the heading other officer infrastructure and activities. Um.

01:12:01:27 - 01:12:44:22

it says 2.28.34 for in some circumstances, Secretary of State should expect to work with impacted sectors to minimize negative impacts and to reduce risks to low risk. Practical across this, there's two fundamental themes. Negative impacts are economic and then there's risks, which is another subsector of impacts that you can have on other marine activities. Um, and at 345 uh, the statement of the sanctions state should be satisfied that the site selection and the site design of a proposed offshore wind farm and offshore transmission has been made with a view to avoiding or minimizing disruption or economic loss or any adverse effects and safety to other offshore industries.

01:12:45:06 - 01:13:27:26

There's a very broad statement about both the site selection and indeed the detailed design having that effect. It goes on to state that at three, four, seven. That where a proposed development is likely to affect the future viability or safety of an existing or approved licensed offshore infrastructure or activity. Look at the broad language. The Secretary of State should give these adverse effects substantial weight in the decision making, and then goes on to say that providing proposed schemes have been carefully designed and that necessary consultation with relevant bodies and stakeholders has been undertaken at an early stage.

01:13:28:04 - 01:14:00:18

Mitigations may be possible to negate or reduce effects on other offshore infrastructure operations to a level sufficient to enable the Secretary of State to grant consent. Now, I think it is important against the background, because we now have a. Helpfully, the Crown Estate responded to some questions posed by the examining panel in the outer dozing offshore wind farm, where there are specific questions about the 7.5km, which is a which is a matter that's previous been raised and by the applicant.

01:14:01:21 - 01:14:37:01

And insofar as the Crown Estate's response to that was, um, that effectively the use 7.5 for a range of purposes. Um, and one of them was de-risking round four projects and the tender process for providing additional mitigation and assurance to participants through limiting proximity. And let's be clear that participants are those engaged in round four. But what they went on to say is the Crown Estate acknowledges that Inter Farm Week effects can extend beyond these buffer distances.

01:14:37:03 - 01:15:30:06

And also, in the fourth bullet point of their response to question one, they state that the spatial and temporal variability of wind speeds means that it's complex to accurately predict impacts on nearby wind farms, which may depend on factors beyond distance. So they go on to particularly identify prevailing wind directions and wind farm layout has been further factors. So in essence, they recognize, in essence, that a 7.5 was a rule of thumb between their projects, but recognizing that the effects would extend beyond it, particularly identifying prevailing wind direction being a key criteria, they then in the fifth, um, bullet point, go on to say that the location of a wind farm within an area of seabed for the Crown Estate is for the developers to decide and design for, subject to obtaining necessary consents and the Crown Estate's approval.

01:15:30:20 - 01:16:06:09

I take that as a, um, essentially exactly what it says, that the reality of the situation is that these issues are a matter for the developer to take forward in terms of that project design. The Crown Estate also dealt with, uh, the Frazer Nash report, which has also been referenced very sensibly Extensively on the applicant and as they acknowledge, the report summarizes modeling applied to generic hypothetical windfarms and does not replace the need for project specific analysis.

01:16:07:03 - 01:16:37:21

See the Crown Estate making it perfectly clear that you can't use the Fraser Nash report to generically make statements about distances. And again, ultimately, in the ultimate bullet point, it's very clear that the, um, the studies are separate to help um, other studies and evidence specific projects is for developers to determine, again, putting it squarely on the responsibility of the developer and just looking through those tiers of policy.

01:16:37:27 - 01:17:10:24

Therefore, there wasn't a detailed analysis done of the wake impacts of the the rounds and their relative locations. A general 7.5km was undertaken at the initial stages of the uh Crown estates are bidding round, the Crown Estate are clear that it's for individual projects to take forward the design and consider these matters, and that their own study, which they commissioned, was generic and is no substitute for specific, um, uh, analysis, uh, for project specific analysis.

