TRANSCRIPT OF PROCEEDINGS

The attached transcript, while an accurate recording of evidence given in the course of the hearing day, is not proofread prior to circulation and thus may contain minor errors.

2015/16 HAZELWOOD MINE FIRE INQUIRY

MELBOURNE

WEDNESDAY, 9 DECEMBER 2015

THE HONOURABLE BERNARD TEAGUE AO - Chairman

PROFESSOR JOHN CATFORD - Board Member

MR PETER ROZEN - Counsel Assisting

MS RUTH SHANN - Counsel Assisting

MR RICHARD ATTIWILL QC - State of Victoria

MS RENEE SION - State of Victoria

MS RACHEL DOYLE SC - GDF Suez Australian Energy

MS MARITA FOLEY - GDF Suez Australian Energy

DR MATTHEW COLLINS QC - Energy Australia Yallourn

MS EMILY LATIF - Energy Australia Yallourn

MS JULIET FORSYTH - AGL Loy Yang

MS LISA NICHOLS - Environment Victoria

MS EMMA PEPPLER - Environment Victoria

- 1 CHAIRMAN: Yes, Ms Shann.
- 2 MS SHANN: Thank you, Chairman. If I could now call the water
- 3 panel, consisting of Ms Davis, Mr Rodda and Mr Mawer.
- 4 <CLINTON EDMUND RODDA, affirmed and examined:
- 5 <DAVID JOHN MAWER, affirmed and examined:
- 6 <SHARON DAVIS, affirmed and examined:
- 7 MS SHANN: Thank you. Dr Davis, if I could start with you and
- gives just go through the administrative process of tendering
- 9 your statements. You have made two statements to the
- 10 Inquiry, is that right?
- 11 DR DAVIS: That's correct.
- 12 MS SHANN: The first one is dated 2 November 2015. That's
- behind tab 1B of volume 2 and the Ringtail is
- VGSO.1018.001.0001. Have you had an opportunity to read
- that statement before coming into court?
- 16 DR DAVIS: I have.
- 17 MS SHANN: And the statement is true and correct?
- 18 DR DAVIS: It is.
- 19 MS SHANN: Any changes you wish to make?
- 20 DR DAVIS: No.
- 21 MS SHANN: There are a number of attachments to that statement
- and you are familiar with those attachments?
- 23 DR DAVIS: I am.
- 24 MS SHANN: I tender that.
- 25 #EXHIBIT 7A Statement of Sharon Davis dated 2/11/2015.
- 26 MS SHANN: After some further questions you provided a
- 27 supplementary statement dated 4 December 2015?
- 28 DR DAVIS: I did, yes.
- 29 MS SHANN: And you are familiar with the contents of that?
- 30 DR DAVIS: Yes.
- 31 MS SHANN: True and correct?

- 1 DR DAVIS: Yes.
- 2 MS SHANN: Anything you wish to add?
- 3 DR DAVIS: No.
- 4 MS SHANN: I tender that.
- 5 #EXHIBIT 7B Supplementary statement of Sharon Davis dated
- 6 4/12/2015.
- 7 MS SHANN: Thank you. For the assistance of the parties that's
- 8 volume 11, tab 25. Mr Rodda, you made a statement on
- 9 4 December 2015?
- 10 MR RODDA: Yes, I did.
- 11 MS SHANN: And that statement appears behind tab 24 in volume
- 12 11. You have read that statement before coming into
- 13 court?
- 14 MR RODDA: Yes, I have.
- 15 MS SHANN: And it is true and correct?
- 16 MR RODDA: Yes, it is.
- 17 MS SHANN: Any changes you wish to make?
- 18 MR RODDA: No.
- 19 MS SHANN: I tender that.
- 20 #EXHIBIT 8 Statement of Clinton Rodda dated 4/12/2015.
- 21 MS SHANN: Mr Mawer, I understand you have provided an outline
- or a statement but in an unsigned form?
- 23 MR MAWER: I believe so, yes.
- 24 MS SHANN: And that's dated 7 December 2015?
- 25 MR MAWER: Yes, it is.
- 26 MS SHANN: Have you read that before coming into court?
- 27 MR MAWER: Yes, I have.
- 28 MS SHANN: Are the contents true and correct?
- 29 MR MAWER: Yes, they are.
- 30 MS SHANN: Any changes you wish to make?
- 31 MR MAWER: No, I do not.

- 1 MS SHANN: I tender that.
- 2 #EXHIBIT 9 Statement of David Mawer dated 7/12/2015.
- 3 MS SHANN: That's tab 27 in volume 11. If I can first perhaps
- 4 just ask each of you to briefly introduce yourselves and
- 5 explain where you are from and how you relate to each
- 6 other insofar as water in Victoria goes. Dr Davis?
- 7 DR DAVIS: I am the Executive Director of Water Resources with
- 8 the Department of Environment, Land, Water and Planning.
- 9 I am responsible for a range of different programs
- including the entitlements and markets element of water
- 11 resource management and I guess from a broader perspective
- 12 DELWP has responsibility for the overarching policy
- direction for the State.
- 14 MS SHANN: Mr Rodda or Mr Mawer?
- 15 MR MAWER: I'm the Managing Director of Gippsland Water.
- 16 Gippsland Water has commercial arrangements with the three
- major generators to provide water in varying volumes.
- 18 MS SHANN: The power generators?
- 19 MR MAWER: Yes.
- 20 MS SHANN: Which are located within the mines?
- 21 MR MAWER: Attached to the mines, yes. So our role primarily
- is to provide varying amounts of water, either potable
- drinking standard water or bulk raw water, for their
- 24 operational uses.
- 25 MR RODDA: Clinton Rodda, Managing Director, Southern Rural
- 26 Water. Southern Rural Water looks after I guess rural
- 27 water across the south of the state. Specifically in
- relation to the Latrobe Valley we're the storage operator
- and resource manager for the Latrobe bulk entitlements.
- We also hold two bulk entitlements in the system and we
- 31 manage the groundwater licences that exist with each of

- 1 the mines.
- 2 MS SHANN: All right. I think really the starting point is
- 3 what is groundwater and how is that licensed? Dr Davis,
- 4 is that a question best for you?
- 5 DR DAVIS: I could make some comments. In terms of what is
- 6 groundwater, groundwater is the water that occurs in a
- 7 saturated phase below the surface of the ground. So
- 8 that's where you have, within the profile, water that
- 9 occurs completely saturated. The licensing of that is a
- 10 function that's delegated to water authorities, so the
- 11 licensing is an issue for Southern Rural Water.
- 12 MS SHANN: And that's your purview, Mr Rodda?
- 13 MR RODDA: Yes. So we issue and manage groundwater licences
- and monitor compliance to the licence conditions. These
- particular groundwater licences were issued by the
- minister, so we operate under delegation from the
- minister.
- 18 MS SHANN: In terms of the three mines that we are here dealing
- with, they have each got groundwater licences until 2025?
- 20 MR RODDA: That's correct.
- 21 MS SHANN: The amounts vary in terms of how much water they are
- 22 entitled to draw out of that source; is that right?
- 23 MR RODDA: That's correct.
- 24 MS SHANN: But it's for Loy Yang 19,000 megalitres?
- 25 MR RODDA: Yes, there's a schedule in the licence which
- 26 explains the volume they are allowed to take out each
- 27 year. So, it can vary over the period of time, but
- largely that particular one is around 19,000 megs.
- 29 MS SHANN: And Hazelwood 22,000 and Yallourn 3,285?
- 30 MR RODDA: Yes.
- 31 MS SHANN: In terms of the purpose of those licences, if we

- could perhaps put up on the screen DELWP.1006.001.0048,
- which is the Loy Yang licence and that's attached,
- 3 Dr Davis, to your first statement. Mr Rodda, I will ask
- 4 you a few questions about this, but part of the purpose of
- 5 having the three of you together is if at any time you
- 6 think one of your colleagues is better placed to answer
- 7 something, please just indicate.
- 8 MR RODDA: Yes.
- 9 MS SHANN: Mr Rodda, firstly in terms of the groundwater
- 10 licences for the three mines, do they have identical
- 11 conditions?
- 12 MR RODDA: Other than the volumes, largely they are the same,
- 13 yes.
- 14 MS SHANN: I will ask you about a few of the conditions. Using
- 15 the Loy Yang example, just indicate if these are any
- 16 conditions which are different as compared to the other
- mines. So, the objective of the licence at the top is to
- 18 allow efficient depressurising of the Loy Yang open cut
- mine. Is that your understanding, being that the removal
- is part of the stability process whilst the mining is
- 21 occurring?
- 22 MR RODDA: Yes, that's correct.
- 23 MS SHANN: And indeed the preamble, if you just scroll down the
- licence on the same page, "The extraction of groundwater
- is for the purpose of achieving safe and stable conditions
- in the Loy Yang open cut mine as authorised under the
- 27 groundwater licence."
- 28 MR RODDA: Yes.
- 29 MS SHANN: Over the page, condition 2, "The licensee is
- 30 authorised to take and use groundwater to facilitate
- 31 mining for coal and generation of electrical energy and

- 1 purposes incidental thereto." And condition 5, "The
- 2 licensee may only take and use groundwater under this
- 3 licence on the land with respect to which the licensee
- 4 holds a mining licence for the Loy Yang power mine."
- 5 MR RODDA: Yes.
- 6 MS SHANN: Just looking then at the purpose for which the
- 7 licence exists, is it correct to say, firstly, that the
- 8 purpose is limited by condition 2, to facilitate mining
- 9 for coal and generation of electrical energy?
- 10 MR RODDA: And purposes incidental thereto, yes.
- 11 MS SHANN: Yes, and, secondly, that it only operates during the
- 12 term of the licence?
- 13 MR RODDA: That's correct.
- 14 MS SHANN: For mining.
- 15 MR RODDA: That's correct.
- 16 MS SHANN: In terms of this idea that each of you are familiar
- with of whether or not these licences and entitlements can
- be used to flood the mine voids after closure, what's the
- 19 position from Southern Rural Water's perspective of the
- 20 groundwater licences?
- 21 MR RODDA: It is not clear, in our view, because it talks about
- "purposes incidental thereto" and given this was issued in
- 23 1996 by the minister, I can't speculate what was on his
- 24 mind at that particular point in time. But we would see
- 25 that would be a matter for consideration at the renewal of
- a licence or if it was brought forward for early renewal.
- 27 MS SHANN: It's not something that from Southern Rural Water's
- 28 perspective can be presumed that this licence can be used
- 29 to start flooding the mine for rehabilitation or closure
- 30 purposes?
- 31 MR RODDA: At this point we don't have a view either way.

- 1 MS SHANN: Has anyone asked you to drill down into that a
- 2 little more as to what Southern Rural Water's view would
- 3 be about giving groundwater licensing for the purpose of
- 4 flooding the pits?
- 5 MR RODDA: No.
- 6 MS SHANN: Dr Davis, what's the perspective of DELWP as to
- 7 whether or not the groundwater licences in their current
- 8 form can be used for the purpose of rehabilitation?
- 9 DR DAVIS: I don't have anything further to add other than what
- 10 Southern Rural Water has said in relation to that.
- 11 MS SHANN: Has DELWP been asked firstly by the mines about
- whether or not the groundwater licence use could be rolled
- over to help fill the mine voids?
- 14 DR DAVIS: No.
- 15 MS SHANN: What about DEDJTR?
- 16 DR DAVIS: No.
- 17 MS SHANN: And Mr Mawer, anything to add to that from your
- 18 perspective?
- 19 MR MAWER: It doesn't impact on Gippsland Water.
- 20 MS SHANN: Thank you. In relation to bulk entitlements, again
- 21 perhaps, Mr Rodda, you are best placed to just briefly
- 22 explain what that is?
- 23 MR RODDA: We administer the bulk entitlements, but we didn't
- 24 establish them. So the bulk entitlements basically give
- 25 permission for extraction of water from the waterways,
- either from Blue Rock Lake, Lake Narracan or what we call
- 27 run-of-river flows. So Southern Rural Water as a storage
- operator has an obligation to make sure there is a certain
- amount of what's called passing flows, the flows that are
- 30 required at various strategic points of the river for
- 31 environmental health and other purposes, and each of the

- 1 holders of a bulk entitlement has rights to extract water
- for their purposes as set out in the bulk entitlements.
- 3 MS SHANN: Two of the mines have bulk entitlements directly, if
- 4 that's the word to use.
- 5 MR RODDA: Yes, correct.
- 6 MS SHANN: And Hazelwood has it indirectly. Perhaps you could
- 7 explain, if you understand what that means, what the
- 8 difference is between the Hazelwood position as compared
- 9 to the other two?
- 10 MR RODDA: Actually, I think David would be better placed to
- 11 explain that because we don't look after that element of
- 12 it.
- 13 MS SHANN: Thanks, Mr Mawer.
- 14 MR MAWER: Bulk entitlement is effectively a right to take
- 15 water from source. Hazelwood has a commercial arrangement
- with Gippsland Water and I think in my statement
- I indicated 14 gigalitres a year of water entitlement via
- Gippsland Water and that would come from our bulk
- 19 entitlement held in our name.
- 20 MS SHANN: All right. So that's a commercial contractual
- 21 agreement?
- 22 MR MAWER: That's a commercial contractual relationship.
- 23 MS SHANN: And in relation to the other two mines they have got
- 24 a direct relationship with Southern Rural Water where they
- 25 have a bulk entitlement themselves?
- 26 MR RODDA: Their relationship is actually with the government
- 27 because the government issues the bulk entitlement. The
- 28 minister does. We manage it and we charge them costs for
- 29 managing it.
- 30 MS SHANN: In terms of the amounts that each are entitled to,
- 31 it is far larger than the groundwater; is that right?

- 1 MR RODDA: It is larger, yes.
- 2 MS SHANN: In terms of, for example, Yallourn, it's up to
- 3 36,000 megalitres?
- 4 MR RODDA: Yes.
- 5 MS SHANN: In terms of how bulk entitlements work, there is no
- 6 guarantee of an actual amount; is that right?
- 7 MR RODDA: That's correct.
- 8 MS SHANN: Can you explain that? It's about percentage of
- 9 what's available?
- 10 MR RODDA: Yes. So each entitlement holder has, if we take
- Blue Rock as an example, they have a share of the capacity
- of Blue Rock. So they have a storage volume that they can
- 13 collect their water in, if you like, until they reach that
- 14 limit. When they reach that limit, it spills over into
- other entitlement holders' holdings and if the dam is full
- and all the entitlement holders' holdings are full within
- the dam, then it spills out of the dam and downstream.
- So, each of the entitlement holders has a percentage share
- of inflows and we have a water accounting software that
- 20 actually accounts for the water that comes in and the
- 21 requests that are made by the various bulk entitlement
- 22 holders to extract water from different parts of the
- 23 system.
- 24 MS SHANN: So things like climate change, drought, other needs
- 25 from that water source may influence in the future how
- 26 much of a percentage is available as part of a bulk
- 27 entitlement?
- 28 MR RODDA: No, the percentages are fixed, but the way they call
- on water is different because typically the Latrobe system
- is a very reliable system. It has a lot of water
- 31 consistently running through the system. So, for example,

- 1 Blue Rock is full at the moment. The first call that the
- 2 power generators make is typically on their run-of-river
- 3 entitlements, so they don't touch their storage unless
- 4 there's no passing flows in the system to extract water
- 5 from. Then they will move to Blue Rock or Lake Narracan
- 6 to draw on their stored water.
- 7 MS SHANN: Thank you. Are you able to say, for example, in
- 8 20 years time what a percentage share would look like in
- 9 terms of an actual amount that could be drawn by a
- 10 particular entitlement holder?
- 11 MR RODDA: Their percentage shares won't change.
- 12 MS SHANN: Yes, but what actual amount they could take in terms
- of megalitres?
- 14 MR RODDA: No, I couldn't speculate on that, no.
- 15 MS SHANN: In terms of these particular bulk entitlements, is
- it the case for all three, even though there's a slightly
- different legal arrangement with Hazelwood, that they are
- issued to the company running the power station?
- 19 DR DAVIS: I can answer that question. So in terms of bulk
- 20 entitlements, they are issued to under the Water Act,
- 21 bulk entitlement can be held by a power generation
- company.
- 23 MS SHANN: And they are tied to the purpose of operating the
- power stations?
- 25 DR DAVIS: That's my understanding, yes.
- 26 MS SHANN: So if those power stations were no longer
- 27 operational, those entitlements would cease to exist?
- 28 DR DAVIS: No, it's not that an entitlement would cease to
- 29 exist. Under the Water Act a power generation company can
- 30 hold a bulk entitlement. So I think it's not
- further I wouldn't be able to answer now without

- 1 additional advice whether, if a company ceases to generate
- 2 power, how that would impact on their capacity to hold
- 3 that bulk entitlement.
- 4 MS SHANN: In light of this Inquiry, have you made any such
- 5 investigations?
- 6 DR DAVIS: No, I haven't.
- 7 MS SHANN: Have you been asked to?
- 8 DR DAVIS: No.
- 9 MS SHANN: Have any of the mines asked DELWP whether or not the
- 10 bulk entitlements could be used for the purposes of
- rehabilitation as in flooding the mines?
- 12 DR DAVIS: No, not to my knowledge.
- 13 MS SHANN: Has DEDJTR ever asked DELWP whether the bulk
- entitlements could be used for that purpose?
- 15 DR DAVIS: No.
- 16 MS SHANN: Perhaps just for completeness, you note at paragraph
- 43 of your statement that each bulk entitlement states
- that it is for the purpose of supplying the electricity
- 19 generation works, and that's what we have just been
- 20 talking about?
- 21 DR DAVIS: Yes.
- 22 MS SHANN: We have been provided with three documents relating
- to advice that has been sought and given on a recent work
- 24 plan variation by the Loy Yang Mine. Mr Rodda, firstly,
- are you familiar with a letter dated 24 August 2015 by
- Vince Lopardi?
- 27 MR RODDA: Yes.
- 28 MS SHANN: What's Vince Lopardi's role in relation to you?
- 29 MR RODDA: Vince looks after a number of referrals that we
- receive in our role as a referral authority. So, in this
- 31 case he received the Loy Yang Mine work plan variation

