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TRANSCRIPT OF PROCEEDINGS

TRANSCRIPT IN CONFIDENCE

O/N H-1304765

INDEPENDENT PLANNING COMMISSION

MEETING WITH DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT

RE: RUSSELL VALE COAL UNDERGROUND EXPANSION PROJECT

PANEL:	**PROFESSOR ALICE CLARKE (CHAIR)** **PROFESSOR CHRIS FELL AM** **DR PETER WILLIAMS**
OFFICE OF THE IPC:	**BRAD JAMES** **BEN PORGES**
DEPARTMENT:	**MIKE YOUNG** **STEVE O'DONOGHUE** **SARA WILSON**
LOCATION:	**VIDEO CONFERENCE**
DATE:	**1.34 PM, WEDNESDAY, 14 OCTOBER, 2020**

THIS PROCEEDING WAS CONDUCTED BY VIDEO CONFERENCE

PROF A. CLARKE: Good afternoon. Before we begin, I would like to acknowledge the traditional owners of the land on which we meet. I would also like to pay respects to their elders, past and present, and to the elders from other communities who may be here today. Welcome to the meeting today. Wollongong Coal Limited owns and operates the Russell Vale Colliery located in the Illawarra region, approximately eight kilometres north of Wollongong and 70 kilometres south of Sydney. Wollongong Coal is seeking approval for the Russell Vale Underground Expansion Project, which involves mining by means of bord and pillar mining technique.

Wollongong Coal proposes to extract up to 3.7 million tonnes of run-of-mine over five years at a production rate that would not exceed one million tonnes of product coal per year. My name is Professor Alice Clarke. I am the chair of this IPC panel. Joining me are my fellow commissioners, Professor Chris Fell and Dr Peter Williams. Brad James and Ben Porges from the Office of the Commission are also in attendance. In the interests 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 on part of the commission's decision-making process. It's taking place at the preliminary stage of this process and will form one of several sources information upon which the commission will base its decision. It is important for commissioners to ask questions of attendees and to clarify issues whenever we consider it appropriate. If you are asked a question and are 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 up on our website. I request that all members here today introduce themselves before speaking for the first time and for all members to ensure that they do not speak over the top of each other to ensure accuracy of the transcript.

As you are aware, we are meeting via video link. Should we experience technical issues ..... connectivity, Brad James will place those participants still connected on hold, so please stay connected. If your connection has been lost, please contact Brad on 93 ..... 3 2165. The meeting will be temporarily adjourned and the transcript will be paused until we can reconnect participants. We will now begin. Thank you. I think first, Mike, I might hand over to you guys to make any initial comments that you have, raise any issues or go over any information that you would like to in today's meeting.

MR M. YOUNG: Thank you, Commissioner, and thank you for the opportunity to talk about our assessment of the Russell Vale Expansion Project and also provide some answers or responses to some of the questions that the commission may have today. My name's Mike Young. I'm the executive director of Energy, Industry and

Compliance at the Department of Planning, Industry and Environment, and I will let my colleagues perhaps introduce themselves now for the purposes of the transcript.

MR S. O'DONOGHUE: Sure, Mike. Steve O'Donoghue, Director of Resource Assessments.

MS S. WILSON: Sara Wilson, consultant on behalf of Department of Planning.

MR YOUNG: So today, look, we're in your hands. Obviously we've prepared a very comprehensive report on the Russell Vale proposal. It's obviously been in the planning system for many, many years. There's been obviously a number of public processes conducted by the former Planning Assessment Commission and now the Independent Planning Commission. And clearly the Minister has requested that a final public hearing be held into the project prior to a determination being made by the IPC. And so, you know, we've obviously, in our report, sought to address and respond to the issues raised by the commission in its report.

However, I think the main thing to note since that time that the company has made very significant changes to the project, amending the application to – from a longwall, underground longwall, mining operation to a bord and pillar operation that now is substantially reduce in size as well as scope and we're – I think we're talking a five-year project now and in the order of 3.7 million tonnes or thereabouts. So, I mean, I don't propose to sort of go through all the elements, Alice, but I understood that possibly there was some matters that the commission may want clarification on or had some questions in regard to.

PROF CLARKE: Thanks, Michael. I guess to commence that side of things, we heard yesterday some new information regarding subsidence and geotechnical information from the resource regulator. And, to kick off, we have a few other areas that we want to talk to you about, but to kick off today's meeting, I was wondering if you have any comments on that. It's new information and different to, I think, the information that's in the report that we have.

MR YOUNG: Certainly. I guess, I'd – obviously, I was involved in – as an observer in that meeting with the resource regulator yesterday and clearly I indicated that the – some of the matters being raised were not reflected in the advice from the resource regulator. And I understand that those matters are being clarified directly with the resource regulator for the benefit of the commission. And so I – I – I would – I would suggest that – that those matters, in terms of getting formal advice on those – on those issues, it would be appropriate to wait for the written advice from the resource regulator to avoid, you know, any – any matters or issues being taken out of context or not fully reflecting the views of the resource regulator as an agency.

So that being said, I think that we obviously, in our report, did assess those same issues in regard to risks associated with multi-seam mining and stability associated with pillar stability and subsidence and potential risks associated with that in terms of surface features and groundwater. So I thought it might be helpful if Steve and Sara

took you through some of the key points or findings that – and processes, I guess, and technical advice that we relied on in preparing our assessment, including, I would hasten to add, a number of iterations of written advice from the resource regulator about these matters. So, Steve or Sara – or, sorry, Alice. You were going to say something?

PROF CLARKE: Yes, that'd be very helpful to have that. Thank you.

MR YOUNG: So, Steve and Sara, I'm happy how you guys want to handle that.

MR O'DONOGHUE: Look, I'll – I'll – I'll start off.

PROF CLARKE: Thanks, Steve.

MR O'DONOGHUE: I mean, I guess the key aspect has been quite a – quite a lot of advice from – from a range of experts, your Honour, on the revised – if – not going back to the earlier iterations of the project, but the – you know, the revised preferred project report. So, again, it was referred to the ISC independent expert panel scientific committee or mining and coal seam gas on two occasions to get their advice. One of the – one of the issues that they – that they raised, you know, was about multi-seam environment and risk of pillar failure and consequential risks in – in – in the overlying surface features, such as swamps.

The – one of the key outcomes of that was the – the company engaged SCT Operations to undertake more analysis against the – the ISCs recommendations against potential impacts on swamps in – in terms of looking at it from a – the – the risk associated with that down to a – a negligible or extremely unlikely impact on – on a single swamp. The company went away. SCT Operations provided a report. Professor Hebblewhite, who – who's a well-respected subsidence expert, peer reviewed that – that report, provided comments back over a period of time. SCT undertook a further revision of that report. Professor Hebblewhite again reviewed that and was – at the end of that, was satisfied, I guess, with the – with the – with the information provided about the risks to – of subsidence in that multi-seam environment, but also the risk to the – to the swamps as well.