01:17:11:21 - 01:17:41:25

And that means that in terms of the process as set out in NPS, the site selection didn't have any detailed analysis of weight loss. We know from the applicant's early evidence that it did not take into account our weight loss, and today still does not put forward any evidence to you in relation to weight loss. And therefore, at this stage, what we're residuary left talking about is three things are left. One is ultimately a site layout.

01:17:42:26 - 01:18:18:11

Secondly, there may be operational control of turbines which could reduce Wak effects. Or finally, as we see, um, the potential for side agreements, um, in relation to developers reaching an agreement and that that's a matter which has occurred at other offshore wind farms in, uh, uh, at UK waters. And there have been numerous examples of projects entering into agreements to deal with waka farms.

01:18:18:29 - 01:18:54:20

Um, and certainly aware that there has been public statements about only more and more, uh, reaching an agreement on weight loss. And there are other examples in the industry as well. So in terms of where we're at, there are a limited range of opportunities. If you've missed out on site selection, uh,

the area that's been taken forward for application layer and the other constraints that the applicants discussed, um, uh, in terms of, the project, and we're left with very limited options relative to.

01:18:54:28 - 01:19:06:03

Essentially taking matters forward. But that hopefully, is the Orsted IPPs position of the context of where it leaves us relative to this examination.

01:19:08:18 - 01:19:16:14

Thank you. Uh, there's a lot in there, but some of it touches on things that I already had on my list of things to discuss. Um.

01:19:18:16 - 01:19:35:19

I just wanted to come back in as well. I have you on that particular question on viability, and we're looking at para 2.8.347. Um, so I'm completely clear on your position. Are you saying that the.

01:19:37:24 - 01:19:40:08

The effect on future viability.

01:19:42:15 - 01:19:53:22

Would kick in, essentially if you were looking at lifetime extension of those projects, or you saying that future mobility becomes affected immediately. For those schemes, if.

01:19:55:08 - 01:20:07:25

What I'm saying is that as we set out in our response to. To your question, and that was, um, specifically, um, phrased by the austenite piece, that it is a factor that is likely to affect the future viability.

01:20:09:02 - 01:20:10:25

Okay. Which is something different.

01:20:11:29 - 01:20:30:21

The wording is as is likely to affect the future viability. So it doesn't need to be an instant effect on viability. And as with many viability as you project forward. Um, it is it's that forward projection where viability comes to be a greater challenge.

01:20:31:05 - 01:21:02:15

Thank you. And I will ask the applicant to come back on the points that both both sides have submitted a deadline. Five extracts from the Crown Estate's submissions to the housing um examination. Um, I will just ask the applicant to come back on to particular statements in the in that Crown Estate submission, one, which was regarding the fact that an acknowledgement that Winter Farm Week effects can extend beyond that 7.5km, which I don't think is something actually that the applicant does dispute entirely.

01:21:02:17 - 01:21:18:29

I think it's something that you accept they can extend beyond 7.5km, but I'd like your response. And the second is about, um, the statement in the Crown Estate's submission that, um, the phrase in the report doesn't replace the need for a project specific analysis.

01:21:23:28 - 01:21:55:05

Is done on behalf of the applicant. Um, Mr. Carter is going to deal with the point around, um, uh, the existence of weight loss beyond 7.5km, which I think we've always said they can exist. The point is, uh, is there a need to do an assessment and therefore, and you know, what kind of distances are we talking about? It is also though important in that Crown Estate letter, um, that where it talks about the 7.5km, it says the buffer standoff between wind farms.

01:21:55:07 - 01:22:36:09

And this is both existing. So it's not between just between new projects. It was between, uh, existing operational projects and new projects. So it was a buffer between any two projects, um, unless developers consent to closer proximity is a separation distance to enable developers to develop, operate and maintain wind farms by allowing for a range of factors, including, amongst other matters, lake effects, navigation and safety. So it was a starting point to say by setting this distance, we are creating a distance between projects where we think those those very direct, uh, of sort of inter farm effects aren't going to, aren't going to arise.

