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INDEPENDENT PLANNING COMMISSION

MEETING WITH DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT

RE: ERARING POWER STATION ASH DAM EXPANSION

PANEL: **PETER DUNCAN (CHAIR)**
ALICE CLARK

ASSISTING PANEL: **CALLUM FIRTH**
LISA HONAN

**DEPARTMENT
OF PLANNING, INDUSTRY
AND ENVIRONMENT:** **MIKE YOUNG**
STEPHEN O'DONOGHUE

LOCATION: **IPC OFFICES**
LEVEL 3, 201 ELIZABETH STREET
SYDNEY, NEW SOUTH WALES

DATE: **9.15 AM, TUESDAY, 12 NOVEMBER 2019**

MR P. DUNCAN: Good morning and welcome. Before we begin, I'd like to acknowledge the traditional owners of the land on which we meet. I would also like to pay my respects to Elders past and present. Welcome to the meeting today on the propose – proposal seeking approval for the modification to the Eraring Power
5 Station Ash Dam to augment the dam using alternative ash placement strategy and landform design to increase the storage capacity in the short to medium term. My name is Peter Duncan. I am the Chair of the IPC panel today. Joining me is my fellow Commissioner Alice Clark, Callum Firth from the Secretariat and Lisa Honan, a consultant to the Secretariat.

10 In the interest of openness and transparency and to ensure the full capture of information, today's meeting is being recorded and a full transcript will be produced and made available on the Commission's website. This meeting is one part of the Commission's decision-making process. It is taking place at the preliminary stage of
15 the process and will form one of several sources of information upon which the Commission will base its decision. It's important for the Commission to ask questions and to clarify issues whenever we consider it appropriate.

20 If you're asked a question and not in a position to answer, please feel free to take the question on notice and provide any additional information in writing which we will then put on the website. I request that you introduce yourself before you speak for the first time and ensure that we speak one at a time to ensure the accuracy of the transcript. We will now begin. Thanks Mike and Steve, the, um, just by way of introduction, I think if you could give us a summary of the major points of the
25 proposal. And probably the key areas that we would like to or the key areas we would like to focus on are probably rehabilitation, post approvals and ongoing monitoring.

30 Potential for future mining activity in the vicinity, to have an understanding of that. There has been a couple of ash dam reviews, too. We're aware of one that's ongoing internationally and, I think, some information is coming out about that. But also, the localised one at that site and whether there is an understanding for us from the point of view of risk in that work. And another one and it's probably, um, not at the same level of the other points, but, but important is construction traffic and what, what
35 knowledge or understanding we have of that in that area. So they're a few guidelines of areas that we'd like to focus. But over to you, Mike.

MR M. YOUNG: Sure.

40 MR DUNCAN: Yes.

MR YOUNG: Okay. Well, ah, thank you for the opportunity. My name's Mike Young. I am the executive director of energy and resource assessments at the Department of Planning Industry and Environment. I will let Steve introduce himself
45 in due course. Um, so the Eraring Ash Dam, obviously, the Eraring Power Station has been operating since the late 70s, supplies something like 25 per cent, up to 25

per cent of New South Wales's baseload electricity requirements. Clearly, as with all coal-fired power stations, there are by-products associated with the combustion process of the coal, um, in this case, obviously, being fly ash.

5 And the establishment of the Eraring Ash Dam and management of that over a long period of time. This particular modification relates to a relatively modest extension of that Ash Dam emplacement, to the west. There were previous extensions approved, particularly in regard to a project approval and a concept approval, I think, in 2008 that, um, where a previous extension to the Ash Dam was approved. Ah,
10 there is also the Eraring, um, ah, legislation, um, which, ah, provides, ah, I guess, the original, um, architecture for the, allowing, ah, originally Electricity Commission and then Origin to undertake the power station and ancillary activities on the site.

However, there are also these overlapping approval. Particularly in regard to the
15 planning approval and the concept approval from 2008. The modification that was lodged by Origin, we obviously went through the normal, ah, procedures to, um, advertise that and seek, ah, community input on that. I think we received something in order of 22 objections and a number of submissions in common as well as advice from agencies, etcetera. The reason it's been referred to the Intendent Planning
20 Commission for decision is by virtue of the fact that Origin has made, ah, reportable political donations in the past. And that's the trigger which enlivens the role of the IPC in regard to this particular application. I will let Steve, in broad terms, go through the nuts and bolts of the, um, the modification, ah, the various elements. And I think he has got some maps that will help you do that.

25 MR S. O'DONOGHUE: Yes. Steve O'Donoghue, director of resource assessments. I will just provide a figure from the environmental assessment but also from the assessment report.

30 MR DUNCAN: Thank you.

MR O'DONOGHUE: That sort of gives the key components of the modification. I guess, the key one is a, you know, augmentation to provide this more ash capacity. Now, that incorporates a new saddle embankment which is located along this area
35 here on the south-western corner.

MR DUNCAN: So is that an embankment to contain the emplacement of the ash?

MR O'DONOGHUE: It's do they get – it's to get the height of the ash up to what
40 they're calling RL140 which is, their, their own, that's their own, um, sort of height, um, level that they're using. But it's a 40 metre, you know, AHD. Is that they're bringing it, they want, that saddle is needed to bring up the ash deposition up to that RL140.

45 MR DUNCAN: Because of the slope of the land in general?

MR O'DONOGHUE: 'Cause of the – 'cause of the slope of the land.

MR DUNCAN: Yes.

MR O'DONOGHUE: So that's a – that's a, probably, a key bit of infrastructure there in terms of that. Part of that augmentation is also water diversion. So there is,
5 along the access road, the blue line - - -

MR DUNCAN: Yes.

MR O'DONOGHUE: - - - on, on the figure 3 is a, sort of, stormwater diversion and
10 around the, there's an existing access road. But it's diverting water around there to a new, sort of, an existing dam, stormwater dam, but augmenting that and piping the clean water diversion into the clean water catchment. So there's a bored tunnel - - -

MR DUNCAN: Just to clarify, Steve - - -
15

MR O'DONOGHUE: Yes.

MR DUNCAN: The – the red line is the existing dam. But it gets, you lose it under the dark. So it's – it's, can you just show the existing dam and the proposed, just the
20 difference in area, if you like?

MR O'DONOGHUE: So yes, so the pink line, the pink line is the existing - - -

MR DUNCAN: Yes.
25

MR O'DONOGHUE: - - - is where, where, under the current ash, ash disposal - - -

MR DUNCAN: Yes.