- 1 referral.
- 2 MS SHANN: Does he report to you?
- 3 MR RODDA: No, he reports to a general manager, groundwater and
- 4 rivers, who then reports to me.
- 5 MS SHANN: That letter is volume 10, tab 24, or it might be
- 6 volume 11, without a Ringtail on it. You are familiar,
- 7 though, with the contents of this letter?
- 8 MR RODDA: Familiar with the contents, yes.
- 9 MS SHANN: Is what occurred that you received, as in Southern
- 10 Rural Water received, a copy of the Loy Yang work
- variation and were asked to provide some advice on it?
- 12 MR RODDA: That's right. We are a referral authority, so the
- work plan variation was referred to us by DEDJTR and so in
- our role as referral authority we provided comment back.
- 15 MS SHANN: And the comments that are outlined in this letter,
- are they comments you agree with?
- 17 MR RODDA: Yes, I'm comfortable with that.
- 18 MS SHANN: And they include that there are a significant number
- of risks related to the long-term availability of water?
- 20 MR RODDA: I think our interest is around groundwater and the
- 21 management of groundwater. So we raised a number of
- 22 matters that we felt DEDJTR should consider in their role
- as a regulator considering this work plan variation.
- 24 MS SHANN: And in their role in considering whether or not to
- 25 accept the work plan variation?
- 26 MR RODDA: Accept or decide upon, yes.
- 27 MS SHANN: Did you, as in Southern Rural Water, provide advice
- that there were a significant number of risks relating to
- 29 whether or not their water could be sourced for the
- 30 purpose as set out in the Loy Yang work plan variation?
- 31 MR RODDA: I think the core of this was around the groundwater

- 1 risks. There was one reference to the volume of water
- 2 required in the future which was referred to in the plan
- and asked the regulator to consider those, the
- 4 availability of that water and the risks associated with
- 5 the use of that water.
- 6 MS SHANN: And it was identified that there were a significant
- 7 number of risks in that regard?
- 8 MR RODDA: Well, we identified that there were risks to be
- 9 considered, yes.
- 10 MS SHANN: So at page 2, the first dot point halfway down,
- "There are a significant number of risks".
- 12 MR RODDA: Yes.
- 13 MS SHANN: Does the letter then go on to detail a number of
- 14 water quality management issues that are of concern to
- 15 Southern Rural Water?
- 16 MR RODDA: That's correct.
- 17 MS SHANN: Including that there is a need for these issues to
- be determined well before closure as they may influence
- 19 closure strategy?
- 20 MR RODDA: Yes, that's correct.
- 21 MS SHANN: There is a reference towards the bottom of the third
- 22 page which says, "I have been advised by DELWP that a
- 23 meeting with themselves together with their groundwater
- 24 and ecosystems representatives to discuss the amendment
- and potential implication for water management is
- essential."
- 27 MR RODDA: Yes.
- 28 MS SHANN: Dr Davis, has that meeting happened?
- 29 DR DAVIS: No.
- 30 MS SHANN: Is it scheduled to occur?
- 31 DR DAVIS: I don't believe there's a meeting currently

- 1 scheduled, no.
- 2 MS SHANN: Do you agree with the sentiment that Mr Lopardi
- 3 expresses that DELWP considers such a meeting to be
- 4 essential?
- 5 DR DAVIS: That certainly reflects the advice that people in my
- 6 team provided.
- 7 MS SHANN: And that advice is contained in two emails from
- 8 DELWP to Mr Lopardi?
- 9 DR DAVIS: Yes.
- 10 MS SHANN: And those were provided this morning and dated
- 11 30 July 2015 and 21 August 2015?
- 12 DR DAVIS: Yes.
- 13 MS SHANN: I think you now have a copy of those. These are
- from Simon Baker at DELWP?
- 15 DR DAVIS: Yes.
- 16 MS SHANN: What's his role?
- 17 DR DAVIS: Simon is a senior hydrogeologist in our water resource
- assessment team, so he has a technical role.
- 19 MS SHANN: You are familiar with the content of these two
- 20 emails?
- 21 DR DAVIS: I am.
- 22 MS SHANN: And do you agree with the content of them, insofar
- as it relates to the advice on the water issue?
- 24 DR DAVIS: I agree that that represents Simon's technical
- 25 advice on reviewing those issues.
- 26 MS SHANN: The second email, there's a number of DELWP persons
- 27 copied in to. When did you first see these emails?
- 28 DR DAVIS: These I'd say earlier this week.
- 29 MS SHANN: Were you involved in discussions with Mr Baker
- 30 around the time of 30 July or 21 August?
- 31 DR DAVIS: I wasn't, no.

- 1 MS SHANN: Were senior members of your team?
- 2 DR DAVIS: I don't believe so.
- 3 MS SHANN: Insofar as there's reference in the 21 August 2015
- 4 letter to, firstly, "DEDJTR need to advise us on what are
- 5 the proposed licensing arrangements, the implications of
- 6 who will be responsible for the implementation of
- 7 remediation should the operator cease to operate after the
- 8 planned closure of the mine or if this should happen in
- 9 the interim." Is that a sentiment that you share or a
- 10 concern you share that there needs to be some advice from
- 11 DEDJTR in that regard?
- 12 DR DAVIS: I think that a sentiment that information is
- exchanged and comments received is certainly something
- 14 that I would support.
- 15 MS SHANN: Do you agree that DEDJTR needs to provide DELWP with
- advice on what the proposed licensing arrangements are?
- 17 DR DAVIS: I think that could you just ask that question
- 18 again, sorry?
- 19 MS SHANN: Do you agree that DEDJTR needs to provide advice to
- DELWP on what the proposed licensing arrangements are?
- 21 DR DAVIS: I guess I'm not sure if I think it would be
- 22 beneficial.
- 23 MS SHANN: Do you agree that the implications of who will be
- responsible for the implementation of remediation should
- 25 the operator cease to operate after the planned closure of
- the mine or if this should happen in the interim is
- 27 something that DEDJTR needs to advise DELWP on?
- 28 DR DAVIS: I don't think that's a need.
- 29 MS SHANN: Is it something that would be a good idea?
- 30 DR DAVIS: I think sharing that information would be useful.
- 31 MS SHANN: And would it be useful to assist DELWP and in turn

- 1 Southern Rural Water in being able to provide advice as to
- whether or not it's feasible for the mines to expect large
- 3 volumes of water to be used for rehabilitation purposes?
- 4 DR DAVIS: Yes.
- 5 MS SHANN: Do you agree that there is a need for a meeting to
- 6 occur between Southern Rural Water, DEDJTR and DELWP to
- 7 discuss the implications of the mines seeking to use such
- 8 large volumes of water in the future?
- 9 DR DAVIS: Yes.
- 10 MS SHANN: Can you assist the Board at all as to why such a
- 11 meeting has not occurred to date?
- 12 DR DAVIS: No.
- 13 MS SHANN: In terms of the issue of feasibility of this amount
- of water being available for the three mines, each of you
- in the questions provided were asked about the Gippsland
- region sustainable water strategy, a document by the
- Department of Sustainability and Environment, which is at
- DELWP.1005.001.0001. Dr Davis, if I could start with you.
- 19 Firstly, this is a 2011 document?
- 20 DR DAVIS: Yes.
- 21 MS SHANN: Would it be fair to refer to it as a policy
- document?
- 23 DR DAVIS: Yes.
- 24 MS SHANN: But it remains current policy?
- 25 DR DAVIS: Yes.
- 26 MS SHANN: Although it is the Department of Sustainability and
- 27 Environment, this document is now part of DELWP's policy?
- 28 DR DAVIS: Yes.
- 29 MS SHANN: If I could take you to page 132, and firstly just to
- 30 confirm this policy was developed after about two and a
- 31 half years of work?

- 1 MR MAWER: I can confirm that, yes.
- 2 MS SHANN: And that drew on a range of experts contributing to
- 3 the policy?
- 4 MR MAWER: There were a broad range of organisations provided
- 5 support and members. There's a list near the front of who
- 6 was representing whom at that time, yes.
- 7 MS SHANN: Thank you. In terms of page 132, it states,
- 8 "Current rehabilitation plans for open cut coal mines
- 9 involve flooding them to create artificial lakes.
- 10 However, this is not considered to be an entirely viable
- option any longer because there is insufficient water to
- 12 fill most of the mines."
- Dr Davis, can I start with you and just ask in
- terms of that statement is that one which DELWP agrees
- with?
- 16 DR DAVIS: Yes.
- 17 MS SHANN: And do you have anything to add from Southern Rural
- Water's perspective?
- 19 MR RODDA: No, not on that.
- 20 MS SHANN: Mr Mawer?
- 21 MR MAWER: No.
- 22 MS SHANN: In light of that, Dr Davis, is that information that
- DELWP has provided then to, for example, DEDJTR to direct
- them to this and the considered opinion of DELWP and the
- 25 experts who contributed to this paper to indicate that
- it's not considered to be an entirely viable option any
- longer to fill the mines with water?
- 28 DR DAVIS: Well, this is a publicly available document.
- 29 MS SHANN: It's on the internet. But have any further steps
- 30 been taken to draw this particular conclusion to DEDJTR's
- 31 attention?

- 1 DR DAVIS: I'm not aware of what explicit processes might have
- 2 been used to do that.
- 3 MS SHANN: When DEDJTR provided, for example, the Loy Yang work
- 4 plan variation to DELWP for comment or did that come
- 5 through Southern Rural Water?
- 6 DR DAVIS: That came through Southern Rural Water.
- 7 MS SHANN: Was there reference back to Southern Rural Water or
- 8 indeed directly to DEDJTR drawing attention to this policy
- 9 and the considered view which I have just read out to you?
- 10 DR DAVIS: I don't believe that was made explicitly in the
- 11 comments that were sent back through.
- 12 MS SHANN: Why is that? Are you able to say?
- 13 DR DAVIS: No.
- 14 MS SHANN: You can't say one way or the other?
- 15 DR DAVIS: I can't comment on why that wasn't.
- 16 MS SHANN: Do you think that this is useful information for
- DEDJTR to have in evaluating a work plan variation which
- advocates for a partially flooded lake option?
- 19 DR DAVIS: Yes.
- 20 MS SHANN: There is an action item at 6.8 on the same page
- 21 which states, "The Department of Primary Industries will
- review mine rehabilitation strategies in consultation with
- the Department of Sustainability and Environment, the
- 24 Environment Protection Authority and companies that mine
- coal in the Latrobe Valley. The mine closure and
- restoration strategies will consider impacts on
- 27 groundwater and surface water resources." The Department
- of Primary Industries, that's now part of DEDJTR?
- 29 DR DAVIS: Yes.
- 30 MS SHANN: Are you aware of what, if anything, has been done to
- 31 action item 6.8?

- 1 DR DAVIS: No.
- 2 MS SHANN: Mr Rodda?
- 3 MR RODDA: No, we are not aware of any action.
- 4 MS SHANN: Mr Mawer?
- 5 MR MAWER: Gippsland Water wasn't to be involved.
- 6 MS SHANN: There is a reference to "in consultation with the
- 7 companies". There is a regional monitoring committee
- 8 which involves various water bodies and also the mines; is
- 9 that right?
- 10 MR RODDA: Yes, that's correct.
- 11 MS SHANN: Mr Rodda, Southern Rural Water is involved in that
- 12 committee?
- 13 MR RODDA: We are, yes.
- 14 MS SHANN: Has there been discussion at that committee about
- how the mines may source water to partially or completely
- fill up the mine voids?
- 17 MR RODDA: I'm personally not involved in that committee so
- I couldn't say whether there has been discussion on that
- 19 or not.
- 20 MS SHANN: Are there any documents or have you made any
- 21 enquiries as to whether or not those issues have been
- discussed by the mines?
- 23 MR RODDA: No.
- 24 MS SHANN: Each of you were asked in the questions which then
- 25 resulted in your statements to detail discussions which
- had occurred about rehabilitation and water. So there is
- 27 nothing to add to what's detailed in your statements; is
- that right?
- 29 MR RODDA: Not from mine, no.
- 30 MS SHANN: And you made enquiries before you indicated in your
- 31 statement that there hadn't been any discussions in

- 1 addition to what's detailed there?
- 2 MR RODDA: That's correct. Our involvement has been through
- 3 the mine plan variation that we responded to.
- 4 MS SHANN: There is, though, through this regional monitoring
- 5 committee a direct relationship between Southern Rural
- Water and the three mines; is that right?
- 7 MR RODDA: They're all involved, yes. We're all involved.
- 8 MS SHANN: And that is a forum where the mines could raise
- 9 questions or issues to do with water sourcing?
- 10 MR RODDA: I couldn't answer that. As I said, I haven't been
- involved directly in that committee, so I can't give you a
- 12 direct answer on that.
- 13 MS SHANN: Dr Davis, you refer to that committee in your
- 14 statement. Are you able to assist in any way in relation
- to those questions I have just asked Mr Rodda?
- 16 DR DAVIS: No, I can't. I have nothing further to add.
- 17 MS SHANN: Has Southern Rural Water ever directed the mines'
- 18 attention to page 132 of the Gippsland policy document
- that I was asking Dr Davis about?
- 20 MR RODDA: No.
- 21 MS SHANN: In terms of the amounts that it would take to fill
- or even partially fill the mine voids, do any of the three
- of you have any indication as to what quantity of water
- 24 would be involved?
- 25 DR DAVIS: No, I don't.
- 26 MR RODDA: No.
- 27 MR MAWER: I think some of Gippsland Water's staff may have,
- for an exercise themselves, done that calculation, but
- they have not done it for Gippsland Water and I'm not
- aware of the outcome. I think it was more of an
- 31 intellectual exercise.

- 1 MS SHANN: The Yallourn Mine has indicated 748 gigalitres.
- What's a gigalitre compared to a litre of water?
- 3 MR MAWER: A billion.
- 4 MS SHANN: It's just a trivia test. Sydney Harbour has about
- 5 500 gigalitres. Does that sound right, or are any of you
- 6 aware of that?
- 7 DR DAVIS: I can't recall.
- 8 MS SHANN: In any event, 748 gigalitres is an awful lot of
- 9 water, isn't it?
- 10 MR RODDA: Yes.
- 11 MS SHANN: Have any of the three parts of the water authorities
- been asked about the potential for diverting one or more
- rivers into the mines?
- 14 DR DAVIS: No.
- 15 MR MAWER: No.
- 16 MR RODDA: No.
- 17 MS SHANN: Is that possible?
- 18 MR RODDA: It's not something that would be in our area of
- 19 responsibility to decide.
- 20 MR MAWER: I think history would suggest it's certainly
- 21 physically possible. Whether it was intended or not in
- the future would be a different issue.
- 23 MS SHANN: Dr Davis?
- 24 DR DAVIS: I guess it would be physically possible, but that
- would be something that would need to be further
- evaluated.
- 27 MS SHANN: Has anyone asked you to evaluate that?
- 28 DR DAVIS: No.
- 29 MS SHANN: Just finally, there's been some reference to the Loy
- 30 Yang 2015 work plan variation which was reviewed by both
- 31 DELWP and Southern Rural Water. Have any other work plan

- 1 variations or work plans been evaluated by any of the
- 2 three water areas?
- 3 MR RODDA: Not to my knowledge.
- 4 MR MAWER: Not Gippsland Water.
- 5 MS SHANN: Dr Davis?
- 6 DR DAVIS: No, I don't believe so.
- 7 MS SHANN: All right. For example, in 2009 there was a work
- 8 plan variation for the Hazelwood Mine. That's not
- 9 something that the water authorities were asked to review?
- 10 MR RODDA: I'm not aware. I would need to go back and check
- our documents and history on it. But I'm not aware if we
- have.
- 13 MS SHANN: All right. Dr Davis?
- 14 DR DAVIS: I'm sorry, I'm just - -
- 15 MS SHANN: If I can direct you to your second statement. At
- paragraph 17 you say, "I do not believe that DELWP had any
- involvement in the Hazelwood work plan variation approved
- 18 in 2009."
- 19 DR DAVIS: Yes, thank you.
- 20 MS SHANN: I just wanted to clarify the language there. It
- says "had any involvement". The question is did DELWP
- look at it or was asked to look at it?
- 23 DR DAVIS: As far as I'm aware, no.
- 24 MS SHANN: What about for Yallourn in 2012?
- 25 DR DAVIS: No, I don't believe so, no.
- 26 MS SHANN: Mr Chairman, if I could tender the two emails from
- 27 Mr Baker to Mr Lopardi.
- 28 #EXHIBIT 10 Two emails from Mr Baker to Mr Lopardi.
- 29 MS SHANN: And also tender the Gippsland sustainable water
- 30 strategy.
- 31 CHAIRMAN: That's the report?

