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IN THE LAND AND ENVIRONMENT COURT
OF NEW SOUTH WALES5 PAIN J
COMMISSIONER O'NEILL

SEVENTH DAY: THURSDAY 12 SEPTEMBER 2013

10 **2012/11154 - HUNTER ENVIRONMENT LOBBY INC v MINISTER FOR
PLANNING & INFRASTRUCTURE & ANOR**

15 <RODERICK EDWARD CAMPBELL AND JEROME GREGORY FAHRER,
CONTINUING(10.08AM)HER HONOUR: Thanks. Good morning to everybody. I assume
we're continuing with the economic evidence from yesterday?20 WHITE: Yes. Just two points to raise, your Honour, if I may, both relating
to economics. Your Honour may recall yesterday that the parties were
taken to page 13 of Mr Campbell's affidavit dated 9 August which had
a chart of semi soft coking coal price estimates. I believe the court only
had a black and white copy. I've got colour copies if that's helpful.

25 HER HONOUR: Yes, thank you.

30 WHITE: The second issue is, your Honour - this is probably good news -
is that Dr Denniss has to leave today at 2 o'clock, he has another appointment,
so we'll impose a constraint.

HER HONOUR: A rigour on us all.

35 WHITE: Yes. So I just wanted that to be known at the outset, your Honour.

GALASSO: Well, I'll just cross-examine Mr Campbell until 2 o'clock and see
where we go.40 HER HONOUR: I'm sure you won't, Mr Galasso. Just thinking about this
overnight, I'm not quite sure why we are focussing on the cost benefit analysis.
Can somebody tell me? Who's relying on this? I know Dr Fahrer is here,
but are you relying on it or the CGE modelling?45 GALASSO: Both. There's no law that says one is to be determined over the
other.

HER HONOUR: No, it's not.

50 GALASSO: We rely on both.

HER HONOUR: Do I need to ask more about scope then, because I do find it very curious that the scope of Dr Fahrer's work is global, so are we going to get into that in questions now?

5 GALASSO: Can I say, your Honour, I will be putting to Mr Campbell - I'm happy to telegraph it, it's no cross-examination or trial by ambush, the difficulty with scope is the artificiality of it.

HER HONOUR: Yes.

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GALASSO: I'll be putting a proposition to Mr Campbell, and I'm happy for him to get a heads up - it's as silly as this, and I really do mean silly - whatever one construes the Director-General's requirements as or as being, that is, whether the scope should be a net benefit to New South Wales or the local government area or whatever, the nonsense--

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HER HONOUR: That all makes sense as long as it's not net benefit global, or are you going to be putting that?

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GALASSO: No.

HER HONOUR: Anyway, I shouldn't interrupt you, sorry. Yes.

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GALASSO: I'm going to be putting two things. One is the Director-General's requirements are Director-General's requirements, and this is not an appeal about whether they were satisfied or not. But leaving that aside, let's assume that they are the constraint that predicates how the court determines the question, in terms they said, "Do a cost benefit analysis of the project, including net benefit to New South Wales."

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HER HONOUR: Sorry, "including"?

GALASSO: Net benefit to New South Wales.

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HER HONOUR: Okay. Not surprisingly they said that, yes.

GALASSO: We're in New South Wales, it's a New South Wales government, we can get New South Wales--

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HER HONOUR: New South Wales government gets the royalties, yes.

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GALASSO: All the rest of it. But the nonsense in that sort of constraint is that the answer depends upon where the owner of the mine lives, and it's as nonsensical as to say that if the owner of the mine lived in Albury or the owner of the mine lived in Wodonga, you would get significantly skewed results.

HER HONOUR: Is that the problem with the model then?

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GALASSO: No. It's the problem with this notion of constraining it to

New South Wales and determining that the benefit to New South Wales somehow determines it in that sort of sense.

5 HER HONOUR: I don't think I'm quite following you, Mr Galasso.

10 GALASSO: Your Honour, if, for example, I created a straw man that was the owner of this mine, was my junior, and he was a New South Wales resident, the cost benefit analysis would get a significantly different inflated number. Once your Honour determined the project or once the Minister granted a consent, if my junior sold the project to someone offshore, they would've had the benefit of a cost benefit analysis that includes the derived profits to New South Wales because he's a resident of New South Wales.

15 That's the artificiality of the whole cost benefit analysis. As something which gets elevated in appeals such as this, we say both respectfully and disrespectfully, it gets elevated in an appeal such as this as being some sort of key determinant of whether a project should be approved or not by this court.

20 Having said that, can I say this appeal and most of these sorts of appeals are materially different to the appeal in which the cost benefit analysis or the economic analysis came to the fore in this State. By that I mean the Warkworth decision, and we touched upon this in our opening submissions and we'll repeat them in our closing submissions.

25 In Warkworth, the significant difference between that case and this and other appeals such as those that have come before this court is that in Warkworth, the starting position was that, as we read the judgment, the miner was going in and mining an area which he had previously set aside on the basis of environmental protection. So the starting position was that there was this detriment in a circumstance where there was a pre-existing positive circumstance.

30 Now, how we go from cases like Warkworth to this case, in which somehow, in an environmental sense, all other things being equal, we're focussing upon whether there's an economic benefit, and then what the quantum is in order to determine whether a project should go ahead or not, is, in our respectful submission, not something that makes any environmental sense.

35 But more importantly, does the environment stop at the border of New South Wales? We could throw all sorts of things into the pot about whether it should stop at New South Wales or not. I'll pick one, probably against my interests, if I say; let's pick greenhouse gas, scope 1 emissions. Your Honour, in the Newlands case--

40 45 HER HONOUR: Yes, I know all about scope 1, 2 and 3.

50 GALASSO: Well, the scope 1 emissions, for example, which are undoubtedly emissions from the site and, therefore, in New South Wales, is the impact limited to New South Wales or is it a global thing? Now, the minute you say

5 that the impact crosses borders, you start confusing the notion of a cost benefit analysis in limitation of the border. And how do you then split that component of the cost benefit analysis to a border-related issue? Now, having said that, as I said, it's not surprising that a government agency of New South Wales informing a Minister of New South Wales, all of whom are respondent to the people of New South Wales, not to the people of Victoria or Queensland, are going to purport to have a look at what it does to people of New South Wales, but that's, as I've said, the artificiality of the whole process.

10 It just depends on where you go. So if, for example, your Honour was to determine that, in this case, everything else was acceptable but that the cost benefit analysis doesn't derive sufficient positive benefits to the people of New South Wales, well, we would anticipate that, in the future, all projects - not just a mine, but all projects, because these are Director General's requirements that go to Part 3A projects to the extent that they may still be
15 alive - will be ones in which there will an ownership in New South Wales and we will get a significantly different result.

20 HER HONOUR: I hear what you say. I don't think I completely understand where this is going. Anyway, so we're going to explore scope more, are we? I mean, you're saying it's artificial. Yes, the whole thing is artificial.

25 WHITE: Firstly, your Honour, I don't agree with the characterisation of the Warkworth decision as put by my learned friend. If I need to get--

HER HONOUR: That's fine; you can say all that in submissions.

WHITE: I will do.

30 HER HONOUR: Okay, I'm just trying to focus on why I am hearing about CBA now.

WHITE: Well, I don't know either, your Honour.

35 HER HONOUR: Well, no, apparently--

WHITE: But perhaps I can--

40 HER HONOUR: --Mr Galasso is saying they are going to rely on both.

WHITE: Mr Galasso seems to be rolling back from it.

GALASSO: No, not at all. Not at all.

45 HER HONOUR: Well, no, it is in Dr Fahrer's report.

WHITE: But can I--

50 GALASSO: Can I say, your Honour, I take objection to that. All that's been asked is an assessment of the economic benefits and one of the tools that's

been used is the cost benefit analysis and it's been done. Dr Fahrer's updated it. Mr Campbell has criticised it. So it's there.

5 HER HONOUR: Yes. No, I understand. I was just thinking--

GALASSO: Good or bad, right or wrong, it's there.

10 HER HONOUR: --overnight I just wasn't sure why we were focusing on it if it's really the main game is CGE modelling--

WHITE: Yes, absolutely.

HER HONOUR: --but apparently not.

15 WHITE: Well, no, that's my case. But one of the reasons we unfortunately have to focus on or are taken to cost benefit analysis, which we say is a complete waste of time, is because the Minister, in the Director General's report, attaches huge significance to the conclusions reached in the Director General's report. So we say this whole fallacy about using cost benefit
20 analysis arises from the way the Minister approaches these Part 3A projects, particularly mining projects, in the Director General's report. That's why we, unfortunately, have to deal with the cost benefit analysis.

25 As far as I'm concerned we would sit down now and not talk any more about cost benefit analysis and we'll get on to the real issue in this case, which is Dr Denniss's work. But, be that as it may, your Honour, we have a cost benefit analysis which the Minister, in particular, attaches significant weight to.

30 HER HONOUR: Do you, Mr Free?

FREE: Your Honour, the Director General's requirements say that, "A
35 proponent should undertake a detailed assessment of the costs and benefits of the project as a whole and whether it would result in a net benefit for the New South Wales community." The last part goes to the debate about the scope theory you've just been hearing from my learned friend, Mr Galasso, about. It's a matter for a proponent and those undertaking the assessment in accordance with those requirements, now supplemented in this process through the evidence before the Court, as to how they assess the costs and
40 benefits of the project as whole and seek to demonstrate a net benefit for New South Wales.

45 The debate about different models, be it a cost benefit analysis - or different methods of assessment, I should say, be it a cost benefit analysis, an input/output analysis which we talked about yesterday, or CGE modelling are different methods of attempting to identify costs and benefits. They do it in different ways, and I think you heard that in the opening yesterday and you will hear that's why we've got two sessions today. Cost benefit analysis is one mode of seeking to identify and assess costs and benefits.

50

HER HONOUR: Yes.

FREE: CGE modelling is a different one.

5 GALASSO: For the project as a whole.

HER HONOUR: Yes.

10 FREE: Evidence about both of those is before the Court and we will submit will assist in identifying what are the costs and benefits of the project as a whole and whether it would result in a net benefit for the New South Wales community. So they are two modes of analysis that are still being relied upon by the proponent and we say will assist the Court in assessing those matters.

15 HER HONOUR: So does the Minister have a view about scope if you're doing a CBA?

20 FREE: Well, scope is essentially reflected in - the scope focus is reflected in the way it's expressed in the Director General's requirements. And your Honour was taken yesterday also to a guideline document. It's in tab--

HER HONOUR: Is that the Treasury guideline?

25 FREE: Sorry, it's actually a Planning document--

HER HONOUR: Okay.

30 FREE: --and I think it might have been referred to yesterday as a Treasury guideline. There is also a Treasury guideline but--

HER HONOUR: Yes.

35 FREE: --the one I have in mind is in volume 5 tab 122. Does your Honour have that tab?

HER HONOUR: Yes, I do. Yes, I do.

FREE: If your Honour goes to page 4779--

40 HER HONOUR: Yes.

FREE: --to the heading "Distribution Effects"--

45 HER HONOUR: Yes.

50 FREE: --and it explains, "While the main objective is to estimate the impacts on New South Wales in the first instance, it will generally be most practical to assess all of the major costs and benefits to whoever they accrue." It then goes on to talk about by reference to economic theory where one would normally expect costs and benefits to fall. But the first paragraph I wanted

to take you to, to reflect what is the Minister's position, and that's consistent with the Director General's environmental assessment requirements.

5 The main objective is to estimate the impacts on New South Wales in getting to that, and that goes to the point in the Director General's requirements about net benefit to New South Wales. In assessing that matter, as recognised here, it is generally most practical to assess all major costs and benefits to whoever they accrue and then seek to identify which of those costs and benefits are going to fall into New South Wales.

10

HER HONOUR: So what do you say about scope--

FREE: So the ultimate--

15

HER HONOUR: --in Dr Fahrer's approach being global, apparently?

FREE: Yes, well, that may be compatible with the way one goes about it as reflected in this, that it can be most practical to assess all major costs and benefits, but the main objective should be to estimate the impacts on New South Wales. So if that's a step along the way, ideally it should allow one to identify which among those costs and benefit will accrue to New South Wales.

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HER HONOUR: And does his work do that?

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FREE: On my reading of his work in his report is, no, that it's globally focused. I understand--

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HER HONOUR: All right. So how can that be useful to me then--

FREE: Well, part of--

HER HONOUR: --or you, for that matter, in your submissions?

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FREE: Well, part of the exercise in the joint report, and particularly Mr Campbell has been to see to extract the New South Wales-specific benefits.

40

HER HONOUR: Right. So can you take me to the joint report and say where you say they are then?

GALASSO: You were told it yesterday, your Honour. Mr Campbell told you yesterday.

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FREE: It's primarily, your Honour, the proposition about royalties, payroll tax and--

HER HONOUR: Okay. So essentially that's an agreed position, so to speak.

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GALASSO: I think it's paragraph 11 in the first bit.