MR O'DONOGHUE: - - - it would, it would go to.
30

MR DUNCAN: Yes.

MR O'DONOGHUE: The grey, the grey, the grey line is where it would go up to.
35

MR DUNCAN: So – so we're looking, just to get - - -

MR O'DONOGHUE: Yes.

MR DUNCAN: - - - that's, that's the actual - - -
40

MR O'DONOGHUE: That's right.

MR DUNCAN: New - - -
45

MR YOUNG: New area.

MR DUNCAN: New footprint, yes.

MR O'DONOGHUE: So it's infilling that area, um, you know, up from that pink line up to the, the grey line - - -

5 MR DUNCAN: Yes.

MR O'DONOGHUE: - - - on - on figure 3.

10 MR YOUNG: And, and the yellow line then, Steve?

MR O'DONOGHUE: So - so as part of the - I'll get - as part of the augmentation, what - and there's another figure, figure here. It goes, it goes over, um, the old Awaba, Awaba mine workings, um, you know, which is - is a, is a figure here. I'll

15 just provide that.

MR DUNCAN: Thank you.

PROF CLARK: Thank you.

20 MR O'DONOGHUE: So that, so that shows where the, you know - - -

PROF CLARK: Just to - - -

25 MR O'DONOGHUE: - - - where the, where the increased area is going into the mine workings.

PROF CLARK: So, Steve, just a question - - -

30 MR O'DONOGHUE: Yes.

PROF CLARK: - - - from me, here. This line here represents the embankment are - - -

35 MR O'DONOGHUE: Yeah.

PROF CLARK: - - - that you need to build up to me, to reach RL140, is that correct?

40 MR O'DONOGHUE: That's right.

PROF CLARK: And so after this point, the topography is taking it?

MR O'DONOGHUE: That's right.

45 PROF CLARK: Okay. I see.

MR O'DONOGHUE: Yeah, yeah.

MR YOUNG: Yeah, when you go there - - -

5 MR O'DONOGHUE: Yeah, yeah.

MR YOUNG: - - - it's quite a hill at the back there, actually, um - - -

MR YOUNG: Yeah.

10 PROF CLARK: Yep.

MR YOUNG: Yep.

15 MR DUNCAN: Yeah. And we'll need to see that on site, I think. To understand it best, you really do need to see it.

MR O'DONOGHUE: Yeah.

20 MR YOUNG: Absolutely.

PROF CLARK: And after this part here, the embankment's at that level already?

MR O'DONOGHUE: That's right.

25 PROF CLARK: Okay.

MR O'DONOGHUE: Yeah.

30 PROF CLARK: Thanks.

MR O'DONOGHUE: Yeah, yeah. So – so it's really, it's really, you know, providing that, that additional capacity in this, in this sort of western area. So – so the other component, like - - -

35 PROF CLARK: Okay.

MR O'DONOGHUE: - - - so there's the Awaba workings, so the augment – the augmentation will go, will go over that.

40 MR YOUNG: So these are historical mine workings, underground mine workings.

MR O'DONOGHUE: That's right. Yep.

45 MR YOUNG: That are partially filled with water at the moment, so they're not being used.

MR O'DONOGHUE: That's right. They're disused workings, yep.

MR YOUNG: Disused.

5 PROF CLARK: So is this the plan of them or is this the final?

MR DUNCAN: This is the plan, this is the plan of what - - -

PROF CLARK: That was the plan for mining? Or - - -

10 MR DUNCAN: - - - of where the coal has been taken - - -

PROF CLARK: Yes.

15 MR DUNCAN: - - - taken out, you know.

PROF CLARK: Okay. And so, um, is that representative of the final voids?

MR O'DONOGHUE: No. So – so, sorry, I think we need to be clear here. This is

20 not proposed future mining.

MR DUNCAN: No.

PROF CLARK: Yep.

25 MR O'DONOGHUE: This is old mine workings that exist today.

MR DUNCAN: That's right.

30 PROF CLARK: I understand that.

MR O'DONOGHUE: To, beneath there, yep.

PROF CLARK: Is this, what we're seeing here - - -

35 MR O'DONOGHUE: Mmm.

PROF CLARK: - - - the representation of what they planned to take out? Or is it what they actually took out?

40 MR O'DONOGHUE: This is what they actually took out.

MR DUNCAN: It's actually – what they actually took out.

45 PROF CLARK: Okay.

MR DUNCAN: Yep. So it's got here, "coal extracted" as part of the figure.

MR YOUNG: Okay.

MR DUNCAN: Yep.

5 MR YOUNG: And just as so as I can get my bearings, this – this line here is the same line. So I'm looking at the, the green line on figure 4?

MR DUNCAN: That's right. So the green line on there is the - - -

10 MR YOUNG: And grey line on figure 3.

MR DUNCAN: - - - same as the grey line on there. Yep.

MR YOUNG: Yeah.

15

MR O'DONOGHUE: Yep.

MR DUNCAN: Yep, yep.

20 MR YOUNG: Yes. Yes, that's all right. I've got it now.

MR O'DONOGHUE: Yep. Yep. And – and the, the green line, the dotted green line is the current ash emplacement on this one.

25 MR YOUNG: Yes, yes.

MR DUNCAN: So – so you can see that there are small, small components of the existing ash dam that already go under the - - -

30 MR O'DONOGHUE: Yes.

MR DUNCAN: - - - over the Awaba workings, already.

MR FIRTH: Okay.

35

MR DUNCAN: Yes. But this will extend that. So part of the, part of this western augmentation is to, in the assessment they have done, there's subsidence risk with putting ash over old workings. But there's also potential for, for leachate risk getting in to the underground workings and working, and making its way into the
40 environment.

MR O'DONOGHUE: So the previous subsidence risk was up in that top corner, was it, that you're showing there, where the existing, it's over the existing - - -

45 MR DUNCAN: That's right, yes, yes. And a small amount, there's a small amount there, as well.

PROF CLARK: With the small amount that's overlapping now, do they have any monitoring or seen any leachate of that in the underground workings that you're aware?

5 MR O'DONOGHUE: I don't think - - -

PROF CLARK: Or flooded? So - - -

10 MR O'DONOGHUE: - - - there's, there's, there's not a lot of monitoring they have done in, in that top area. Most of it's, a lot of it's sort of looking at, groundwater - - -

PROF CLARK: Flows.

15 MR O'DONOGHUE: - - - you know, flows going – going to the, down through the embankment and towards the lake.

MR DUNCAN: Yes.