- 1 MS SHANN: Yes, Gippsland region sustainable water strategy.
- 2 #EXHIBIT 11 Gippsland Region Sustainable Water Strategy
- Report.
- 4 MS SHANN: Thank you. Unless the Board has any questions?
- 5 PROFESSOR CATFORD: Thank you very much. I would just like to
- 6 ask some very basic questions. I thought the Gippsland
- 7 Water sustainability strategy was really quite a useful
- 8 document. There is a section in there, and you might like
- 9 to refer to page 25 of that document where there's some
- 10 estimates given of future climate change scenarios which
- in 2011 seemed quite striking in terms of the potential
- impact on water. This of course was based on modelling
- done in 2011 by CSIRO. My first question really is have
- 14 you considered any updated modelling of the potential
- water supply scenarios for Gippsland since 2011?
- 16 DR DAVIS: The department is actually currently investing in
- further research to provide improved information on future
- climate scenarios in partnership with the Bureau of
- 19 Meteorology and CSIRO that would contribute to future
- 20 modelling work. I'm not aware of any change in modelling
- 21 between 2011 and now.
- 22 PROFESSOR CATFORD: So you are not aware of any further
- 23 modelling, but would you say the climate situation is
- worsening from four years ago? As we meet there are
- 25 discussions happening in Europe at the moment about this
- very subject. Should we be concerned that in fact the
- 27 potential modelling might show a worse situation?
- 28 DR DAVIS: I wouldn't like to speculate on that.
- 29 PROFESSOR CATFORD: Do you think it would be helpful if we did
- get some updated modelling of what we think the potential
- 31 water reserves might be or the stream flows might be in

- 1 some of the out years?
- 2 DR DAVIS: Yes.
- 3 PROFESSOR CATFORD: The other question just refers back to that
- 4 recommendation in 6.8 which you reply to. Of course, this
- 5 recommendation was made four years ago or commitment was
- 6 made four years ago and it seems not a lot has happened.
- 7 Is there a monitoring system to follow through on
- 8 recommendations like this?
- 9 DR DAVIS: There's not an active monitoring system in place,
- but the sustainable water strategy has set our overall
- 11 planning and strategy for the department, so actions are
- 12 consistent with what's in the strategy and those
- strategies are reviewed and revised every 10 years. So
- they represent a long-term planning document.
- 15 PROFESSOR CATFORD: In fact are any of these recommendations
- 16 monitored then? I'm just trying to understand what the
- 17 process of closing the loop is.
- 18 DR DAVIS: So, I would say the process of closing the loop is
- particularly through the 10-year reviews of these
- 20 strategies.
- 21 PROFESSOR CATFORD: It would be 10 years later, would it?
- 22 DR DAVIS: In addition to specific elements of work as this
- work lines up with current work plans. There's not an
- 24 explicit issue-by-issue or action-by-action monitoring
- 25 plan, but they are picked up through our normal business
- and then reviewed every 10 years.
- 27 PROFESSOR CATFORD: I guess what I'm trying to allude to is
- should there be a more active process of monitoring and
- report back so that actions could be taken sooner than the
- 30 10-year review?
- 31 DR DAVIS: I guess I don't feel that I can speculate on that,

- 1 comment on that.
- 2 PROFESSOR CATFORD: Thank you.
- 3 MS FORSYTH: You were asked about the volumes of water required
- 4 to fill the mines and how much water that was in the
- 5 context of Sydney Harbour. Would you agree the total
- 6 water available to the AGL Loy Yang site, including the
- 7 mine and the two power stations, Loy Yang A and B, under
- 8 various agreements and this is a question perhaps
- 9 firstly to Ms Davis includes for Loy Yang A 40
- 10 gigalitres per annum?
- 11 DR DAVIS: Yes.
- 12 MS FORSYTH: And in terms of Loy Yang B, 20 gigalitres per
- annum via a diversion licence?
- 14 DR DAVIS: Sorry, for Loy Yang?
- 15 MS FORSYTH: Loy Yang B power station.
- 16 DR DAVIS: Via a bulk entitlement?
- 17 MS FORSYTH: Via a diversion licence.
- 18 MR RODDA: I can clarify there, because that's a bulk
- 19 entitlement that we hold and we provide that to Loy Yang B
- via a diversion licence. So it is a pass through,
- 21 effectively.
- 22 MS FORSYTH: That is water that is available to the site, if
- you consider the Loy Yang Mine and power stations as the
- 24 one site?
- 25 DR DAVIS: Yes.
- 26 MS FORSYTH: Then a further 19 gigalitres per annum is
- 27 available in terms of groundwater entitlements?
- 28 DR DAVIS: Yes.
- 29 MS FORSYTH: So, if we use round numbers, there's a total there
- of 80 gigalitres per annum that's currently available to
- 31 that site?

- 1 DR DAVIS: Yes.
- 2 MS FORSYTH: Dr Davis, can I ask you about AGL Loy Yang's work
- 3 plan variation 2015. Are you aware that that work plan
- 4 variation contains a report by GHD which sets out six
- 5 different scenarios for the filling of the mine at the end
- of the mine life depending upon what water is available at
- 7 that time?
- 8 DR DAVIS: No.
- 9 MS FORSYTH: So the department hasn't had the opportunity to
- 10 review that report?
- 11 DR DAVIS: I'm not aware of that.
- 12 MS FORSYTH: Can I ask Mr Rodda whether Southern Rural Water
- has had an opportunity to review that report?
- 14 MR RODDA: I believe the documents were referred to by DEDJTR
- to us.
- 16 MS FORSYTH: Yes. If Southern Rural Water had taken specific
- issue with the range of scenarios that had been developed
- and the model outputs of that report, then that
- information would have been contained back in your
- 20 referral comments?
- 21 MR RODDA: It would have. But our comments are primarily
- directed around the groundwater impacts.
- 23 MS FORSYTH: Can I ask you whether you have personally read the
- 24 GHD report?
- 25 MR RODDA: No, I haven't read the detailed report.
- 26 MS FORSYTH: Can I take you to a document that's in court book
- volume 1B and it is document 3A. Perhaps I will ask you
- first, Dr Davis, if you can get a copy of that document in
- 29 front of you. It is titled "Supplementary statement of
- 30 Stephen Rieniets". I will just give the Ringtail number
- 31 for the page I want to go to which is at annexure A. The

- 1 Ringtail number is AGL.0001.004.0004. That's a covering
 2 letter that attaches some conditions to which the work
- 3 plan variation was subject and then the conditions follow
- from there. Have you had an opportunity to firstly, can
- I ask you to have a look at the document attached to that
- 6 letter and those conditions and tell me if you have seen
- 7 that document before?
- 8 DR DAVIS: No, I haven't.
- 9 MS FORSYTH: Can I please ask you to turn to the page which
- ends in 0011 and have a look at condition 6.11. Condition
- 11 6.11 requires that, "The licensee must no later than the
- 12 completion of stage C" and I will ask you to assume for
- the purposes of that answer that that's approximately in
- 14 2023 "obtain and provide evidence to the department that
- it has obtained the necessary licences and/or contracts
- for the quantity of water that will be applied to achieve
- the key objectives set out in section 6.2 of the work plan
- variation." Can I take it from your previous answer that
- you hadn't seen those conditions before? That you haven't
- been asked to advise on the appropriateness or otherwise
- of the condition of that nature in the work plan
- 22 variation?
- 23 DR DAVIS: Yes, I haven't been asked.
- 24 MS FORSYTH: If one assumes that the flooding of the mine may
- 25 not happen until some time after 2037 or may not occur
- until some time after 2048, are you able to proffer a view
- as to whether a condition requiring the entering into of
- licences or contracts for the filling of mines should be
- required some 15 to 20 years earlier?
- 30 DR DAVIS: No. So I'm not able to offer a view, just to be
- 31 clear.

- 1 MS FORSYTH: Yes, thank you. Just one final point. If you
- 2 assume for the purposes of the question that the GHD
- 3 report that was attached to the work plan variation
- 4 provided a reasonable degree of certainty that the final
- 5 land form that's reflected in the work plan could be
- 6 achieved, the question is really how long it takes to fill
- 7 the mine rather than when it can be filled, would you
- 8 agree that it's reasonable to put off the locking in of
- 9 contracts and licences until some time much closer to
- filling than 2023 required by the condition? I know that
- was a long question, so feel free to clarify it.
- 12 DR DAVIS: I'm not able to comment on that.
- 13 MS FORSYTH: I have no further questions, thank you.
- 14 MS FOLEY: Dr Davis, you were asked a couple of questions about
- the GHD report in relation to the Loy Yang Mine. I just
- have a similar question for you in relation to a GHD
- 17 groundwater assessment for the Hazelwood Mine. Have you
- 18 reviewed a report dated September 2015 in relation to the
- 19 Hazelwood groundwater?
- 20 DR DAVIS: No.
- 21 MS FOLEY: Mr Rodda, can I ask you a similar question. Have
- 22 you reviewed that report?
- 23 MR RODDA: No.
- 24 MS FOLEY: Thank you.
- 25 DR COLLINS: I have some similar questions in relation to the
- Yallourn Mine. You were asked some questions by learned
- 27 Counsel Assisting about page 132 of the Gippsland Water
- strategy report. You don't need to go to it. I will just
- 29 refresh your memory as to the relevant sentence. In the
- 30 second paragraph of that page it states, "Current
- 31 rehabilitation plans for open cut coal mines involve

- 1 flooding them to create artificial lakes. However, this
- is not considered to be an entirely viable option any
- 3 longer because there is insufficient water to fill most of
- 4 the mines." Are any of you able to assist the Board with
- 5 the basis upon which that consideration was arrived at by
- 6 the authors of the strategy report?
- 7 DR DAVIS: No, I'm not able to.
- 8 MR RODDA: No, I wasn't involved in that part.
- 9 MR MAWER: There was discussion over the likely future
- 10 reliability of supply of water in the Valley, potential
- other users and the effects of climate change. I think
- the statement leads into the following action 6.8, and
- action 6.8 was intended to develop more information about
- 14 what the likely consequences of the proposal were, the
- interactions between the individual operations and mines
- as distinct to separate planning for each, and the
- implications for other users further away that may or may
- 18 not be affected.
- 19 DR COLLINS: Could I ask whether any of you on the panel is
- aware of the lake filling model report conducted by the
- operator of the Yallourn Mine in 2011 and 2012 and the
- 22 peer review of that lake filling model report conducted by
- the independent consultants GHD? Dr Davis?
- 24 DR DAVIS: No, I'm not familiar with that report.
- 25 MR MAWER: No.
- 26 MR RODDA: No, I'm not.
- 27 DR COLLINS: Can I ask whether each of you is aware of the fact
- that water is presently discharged into the Latrobe River
- from the operations at the Yallourn Mine pursuant to the
- 30 terms of an EPA discharge licence at a rate of up to
- 31 30,000 megalitres or 30 gigalitres a year?

- 1 DR DAVIS: No, I wasn't aware of that.
- 2 MR MAWER: Yes.
- 3 MR RODDA: I'm aware of the discharge licence. I'm not aware
- 4 of the volume.
- 5 DR COLLINS: I'm sorry, discharge to the Morwell River, not the
- 6 Latrobe River. Can I ask you then, Mr Mawer and Mr Rodda,
- 7 whether either of you is aware of any water quality issues
- 8 arising out of the discharge of those volumes of water
- 9 from the operations of the Yallourn Mine into the Morwell
- 10 River?
- 11 MR RODDA: I'm not. That's not something that we would be
- involved in typically.
- 13 MR MAWER: Same for us.
- 14 DR COLLINS: I would like you, for the purpose of the following
- 15 questions, each to make an assumption that at the closure
- of the Yallourn Mine its presently approved rehabilitation
- 17 plan is implemented resulting in the creation of a 750-odd
- gigalitre lake that is interconnected with the Latrobe
- 19 River and the Morwell River diversion. Can you each
- follow the assumption I'm asking you to make?
- 21 MR MAWER: Yes.
- 22 DR COLLINS: What do each of you say about the potential for
- that solution in terms of constituting a resource for the
- 24 community of the Latrobe Valley?
- 25 DR DAVIS: I'm not willing to speculate on that outcome.
- 26 DR COLLINS: Mr Mawer?
- 27 MR MAWER: I would want to consider what the potential water
- quality issues of that sort of level of effectively
- stagnant water would be. But I wouldn't speculate beyond
- that. I don't have enough information.
- 31 DR COLLINS: If the proposed lake were interconnected with the

- 1 Latrobe River and the Morwell River and the Morwell River
- diversion, would that alleviate concerns about stagnancy
- 3 of water?
- 4 MR MAWER: No. I would want information on the porous nature
- of the surface contact between the existing mine and the
- 6 water, what the interface and action was between the water
- 7 and that, whether there was water moving through that face
- 8 or not without being sealed, how adequately it had been
- 9 sealed. Given the likely evaporation from the surface
- over summer and the flow rates, I would be interested
- whether in fact there was water flowing out. So you
- haven't defined what "interconnected" means at this stage.
- 13 DR COLLINS: You are not aware, I take it then, of the work
- that's been done by the operator of the Yallourn Mine and
- independent consultants in relation to questions such as
- evaporation, quality of water and discharge rates?
- 17 MR MAWER: No, clearly not, because I think that information
- would help people to decide whether they thought this was
- an amenity for the public or not.
- 20 DR COLLINS: Thank you. Mr Rodda, can I ask you the same
- 21 question?
- 22 MR RODDA: I'm not in a position to comment any further on
- that.
- 24 DR COLLINS: Can I ask you, please, in the Gippsland water
- strategy report, about a passage appearing on page 39. Do
- each of you have that available to you? This is exhibit
- 27 11. You see in the right-hand column about a third of the
- way down the page a heading "Flood mitigation" and then
- the authors say, "To reduce the impact of downstream
- flooding, storages would need to be able to retain a
- 31 significant volume of floodwater when flooding occurs."

- 1 Then, "In Gippsland there are very limited opportunities
- 2 for storages to provide significant flood mitigation
- 3 without also reducing the ability to supply water." Do
- 4 each of you agree that a fully flooded lake solution,
- 5 particularly in the context of the Yallourn Mine, has the
- 6 capacity to create a new opportunity for storage which
- 7 could potentially have benefits for flood mitigation?
- 8 Dr Davis?
- 9 DR DAVIS: I wouldn't be willing to speculate on that.
- 10 DR COLLINS: Mr Mawer?
- 11 MR MAWER: It would depend on the design chosen.
- 12 DR COLLINS: Yes, I asked whether you accepted that it had the
- potential to provide a significant resource for flood
- mitigation purposes. Do you agree that it has that
- 15 potential?
- 16 MR MAWER: It is a possibility.
- 17 DR COLLINS: Thank you. Mr Rodda?
- 18 MR RODDA: Yes, it would be a possibility.
- 19 DR COLLINS: Equally on the assumption that I have postulated
- for you, do you accept that such a lake could have a
- significant role to play in relation to drought proofing?
- 22 Dr Davis?
- 23 DR DAVIS: Again, I wouldn't be willing to speculate.
- 24 DR COLLINS: Mr Mawer?
- 25 MR MAWER: Drought proofing what?
- 26 DR COLLINS: Drought proofing the Latrobe Valley community.
- 27 MR MAWER: Sorry, I couldn't speculate.
- 28 DR COLLINS: Mr Rodda?
- 29 MR RODDA: I couldn't comment on that.
- 30 DR COLLINS: Finally, would such a lake on the assumptions
- I have postulated be potentially of benefit to the Latrobe

- 1 Valley community in terms of fire suppression?
- 2 DR DAVIS: Sorry, again I couldn't speculate.
- 3 DR COLLINS: Mr Mawer?
- 4 MR MAWER: It depends on the design and what's chosen to do.
- 5 It doesn't eliminate it as a possibility, but again it
- 6 would have to look at what was actually being proposed.
- 7 DR COLLINS: And you haven't had the opportunity to review what
- 8 is in fact proposed in respect of any of the mines, but in
- 9 particular the Yallourn Mine?
- 10 MR MAWER: No, I have not.
- 11 DR COLLINS: And Mr Rodda?
- 12 MR RODDA: I couldn't comment further on that.
- 13 DR COLLINS: You, too, haven't considered in detail the
- proposed rehabilitation plans for any of the three mines?
- 15 MR RODDA: Other than our review of the Loy Yang work plan
- 16 variation, no.
- 17 DR COLLINS: No review in respect of my client's mine, the
- 18 Yallourn Mine?
- 19 MR RODDA: That's correct.
- 20 DR COLLINS: Thank you. Nothing further, thank you.
- 21 MS PEPPLER: Dr Davis, if I could take you first to paragraph
- 22 12 of your supplementary statement. Here you are
- answering a question in relation to considering diversion
- of the Latrobe Valley and/or Morwell Rivers. You refer to
- 25 some issues to consider. Those issues include social
- amenity and landscape values; that's correct?
- 27 DR DAVIS: Yes.
- 28 MS PEPPLER: Environmental impacts?
- 29 DR DAVIS: Yes.
- 30 MS PEPPLER: And that the Latrobe River system is fully
- 31 allocated?