So, I guess, the – our report sort of documents that process in some detail; includes the SCTs reports and the peer reviews and that's sort of all part of the package – package provided. So that's sort of the – I guess, the process that there. Part of that too, resource regulator, you know, was provided with all that information and provided advice back to the department about their concerns as – as did Water New South Wales. And we certainly considered all that information in – in our assessment of the project. So it's just some context to – to, I guess, that process and the information we considered. Probably one – one thing to state with Professor Hebblewhite as an independent expert, he was certainly involved early on in the – in – on behalf of the department and some of the risk assessments in the earlier iterations of the project.

In this instance, he – he was – he was engaged by – directly by Wollongong Coal, but we – we're satisfied with – with him as an independent expert to provide advice, consider his advice, of his – of his peer review. I guess the other thing that the – Professor Hebblewhite is – is a member on the underground advisory panel, the Advisory Panel for Underground Mining, which has been recently established by – by the New South Wales Government. And he's a – he's an expert on – in – on that panel for – for subsidence.

PROF CLARKE: But, Steve, just for my clarification, was there any a time during that process that Professor Hebblewhite was reviewing his own work?

MR O'DONOGHUE: No, he was – he was only reviewing the work done by – by SCT - - -

PROF CLARKE: Thank you.

MR O'DONOGHUE: - - - on that one.

PROF CLARKE: Thank you.

MR YOUNG: Sara, I thought it might be helpful for you to just outline – Steve's obviously gone through the process that we've gone through to – on that – that matter and those issues. What were some of the findings? Perhaps that would be helpful to articulate some of those findings.

MS WILSON: I guess the complicating factor here is the fact that we've got multi-seam mining and SCT did a quantitative assessment of the different – the – the upper seam in terms of the Bulli Seam, as well as the middle seam, which is the Balgownie Seam. They determined that the Balgownie Seam and seven of the 14 panels in the Bulli Seam have actually been fully collapsed at the completion of historical mining. And therefore there's no potential for further subsidence to occur as a result of those seam areas. There is some areas, seven of the panels within the Bulli Seam, that are not known to have definitely collapsed at this stage.

However, it is the view of STC after looking at a lot of mine plans and subsidence ..... monitoring results that it – it – they – these areas are also almost certainly subsided, particularly also considering that they're saying more similar mining systems have been used in the Bulli Seam goaf areas, which have been confirmed. But in the highly unlikely event that any pillars were still standing in the Bulli Seam area, STC have quantified the probability of instability of these to be about less than one per cent. So – and if – if those areas are actually – if they do collapse as a result of mining in the Wongawilli Seam, the resultant subsidence would about 850 millimetres.

The – the assessment then went on to do a very detailed analysis of – of the areas where there could be a region of pillar failure, although keeping in mind that the – the probably of that is very low. And where that coincides with where swamps are

present they determine that there is an area of about 200,000 metres squared which represents about 28 per cent of the area of swamp within the project area that are actually overlying that area where the Bulli Seam is yet to be confirmed to have subsided. And they then went on do a further analysis that said if there was 850 millimetres of – of subsidence that did result in that area and there was 10 per cent of the swamps that were impacted as a result of that, which is also highly conservative, considering that there has actually been 1.7 metres of subsidence in that area previously and no – no observed impact to swamps, that SCTs overall highly-conservative analysis resulted in there being a 0.028 probability of impact to a single swamp, is obviously considered as negligible.

I think it's important to reiterate the fact that this area has undergone 1.7 metres of subsidence in some of the areas which had coincided in areas where there are swamps and that – that monitoring of those swamps to date has indicated – has not indicated that there has been any substantive impacts to the swamps. So we - - -

PROF CLARKE: .....

MS WILSON: Go on.

PROF CLARKE: Yes, can I ask a question just before you move off those pieces of data there. I think you said 200,000 squares metres. Of that, there's 28 per cent of swamps in it, and then you said that's 10 per cent of swamp. Is that 10 per cent of - - -

MS WILSON: No, no.

PROF CLARKE: .....

MS WILSON: No, no. Sorry.

PROF CLARKE: Or was it 10 per cent of - - -

MS WILSON: No. What – well, the – the – the – the – what is STC has said, if there needs to be a combined – quite a few – three – three things that need to happen together for there to be a catastrophic loss of ..... land swamp to occur.

PROF CLARKE: .....

MS WILSON: Those three things are (1) is a region of pillar failure, so pillar feature within the Wongawilli Seam, of which STC indicated there is a less than one per cent chance of that happening.

PROF CLARKE: That's right.

MS WILSON: The second thing that needs to happen is that there needs to be swamps present. And STC have identified that there is – you know, 200,000 metres

squared of swamp in the area. The third thing that needs to happen is there needs to be an excessive level of subsidence that actually results from that pillar failure, so based on worse-case outcomes of there being 850 millimetres of subsidence as a result of the Bulli Seam collapsing, they've said that the worst-case impacts would be about 10 per cent of the swamps impacted. Now, they've – so that – that – that's a fairly subjective percentage. But they've – and but they've said that that's a fairly conservative percentage, considering that there has been significant subsidence in this area previously and no impacts have been – have been identified.

PROF CLARKE: Thanks, Sara.

MS WILSON: So ..... was – was a subjective figure based on – a subjective and conservative figure, I – I guess, based on the fact that there hasn't been any impacts on swamps previously.

PROF CLARKE: Thank you. You've clarified my – my question. Chris has a question for you. Chris.

PROF FELL: Yes. Thanks. That's very helpful, but just to put numbers on it, your figure 9 in the file shows in yellow the areas that there are still some questions hanging over in the Bulli Seam and projects on that where swamps are just – could you give me an idea of how many swamps we're talking about? I think there's been a total of 33 identified .....

MS WILSON: So - - -

MR O'DONOGHUE: Can I bring up – I will bring up – can I share the figure that we're talking about?

PROF CLARKE: Sure.

MR JAMES: Okay, yes. Steve, one sec. I will just allow sharing. Okay. Over to you.

MR O'DONOGHUE: All right.

MS WILSON: From my understanding, there's 39 upland headland swamps recorded in the Wonga East area, so within the project area, which – which covers 49 hectares and SCTs analysis indicates that of that, 28 per cent are within that – that – the yellow-shaded area - - -

PROF CLARKE: Yes.

MS WILSON: - - - on – on – on ..... shown at the moment, on the figures shown at the moment, figure 9.

MR JAMES: Can you see that figure there now?

PROF FELL: That comes to 3.1.

MS WILSON: Yes .....

PROF FELL: So we will stick with three, perhaps.