20 MR O'DONOGHUE: Yes.

MR DUNCAN: And this is all flooded?

MR O'DONOGHUE: This is all flooded, yeah, the underground workings.

25 MR DUNCAN: Not back filled? Just, they, just they - - -

MR YOUNG: No, they're voids - - -

30 MR DUNCAN: Just, no, they're voids, yep, yep.

MR YOUNG: - - - and they manage it into a certain level.

PROF CLARK: Yes.

35 MR YOUNG: And the Centennial have a, a pumping station elsewhere - - -

PROF CLARK: Yep.

40 MR YOUNG: - - - where they manage the level to a certain level.

MR O'DONOGHUE: Okay.

MR YOUNG: Um, um, yeah.

45 MR O'DONOGHUE: So – so the strategy is to – is to fill the voids. I would put forward three options in the, in the EA. So it's filling – filling the voids - - -

PROF CLARK: Mmm.

MR O'DONOGHUE: - - - you know, to, for subsidence risk. But also to prevent the, you know, leachate, you know, getting into the, into the underground workings.
5 It was also options to, you know, to look at collapsing, collapsing the – the workings. And also to put in a liner, a clay, a clay liner. Now, we engaged WSP. In their report, they considered that the best option was filling, filling the voids. But certainly not collapsing the workings, because there's a lot of risk around that.

10 MR DUNCAN: Mmm.

PROF CLARK: Mmm.

MR O'DONOGHUE: And potential fracturing and, you know, that could – that,
15 they considered that wasn't a very viable option for that.

MR DUNCAN: And the – and that report indicated that that type of technique has been used elsewhere in, in the region.

20 MR O'DONOGHUE: It – it has been.

MR DUNCAN: Yes.

MR O'DONOGHUE: And David Knott who – who was the geo-tech expert for
25 WSP, has been involved in quite a bit, a bit with that in the Newcastle area. So he's very familiar with that.

MR YOUNG: Would it be fair to say, Steve - - -

30 MR O'DONOGHUE: Yes.

MR YOUNG: - - - that the risk around subsidence was considered fairly low in terms of the stability of the workings or the risk of them collapsing? And the greater issue in regards to the grouting the proposed filling was more about to manage
35 potential leachate.

MR O'DONOGHUE: That's right, yeah. And I think if you're just going back to figure three, if you see the – the yellow line.

40 MR YOUNG: Yes.

MR O'DONOGHUE: What, what was proposed by Origin was to grout, grout the under workings 100 metres away from the actual, um, the, the, where the, um, ash was being disposed. So as a, as a measure to, to further reduce that leachate risk. So
45 it was, it was extending that – that, um, um, sort of, underground le-, sort of grouting.

PROF CLARK: So this yellow line - - -

MR O'DONOGHUE: Yeah.

PROF CLARK: - - - is the proposed level of which they would - - -

5 MR O'DONOGHUE: They were proposing to grout to, yep.

PROF CLARK: It would be useful to see that yellow line on this.

MR O'DONOGHUE: It probably would be, yeah.

10 PROF CLARK: Yeah.

MR O'DONOGHUE: In terms of that. But, but I, I guess the, the, I guess, the difference here is that there, there's, the risk of subsidence is, is to this point. But it

15 does extend out - - -

PROF CLARK: Yeah.

MR O'DONOGHUE: - - - some degree, and I think that the reports from, from, um,

20 you know, from, from, Origin, you know, talked about, but it – but it, in, in terms of going out to 100 metres, that was more for, for leachate protection, rather than subsidence.

PROF CLARK: So in the, just a question.

25 MR O'DONOGHUE: Yeah.

PROF CLARK: In the report when, um, the, the, um, the WSP report, um, the 100 metres was put on the table as, my understanding was - - -

30 MR O'DONOGHUE: Yep.

PROF CLARK: - - - it was put on the table as - - -

35 MR O'DONOGHUE: Yes.

PROF CLARK: - - - a good idea, but we're going to need to do some test work - - -

MR O'DONOGHUE: That's right.

40 PROF CLARK: - - - to confirm that.

MR O'DONOGHUE: Look, look, I think - - -

45 PROF CLARK: Is that - - -

MR O'DONOGHUE: - - - that's, that's correct, there - - -

PROF CLARK: Have you got any comment on that?

MR O'DONOGHUE: There was sort of, um, 100 metres was a, you know, a recommended. But there was not a lot of, I guess, not a lot of, too much science
5 around whether, you know - - -

PROF CLARK: That's right.

MR O'DONOGHUE: - - - is 100 metres appropriate or 50 metres? I guess the - a
10 lot of the clearing is associated with going that 100 metres, you know. So that's, it's boreholes, you know, it's boreholes going down.

PROF CLARK: That's right.

15 MR O'DONOGHUE: So they have assumed that that will all be cleared out to the hundred metres, which is conservative. Because it's not, they're putting - - -

MR YOUNG: It's in terms of the biodiversity impacts.

20 MR O'DONOGHUE: Yes. In terms of the biodiversity impacts, all right.

PROF CLARK: All right.

MR O'DONOGHUE: So if, if that - if that did go back, if they only needed about
25 50 metres based on looking at the permeability and leachate then they could get some reduction in biodiversity impacts.

MR YOUNG: It's fair to say, I think, at this stage, the general consensus is, is that
30 100 metres is more than, is fairly conservative.

MR O'DONOGHUE: Yep, yes.

MR YOUNG: In terms of that risk management profile. And if anything, the
35 detailed design may well reduce that.

MR O'DONOGHUE: That's right, that's correct, yes.

PROF CLARK: So my, my, my, I guess my question is, is that that distance would
40 depend very much on the leachable qualities of the grout material used.

MR O'DONOGHUE: That - that's correct.

PROF CLARK: And the potential for permeability through there.

45 MR O'DONOGHUE: That's - that's correct.

PROF CLARK: Do you have any comments about what would be needed in terms of it might be 100, it might 20, it might be 200.

MR YOUNG: Well - - -

5

PROF CLARK: It depends what you put in there.

MR O'DONOGHUE: Sure.

10 MR YOUNG: Look, I think, I think that's right. It would, 'cause there's, there is a requirement in the conditions, you know, for that, for doing those leach ability tests and grout testing of, you know, what the – and validation of that. So I think in that process there's, there's, in, in looking at the permeability that they get and that
15 leachate, leachability would be, would inform, you know, what's an appropriate barrier.

PROF CLARK: Excellent.