- 1 DR DAVIS: Yes.
- 2 MS PEPPLER: Would you also agree that impacts on offsite users
- and the environment is something that would be relevant to
- 4 consider?
- 5 DR DAVIS: Yes.
- 6 MS PEPPLER: This is a question for all three of you. Would
- 7 you agree that in principle it is desirable to avoid
- 8 impacts on other offsite users and the environment that
- 9 might be caused by a river diversion?
- 10 MR MAWER: There is possibility for there to be beneficial
- impacts. So I think it has to be an informed decision.
- 12 MS PEPPLER: So a weighing up of potential beneficial impacts
- and detrimental impacts and then a decision made.
- 14 MR MAWER: Yes.
- 15 MS PEPPLER: You have already stated that there has been no
- formal consideration yet of the diversions. You agree
- there has been no stakeholder consultation in terms of the
- 18 community?
- 19 DR DAVIS: As far as I'm aware.
- 20 MS PEPPLER: Would you all agree that there should be
- 21 consultation in relation to the potential for diversion
- before a decision is made?
- 23 DR DAVIS: I'm not able to express an opinion on that.
- 24 MS PEPPLER: So if there are downstream users, for example
- farmers that have agricultural uses of water, would you
- agree that they should be consulted?
- 27 DR DAVIS: I think, yes.
- 28 MS PEPPLER: I wanted to ask you all about the fact that each
- mine has a preferred plan for accessing water in the
- future and you have been asked some questions about the
- 31 GHD reports and the work that's been done by GHD for each

- 1 mine in terms of accessing water in the future and where
- 2 that water is going to come from. We will leave aside the
- 3 Loy Yang 2015 work plan variation approval that's just
- 4 happened. I will come back to that. But you have said in
- 5 relation to other ones that you have not had the
- 6 opportunity to consider the details of those plans. Would
- 7 you agree with me that in approving those plans DEDJTR has
- 8 put the cart before the horse in terms of what might
- 9 happen with water access for these mines in the future?
- 10 DR DAVIS: I'm not willing to I'm unable to express an
- 11 opinion on that.
- 12 MR MAWER: Gippsland Water is not involved in those plans.
- 13 MR RODDA: I have not observed them, so I can't comment.
- 14 MS PEPPLER: So the mines are pursuing a rehabilitation
- 15 strategy in terms of where they are going to get water
- from the future, but none of your authorities or the
- department has really considered that particular outcome?
- Do you agree with me that that's inadequate?
- 19 DR DAVIS: I'm not willing to speculate on it.
- 20 MR MAWER: Gippsland Water doesn't have a role.
- 21 MS PEPPLER: Do you agree with me that going forward every work
- 22 plan variation that is submitted for approval should be
- referred to DELWP, Gippsland Water, Southern Rural Water
- and also the West Gippsland Catchment Management
- 25 Authority? Perhaps answer for your respective water
- 26 authorities. Dr Davis, I will ask you to comment about
- 27 whether you think it should also be referred to a CMA.
- 28 DR DAVIS: I'm not willing I'm not able to express an opinion
- on that.
- 30 MS PEPPLER: So you are not willing to say that the department
- 31 should be provided with applications for work plan

- 1 variations?
- 2 DR DAVIS: No.
- 3 MS PEPPLER: Mr Mawer?
- 4 MR MAWER: The Gippsland Water is not a referral agency in that
- 5 process.
- 6 MS PEPPLER: Do you think they should be, Mr Mawer?
- 7 MR MAWER: That's not for us to say, given the interaction with
- 8 us is relatively minor.
- 9 MS PEPPLER: Mr Rodda?
- 10 MR RODDA: We believe and we are a referral authority for
- 11 groundwater impacts and certainly take that role
- 12 seriously.
- 13 MS PEPPLER: Do you agree also in principle that it is
- desirable that there's a consistent practice developed in
- 15 relation to this point, in relation to variations, so that
- everybody is clear when a particular application for
- 17 variation will be referred and to whom as a matter of
- principle? Is anyone prepared to agree with me on that
- 19 point? Dr Davis?
- 20 DR DAVIS: I'm not I won't express an opinion on that.
- 21 MS PEPPLER: I want to ask some questions now about the Loy
- Yang 2015 work plan variation. Mr Rodda, I will refer to
- the Southern Rural Water's letter that we have been taken
- 24 to. It is fair to say, isn't it, that that letter
- 25 expresses concerns?
- 26 MR RODDA: What we identified in that letter was, I guess, a
- desire for more information and we wanted to bring matters
- to the attention of the regulator for their
- decision-making processes that we thought were important.
- 30 MS PEPPLER: Can I take you to the final page of that letter.
- 31 You see after the dot points there it says, "Southern

- 1 Rural Water believe there are significant risks related to
- 2 groundwater management inherent in the mine closure plan
- 3 proposed in the WPV." Earlier I think you said in answer
- 4 to Counsel Assisting's question that there are a
- 5 significant number of risks. Do you agree with me in fact
- the letter just says "significant risks"?
- 7 MR RODDA: That's what the statement says, yes.
- 8 MS PEPPLER: And those risks include in particular for Southern
- 9 Rural Water groundwater quality issues?
- 10 MR RODDA: That's one aspect of it, yes.
- 11 MS PEPPLER: And also Southern Rural Water had a concern about
- the long-term availability of water from the surrounding
- 13 catchment which would otherwise flow to the Latrobe River
- 14 with potential consequential impact on regional water
- resources; that's right, isn't it?
- 16 MR RODDA: We wanted that considered by the regulator as part
- of their decision-making process.
- 18 MS PEPPLER: Southern Rural Water also said that those matters
- 19 needed to be addressed well in advance of closure; that's
- 20 correct.
- 21 MR RODDA: That's correct.
- 22 MS PEPPLER: And one of the reasons that these things need to
- be addressed well in advance of closure is because, for
- example, the quality of overburden that's been put into
- 25 the base of the pits and ash that's been put into the base
- of the pits might have future impacts on water quality,
- both groundwater and surface water?
- 28 MR RODDA: We wanted that considered, yes.
- 29 MS PEPPLER: It was also said that a meeting with DELWP and
- I assume yourselves was essential prior to further
- 31 correspondence, and we now know that that hasn't occurred.

- 1 Do you agree that it is desirable that if DELWP and
- 2 Southern Rural Water suggest to DEDJTR that a meeting is
- 3 essential that that meeting should occur?
- 4 MR RODDA: At the end of the day the regulator makes the
- 5 decision on this. So they are the ones that would decide
- 6 whether they see the need for the meeting.
- 7 MS PEPPLER: I will go back to you, Dr Davis, because this was
- 8 in the department's email. There is reference to this
- 9 project not being similar to other projects. It is true,
- isn't it, that this is a significant sized project
- 11 compared to what the water authorities and the department
- 12 normally assess?
- 13 DR DAVIS: I don't feel that I can confirm that, actually.
- 14 MS PEPPLER: Okay. Would you agree with me and perhaps this
- is a question for all three of you that the
- rehabilitation of these pits is of such a scale that in
- fact there should be greater attention paid by the water
- authorities and the department in terms of how these pits
- will be rehabilitated than for other applications, for
- 20 example for dams or more minor sized quarries; we need
- greater attention, not less?
- 22 DR DAVIS: I don't think I can speculate on that.
- 23 MS PEPPLER: Mr Mawer?
- 24 MR MAWER: It would be speculation.
- 25 MS PEPPLER: Mr Rodda?
- 26 MR RODDA: We assess groundwater applications and we take a
- 27 risk based approach. So we would expect the regulator in
- this case to take a risk based approach as well.
- 29 MS PEPPLER: Keeping with the Loy Yang 2015 work plan variation
- and, Mr Rodda, I think these questions will be directed to
- 31 you, we heard from DEDJTR that they have attempted to

- 1 address your concerns in relation to both the final form
- of the work plan as well as in relation to conditions that
- 3 have been attached to that particular licence. I wanted
- 4 to take you to condition 7.1. Do you have those
- 5 conditions there? They are in annexure A to the
- 6 supplementary statement of Mr Rieniets.
- 7 MR RODDA: So what I would say is I haven't seen these before.
- 8 So I'm not aware of what the conditions are.
- 9 MS PEPPLER: Would you agree with me in principle then, if you
- 10 haven't had an opportunity to review them, that it would
- 11 be desirable that the conditions should refer not only to
- 12 the West Gippsland CMA, which it does, and their
- satisfaction but also to Southern Rural Water's
- 14 satisfaction?
- 15 MR RODDA: Without actually reviewing it, it is a bit hard to
- 16 comment because really that's a matter for the regulator
- for them to decide who the right parties are. So without
- 18 the context I can't comment.
- 19 MS PEPPLER: Do you see that Southern Rural Water has a role
- 20 going forward in assisting DEDJTR to consider any
- 21 further I will use a broad term water risk or water
- 22 quantity assessments that come in from the proponent to
- DEDJTR, is there a role for Southern Rural Water to assist
- DEDJTR in identifying whether those are up to scratch?
- 25 MR RODDA: We would certainly make ourselves available to
- respond to anything that DEDJTR wanted to put to us as the
- 27 regulator.
- 28 MS PEPPLER: Would you agree that it would assist if the
- 29 satisfaction of Southern Rural Water is expressly referred
- to because that would ensure that a proponent is not able
- 31 to say to DEDJTR, "Oh, but it doesn't refer to the

- 1 satisfaction of Southern Rural Water so you don't have to
- take their views into account"?
- 3 MR RODDA: I'm not quite sure what your question is. I'm not
- 4 quite sure how to answer that.
- 5 MS PEPPLER: If there is no reference to Southern Rural Water,
- 6 the department does not have to take your views they
- don't have to take your views into account; they could. If
- 8 there is a reference to "the satisfaction of Southern
- 9 Rural Water" then your views will be of great relevance,
- they would need to be followed. Do you agree it's
- desirable for your views to be followed?
- 12 MR RODDA: I don't know the context that you are referring to
- out of the decision. So I can't really comment on that.
- 14 MS PEPPLER: Okay. I assume also that you are unable to answer
- the question whether this question lacks specificity about
- what's to be done by Loy Yang?
- 17 MR RODDA: Yes, I can't comment on that. I haven't seen the
- 18 conditions.
- 19 MS PEPPLER: Do you agree with me that it would be desirable
- that the conditions should refer expressly to both water
- 21 quality and water quantity information?
- 22 MR RODDA: Again, without the context, it is a bit hard for me
- to comment on that.
- 24 MS PEPPLER: I want to turn now to ask you some questions about
- 25 the actual work plan itself. Do you have annexure 3 to
- Mr Rieniets' statement which is the approved work plan for
- 27 Loy Yang?
- 28 MR RODDA: I think it's coming.
- 29 MS PEPPLER: Have you reviewed the work plan, Mr Rodda?
- 30 MR RODDA: I don't believe I have seen the final work plan.
- I think that was referred to yesterday. We reviewed as an

- organisation a version of it that was sent to us.
- 2 MS PEPPLER: I might try to ask you some questions of matters
- 3 of principle then rather than going to that text if you
- 4 haven't had the opportunity to review it. I will ask you
- 5 to accept that the body of the work plan itself assumes
- and prefers that a concept whereby the pit is filled over
- 7 15 years is the option that Loy Yang wishes to proceed
- 8 with. I will ask you to go to the GHD water balance
- 9 assessment that forms part of this work plan, the approved
- work plan, and I will ask you to go to page 15 of that
- 11 document. It is AGL.0001.004.0605.
- 12 MR RODDA: I'm not sure I have that.
- 13 MS PEPPLER: It is towards the end of the folder. There are
- 14 two GHD reports. The final report is about the external
- overburden dump. The second last report is the GHD mine
- 16 lake water balancing model.
- 17 MR RODDA: You said page 16 of a report?
- 18 MS PEPPLER: Page 15. If it assists, if you can see a screen,
- it's up on the screen now.
- 20 MR RODDA: Under "Conclusions"?
- 21 MS PEPPLER: Yes. So these are GHD's conclusions following on
- from their professional water balance assessment. Do you
- have that there now, Mr Rodda?
- 24 MR RODDA: Yes, I do.
- 25 MS PEPPLER: Do you see table 8?
- 26 MR RODDA: Yes.
- 27 MS PEPPLER: Which sets out a summary of void filling modelling
- results. Do you see there there are a number of scenarios
- 29 listed, scenario 4 being assessed as best case, scenario 5
- 30 likely case and scenario 6 worst case?
- 31 MR RODDA: Yes.

- 1 MS PEPPLER: Do you see on GHD's best case the years to RL, so
- 2 relative level minus 22.5 metres, is assessed as 25 to
- 3 30 years?
- 4 MR RODDA: Yes.
- 5 MS PEPPLER: So GHD has actually assessed a best case scenario
- as taking 25 to 30 years. Do you agree that it would be
- appropriate for the work plan to therefore plan on that
- 8 basis?
- 9 MR RODDA: I can't really comment. That's a matter for the
- 10 regulator.
- 11 MS PEPPLER: As a matter of principle, if these mines take
- longer than estimated in the work plan to fill there's
- going to be a greater need for monitoring and maintenance,
- isn't there?
- 15 MR RODDA: Well, our comments in the document said that there
- is continued need for ongoing monitoring and maintenance
- 17 up to mine closure and post mine closure.
- 18 MS PEPPLER: For example, the difference for Loy Yang would be
- that if instead of 15 years it takes 25 years or
- 20 potentially 85 years, there's definitely a need for
- 21 potentially greater funding for your water authorities to
- oversee any licences or allocations that have been issued?
- 23 MR RODDA: I'm not sure about additional funding, but there is
- 24 need for ongoing monitoring and there is need for ongoing
- funding of the monitoring of the licence, yes.
- 26 MS PEPPLER: So, for example, if in relation to Hazelwood, who
- assumes that they can fill seven years post closure, in
- fact the worst case scenario of 160 to 200 years
- 29 eventuates, this is a significant time difference, isn't
- 30 it?
- 31 MR RODDA: Yes.

- 1 MS PEPPLER: Does it concern you that the work plans that have
- 2 been approved only refer to the absolute best case or in
- 3 the case of Loy Yang an even better than best case
- 4 scenario for timeframes for rehabilitation?
- 5 MR RODDA: We haven't been able to review those work plans, so
- 6 I can't comment.
- 7 MS PEPPLER: I want to ask you now about criteria. I'm here
- 8 for Environment Victoria, and one of our propositions for
- 9 the Board will be that clear criteria is necessary. In
- 10 fact this is a matter that was raised by Southern Rural
- 11 Water as well in terms of objectives. In the work plan at
- page 81 it is much easier to find; it is in the body of
- the work plan rather than an annexure or appendix.
- 14 MR RODDA: Table 6.4.4.1?
- 15 MS PEPPLER: Yes. Do you see there under the "Risk of poor
- lake water quality" in the first line that under
- "Approach" the first dot point says, "Develop water
- quality objectives and water level criteria prior to lake
- filling"; do you see that?
- 20 MR RODDA: Yes.
- 21 MS PEPPLER: Do you agree with me that water quality objectives
- and water level criteria should be developed well prior to
- filling which would not occur until 2037 and in fact
- should be developed as soon as possible?
- 25 MR RODDA: I think we referred to that in our letter. I think
- our comment is they should be taken well in advance of
- 27 closure, but that's again a matter for the regulator to
- decide whether he sees that as appropriate.
- 29 MS PEPPLER: So it is Southern Rural Water's view, to be clear,
- isn't it, that it should be done?
- 31 MR RODDA: In advance, yes.

- 1 MS PEPPLER: For example, that's because, as we discussed
- 2 earlier, what's being done now in terms of mine operations
- 3 and progressive rehabilitation could influence potential
- 4 end uses or water quality issues?
- 5 MR RODDA: Exactly, yes.
- 6 MS PEPPLER: Who do you say perhaps this is a question for
- 7 all of you should be developing these clear criteria?
- 8 Is it a role for the companies that operate the mines or
- 9 is it a role for government broadly? Are you able to say
- who precisely?
- 11 MR RODDA: In our view it would be a matter for the regulator
- 12 to decide.
- 13 MS PEPPLER: DEDJTR.
- 14 MR RODDA: Yes, and they need to be satisfied that the criteria
- is sufficient.
- 16 MS PEPPLER: Mr Mawer?
- 17 MR MAWER: Gippsland Water doesn't have a role.
- 18 MS PEPPLER: Dr Davis?
- 19 DR DAVIS: I don't have anything to add.
- 20 MS PEPPLER: I want to take you now to the extent of the scope
- of the existing permissions. Learned Counsel Assisting
- has taken you to the groundwater licences and the bulk
- entitlements. Perhaps to try to cut it short, do you
- agree with me that there is uncertainty about whether
- 25 those current permissions will cover filling of these
- 26 pits? It is uncertain?
- 27 DR DAVIS: I'm not able to express an opinion.
- 28 MS PEPPLER: Mr Mawer ?
- 29 MR MAWER: I don't know the documentation or the licences.
- 30 MS PEPPLER: Mr Rodda?
- 31 MR RODDA: I don't have anything to add other than what I said

- 1 earlier.
- 2 MS PEPPLER: Assume that the Board accepts that there is
- 3 uncertainty. Do you agree that it is important not to
- 4 therefore rely upon those entitlements in terms of your
- 5 rehabilitation planning? Mr Rodda?
- 6 MR RODDA: I'm not sure that we can comment on that any
- further.
- 8 MS PEPPLER: Mr Mawer, at paragraph 24 of your statement you
- 9 refer to the fact that 10 gigalitres of water has been put
- 10 aside for the environment to maintain the health of the
- 11 Latrobe River and downstream environs, including RAMSAR
- 12 listed wetlands and Gippsland lakes. Does that
- demonstrate to us that there has been a conscious decision
- made to try to get more water for the environment in this
- 15 catchment?
- 16 MR MAWER: That was an outcome of the discussions at the SWS
- and was part of government policy to establish the
- 18 environmental water holder in Victoria and to formalise
- quantities of water available for that purpose.
- 20 MS PEPPLER: I'm not sure if you are familiar with the fact
- 21 that Jacobs have prepared and independent report to assist
- 22 the Board in this matter which refers to the there is a
- heading in section 3.4. It says, "Water access and
- 24 allocation in an already stressed system". It says,
- 25 "Minimal environmental water requirements for Latrobe
- 26 River and Gippsland lakes are currently not fully met."
- 27 Do you accept that to be the case?
- 28 MR MAWER: I am not familiar with that report. I have not seen
- 29 it.
- 30 MS PEPPLER: Mr Rodda?
- 31 MR RODDA: No, I have not seen the report.

- 1 MS PEPPLER: Dr Davis?
- 2 DR DAVIS: I haven't seen the report.
- 3 MS PEPPLER: Do you accept that in the strategy that we have
- just been referring to, which is the Gippsland Water
- 5 strategy that is current policy of 2011, there's a
- 6 reference on page 29 to groundwater levels having declined
- 7 up to 90 metres as a result of the mines?
- 8 MR RODDA: So this is the Latrobe basin we are referring to?
- 9 MS PEPPLER: From the depressurisation, the pumping of
- 10 groundwater.
- 11 MR RODDA: My understanding, and I would need to qualify this
- by saying I'm not a hydrogeologist, but it is both the
- mine operations and oil and gas extraction offshore as
- 14 well.
- 15 MS PEPPLER: Do you agree that's a significant drawdown?
- 16 MR RODDA: It is a drawdown. I guess the significance of it
- depends on the impacts and whether others have been
- impacted by that drawdown, whether that be the environment
- or other users.
- 20 MS PEPPLER: I do want to come back to the question of
- 21 resources, because going forward these pits will need to
- be filled with water and all of your organisations will be
- involved, we hope, with assessing and making having
- input back to DEDJTR about what should happen with these
- 25 pits. Does each of your organisations have the requisite
- both funding, man or woman power, and access to expertise
- 27 that will be required of you in making assessments about
- what the consultants for these mines say is appropriate?
- 29 You need to assess that. Do you have adequate resources
- and expertise or would you like the Board to make a
- recommendation that you should have more?