FREE: Yes, if one looks at that, there's some movement in the figures according to the other aspects of the debate between these gentlemen about--

5 HER HONOUR: Coal prices and all that, yes.

FREE: --coal prices. There's also an issue that Mr Campbell refers to in his evidence about what is the correct royalty rate and there's a suggestion that Dr Fahrer had underestimated the royalty rate. So those numbers go up and
10 down a little according to those variables, but that is, as your Honour will see from paragraph 11 of the joint report, what Mr Campbell has stressed as being the immediately quantifiable benefits of the project to New South Wales.

HER HONOUR: Okay, and so you will be essentially adopting that, will you, in relation to CBA anyway?
15

FREE: As a relevant measure, yes.

HER HONOUR: Okay. So that's paragraph 11 in the joint report.
20

FREE: Yes, I can say the exercise - the numbers depend a bit on, as I said, the debate about--

HER HONOUR: All those variables, yes, but that's the ballpark.
25

FREE: The approach in terms of immediately quantifiable benefits. There is also reference elsewhere in Mr Campbell's evidence to employment benefits I think he describes as minimal, but there are other employment benefits. But, in terms of what they have sought to quantify as immediately quantifiable
30 benefits of the project to New South Wales on the cost benefit analysis, that's the primary set of figures.

HER HONOUR: Okay. You'll be using that in your submissions?

FREE: Yes, your Honour.
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HER HONOUR: Okay. So for employment what will you be relying on?

FREE: I don't think it is now quantified anyway. It may be that on employment the analysis your Honour gets will be more helpful in the CGE modelling which has sought to identify the direct employment benefits and the flow-on
40 employment benefits. Perhaps that might make more sense if we address that when we get to that point in the evidence.

HER HONOUR: Yes, thank you. All right. Well, that clarifies some matters for me. So we're up to the joint report and going through topic by topic to the extent that you need to. I'm not sure if we need to or not, frankly. A lot of it seems to be agreed in terms of figures.
45

WHITE: Yes, quite.
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GALASSO: The only thing, your Honour, while we're on that table in--

WHITE: Excuse me.

5

GALASSO: I'm sorry? Sorry, are you all right?

HER HONOUR: I think Mr White is saying he stood up first.

10

GALASSO: Are you right, Mr White? Well, before Mr White wants to go through the joint report there was one--

HER HONOUR: He got up first, Mr Galasso.

15

GALASSO: Sorry, I didn't realise that was a rule.

HER HONOUR: It doesn't matter who speaks first. Yes, Mr White.

20

WHITE: The scope now seems to be agreed.

HER HONOUR: Do you mean at the bar table, not necessarily by the experts?

WHITE: Well, how does--

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HER HONOUR: Just to clarify, I mean, it sounds like - well, I'm not sure about Mr Galasso. I couldn't tell from that--

GALASSO: No, I don't agree at all.

30

HER HONOUR: Anyway, I think it's useful to know what the Minister is going to say--

WHITE: Yes, well, that was useful.

35

HER HONOUR: --because that's highly relevant from my point of view anyway. Is that all you wanted to say?

WHITE: Okay, that's all I - I'll allow Mr Galasso to say--

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HER HONOUR: Right, sorry, Mr Galasso.

WHITE: That's all I just wanted to--

45

HER HONOUR: Did you want to point out something?

GALASSO: Well, the thing I was going to say, your Honour, was, yes, I just wanted to - we were looking at paragraph 11 or the table in paragraph 11.

HER HONOUR: Yes.

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5 GALASSO: My note - and I suppose this is a tangential question of Mr Campbell, was that yesterday Mr Campbell had said, according to my note, that if the prices for coal quoted by the Commonwealth Bank of Australia - I won't use the acronym CBA because it means a different thing in this case - then my note, Mr Campbell, was you said the net present value of the project at 7% would be about \$130 million.

WITNESS CAMPBELL: At a global level.

10 GALASSO: At a global level?

WITNESS CAMPBELL: Yes.

15 GALASSO: Right. Okay. So that's on that. Now, we don't accept the question of scope and I just wanted to ask a couple of questions about scope and for Mr Campbell to clarify what I've said to your Honour earlier.

HER HONOUR: You don't accept his view of scope?

20 GALASSO: Well, I don't accept that--

HER HONOUR: That's fine, yes, please ask those questions.

25 GALASSO: Yes, okay. Mr Campbell, yesterday you took the Court to the Director General's requirements and, in fact, you've done so in both of your affidavits relied, as I read it, heavily on that part of the Director General's requirements that deals with the topic of social and economic, correct?

30 WITNESS CAMPBELL: That's correct.

GALASSO: And the particular passage in the Director General's requirement upon which you rely is - I take it you've got a copy of the Director General's requirements in front of you?

35 WITNESS CAMPBELL: I do now thanks to Ms Novak.

GALASSO: It's page 5 at the top of the page in the first box, and it's the last dash point on that page, correct?

40 WITNESS CAMPBELL: Yes, that's right.

GALASSO: So it's talking about dealing with the key issue of social and economic including, in this bullet point, the words that we see in that slash.

45 WITNESS CAMPBELL: The words that we see there are the words that we see there.

50 GALASSO: If someone was to ask you to do a detailed assessment of the costs and benefits of a project as a whole, then you agree do you not that that would be a cost-benefit analysis irrespective of scope, correct?

WITNESS CAMPBELL: A major step in cost-benefit analysis according to every textbook is the setting of scope and it's a conscious decision to either set the scope as global or state level or national.

5

GALASSO: But if someone was to ask you what the costs and benefits of a project as a whole were, you would do the cost-benefit analysis of the project as a whole wouldn't you?

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WITNESS CAMPBELL: Well I'd probably ask them did they mean at a global level.

GALASSO: But ordinarily you'd take it to mean at a global level irrespective of where the profits ended up?

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WITNESS CAMPBELL: I would always ask my client your Honour as to what scope they were wanting me to take.

20

GALASSO: And if in addition to that someone asked the question of doing a detailed assessment of whether the project would result in a net benefit for the New South Wales community, you wouldn't be doing a cost-benefit analysis for that question would you?

WITNESS CAMPBELL: Yes I would.

25

GALASSO: Are they not two different cost-benefit analyses if you would do a cost-benefit analysis for the net benefit for the New South Wales community?

WITNESS CAMPBELL: I'm not sure I entirely follow.

30

GALASSO: Well to find out what the costs and benefits of a project as a whole are is one question and to find out whether it would result in a net benefit for the New South Wales community, can I suggest to you Mr Campbell is a different question is it?

35

WITNESS CAMPBELL: I mean you could read into the first part of that sentence the potential to take a global scope and as we've just heard in the guidelines it says it may initially be more practical to assess - I'm not quoting verbatim here - but to assess the costs and benefits at a global level, or to whomever they accrue and then adjust to reflect those that accrued in New South Wales.

40

GALASSO: Yes and in the same document it talks about doing that via a cost-benefit analysis does it not?

45

WITNESS CAMPBELL: I think the whole process is generally referred to as a cost-benefit analysis.

50

GALASSO: Right, so you don't say that reading the guidelines the undertaking of a cost-benefit analysis is an inappropriate approach to

determining the economic effect of a project do you?

WITNESS CAMPBELL: Most certainly not.

5 GALASSO: So to the extent that someone would say that a cost-benefit analysis is irrelevant to what a proponent might do or what say a decision-maker like the Minister or the Court may do, you would disagree with that, correct?

10 WITNESS CAMPBELL: Sorry, I - would I disagree that cost-benefit analysis is irrelevant?

GALASSO: Yes.

15 WITNESS CAMPBELL: Sorry, I've just lost how many negatives there are in the sentence. I think cost-benefit analysis is a useful tool for project assessment.

20 GALASSO: Right, you don't say it's irrelevant to this court's determination of the economic effects of the project?

WITNESS CAMPBELL: No I do not.

25 GALASSO: When it comes to scope it is correct is it not that in terms of the cost-benefit analysis and/or whether there is a net benefit for the New South Wales community, a significant element of the result is determined by where the person who derives the profit is domiciled, correct?

WITNESS CAMPBELL: Yes that's correct.

30 GALASSO: So if the cost-benefit analysis was in terms of scope to be limited to a net benefit for the Australian community, then presumably if the ultimate owner of the project, and hence to whom the profits ultimately go, was an overseas person or corporation, that would give a significantly different result than if the owner of the, in this case the mine, was an Australian person or corporation, correct?

35 WITNESS CAMPBELL: Yes that's correct.

40 GALASSO: And if the scope of the cost-benefit analysis was to be limited to the New South Wales community, if the owner of any given coal mine project happened to be a domicile in Queensland for example, let's call him Mr Clive, that would derive a significantly different result than if the owner of the coal project was domiciled in New South Wales say near Newcastle and let's call him Mr Nathan, wouldn't it?

45 WITNESS CAMPBELL: It would and as an analyst you'd recommend to your client that in that case the outcome of the analysis could be heavily contingent on scope and you might suggest that the setting of the scope be looked to very carefully.

50

5 GALASSO: Yes but if Mr Nathan moved to the village of Camberwell you could never bring the scope down narrow enough to exclude him as being a domicile of Camberwell in order to artificially inflate the benefit to the local community could you?

10 WITNESS CAMPBELL: But it wouldn't be artificially inflating. If all the benefits of the mine flowed to a resident of Camberwell then they would be the benefits to the residents of Camberwell.

GALASSO: If all of the profits flowed to Mr Nathan who lived in Camberwell as a single person, those benefits get reflected in the cost-benefit analysis as a positive benefit, correct?

15 WITNESS CAMPBELL: Yes.

GALASSO: But those benefits don't flow to the good people of Camberwell do they, they flow to Mr Nathan's bank account?

20 WITNESS CAMPBELL: But under our example isn't Mr Nathan one of the good people of Camberwell?

25 GALASSO: So do you say that that's okay notwithstanding that he may derive millions of dollars in profits when other residents get nothing, the model though would show a significantly positive result to the local area of Camberwell would it not?

30 WITNESS CAMPBELL: Yes a weakness of cost-benefit analysis your Honour is that it often has little to say about equity and what's fair, so maybe it wouldn't be fair for Mr Nathan to make millions of dollars while other residents missed out, but in terms of under the strict interpretation of - well, under standard cost-benefit analysis practises, yes that's right. The benefits to Mr Nathan would be included in the benefits to Camberwell if he was a resident of Camberwell.

35 GALASSO: And if the project was owned by a publicly listed corporation, say on the Australian Stock Exchange, the result in the cost-benefit analysis would fluctuate as a function of the ownership of shares of the corporation, would it not?

40 WITNESS CAMPBELL: That's right and that's why in the Warkworth case one of the initial points of discussion in the economics evidence was identifying the degree of foreign ownership of the proponents of that project.

45 GALASSO: But if there was a - between this morning at 10 o'clock and say 11 o'clock, if there was a raid on the stock market of - my client is a public listed company is it not?

50 WITNESS CAMPBELL: It doesn't have--

GALASSO: The owner of the mine?

WITNESS CAMPBELL: It doesn't have very much in free float but it is listed yes.

5

GALASSO: Yes, but if there was a raid on the stock market by say some bankers in Macquarie Bank, and the ownership shifted significantly to them and they were all domiciled in the State of New South Wales, then the sort of numbers that we're talking about in the cost-benefit analysis increased significantly in the benefit column do they not?

10

WITNESS CAMPBELL: Yes as the project hasn't begun yet, if Macquarie and their Sydney based owners launched this raid today and the project begins tomorrow, we'd have to do some adjustment to the cost-benefit analysis, yes.

15

GALASSO: So may we take it Mr Campbell that if someone wanted to convince this court or a decision-maker that the cost-benefit analysis was significantly high, you would accept would you not that you could manufacture that result if your scope was limited to New South Wales by having the owner of the project being New South Wales domiciled with an option arrangement that is triggered after approval?

20

WITNESS CAMPBELL: You're going outside of my area of expertise in terms of triggering ownership arrangements and things like that.

25

GALASSO: Or just go and buy a shelf company for a corporation that's listed in New South Wales and have two directors domiciled in New South Wales and your cost-benefit analysis--

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HER HONOUR: Isn't this just a submission Mr Galasso, isn't that what you're going to be putting in submissions?

GALASSO: Yes, I probably don't need to take it any further, thank you.

35

HER HONOUR: I'm just mindful of the time, I mean frankly I think we need to move to the CGE as fast as possible.

GALASSO: All right, well just one last thing then your Honour. Yes, no further questions.

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HER HONOUR: Any other questions for these witnesses?

WHITE: Well I would have lots of questions your Honour but I'm mindful of your Honour's comments, I understand.

45

HER HONOUR: I'm just mindful of you telling me Dr Denniss has to leave.

WHITE: Quite, no that's--

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HER HONOUR: I mean these witnesses could come back, I mean they mightn't want to but I mean we could stand them down and deal with Dr Denniss and they can come back.