MR YOUNG: You know.

20

MR O'DONOGHUE: Mmm.

PROF CLARK: Thank you. That's answered my question.

25 MR DUNCAN: Good.

MR O'DONOGHUE: Yes. So they're the, so they're the, in terms of the augmentation, I guess, they're the key, the key components there. There's also, like, a change to the ash deposition strategy. What they have found is that the current
30 solid deposition, you know, there was potential problems with liquefaction. So they had advice from Stantec which is their record, engineer of record, about that. So part of it, part of it is changing the ash Deposition strategy. More like a traditional one, I guess, at other mines, like, mineral mines where you're putting spigots at the edge of the, the dam and it's, you know, sort of working its way down, um, through the,
35 through the ash dam with water going into the decamp pond.

Um, and that's more to get sloped of less than three per cent, so one to two per cent, which is going to reduce that potential for, for, you know, liquefaction in the, in the site. And, and I think some of the work done, we can talk about later in terms of the,
40 the main embankment stability. And part of, part of applying that is some of the reduced risks for, you know, potential risks to the embankment stability that, that was provided in that Stantec report, later.

PROF CLARK: So one, one of the things that I may not have picked up in the
45 report and you might be able to help me with is with liquefaction of, of, you know, semi-consolidated materials of that nature and the ongoing mining in the area, is there – is there conditions around that?

MR O'DONOGHUE: That really, that really came out of the, the, you know, that risk – that, going from consequence A to B category.

PROF CLARK: Yes.

5

MR O'DONOGHUE: And, and, and earthquake risk.

PROF CLARK: That's it, yep.

10 MR O'DONOGHUE: So it's sort of linked into that. Yeah.

PROF CLARK: I saw the earthquake one, but not necessarily the induced mining side of things.

15 MR O'DONOGHUE: No, no, it's more about that, it's more about that risk associated with the, you know, the earthquake and moving to that consequence, increased consequence category because of the – and that was largely driven by increased population at risk below, below the dam wall.

20 MR YOUNG: Yeah. That was, that was right.

MR O'DONOGHUE: Yeah.

MR YOUNG: We shall talk about it in a minute.

25

MR O'DONOGHUE: Yeah.

PROF CLARK: Yes.

30 MR YOUNG: But in terms of the alternations to the emplacement strategy in terms of the ash.

MR O'DONOGHUE: Yes.

35 MR YOUNG: So what's, what are they actually changing?

MR O'DONOGHUE: It, it's really, really, um, going from, like, a cell deposition, where they create as cell, deposit it in the cell, it would dry out. Whereas they're going, you know, straight, removing that and going from the spigot deposition at the
40 edges and working its way down, down to the – to the decamp pond.

MR YOUNG: So the previous strategy was with the cells.

MR O'DONOGHUE: Yes.

45

MR YOUNG: And making multiple cells and now it's more of a generic - - -

MR O'DONOGHUE: Even distribution around that.

MR YOUNG: Even distribution, yes.

5 MR O'DONOGHUE: Yeah. Around the, around the edges, yes, yes. So I guess there was, a component was that upgrade of the storm water system which we have talked about. And there is also relocating the Boral, sort of, reuse facility, beneficial use facility of some of the key, the key components of the, of the modification.

10 MR DUNCAN: And it would provide capacity for an additional five million cubic metres, this extension?

MR YOUNG: That's right. Yes.

15 MR DUNCAN: And the total capacity, well, the total current approved capacity is around 40 million.

MR YOUNG: It's 40 million, yes.

20 MR DUNCAN: Yes.

MR YOUNG: 40 million cubic metres, so - - -

MR DUNCAN: And it extends it by?
25

MR YOUNG: Five.

MR DUNCAN: Five. 40 to 5?

30 MR YOUNG: 40 to 45, I suppose, yeah.

MR DUNCAN: Yeah.

MR YOUNG: Yep. I guess, the other thing is the timing aspect of it. So it depends
35 on the degree to which they're able to recycle and the degree to which how much they're operating the plant and at what capacity as to how much ash producing and then how much they're going to need to deposit. So hence, the, the timing in terms of how much the five million would provide.

40 MR DUNCAN: Yes.

MR YOUNG: In terms of number of years, etcetera, is, is being expressed as a range as opposed to a clear end date. So depending on when they get started and so forth, we're talking, you know, a best-case scenario may be up until about 2026. So
45 about another seven years from now, something of that order. But, you know, if it's – if it's running at greater capacity and they're less successful with reaching the 80

per cent reuse goal, because they're running at about 29 per cent at the moment, then, obviously, that may well get filled more quickly.

5 MR DUNCAN: That reuse goes off site, doesn't it? So it's used in other processes, concrete and obviously - - -

MR YOUNG: That's right, roads - - -

10 MR DUNCAN: Yes.

MR YOUNG: - - - all of those sorts of things, yes.

MR DUNCAN: But that's still quite a viable reuse of the resource? There's no question that that won't happen?

15 MR YOUNG: No. I think there's, there's a strategy that they're required to prepare.

20 MR DUNCAN: Yes.

MR YOUNG: And under that strategy there is a goal of 80 per cent reuse.

MR DUNCAN: Okay.

25 MR YOUNG: Of the, of the ash.

MR DUNCAN: Yep.

30 MR YOUNG: It's fair to say that they're well short of that at the moment. I think they're around the 29 per cent.

MR DUNCAN: Yes.

35 MR YOUNG: Boral do have a facility for the ash recycling on the site. I think that in the documentation they have provided to the Department as part of this assessment, it indicates that the demand and the competition for alternative supply of other materials for those same purposes, particularly in regard to road construction etcetera has meant that the market has been, there has been less of a market than they had anticipated. Which has meant that their, their, ah, reuse goals have been low, or
40 their reuse targets that they have achieved have been less than they were hoping.

MR DUNCAN: Right. All right. I guess, it raises the question, post 2026, what's the strategy?

45 MR YOUNG: That's a good question. I think it's something you should put to Origin.

MR DUNCAN: To – yes.

MR YOUNG: When you meet with them. I guess what we've been asked to do is consider a modification that will give something in the order of up to seven years of additional capacity.

MR DUNCAN: Yes, yes.

MR YOUNG: There are – there's an obligation under the existing conditions to continue to investigate reuse options.

MR DUNCAN: Yes.