- 1 MR ATTIWILL: I would object to this on this ground. I haven't
- 2 objected to any of these questions so far to date.
- 3 CHAIRMAN: I think the answer will be that it won't go
- 4 anywhere. I think that's right. You are putting it in
- 5 such broad terms as it's not helpful.
- 6 MR ATTIWILL: And asking, for example, Dr Davis, who is a
- 7 public sector employee - -
- 8 CHAIRMAN: I understand the difficulties. She has really
- 9 answered those questions that are appropriate and left
- 10 those that in her position she has to leave.
- 11 MR ATTIWILL: Yes.
- 12 MS PEPPLER: Thank you. I have no further questions.
- 13 PROFESSOR CATFORD: I just had one further question to Mr Mawer
- and Mr Rodda. It is really just thinking towards the
- 15 future. How concerned are you about future supplies of
- water for your areas of responsibility given the
- predictions in your strategy, which we have been referring
- to, and issues of climate change? Is this something that
- causes you anxiety, concern or not?
- 20 MR MAWER: You mean one of the many things that keep us awake
- 21 at night. I think what hasn't been referred to that came
- out of the Gippsland regional sustainable water strategy
- was acknowledgment by government of the need to establish
- 24 an emergency reserve in Blue Rock of the previously
- 25 unallocated water. That water is available in periods of
- low inflow. So there have been significant steps made in
- 27 recent years to make available additional water reserves
- that bolsters the reliability of the water supply in the
- 29 Latrobe Valley. Gippsland Water for one is able to bid to
- purchase that water in times of need, as are the power
- 31 station operators. From our point of view as an

1	organisation we have made capital investments to improve
2	the reliability of supply in some of our smaller run of
3	the river systems which will be exposed under low inflow
4	scenarios.

We have done as an organisation what we can do. We keep and are required and have recently tabled a report on our view forward of our water supply. We do a water supply demand strategy update regularly which is submitted to government. Our current view is that we are reasonably comfortable with the security in our major systems. Our small systems are somewhat vulnerable, but their relative size gives us comfort we can make alternative arrangements.

PROFESSOR CATFORD: Does that assume that the current climatic conditions continue, because in the strategy it refers to the drought of 1997 to 2009 and indicates that if that was to continue or reoccur there would be almost a 50 per cent decline in stream flow, 43 per cent for the Latrobe Valley? That's a huge reduction if we were to have the drought return. So I'm not quite sure if you are saying, despite that, you are still comfortable.

MR MAWER: Subject to being able to manufacture water either through recycled water or through a desalination version of some sort of operation, we will always be vulnerable to the vagaries of rainfall and where that rain falls as well as how much because we have fixed catchments. That's not a situation that's any different to the last 50 to 100 years. We are managing inside an envelope that is aware of rainfall levels equivalent to 2006. So we are mindful of that. There's so much you can do, and then beyond that it's not practical or economic.

1	MR RODDA: For us, Southern Rural Water, climate risk is one of
2	our top risks in our risk register, and certainly for the
3	supply to our irrigation districts in the central west and
4	Gippsland we do a lot of work to understand that and
5	modernising our districts is a primary response as well as
6	in the central west looking for alternative water
7	resources.
8	Our interest in terms of climate risk in the

Our interest in terms of climate risk in the
Latrobe system is primarily for our irrigators downstream
on the Latrobe River. As David said, the establishment of
the drought reserve provides a lot more resilience than
was there perhaps five years ago. But we expect as
climate change impacts further that there will be reduced
water resources there and each of the parties that have
access to the system need to manage their risk.

- 16 PROFESSOR CATFORD: Thank you.
- 17 MS SHANN: Just a few matters. Mr Mawer, you have just
- mentioned bidding in times of need in relation to the Blue
- 19 Rock reserve and referred to power stations. Can you just
- explain what you mean by that and what, if any,
- 21 implications that might have for the idea that we are
- 22 exploring about filling up or partially filling up the
- 23 mine voids?

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- 24 MR MAWER: It was acknowledged during the SWS that there had
- 25 been previous somewhat ad hoc activity with regard to
- 26 making extra water available from the unallocated area and
- 27 reserve of Blue Rock, and that that water would be better
- identified as potentially certainly available in the
- future as an emergency reserve, with the department
- 30 expecting to make that water available for purchase by
- 31 large users, including Gippsland Water and certainly the

1	power generators, the other entitlement holders, including
2	some for irrigation. That's alluded to in the SWS
3	document itself and on the bottom of page 127 talks about
4	some of the benefits that other entitlement holders might
5	gain from that reserve level being maintained full from
6	spill between the various entitlement holders' buckets in
7	the reservoir.

From our point of view what it says is that there is no guarantee that water would be made available in normal circumstances, but one of the issues you might consider is, as the generators may or may not cease using their entitlements for generation, the requirement for an emergency reserve may or may not lessen. That's a policy issue for the future. So there may in fact be more water deemed more available for general use.

- 16 MS SHANN: It's just not clear at this stage; do you accept that?
- 18 MR MAWER: Absolutely.

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- MS SHANN: Mr Rodda, you were taken to a version of the Loy
 Yang work plan variation and you indicated that you
 weren't entirely sure whether that was the version which
 was reviewed by Southern Rural Water. I'm not necessarily
 expecting that you do, but do you know what the date of
 the version that Southern Rural Water reviewed was?
- 25 MR RODDA: I believe it's version 5. When it came up
- yesterday, I checked that it was version 5 that we
- 27 reviewed.
- MS SHANN: Thank you. In terms of some questions you were
 asked by counsel for the Loy Yang Mine you were referred
 to a GHD document which you indicated was received by
 Southern Rural Water as part of the package that DEDJTR

- 1 gave for the purpose of the review of the work plan
- 2 variation. Were those documents in total part of what
- 3 your colleague Mr Lopardi reviewed for the purpose of
- 4 drafting that letter which has been referred to?
- 5 MR RODDA: That's correct.
- 6 MS SHANN: Mr Rodda, you also mentioned being a referral agency
- for groundwater impacts, and I'm presuming that that's
- 8 referral by DEDJTR.
- 9 MR RODDA: That's correct in this case, yes.
- 10 MS SHANN: For how long has Southern Rural Water been a
- 11 referral agency for groundwater impacts?
- 12 MR RODDA: I couldn't tell you how long. I couldn't say.
- 13 MS SHANN: Are you able to just five years, 10 years, six
- months?
- 15 MR RODDA: I don't know what the practice has been.
- 16 MS SHANN: All right. What does it mean to be a referral
- 17 agency for groundwater impacts?
- 18 MR RODDA: It means that we consider what's put in front of us
- 19 and we consider the impacts on groundwater resources in
- terms of sustainability, environmental impacts, quality
- 21 impacts.
- 22 MS SHANN: Is that a formalised arrangement that if there is
- 23 something that comes across DEDJTR's desk or to their
- 24 attention which relates to groundwater impacts that they
- are to refer that to Southern Rural Water for comment?
- 26 MR RODDA: I couldn't comment on the regulator's practice
- 27 there. We are a referral authority for a range of
- different things. We also, as the groundwater manager in
- the south of the state, refer out applications that we get
- for new licences or transfers as well. So it's a common
- 31 practice. But you would need to clarify that with the

- 1 regulator.
- 2 MS SHANN: All right. Just finally, Dr Davis, if I could just
- 3 take you to the Gippsland region sustainable water
- 4 strategy document. You have the copy with you?
- 5 DR DAVIS: Yes.
- 6 MS SHANN: Firstly, I asked you some questions in relation to
- 7 whether in particular page 132 had been brought to the
- 8 attention of DEDJTR. If I could just ask you to look at
- 9 page 6 of that document firstly. Does that have listed a
- 10 consultative committee or a list of members of the
- 11 consultative committee who helped develop the strategy?
- 12 DR DAVIS: Yes.
- 13 MS SHANN: And that includes a Mr Turner from the Department of
- 14 Primary Industries?
- 15 DR DAVIS: Yes.
- 16 MS SHANN: Is that now part of DEDJTR?
- 17 DR DAVIS: Yes.
- 18 MS SHANN: If I could also just ask you to turn to page 169,
- 19 Professor Catford asked you some questions about action
- 20 6.8 and what, if anything, had been done about that action
- or monitoring compliance with it.
- 22 DR DAVIS: Yes.
- 23 MS SHANN: If I can just read to you paragraph under 8.1, the
- third paragraph in, "The Department of Sustainability and
- 25 Environment has a statutory requirement to report on the
- implementation of this strategy in its annual report,
- 27 which is tabled in parliament." The Department of
- 28 Sustainability and Environment, is that now part of DELWP?
- 29 DR DAVIS: Yes.
- 30 MS SHANN: Has that been done? Has the implementation of this
- 31 strategy been reported on by DELWP and tabled in

- 1 parliament?
- 2 DR DAVIS: I would have to take that question on notice,
- I think. 3
- MS SHANN: All right. Do you undertake to provide that 4
- 5 information perhaps through VGSO for the Board's
- assistance? 6
- DR DAVIS: Yes. 7
- 8 MS SHANN: They are the questions. Thank you. Mr Chairman,
- 9 perhaps a break before we convene for the next panel?
- CHAIRMAN: Yes. I think that's probably a good idea. We will 10
- make it 20 to 12 as the planned resumption time. 11
- <(THE WITNESSES WITHDREW)</pre> 12
- 13 (Short adjournment.)
- MS SHANN: Thank you, Mr Chairman. If I could call three 14
- 15 people to the mine panel, Mr Rieniets, Mr Faithful and
- 16 also Mr Mether. Thank you.
- <STEPHEN GERARD RIENIETS, sworn and examined:</pre> 17
- <JAMES ANTHONY FAITHFUL, sworn and examined:</pre> 18
- <RONALD CLIVE METHER, sworn and examined:</pre> 19
- MS SHANN: Thank you. Mr Rieniets, if I could start with you 20
- 21 just in relation to your statements. You provided three
- 22 statements to the Inquiry?
- MR RIENIETS: That's correct. 23
- MS SHANN: So the first one is dated 30 October 2015, and 24
- 25 that's at AGL.0001.001.0001.
- 26 MR RIENIETS: Correct.
- 27 MS SHANN: That has a number of attachments to it?
- 28 MR RIENIETS: Correct.
- 29 MS SHANN: And you have read that statement before coming into
- 30 court?
- 31 MR RIENIETS: Yes.

- 1 MS SHANN: It's true and correct?
- 2 MR RIENIETS: Yes.
- MS SHANN: Nothing you wish to change? 3
- 4 MR RIENIETS: Nothing.
- MS SHANN: I tender that. 5
- #EXHIBIT 12A Statement of Stephen Rieniets dated 30/10/2015. 6
- MS SHANN: Your second statement is dated 3 December 2015? 7
- 8 MR RIENIETS: Correct.
- 9 MS SHANN: And again you have read that before coming into
- 10 court?
- 11 MR RIENIETS: Yes.
- MS SHANN: True and correct? 12
- 13 MR RIENIETS: Yes.
- 14 MS SHANN: Nothing you wish to change?
- 15 MR RIENIETS: Nothing.
- 16 MS SHANN: I tender that.
- 17 #EXHIBIT 12B - Statement of Stephen Rieniets dated 3/12/2015.
- 18 MS SHANN: Finally, a further statement dated 4 December 2015?
- 19 MR RIENIETS: Yes.
- 20 MS SHANN: And you have read that before coming into court?
- 21 MR RIENIETS: Yes.
- 22 MS SHANN: True and correct?
- 23 MR RIENIETS: Yes.
- 24 MS SHANN: Nothing you wish to change?
- 25 MR RIENIETS: Nothing.
- 26 MS SHANN: I tender that.
- #EXHIBIT 12C Statement of Stephen Rieniets dated 4/12/2015. 27
- 28 MS SHANN: Mr Faithful, you have made one statement dated
- 13 November 2015? 29
- 30 MR FAITHFUL: I have.
- MS SHANN: With attachments? 31

- 1 MR FAITHFUL: I have.
- 2 MS SHANN: And you have read that before coming into court?
- MR FAITHFUL: Indeed. 3
- MS SHANN: True and correct? 4
- 5 MR FAITHFUL: True and correct.
- MS SHANN: Nothing you wish to change? 6
- MR FAITHFUL: No. 7
- 8 MS SHANN: I tender that.
- 9 #EXHIBIT 13 - Statement of James Faithful dated 13/11/2015.
- 10 MS SHANN: Mr Mether, you have made a statement dated
- 16 November 2015? 11
- MR METHER: I have. 12
- 13 MS SHANN: And you have delighted us with many folders of
- 14 attachments.
- 15 MR METHER: I have.
- 16 MS SHANN: And you have read that statement before coming into
- 17 court?
- MR METHER: I did. 18
- 19 MS SHANN: True and correct?
- 20 MR METHER: True and correct.
- 21 MS SHANN: Nothing you wish to change?
- 22 MR METHER: Nothing.
- 23 MS SHANN: I tender that.
- #EXHIBIT 14 Statement of Ronald Mether dated 16/11/2015. 24
- 25 MS SHANN: Just really for those in the room who aren't aware,
- if we could just start from each of you are here on behalf 26
- 27 of one of the mines?
- 28 MR RIENIETS: Correct.
- 29 MS SHANN: If you could perhaps just indicate which mine and
- then also the company which you are relevantly here for as 30
- well? 31

- 1 MR RIENIETS: I'm here for the AGL Loy Yang Mine.
- 2 MR FAITHFUL: I'm here for GDF Suez's Hazelwood Mine.
- 3 MR METHER: I'm here for Yallourn and Energy Australia.
- 4 MS SHANN: Thank you very much. Each of the mines in relation
- 5 to this Inquiry engaged at least one expert to provide
- 6 some assistance to them; is that right?
- 7 MR RIENIETS: Yes.
- 8 MR METHER: Yes.
- 9 MR FAITHFUL: Yes, that's right.
- 10 MS SHANN: And in relation to those, they were for AGL Tim
- 11 Sullivan?
- 12 MR RIENIETS: Correct.
- 13 MS SHANN: And a report was then provided by I think it's Mr,
- but I might be downgrading him, but by Tim Sullivan?
- 15 MR RIENIETS: Correct.
- 16 MS SHANN: And he then participated in a joint expert meeting?
- 17 MR RIENIETS: Yes.
- 18 MS SHANN: And in relation to Hazelwood there were two reports
- 19 provided from Dr Haberfield and Dr McCullough?
- 20 MR FAITHFUL: That's right.
- 21 MS SHANN: Those two persons also participated in the joint
- 22 expert meeting?
- 23 MR FAITHFUL: They did.
- 24 MS SHANN: And Mr Mether, from the Yallourn perspective, Dr Ian
- 25 Pedler was engaged?
- 26 MR METHER: But he didn't attend that expert conference.
- 27 MS SHANN: And a report wasn't provided on Yallourn's behalf?
- 28 MR METHER: Correct.
- 29 MS SHANN: In terms of the three experts who did participate,
- 30 so that's really a question on behalf of the Loy Yang and
- 31 Hazelwood Mines, you each have no issue with the expertise

- of the people that were put forward?
- 2 MR RIENIETS: Definitely not.
- 3 MR FAITHFUL: No, not at all.
- 4 MS SHANN: Indeed, in terms of the other persons participating
- 5 in that joint expert panel, for example Emeritus Professor
- Jim Galvin, each of you is familiar with Professor Galvin?
- 7 MS DOYLE: I object to this question. I'm not sure what the
- 8 view of the mine operators or those who are here on the
- 9 panel today in terms of relative expertise or expertise
- 10 per se of the other panel, what their views can do to
- assist or enlighten the panel. I'm not sure of the
- 12 relevance of this line of questioning.
- 13 MS SHANN: The relevance is if it should turn out that there is
- a disagreement between, for example, one of these
- witnesses and those persons who were proffered as experts,
- that their recognition of the expertise of those people is
- 17 relevant.
- 18 CHAIRMAN: Perhaps you can put a general question rather than
- go into great detail, because it seems to me that the
- indications are that there's not likely to be a problem.
- 21 MS SHANN: Generally is the expertise of Emeritus Professor Jim
- Galvin recognised by each of the three of you?
- 23 MR FAITHFUL: Yes.
- 24 MR RIENIETS: Yes.
- 25 MR METHER: In the area that he works in.
- 26 MS SHANN: Turning to the mines and really just to deal with a
- 27 brief overview of some of the characteristics and some of
- the regulatory regime, I will deal with them really as a
- 29 whole coming to each of you, but please indicate at any
- 30 stage if there is a relevant difference which needs to be
- articulated on behalf of the mine. Firstly, the age of

- each of the mines differs. If perhaps you could indicate
- when each mine actually commenced operations.
- 3 MR METHER: Yallourn was around 1920.
- 4 MR FAITHFUL: Mid-50s for Hazelwood.
- 5 MR RIENIETS: And 1982 for the Loy Yang Mine.
- 6 MS SHANN: Privatisation occurred at a relatively similar time;
- 7 is that right?
- 8 MR METHER: That's my understanding.
- 9 MS SHANN: And that's 1996?
- 10 MR RIENIETS: Thereabouts.
- 11 MR METHER: Thereabouts, yes.
- 12 MS SHANN: On privatisation, each of the private companies that
- took over assumed full responsibility for rehabilitation;
- is that right?
- 15 MR METHER: That's correct.
- 16 MR FAITHFUL: That's right.
- 17 MR RIENIETS: That's my understanding, yes.
- 18 MS SHANN: Each had a licence provided to it which had a number
- 19 of conditions dealing with rehabilitation; is that
- 20 correct?
- 21 MR METHER: It had certainly licence conditions and
- rehabilitation as part of those conditions.
- 23 MS SHANN: It was part of that. That dealt with and perhaps we
- could look at the Yallourn licence just as an example and
- 25 then please indicate if there is any relevant difference.
- 26 So that's at EAY.0001.001.0020.
- 27 Mr Mether, this is annexure 9.12 to your
- 28 statement. Is that the original licence accorded to
- 29 Yallourn Energy Limited.
- 30 MR METHER: It is stamped 1996 and to my knowledge that's the
- 31 first licence on privatisation.