5 WHITE: Well based on what the Minister says and the discussion and what's contained in the joint report, as long as your Honour understands that we don't accept that a global case scope is required. I'm content to leave it on the basis of what's set out in the joint report.

10 WITNESS FAHRER: Your Honour may I add to some remarks I made yesterday, I don't know if I'm out of line or--

HER HONOUR: Yes certainly, sorry?

15 WITNESS FAHRER: If that's appropriate?

HER HONOUR: Yes fine.

20 WITNESS FAHRER: Thank you your Honour. They relate to coal prices and exchange rates following remarks that Mr Campbell made yesterday, and you will recall your Honour that I said that it's very likely that coal prices were going to be substantially lower as Mr Campbell claims or repeats the claims of the Commonwealth Bank analyst that exchange rates will be lower and Mr Campbell said yes but he took into account the exchange rates that the
25 Commonwealth Bank actually did use. Overnight I referred to Mr Campbell's report, and this is at page 13 of his report dated 9 August, in which he - there's a table there at the bottom of page 13 in which we have exchange rates, Commonwealth Bank exchange rates, and they are almost, or very little below what the exchange rate is now. So in fact they're not consistent
30 with a significantly lower exchange rate. I think--

HER HONOUR: Sorry, not consistent with?

35 WITNESS FAHRER: What would actually occur with the exchange rate if coal prices were lower. I suspect this is because one person at the Commonwealth Bank puts together the coal price forecast and a different person at the Commonwealth Bank puts together the exchange rate forecast and they don't talk to each other, but that's speculative on my part.

40 WITNESS CAMPBELL: Can I say something on that point?

HER HONOUR: Hang on, I'm not sure Dr Fahrer is finished.

WITNESS FAHRER: Okay.

45

WITNESS CAMPBELL: Are you changing topics or--

WITNESS FAHRER: I'm talking about--

50 HER HONOUR: Can he just continue?

WITNESS CAMPBELL: Yes.

5 WITNESS FAHRER: Yes. Secondly on the subject of prospects for the coal
industry and coal prices, there was an item - the Commonwealth Bank report,
it was put together according to the references in Mr Campbell's affidavit in
May and this was at the height of pessimism for the prospects of the Chinese
economy. Now more recently as in the last couple of days, the sentiment
10 seems to have turned around and in fact there was an article in today's press
which I am happy to read to you your Honour if that's appropriate?

HER HONOUR: No but you can direct me to it.

15 WITNESS FAHRER: Okay, it's an article by Malcolm Maiden, I found it in
The Age online. I believe it's also in the Sydney Morning Herald online, in
which Mr Maiden says in effect "China growth story is much more optimistic
than people thought until very recently. If that happens commodity prices
will be higher". How your Honour I'm not suggesting that you should take as
20 gospel the latest article in the - what I am saying though is that what analysts
and commentators say about the future is ephemeral. It changes quickly.
They tend to repeat the last story that was told to them, in my observation,
and not that much weight should be put on it, put on what they have to say,
and much more weight should be put on the analysis of a company that
25 actually has its money on the line in terms of getting coal price forecasts
correct.

WITNESS CAMPBELL: Can I just respond to those two points your Honour.
If you'd like to turn to Dr Fahrler's affidavit, page 36--

30 HER HONOUR: Sorry, are you seeking to disagree with him?

WITNESS CAMPBELL: I'm just pointing out that the exchange rate used in
his own modelling is extremely similar to that of the Commonwealth Bank that
I've also incorporated and--

35

HER HONOUR: So are you in furious agreement then?

WITNESS CAMPBELL: Well--

40 WITNESS FAHRER: Can I respond to that, your Honour?

HER HONOUR: Sure.

45 WITNESS FAHRER: I haven't got lower coal prices. Mr, Mr Campbell does.

WITNESS CAMPBELL: But in regards to Dr Fahrler talking yesterday about
the close relationship between coal--

50 HER HONOUR: Prices and exchange rate, yes.

WITNESS CAMPBELL: Yeah, you'll notice that Dr Fahrer's exchange rate declines while coal prices rise in direct contradiction of the pattern that he was suggesting yesterday.

5 WITNESS FAHRER: They don't. Not to the - well, not to that extent, but anyway.

HER HONOUR: Right, just how much of a role is this issue going to play in anybody's submissions? Do we need to unpack this more or--

10 WHITE: Coal price?

HER HONOUR: --do I move on? Well, exchange rates, coal prices. Nobody's asked questions about it but--

15 WHITE: Well, we haven't got onto that topic yet, your Honour.

HER HONOUR: So we need to?

20 WHITE: Yes.

HER HONOUR: So do we really need to put in Dr Denniss and excuse Mr Campbell for the moment and ask him to come back later? Is that the safer course? I mean, when you say you have other questions.

25 WITNESS CAMPBELL: Can we agree that it's not a particularly big issue?

HER HONOUR: I don't quite know where all this economic stuff is going. Mr Galasso is sticking--

30 WITNESS FAHRER: Well, I think it is if--

HER HONOUR: --to his guns as far as--

35 WITNESS FAHRER: --if you're going to have lower coal prices.

HER HONOUR: --I can see. The minister's said what he's said in terms of Mr Free's approach. I'm not quite sure where that leaves the applicant. Mr Galasso wants to rely on the global approach and--

40 WHITE: Well, I'll be submitting to you that you shouldn't.

HER HONOUR: Yes, I'm not surprised you would be saying that. I just don't know where all this leads at the moment. I suppose if you want to ask them a question it's fine.

45 WHITE: Where it leads - I mean, I don't want to take time up now with the witnesses but where it does lead, your Honour, is that we, of course, will be submitting that the economic benefits are not as great as are contended for by the proponent and by the minister. I mean, that's really where we get to.

50

5 HER HONOUR: Except there's going to be some - I mean, you may well put that to me, but there's going to be I think some agreement on the figures, isn't there? Well, there is in the CBA now in terms of the benefits to New South Wales, which frankly is my focus as well. If the minister's adopting what Mr Campbell's essentially said then there might be ups and downs, but that's the ballpark in terms of royalties, taxes, and the like. That leaves employment, which apparently is CGE modelling.

10 WHITE: There are just two further issues, your Honour, on that, is that if that figure is agreed that's great, but that's subject to what's said about--

15 HER HONOUR: It mightn't be agreed by Mr Galasso but that's what the minister's apparently going to say.

20 WHITE: No, I appreciate that, but also that figure is subject to the difference between the parties as to what might happen to the coal price. We heard from Mr Campbell that doesn't make a huge amount of difference actually to the bottom line. What I'm going to be submitting to you, your Honour, is that you wouldn't take the company's forecasted coal price, for reasons that Mr Campbell gave. You wouldn't necessarily take the CBA rate either, because we are speculating, ultimately, as to where the exchange rate and the price of coal may go, so I'm going to be submitting a range would be appropriate, but then what also has to come off the CBA in our submission is the cost of externalities, so that would come off the agreed cost of 87 million. I see your Honour looking somewhat sceptical about the submission. I clearly have to make that good.

30 HER HONOUR: No, I'm expecting a submission about that. We haven't got onto externalities.

WHITE: No, quite, but that's--

35 HER HONOUR: I don't know if cost benefit analysis, maybe you don't do externalities in the cost benefit analysis.

WHITE: As we saw yesterday in the guidelines, you do.

40 HER HONOUR: But I'm not sure if it's in, well, what I'm calling cost benefit analysis. I mean, that's not touched on by these experts so I assume--

WHITE: Well, it is by Mr Campbell.

45 HER HONOUR: We might to unpack then, then.

WHITE: One of Mr Campbell's central criticisms of the work undertaken by Dr Fahrer is that externalities are not taken into account.

50 HER HONOUR: All right, but does that mean on the cost benefit analysis - and I haven't got figures dealing with externalities, with

all the issues about how you cost externalities.

5 WHITE: Exactly, so all you've got from the proponent's side of the ledger is the benefits. You don't have the costs. So I would want to spend a little bit of time on that, so--

10 HER HONOUR: So is it better if I excuse Mr Campbell for the moment, as if he can come back later, and Dr Denniss comes in and we deal with the CG modelling?

WHITE: If that's convenient to the Court it would certainly help us a lot.

HER HONOUR: Okay, well, I'm happy to do that.

15 WHITE: Thank you.

20 HER HONOUR: So we're now moving to CGE modelling and Dr Denniss's report and another part of Dr Fahrer's report. Mr Campbell, can I ask you to step down and--

WITNESS CAMPBELL: Certainly.

HER HONOUR: --come back. It will be after lunch, I'm sure.

25 WITNESS CAMPBELL: Certainly.

WITNESS CAMPBELL WITHDREW

<RICHARD REGINALD DENNISS, AFFIRMED(10.50AM)

HER HONOUR: Thank you, take a seat. Court Officer, can you make sure he has a fresh glass?

5

WHITE: I'm just getting my documents.

HER HONOUR: His details, thank you.

10 WHITE: Dr Denniss, could you tell the Court, please, your full name, your position, and your professional address?

15 WITNESS DENNISS: Dr Richard Reginald Denniss, executive director of The Australia Institute, and we moved last week and I don't know what our address is but it's in the Canberra CBD.

WHITE: You affirmed an affidavit in these proceedings which was on 9 August, I believe.

20 WITNESS DENNISS: Correct.

WHITE: To the best of your abilities are the contents of that affidavit true and correct?

25 WITNESS DENNISS: Yes.

WHITE: You met with Dr Fahrer and together you produced a joint report. Is that right?

30 WITNESS DENNISS: Correct. By phone, but yes.

WHITE: By phone, yes. Thank you very much.

35 HER HONOUR: So Dr Fahrer's report's already in evidence, Mr Galasso, and the joint report. Yes.

40 GALASSO: Sorry, I just need to confirm, Dr Fahrer, in addition to your affidavit that we dealt with yesterday you prepared a joint report with Dr Denniss which has been headed Joint Expert Report on Computable General Equilibrium Modelling, which I inform you has been marked exhibit L.

WITNESS FAHRER: That's correct.

45 GALASSO: You have a copy of exhibit L with you?

WITNESS FAHRER: Yes, I have.

50 HER HONOUR: Dr Denniss, I gather you've been sitting in the back of the court so you might have a flavour for how this--

WITNESS DENNISS: Yes.

5 HER HONOUR: --is being run, but in the same way that Mr Campbell and Dr Fahrer yesterday did an opening statement it is helpful just to set the scene a bit, certainly from the Court's point of view, and depending--

WITNESS DENNISS: Sure.

10 HER HONOUR: --on what's in the opening statement and how the issues pan out we work through the joint report or deal with it globally.

WITNESS DENNISS: Okay.

15 HER HONOUR: I don't have strong views about how we do that. It's good to have interaction with Dr Fahrer but we do try and manage that, I guess, so there's not too much interruption. We've now moved to a new topic essentially so I'm expecting to hear a brief opening statement from both of you, in no particular order. It would be logical to start with you, Dr Fahrer, in a sense cause you're the one who did the modelling initially.

20 WITNESS FAHRER: Thank you, your Honour. I only have a small number of points to make in, in opening.

25 HER HONOUR: Thank you.

WITNESS FAHRER: They relate to items that are in our, in Dr Denniss's and my joint report.

30 HER HONOUR: Yes, exhibit L, we all have that.

35 WITNESS FAHRER: Yes, and principally about the labour market and the effect or the, the modelled effects on the labour market of the, the number of jobs to be created in net terms as estimated in the modelling as a result of the project.

HER HONOUR: Is this jobs in the local area, New South Wales, nationally, globally?

40 WITNESS FAHRER: All of the above, your Honour.

HER HONOUR: All of the above, jobs anywhere--

WITNESS FAHRER: Yeah.

45 HER HONOUR: --resulting from the project.

50 WITNESS FAHRER: Yep. Now, you will notice, your Honour, at the top of page 3 in, "Size of impacts, nature and extent of crowding out," an item that is agreed by Dr Denniss and I which is that:

“An increase in the employment associated with the construction of the mine will lead to a destruction of a similar number of jobs elsewhere in the economy.”

5 I want to make two points about that. First relates to the particular meaning of
the word destruction as economists like Dr Denniss and I use, use it, and the
second, which, point which I'll make first, which is this is the direct result of a
modelling assumption that, that I made, the assumption being that the project
won't create or will - many jobs, or in fact will create very few jobs, so it is, this
10 is by assumption. It--

HER HONOUR: Sorry, the assumption is it will not create?

15 WITNESS FAHRER: Will not create, will create hardly any jobs at all.

HER HONOUR: I see, okay.

20 WITNESS FAHRER: It is possible, and I do this in, in the report, to make
alternative assumptions that the, that the model will in fact create large
numbers of jobs. That's not my central modelling result.

HER HONOUR: So that's sort of like a worst case scenario in a way.