MR YOUNG: And we understand that they will be providing a new version of that strategy shortly to – and we will certainly be looking to encourage them to improve and increase their share of recycling to extend the ability of them to, well, to negate the need for further expansions to the – to the ash dam. I think it's fair to say, Steve, and correct me if I'm wrong, but they haven't actually, in some parts of the existing footprint, there are areas that have been approved but not yet taken up. Is that correct?

MR O'DONOGHUE: Well, the, um - - -

MR YOUNG: To the north?

MR O'DONOGHUE: - - - they've, in terms of ash deposition?

MR YOUNG: Mmm.

MR O'DONOGHUE: Look, there's, there's, I think, that's, that's correct. I mean, there's potential for, for, you know, some further deposition in existing areas, as well. So I think they're, they're looking at, you know, those sort of strategies. I mean, any – any, it's likely that, you know, any significant augmentation would, you know, you would need to look at the main embankment. And I think there's some information about, that was an option that they looked as a, you know, as part of this modification, you know, in terms of it providing capacity. But in the short term, they saw this as the best, as the best option to go. In consideration of, you know, it's still pursuing an official reuse options, as well.

MR YOUNG: I think the, ah, the, the, current economic life is looking until about 2032, so another, um, you know, 12 to 13 years, something of that order. Of course, as we know, those dates are not necessarily precise.

MR DUNCAN: Yes.

MR YOUNG: So part of what we will be seeking in that strategy, updated strategy is a plan that covers, um, not just the next five or six years but indeed, the next, you know, 12 years or so.

5 MR DUNCAN: Okay.

MR YOUNG: And how they intend to do that. But I would, I think it's fair to say, there is no one answer or one proposal that would take them through all the way to 2032. They're exploring, exploring a number of options and I guess I would
10 encourage you to put that to Origin.

MR DUNCAN: Okay. Good. Any further questions on that area? Steve, is there – are there other points you want to point out at this stage, with these plans?

15 MR O'DONOGHUE: Probably, probably not in terms of what the, what the components of the modification are.

MR DUNCAN: Okay.

20 MR O'DONOGHUE: Yep.

MR DUNCAN: Just while we're there, then, can, can you give us an understanding of any potential and future mining in the vicinity of the site?

25 MR O'DONOGHUE: Well, there, well, there is a – the, Centennial do have a project. You know, they have started the, the process for, for the Newstan Mine for, for further underground mining. Which would, which would be looking at, like, you know, long wall panels or – or coal mining around the, the dam. So they've – they have, part of that consideration is, you know, how protection of the, the existing dam
30 structure. But, but also consideration of any augmentation, you know, that might occur with this dam, as well. So in terms of, you know, whether we would restrict mining under, under the, under the area would be a key consideration in terms of sterilisation of coal.

35 MR DUNCAN: So - - -

MR YOUNG: So there are, there are multiple seams in the area. So obviously, historical mining has extracted some of those seams.

40 MR DUNCAN: Yes.

MR YOUNG: But there is opportunity for the Newstan, within the Newstan exploration areas to extract further coal. And so generally, we would put in an application to do so. Part of which, I, I don't know the exact limits of where they're
45 proposing to, to mine, compared to the dam. But I would say that it, that's an application on foot.

MR DUNCAN: Yes.

MR YOUNG: And Centennial haven't objected to this proposed extension.

5 MR DUNCAN: Yes.

MR YOUNG: Um, despite, or, you know, following a close consultation, they have raised the con-, some concerns about potential sterilisation of, ah, minor amounts of coal.

10

MR DUNCAN: Yep.

MR YOUNG: Um, that's obviously something that the government's going to need to decide as to, um, any risk associated with mining in that area, as part of their
15 consideration of the Newstan application and/or if there's a decision to not allow mining under certain parts of that area, because of those risks, obviously, that would sterilise a certain amount of coal and that would be a decision that would need to be a decision that would need to be made.

20 MR DUNCAN: And their comment went to the offset areas. They were concerned whether the offset areas are.

MR YOUNG: Mmm.

25 MR DUNCAN: And – and whether they could, in fact, mine under that in the future or what risk that would have, yes, thank you.

MR O'DONOGHUE: That's right. I mean, there, there are, there has been, like, underground mining beneath, beneath offset areas before. So - - -

30

MR DUNCAN: Okay.

MR O'DONOGHUE: - - - proposed. So it depends on the, the level of subsidence and impact on – on biodiversity values at the surface. But it's – but it's true to say
35 any future mining application there would need to take into account this facility in its current form or and/or it's upgraded form.

MR DUNCAN: That's right.

40 MR YOUNG: Correct.

MR O'DONOGHUE: To ensure that there was - - -

MR DUNCAN: Yes.

45

MR YOUNG: In terms of a sequence?

MR O'DONOGHUE: Yes.

MR YOUNG: Yeah. I mean - - -

5 MR O'DONOGHUE: Yeah.

MR YOUNG: - - - I think this is first cab off the rank, so to speak.

MR O'DONOGHUE: Okay.

10 MR YOUNG: Yeah.

MR DUNCAN: All right.

15 PROF CLARK: So I guess the, the questions I have that I, it sounds like you would not be able to answer at this stage is how deep and what's the ground conditions in between? What's the ground conditions in between that and the already mined bit, obviously.

20 MR YOUNG: Well, we – we would – we need to consider that as part of at that time - - -

PROF CLARK: At that time.

25 MR YOUNG: At that time, yep.

MR DUNCAN: At that, that application.

MR YOUNG: Yeah, yep.

30 PROF CLARK: Yes.

MR YOUNG: Depending on the outcome of your decision, obviously.

35 PROF CLARK: Yeah.

MR DUNCAN: All right. Anything more on mining?

PROF CLARK: No. Um - - -

40 MR YOUNG: I – I guess, the only thing I would say in that regard is my area does cover both mining and energy projects. And we certainly are not recommending that this project, this extension not proceed because of the risk of coal sterilisation.

45 MR DUNCAN: Okay.

MR YOUNG: Yeah. Does that make sense?

PROF CLARK: It does.

MR YOUNG: Yes, yep.

5 MR DUNCAN: Yes.

PROF CLARK: Yeah.

10 MR DUNCAN: Well, could we talk a little bit about ash dams in general, some of the reviews that were done? And particularly of the former risk with the existing dam.

MR YOUNG: Sure.

15 MR DUNCAN: You – could you go into that a little bit for us?

MR YOUNG: So, um, again, this is – this is – this is a matter that you should probably ask the details of - - -

20 MR DUNCAN: Yes.

MR YOUNG: - - - you know, from Origin. Because, obviously, they're up on that. This is related but not directly to the assessment of the application. So it is a matter being handled by other departments within government.