- 1 MS SHANN: Turning over, the long reference just at the bottom
- 2 right of the page should end in 0024.
- 3 MR METHER: I have that.
- 4 MS SHANN: That sets out at "Conditions", 15, a condition
- 5 relating to progressive rehabilitation?
- 6 MR METHER: Yes, it does.
- 7 MS SHANN: Indicating it will be conducted as per the
- 8 rehabilitation plan?
- 9 MR METHER: Correct.
- 10 MS SHANN: Or at the direction of an inspector?
- 11 MR METHER: That's correct.
- 12 MS SHANN: And in relation to final rehabilitation it says it
- will be in accordance with the rehabilitation plan and any
- 14 additional requirements directed by an inspector.
- 15 MR METHER: It does.
- 16 MS SHANN: Turning over the page, at 16.2 it indicates that a
- failure to complete works in accordance with
- the rehabilitation plan or any such directions will
- constitute grounds on which a bond may be forfeited?
- 20 MR METHER: It does.
- 21 MS SHANN: There's also a reference at 20 to a rehabilitation
- bond?
- 23 MR METHER: Item 20, rehabilitation bond, yes.
- 24 MS SHANN: Condition 20, and indication that the level of the
- 25 bond has initially been assessed at \$15 million?
- 26 MR METHER: That was the initial assessment.
- 27 MS SHANN: In terms of the other two mines, are those licence
- conditions similarly applicable in the licences of each of
- 29 Loy Yang and Hazelwood?
- 30 MR RIENIETS: As it relates to Loy Yang, the Loy Yang licence
- 31 was issued in 1997, but the conditions are the same.

- 1 MR FAITHFUL: Hazelwood is the same.
- 2 MS SHANN: The legislation which deals with this issue of
- 3 rehabilitation really picks up those conditions in terms,
- 4 and that's the Mineral Resources Sustainable Development
- 5 Act 1990, in particular section 78(1), "The holder of a
- 6 mining licence must rehabilitate land in accordance with
- 7 the rehabilitation plan approved by the department head."
- 8 Are you familiar with that provision?
- 9 MR METHER: I'm familiar with the booklet, yes.
- 10 MR FAITHFUL: Yes.
- 11 MR RIENIETS: Yes.
- 12 MS SHANN: Similarly, section 80 in relation to rehabilitation
- bond, subsection (3), "The condition of a rehabilitation
- bond is that the authority holder rehabilitates the land
- as required by section 78 or 78A to the satisfaction of
- the minister." Are you familiar with that?
- 17 MR METHER: Familiar with those words.
- 18 MR FAITHFUL: Yes.
- 19 MR RIENIETS: Yes.
- 20 MS SHANN: At section 83(4), the minister may recover as a debt
- due to the Crown any amount by which the cost incurred for
- the Crown to rehabilitate exceeds the amount of the bond.
- 23 Are you familiar with that provision?
- 24 MR METHER: My understanding is that's correct.
- 25 MR FAITHFUL: Yes.
- 26 MR RIENIETS: Yes.
- 27 MS SHANN: So would you agree that the rehabilitation plan is a
- very significant document for the purposes of the
- regulatory regime that's set up for the mines?
- 30 MR METHER: It is certainly a guiding document for the mine.
- 31 MS SHANN: Mr Mether, would you agree that it's actually the

- 1 way in which the State can enforce the bond system and
- 2 chase money from a mine if the bond is insufficient?
- 3 MR METHER: The rehab master plan is part of our approved
- 4 plans. It is a guiding document and certainly the
- 5 regulator can enforce based on not complying with that.
- 6 MS SHANN: And by what's contained in the rehabilitation plan,
- 7 that the regulator can take the licence holder to court to
- 8 try to recover costs if the bond was deemed insufficient?
- 9 DR COLLINS: I object to that. It calls for a speculation on a
- 10 matter of law. The witness isn't qualified to answer a
- 11 question that calls for a conclusion of law.
- 12 CHAIRMAN: I don't think it's really necessary. I know for the
- benefit if you can just ask some of the more factual
- 14 questions rather than legal questions.
- 15 MS SHANN: Certainly. Mr Faithful and Mr Rieniets, do you
- agree with the proposition that the rehabilitation plan is
- 17 a very significant document?
- 18 MR FAITHFUL: Yes, I agree.
- 19 MR RIENIETS: Agree, yes.
- 20 MS SHANN: And that the purpose or what is contained in that
- document should set out what each of the mines is planning
- 22 to do in terms of progressive and final rehabilitation and
- also how they are going to do it?
- 24 MR FAITHFUL: Yes.
- 25 MR METHER: It sets out the guide.
- 26 MS SHANN: Do you agree that it should set out both what the
- 27 mine is planning to do and also how they are going to do
- 28 it?
- 29 MR METHER: At a reasonably high level, yes.
- 30 MS SHANN: And is there a difficulty in terms of agreeing with
- 31 the proposition it should set out how the mine is going to

- do rehabilitation?
- 2 MR METHER: Rehabilitation, like doing anything, is reasonably
- 3 complex. You won't put all the fine detail in a
- 4 rehabilitation plan.
- 5 MS SHANN: Mr Rieniets?
- 6 MR RIENIETS: I think the longer the plan horizon is, there are
- 7 more complex and uncertainties that may arise. So the
- 8 plan needs to be able to cope with those changed mining
- 9 conditions that may arise going forward. But the near
- 10 term, they should be quite clear what the rehabilitation
- 11 requirements are.
- 12 MS SHANN: And in terms of, for example, if the rehabilitation
- plan is putting forward a final option for closure and
- post closure, do you agree that it should contain
- information about how that is to be achieved?
- 16 MR RIENIETS: Once again, depending on how long closure is, it
- is a concept because closure may be 30, 40 years away, so
- it is a concept and, as more certainty comes towards that
- end, more certainty will be given to that plan.
- 20 MS SHANN: In terms of, for example, investigating an issue
- 21 like batter stability, that takes a really long time,
- doesn't it?
- 23 MR RIENIETS: Batter stability in these mines in relation to
- rehabilitation is a complex matter and it does take time
- 25 to make sure that the final form of the mine is as safe
- and stable as low as reasonably practicable.
- 27 MS SHANN: In terms of an issue like water quality and whether
- or not there would be a negative impact on, for example,
- 29 groundwater by having exposure between the bottom of a pit
- and a groundwater source, investigating that issue would
- 31 take considerable time, wouldn't it?

- 1 MR RIENIETS: Once again, depending on when the final closure
- is, it is an issue that needs a lot of work to be done to
- 3 ensure that study is undertaken.
- 4 MS SHANN: Do you agree that setting out how those things are
- 5 going to be done, those investigations, is an important
- 6 component of a rehabilitation plan?
- 7 MR RIENIETS: I think committing to doing those studies, but
- 8 the how may take some time, depending on the time that
- 9 final closure of the mine is.
- 10 MS SHANN: So do you agree, though, that putting into the
- 11 rehabilitation plan how those investigations and studies
- are going to be undertaken is important?
- 13 MR RIENIETS: I think committing to those studies is more
- important depending on the length of when the mine closes.
- 15 MS SHANN: Rather than saying what will be done?
- 16 MR RIENIETS: I think sometimes it's too early to say what will
- be done, but committing to those studies is the important
- 18 element.
- 19 MS SHANN: Mr Faithful, if I can ask you the same question. Do
- you agree that a rehabilitation plan should contain
- details as to how the mine's final closure plan is going
- to be implemented?
- 23 MR FAITHFUL: Look, I agree with Steve and with Ron in that
- 24 these I agree that it should contain some pertinent
- 25 information. All the details will not be known
- immediately, but in terms of what work needs to be done to
- 27 identify what the issues are and then also planning a
- roadmap for and how to achieve dealing with those issues,
- 29 they should be put forward in the rehabilitation plan.
- 30 MS SHANN: Would that involve detailing, for example, the
- 31 studies that would need to be undertaken to consider

- particular uncertainties?
- 2 MR FAITHFUL: Yes, I agree.
- 3 MS SHANN: And would it involve detailing how an issue such as
- 4 water sourcing will in practical terms be attempted to be
- 5 solved?
- 6 MR FAITHFUL: Yes.
- 7 MS SHANN: And similarly water quality issues?
- 8 MR FAITHFUL: It should put forward views on how that can be
- 9 addressed, yes.
- 10 MS SHANN: And what is going to be done by the mine to seek to
- 11 address those?
- 12 MR FAITHFUL: At the time that the mine does those studies,
- 13 yes, it can put forward a view on how those things can be
- 14 addressed.
- 15 MS SHANN: Mr Mether, if I can ask you to comment on the same
- issue.
- 17 MR METHER: I concur with Steve. Rehabilitation is a long-term
- plan, as you can see by the life of these mines. I think
- it is unrealistic to put all the detail in a plan of the
- 20 end result. But a commitment to work your way through the
- issues and by the time you need to rehabilitate and have
- the detail is certainly needed.
- 23 MS SHANN: In terms of that, is what you are really saying that
- you think the rehabilitation plan should have a commitment
- as opposed to a detail of what it is exactly the mine is
- 26 going to do to solve those issues?
- 27 MR METHER: As I said, they are long-term plans and new issues
- 28 may come along over the journey. So I think it's a guide
- 29 that at the end you will have an environment that is safe
- and stable and matches the environment that it's been
- 31 constructed in.

- 1 MS SHANN: Just going back to the question that I asked you, do
- 2 you disagree that the mine's rehabilitation plan should
- 3 contain details as to what it is it's going to do to try
- 4 and solve uncertainties?
- 5 MR METHER: I would agree it needs a level of detail to solve
- 6 the issues as part of the rehabilitation plan.
- 7 MS SHANN: And that that should be more than just a commitment
- 8 by the mine to think about or to do work on those issues,
- 9 but instead should be a plan of what exactly it is going
- to do to try to solve the issues?
- 11 MR METHER: I think it's a combination of both. I think it's a
- plan and a commitment. But the fine detail I would
- struggle to put in a plan 30 years out as things changed.
- 14 MS SHANN: For example, it wouldn't be unrealistic, would it,
- to have a rehabilitation plan in 2015 or 2016 which said
- what steps a mine is going to take to engage with water
- authorities or with DEDJTR on the issue of sourcing water
- 18 to flood a mine?
- 19 MR METHER: No, that's a reasonable statement to put.
- 20 MS SHANN: And it wouldn't be unreasonable for the mine to have
- detail in their rehabilitation plan about what steps it is
- taking and going to take in concrete terms to consider the
- issue of water quality in a flooded or partially flooded
- 24 pit?
- 25 MR METHER: Water quality is an important thing. So what steps
- 26 would be taken to work your way through that is reasonable
- in a plan.
- 28 MS SHANN: And it would be reasonable for the plan to actually
- 29 contain details of, for example, studies which are being
- 30 undertaken or approaches to government agencies in
- 31 relation to those issues?

- 1 MR METHER: The end result, to deliver the rehabilitation
- 2 plans, all parties need to work together to provide the
- 3 resources.
- 4 MS SHANN: And it is not unreasonable, though, for the actual
- 5 rehabilitation plan itself to contain the details as to
- 6 what the mine plans to do in relation to those matters?
- 7 MR METHER: A level of detail.
- 8 MS SHANN: Well, it should indicate what studies it's going to
- 9 be undertaking in the short-term, shouldn't it?
- 10 MR METHER: The short-term it could, but take the journey of a
- 11 rehabilitation plan, many different studies are done. So
- 12 you may have studies at the start, but they are
- continually updated along the journey with new
- information.
- 15 MS SHANN: But you agree that detail should be in the actual
- 16 plan?
- 17 MR METHER: A level of detail.
- 18 MS SHANN: In relation to the rehabilitation plans for each of
- the three mines, do you agree with the joint expert report
- 20 which is at EXP.0012.001.0001, which is tab 23 of folder
- 21 11. We will get it in front of you and it will come up on
- the screen as well. Mr Faithful, just indicate if you
- have a difficulty leaning over someone's shoulder.
- 24 MR FAITHFUL: That's fine.
- 25 MS SHANN: This report was prepared prior to the Loy Yang work
- 26 plan variation which was just approved very recently, so
- 27 there's a caveat that sits above this. But, Mr Rieniets,
- I will perhaps ask you separately in relation to that, but
- 29 we are aware that there is that issue. Do each of you
- 30 agree in relation to the current approved rehabilitation
- plans, and this is just looking at point 7, which is page

- 7, do you agree that the current approved rehabilitation
- 2 plans, including the 2015 Loy Yang variation, are largely
- 3 conceptual and therefore only constitute an early first
- 4 step in developing the final designs? Mr Rieniets?
- 5 MR RIENIETS: I think some elements of the rehabilitation that
- 6 we have already completed are not conceptual, that they
- 7 are physically done. I think rehabilitation and stability
- 8 going forward is a complex issue and that needs to be
- 9 resolved before final rehabilitation can be undertaken in
- 10 a safe manner.
- 11 MS SHANN: Just in relation to that, is what you mean that the
- 12 better understanding of those complex issues may change
- 13 the final design?
- 14 MR RIENIETS: It may change the final batter slope and it may
- not. So, that's the space we are in. We are working
- through that to have the final slope design agreed with
- the evidence that it is safe and as stable as possible.
- 18 MS SHANN: Working through those issues, it may also change the
- final design in terms of water, is that right, how much
- 20 water can go into the pit?
- 21 MR RIENIETS: That will be a factor that would need to be
- considered.
- 23 MS SHANN: So the design that is currently put forward, for
- example, by Loy Yang of a partially flooded pit up to a
- 25 particular level, that may change in the future depending
- on the answers to some of these questions around water
- sourcing or water quality?
- 28 MR RIENIETS: It may.
- 29 MS SHANN: Mr Faithful, could I perhaps go back to the original
- 30 question which is do you agree with that proposition that
- 31 the approved rehabilitation plan in this case for

- 1 Hazelwood is largely conceptual and therefore only
- 2 constitutes an early first step in developing the final
- 3 design?
- 4 MR FAITHFUL: I agree, for the approved rehabilitation plan,
- 5 yes.
- 6 MS SHANN: And can you clarify what you mean in relation to
- 7 that?
- 8 MR FAITHFUL: For the approved rehabilitation plan, the 2009
- 9 work plan variation.
- 10 MS SHANN: Sorry, I thought you said "improved".
- 11 MR FAITHFUL: No.
- 12 MS SHANN: The caveat you are putting there is that Hazelwood
- is intending to put in a variation next year.
- 14 MR FAITHFUL: Yes, which will address some of these issues.
- 15 MS SHANN: Mr Mether, can I ask you the same question, which is
- whether you agree with that statement?
- 17 MR METHER: I certainly agree that it is conceptual and the
- work continues on.
- 19 MS SHANN: Mr Faithful and Mr Mether, do you agree that the
- final designs which are currently being put forward in
- 21 relation to either full or partial pit lakes, that that
- 22 may alter depending on the resolution of some of these
- 23 unknowns?
- 24 MR METHER: I don't necessarily agree with that for Yallourn.
- 25 MS SHANN: You were present in court this morning?
- 26 MR METHER: I was.
- 27 MS SHANN: If, for example, the water authorities determined
- that Yallourn was not able to access the water to flood
- the pit, that would clearly change the intended closure
- 30 plan, wouldn't it?
- 31 MR METHER: It would be a discussion we would have to have with

- 1 those authorities.
- 2 MS SHANN: Let's assume the discussion has occurred and they
- 3 still say "no water", it would change the plan, wouldn't
- 4 it?
- 5 MR METHER: They would say "no water"; we would have to work
- 6 out whether a final rehabilitation plan could be modified
- 7 to provide a stable environment with no water.
- 8 MS SHANN: All right. Mr Faithful, in relation to Hazelwood do
- 9 you agree that the resolution of some of these
- 10 uncertainties may change the final intended design?
- 11 MR FAITHFUL: Yes, I do agree. Yes.
- 12 MS SHANN: In terms of ownership of the mines, the licence has
- been granted to a particular company; is that right?
- 14 MR METHER: That's correct.
- 15 MR RIENIETS: Correct.
- 16 MS SHANN: And for each of the three mines that company sits
- within a company structure which is larger?
- 18 MR METHER: That's correct for Yallourn.
- 19 MR RIENIETS: Correct.
- 20 MS SHANN: It is your understanding it's the licensee who
- submits the rehabilitation plan and so on; is that right?
- 22 MR METHER: We submitted it as part of the Yallourn Energy
- 23 Group in the original at that time.
- 24 MS SHANN: Who is the actual company who is the licensee for
- each of the mines?
- 26 MR METHER: It's Energy Australia which previously was Yallourn
- Energy.
- 28 MR FAITHFUL: Hazelwood Power.
- 29 MR RIENIETS: AGL Energy Limited.
- 30 MS SHANN: Do those entities actually own the land?
- 31 MR METHER: At Yallourn, probably 95, 99 per cent of the land,

- 1 the freehold, is owned by Energy Australia.
- 2 MS SHANN: By the same company who has the licence?
- 3 MR METHER: The same company who has the licence.
- 4 MS SHANN: And with Hazelwood?
- 5 MR FAITHFUL: I would have to clarify. I can't answer that.
- 6 MS SHANN: Do you undertake to clarify that?
- 7 MR FAITHFUL: That's fine.
- 8 MR RIENIETS: It is my understanding that around about 6,000
- 9 hectares which includes the mining licence and the
- 10 surrounding land at Loy Yang is owned by AGL.
- 11 MS SHANN: And the same AGL company?
- 12 MR RIENIETS: That's my understanding.
- 13 MS SHANN: In terms of the idea of closure times, the licences
- 14 have expiry dates, and in relation to both Hazelwood and
- 15 Yallourn that's 2026?
- 16 MR METHER: That's the licence expiry date.
- 17 MS SHANN: And in terms of Loy Yang that's 2037?
- 18 MR RIENIETS: That's correct.
- 19 MS SHANN: And in terms of intentions of the companies, are
- there intentions to extend those?
- 21 MR METHER: At Yallourn we intend to run at this stage to 2032.
- 22 MR FAITHFUL: At Hazelwood, yes, to 2033.
- 23 MR RIENIETS: At AGL we plan to run Loy Yang to 2048. However,
- there is a coal supply agreement to an adjacent power
- station that may run longer than 2048. That's to Loy
- 26 Yang B.
- 27 MS SHANN: Each of you has referred to the intent of the mines
- as we presently are in 2015. It's the case, isn't it,
- that there are no guarantees that any of the companies who
- own the mines will actually carry on past a certain date?
- 31 You are not in a position to quarantee there won't be a

- 1 change, are you?
- 2 MR METHER: I'm not in a position to guarantee that, no.
- 3 MR FAITHFUL: I'm not in a position.
- 4 MR RIENIETS: No guarantees in life.
- 5 MS SHANN: No guarantees in life. In terms then of the
- 6 rehabilitation, would you agree that it's a relevant
- 7 consideration that circumstances may change and these
- 8 mines may not close at the times that you have just
- 9 indicated?
- 10 MR METHER: They may not close at the times indicated.
- 11 MR FAITHFUL: I agree.
- 12 MR RIENIETS: I think in Loy Yang's case, it's the newest mine,
- it's 30 years old. So its horizon, I would be fairly
- confident it would push out to 2048.
- 15 MS SHANN: There's external matters outside of the company's
- 16 control in terms of policy or legislative changes to do
- 17 with coal. That's correct, isn't it?
- 18 MR RIENIETS: That's correct, and AGL has come out publicly and
- said it will close all of its coal fired power stations by
- 20 2050. Loy Yang's life is 2048, so our intention is to run
- 21 Loy Yang until 2048.
- 22 MS SHANN: It is possible that some external factors may make
- it less economically attractive for Loy Yang to do that?
- 24 MR RIENIETS: Perhaps.
- 25 MS SHANN: And it may be that there are earlier closure dates?
- 26 MR RIENIETS: Perhaps.
- 27 MS SHANN: In terms of that idea, for example the carbon tax
- which we briefly dallied with, that type of idea would be
- relevant for the profitability of a mine, wouldn't it?
- 30 MR METHER: I'm not in a position to comment on that one.
- 31 MR FAITHFUL: I agree with the concept.