01:22:36:11 - 01:23:08:14

So it was taking account of wake effects. And I don't think you can say it wasn't um, in respect of I will add more and go into more. Um. Uh as Mr.. And is probably knows uh hourly more as an extension to go into more they share a boundary and it was therefore essential that that those those two projects effectively go into more agreed to hourly more coming forward. That is a very different situation to the Ram for leasing rounds that we're talking about at the moment. Um, and Mr. Carter, I think there was the other point. You were sorry, madam, I forgotten the second question.

01:23:08:16 - 01:23:12:11

You asked about not not replacing the need for a project specific analysis.

01:23:14:09 - 01:23:49:07

Pool costs on behalf of the applicant. Um, I don't think the Crown Estate, uh, letter is suggesting that there is a frame. You know, we've covered this point lots of times that there is a framework to do a project specific analysis in the context of EIA, in the context of a DCO. It's not pointing to any particular guidance that the data put out or any other regulator. Not that the data regulator, but any regulator put out to say here is some guidance to follow. Um, So you know that Orsted IPPs have done an assessment, and they would say that this is more relevant to this situation than the phrase and that study.

01:23:49:09 - 01:23:56:29

And and arguably it is, but it doesn't mean that there is a framework within which to do one that's relevant to this examination, the DCO and the EIA process.

01:23:58:03 - 01:24:25:06

Thank you. Um, okay. We've we've heard, um, from Mr. Innes then, um, the, the three, uh, mechanisms that or the three potential, uh, forms of mitigation that may, uh, be if it were to be accepted that there was a coexistence issue here. Um, he's talked about site layout, operational control of turbines and side agreements. Um.

01:24:27:28 - 01:25:00:16

I suppose there's a few things that I want to look at, too, in terms of the way that this we move forward in this examination. Obviously, we requested a statement of common ground. First of all, I would say We are expecting that at deadline six and we will, um, we obviously we know that will include wake effects. Our plea is to be as detailed as possible in your statement of common ground

when it comes to wake. Okay. So the the point of requesting it is to tell us more than we already know from the submissions, um, to date and to narrow the areas of disagreement.

01:25:00:18 - 01:25:01:07

So

01:25:02:29 - 01:25:07:06

without that, we may as well just have the separate submissions. Um.

01:25:10:19 - 01:25:12:00

We've had some stay there.

01:25:12:11 - 01:25:48:00

Mr. Carter forecast and perhaps just just sorry for jumping in. I just wanted to pick at that point whilst it was it was fresh. We are looking to progress a statement of common ground. We have a draft that we sent recently to the state IPS that they're reviewing, um, and that we are we are having a meeting later this week and intend to submit something in that deadline. Six I think we need to temper expectations of, of of what you've requested there because, uh, I don't think it is going to set out in great detail the, um, areas of disagreement beyond what's been received through quite a volume of material here.

01:25:48:02 - 01:26:04:18

It will either have heading points pointing to you to areas of disagreement, or it will refer back to submissions. Because in the timescales available, and knowing that all of this material is already available in examination, I don't think either party is looking to take that approach to the statement of common ground.

01:26:04:29 - 01:26:29:15

Right? Okay, um, I will then come back to Mr. Innes and just explore those points that he's, um, suggested there about, um, and just probe a little bit into, um, exactly how you would see these things working. So you've talked about, um, site layout to start with and operational control of turbines. Perhaps we could look at how you would see a form of mitigation working in relation to those matters.

01:26:30:04 - 01:26:54:13

Yeah. Comments about the authors today piece. One of the difficulties is that's clearly a matter for The promoter of a scheme to come up with a layout that mitigates or doesn't, and demonstrate how they mitigated it. It's certainly not for, um, another party to tell a developer how that would work. Um, what we've heard today.

01:26:54:15 - 01:26:55:07

Is that.