25 WITNESS FAHRER: In effect, if you, if, if your focus is on, is on jobs and
this - Dr Denniss himself made the same point, I think, in the Warkworth case
in his criticism of input/output modelling, that is, it's standard in this kind of
modelling to assume that the number of, total number of jobs in the economy is
determined by factors outside the particular project, and that's, that's a, I think
that's a fine assumption to make, unless the project is being, occurs at a time
30 of a deep economic downturn, in which case you would expect that the project
would create a large number of jobs, but I don't think there's a prospect of a
deep economic downturn between the years 2015 or 2022, at least not, not
that I'm, know about, so it's reasonable to assume as I have assumed.

35 But this - when we say the net number of jobs is not to be created, different
kinds of jobs will be created as a result of the project, not hugely different, but
this, this relates to the use of the word destruction, and this is a very important
point. It does not mean, your Honour, that large - well, the - 162 jobs will be
40 created as, as a result of the mine and almost the same number of people will
be retrenched from other positions. That's not what it means at all. What it
means is that as a result of the mine some industries and occupations will
grow a little bit faster than they would have otherwise, other industries and
occupations will grow a little bit slower than they would have otherwise.

45 So the word destruction relates to the counterfactual in the future about what
would have happened if - what would happen if the mine doesn't happen, but
we're not going to see a lot of pink slips, as it were, and in fact, although I
didn't report this because it was a, in, in my affidavit, I didn't know it was going
to be a big issue at the time, the modelling does report job growth for
50 97 occupations and I think with virtually all of them there will be some growth,

just for some of them, less than there would be otherwise. So that's, that's all I have to say in my opening remarks, your Honour.

5 HER HONOUR: I suppose it would help me, can you just say how you see CGE modelling and why did you do it?

10 WITNESS FAHRER: Well, your Honour, you will recall from the Warkworth case that input/output modelling was, was criticised by, by the chief judge and was criticised in evidence and I think for good reason. Now, input/output modelling is fine for some purposes but it's not the best technique that, to
15 be used for - evaluative technique for this kind of purpose and the reason is that input/output modelling takes no account of the fact that there are limited productive resources, by that I mean principally people to be employed in, in the economy, and so it, it, so it's, it, it always makes a, a, the, the, the amount of output, income, jobs, bigger than would likely be the case, unless you're in the Great Depression, or a very deep recession.

20 Input/output modelling has other weaknesses as well. Well, no, CGE modelling, on the other hand, has all the advantages of input/output modelling, and in fact it uses much of the same data, but it does take into account these resource constraints, plus it takes into account change, the effect of changing prices, you can model the effects on the economy over time, which input/output modelling doesn't allow you to do, so it is a superior
25 technique when you've got a big enough project that it affects the whole economy, which is what we have, what we have here. Now, it's not to say that input/output modelling is, is disreputable. It's not. The economist who invented it won the Nobel Prize for inventing it. It's just not the right technique for this kind of job and CGE modelling is.

30 HER HONOUR: Thank you. Dr Denniss?

35 WITNESS DENNISS: Thank you and, look, I agree with much of what Dr Fahrer has just said, but can I thank him for his tender because, frankly, proponents of mines in Australia for decades have been making outrageously exaggerated claims about the amount of employment that will be created if these mines ago ahead. Indeed, the initial modelling in the Warkworth case suggested that 44,000 jobs would be created. Now, there was an asterisk ahead of "job" because they had redefined "jobs" as man years, but it wasn't
40 an accident that such a large number, 44,000 jobs, made it into the results and we've just heard, and I agree, that the number is like to approach zero. So this is a fantastic turnaround in the evidence that has been put before decision-makers and, frankly, it's about ten years too late. I don't blame Dr Fahrer for that, but again I appreciate his candour, even if some of the people that have previously given evidence might be squirming right now.

45 So I agree and I will come to CGE models and I was involved in the Warkworth case, where I made a lot of those criticisms and I did say during the Warkworth case that I thought CGE was superior and it's a point that Dr Fahrer and I agree on, but superior doesn't mean perfect and the fact that CGE is better in
50 general doesn't mean that we shouldn't ask hard questions about the particular

5 way that the CGE modelling has been applied. So I'll come to some of those questions and, if it's okay with you, I might need to ask Dr Fahrer some specific questions because I had previously- in our agreed statement I've been seeking additional information about the modelling assumptions and the modelling results and I haven't been provided with the details. So if it's okay, when I've made my opening statement or at some point, I would like to ask some specific questions of how the model is constructed because I am limited in my ability to evaluate its results because I haven't been provided either with its inner workings or with the full set of results.

10

15 Yesterday I heard in court that Dr Fahrer describe CGE or his CGE as having included broad welfare benefits and I was surprised that he said that his model included welfare benefits because, while it does include some and also I heard this morning that there were two modes of analysis, this cost benefit analysis and the CGE analysis, well, I think it's very important for the court to understand that the CGE model that Dr Fahrer uses makes absolutely no attempt to measure environmental costs, makes absolutely no attempt to measure cultural costs, makes absolutely no attempt to measure health costs and it makes no effort at all to look at the distribution of benefits between individuals, winners and losers. Similarly, it has no - that I'm aware - no constraint for the amount of water that's available in the model and I understand the court has heard evidence about other agricultural users being concerned about water. This CGE model, as I understand it, does not have water as a finite resource in it. Nor, of course, does it have fresh air.

25

30 So while it's true, I suspect - again I haven't seen it all - while it's true that there are some welfare benefits in there, I think that it's clear that the broad welfare, as I suspect that others would interpret it, those broad welfare benefits have been entirely excluded in the construction of the model and in turn in the results.

35

HER HONOUR: What's welfare benefit and what's broad welfare benefit?

40

WITNESS DENNISS: Excuse me.

45

HER HONOUR: What is welfare benefit in economic speak and what is broad welfare benefit?

50

WITNESS DENNISS: Well, good question and this comes to scope again, but if you were to look at the welfare benefits or the welfare effects of a proposal, economic theory has got no problem at all with including externalities, as we discussed. My point is that this CGE model includes no measures of any externality that I'm aware of and the CGE model that these results are based on does not see that water is a scarce-through look?

55

HER HONOUR: No, I understand all that. Mine is a very basic question. "Welfare" means what, income, profits?

60

WITNESS DENNISS: No. Happiness, utility, fun. You know, it's what economists assume humans want to maximise, even though we don't attempt

to say what that is. So income is a part of welfare, but is not all of welfare. Now, a CGE model, I agree with Dr Fahrer, a CGE model has the advantage over input/output analysis in that, whereas input/output analysis ignores any of the negative linkages between the expansion of one industry and impacts on other industries, CGE models are explicitly designed to highlight those linkages. So in an input/output model the expansion of the mining industry will lead to an increase in employment in the transport industry.

HER HONOUR: I don't know if you're aware, but the input/output apparently basically nobody is relying on it anyway.

WITNESS DENNISS: I agree, but I'm just trying to distinguish between the two. I can see--

HER HONOUR: But I'm just letting you know I won't be looking at it.

WITNESS DENNISS: Okay. A CGE model includes what an input/output model includes, but a CGE model also includes the impact, the adverse impact, of the expansion of one part of the economy on other parts of the economy, the destruction Dr Fahrer was talking about. So one of my major concerns with the modelling that has been present is that, while the biggest advantage of CGE modelling is that it shows the impact of the growth in one part of the economy on all the other bits of the economy, Dr Fahrer's results don't actually allow us to see what those negative impacts are.

So we know that he has modelled the impact of the mine's expansion on manufacturing in the Hunter Valley, but I can't tell you what that impact is. We know that he has modelled the impact of the expansion of the mining industry on agriculture in the Hunter Valley, but I can't tell you what that is. I know that he knows because it's impossible to run this model and not generate those numbers, but those numbers have not been provided to me, despite me asking for them.

A couple of other points before I move onto some questions. The CGE modelling that Dr Fahrer has conducted suggests that, in addition to the jobs in the mine, there's about 12 jobs nationwide that are created in addition to the direct employment in the mine. Now, there are 23 million people in Australia, so we're talking at the sixth decimal place, the impact on Australia's employment, and again these needs to be contextualised with the claims that we've heard for decades about the economic benefits of these mines.

So I've described those employment effects as trivial. They are trivial at the national level, but what Dr Fahrer's results tell us is that at the local level, at the local level, that's where most of the jobs will be lost. Dr Fahrer's model tell us that around 80 jobs will be lost in and around the mine and from a - if we're interested in welfare, if we're interested in benefit to the community, I think it's very important to note that what this model says is that the local community will bear most of the noise pollution, most of the air pollution, most of the loss of amenity and they will also lose 80 jobs. It's people who live outside of the region, including overseas, that will get most of the benefits and they won't get

those costs.

HER HONOUR: All you're telling me sounds slightly counter intuitive. I mean if the SEOC starts tomorrow, they will need more workers.

5

WITNESS DENNISS: Yeah.

HER HONOUR: So when you say "lost", 80 jobs lost, you mean that there won't be people employed in other sectors?

10

WITNESS DENNISS: Yeah. I'm telling you what his results tell me and his results say that--

HER HONOUR: Can you tell me where this is in the evidence?

15

WITNESS DENNISS: Yes. Page 4, I think. No, that's the terms of trade table. Jerome - sorry, Dr Fahrer, do you know where you've got your--

WITNESS FAHRER: Which particular--

20

WITNESS DENNISS: Well, we know that the mine only creates 160--

WHITE: Page 3, I think, of the joint report, the bottom.

25

HER HONOUR: This is in the joint report?

WITNESS DENNISS: In the joint report.

HER HONOUR: Well, I just heard a figure of 80, so that must be somewhere else.

30

WITNESS DENNISS: Yes.

WHITE: Page 3, bottom.

35

HER HONOUR: Well, actually page 3 refers to 84.

WITNESS DENNISS: So this is - 84. I apologise, but this is agreed.

40

HER HONOUR: No, that's fine.

WITNESS DENNISS: So, yes, I agree it's counter intuitive, but these are the proponent's modelling results.

45

WITNESS CAMPBELL: Your Honour, may I--

HER HONOUR: Sorry, does that mean that 84 local jobs in other industries won't be filled?

50

WITNESS DENNISS: Yes.

HER HONOUR: Because those workers will have gone to the mine.
Is that what you're saying?

5 WITNESS DENNISS: No, it means - and again you might want to ask
Dr Fahrer this because he hasn't provided me with all the model outputs.
What it means is that the mine will drive up wages. The mine will drive up
costs of production. Those will be most - those adverse effects will be most
10 heavily concentrated in the area around the mine and that in turn the area
around the mine will bear the biggest brunt of these indirect effects, whereas
half - I think he assumes three-quarters, that is, in the agreed statement,
some proportion of the workers will travel from outside of the region.

15 So of you think of it this way. Dr Fahrer says there won't really be any
increase in Australia's level of employment. Dr Fahrer assumes that some
people will travel from outside of the region to come into the region to work in
this mine. So if more jobs are being created for people outside of the region,
fewer jobs must be created for people close to the mine, but again this is
Dr Fahrer's modelling and if I had the results I could answer this better.

20 WITNESS FAHRER: Okay. Can I make a point? There's a factual,
a small factual error in what Dr Denniss just said. The assumption is that
three-quarters of the jobs will be created within the region and one-quarter
outside the region. As anyone who has been to the region broadly will know,
25 a lot of people commute from Newcastle and thereabouts to work in the mines.

WITNESS DENNISS: So my point simply is that, while the adverse amenity
effects and environmental effects will be concentrated in and around the mine,
so to, according to the modelling results, will be the adverse economic effects.

30 WITNESS FAHRER: Okay. May I say some words in reply?

WITNESS DENNISS: I haven't finished my statement.

35 HER HONOUR: Yes.

WITNESS FAHRER: All right. Okay.

40 WITNESS DENNISS: I don't mind clarification because, if I had the modelling
results again, I might be more precise.

WITNESS FAHRER: Okay. Well, I think Dr Denniss and I are in agreement
that this project is not about jobs. I mean it's about the 162 people who will be
employed in the mine, but it's not principally about--

45 HER HONOUR: When you say it's not about jobs, you mean there won't be
a lot resulting from the mine?

50 WITNESS FAHRER: The major benefits of this job, economic benefits,
macroeconomic benefits, are about incomes. They're not about job creation

and I think Dr Denniss--

HER HONOUR: Income for whom?

5 WITNESS FAHRER: Incomes for - incomes for Australia generally, people in the local region - and I'll get to that in a minute - and New South Wales. The effect, the economic effect will be spread through the region, through the State, through the country.

10 WITNESS DENNISS: Can I - could I continue my opening statement?

FREE: Yes, and, Dr Denniss, please continue and can I ask that you make sure that you respond to that point which has just been made about the project is not about jobs; it's about net incomes which will be spread throughout the local area and throughout Australia.

15 WITNESS DENNISS: Yes, and across the world, of course.

FREE: Yes, but finish your opening statement, but then respond.

20 WITNESS DENNISS: Sure. So the CGE modelling results--

HER HONOUR: Sorry, have you moved off that topic now?

25 WITNESS DENNISS: Yes, about the local jobs.

HER HONOUR: Okay. I still don't feel like you've answered my question, but I'm not an economist, so you will have to assume ignorance on my part.