PROF CLARKE: Yes, we can see that. Thanks, Steve.

MR O'DONOGHUE: Yes.

MR YOUNG: It's Mike Young here, but, I – I mean, I take your point, Chris, about numbers of swamps and so forth, but I do think we're dealing with layers upon layers upon layers of estimation and uncertainty here in terms of the nature and the extent of the – the risks to these swamps. Clearly, I think, the IPC or the Planning Commission talked about concerns about impacts on the swamps and – and talked about avoiding or ensuring that any impacts were either negligible or very low or words to that effect, in terms of a risk matrix. And I guess we've – we've taken that and – and looked at the – the various assumptions in the assessment and, I guess, you know, we are going based on the advice of – of the experts and also Bruce Hebblewhite as a recognised independent expert.

I guess we're satisfied that the conclusions were made in the report about a very low or negligible risk are sound in terms of that risk matrix or risk profile. And that's as Sara said, that's overlain by the fact that, you know, even if the very unlikely event that there's some localised subsidence due to further destabilisation of old workings, which I think is – is unlikely given the – the assessment and the nature of – of bord and pillar mining, that it would be highly unlikely that you would get any significant or widespread impact on swamps that would be even material or even noticeable. So I just think it's important, you know, to put that in context in terms of – so we don't get in the trap of looking at particular numbers when we're really layering estimates upon uncertainties and – and so forth. I'm sure you get my point, Chris.

PROF FELL: I do, and that's a helpful set of comments. Thank you, Mike.

MS WILSON: I think it's also important to note that we have recommended subsidence performance measures that prevent greater than negligible environmental consequences to upland swamps. And there is a very clear New South Wales Government policy that if there is greater than negligible impacts, then they are offset by this policy.

PROF CLARKE: I understand that. I still think that if there are questions that allow us to put the layers of uncertainty, risk and likelihood into context, it is helpful to step through them. Most of us are familiar with risk profiles and – and matrixes and the way that you come to the conclusion that it is 0.028 per cent. It is helpful to be able to walk through that with – with the various reports that we have in front of us. So please continue, Sara. Thank you.

MS WILSON: I don't know if there's anything more that I need to add in terms of understanding the – the – the risks, other than, I guess, it's not a – a risk in terms – the – the – the analysis presented isn't really a risk in terms of how many swamps would be impacted. It's the probability of impact to a single swamp.

PROF CLARKE: Now, with the - - -

MS WILSON: So that's why it's difficult to answer your – your – your question in terms of how many swamps would be impacted. I guess the analysis isn't focused on that. It's looking at that probability of impact to a single swamp.

PROF CLARKE: Yes. I – I didn't quite develop the full question. I was getting to that and that wasn't the conclusion that I was going to. I see, Peter, you've got your hands up.

MR P. WILLIAMS: Thanks, Alice. Peter Williams. Sara, sorry, I was just trying – just following the logic, I guess, you were saying that there are four – sorry – seven of the pillars in the Bulli Seam haven't collapsed. Well, sorry. Seven have and the other seven, it's uncertain. Almost definitely have, but not 100 per cent certain whether they have collapsed. Is that correct?

MS WILSON: That's correct.

MR WILLIAMS: Right. And then the chance of pillar failure, I think you gave a figure of one per cent or less than one per cent.

MS WILSON: That's correct.

MR WILLIAMS: So what we're saying is we're almost certain that they have collapsed, but, if they haven't, there's a less than one per cent chance they will.

MS WILSON: That's correct.

MR WILLIAMS: Okay.

PROF CLARKE: And if they do in that very less-than-one-per-cent chance that they will, the subsidence would be in the order of 550 - - -

MR WILLIAMS: 850 millimetres?

MS WILSON: 850 millimetres.

PROF CLARKE: Sorry. 850 ml.

MR WILLIAMS: Yes .....

PROF CLARKE: And that represented 0.028 per cent impact. So what - - -

MS WILSON: So there were – it – if you go back and have a look at the – the quantitative assessment ..... there was – there was a – a formula used in terms of multiplying the region - - -

PROF CLARKE: This one?

MS WILSON: - - - the region in the area and the – the – the – the probability of impact - - -

PROF CLARKE: Yes.

MS WILSON: - - - to come up with a risk.

PROF CLARKE: So all things being very remote and very unlikely, should they happen, what is the impact on a swamp?

MS WILSON: It – very good question. And although you would expect there to be impacts with 1.7 metres of subsidence, previous and long-term monitoring in this area has shown that that hasn't been the case.

MR YOUNG: So essentially, Alice, you'd – what we're saying, I suppose, is the nature and extent of historical impacts in that area have been far in excess of the absolute worst case that we'd expect from further destabilisation of the old workings through the new proposed bord and pillar mining. I guess that's overlain with the fact that if there was some localised – and, I guess, when we're talking about pillar failure, I'm not sure that we're talking about – we'd expect all – all of those pillars to fail across that entire area. You might – what we're saying is that, you know, even you do get pillar failure, that's likely to be localised.

And then if – if you do have some localised impacts, what we're saying is that obviously that would have to be monitored and looked at and the conditions ..... require that. And that if necessary the government recognises that from time-to-time projects do impact swamps. And clearly that's anticipated through an offset policy that allows those impacts to occur. Obviously, avoidance and minimisation in the first instance, but where that's not possible, that those impacts are appropriately offset in accordance with those policies. And that's actually been done at other coal mines in the southern coalfields. For example, at the Dendrobium mine, where South32 dedicated a large area of land, which included a – a – a – large areas of upland swamps and dedicated that to the New South Wales Government and the National Park Estate.

So there are precedents on a – in fact, a much larger scale compared to any sort of remote possibility of impacts that we're considering on this particular project.

PROF CLARKE: Thanks, Mike. Chris, you have a question.

PROF FELL: Just how long does it take effects to show up, particularly on this sort of failure of pillars?

MS WILSON: That – that – that question or – or that was at – is really clearly scoped in the swampland upland policy, in that they have indicated that if – that – that monitoring should occur for at least 12 months following some – following mining. And within that 12 months, if there isn't any indication of reduced water levels within the swamp or reduced shallow groundwater levels, then they consider the 12-month period to be sufficient. So that's fairly – fairly clearly scoped within the offset policy.

PROF CLARKE: Thank you.

MS WILSON: So – so with that in mind, I would suspect that – I would suggest that subsidence impacts would be identified within a 12-month period.

PROF FELL: Okay, thank you.

PROF CLARKE: If – if, you know, there was the unfortunate need to offset, are there swamps that they can actually offset this against?

MR YOUNG: Yes. Yes, there are. There – there a number of upland swamps obviously in – in the region. I – I'm not aware – Sara would be able to tell me where that - - -

MS WILSON: There – there's certainly some – in fact, it's off – if you have a look at – I think it's ..... figure 13, there are actually swamps to – in the ..... to the north and west of – of the mining area at the moment. It's not particularly – it's not shown particularly well on this figure, but previous reiterations - - -

PROF CLARKE: Yes.