01:26:55:09 - 01:27:27:16

The applicant doesn't feel very confident. That would be meaningful. Well, the issue is trying too hard to take to accept that on face value, when in fact no studies have been undertaken. The whole purpose of understanding how mitigation might be, um, an appropriate remedy is where one undertakes and understands the extent to which it might be successful. And I suppose that, um, uh, hourly, more they got to a certain level of impact. And so we need to do something about it, or let's have a requirement.

01:27:27:18 - 01:28:01:20

But it didn't appear from the material that I'd seen that there was very much clarity as to what it could achieve in terms of, uh, of mitigation or how the effects could be mitigated. Uh, would um, uh, you know, is it a question of larger turbines? Might be actually a better mitigation than a larger number of small turbines. That is something which you can only test. Our model suggests that there is a slight betterment in a reduction in weight loss from the larger turbines that, that that sort of came out of our analysis based on our information.

01:28:01:22 - 01:28:38:07

But these are really matters for the applicant to, um, essentially come back on because it's their layouts. Um, uh, and we've set out the challenge of the issue is really for them to come back, um, and demonstrate, um, what mitigation might be available. Um, and if they choose not to do so, then that's their risk in terms of the overall examination and the evidence, if they choose not to provide Any evidence on that, then they have to potentially accept the effects.

01:28:38:10 - 01:28:58:08

Unmitigated. Because simply put, the inference from the applicant wouldn't be very successful. Uh, um, I don't know whether they've considered, um, uh, the way in which the turbines operate and the extent to which that can be used as a form of mitigation to weigh costs.

01:29:00:02 - 01:29:11:21

Can you can you or Mr. Oldfield elaborate on that particular point? Is this about downtime or shutting off sections, or is this about something different in terms of the operation, the control of the operation?

01:29:13:14 - 01:29:27:15

My understanding is half the Orsted IP. Uh, Mr. Elderfield can add to it. I've been advised that the way in which turbines are operated can be done in a manner that reduces the subsequent weeks.

01:29:32:06 - 01:29:33:02

And I.

01:29:33:04 - 01:29:33:24

Can help.

01:29:34:00 - 01:29:35:06

Elderfield up there.

01:29:35:19 - 01:29:36:05

Thank you, Mr..

01:29:36:11 - 01:29:38:15

Lee, with some more technical support. Thank you.

01:29:40:04 - 01:30:08:22

No problem. I was going to mention the the. What I mentioned earlier was this concept of wake steering, which is where at a more local level, that that is used to reduce the effect. Um, there are other matters of, uh, you know, uh, curtailment that could be looked at in terms of patterns of production that could look to mitigate those. You know, maybe you're not operating the final row of a set of

turbines or something along those lines. Those kind of mechanisms and control functions can go in and can be used as mitigations.

01:30:10:14 - 01:30:12:21

Can you explain wake steering.

01:30:13:12 - 01:30:43:22

Sorry. Wake steering. So basically, um, when a turbine is operating, the control of the rotation of the turbine, the your um, you can you can basically make the wake go in a different direction. So rather than having it in the exact right direction for the wind direction, you've got, you just you just don't direct it off a little bit, and that allows the wake to go in a different direction. And that can be used to avoid down wind turbines. And that's that's used commonly on operational wind farms at the moment. At a it's like an inter turbine effect inside the array.

01:30:44:25 - 01:30:48:18

And presumably that hasn't that that does reduce their production of energy.

01:30:50:08 - 01:31:03:15

Well they I think lots of uh for wind farm itself. They'll if they are very waked they can actually look at making the energy the net energy much better because they are avoiding that, that lake effect being dead downwind of each other.

01:31:04:00 - 01:31:05:06

Within a farm that is.

01:31:05:24 - 01:31:06:12

Within a farm.

01:31:06:14 - 01:31:06:29

Yes.

01:31:07:16 - 01:31:18:09

And just quickly on that point about larger turbines, um, potentially having a lower lake effect, is that something that's recognized as a phenomenon in, in literature?