30 WITNESS DENNISS: Okay.

GALASSO: Can I - I don't mean to disrupt Dr Denniss, nor Dr Fahrer, but may I suggest that at this point both Dr Denniss and Dr Fahrer give us, as it were, a lay explanation of what they mean by 84 jobs lost.

35 HER HONOUR: Yes, that's what I was asking.

GALASSO: Because that's something that I had a difficulty with and it's the concept--

40 HER HONOUR: I'm in furious agreement with you for once, Mr Galasso.

GALASSO: Luckily, we've got a daily transcript.

45 HER HONOUR: So you can sit down now.

GALASSO: Your Honour, we've got a daily transcript. I'm going to get that page and put hang it on my chambers.

50 HER HONOUR: I'll have it expunged.

GALASSO: And I will wear it like a big - and I think that--

5 HER HONOUR: You can't frame on your wall either.

GALASSO: I'll wear it as a T-shirt underneath.

HER HONOUR: Yes, I absolutely agree with you.

10 GALASSO: It's the concept of 84 jobs lost versus 84 people losing their jobs which is the--

HER HONOUR: Yes, I agree that's--

15 GALASSO: So if Dr Denniss and Dr Fahrer could deal with that because we're lay people, not economists.

20 WITNESS FAHRER: I think I can help. I think I can help there and I don't think Dr Denniss will disagree with this because it was he who derived the 84 number. Your Honour, in my affidavit, at paragraph 48, on page 13, you will see in the first dash point the local region average annual increase of 78 FTE jobs.

25 HER HONOUR: FTE being four times--

30 WITNESS FAHRER: Four time equivalent, your Honour. We know, or I am advised, that the mine itself will create 162 jobs or 162 people will be employed in the SEOC mine. I think where Dr Denniss, and it's fairly straightforward, comes at 84 jobs lost, is 162 minus 78 equals 84 if my arithmetic is correct. Now, that's the arithmetic. As I said in my opening statement--

HER HONOUR: I'm sorry, I'm missing something. Where's the 78 from?

35 WITNESS FAHRER: From the model.

HER HONOUR: From your model. I still don't really understand what you're telling me. I mean I see the 78 there.

40 WITNESS FAHRER: Okay.

HER HONOUR: I don't know why that's a loss. I don't know why it's described as a loss.

45 WITNESS FAHRER: 78 more people in the local region will be employed with the mine than would have been employed without the mine. We know 162 will be employed in the mine and so 162 minus 78 equals 84, which means 84 jobs that would otherwise have existed in the local region won't exist. Do you agree with that, Richard?

50 WITNESS DENNISS: Absolutely.

HER HONOUR: So is that just because they're moving from other sectors to the mine?

5 WITNESS DENNISS: No, they're not working any more.

10 WITNESS FAHRER: Well, no, no, that's not true. The model in fact doesn't say that. All we know is that there would have been - in aggregate terms in the region there are 78 more jobs than would have been otherwise and we know 162 jobs will be created in the mine. So where have the other 84 jobs gone? Well, they could be working out of the region, who knows.

WITNESS DENNISS: Or they might have left the region.

15 WITNESS FAHRER: Yes.

WITNESS DENNIS: So can I - I don't disagree with anything Dr Fahrer says but--

20 HER HONOUR: I must say we don't understand up here. I'm sure we're slow. If I'm told 162 jobs are to be created but then only 78 are going to be local--

WITNESS DENNISS: Yes.

25 GALASSO: There's a net increase of 78?

WITNESS DENNISS: Yes.

HER HONOUR: Net increase, I see, okay.

30 GALASSO: I'm trying to liaise, put it in layman speak. I will ask Dr Denniss if I may, your Honour.

HER HONOUR: Yes.

35

GALASSO: If her Honour was to ask how many jobs are there in the region at the moment, she'd get a number--

WITNESS DENNISS: Yes.

40

GALASSO: --without the mine. In the region with the mine it would be that number less 84 but with the mine there's 162 jobs. There are people who are working at the mine who will take away available jobs in another sector but that doesn't mean that that number of people are losing their jobs?

45

WITNESS DENNISS: Look, here is how I would explain what Dr Fahrer's model--

HER HONOUR: Is that right?

50

5 WITNESS DENNISS: I'm not quite sure I agree. So let me throw out in my words. Imagine we have the local economy as it exists today. We've got step 1. Step 2, we construct a new mine which employs 162 new people in it. So your intuition might be that after we build a mine that employs 162 people, there's 162 extra people working in that region. What Dr Fahrer's--

HER HONOUR: Well, there's 162 jobs created?

10 WITNESS DENNISS: Yes.

HER HONOUR: Yes?

15 WITNESS DENNISS: What Dr Fahrer's model tells us is that your intuition would be incorrect and that in fact there would be 78 extra people working in the region after the mine is built.

20 O'NEILL: So when Dr Pain said to you that people will move from a different industry, say agriculture, that 84 people would be moving out of agriculture and into the mine, that was actually correct, is that--

WITNESS DENNIS: No, they might--

O'NEILL: Or from another industry?

25 WITNESS DENNISS: They might now be not working but Jerome knows, Dr Fahrer knows this better than I do, or they might have left the region because there are no longer mining jobs available for them.

30 O'NEILL: I see.

WITNESS DENNISS: The construction of the mine drives out non-mining jobs. So if I'm someone with skills in the non-mining industry, like agriculture--

35 O'NEILL: You've got to go elsewhere?

WITNESS DENNISS: --this model says I no longer work in that region any more, and again, all these results could be known to the Court if Dr Fahrer would release them.

40 WITNESS FAHRER: Well, we'll get to that in a minute, your Honour. The way you're talking, I mean I broadly agree with that but I would reiterate that this is a result of the assumption that I've made that no, virtually no extra jobs will be made, will be created as a result of the mine.

45 Now I could make an alternative assumption, and I do make an alternative assumption in the report that there will be plenty of extra jobs created in the region, in the State, in Australia, in which case there will be..(not transcribable).. this issue wouldn't arise. So we just need to bear that in mind. This is a modelling assumption, that's all, a modelling assumption
50 to make the results as conservative really as they can be made.

WITNESS DENNISS: I just point out I haven't actually finished my address yet.

5 HER HONOUR: I did remember that.

10 WITNESS DENNISS: But, look, I think the issue of assumptions is the issue to which I will turn soon. The whole - I think what the Court needs to understand is that every element of these CG (as said) models is a result of an assumption.

HER HONOUR: Yes, I'm aware of that.

15 WITNESS DENNISS: So for the person that made the model to say that that's just an assumption is I think a distraction. It is a very important assumption. It is an assumption that entirely contradicts ten years of public statements by the mining industry and it is, as Dr Fahrer says, the orthodox assumption. So of course he could put in another assumption that this mine creates large numbers of jobs but of course that is all it would be, an assumption.

20 Now, that's my point about these CGE models are a black box. The assumptions that underpin these models are very numerous, very interrelated and very complex and, again as Dr Fahrer says in his affidavit, the strength of the CGE model is that all these assumptions about interdependencies are in there and the strength of the CGE models is that it reveals the consequences of these interdependencies but the modelling results that have been provided to me and provided to the Court then conceal what all those interdependencies are. So I know that some people lost their jobs in agriculture and I know that some of them probably live in and around the mine but I can't answer your simple question because I don't have access to the detailed modelling tool.

30

HER HONOUR: So have you finished your opening statement?

WITNESS DENNISS: No.

35

HER HONOUR: Okay, keep going?

40 WITNESS DENNISS: So CGE models have strength but, as Dr Fahrer has highlighted, the assumptions that underpin them are very important. I think some of the assumptions that he's made are potentially significant but in our evidence today, rather than have too highly detailed an economic commentary and argument, I do need to draw the Court's attention to what I think is a very significant assumption that Dr Fahrer has made and I think a very surprising assumption. He appears to have redefined a very well known concept in economics which is the terms of trade.

45

50 Now, the terms of trade, according to the Australian Bureau of Statistics, relate to the relative price of exports and imports, so the price Australia gets for the things it sells versus the price Australia pays for the things it buys. That is the ABS definition and that is agreed in our joint statement.

5 However, a very significant proportion of the benefits estimated by Dr Fahrer are what he calls terms of trade benefit and he has introduced and accepts that he is using a different definition of the terms of trade than the Australian Bureau of Statistics and in turn virtually every economist I know.

10 Now, again this comes to the point that because I don't have access to the detailed model, I don't really know what his new definition of the terms of trade are but we did agree on the phone, and I think we still agree, that in conventional economic theory if Australia were to sell more of its coal overseas the impact of increasing the supply of coal would be to have a very small, and I'd agree with the adjective trivial, if Australia increased the supply of coal to the world market it would have a trivial negative impact on the world price of coal.

15 Now, if our export prices fall, then that would generate a reduction in our terms of trade, and I concede that this would be trivial, but what's not trivial is that Dr Fahrer's results report positive terms of trade benefits when the orthodox economic theory that he says his model is based on would generate trivial but negative terms of trade benefit.

20 Now, we had this debate on the phone and in our agreed statement, but I think it is very significant. If we have a look at the detailed results on page 10 of Dr Fahrer's initial report, if you looked at the third column, sorry, the third row from the bottom, terms of trade, so the bottom of page 10--

HER HONOUR: Yes, I see that.

30 WITNESS DENNISS: Terms of trade, if you look at, for example, the rest of the Hunter region, so the second numeric column, these terms of trade benefits account for 108 million of the 133 million total increase. That's 81%. Now, again orthodox economic theory would suggest this effect would be negative and these results suggest that they account for 83% of the positive benefits.

35 Now, I don't know whether Dr Fahrer and I would be able to resolve, and I do have some specific questions that I'd like to ask him at some point, I don't know that we'll be able to get to the bottom of that today in a way that the Court would find satisfactory, but I do know that orthodox economic theory suggests that an increase in the supply of something leads to a reduction in its price and I do know that the ABS definition of the terms of trade would mean that there would be a slight reduction in the terms of trade and I do know Dr Fahrer's reporting a very significant and large positive benefit, which again, when I've asked for more detailed information on the model, hasn't been provided.

40 So 81% of the benefits to the Hunter region, 108 of the 133 million, is from my point of view very hard to understand. Now, it might be, and maybe I do probably need to ask Dr Fahrer some questions if I need to go further.

50

HER HONOUR: How about you finish your opening statement and then we'll see how we go.

5 WITNESS DENNISS: Okay. So to summarise, we now understand that proponents of mines in Australia don't think they will create jobs. This is a fundamental change.

10 HER HONOUR: Well, probably you should limit your comments to this mine but anyway that seems agreed for this mine, is that right?

15 WITNESS DENNISS: Okay. Dr Fahrer suggests that the impacts for employment in the local region will be negative. Dr Fahrer's model, although he described it yesterday as a model of welfare, excludes environmental costs, excludes health costs, excludes cultural costs and similarly it excludes the distributional costs. Now, Dr Fahrer suggests that on average people in the region will be \$1,900 better off.

20 So I'll conclude with this point. Averages conceal the distribution. If one person in this room was a billionaire, our average wealth would be very high. Not many people would feel that a billionaire walking into the room had improved their wealth. Dr Fahrer's modelling tells us that someone is going to make a lot of money out of this but this goes to this issue of scope.

25 Now, when I was asked to participate in this, I read the cost benefit analysis and the CGE analysis as working together. I've been instructed to not talk about the cost benefit analysis, which I find confusing, because if we really want to understand costs and benefits, the macroeconomic modelling sheds light on some of the benefits. It sheds no light on the costs but it does shed light on the benefits. If the reason that on average people in the community
30 are \$1,900 better off, well, we know 84 people are either leaving the region or haven't got the job they used to have. They're not \$1,900 better off and if one person in that region is making millions of dollars in profit, then that's really cold comfort for the people who've now got noise and airport issues.

35 So the CGE modelling as it has been presented has no distributional analysis at all and I think that's the major weakness when we're trying to figure out costs for who and benefits for who. And I should just perhaps add, I was listening to the previous line of questioning about, "Well, what happens if some shares get bought or sold? We shouldn't care about ownership."
40 Well, Australia has a Foreign Investment Review Board who has specifically been established on the premise that who owns assets is important to us.

45 The whole point of the Foreign Investment Review Board process is to consider questions of would it be in Australia's national interest if assets that were currently owned by Australians were sold to people who weren't Australians. So the implication earlier seemed to be that we shouldn't care about the geography of who gets all the benefits, knowing full well that this is apparently a hundred per cent foreign-owned mine. But the Australian Government views very seriously the issue of whether something is owned by
50 Australians or foreigners, and indeed if someone wants to buy more than 15%

of a significant asset, the Foreign Investment Review Board has to give them permission to do so.

5 So I think that CGE modelling is superior to input/output modelling. I think that the CGE modelling that we've got highlights just how trivially small the benefits to the economy of this are. Obviously people - obviously the proponent will always want to build something if it's profitable. Showing up and saying, "Please, can I have a property development or a mine because it's profitable," well, I don't even know why we'd need to have an investigation.