25 MR DUNCAN: Yes.

MR YOUNG: And, obviously, Origin as – as the proponent. Ah, in terms of – my understanding is that, um, ah, Origin, ah, undertook a risk assessment of a number of its facilities, including this particular ash dam. As a result of that analysis, um, er, in regard to, er, consideration of earthquake and risk and, er, looking at the, um, er, potential people, numbers of people that may be, um, in the areas that may be affected by, um, er, some kind of failure of the dam wall, etcetera, which particularly focused on the recreation centre at Myuna.

35 MR DUNCAN: Yes.

MR YOUNG: Um, as a result of that, the advice they got was that the current category consequence, which I think was A, was maybe, um, not appropriate, and that it ought to be, potentially, er, a risk category consequence of A, which is a higher – higher – higher category, consequence category.

MR DUNCAN: And that came from the, um, dam safety.

45 MR YOUNG: No. That was Origin's own - - -

MR DUNCAN: Own risk assessment, I take it.

MR YOUNG: Own risk assessment; that's right. Now, my understanding as a result of that, that there were certain communications with, um, land owners, including, um, er, sport and rec, and, as result of that, a decision was made to temporarily close the Myuna Sport and Rec facility. Now, since that time, my
5 understanding is that, uh, er, Origin has engaged, um, its engineers to look at potential works to, uh, stabilise, or increase the, um, er – the stability and integrity and strengthen the – the dam wall. Um, I understand also that the, uh, sport and rec has engaged its own engineers to undertake a risk assessment. My understanding is that risk assessment is now complete and now with the department.

10 MR DUNCAN: Right.

MR YOUNG: Um, and I understand that Origin, uh, are now proposing to, um, commence, uh, or engage those engineers to undertake a scope of works in
15 consultation with the risk assessors for sport and rec, and also the dam safety committee. Um, and those works, I think, have not yet commenced.

MR O'DONOGHUE: No, they haven't commenced.

20 MR YOUNG: They haven't commenced yet.

MR O'DONOGHUE: But there's – there's – you get – Origin can probably give you an update, uh, when they give you a briefing.

25 MR YOUNG: Mmm.

MR O'DONOGHUE: But, um, our understanding is that the – you know, they're looking at tenders and who would – who they would engage for that for the initial scope of works, which is related to – to, um, ground – ground stability, um, beneath
30 the dam.

MR YOUNG: But I'm not sure that there's – er, my understanding that there's no, er, identified problem or, ah, with the dam wall itself. It's more of a looking at – because of the consequence of the risk category.

35 MR O'DONOGHUE: That's right, yeah.

MR YOUNG: Increase in the risk category. There's certain works that ought to be done to the dam wall to address that risk.

40 MR O'DONOGHUE: That's correct, yes.

MR YOUNG: Yep.

45 MR O'DONOGHUE: Yep, yep. As a result of the increase in the consequence.

MR DUNCAN: Yes.

MR YOUNG: As opposed to a problem with either cracking or slumping, or any issues with the dam wall itself.

5 MR DUNCAN: So since this assessment has been carried out, there has been ongoing work by Origin, working also with their neighbour to - - -

MR YOUNG: It's relatively up to date.

10 MR DUNCAN: Yes.

MR YOUNG: But there's – probably the – the key update there is that the risk assessment - - -

15 MR DUNCAN: Yes.

MR YOUNG: - - - undertaken by, uh, Family and Community Services has now been complete.

20 MR DUNCAN: Okay. Yeah. Okay.

MR YOUNG: Yeah.

25 MR O'DONOGHUE: And I guess the key thing out of that, it would confirm – well, because it would confirm that the – the move from consequence, uh, B to consequence A in that category of the - - -

MR YOUNG: Yes.

30 MR O'DONOGHUE: Yeah.

MR YOUNG: So that risk assessment is confirmed.

MR O'DONOGHUE: Yeah.

35 MR YOUNG: That, uh, Origin's recommendation that that risk category be altered.

MR DUNCAN: Okay. Okay.

40 MR YOUNG: So in the preparation of this, we – we've consulted with the Dam Safety Committee and, um, they've been consulted through that process. And, obviously, any – any works or changes to the dam, um, in terms of integrity and strength and so forth would need to, um, gain approval from the Dam Safety Committee in due course.

45 MR O'DONOGHUE: And that – that includes the – the proposed western embankment.

MR YOUNG: Mmm.

MR DUNCAN: Yes.

5 MR O'DONOGHUE: So that will be – that will be – um, go through the Dam Safety – Dam Safety Committee in terms of the – meeting their requirements under the Dam Safety Act.

10 MR DUNCAN: Okay. So there was, uh, a comment by Dam Safety about this being all considered as one, and not two separate structures, wasn't there? And that way it's put forward is - - -

MR YOUNG: Yeah. Yes.

15 MR DUNCAN: - - - existing and a new structure. But I assume that's a categorisation that Dam Safety have if they would see it all as one.

MR YOUNG: It's a prescribed dam.

20 MR DUNCAN: Yes.

MR YOUNG: And so they – there's certain obligations for the dam – for the facility as a whole.

25 MR DUNCAN: Yes.

MR YOUNG: I guess what we particularly, uh, requested confirmation from Origin and its engineers is whether, uh, the proposed works in this – uh, in regard to the subject of the application, the modification, whether that would have any
30 implications or interactions with this issue around the category consequence and the works associated with the dam wall. And the clear answer from those engineers was, "Well, those are separate matters and they're not – the – the additional emplacement to the western side here would not have any significant impacts or interactions with increasing risk or - - -

35

MR DUNCAN: Okay.

MR YOUNG: - - - those sorts of things.

40 MR DUNCAN: Yeah. Alice.

MS CLARK: Where on this map is the, um, area concerned as such from the current dam wall, if that's the best map to show it?

45 MR O'DONOGHUE: Well, the – the – the main embankment is – is along here.

MS CLARK: Yep.

MR O'DONOGHUE: So it's really – it's really associated with the risks of failure of the main embankment down here, where – where you've got the decamp pond. So failure of that and then the Myuna – the Myuna, um, Rec Centre is, you know, uh, just down - - -

5 MS CLARK: Just down – downstream.

MR O'DONOGHUE: - - - downstream of that.

10 MR YOUNG: So – so there's no – I understand that there's no actual problem with the wall or the embankment itself; is that right?

MR O'DONOGHUE: No, no.