01:31:19:15 - 01:31:43:03

Ah, I don't well, there's, there's limited literature about it, but certainly from the study we conducted here, the higher hub heights, they're considerably higher than the existing assets. So there is this effect that seems to come through from the modelling we've done, which suggests that there is a reduced impact. And it makes sense in physics, you're into this higher wind area that these older turbines don't have access to.

01:31:43:27 - 01:31:49:15

And that comes back to some of the sensitivity testing you did in the report about looking at the 22 megawatt turbines.

01:31:49:17 - 01:31:57:11

And exactly, exactly. Yes, as we went higher, it reduced the impact. And that's the second table, 5.5 I think it was.

01:31:57:23 - 01:32:04:05

Thank you. Okay. With the applicant like to come back on any of those those points.

01:32:04:20 - 01:32:40:04

Who cast from behind. It's certainly the first time that we've heard some of those points in terms of the Orsted ISP's views on potential mitigation. So I think we need to respond to those in writing at a deadline six. Um, I think the points we've made previously about, um, the um, net effect of any mitigations on the overall energy outputs and greenhouse gas abatement stands with respect to these mitigations. Uh. Clearly, if operational controls on turbines in terms of curtailments would have a significant detrimental effect on the monarch project.

01:32:40:16 - 01:33:12:21

Um, uh, weather. And I think there's some uncertainty there. Um, as presented by Mr. Elderfield as to whether operational control through wake steering is actually in any way possible at distances of 30km. We're talking here. I think Mr. Elderfield is talking about this as something that is theoretically possible and has been used on into wind farm weights, turbine to turbine at distances of on operational projects likely to be in the order of a kilometre or so rather than 30 times that.

01:33:13:01 - 01:33:51:13

Um, so, you know, I think, again, that would have a potentially significant impact on Mona and a relatively minor change in any impacts that might be felt on any of the, um, uh, authored IPS operational projects. But I think we need to look at that in, in a, in a little bit more detail. I think the point about, um, selections of turbines, we covered this in the, uh, issue specific hearings. Three with respect to seascape and that the national policy statements are quite clear. Obviously, it's a very different topic, but the point stands, the national policy statements are quite clear that mitigation can't be brought forward by selection of, say, a smaller turbine or in this case, a larger turbine.

01:33:51:15 - 01:34:22:15

We have to go to the market and we have to understand what turbines are available at the time that we're procuring them. We're not picking something off the shelf where we can say, well, we'll pick a larger or a smaller. So in terms of the selection of turbines and using that as a mitigation, it's frankly not a possible scenario that could be taken. And again, if we then moved away from the optimal turbine, that would have a significant impact on the overall production of minor and a relatively small, um, reduction in any impacts on, on, on the IPPs projects.

01:34:22:17 - 01:34:49:24

So all of these mitigations fall into that that same category that we talked about earlier where, um, is it possible to mitigate? I mean, things can be done at the very, very edges of the numbers that are being taught here may have some measurable effect in some model, but equally, they will all have significant effects on the output of Mona. Um, and what are we trying to do here? We're trying to bring forward a project that is going to have a significant clean energy output, um, for the UK.

01:34:54:17 - 01:35:06:26

Thank you. Um, can we just the third point raised by Mr. Innes came down to side agreements. Um, I'll just ask Mr. Innes to expand on that in terms of, um, how you see that working?

01:35:09:27 - 01:35:10:12

Um.

01:35:10:17 - 01:35:44:08

Colleagues from half the Orsted eyed peas, how I understand they've operate in the past is through an agreement, um, between parties. Um, um, I think early on today there's been various discussions in relation to the economic loss suffered, potentially by a change of operation from a number of the, um, shipping companies and the discussions about um, private agreements being entered into. Um, my understanding is the terms of these agreements have operated at not dissimilar terms to that type of arrangement.

01:35:47:16 - 01:35:53:06

Thank you. With the applicant made to respond on the point of commercial agreements and their appropriateness in this context.