10 HER HONOUR: Sorry, why is the benefit to the economy not as good? I didn't follow that point.

15 WITNESS DENNISS: Well, no one would propose to build something that wasn't profitable. They wouldn't - they wouldn't--

HER HONOUR: True. I just don't know why you're telling me this.

20 WITNESS DENNISS: Because the--

HER HONOUR: I'd say that's a given, that people want to make profit.

25 WITNESS DENNISS: Okay. So if people want to make profit, it doesn't - if we want to ask the question, "Is it in the community's interests?" then surely we'd have to ask, "Is the person making the profit in our community?" And - and the conversation we've heard about a scope--

30 HER HONOUR: I understand why. I'm just not sure - is this directed to the CGE modelling or just a general observation?

35 WITNESS DENNISS: Yes. Well, because the C - well, a bit of both, but the CGE modelling shows that we can. If you have a look at page 10, Dr Fahrer breaks down costs and benefits of the local region, the rest of the Hunter, the rest of New South Wales, the rest of Australia. Well, if he can do that in his cost - in his CGE model, I can't understand why he didn't do it in his cost benefit analysis.

40 HER HONOUR: But it doesn't matter in a sense. I just need to get to the bottom line.

WITNESS DENNISS: Okay.

HER HONOUR: What do you say about what's on page 10?

45 WITNESS DENNISS: That it's exaggerated because--

HER HONOUR: You'll have to talk me through this.

50 WITNESS DENNISS: Because the terms of trade effect should be negative, and it's substantially positive, and I need to ask questions of Dr Fahrer before

I can make a stronger case for how exaggerated I think it is. But orthodox economic theory suggests the terms of trade effect is negative. These results suggest it's very strongly positive.

5 HER HONOUR: Yes, sorry, you've made that point. But just the point you were making about it does matter where ownership lies, because that's, you know, follow the money trail to the profit. How does that affect that table on page 10?

10 WITNESS DENNISS: Well, none of the benefits accrued are people - sorry, we've got the - Australia there, and then we've got net foreign income transfers included in that table. So again, doctor--

HER HONOUR: Sorry, where's net - I see, the last one.

15

WITNESS DENNISS: It's the very bottom, it's the very bottom row. So we've got net foreign income transfers of \$669 million, and I don't - I can't understand why that's not in the cost benefit analysis, but--

20 WITNESS FAHRER: Your--

HER HONOUR: Anyway, that's fine.

25 WITNESS FAHRER: May - may I make a point of clarification, your Honour, regarding - and this - what "net foreign income transfers" mean?

HER HONOUR: Yes.

30 WITNESS FAHRER: And I did point this out to Dr Denniss in an email but he may have forgotten, and this is a language issue on my part, this - and we're talking about table 3 towards the bottom on page 10. "Foreign" here means foreign to the locality to which the numbers refer. So it doesn't mean out of Australia, unless we're talking about the Australian numbers.

35 So that, for example, the net foreign income transfers of 866.5 million to the local region, that's money that's leaving the local region, it's not money that's going necessarily outside of Australia. So, for example, all the taxes are going to go outside the local region, all - and so on, all the royalties, the income taxes, and so on and so forth, they'll go to the various governments
40 who don't reside in the local region. So that's just a point of definition there.

HER HONOUR: But under the Australia column, that is outside Australia.

45 WITNESS FAHRER: That would be correct, yes.

WITNESS DENNISS: Well, can I then clarify, so does that mean that that table doesn't include any estimate of the money flowing out of Australia for ownership?

50 WITNESS FAHRER: It does. 669.7.

WITNESS DENNISS: 669.7 is the foreign transfer from Australia.

5 WITNESS FAHRER: Right. But that's for the entire economic effects.
I'm not saying that's the Ashton foreign owner's profit or anything like that,
I mean, that's - that's the - the whole economy effect.

O'NEILL: Could you just say what it is again? You said that is--

10 WITNESS FAHRER: That is the whole of Australia - what we've - what I've
modelled here is - is the whole of Australian economic effect, and so then
it includes the effects on other business which are - businesses which are
partially or - or wholly foreign-owned, so the - the number 669.7 million
15 includes transfers from all foreign-owned businesses, not just the coalmine
in question.

WITNESS DENNISS: May - may I ask Dr Fahrer a few questions or--

20 WITNESS FAHRER: I - I did have some points in response which may get
to these - but I've set them out in sequence, I do want to get to them in case
Dr Denniss's cross-examination doesn't - doesn't get to them.

HER HONOUR: Yes.

25 WITNESS FAHRER: On the question of what does a CGE model do and
what doesn't it do, Dr Denniss has criticised the model for not including health,
environment, heritage, culture and distributional effects. Your Honour, there
isn't a model in the world that includes all of those things, as well as being a
model for the economy. If I can build a model like that, I'd be rich and famous
30 and I wouldn't be sitting here - sitting here - sitting here today. It's - it's - it's a
nice ask, but it's never going to happen.

WITNESS DENNISS: But it was described yesterday as a ..(not
transcribable).. model.

35

HER HONOUR: He's having a talk now.

WITNESS DENNISS: Sorry.

40 WITNESS FAHRER: Yeah, okay. With regard - Dr Denniss - and I think he
might have misspoke and said that there'll be - that the - that the modelling
shows there'll be a loss of jobs. Well, in fact, there will be a small positive
increase of 78 jobs in the - in the modelling. I think - I think he misspoke there.

45 O'NEILL: He said 12 earlier.

WITNESS FAHRER: Well, he didn't misspeak was by saying the effects
on the economy however defined will be trivial. I don't agree with that at all.
The effects on the local region in total will be - and you can see this, your
50 Honour, in table 2 on page 10 - 167.7 million, or in net present--

HER HONOUR: Sorry, where in table 2?

WITNESS FAHRER: Top row.

5

HER HONOUR: Yes, I'm there.

WITNESS FAHRER: Or in net present value terms of \$102.4 million. That's a lot of money for a small local region, in my opinion.

10

GALASSO: What do you define as the local region?

WITNESS FAHRER: Singlebrook(as said) and - Singleton and Muswellbrook local areas. Dr Denniss hypothetically said, "Well, what if a billionaire gets all of the money?" Well, there aren't going to be any billionaires getting all of the money in - in this case. It - this is - now, this is derivable from the numbers in my report, and I - I've estimated this as - as Dr Denniss was speaking.

15

Of the \$102.4 million, we - we know, your Honour, that 162 people will be employed in the mine, about three-quarters of them will be living in the local region, and they'll be making a salary, I'm advised, of about \$140,000 per year. So mining is a well-paid occupation, which is another good reason - which is - which is a positive benefit. Of the 102.4 million, about half after tax will go to the mineworkers. The rest of it will go to other people who live in the region. Which other people who live in the region? The people who work in the shops where the mineworkers' salaries will be spent, for example, and, you know, and downstream where the people who work in businesses where - where, you know, which the mine buys supplies from, for example.

20

25

So it's not - it's - it's - it's obviously not the case that, you know, Mr Nathan(?) is going to accrue, you know, one - all - all, you know, all of the money. It's going to spread through the - through the - to the mineworkers about, you know, about half of - about half, and - and in the rest of - the rest of the region, on average, \$1,900 per person.

30

35

The terms and trade point with respect to Dr Denniss, he's just wrong about that. I - well, I'll get to that in a minute because it's going to take some time.

WITNESS DENNISS: But can I just point, we do agree in our agreed statement--

40

WITNESS FAHRER: Yes.

WITNESS DENNISS: --that I'm not wrong.

45

WITNESS FAHRER: No, no. Well, you're - you're - you're right about the definition that the ABS uses, but you're wrong about other things, so we'll get to that. In terms of the model being a black box, well, inevitably - and I think I even used the word "black box" in my report - unfortunately, that's the nature of this model. This particular model, your Honour has 329,000 equations.

50

HER HONOUR: How many?

5 WITNESS FAHRER: 329,000, give or take a few. The structure of the model is on the internet, not - or the - or the - the - the family of models on which this model is based, it can be found on the internet on a government website, so it's not a secret, but you have to be a specialist to - you have to really be a specialist to - to want to wade your way through all the documentation. And I don't - I don't criticise Dr Denniss for not doing it, I mean, it's not--

10

WITNESS DENNISS: I offered to.

HER HONOUR: Please don't interrupt him. Can you just continue, thanks.

15

WITNESS DENNISS: Sorry.

WITNESS FAHRER: Okay. Okay. Now, on the question of the terms of trade, okay, there are two issues here. One is what definition of the terms of trade we're talking about. Secondly is whether export prices, you would expect coal export prices to go up as a result of this mine. Dr Denniss says you would expect them to go down a little bit because there's an increase in the supply of coal. But that's not what's been modelled. What's been modelled is a small increase in the demand for Australian coal, and so then you would expect - and I thought we discussed this over the phone, Richard - you would expect prices to go up a little bit, but hardly at all, because the amount of coal here is very small compared to the world's supply. So you would expect, as far as the terms and trade as such, as defined by Dr Denniss, to go up but not by very much.

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30

But I've just used - I use a different definition of the terms of trade, it is not the ABS definition, and I concede that and I can explain what's in this definition. That it is the ratio - the income equivalent ratio of all the - all the things that make people's income go up or - effectively, it reflects price changes which cause their incomes to increase, and there's a whole raft of them in - in - in them all, and that's why the numbers - the numbers aren't about export prices at all, hardly at all, they're about other things.

35

40

So as - as I said - well, we just - well, as the joint - our joint report said, this is a semantic definition about the terms of trade. If you don't want to call them the terms of trade, or if somebody doesn't want to call them the terms of trade, call them something else. "Barter terms of trade" might be a more accurate definition of - of - of - of this - of what we're measuring here. But - but critically, your Honour, the model's not measuring what Dr Denniss think it's measuring or thinks it should be measuring.

45

WITNESS DENNISS: Can I respond?

HER HONOUR: Are you about to ask questions now?

50

WITNESS DENNISS: Well, I - yes, but I mean, how can anybody evaluate the

results of something when the modeller uses unconventional definitions of variables and then blame other people for misunderstanding? I mean, the terms of trade is a very well-known definition. I've been teaching economics for 20 years--

5

HER HONOUR: I'm not going to be getting into what the terms of trade means ultimately. So what's the pointing end of this argument in terms of the performance of the model?

10 WITNESS DENNISS: The pointing end of this argument is - well, I - I - I need to ask some specific questions of Dr Fahrer.

GALASSO: Why didn't he ask this in the joint--

15 HER HONOUR: I think he did, but he says he didn't get the answers.

WITNESS DENNISS: I did, and they weren't - they weren't provided.

GALASSO: Did you ask it in the joint report?

20

HER HONOUR: I don't know if it's in the joint report. He said he ..(not transcribable).. I don't know how we're going to go on timing here.

WITNESS DENNISS: Well, they might be very short answers.

25

HER HONOUR: Have you got them all written down?

WITNESS DENNISS: I do.

30 WITNESS FAHRER: Well--

WITNESS DENNISS: Well, can we just try? Why--

WITNESS FAHRER: Well, you--

35

HER HONOUR: One way of doing this is I take a break now, you can show these questions - no, well the barristers will be getting nervous about why is this happening now.

40 WITNESS DENNISS: Some of them are yes or no, most of them are yes or no.

45 HER HONOUR: It's just a case of how we manage it. So I could go off, and Dr Fahrer can look at it - it's not ideal this is done sort of in the way we're doing it at the moment- and then I can come back at 12 or 5 past or whatever. But just with timing - I'm looking at you, Mr White - if you really have to go at 2, I'm not quite sure how we deal with all this.

50 WITNESS DENNISS: But some of these are yes or no answers. They really might not take very long at all.

HER HONOUR: They might be in your view, but we don't seem to be having much yes or no.

5 WITNESS DENNISS: It's how the model is built. He either can answer the - tell us how--

HER HONOUR: Yes. It's just a pity this wasn't discussed earlier. I'm not being critical, but it would have been good to sort this out earlier.

10 WITNESS DENNISS: It was discussed earlier. I've been asking for it. It - it says--

HER HONOUR: Has it been in writing to him?

15 WITNESS DENNISS: Yes. And it says in here that, you know, Dr Fahrer thought he provided enough information.

HER HONOUR: Dr Fahrer, do you know if you can answer these questions?

20 WITNESS FAHRER: Well, I don't know what the questions are, your Honour.

HER HONOUR: Okay. Do I take a break?

25 WHITE: Yes, please, your Honour.

HER HONOUR: I'll adjourn till five past 2.

SHORT ADJOURNMENT

30 HER HONOUR: So I'm asking you did you get the questions or can you answer them?

WITNESS DENNISS: Yes and look, given that--

35 HER HONOUR: Sorry, I think that's to Dr Fahrer.

WITNESS DENNISS: Sorry.