15 MR YOUNG: That's all right.

MR O'DONOGHUE: If it – if it retained consequence category B - - -

MR YOUNG: Mmm.

20 MR DUNCAN: Yes.

MR O'DONOGHUE: So it's more that – that going to consequence category A increases the requirements for – for what you do to

25 MR DUNCAN: It's a categorisation issue, rather than a physical issue.

MR YOUNG: Exactly, yes, yes.

30 MR DUNCAN: Yeah. Okay.

MR O'DONOGHUE: So that just this figure here sort of shows - - -

MS CLARK: Thank you.

35 MR DUNCAN: Uh, that's good.

MR O'DONOGHUE: Yep.

40 MR DUNCAN: Yeah.

MR O'DONOGHUE: Yeah. So – so there's the decamp pond. So there's the – the main embankment, um, and then there's the sport and rec centre - - -

45 MR YOUNG: With the triangle.

MR O'DONOGHUE: - - - is just here.

MR YOUNG: Yep.

MR DUNCAN: So, for the record, we're looking at figure 2, figure 2 out of the modification assessment report.

5

MR YOUNG: Yep. So the long-term future of the sport and rec facility, I guess, is, er, a matter for further discussions with, um, the relevant department and Origin. Um, they are looking at potential alternative locations, but - - -

10 MR DUNCAN: Are they? Okay.

MR YOUNG: - - - I don't think any decision in that regard has been made at this stage.

15 MR DUNCAN: Lisa, did you have a point?

MS HONAN: Um, I was just going to ask if that – you mentioned that the recreational centre had closed for a period of time. Has that reopened - - -

20 MR YOUNG: Not that I'm aware.

MS HONAN: - - - and has continued its operations - - -

MR YOUNG: I believe it's still closed.

25

MS HONAN: - - - or it's still closed.

MR YOUNG: I believe it's still closed, yeah. But, again, that's – I would see that as a matter that's not - - -

30

MR DUNCAN: Yes.

MR YOUNG: - - - relevant to this application.

35 MR DUNCAN: Okay. We have invited, uh, the Department of Sport and Rec - - -

MR YOUNG: Right.

MR DUNCAN: - - - to come to the site inspection.

40

MR O'DONOGHUE: Okay.

MR YOUNG: Mmm.

45 MS HONAN: Can I ask just one other question, um, and it may be outside your areas. Um, but as part of the dam safety committees, do they undertake or look to

understand liability of tailings dams in terms of long-term risk or financial liabilities
- - -

MR YOUNG: No.

5

MS HONAN: - - - to tailings dams?

MR YOUNG: No.

10 MS HONAN: They don't have that area.

MR YOUNG: No. No. Nope. Nope. They look at risk and engineering - - -

MS HONAN: Sure.

15

MR YOUNG: - - - integrity issues only.

MS HONAN: Thanks.

20 MR DUNCAN: Alice?

MS CLARK: I don't think I - - -

MR DUNCAN: Uh, traffic. Can we have a discussion about traffic?

25

MR O'DONOGHUE: Sure.

MR DUNCAN: Anything – any comments on that, just on construction traffic and impacts in the area.

30

MR O'DONOGHUE: Yes. So I think – yep. Well, I mean, I guess the main construction traffic would be for, um, the construction of the western embankment. Um, so that in terms of – in terms of vehicles and – but also for the cement – cement grouting.

35

MR DUNCAN: Yes.

MR O'DONOGHUE: So the – it's – it's a three month construction period, uh, normally, um, with about 600 truck movements over that period to get the material – the material there.

40

MR DUNCAN: Okay. Yeah.

MR O'DONOGHUE: So that's about, um – it equates to about 50 truck movements per week, or 10 – 10 truck movements per day.

45

MR DUNCAN: Right.

MR O'DONOGHUE: So it's a relatively small, um – you know, compared to the existing traffic flows, it's a – it's a small, a relatively small number of heavy vehicles that would be going to the site. Um, so looking - - -

5 MR YOUNG: I think there's a – in terms of proportion, additional heavy vehicle movements as a result of modification were represented – less than five per cent increase on the existing overall vehicle movements on some of those local streets that access the site.

10 MR DUNCAN: Okay.

MR O'DONOGHUE: So I'm - - -

15 MR YOUNG: That's during the morning and evening peaks, yeah.

MR O'DONOGHUE: Yeah. So I guess the main – the main – what we're requiring is a construction traffic management plan, like, to manage that and that, you know, it – it generally incorporates, you know, codes of conduct for drivers and, um, hours of – hours of operation and that.

20 MR DUNCAN: So everything is pretty typical - - -

MR O'DONOGHUE: Yeah.

25 MR DUNCAN: - - - conditions.

MR O'DONOGHUE: And the – and there – it's the – the – they're entering the side by – by existing, um, you know, access, access routes, you know, to get to the – to get to the dam – the dam wall. So there would be – you know, so there would be
30 heavy vehicle movements already going in through those access – access points - - -

MR DUNCAN: Yes.

35 MR O'DONOGHUE: - - - as well.

MR DUNCAN: All right. I'm comfortable. Alice?

MS CLARK: Yeah, I'm comfortable with that.

40 MR DUNCAN: So I guess that leads us to the final matter, then, is rehabilitation – I think it's final in every sense – for the discussion today. But, I mean, in the point of view of this proposal, rehabilitation, post-approvals and any ongoing monitoring. Can you provide some context for that information for us?

45 MR O'DONOGHUE: Look, sure. Um, I guess there's – under the conditions, the existing conditions, um, and proposed conditions, and also in the concept approval, there are, uh, requirements for rehab – rehabilitation strategy in the – in the concept

approval, which we're sort of – which we've recommended to get, uh, included in the conditions for – for, uh, for this, as it – that's a – that's a existing obligation in the concept approval. So we – so we can incorporate it in these conditions, and part of it is that the – the – Origin want to surrender their – their concept approval. So we
5 want to make sure that any existing obligations are carried through to the – to the - - -

MR DUNCAN: Any existing obligations from the previous contractor approval.

MR O'DONOGHUE: Yeah.
10

MR DUNCAN: Any new conditions as – in regards to this proposal?