MS WILSON: - - - of ..... project did show swamps further to the north and west of this, so – so the simple answer to the question is, yes, there are.

PROF CLARKE: I can see some of them on there. Thank you, Sara. Okay. Any other questions regarding subsidence and swamps, Peter or Chris?

PROF FELL: No, I'm right. Thanks.

MR WILLIAMS: Just – just on the offsetting, there's no requirement at this stage, Mike, for offsetting at all. Is that .....

MR YOUNG: Well, I – I guess we would – we would say – yes – yes and no, the answer to that is, Peter, is no in the sense of there's no upfront requirement, because our assessment indicates that the impacts ought not to occur.

MR WILLIAMS: Yes.

MR YOUNG: That being said, there's a contingency in – in – in the conditions that should the monitoring – they need to establish relevant criteria for impacts and undertake the monitoring over the – and it's not just over a 12-month period. It would be progressively, because obviously the mining occurs progressively. And they would need to start that and to the get the baseline monitoring, which I think they've already done, to some extent, you know, over the last number of years during the assessment process. And then if those triggers were met or the indicators were – the thresholds were breached, so to speak, that offset liability would begin.

And then the – the swamp's offset policy would apply and they would need to calculate the losses associated with that, the impacts, and there's a calculator for that purpose. On that basis, they would need to then find and retire those credits through - - -

MR WILLIAMS: Yes.

MR YOUNG: - - - appropriate swamp offsets in the region.

MR WILLIAMS: Yes. Yes, okay. Excellent. That's great. Thank you.

PROF CLARKE: Okay. I think we've covered off on swamps and subsidence. If we want to loop back around, that's fine, people, but perhaps we could move on to waste. We had some questions around waste, waste disposal on the surface, and in general the amount of – of material that might be produced. Chris, did you have a specific question that you wanted to ask around waste?

PROF FELL: Well, yes. Basically, because of Wollongong Council's requirement that they no longer deposit waste on the old waste .....

MS WILSON: Sorry, I'm struggling to hear.

PROF CLARKE: Yes.

PROF FELL: .....

PROF CLARKE: Chris, I'm going to come back to you, Chris.

PROF FELL: ..... because ..... dispose of the holding - - -

PROF CLARKE: Sorry, Chris. You paused there for a minister. Have another go at your question now that you're – you seem to be back.

PROF FELL: Apologies ..... 15,000 tonnes of storage for waste and they're rather hoping to actually sell it as waste in the local area, rather than put it in a mine .....

they can't get sales. My – my question is that seems quite a small holding area given the uncertainties of waste disposal. Do you have any comment on that?

MR O'DONOGHUE: I can start, Chris. I guess the – I mean, the first – the first thing is that they're – the – the beneficial reuse is – in our conditioning, we've put forward that where there's beneficial reuse options, that that's a priority. And, you know, and – and there's a requirement for a waste management plan to – to sort of step through – step through that. But I guess the – the – without that, there's the – there's the ..... placement back to the underground – to the underground workings, which is the – I guess, the prime source in – in lieu of there being a rejected placement area, which has really been part of that rehabilitation that council wants of that existing area.

So while it's a small area at the Pit Top, it's – it's reducing, I guess ..... at – at the surface, you know, for the storage of that material and noise – and noise associated around with that and height with the – the main intent to get the underground, but – but to provide, you know, opportunities for – you know, for – for – for reuse for that amount of material – material if – if there's opportunities that present itself.

PROF FELL: Okay, thank you.

PROF CLARKE: Peter, any further questions around waste?

MR WILLIAMS: The department's satisfied with the water quality in terms of what's – the waste that will go back into the – into the workings.

MR O'DONOGHUE: Based on the information, they've – they've done, you know, further geochemical analysis of – of – of the reject, which has shown – which is showing, I guess, the – any leachates from that. There's – there's a minimal – minimal likely impact on – impact in water quality. We've – I guess we've conditioned it for – so it's – since – since there is variation, I guess, in quality that needs to be checked, there is a requirement to do that on an – an ongoing monitoring to – to demonstrate that – that the – that, you know, the – the geochemical nature of the reject would be – would be okay to – to put in the underground workings. But overall, the – the information is suggesting, you know, with – with a high level of confidence that – that it would be suitable to go into the underground workings.

MR WILLIAMS: Yes. The – the applicant yesterday in their presentation said that – that they were satisfied that they had met the requirements like for the – for the NorBE test with the catchment, drinking catchment SEPP, for water that obviously might be discharged from the mine into the – into the catchment itself. So that – you – you'd concur with that – that?

MR O'DONOGHUE: Well, I – I guess, I mean, the – the – at this point – I mean, that sort of goes into the – the longer term – you know, if it's going into the underground workings, it would – which, you know, the – which – which is a dry area in the – in the long term, there'd be – there would be water recovery, which

comes back to, I guess, one of your questions about how – you know, how that's managed in the future. The – the – the – the adits, you know, the discharge that leaves from is – is back down at the pit – you know, near the Pit Top area outside – outside the catchment area.

MR WILLIAMS: Yes.

MR O'DONOGHUE: Yes.

MR WILLIAMS: Yes.

MR YOUNG: It's – it's Mike Young here. Steve, would it be fair to say that there's no actual discharges proposed into the catchment itself.

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

MR YOUNG: And that the – the – in laymen's terms, the reject material is really just washed coal and other material that would have – that were really – if necessary, just really putting the same material that came out of the same place back into the - - -

MR O'DONOGHUE: That - - -

MR YOUNG: - - - workings?

MR O'DONOGHUE: That's correct. That's correct. I mean, it's the – you know, part – part of the – you know, the roof material or floor material that gets caught up or other elements in the coal that, you know, through the washery that – that – that – that were, you know, from that coal resource in the first place, so it – that – that's correct, Mike, in terms of going – that material being sourced from underground.

MR YOUNG: Right, so, I mean, there'll still be some – presumably some – some groundwater movements that would eventually find its way into the catchment.

MR WILLIAMS: Well, not – no. Not from a surface point of view, because don't forget we're – we're talking about extraction of coal resources well underground. And, you know, we're not expecting any sort of major, you know – that water would report to those workings and – and the indications are that it's a relatively small amount of water. And obviously that is collecting now not just from the proposed workings, but from the historical workings there as well. And the idea is that that would be collected and discharged and/or treated at the Pit Top facilities, so, correct me if I've wrong, Steve, but I'm not – not aware that there's going to be any sort of significant discharge – dispirit discharge, so to speak, from underground workings into areas that would make up surface water from the catchment.