- 1 MR RIENIETS: Obviously a carbon tax adds to your fuel costs.
- 2 So adding costs to your fuel costs affects your cost
- 3 structure of your business.
- 4 MS SHANN: Do you agree that because there are no guarantees in
- 5 life and that there's no guarantee that closure will
- 6 happen at those dates that are currently intended, that it
- 7 is very important for these issues about how the mines
- 8 will be rehabilitated to be resolved in the short-term?
- 9 MR METHER: We have an approved plan and we are working hard at
- 10 delivering that approved plan.
- 11 MS SHANN: Do you agree with the proposition I just put to you?
- 12 MR METHER: Can you put it to me again?
- 13 MS SHANN: Certainly. Do you agree that because there is no
- quarantee that the life of the mine will be as is
- 15 currently intended, that it is very important for issues
- about rehabilitation to be dealt with in the short-term?
- 17 MR METHER: It is important that they be dealt with over the
- journey of the life of the mine.
- 19 MS SHANN: And I'm putting to you that they should be being
- dealt with starting from now.
- 21 MR METHER: They've been dealt with starting 20 years ago and
- we continue to improve our models and our planning.
- 23 MS SHANN: Mr Faithful?
- 24 MR FAITHFUL: We work on a 2025, 2033 mine life, so we cater
- our rehabilitation plans to match that. But, similar to
- Ron, we have been doing a lot of work over a period of
- decades on rehabilitation to a final closure plan.
- 28 MR RIENIETS: I think the life of Loy Yang Mine sorry, AGL
- Loy Yang in that mine is 2048. But the mine may continue
- 30 to supply other customers beyond that, so I think a
- rehabilitation plan needs to have flexibility to go longer

- 1 or shorter.
- 2 MS SHANN: In terms of the actual mines, could you indicate for
- 3 each of them the size and in particular width, depth?
- 4 MR METHER: At Yallourn, the mine itself is about 26 kilometres
- around the surface of it and probably 90, 95 metres deep.
- 6 MR FAITHFUL: Hazelwood is very similar. It is probably 20
- 7 kilometres circumference and it's probably in the order of
- 8 120 metres in depth.
- 9 MR RIENIETS: The mining licence size at Loy Yang is
- 10 4,560 hectares. Obviously not all of that has been mined.
- 11 The current mine is approximately four kilometres long,
- two and a half kilometres wide, 170 metres deep. It's had
- 750 million tonnes of coal mined and it's got about a
- 14 little over a billion tonnes left in its licence.
- 15 MS SHANN: And how much bigger is it intended that they will
- 16 each get?
- 17 MR METHER: At Yallourn we have about 300 million tonne of coal
- 18 to mine to 2032.
- 19 MS SHANN: So how much bigger will the pit be?
- 20 MR METHER: In area wise, I wouldn't have an exact we have
- about two kilometres more by about a kilometre and a half
- 22 wide to go.
- 23 MR FAITHFUL: We'd be very similar at Hazelwood.
- 24 MR RIENIETS: The Loy Yang ultimate size will be six kilometres
- long and four kilometres wide, thereabouts.
- 26 MS SHANN: And on the current plans, how much water is required
- to fill it?
- 28 MR METHER: Depending on the final size, which will be our
- 29 generation profile, but considering if we run at full
- generation to 2032, it will be about 748 gigalitres.
- 31 MR FAITHFUL: We can't confirm the number in terms of the

- 1 volume of water required.
- 2 MS SHANN: That isn't a matter that you have made any enquiries
- 3 about in light of being put forward as the representative
- 4 of Hazelwood for today?
- 5 MR FAITHFUL: We have done a number of studies, but the total
- olume to fill the void, I can't remember that number.
- 7 MS SHANN: Do you undertake to make that enquiry and provide
- 8 that information?
- 9 MR FAITHFUL: Sure.
- 10 MR RIENIETS: The volume we need to be at RL minus 22.5 for
- stability of the mine at closure. The volume of water,
- I haven't got the figure, but I will endeavour to get you
- the exact figure. But the water source from our bulk
- licence, groundwater licence is more than sufficient.
- 15 It's just a matter of how much time it will take to fill
- to that level.
- 17 MS SHANN: And whether they will give you access to that water,
- 18 right?
- 19 MR RIENIETS: Correct. Our assumption is we will have access
- to that water.
- 21 MS SHANN: Is that assumption based on any assurances that you
- have received from the people who control those licensing
- or water regimes?
- 24 MR RIENIETS: No, it's not, because in our water study, which
- has been talked about, the six scenarios, and we have
- looked at all six.
- 27 MS SHANN: But just to clarify, has government actually given
- you any assurance in relation to those water sources?
- 29 MR RIENIETS: We haven't had any official discussions with
- 30 government on that.
- 31 MS SHANN: Have you sought to have any discussions with

- 1 government as to access to those entitlements or
- 2 groundwater licence?
- 3 MR RIENIETS: Not at this point, but if I look at obviously
- 4 the groundwater licence needs to be renewed in 2027. The
- 5 bulk entitlement talks about being used for generating of
- 6 electricity and incidental activities.
- 7 MS SHANN: Incidental to generating electricity?
- 8 MR RIENIETS: Yes.
- 9 MS SHANN: Is the bulk entitlement held by the same company
- 10 that is the licensee for the mining?
- 11 MR RIENIETS: I believe so.
- 12 MS SHANN: Could each of you - -
- 13 MR METHER: To the best of my knowledge, ours is the same.
- 14 MR FAITHFUL: To the best of my knowledge, yes.
- 15 MS SHANN: Can I ask in relation to Hazelwood and Yallourn, has
- 16 the mine approached government to ask, "Can we have the
- water to do what we intend to do with the pits for
- 18 rehabilitation?"
- 19 MR METHER: At Yallourn our rehabilitation plan as part of our
- 20 Maryvale development was part of an EES process which got
- 21 ministerial approval. As I say, it was part of that
- overall plan and every plan since at Yallourn has been a
- refinement of the fully flooded lake system.
- 24 MS SHANN: So in relation to that, though, were you present in
- court yesterday?
- 26 MR METHER: I was.
- 27 MS SHANN: And Mr Rozen was reading out part of the is it
- revised master rehabilitation master plan? Is that the
- 29 correct name?
- 30 MR METHER: The work plan conditions for Yallourn you are
- 31 referring to?

- 1 MS SHANN: Yes, and the document which was produced in response
- 2 to that, the revised - -
- 3 MR METHER: The revised one, condition 7?
- 4 MS SHANN: Yes, that's right. You were present when there were
- 5 some questions being asked about some of what was
- 6 contained within that Yallourn revised plan?
- 7 MR METHER: I was.
- 8 MS SHANN: Do you agree that that plan indicated to government
- 9 that there were issues to do with, relevantly for this,
- 10 water sourcing and that those issues still needed to be
- 11 resolved?
- 12 MR METHER: Correct.
- 13 MS SHANN: Subsequent to that document having been provided to
- government, what steps has Yallourn taken to have those
- discussions about water sourcing?
- 16 MR METHER: Specifically to get access to the water, to my
- 17 knowledge we haven't had further discussions. We have
- certainly had broad discussions with DEDJTR just as part
- of our final rehab, part of our rehab progression, but no
- 20 specific discussions to my knowledge on accessing water
- 21 for the final rehab.
- 22 MS SHANN: Why haven't you?
- 23 MR METHER: A number of activities have been happening since
- that time. It's only been the last three years and with
- it, I suppose, 15 years out, a whole range of things
- 26 change in that time. But water will still have to be
- accessed to provide our final rehab plan.
- 28 MS SHANN: As I understand it, the preferred approach, if I can
- 29 call it that, by Yallourn is to divert at least one river?
- 30 MR METHER: The approved plan is a fully flooded concept to RL
- 31 37 with some interconnectivity to the river systems at its

- final level.
- 2 MS SHANN: So you would accept, wouldn't you, that to get
- approval for that type of diversion, that would take many,
- 4 many years to achieve, wouldn't it?
- 5 MR METHER: It will take many years or years to refine to get
- 6 to that position.
- 7 MS SHANN: But if that request was formally made to government,
- 8 you would accept, wouldn't you, it would take them an
- 9 extremely prolonged process in order to determine whether
- or not to approve it?
- 11 MR METHER: Our approved plan's a flooded mine plan. The
- detail of the water sourcing to deliver that, yes, will
- take some period to work through.
- 14 MS SHANN: But you would accept, wouldn't you, it will take
- 15 government a long time to determine whether or not to
- divert a river, if that request was formally made?
- 17 MR METHER: Government would have to determine how long it
- 18 would take them.
- 19 MS SHANN: Why haven't you initiated the conversation with
- government about water in the last three years?
- 21 MR METHER: Probably because we've had other activities at
- Yallourn that have taken our time in the last three years.
- 23 MS SHANN: Are you referring to the batter collapse in 2012?
- 24 MR METHER: The repair of the Morwell River diversion.
- 25 MS SHANN: And that didn't sort of highlight the issues about,
- for example, water and stability and the interaction which
- 27 might be relevant to address for rehabilitation?
- 28 MR METHER: It certainly highlighted the readily accessible
- 29 water available at Yallourn.
- 30 MS SHANN: In an unforeseen and emergency type of sense.
- 31 MR METHER: Is there a question there?

- 1 MS SHANN: Yes. That's not the intended way in which Yallourn
- 2 wants to fill the mine void?
- 3 MR METHER: It is certainly not the intended way we hope to
- 4 fill in the future.
- 5 MS SHANN: Mr Faithful, could I ask you in relation to this
- 6 issue of water sourcing what steps has Hazelwood taken to
- 7 engage with government and request water sourcing so that
- 8 the plan that they want to achieve can actually be
- 9 achieved?
- 10 MR FAITHFUL: To my knowledge there's nothing formal. There
- 11 has been no formal request of government officials to
- 12 secure access to that water.
- 13 MS SHANN: What about unofficial? Have there been
- 14 conversations which have been initiated by Hazelwood about
- water sourcing?
- 16 MR FAITHFUL: There was a conversation at a recent groundwater
- 17 review committee meeting. We spoke about the Southern
- Rural Water and access to aquifers. From memory there
- were some discussion about licensing period and also about
- 20 use. But that was the most recent thing that I can
- 21 recall.
- 22 MS SHANN: You were present in court this morning?
- 23 MR FAITHFUL: Yes.
- 24 MS SHANN: So we had no one who was a member of that particular
- committee, but we had representatives from some relevant
- water authorities who indicated that they weren't aware of
- 27 any discussions or approaches by the mines about those
- issues. The discussion that you are referring to, was
- that going to be taken further by the people in the room?
- 30 MR FAITHFUL: I hadn't put my mind to it, to be honest.
- 31 MS SHANN: You hadn't turned your mind to whether you hadn't

- 1 asked whoever was there representing Southern Rural Water
- 2 to take those issues further back to the office and make
- 3 those inquiries about - -
- 4 MR FAITHFUL: To clarify, firstly I wasn't there. It was
- 5 somebody else that was representing GDF at that period.
- 6 They asked a question of the Southern Rural Water
- 7 representative who was there, "What is the story with the
- 8 licences for groundwater? And how often or what's the
- 9 licensing process?" It came about that the understanding
- 10 was my understanding was that they get rolled over when
- 11 you start to get towards the end of it. You can either go
- through an application process or the approach would be
- that they would roll over these licences. Now, that was
- given by that person at that meeting and that was verbal.
- 15 MS SHANN: I understand. Is it your understanding that that
- was the extent of the discussion, that it was about
- 17 whether licences can roll over?
- 18 MR FAITHFUL: Yes.
- 19 MS SHANN: So it wasn't to do with what purpose the licences
- are for?
- 21 MR FAITHFUL: Look, I would have to check that, as obviously
- I wasn't there. I know it was certainly about access to
- 23 the water and what happens with the licence, but the
- 24 purpose I can't clarify.
- 25 MS SHANN: All right. In terms of the current plans, just to
- confirm, we have had Yallourn indicate that the current
- 27 preferred plan is a fully flooded pit lake with
- interconnection to river systems?
- 29 MR METHER: Correct.
- 30 MS SHANN: Hazelwood?
- 31 MR FAITHFUL: Lowered land form, so partial pit lake.

- 1 MS SHANN: And to what level on the land form?
- 2 MR FAITHFUL: Start for hydro-geological stability levels minus
- 3 22 and then progressively rising over a period of time.
- 4 MS SHANN: At what period of time?
- 5 MR FAITHFUL: It depends on the modelling that we have recently
- done. In the 2000 work plan variation it was in the order
- of 500 years to reach hydrological equilibrium. But there
- is an amount of recent modelling which has been put
- 9 forward in my witness statement to address some of those
- issues.
- 11 MS SHANN: That puts forward some different options depending
- on issues primarily about where the water might come from?
- 13 MR FAITHFUL: Yes, it does.
- 14 MS SHANN: In relation to Loy Yang?
- 15 MR RIENIETS: Similarly, a lowered land form down to a lake and
- partial part of the mine up until initially to RL minus
- 17 22.5 and then progressively filling up until RL zero over
- time and, depending on the inflows, that time is variable.
- 19 MS SHANN: What's the band of time?
- 20 MR RIENIETS: It is contained in the GHD report, but it may
- take up to 100 years to get to that ultimate level,
- depending on the inflows.
- 23 MS SHANN: Again, depending on the water sourcing issue?
- 24 MR RIENIETS: Yes.
- 25 MS SHANN: Will the companies be involved in maintenance over
- that period of flooding?
- 27 MR METHER: My expectation at Yallourn, there will be a period
- where the company would need to be involved during the
- 29 flooding.
- 30 MS SHANN: What period is that?
- 31 MR METHER: It depends on the flooding period and the time

- 1 afterwards. At Yallourn the flooding period, depending on
- I suppose a number of scenarios, could be down to three
- years to six years to 10 years and without any water from
- 4 other sources even up to 80 years, if you didn't have
- 5 other water sources. But my expectation would be during
- 6 the flooding period there would be a continual monitoring
- 7 program and post flooding there would be a period of
- 8 maintenance until it was deemed to be in a stable
- 9 condition and that could be reduced significantly.
- 10 MS SHANN: Do you accept that the cost for the mine in
- 11 rehabilitating is very different depending on whether you
- are looking at, for example, maintenance over that shorter
- period of less than a decade as compared to 80 years?
- 14 MR METHER: Certainly there's a variance in the cost base.
- 15 MS SHANN: Mr Faithful, in relation to Hazelwood you accept the
- same proposition?
- 17 MR FAITHFUL: Yes.
- 18 MS SHANN: And it's the case, isn't it, you can't say one way
- or the other whether the company would be around in
- 20 500 years still monitoring the water flow into the mine?
- 21 MR FAITHFUL: I can't answer that.
- 22 MS SHANN: Mr Rieniets, in terms of that issue of the company's
- involvement in maintenance, you accept there's a vast
- 24 difference in the cost depending on how long that flooding
- 25 process would take?
- 26 MR RIENIETS: Yes, I accept there's a care and maintenance
- 27 period during the flooding period and obviously that will
- taper off as the flooding occurs.
- 29 MS SHANN: Is that presuming stability goes well?
- 30 MR RIENIETS: It assumes a number of things. It's assuming
- 31 stability. It's assuming adequate coverage of the

- 1 resource and a whole range of matters.
- 2 MS SHANN: And there's an uncertainty as we are all here in
- 3 2015 about, for example, how stable that process will
- 4 actually look like during the flooding. Do you agree with
- 5 that?
- 6 MR RIENIETS: I think as we sit here today in 2015 it's a
- 7 complex issue and there's more work to be done such that
- 8 when we get to 2048 at closure we know all the answers and
- 9 we have come along the journey.
- 10 MS SHANN: Are you in a position to guarantee we are going to
- 11 know the answers to these complex questions by 2040?
- 12 MR RIENIETS: I will go back to my statement before that there
- are no guarantees in life, but I will give you a guarantee
- on that one. We will resolve all of the issues well
- 15 before 2048.
- 16 MS SHANN: How will you resolve the issue of, for example, what
- you need to do with overburden under a water level or
- above a water level in the pit model during flooding?
- 19 MR RIENIETS: It's a range of studies we will undertake to
- ensure that is achievable and acceptable.
- 21 MS SHANN: What happens if the studies come back and say that's
- not achievable or acceptable?
- 23 MR RIENIETS: Obviously that's where your rehabilitation plans
- 24 need to be flexible to cater for different circumstances
- as and when they arise.
- 26 MS SHANN: And if that was the result of those studies, the
- 27 rehabilitation final concept plan may not be able to be a
- 28 pit lake; is that right?
- 29 MR RIENIETS: That's speculation.
- 30 MS SHANN: If the results of research said it would be unsafe
- 31 to flood in this gradual manner going up the slopes, you