01:35:53:29 - 01:36:18:14

Paul Carter, on behalf of the applicant, uh, I need to say that those commercial side agreements are where there are identified, um, effects under the EIA process that's been undertaken, undertaken against established guidance by an established regulator in the field. This isn't the case when we're looking at this from a weight loss perspective. So, um, I don't think we've got anything more to say beyond that.

01:36:21:02 - 01:36:51:09

Thank you. Um, can I just throw in one more, um, consideration, which I'm sure may have already, um, crossed your minds too, which is, um, N3 2.80.262, which in relation to offshore, uh, other offshore users. Just scrolling to the right place myself talks about the scope for arbitration. And here it's looking this is under the mitigation heading.

01:36:51:11 - 01:37:20:09

And it's saying that in some circumstances, the Secretary of State may wish to consider the potential to use requirements involving arbitration as a means of resolving how adverse impacts on other commercial activities will be addressed. Um, I suppose I just interested in your views about whether there could be any role for arbitration on this matter. For example, in determining I appreciate we need to have a starting point where there's actually an agreement that there could be in effect. But, um, just open that one up to, um, to the applicant first.

01:37:22:09 - 01:38:01:02

Paul Carter, on behalf of the applicant. Um, I don't think we would see that arbitration would be the right mechanism here, but. But I think it does point back to the point that Mrs. Dunne made previously about this being an industry wide issue that needs some guidance, approach resolution from the Secretary of State rather than on a project by project basis. So in that regard, I think it's a useful paragraph to, to to look at the Secretary of State having an overarching um, position on this, uh, rather than it necessarily being resolved in the way that we're talking about it through the examination here.

01:38:02:14 - 01:38:04:20

Uh, Mr. Ellis, do you have any views?

01:38:07:28 - 01:38:10:27

That come in as of the austenite piece? Um,

01:38:12:23 - 01:38:51:18

clearly, we've adopted a staged approach of trying to understand the issue. Um, then work through what national policy said about ways in which you can deal with these issues. Um, at this stage, we

have identified a range of physical aspects that could be done to mitigate. Um, but as we've said, it's really for the applicant to say what they think they could achieve through that. Um, we're perfectly happy to speak to them about that. Um, but if none of that's really forthcoming, and then there's a third possibility of trying to find a solution through an agreement.

01:38:51:20 - 01:39:36:01

Well, if the Secretary of State is left in the unsatisfactory position of there being, um, a very meaningful impact on existing assets, uh, where no realistic mitigation has been put forward, then at one way in which the Secretary of State might seek to address it is to say that the matter will be dealt with by arbitration, because that is what that is designed to achieve. It's to deal with matters which effectively are not ones for a regulator to discharge, but where a third party, based on expert evidence has to come to a view about a particular matter.

01:39:36:03 - 01:39:55:13

So certainly don't rule that out. But it would certainly be the last resort before we'd explored those other aspects. And I think that's where the Secretary of State would have expected the parties to have gone first before, um, articulating that the matter would have to be referred to an arbitration provision.

01:39:57:09 - 01:39:58:15

Understood. Thank you.

01:39:59:06 - 01:40:22:04

Paul Carter, on behalf of the applicant. Can I just add that it would be typical where an arbitrator gets involved, that they have some sort of policy or guidance around which to arbitrate? Um, otherwise they're stepping into this in the same way, uh, Yourselves are another example. The authorities are, in the complete absence of any guidance on how to deal with this. So it would be a very difficult and maybe fruitless approach to take.

01:40:25:14 - 01:41:20:18

Could we also just going back to some of the points that have been made about about mitigation and no mitigations being presented in the absence of, uh, policy or guidance that talks about levels of impact and talks about possible mitigations, it would be very unclear from our perspective what an achievement of good mitigation would be. What is a what is a, um, a number that would satisfy the IPPs in terms of a reduction from the headline figure they've given in this report? Putting aside all of the comments we've made about, um, the uncertainties in this report, but what what represents a good mitigation, um, and acceptable mitigation, because in the absence of understanding that it's very difficult for anyone to know, um, what could be, what could be brought forward? And for any, um, arbitrator to judge whether, um, enough has been done and effective controls have been put in place.