MR O'DONOGHUE: Not – not from the catchment. There's still – there's a licenced discharge point already, you know, the Pit Top area, where – where water

brought from underground workings is – is, you know, discharged down Bellambi Creek.

MS WILSON: And that's estimated to be about 400 megalitres per year.

PROF FELL: In the future, if I might, Chair - - -

PROF CLARKE: Yes .....

PROF FELL: - - - you're talking 288 megalitres of your ..... discharge. That's a long way in the future in 2057.

MR O'DONOGHUE: Look, that – that's right, Chris. In terms of the modelling they've done to show groundwater recovery level, in the – in the long term, and that – that would – you know, back out – out of the adit at the – the Pit Top workings, which if – you know, if not collected would – would discharge to Bellambi Creek. So, you know, part – part of what's put forward and with the added discharge management plan, is – is really options around there to treat – to treat the water to a suitable quality and potential for – you know, for – for, you know, beneficial reuse of that or – or suitable-quality discharge.

MR YOUNG: But I think is the 288 a worst case, Sara – Sara, or is that an expected case?

MS WILSON: Are we talking about discharge from the adit?

MR YOUNG: Discharge from the adit, yes.

MS WILSON: Discharge from the adit is 110 megalitres per year worst case.

MR YOUNG: I think the 288 was potential groundwater inflows.

MS WILSON: ..... groundwater - - -

MR O'DONOGHUE: Yes.

MS WILSON: - - - groundwater inflows that will be treated and discharged via the EPAs licenced discharge point.

MR O'DONOGHUE: But, yes, during operations - - -

MS WILSON: ..... two separate things here.

MR O'DONOGHUE: Yes, yes.

MR YOUNG: So, Peter, I'm just concerned that – did that answer your question about the NorBE test and discharge into the catchment or – or not?

MR WILLIAMS: Yes. Sorry. That last bit – sorry. I just missed that last little bit. Did – are you saying that the licenced – and, Steve – but the licenced discharge point, is that – where – where is that actually in the – is that the adit? The – the – the – the .....

MR O'DONOGHUE: That comes back to the Pit Top area back at – back at ..... you know, Coromal, you know, Russell Vale.

MR WILLIAMS: Yes, yes, yes.

MR O'DONOGHUE: Yes. And then – and then discharge, you know, down through – through the Bellambi Creek system - - -

MR WILLIAMS: Yes.

MR O'DONOGHUE: - - - at that point, yes.

MR WILLIAMS: Yes. I – I mean, it's just the points that were made yesterday about the – in terms of any discharge into the catchment, not out of the adit, because that's outside of the - - -

MR O'DONOGHUE: Yes.

MR WILLIAMS: - - - outside of the catchment. But that – the – the comment was made, look ..... it meets or satisfies the NorBE test under the – you know, the – the – the catchment SEPP, drinking water catchment SEPP and I'm just trying to work out the – the impacts in terms of groundwater discharge from within the mine.

MS WILSON: So that – that's equivalent to maximum 288 megalitres per year.

MR WILLIAMS: Yes.

MS WILSON: And that would be treated onsite and discharged via the EPAs licenced volume metric and quality limits.

MR YOUNG: Outside the catchment, Peter. So there's – there's no groundwater discharge into the catchment.

PROF FELL: Okay. Okay. Yes, thanks.

PROF CLARKE: So my question to – I – I'm – I think it's probably Sara. In the – you know, in the future, in 2057, when the adit's discharging at – I think it was said at 288 litres, what – where has that water gone through before it gets to the adit? Has it gone through the new mined bord and pillar ..... mined bord and pillar? Is it – where – what's – where's it – where's it been before it goes out the adit?

MS WILSON: Well, it – it's associated with groundwater recovery over many years. And so it's basically the groundwater recovering to a point which it – it – it – it ..... to the – to the surface ..... and – and – I – there – there's quite – there are – there are definitely some question marks over where that would happen, would the existing adit is. And that's one of the reasons why we've requested that they prepare an – an adit water discharge management plan within four months to – to identify the location of the mine-related adits and the water leakage points and the volumes and the timelines and – and – and – and treatment options for that.

MR YOUNG: So, Alice - - -

PROF CLARKE: So are those - - -

MR YOUNG: - - - the – the water would come – sorry, Alice. The water would go – have gone – it'd be a combination of – of naturally-occurring groundwater that – that may have been going through the historical workings and/or the new bord and pillar workings. Although, you know, we're talking about – I think you said actually 110 litres – megalitres a year at worst case, which is actually a relatively small volume in the scheme of mining projects. And that water would be mostly groundwater, but it would also potentially include some surface water, if there were some historical connections between surface water features and surface water – shallower groundwater and connectivity between the previous workings that have been completed.

But the – the assessment indicates that there'd be very little, if any, induced surface water to take from these new workings, because of the depth of those and the lack of connectivity or the lack of subsidence that would occur, because it's bord and pillar as opposed to longwall. So really it's just the same water that's in the catchment anyway, that – that would be traversing through the various rock strata, including the coal seams, but because it would come in contact with coal and some point, most of that water, it would need some kind of – it might be okay for discharge, but it probably will need some kind of treatment at the site before it's suitable for discharge.

And that's, I guess, what we've sought to get the company to clarify is exactly – and to fund, to ensure that where that water comes from is known and where it's collected – and it's collected and it's treated and then it's discharged and that there's money and – and resources set aside to ensure that occurs in the long term.

PROF CLARKE: Thanks, Mike. It was the long term where I was leading with that, post the 10 years that the – the – the – that the mine is responsible for. It's another 30 years ..... for build up under the current plan. And I – I think my question is who's responsible over that longer term and you've addressed that. Thank you. Did you have any other questions around water, Chris or Peter?

MR YOUNG: No .....

PROF FELL: ..... thanks, Alice. Thanks.

PROF CLARKE: Okay. I think next the – the next things that we'd like to ask some questions around are the economics. Peter, can I hand over to you for – for that.

MR WILLIAMS: Yes. Thanks, Alice. Just in the report, Mike, at – at – I'm a little bit uncertain about the level of local economic benefit. The local employment numbers seem very low. I think it might have been something like – an estimate may be only 20 per cent local workforce. I presume that's within the Wollongong Local Government Area. There – there was talk about significant economic benefits. I don't work whether you could call them significant. Maybe for – for the local community. I – I – I'm just a little bit – I thought it was a little bit unclear about the – the level of economic benefit in terms of local employment opportunities, multiplier effects, financial benefit to – to both the – the local area and – and the broader New South Wales economy.

I think there was a figure of, I think, 174 million, I think, from memory in terms of benefits to the economy – to the – to the state economy. The – the local benefits seemed quite low and I don't know whether that's because they were using a very low local employment number or just that some of the benefits didn't seem to be as big or as significant as perhaps one might have expected. That's really what my question's leading to.