40 WITNESS FAHRER: I will answer to the best of my ability your Honour. Yes I think so.

WITNESS DENNISS: And some of the questions, do you want me to repeat them all now or only the ones I still kind of need you to hear - sorry.

45 HER HONOUR: Dr Denniss I'm operating on a need to know basis, so I don't know what the questions are.

50 WITNESS DENNISS: All right, so firstly is it true that in this model what's actually being modelled is an increase in the demand for Australian coal,

not an increase in the supply of Australian coal?

5 WITNESS FAHRER: That is correct but of course in any competitive economy demand equals supply so the supply follows the initial increase in demand for Australian coal.

WITNESS DENNISS: So because we've modelled an increase in demand for Australian coal, what happens to the price of Australian coal?

10 WITNESS FAHRER: It goes up by a trivially small amount.

WITNESS DENNISS: And small though it is, is that included in what's called the terms of trade effect?

15 WITNESS FAHRER: Yes.

WITNESS DENNISS: And does every other coal mine in Australia get a higher coal price because this model--

20 WITNESS FAHRER: Yes.

25 WITNESS DENNISS: So this model assumes that rather than start from the new mine being built and increasing the supply of Australian coal putting downward pressure on the price of coal, this model starts the causation at quite a different point and starts to assuming there's an increase in world demand for Australian coal and that world demand is met by an increase in supply and in turn--

30 WITNESS FAHRER: That's right.

WITNESS DENNISS: Yes, so when the new mine gets built in the Hunter Valley what happens to the wages of other people working elsewhere in the Hunter Valley in this model?

35 WITNESS FAHRER: They go up.

WITNESS DENNISS: So people working in hotels in Newcastle will get a pay rise in this model as a result of the mine being built?

40 WITNESS FAHRER: That's correct.

WITNESS DENNISS: And that wage increase that people working in pubs get is included in what you've called the terms of trade effect?

45 WITNESS FAHRER: That's right.

WITNESS DENNISS: And in the agriculture industry would wages go up if this mine is built?

50 WITNESS FAHRER: Wages would go up generally, it's part of the - it's built

into the assumption, the labour market assumption that I've made which is that any increase in the demand for labour is met through an increase, or almost any increase in the demand for labour is met through an increase in the price of labour rather than increasing the number of people that are employed.

5

WITNESS DENNISS: So if the mine is built and people running tourism and agriculture operations increase their wages, they can then sell their product at a higher price than they could sell it before the mine was built?

10

WITNESS FAHRER: Well that depends on every - all of the other interactions that are going on in the economy. Now on other things being equal basis that's true but the point about a CGE model is that other things aren't equal and you'd have to work your way through all of the outputs.

15

WITNESS DENNISS: But it's fair to say that in the model when a new mine being built forces up wages in the hospitality sector, the hospitality sector has the capacity to cover those wage increases by in part by passing on higher prices to customers?

20

WITNESS FAHRER: In part yes that's right but also the hospitality sector will be selling more of its output because the economy is just that little bit bigger and so there'll be a greater demand for hospitality services.

25

WITNESS DENNISS: In some parts of the economy?

WITNESS FAHRER: Well generally, I don't think there's any part of the - or no region of the economy that actually goes down--

30

WITNESS DENNISS: But there's 78 fewer jobs in and around--

WITNESS FAHRER: 84--

WITNESS DENNISS: 84 I'm sorry, there are 84 fewer jobs--

35

WITNESS FAHRER: Than would otherwise have been the case.

WITNESS DENNISS: So probably the hotel in that area would possibly be selling less?

40

WITNESS FAHRER: Possibly but I'd, you know, you'd have to look at it case by case. I don't think the model desegregates down to the pub level.

45

WITNESS DENNISS: Not but it does desegregate down to the Singleton-Muswellbrook region--

WITNESS FAHRER: Yes.

WITNESS DENNISS: --where 78 fewer jobs - 84, sorry.

50

WITNESS FAHRER: Yes but the net effect might not be negative at all

because there's more income in the region.

5 WITNESS DENNISS: So, because I want the Court to understand
how important the assumptions that are made in these models are.
The assumption in this model is that when a mine gets built in the Hunter
Valley every other mine in the Hunter Valley can now sell their output for
a slightly higher price. Now, most business people would express concern
at new competitors supplying more to the market. Most business people often
10 express quite a lot of concern that if more people enter the market that things
will be bad, not good, but in this model the introduction of a new coal mine
benefits every other coal mine in the Hunter Valley, is that true?

15 WITNESS FAHRER: That's true because the presumption is that the
introduction of the new coal mine is a result of the demands for Australian coal.

WITNESS DENNISS: But that's a fundamental assumption whether to start
the model by assuming that the new mine represents an increase in supply
which is I think how most orthodox analysis as opposed to most--

20 WITNESS FAHRER: No I would dispute that.

WITNESS DENNISS: Okay. If you asked a first year economic student--

25 GALASSO: I object.

HER HONOUR: Can you just stick to this?

WITNESS DENNISS: Well it's whether it's orthodox.

30 GALASSO: No I object.

HER HONOUR: But it might be just difference of opinion.

35 WITNESS DENNISS: Okay. So in the model building new mines
in the Hunter Valley lead to wage rises in the hospitality sector?

WITNESS FAHRER: Yes.

40 WITNESS DENNISS: And those wage rises are passed on and are captured
as benefits to the Hunter economy of higher wages in the Hunter economy?

WITNESS FAHRER: Amongst many other things yes.

45 WITNESS DENNISS: And they're reported as terms of trade benefits?

WITNESS FAHRER: Yes.

WITNESS DENNISS: Whereas the ABS definition wouldn't--

50 WITNESS FAHRER: That's correct.

5 WITNESS DENNISS: If your model - if I asked you to model what would happen to the Australian economy if wages went up in the hospitality sector, now in your model the cause is new mines cause wage increases, but imagine we just increased wages in hospitality because they got a pay rise at an industrial relations tribunal hearing, what would an award wage increase do for the economy in your model?

10 GALASSO: Your Honour does that assist your Honour?

HER HONOUR: Yes it does. Can you answer that please?

15 WITNESS FAHRER: Yes I will your Honour. If that was the only thing that was going on, if the wage increase was plucked out of the air or plucked out of the fair wage commission's air or something, then I would expect employment to go down.

20 WITNESS DENNISS: So when coal mines cause wage increases that's good, but when industrial umpires cause wage increases that's bad?

25 WITNESS FAHRER: It depends on the cause of the wage increase. Fundamentally what's happening is something good for the economy which is an increase in the things that we produce and sell. When goods things happen to the economy wages throughout the economy go up.

30 We've seen that, for example, your Honour, in the mining boom in Western Australia, the, the, the, the boom for iron ore has caused wage increases for truck drivers, and that's very good for truck drivers, and despite all of that truck driving companies who are contractors to mining companies do very well because of the underlying good things that are going on.

WITNESS DENNISS: And it's the modeller's job to decide what's good and bad, isn't it?

35 WITNESS FAHRER: No, I wouldn't characterise it that way. It's the modeller's job initially to decide what inputs to put into the model, but there's no morality here, Dr Denniss.

40 WITNESS DENNISS: So if you had have modelled an increase in the supply of Australian coal without making your judgment - well, I'll put it another way, your judgment was that you should model an increase in the world's demand for Australian coal.

45 WITNESS FAHRER: That's right.

50 WITNESS DENNISS: If you had have made a different decision, if you'd have modelled an increase in the supply of Australian coal, which is how I, for example, would interpret what would happen when you built a new mine, but leave my interpretation aside, if you had have modelled an increase in the supply of Australian coal rather than an increase in the demand for Australian

coal what would have happened in the model? Sorry, what would have happened to the coal price?

5 WITNESS FAHRER: I think the premise - I'll answer directly the question in a minute, but I think the premise is a rather strange one. I - the reason Ashton wants to open this mine is because it's got overseas customers who want to buy its coal. Now, if for whatever reason some, some crazy coal company just decides to produce more coal, even though it hasn't got more customers, then the price would, would go down.

10

WITNESS DENNISS: The price would go down?

WITNESS FAHRER: Yes.

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WITNESS DENNISS: And what would happen if the Ashton mine wasn't built, what would happen to the price of Australian coal?

WITNESS FAHRER: It would be - well, well--

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WITNESS DENNISS: If, if world demand increases in the way you've assumed.

WITNESS FAHRER: Yes.

25

WITNESS DENNISS: If the world demand for coal increased and the Ashton mine wasn't built, what would happen to the price of Australian coal?

30

WITNESS FAHRER: Well, I would assume that some other coal company, in the Hunter Valley or elsewhere, would, would supply the, would, would supply the coal and the price would go up.

WITNESS DENNISS: So the price of Australian coal would go up if this mine wasn't built?

35

WITNESS FAHRER: No. The price of Australian coal is going up because there's an, the, because of the demand for Australian coal. Now, whether it's this mine or the mine down the road in the Hunter Valley is neither here nor there as far as the modelling is concerned.

40

WITNESS DENNISS: But if the Court wants to understand the costs or benefits of building or not building the mine, can you just - I think you agreed with me, I just want to be clear, if we want to understand the benefits of building or not building the mine, if we didn't build the mine and you've modelled an increase in world demand, what would happen to the coal price received by every other coal mine in Australia?

45

WITNESS FAHRER: That would depend on where this demand was satisfied from, and if it was satisfied from - well, in fact if you assume, which is reasonable to assume, one price, for the modelling purposes, your Honour, one world price of coal, if you think that the demand is going to be satisfied

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somewhere, from some mine in the world, then the price of coal will go up and every Australian mine, coal mine, will benefit.

5 WITNESS DENNISS: Okay, so we agree that if there's an increase in world demand for coal and the Ashton mine doesn't go ahead the coal price will go up and we agree that if the Ashton mine was built and demand wasn't increased the, the price of coal would go down.

10 WITNESS FAHRER: Yes.

15 WITNESS DENNISS: So anywhere in your CGE model have you provided account factual to help us understand what the terms of trade benefits or other benefits to the Australian and broader economy would be from the coal price increasing as a result of an increase in world demand without the Ashton mine? Cause it is possible that the demand you have modelled occurs without the Ashton mine being built, so why didn't you model, why didn't you give us--

HER HONOUR: Sorry, that's about three questions.

20 WITNESS DENNISS: Okay, sorry.

HER HONOUR: Are you following this?

25 WITNESS DENNISS: It's, it's complex as opposed to - let me try and ask it in the simplest way.

WITNESS FAHRER: Your Honour, I don't even understand the question.

30 WITNESS DENNISS: Well, I don't understand the model. Well, I could if you'd give me the results. If - you have assumed, what you've actually modelled is a world increase in demand. Why didn't you provide results that show two scenarios, here's a worldwide increase in demand for coal and here's the benefits with the Ashton case, sorry, here's a worldwide increase in demand for coal and here's - with the Ashton mine, and here's a worldwide increase in demand for coal without the Ashton mine. Why didn't you--

35 WITNESS FAHRER: Well, I--

40 WITNESS DENNISS: Why didn't you give us those two scenarios?

45 WITNESS FAHRER: Well, I have. I mean, in effect, I mean, what I've done is I've modelled the effect of the, the Ashton mine and they're, and, and they all, they are relative to, and, and all the results are in a counterfactual where the Ashton mine is not built.

WITNESS DENNISS: Yeah, but in the counterfactual where the Ashton mine isn't built you've got a lower level of world demand for Australian coal.

50 WITNESS FAHRER: That's right.

5 WITNESS DENNISS: So I, that's my question, what you've really modelled is the economic impact of a world, increase in world demand for Australian coal, and it's logically consistent that it's possible to have a world increase in demand for Australian coal without the Ashton coal mine, so isn't the, isn't the actual counterfactual we need not - you're comparing two scenarios, higher world demand for Australian coal, lower demand for Australian coal. Don't we really want to know the, the, the impact of an increase in world demand on Australia's coal, that's the baseline, and then the counterfactual--

10 HER HONOUR: I've got to say, you've lost me yonks ago.

WITNESS DENNISS: Okay, I'm sorry.

15 HER HONOUR: Dr Fahrer's--

WITNESS DENNISS: It is--

HER HONOUR: --following fine but I'm not.

20 WITNESS DENNISS: All right, well--

WITNESS FAHRER: You've lost me too.

25 HER HONOUR: You've got to from my point of view just ask simpler questions.

WITNESS DENNISS: Sorry, if we look at--

30 HER HONOUR: Put simpler propositions to me.

WITNESS DENNISS: If we look at Dr Fahrer's--

35 HER HONOUR: And also the point - how many more questions do you anticipate asking?

WITNESS DENNISS: This is probably the last one.

HER HONOUR: Okay, just break it down.

40 WITNESS DENNISS: Well, maybe we need to look at Dr Fahrer's affidavit with his graph and his counterfactuals. So if we look at page 7, what we do when we run a CGE or any modelling exercise is we, we have two scenarios, a policy case and a reference case, and that's what Dr Fahrer's done here. So the reference case that he's presented is a reference case without the
45 Ashton mine and the policy case is the policy case with the Ashton mine, but there is, there are two differences between his policy case and his reference case. There are two differences, but he only describes one difference.