01:41:20:27 - 01:41:32:24

Um, so we are we are struggling to understand, um, in that respect, what what what the IPS are expecting in terms of mitigation in this regard.

01:41:34:13 - 01:41:35:06

Thank you.

01:41:39:16 - 01:41:42:15

Mr.. Do you want to come back on that or can I move on.

01:41:43:18 - 01:42:15:10

Comments that I please? There's not really much more than I can say, because what you'd really be testing is how much mitigation you could produce and what the consequences of it were. Um, that's really about as far as you could go with, with, with, with mitigation because I don't think it is, um, a question of saying, well, I have to get down to a specific figure. Um, it would be what is achievable. But if you haven't even thought about how it could work or how you could mitigate in the context of your arrays.

01:42:15:13 - 01:42:45:08

Then clearly then you have no evidence, but it is genuine. The amount of for the applicant to say what they could achieve through mitigation. As I've said, the initial stages have not taken this matter into account. You're left really with a very narrow, um, application boundary. What can I do within the boundary? Given portable walls, there already be some constraints and further constraints. What could be done? And that's really a matter that only the applicant can answer.

01:42:47:14 - 01:43:17:20

Thank you. I will just then return to um. We've discussed many times before the are well and more requirement um on weak effects which I think was requirement 25 and in the past I think was doing this, you've been clear that that could be an option in terms of, um, one outcome from your perspective. I just wanted to check. Is that still your position? So if a requirement similar to that, similar to that applied on a well and more was applied here.

01:43:19:14 - 01:43:29:01

Um, are you saying that that would satisfy you, i.e. that that would enable the assessment you're seeking to be undertaken and the mitigation therefore to be identified?

01:43:29:21 - 01:44:04:10

Kinds of things that I, I don't think it would be satisfactory because it should only really be founded on the basis of a proper evaluation of the effects and the potential for mitigation. Um, otherwise, it could well be seen as a false dawn of a doubt with the issue by producing a requirement actually achieve nothing. And that's really the point. Um, I know you've attempted to ask questions about more, but the response back was, uh, less than detailed and really didn't provide any more information of, of to how they were getting on in the discharge.

01:44:04:22 - 01:44:40:26

Um, but the issue is really what can be achieved. And I generally say if you're going to have a requirement that does need to be an understanding of what that can realistically achieve, even if it's within bounds, you know, there may be a range of what it can achieve, but to have no idea about what it can be achieved, then it would be quite hard. But if there was nothing and nothing else was on offer, at least we'd know that the that there was some attempt to, in terms of the final layout to address potential issues of, of weight loss and it could at least be tested.

01:44:41:17 - 01:44:48:24

But I think it probably needs information to make it a realistic prospect of of being meaningful.

01:44:50:19 - 01:44:51:06

Thank you.

01:44:52:08 - 01:45:28:29

And so I suppose we're going to close this item shortly. I suppose my question is where the things go from here. Um, how how much of any progress is going to be made between the parties. Before we

close this examination, is there any, you know, is the applicant willing to take away some of the new information that's been submitted today in terms of those three potential options, and to give them consideration and to potentially talk to the AusAID IPS outside of this examination to, um, explore those topics.

01:45:29:01 - 01:45:34:07

Or are you saying to us now that that's just not those things on the table, just aren't aren't things you're able to engage with?