MR YOUNG: Yes. Look, I'll – I'll hand over to – to Steve and Sara in a minute, but just to – from a – from a strategic or sort of perspective, Peter, look, this – this is a very small mine in the scheme of things. I think – are we talking 3.7 million tonnes in total?

MR WILLIAMS: That – that's it, yes.

MS WILSON: ..... four-point .....

MR WILLIAMS: One million tonne a year, yes.

MR YOUNG: A year. So, Peter, as you'd be aware, many coal mines, you know, produce, you know, many times that every year let alone all together.

MR WILLIAMS: Yes.

MR YOUNG: And obviously the – the changes that have been made by the proponent over the years to amend the application, etcetera, from longwall mining and the extent of mining has meant that, I would say, the broader economic benefits are becoming less and less. But, I guess, they would argue that so too are the environmental impacts and that the changes have been made essentially to address and reduce and avoid environmental impacts. Look, I think in terms of – it – it is a relatively small mining company as well in the scheme of things, although obviously

it has broader international connections. But that it – it does represent, I guess, a continuation of an existing operation, albeit it has been on care and maintenance for a while, so it's obviously running with a – a smaller staff or smaller workforce.

I can't comment at exactly about the multiply effects and – and what level of local employment was assumed, but I – I still can say that obviously the royalties associated with 3.7 million tonnes of coal and the – the fact that it would re-employ presumably – I'm not sure how many people, Sara.

MS WILSON: 205.

MR YOUNG: Say – say again.

MS WILSON: 205.

MR YOUNG: 205. So we're still talking 200 people. Now, exactly how many of them come from the local area, et cetera, I will let the others comment on, but - - -

MS WILSON: I can comment on that, if you like.

MR YOUNG: But, like, in the scheme of things from a – this is a state significant development, so obviously whilst there are benefits to the local community and one would expect many of the people of those 200 people to live in the Illawarra region, just because of a proximity perspective, you know, 3.7 million tonnes of coal and the associated royalties and employing another 200 people for five years plus, because it would obviously have a tail in terms of rehabilitation, etcetera, you know, whether you call that significant, it's certainly significant compared to, you know, so – many of the projects that we do assess; not mining projects, but other sorts of projects, so – but, Sara, did you want to comment on the local employment issue?

MS WILSON: Yes, so the local effects analysis, we did identify that it was very conservative, particularly in terms of the additional local workforce. So we did assume 20 per cent of the workforce would be sourced locally, but we did determine that in reality that number would be substantially higher. In our preliminary assessment report, the ..... confirmed that it was previously operating – when it was operating at full production, it had a 62 per cent of its employers were – that residing locally. So those numbers in terms of the actual appointment numbers we considered to be highly conservative. And - - -

PROF CLARKE: Sara, what basis do you make the – the – the statement that, "Well, they've said it would be, you know, 20," that you were thinking it was going to be 60? What – why do you think - - -

MS WILSON: Was that a question to me?

PROF CLARKE: What – yes. I – I think so.

MS WILSON: Sorry. Can you just repeat that. I didn't hear it properly.

PROF CLARKE: Yes, sure. It – I guess they've said, you know, 205 or 200 people and 20 per cent of those will be local and the rest won't be. And I think if I understood you correctly, you said, no, that it – it will actually be a much larger proportion that was local. And I'm just wondering what's the basis for that.

MS WILSON: I think that the local effects analysis was just being highly conservative.

MR YOUNG: I think what Sara's saying, Alice, was that the – and if you look at our – our previous reports on this project, the – the previous analysis or the previous operations at – at the mine were 62 per cent local employees from the region, which – which is probably – you know, whether it's 20 or 30 or 40 or 50 or 60, I guess what we're saying is 20 seems low and so we agree with Peter, given that historically when it was operating it was more like 60 per cent. And I expect that given the location down there in Wollongong, I – I would expect that the – the proportion of local employment would be – would be higher than 20 per cent.

PROF CLARKE: I – I – I asked the question, because it surprising me – to me to, you know, know Wollongong as a mining environment and have a lot of high unemployment that it was surprising to me to see that it was so low in the report. And that's why I was wondering why you also thought it – it was going to be higher. Thank you. Yes. Okay. Peter, did you need anything else there on the – the economics question?

MR WILLIAMS: I think the economics is – no, that covers all that. Thanks very much, Alice. Thank you.

PROF CLARKE: Chris, anything there from yourself to follow up?

PROF FELL: Just one question, and that is they're only mining a small amount of the seam of the order of a couple of metres in a seam that is probably about seven metres or more in ..... it was a 35 per cent recovery ..... this a very valuable resource in terms of it has been very high-quality metallurgical coal. I'm just wondering whether that recovery – because they're using a first workings approach is regarded as – as adequate.

MR O'DONOGHUE: I can start there - - -

PROF CLARKE: .....

MR O'DONOGHUE: I can start there, Chris. I guess the – I guess the key – like, the bord and pillar mining, you know, the first workings, I guess, the – Wollongong Coal, because of all the concerns raised about pillar stability, you know, made – made the decision that that – to reduce the amount of coal recovery and have a – have, you know, quite substantive pillars, you know, to – to reduce the instability.

So from a mining height to, you know, to – height to pillar width, it – it makes – it makes the – the pillars quite stable. And that – that probably ..... more reasoning round the trade-off against, you know, subsidence impacts against coal recovery and – and, I guess, the concerns raised by the – you know, through – through the – through the assessment process by the various agencies and the ISC that – that – you know, led to that – that approach by the company.

MR YOUNG: I guess, Chris, from a – from a government perspective, you know, the – the mining exploration and – and geoscience as part of Department of Regional New South Wales clearly, you know, coal is a – a resource owned by the State and by you and I. And clearly, where possible, you know, it's – it's, you know, beneficial to extract a – a – you know, a – a high percentage of the resource to make the most of the resource. But clearly that all needs to be happen – happen within a – a – an assessment process and considering environmental, social and economic constraints and, I guess, the – the bottom line in this situation is that clearly from an environmental point of view, the constraints are such that this is the – I guess, the – well, what – what the proponent is putting to – to government is that this is the – the reasonable compromise with avoiding and minimising those environmental impacts whilst still being able to extract a valuable resource, albeit far less than it could have been otherwise.

And I'm – I'm not – I don't think that it necessarily sterilises – I'm not saying that it is – it's contemplated or would – would occur, but it doesn't necessarily sterilise the ability to, you know, extend the operations or to increase coal recovery at some time in the future, although I think that's probably highly unlikely.

PROF FELL: Thank you.

PROF CLARKE: I'm – I think we've covered off on all of the areas there that we wanted to ask you about. As you can appreciate, we've had a – a number of conversations now with different – Peter, you've got your hand up. Yes, Pete.