50 In his policy case there is an Ashton mine and a high level of world demand,

and in his reference case there is no Ashton mine and a low level of world demand, and that prevents us, in looking at his results, from distinguishing what the benefits of an increase in world demand for coal is from the benefits of having the Ashton mine. The meaningful counterfactual that Dr Fahrer should have presented--

5
HER HONOUR: Sorry, are you putting this to him now? Is this your question to him?

10 WITNESS DENNISS: Yes, well, it's - okay, I'll put a question to you. Dr Fahrer--

GALASSO: Before you do, just one thing. Your Honour, can I just as a global objection say I have never been in a case in which I've experienced this degree of questioning from one witness to another. I would have thought this is what the joint process is all about. Leave that aside.

15
HER HONOUR: I mean, I agree.

20 GALASSO: I wouldn't mind knowing where in Dr Denniss's report this topic is raised and then where in the joint report this topic is raised.

WITNESS DENNISS: I, I can answer that. In our joint report--

25 GALASSO: No, your report first, please. You drafted your affidavit after you had Dr Fahrer's affidavit.

WITNESS DENNISS: Yes.

30 GALASSO: Well, where in your affidavit is this point raised?

WITNESS DENNISS: This point is not raised in my affidavit because I didn't have enough information until I spoke to Dr Fahrer 20 minutes ago.

35 GALASSO: Well, where in the joint report is it raised?

WITNESS DENNISS: Well, it's rebutted by Dr Fahrer in our joint report, perhaps confusingly for both Dr Fahrer and I, on page - where Dr Fahrer - on the top of page 7, bottom of page 6, Dr Fahrer says:

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"The model is entirely consistent with orthodox economic theory and does not assume that an increase in the supply of coal from the project will lead to an increase in the price of coal received by the Australian producers."

45
Dr Fahrer and I tried to have this conversation on the phone. I didn't have enough information and it was only when I realised 20 minutes ago what he'd done that, that the issue here is what causes the increase in the price of coal, and we tried to have this conversation on the phone, it wasn't very productive, I asked for more evidence, it wasn't provided, but after the questions I asked

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Dr Fahrer just then I now realise how, from my point of view, fundamentally flawed his reference case is.

5 GALASSO: Well, you don't say anything about fundamental flaw in the joint report. All you say, as I understand it, in answer to the proposition of Dr Fahrer says is you dispute that Dr Fahrer's model is entirely consistent with orthodox economic theory. You don't say anything about him not answering any questions or not providing any detail or that you provided a list of questions and that with the answers it would give rise to the sort of narrative that you're giving now, Dr Denniss, is it?
10

WITNESS DENNISS: I, I, I disagree. Perhaps we were--

15 GALASSO: Well, where is it in this document?

WITNESS DENNISS: Well, just about to read it to you.

20 HER HONOUR: Look, we've just got to cut through and work out what's the fairest from here. I agree ideally it would have happened in the joint conference, I don't know why it didn't, it didn't, and I agree this is--

25 GALASSO: As a broad objection I must say, your Honour, in the small experience I have in this Court, this degree of cross-examination by one witness of another in a raw sense in the absence of - can I say, we're all in vacuum of this--

HER HONOUR: Yes, I agree it's not ideal.

30 GALASSO: --is remarkable, and can I formally object to it?

HER HONOUR: So you want me to stop him now?

35 WHITE: Your Honour, perhaps I can just short-circuit it. We've had a lot of questions, your Honour has indulged Dr Denniss in a lot of questions. Perhaps now we could just ask ..(not transcribable).. frankly a lot of it's gone over my head. Perhaps--

HER HONOUR: I join in that.

40 WHITE: Yes.

HER HONOUR: Well, no, I think I understand the pointy end of it, but anyway, yes.

45 WHITE: That's what I'm coming to, your Honour.

HER HONOUR: In terms of what Dr Dennis wants--

50 WHITE: What I was going to ask--

HER HONOUR: --to be able to say.

5 WHITE: Perhaps we can just ask now, Dr Denniss, having asked his questions and go his answers, perhaps he could just summarise for us what he asks us to take from that. That might just be the easiest way forward.

HER HONOUR: All right, and then of course Dr Fahrer should be able to--

10 WHITE: Of course, I'm not saying he shouldn't but I want to know what we get out of or what Dr Denniss says we get out of that series of questions and answers.

HER HONOUR: Are you able to do that?

15 WITNESS DENNISS: I think so. The, the modelling question is, what are the benefits of this mine compared to not having this mine? So what we want to do in economics or in any experiment is control for as many variables as we can so we can focus on the one thing that's changed, and it's clear to me that the, the, the, the graph on the top of page 7 shows that the, the, the economic indicator, the benefit, is a little arrow that says, "Impact of SEOC project," and the clear implication of both that graph and the modelling results is that it's the project that drives the benefits to Australia.

25 What I now understand from Dr Fahrer's answers to my question is that some portion - and I would suspect a very large portion - of what's described as impact of SEOC project is actually impact of increased world demand for Australian coal, and they are two very different scenarios, so to compare the SEOC project (with high world demand) to non-SEOC project (with low world demand), which is what's been done in this modelling, conceals from me and from anybody else what the relative size of the economic benefits from the SEOC project are and what the relative benefits of a modelled increase in world demand for Australian coal are.

35 WITNESS FAHRER: May I respond, your Honour?

HER HONOUR: Yes, please do.

40 WITNESS FAHRER: I think I understand Dr Denniss's point. Not entirely sure but I think I understand Dr Denniss's point. So what Dr Denniss is saying - but the conclusion that he makes is entirely false. What Dr Denniss is saying is that there would be, there's going to be a demand for Australian coal anyway, Australian coal producers and Australian - by inference, so there's going to, it's going to benefit anyway, and so the extra benefit that you get from the SEOC mine as such is pretty small. Is that right?

45 WITNESS DENNISS: I, I've said it's small throughout, yes.

50 WITNESS FAHRER: Okay. Let's assume, for the sake of Dr Denniss's argument, that this demand for Australian coal is 11 million tonnes, I think, in, in aggregate, was - well, not - demand for world coal was supplied instead

out of Indonesia, because for, for whatever reason, but the demand for world coal, this increase in demand, does - will in fact lift the prices received by all Australian producers and they will be better off, but it will be tiny, your Honour, just tiny.

5

But the demand for world coal, this increase in demand, does really in fact lift the prices received by all Australia producers and they will be better off, but it will be tiny, your Honour, just tiny. The real benefit occurs from the actual production - production of the actual - actual production of the coal, as I have modelled it.

10

Now, does it have to be the SEOC mine in the modelling? No. It could be a mine up the road by another owner, of course. I mean, you know, there's nothing - I mean the modelling is of the SEOC project, but if exactly the same mine output prices, you name it, employees, was done by Coal & Allied five kilometres up the road, the macroeconomic effects would be the same. But Dr Denniss's fundamental point that the - I think it's his fundamental point. I'm not sure. I think it's his fundamental point that the modelling is somehow flawed in that respect is just wrong, your Honour.

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HER HONOUR: I think we're up to barristers asking questions.

GALASSO: I'm not daring to.

25

HER HONOUR: Another first. All right, anybody else want to ask any questions?

WHITE: Well, I've been sacked anyway.

30

HER HONOUR: Well, ultimately I've got to puzzle through all this. So is there anything else anybody thinks needs to be clarified?

WHITE: Yes, there is just one thing I did want to - yes, I do want to clarify something, your Honour, if I may and that's actually with--

35

HER HONOUR: If you believe you can, Mr White, please feel free.

WHITE: Dr Denniss, do you recall that Dr Fahrer took us to table 2 in his affidavit?

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WITNESS DENNISS: Yes.

WHITE: In remarks earlier on Dr Fahrer said - I'm paraphrasing - "Dr Denniss and I are in agreement that this project is not about creating jobs. It's about creating net incomes for the local area, the State and for Australia." I think I asked you to come back on that in opening. I'm not sure if you did in where we got to and then Dr Fahrer referred us to this table where he's making that point and he talked about the increase in income as a result of the mine to the local region, Singleton and Muswellbrook of being some \$102 million and there we see what's contained in the table and a total increase in income to

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New South Wales of 333.5 million. Do you see that?

WITNESS DENNISS: Yes.

5 WHITE: Now, what I just want to ask you about is, well, firstly, can you comment on that?

10 WITNESS DENNISS: Sure. I hate to say, may I ask one question? What do you mean by net present value, as opposed to present value?

HER HONOUR: I think you will have to puzzle through, Dr Denniss. That should have all happened much earlier.

15 WITNESS DENNISS: Okay. All right. I think it came up--

WHITE: Dr Denniss, we have had a few questions from you.

20 WITNESS DENNISS: Sure. Sorry. Okay. If I talk about the present value of those numbers, what that does is it's an attempt to take a flow of benefits over a long period of time and then express them in a lump sum. So, for example, if I were to offer you \$100 a year for the next ten years, the present value of that - the present value of that is what lump sum would you be willing to accept. So if I offered you \$200 or \$100 a year for ten years, economic theory says most people would take 100 for ten years. Commonsense suggests that
25 most people would probably take the 200 bucks straight away.

30 So there is an issue in the way the present value data is being used here because these benefits accrue over a period of time and you're effectively taking a long flow of benefits and turning them into a lump sum stock, but then you're comparing that lump sum to say incomes today or GDP today, when really, if you wanted to put it into the right perspective, you would probably compare it to the present value of the flow of GDP over that time or the flow of personal income over that time.

35 So present value is a well known technique. It performs an important economic function, but it does allow you to take a flow of benefits over time, package it up as if it was a lump sum that came to you today and then, when you then divide it by this week's income or this year's income, a lot of people then perhaps over emphasise its size.

40 WHITE: So the figures are presented there. Should her Honour treat these as showing a benefit of the mine?

45 WITNESS DENNISS: Yeah, she should, but my point about these terms of trade benefits, or the so-called terms of trade benefits, are that they're exaggerated. I don't believe that people working in pubs will really get a pay rise as a result of this mine going ahead and if they don't get a pay rise, then these things that have been called terms of trade benefits aren't going to accrue.

50

WHITE: But where do we see the terms of trade benefits alleged by Dr Fahrer feed into table 2?

5 WITNESS DENNISS: Well, you would probably have to ask him, but the -
can you answer that question better than me?

WITNESS FAHRER: Are you asking me or am I responding to Dr Denniss?

10 WITNESS DENNISS: I just think you might give a better answer of how we get
those.

WHITE: I'm trying to get to grips with these tables, that's all.

15 WITNESS FAHRER: Okay. All right, well, let's look. For example, table 2,
the first number, first row, first column, 968.5 million. You will see that number
appearing in table 3 twice in fact, 968.5 million. So that's the total value of
economic output in the region.

20 WHITE: Thank you. So terms of trade does feed into the real income column
in table 2?

WITNESS FAHRER: Yes. Of course, yes.

25 WHITE: Thank you. That's fine. Dr Denniss asked whether it did, that's all,
and you've clarified it did.

WITNESS DENNISS: Yes. So to the extent the terms of trade benefits are
over estimated, those results in table 2 are over estimated.

30 WHITE: Okay. Is there anything else, any other comment you want to
make about table 2?

WITNESS DENNISS: No.

35 WHITE: Thank you very much.

40 HER HONOUR: Is it safe to say this, but in terms of the joint report, I've
looked through that and my impression is we have covered off everything in
the joint report this morning? Is that fair to say?

WHITE:

45 WITNESS DENNISS: I asked Dr Fahrer whether he would be willing to
provide me with the modelling outputs that I previously asked and I think
he agreed that, if I could specify which ones I wanted, he would still provide
them. So I don't know if that's of any use, but if I - all of the issues--

50 HER HONOUR: I'm afraid we're about to get to the end of your evidence.
Ideally this should all have happened earlier, much earlier.

WITNESS DENNISS: I asked for it.

5 HER HONOUR: Probably you should have told your legal team a bit more about some of these difficulties because it's not ideal to have this sort of level of detail coming out new for everybody in this way. I don't know. You could talk to your legal team. At this stage they would have to reopen their case if you did more work. I don't have a view about that. I haven't got the application before me. So maybe you talk to Mr White or not, as the case may be.

10

If nothing else, I will excuse these gentlemen, but Dr Fahrer I know you're coming back. Should we have a longer lunch today and have Mr Campbell back at 2?

15

WHITE: Yes.

HER HONOUR: I could use the time.

20

WHITE: Yes.

HER HONOUR: And I thank you for your assistance all together and I'll see you after lunch, Dr Fahrer. So I'll adjourn until probably a couple of minutes past 2 o'clock.

25

WITNESS DENNISS WITHDREW

LUNCHEON ADJOURNMENT

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**A COMPLETED TRANSCRIPT WILL BE ISSUED
FRIDAY 13 SEPTEMBER 2013**