MR O'DONOGHUE: There's no – there's no new conditions about rehab. It's – what we've done is incorporated – given that the – the – ash – and this is in
15 discussions with Origin as well. Um, given that the – the – the ash strategy in terms of beneficial reuse has a – does have large implications on how you might rehab the site, a higher – higher, um – if you can achieve 80 per cent ash targets, um, in terms of timing of when you do rehab, or – or it – so it's sort of linked in together. So what – so what we've done is incorporated it in the – in the long-term ash strategy, the
20 rehabilitation strategy requirements so they can – they can look at – you know, depending – pending, uh, beneficial reuse, they can, uh, modify the rehab strategy in accordance with the – the – the ash strategy as well.

So part of what, um, Origin in the updated strategy they're providing shortly will be
25 – will be incorporating, um, into that the rehab – rehab components in that as well. There's – there are existing rehab – there's an existing rehab management plan that – from 2010, um, that's – that was submitted to the department. So – so there are existing obligations there that – that Origin have to – have to undertake.

30 MS HONAN: Firstly, could I - - -

MR O'DONOGHUE: Yeah.

MS HONAN: - - - just clarify. So the conditions of consent for the current
35 modification look to ask for a future rehab management strategy, but there is an approved management plan already in existence; is that right?

MR O'DONOGHUE: Yeah. Yeah, and under – under the existing conditions.

40 MS HONAN: Right.

MR O'DONOGHUE: Yep, yep.

MS HONAN: Okay.
45

MR DUNCAN: So that future strategy would take every – that – all that into account.

MR O'DONOGHUE: So that – so that will be - - -

MR DUNCAN: So rolled up.

5 MR O'DONOGHUE: So that will roll up into – into the – the ash strategy and the rehab strategy into one, into one, uh, document.

MR DUNCAN: Okay. Alice, have you got anything further on that?

10 MS CLARK: No, I – I would want to go and have a look at that for – ongoing long-term groundwater monitoring would be of interest to me in that area.

MR O'DONOGHUE: There are – but there are – there are increased requirements, just not in – it's not under that rehab condition, but there are – because of the – the,
15 um, I guess the – the proposed grouting.

MR DUNCAN: Yes.

MR O'DONOGHUE: As part of the – the conditions, we – we have required an
20 updated monitoring strategy, but also updated groundwater modelling to – to inform, I guess, ground – further inform groundwater flows and in – as part of the – more generally, for – for the site, but – but also specifically for the – for the augmentation. And part of that is – is – is beefing up the groundwater monitoring program for the site, which is fairly – which is fairly limited at the moment. Like I discussed earlier,
25 it's more looking at groundwater flows, you know, going from the top end of the site down to – down to – to the lake. So there's certainly opportunity for – for improving the groundwater monitoring network in conjunction with the improved groundwater model that we're – we're requiring.

30 MS CLARK: So the basis of the question is you're making the – the dam much larger. It's, um, going over the preconditioned ground that has been mined. Um, everything changes then. What – what is the ongoing long-term requirement? So they're different now because of that increased amount of – you know, there is a lot of pressure that's happening, yeah, so - - -

35 MR O'DONOGHUE: So, essentially, we're – we're rolling over the existing obligations.

MS CLARK: Mmm.
40

MR YOUNG: Obviously, they will need to extend and be updated. And – and I think have changed over the last however many years in terms of the ability of them to recycle and also to the fact that the plant is in, you know – off and running at – at high capacity. Um, and in addition to that, we're requiring this void remediation
45 plan, um, which includes, amongst other things, a comprehensive service and groundwater monitoring, a reporting program, um, to look at some of those leachate implications and to manage those and monitor those. I think the other important

thing to say is that – a couple of things. One is, I guess, um, you know, this – this ash dam has been there for a long period of time.

MS CLARK: Mmm.

5 MR YOUNG: There are – oh, there are existing – there original legislation, um, covered that area. That was then – uh, an extension was made to that dam in 2008 which was approved, but that was not the whole thing. That was an extension to around the edges, a much larger extension than what we're considering today. Um,
10 now does that project approval apply to the whole dam? Yes. Um, but I guess our view is that, um, uh, we're not – it's not clear exactly, um, you know, what the final land form is going to be, how much they're going to be able to recycle, um, you know, and, therefore, there needs to be a strategy in place. But in terms of the actual specific plans and the obligations and the final land form and so forth, is something
15 that we're going to have to keep working out as a government over time.

MS CLARK: Understood. My question – my question is – particularly because this extension goes over pre-mined land - - -

20 MR YOUNG: Mmm.

MS CLARK: - - - and that – that – that difference is – is huge when you look at how groundwater flows through something that hasn't been mined before - - -

25 MR YOUNG: Mmm.

MS CLARK: - - - and the connectivity when you have mine voids.

30 MR YOUNG: Mmm.

MR O'DONOGHUE: Yeah.

MS CLARK: That's the whole premise of – of that

35 MR YOUNG: Yeah. And the other – the other key thing is that, um, it does operate with – under an environment protection licence, the EPA.

MS CLARK: Yes.

40 MR YOUNG: And, uh, they're particularly, uh, interested in, obviously, potential impacts on groundwater quality, and also, um, any discharges that may occur into Lake Macquarie and so forth. So - - -

45 MR DUNCAN: Okay. All right. Well, I think that has covered all the areas that we talked about at the start. Are there – are there any other issues, Alice, that you wish to bring up?

MS CLARK: No.

MR DUNCAN: Lisa, anything that you wish to raise?

5 MS HONAN: Can I just ask one question? Do we know where Boral is going to on the site? I know there's a mention that they are moving. Is – is that part of the application specifically about where they're moving to?

10 MR O'DONOGHUE: It – it is, but I – I'm not sure if it's on the, um, map I provided. Hang on. I will just have a look.

MR DUNCAN: This one there? That's figure, uh, 3.

15 MR O'DONOGHUE: Yeah. It's not marked up on there. Look, we can clarify that one. Yeah.

MS HONAN: Okay.

20 MS HONAN: Or we could ask the applicant.

MR YOUNG: Or just ask our Origin - - -

MS HONAN: We will ask - - -

25 MR DUNCAN: We will see it.

MS HONAN: We will ask the applicant. That's all right.

30 MR DUNCAN: We will have a look at the site inspection.

MS HONAN: Thank you.

35 MR DUNCAN: Nothing else? I think at that point – Mike, thank you very much and, Steve, thank you very much for the presentation.

MR O'DONOGHUE: Okay.

MR YOUNG: Thank you. You're welcome.

40 MR O'DONOGHUE: Thank you.

MR DUNCAN: And we will close the meeting.

45 MR O'DONOGHUE: Okay. Thank you.

MR YOUNG: Thank you.

MR DUNCAN: Thank you. Thanks very much.

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[10.02 am]