MR WILLIAMS: I – I – sorry. I didn't know if ..... we're about to round – round off, Alice? Just - - -

PROF CLARKE: Yes.

MR WILLIAMS: Can I just ask one more question?

PROF CLARKE: Of course.

MR WILLIAMS: Yes, yes. Sorry. I – I – sorry about that, but I – sorry. Mike, it's – it's – just in relation to two of the conditions of consent, and – and I did ask the applicant about it yesterday and they gave a very practical answer. But I just wanted to run it past you as well. There's two conditions relating to hours of operation changes. And it's to do with situations where there's unexpected hold-ups or – at Port Kembla or – or whatever and it's about extension into the 6 pm to 10 pm

timeslots. And there's one of the conditions that relates to hours of operation changes for surface facilities and product transport. And any – an extension into that later time period is subject to the approval of the Secretary.

Now, there's also a condition relating to transport rates and hours, which isn't subject to the same proviso of the satisfaction of the Secretary. So trucks could move on and off the site without – potentially without being subject to the same requirement. Now, the applicant said to me yesterday, "Well, if we can't get the – if the hours of operation of product surface facilities and product transport aren't approved by the secretary, well, they're not going to be – we can't be moving trucks anyway." But I'm just wondering if there might be scenarios where they could still move trucks.

MR YOUNG: Yes. I – I understand, Peter. Yes, I – I will let Sara and Steve answer that in detail, because they've probably got the conditions in front of them, but just from a contextual point of view, just to give the commission some context or comfort, it – it's a very typical condition put in a mining proposal – mining approval, because there are certain times when there may be issues with availability of support or rail infrastructure or roads and so forth that, you know, we expect that 99.5 per cent of the time or whatever that they would adhere to the normal operating hours, but from time-to-time there may be a – a commercial or a practical reason why they would seek endorsement for a limited and temporary extension into those hours outside the normal operating and transport hours.

And, of course, that doesn't guarantee that they will get it. They can ask and give reasons and obviously if we don't accept those reasons, we wouldn't grant that – that flexibility, so it's – it's – it's a common condition on most mining approvals, if it's – if – if – if – if that's necessary in the logistics chain. And I would say, you know, maybe once every couple of years a mining company might write to us and ask for a – you know, a – a few days of – of – of flexibility to meet a certain requirement or if there's a certain problem with the rail line or – or – and so forth. But, Steve, I don't know whether you – if there's any inconsistency or potential ambiguity between those conditions.

MR O'DONOGHUE: Look, I – I – look, I don't think so. Which of the – which of the – have you got the conditions in front of you, Peter?

MR WILLIAMS: Look, I – I saw them in – they were actually in table 4 of – of the – there's pages 12 and 13 of the - - -

MR O'DONOGHUE: Right.

MR WILLIAMS: That's where I picked them up.

MS WILSON: I think Peter's referring to condition - - -

MR WILLIAMS: .....

MS WILSON: - - - A11, which allows transport outside of the standard hours of 8 am to 6 pm are during exceptional circumstances with written approval of the planning secretary .....

MR YOUNG: But I think there must be a table in our report that says something about - - -

MR WILLIAMS: Yes.

MR YOUNG: Yes.

MR WILLIAMS: Yes, yes. It – it's table – table 4. And that condition you just referred to, Sara, is – is on page 12 of the – of the report, and then you've got another condition that relates specifically to transport rates and hours on page 13. And it's very similar. It's just not subject to the proviso of the approval of the secretary. And I – I was just wondering there could be situations where there could be truck movements on and offsite, where you don't need the approval, which you would need otherwise for any variation of operation of hours or – of surface facilities and product transport and that earlier condition that you referred to, Sara, that does require the – the approval of the secretary.

So I – I've got no problems with the condition per se. I can understand – and I – I see the logic of it, Mike. It's just that I was wondering why one condition is subject to approval of the secretary and the other one isn't.

MR YOUNG: Well, the – the – I mean, there is the condition there as well that trucks can enter the site. What – one of the issues that was raised by the community was, you know, trucks parking outside residential areas prior to – prior to 7 am. So there is provision there which doesn't require the – the approval of the secretary that they – that, you know, in preference that they should proceed into the – into the site and go to park – a parking area onsite. And – and, you know, without disrupting the – the residential receivers around the – around the area. So I don't know if that's – is that - - -

MR WILLIAMS: Sara, have you got that in front of you? Have you got your head around - - -

MS WILSON: No, I – I am struggling a little bit to understand are you suggesting there are – there are conflicting conditions? That - - -

MR WILLIAMS: Well - - -

MS WILSON: The only condition I can see that allows any out – out of hours transport is condition A11, but that is with – with approval of the Planning Secretary.

MR WILLIAMS: Yes.

MS WILSON: I'm not sure what other condition were you referring to there?

MR WILLIAMS: Well, okay. I – as I said, I – I've got those conditions from table 4 of the department's report. Now, one of them is – is titled Hours of Operation – Changes of Surface Facilities and Product Transfer – Transport. That's on page 12 of your report. Then there's another condition relating to - - -

MS WILSON: Yes, okay. I see what you're saying. So that one doesn't allow - - -

MR WILLIAMS: Yes.

MS WILSON: - - - that one doesn't indicate that there is a requirement for approval .....

MR WILLIAMS: Yes .....

MS WILSON: Okay. So there is a – there is a – a – a – a – a difference between what we're requiring in the conditions and what we've stated in table 4.

MR WILLIAMS: Right.

MS WILSON: I guess the important thing is that in the conditions we are requiring to have Planning Secretary approval .....

MR WILLIAMS: Now .....

MS WILSON: ..... that mistakenly hasn't been reflected in table 4.

MR WILLIAMS: Okay, okay. So that – that includes transport of trucks on and off the site. Like, taking material from the – from the – from the site after – after 6 pm.

MS WILSON: To the port, that's correct. So – so – so that – that - - -

MR WILLIAMS: Okay.

MS WILSON: - - - activity will require approval of the planning secretary.

MR WILLIAMS: Okay, great. Thanks. Thanks, Sara. That – that – that clarifies that. Thanks, Mike. Thanks, Steve.

PROF CLARKE: So I think what you're saying is the condition overrides what's in table 4, the .....

MS WILSON: Exactly.

MR WILLIAMS: Okay, thank you.

MS WILSON: .....

PROF CLARKE: Can I just ask a follow-up question to that. In the various instances where the secretary's approval is required and given, how long do you approve that to operate for? Is it weeks or days or - - -

MR YOUNG: Look, it – it depends on the circumstances, Alice. As I said, there's – there has been precedent for this once every couple of years across the whole of the State where a mining company where rail line or some other issue has gone down and the coal is stacking up and there's a choice of temporary transport to – you know, around that particular blockage or so forth and the alternative is to put five or six hundred people out of work, you know? And so those sorts of things are – obviously need to be considered and put – put to the secretary. And he would consider things like, well, what's the justification? You know, what – there would usually be some kind of consideration of any additional impacts or concerns.