01:45:37:03 - 01:46:40:27

At least on on behalf of the applicant? I think there are um, uh, there are a number of things that we are intending to do. Obviously, the first one is to come back on the report, um, at deadline six. And so far, obviously without a lot of information in there as we're able to, um, I think we, we, um, have now got the suggestions from Mr. Innes around site layout, operator control and side agreement, which obviously haven't been, um, in place before. I think I think the applicants made it pretty clear that in respect of actually being able to meaningfully change the numbers that are put out in the Orsted IPS report, that the effect of doing that, given the, uh, sort of the, the, the, um, controls that are available to the applicant, whether that is, um, increasing the distance between the project or somehow, um, suggestions, I suspect they're not they're not potential, um, mitigations that Mr..

01:46:41:02 - 01:47:11:10

Mr. Innes has put forward that, um, that that does have a disproportionately large effect on the Moana project. And looking at it in terms of therefore what is what would be appropriate mitigation, it needs to be looked at in that context, and that is information that we would be putting in. Um, as I understand it, at deadline six. Um, so that will I think that will provide greater clarity on the applicant's position in terms of what is available in terms of mitigation.

01:47:11:20 - 01:47:50:18

Um, which I, I hope will I think gets to a point where it's, it's um, particularly at the distances we're talking about here, it's you either have minor or you don't. And it, it is quite it is almost as dark as that. You either have this project as it is and you accept that there's going to be an effect or you don't have the project. And I don't think it's the intention of policy in any way, shape or form that existing operational projects should in any way be precluding future development and future clean energy generation from coming forward.

01:47:51:22 - 01:48:34:03

Um, so, uh, it then obviously outside of that, um, it's looking at it having sort of dealt with that point around mitigation. It's then will will kind of, I guess, where do we end up there? Um, and what are the next steps? Um, but but you know, the applicant's very clear that, um, in order to reduce the numbers that have been put into the Orsted IPS report has a disproportionately large impact on the Monet project and and will have the same, disproportionately large effect on the other projects coming forward as well.

01:48:34:22 - 01:48:40:11

Uh, and on that basis, um, it that sort of mitigation just isn't available.

01:48:40:29 - 01:49:19:20

Paul Carter, on behalf of the applicant, would also like to add that that some of the mitigation potential mitigation options that are put forward there would, would have that ongoing reduction in energy generation for Monet beyond the lifetime of the Orsted IPP projects once decommissioned.

commission. So, you know, for instance, changes to site layout in terms of increasing density and moving turbines away from the boundary closest. That's an irreversible change to to the project that would that would so the lifetime effect, the net lifetime effect of energy generation across all of these different projects, the author, IPS and Mona.

01:49:19:22 - 01:49:35:00

And then, of course, you could factor in Morgan and Morecambe in terms of any mitigations they might take forward, would, would, would be substantial and just isn't in the approach that policy is trying to bring to creation of significant amounts of new energy generation.

01:49:38:06 - 01:49:38:27

Thank you.

01:49:41:08 - 01:49:51:11

Um, I think we've taken this as far as we can, and we have other things to get through. So I think we're going to, um, to leave things there. Unless Mr. Innes has anything final. He wants to make sure he's, um, said today.

01:49:53:04 - 01:50:23:17

Thank you. Madam. Colleagues, on behalf of the Ulster IPS. Coexistence is the policy, um, and, um, that um, should, uh, remain a key issue in trying to resolve this matter, and I'm quite happy to leave it there. Madam, I don't want to extend this. I don't have any other matters on the agenda. Were proposed to leave, but, um, um, I don't think at this stage we'd be commenting on the DCO, um, drafting. So we won't be coming tomorrow, but, uh.

01:50:24:00 - 01:50:25:05

Um. Thank you.

01:50:25:21 - 01:50:29:01

That's fine. Thank you for your input today. That's absolutely fine.

01:50:29:03 - 01:50:29:18

Thank you.

01:50:30:00 - 01:50:35:06

Okay. If there's nothing final from the applicant on item six.

01:50:36:22 - 01:50:45:22

No. Okay, then I think we will take a break now. Um, it's 10 to 4, so 4:10. We'll return Julie. 4:10. We'll return. Thank you.