There would be consideration of what the community views might be and any impacts on the community amenity or road safety. There would be consideration about the – the – the duration and the intensity and frequency of those matters. And typically it – it ranges from, Alice, there has been instances where we've done it for a night, so, for example, recently you may be aware of the Wamberal coastal erosion incident, where there's obviously houses potentially going to be dropping into the sea as a result of a big storm and coastal erosion on the Central Coast a few weeks ago or a couple of months ago. And this was actually a quarry where we provided permission for 24 hours essentially to provide out-of-hours material to the emergency services in order to provide that material to stabilise those houses and the beach.

So there's examples where it happens for 24 hours and there's other examples where it's probably been in the order of, you know, one or two weeks, something like that. I don't know, Steve, in your - - -

MR O'DONOGHUE: Yes.

MR YOUNG: - - - experience as well, it's – it's that kind of – it's usually never more than a few days, but possibly only ever as much as a – a week or two, just to clear a particular stockpile - - -

MR O'DONOGHUE: Yes.

MR YOUNG: - - - or meet a particular commercial imperative.

MR O'DONOGHUE: Yes. It's – it's – it's generally not for too long. I think that like the – the rail, if there's a rail incident where the rail line is down for a period of time, other – other than maintenance, it might be lengthier periods.

PROF CLARKE: Thank you.

MR YOUNG: But in – in this case, we're talking about trucks just from the - - -

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

MR YOUNG: - - - to Port Kembla, so - - -

MR O'DONOGHUE: Just trucks, yes.

MR YOUNG: - - - I'd – I'd be – I'd – I think there was – there was a situation a number of years ago where we required the company to remove a coal stockpile that hadn't been removed and, you know, I think that obviously took a number of days to – to load that on to trucks and to remove that from the site. So it does depend on the circumstances and – and the situation, but it really is a contingency measure that we would, you know, anticipate may well never be triggered.

PROF CLARKE: Thank you. Are there any other issues, Mike, that you and your team would like to bring up or discuss?

MR YOUNG: Sara, Steve, anything?

MR O'DONOGHUE: Not from me, no.

PROF CLARKE: Chris, Sarah, anything from - - -

MS WILSON: No, fine. Thank you.

PROF CLARKE: Thank you. Chris, I saw your hand there.

PROF FELL: Yes, I just wondered if we should mention anything about greenhouse, given that we've got guidance in the final report. From a government viewpoint, what's the situation, Mike?

MR YOUNG: In – in – in particular, Chris, what – what aspect of – I mean, clearly - - -

PROF FELL: I mean, let's ..... 1 and 2 and possibly 3.

MR YOUNG: Well, the requirement under the legislation obviously under the Act itself is obviously to consider environmental impacts and matters raised in submissions, and obviously greenhouse gas emissions and the contribution to climate change is obviously clearly part of that. The court has held that for mining projects and so forth, that that ought to include scope 1, scope 2 and scope 3 emissions. And the – the mining SEPP clearly requires consideration of greenhouse gases, including downstream emissions, ie, scope 3 emissions. So in our report, I guess, we've sought to quantify what those emissions would be, put them in context in terms of proportional emissions and we've required the company to obviously look at ways of reducing and minimising those emissions through its operations.

Now, clearly the vast bulk of those emissions is associated with scope 3 emissions, where those – that coal is used at the – at its destination. In this case, my understanding is that the coal is destined for the export market and those emissions would occur overseas and internationally, which clearly does contribute to global climate change and the – the government recognises that.

What, though, is clear from the government's position is that – that the abatement and addressing those greenhouse gas emissions in accordance with the international agreements and so forth is a matter for those destination countries to – to manage and that we need to obviously consider those things, but that, you know, we – we – we ought not to be seeking to limit or condition those matters through the assessment of individual development applications in New South Wales and that matters of trade and – and compliance with international agreements are – are a matter for the country as a whole, for the Commonwealth Government and obviously the New South Wales Government does support those agreements and those implementing reductions in greenhouse gas emissions over time.

But clearly from the Future of Coal statement that was made by the deputy premier and issued by the New South Wales Government a couple of months ago, it's recognised that coal, at least, has a limited future in New South Wales for a whole range of economic and energy security and reliability needs and that whilst we do have a – a broader plan to reduce emissions stipulated in the climate change policy framework and an aspirational goal of net zero emissions by 2050 and a more recent ..... document looking at particular actions between now and, I think, 2035 – I think it is – that it's quite clear from that document that that doesn't meant that individual projects ought to be refused on the basis of greenhouse gas emissions; not that they – that's not a relevant consideration.

PROF FELL: Okay. That's very helpful.

PROF CLARKE: Thank you, Mike. You dropped out there near the end and – and you're frozen, so I – I think – Brad, are you there?

MR JAMES: Yes, Alice. Perhaps - - -

PROF CLARKE: Well, give - - -

MR JAMES: Yes, give it a moment, perhaps.

PROF CLARKE: Yes. We'll give him a moment. He's back. Mike, you dropped just at the - - -

MR YOUNG: Just – can you hear me now?

MR JAMES: Yes.

PROF CLARKE: Yes, we can.

MR YOUNG: I probably dropped out at the – at the punchline.

PROF CLARKE: Please give us the punchline.

MR YOUNG: I'm not sure where I dropped out. Look, I mean, the bottom line is that the government has a clear policy to reduce greenhouse gas emissions over time, but that that's going to happen gradually as we transition to a renewable energy economy and that coal for the – the short to medium term has a key place both in terms of economic benefits to the state, but also in terms of energy security and reliability as well going forward. So it ought not to be – it can – it is obviously a relevant matter for consideration for the consent authority, but it's not something for which the consent authority is obliged to refused coal mining projects on that basis alone, if that makes sense.

PROF CLARKE: Of course.

PROF FELL: Thank you. That's very helpful.

PROF CLARKE: Thanks. Okay. I think we've cleared all of our questions from our side and I didn't think that you had any issues left to raise there. If that's all the case, nods all round there, I think, Brad, we can drawn the meeting to a close. Thank you.

MR JAMES: Great .....

MR O'DONOGHUE: Thanks, Alice.

PROF CLARKE: .....

MR WILLIAMS: Thanks, Mike.

MR WILLIAMS: Great ..... thanks, Mike, Sara and Steve.

MR O'DONOGHUE: Thank you, Sara.

PROF CLARKE: Thank you, Sara, and - - -

MS WILSON: Thank you.

MATTER ADJOURNED at 2.44 pm INDEFINITELY