- 1 would have to change your ultimate design, wouldn't you?
- 2 MR RIENIETS: You would have to review it and ensure it was
- 3 safe.
- 4 MS SHANN: And if they told you it couldn't be safe, you
- 5 obviously wouldn't proceed with that plan?
- 6 MR RIENIETS: You would have to put mitigation in place to
- 7 assume it was as safe as reasonably practicable.
- 8 MS SHANN: In terms of the issue of putting dirt into the void
- 9 as opposed to water, even up to just a particular level,
- that hasn't been the concept option which has been put
- forward by any of the mines and there's obviously a
- 12 reference in the expert report to that. Can I ask in
- relation to overburden availability in each of the mines
- for you just to indicate what the situation is with that?
- 15 MR METHER: I will start from Yallourn. Your comments were
- 16 actually incorrect there.
- 17 MS SHANN: Part of Yallourn has been - -
- 18 MR METHER: Overburden has going back in there since 1940, so a
- 19 significant probably 300 million cubic metres.
- 20 MS SHANN: Is that the township field?
- 21 MR METHER: Township field. Probably 300 million cubic metres
- of dirt has gone back into the Yallourn hole. If we mine
- for the life of Maryvale, to my recollection there's about
- 24 100 million cubic metres of dirt, slightly in excess of
- 25 that, to come into the east field and Maryvale floors.
- 26 MS SHANN: That's currently being undertaken, that process?
- 27 MR METHER: It is currently being undertaken at the moment.
- 28 MS SHANN: And in terms of progressive rehabilitation insofar
- as it relates to movement of the overburden I think you
- have put it at 85 per cent complete?
- 31 MR METHER: 85 per cent of the mine has had dirt put back in

- 1 it.
- 2 MS SHANN: What percentage of the land has been made available,
- for example, for beneficial use for the public?
- 4 MR METHER: Well, there is a range of things. We have about
- 5 5,500 hectares under licence. The mine footprint itself,
- it would be slightly less than 2,000 hectares. So we have
- 7 agricultural leases out on vast amounts of our land. That
- 8 includes areas that have been rehabilitated such as old
- 9 dumps and old other access areas. If you want to continue
- on what is in the public domain on the Yallourn site,
- I can go through motorbike clubs, hill climb club, walking
- tracks, rail trails, gun clubs times three. So there's a
- lot of public facilities on the Yallourn mining licence.
- 14 MS SHANN: In terms of the ultimate intention of Yallourn, and
- this is going back to the idea of the fully flooded pit
- lake option, what's the intention in terms of beneficial
- use or public access?
- 18 MR METHER: Given it would be an interconnected lake that we
- would strive to achieve, the State would obviously have
- 20 some interest in that water body. I would foresee that to
- be used for both recreation, visual amenity and with
- discussions with the State for significant beneficial
- uses.
- 24 MS SHANN: Recreation, is that people actually being able to
- use the lake?
- 26 MR METHER: I would envisage that, yes.
- 27 MS SHANN: In terms of Hazelwood could I ask you firstly just
- in relation to the overburden issue just to describe what
- the situation is there?
- 30 MR FAITHFUL: The situation is that we have been dumping in
- 31 pits since the mid-2000s. So we don't have external

- 1 overburden dumps, active external overburden dumps.
- 2 MS SHANN: How much overburden is there available? Is it about
- 3 20 per cent overburden to 80 per cent coal? Is that what
- 4 the geological situation is at Hazelwood?
- 5 MR FAITHFUL: It's in the order of.
- 6 MS SHANN: In terms then of the overburden that could go back
- 7 into the pit what's been happening in the last, say, five
- 8 years in relation to that? Has it been covering the
- ground of the pit or is it being held somewhere else?
- 10 MR FAITHFUL: The overburden that's been used out of west field
- has been tipped on the floor of the mine.
- 12 MS SHANN: Will there be enough overburden, in your view, to be
- able to cover the unflooded above pit lake level slopes
- that are envisaged in the Hazelwood final concept?
- 15 MR FAITHFUL: Yes.
- 16 MS SHANN: From the material which is currently available to
- 17 Hazelwood or from external sourcing?
- 18 MR FAITHFUL: No, all from internal sources. So out of north
- field and also out of areas adjacent to the mine.
- 20 MS SHANN: How much overburden is it intended will be put on
- 21 the slopes above pit level?
- 22 MR FAITHFUL: I would have to go away and - -
- 23 MS SHANN: I'm talking in terms of the one metre -
- 24 MR FAITHFUL: Depths of coverage? One metre.
- 25 MS SHANN: So it is one metre?
- 26 MR FAITHFUL: Yes.
- 27 MS SHANN: And that will be soil or will it be clay or capping
- 28 or - -
- 29 MR FAITHFUL: That's a clay base, and then you put topsoil and
- grassing and that on top of that.
- 31 MS SHANN: What testing has been done to ensure, for example,

- 1 that that is the right amount of coverage in order to
- 2 mitigate fire risk?
- 3 MR FAITHFUL: Scientific testing, very little. Practical
- 4 testing, since 2006 since we applied did a number of
- 5 north field batters that were covered with overburden in
- 6 the magnitude of that order and have held up progressively
- 7 well over that period of time.
- 8 MS SHANN: So, in terms of the information that you have, is
- 9 that based on the fact that those haven't caught fire?
- 10 MR FAITHFUL: It is based on the performance of those batters
- 11 under a range of scenarios.
- 12 MS SHANN: Have you tried to - -
- 13 MR FAITHFUL: Catch them on fire?
- 14 MS SHANN: Has some expert tried to do that process?
- 15 MR FAITHFUL: No.
- 16 MS SHANN: Is it fair to say that if, for example, embers hit
- that level or if a bushfire went through, currently you
- don't know whether one metre is the safe level or not?
- 19 MR FAITHFUL: I would say that that level has been proven for
- 20 over a period of since 2006, that it stands up in a good
- 21 manner to a number of different risks.
- 22 MS SHANN: Are there any studies which are being undertaken or
- going to be undertaken by Hazelwood in relation to working
- out whether or not this is the right level?
- 25 MR FAITHFUL: The studies can come later, but practical
- evidence has demonstrated that it's more than sufficient.
- 27 MS SHANN: And in relation to that issue it's correct, isn't
- it, that the more or the greater the depth of the
- 29 overburden which is determined to be required to go on the
- 30 batter slopes, obviously the more overburden is needed; it
- 31 goes without saying?

- 1 MR FAITHFUL: That's right.
- 2 MS SHANN: Do you have enough overburden from your internal
- 3 sources to go to, for example, a two-metre depth?
- 4 MR FAITHFUL: I would have to check that. I can't answer that.
- 5 MS SHANN: Do you accept that Hazelwood doesn't have a lot of
- 6 overburden to go beyond the one metre?
- 7 MR FAITHFUL: I would accept that it is a scant resource and
- 8 using it the best way possible is what we need to do.
- 9 MS SHANN: If studies were done which showed that actually two
- 10 metres was a much safer level both in relation to fire
- 11 risk, also potentially stability, would Hazelwood have to
- get external sourcing of overburden?
- 13 MR FAITHFUL: We have been mining for a number of decades.
- There's a number of internal waste dumps and also external
- waste dumps that could be accessed if that was required.
- 16 Alternatively, if it was only required that half a metre
- was sufficient or 100 millimetres was sufficient then the
- 18 reverse also applies.
- 19 MS SHANN: Those differences would impact on the cost of
- 20 undertaking that process of putting the overburden on?
- 21 MR FAITHFUL: Yes, they would.
- 22 MS SHANN: Thank you. In relation to Hazelwood, does the final
- concept intend public access and beneficial use of the
- 24 land?
- 25 MR FAITHFUL: It certainly intends beneficial use and it
- 26 certainly intends some level of safe public access.
- 27 MS SHANN: Could you just explain what's meant by that, some
- level of safe public access?
- 29 MR FAITHFUL: We need to make sure that we are not exposing
- 30 people to risk by letting them on to the site. So it's a
- 31 matter of making sure that, where we are handing over, we

- are allowing use of something that's safe and secure.
- 2 MS SHANN: So is it fair to say that at this stage you don't
- 3 know whether or not the final concept plan will actually
- 4 be safe enough for people to go on to the land and use it?
- 5 MR FAITHFUL: It envisages that and we have a way and an amount
- of work to do to get there, and that's what it is at the
- 7 moment.
- 8 MS SHANN: So you hope that people will be able to go on to the
- 9 land, but currently you can't say whether or not that's
- 10 the case?
- 11 MR FAITHFUL: I can say that it certainly identifies that that
- is in the 2009 work plan. In terms of the path to get
- there, that's something that we are still working through.
- 14 MS SHANN: All right. If I could come to Loy Yang and firstly
- 15 just ask about the overburden issue. Could you just
- describe, firstly, Loy Yang is also a partially flooded
- 17 pit?
- 18 MR RIENIETS: Yes, that's correct.
- 19 MS SHANN: So again is there an intention that a degree of
- 20 overburden is going to be placed on the slopes which are
- above water level?
- 22 MR RIENIETS: Yes. Perhaps if I just sort of conceptualise how
- the overburden is removed historically and shortly into
- the future. So since the mine started in 1982 all of the
- 25 overburden, about 160 million cubic metres, has been
- dumped externally, continues to be dumped in that location
- 27 up until as we speak. From 2017 the overburden will
- commence being placed back inside the mine. There's
- around about 200 million cubic metres of overburden
- 30 between now and the end of the life that will end up back
- inside the pit. There's two stackers that dispose of the

- 1 overburden. From 2025 onwards all overburden will be
- going back inside the pit. As far as covering the
- 3 batters, we have assumed a metre coverage of the batters
- 4 followed by topsoil and grassing.
- 5 MS SHANN: Has Loy Yang undertaken any studies as to whether
- 6 that is the right depth?
- 7 MR RIENIETS: We have had physical trials inside the mine. We
- 8 are intending to do more trials as part of our
- 9 rehabilitation planning going forward. We will have
- 10 technical people involved and universities involved as
- 11 well to make sure that it's the right combination.
- 12 MS SHANN: Are those set plans that Loy Yang has to have
- further studies and involve universities or is that - -
- 14 MR RIENIETS: It's in our work plan.
- 15 MS SHANN: There has been a recent engagement with GHERG, a
- jointly funded project between Loy Yang and GHERG?
- 17 MR RIENIETS: That's correct.
- 18 MS SHANN: Does that deal with some of these issues?
- 19 MR RIENIETS: Ultimately it will deal with some of those
- issues. They have a trial slope at Yallourn, I believe.
- 21 MS SHANN: That's the government funded batter stability
- 22 project?
- 23 MR RIENIETS: Yes.
- 24 MS SHANN: I'm just asking about the jointly funded project in
- relation to Loy Yang and GHERG. Is that dealing with the
- issue of fire and how much overburden might be needed in
- order to protect the coalface from fire?
- 28 MR RIENIETS: It deals with a whole range of those matters.
- One of those will be that.
- 30 MS SHANN: That is one of those matters?
- 31 MR RIENIETS: My understanding, yes.

- 1 MS SHANN: Coming to the issue of beneficial use, it's the
- case, isn't it, that the current Loy Yang work plan which
- 3 has just been approved indicates that there's no intention
- for the public to have access to the site?
- 5 MR RIENIETS: That's what the current plan says. However, 2048
- is a long way away and between now and then, assuming once
- 7 the area is finally rehabilitated, that's not to say it
- 8 won't be available to the public.
- 9 MS SHANN: At this stage you accept, don't you, that part of
- 10 what you are required to do not just to achieve your own
- 11 goals but as part of the licensing and regulatory regime
- is to progressively rehabilitate towards the final
- 13 concept; yes?
- 14 MR RIENIETS: Yes.
- 15 MS SHANN: Isn't it of some significance to know now whether
- there is an intention for the public to be able to have
- access for the purposes of making decisions about
- 18 progressive rehabilitation?
- 19 MR RIENIETS: We already have areas that we have progressively
- rehabilitated that are available for the public use.
- There is a lookout, Miners Lookout, adjacent to the mine.
- It has been rehabilitated, open to the public, very well
- utilised by the public. So we have areas and aspects
- 24 where the public already have access to some of our
- 25 rehabilitated areas. We have quite an extensive area of
- our pasture that's already been rehabilitated back to
- 27 leaseholders. So farmers come and lease that land off us.
- 28 So there are aspects of use for the public.
- 29 MS SHANN: What percentage of the land does that apply to? The
- lookout where just general members of the public could
- 31 come and use the land, what percentage roughly is that of

- 1 the land held under the licence?
- 2 MR RIENIETS: It would be a small percentage, but the
- 3 leaseholdings we lease out is quite significant, thousands
- 4 of hectares we currently lease back to the community or
- 5 back to members of the community to farm that land.
- 6 MS SHANN: The current work plan which has just been approved
- 7 says, doesn't it, that the intention is to install signage
- 8 and fencing indicating no right of entry to the public?
- 9 MR RIENIETS: It indicates that it is private land and our
- intention is at this point, it may change going forward,
- 11 to have public access into that area.
- 12 MS SHANN: Has that been conveyed, do you think, to the
- community in the Latrobe Valley, that change to the work
- 14 plan?
- 15 MR RIENIETS: I can't answer whether it has or hasn't.
- 16 MS SHANN: Because the 1996 Loy Yang work plan indicated that
- the lake that was envisaged would be for community
- recreational purposes; is that right?
- 19 MR RIENIETS: Yes.
- 20 MS SHANN: And so there has been an alteration with the
- variation which has just occurred in the last few weeks.
- 22 MR RIENIETS: Correct.
- 23 MS SHANN: Was there any attempt by the mine to hold
- information sessions or something with the community which
- 25 indicated that change in terms of public access?
- 26 MR RIENIETS: I think at the public meetings we had to talk
- 27 about rehabilitation concepts we did indicate it is
- 28 private land. That being said - -
- 29 MS SHANN: Are you talking about the community consultations
- 30 held as part of the Inquiry?
- 31 MR RIENIETS: Correct. That being said, that's our position

- 1 today. That may change over time. It's a long way out
- 2 before we get to final rehabilitation.
- 3 MS SHANN: The work plan variation, has that been made publicly
- 4 available in terms of the process over this year, for
- 5 example, on your website or provided to council or
- 6 anything like that?
- 7 MR RIENIETS: We have an ERC committee. My understanding is
- 8 they have been brought through the journey of where we are
- 9 at with the work plan variation. I don't believe it was
- 10 referred to the council. I assume that the document
- 11 becomes public once it's approved.
- 12 MS SHANN: What about prior to that, while it's still in the
- approval phase? Did it go on your website so that the
- 14 community could have access to it?
- 15 MR RIENIETS: I don't believe so.
- 16 MS SHANN: Were you present in court yesterday? I'm sorry if
- I have asked you that question already.
- 18 MR RIENTETS: Yes.
- 19 MS SHANN: During the community panel session with
- 20 Ms Rhodes-Ward and Mr Langmore?
- 21 MR RIENIETS: Yes.
- 22 MS SHANN: Do you accept what Ms Rhodes-Ward said about it
- being too much to expect one or two members, for example,
- 24 who are community representatives on a committee, that
- 25 they will take responsibility for disseminating
- information to the broader public?
- 27 MR RIENIETS: That can be difficult, I would recognise that.
- 28 MS SHANN: Do you accept that if the mine wants to ensure that
- a message is getting out to community they have to take
- additional steps beyond having a conversation with two
- 31 community members present?

- 1 MR RIENIETS: I accept that, and AGL take that very seriously.
- We have an ERC committee, as I mentioned. We also have
- 3 public forums to talk about environmental matters every
- 4 year. The whole community is invited. We get 50 to 60
- 5 people as a minimum turn up to those sessions each and
- 6 every year.
- 7 MS SHANN: And at any of those sessions has the position of Loy
- 8 Yang been conveyed that the present intention is that the
- 9 Loy Yang Mine will be fenced off?
- 10 MR RIENIETS: There hasn't been a specific topic. This year's
- 11 topic was about fire preparedness and mitigation at the
- mine, which was well received from the community.
- 13 MS SHANN: Thank you. Mr Chairman, I note the time and I'm
- just wondering whether it might be appropriate to take the
- 15 lunch break.
- 16 CHAIRMAN: Yes. I'm not sure of the arrangements in relation
- 17 to the expert panel, but I just take it from the fact that
- you are raising the matter in this context with me that we
- just assume that this panel will keep going after the
- 20 break?
- 21 MS SHANN: Yes.
- 22 CHAIRMAN: If we make the break now until 2 o'clock, is that
- 23 appropriate?
- 24 MS SHANN: It is.
- 25 CHAIRMAN: Okay. That's what we will do.
- 26 <(THE WITNESSES WITHDREW)</pre>
- 27 LUNCHEON ADJOURNMENT

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- 1 UPON RESUMING AT 2.00 PM:
- 2 <STEPHEN GERARD RIENIETS, recalled:</pre>
- 3 <JAMES ANTHONY FAITHFUL, recalled:</pre>
- 4 < RONALD CLIVE METHER, recalled:
- 5 MS SHANN: If I could just ask a few questions in relation to
- fire mitigation and covering the coal. Firstly, is there
- 7 any intention in the current plans to cover the batters
- 8 under the level at which the water is ultimately intended
- 9 to reach?
- 10 MR METHER: I will start from Yallourn, if you like. There's a
- 11 range of areas within our mine that are all different and
- we will cover probably at some point where that water line
- does fit. Some batters, whilst we are operational, will
- 14 not be covered. They certainly have spray coverage, but
- 15 the profiles will be left as they are so we can keep our
- infrastructure, roads, powerlines, et cetera, there.
- Other areas of the mine we are currently covering. So,
- where the infrastructure allows us to do it, we can do
- 19 some coverage.
- 20 MS SHANN: Mr Faithful?
- 21 MR FAITHFUL: Hazelwood covers the coal down to minus RL 22
- which is the hydro-geological stability level. The
- batters underneath, it is not intended that they are
- covered with anything apart from the fire service system.
- 25 MS SHANN: What's the best case scenario for when you reach
- 26 minus 22 in terms of timeframe?
- 27 MR FAITHFUL: The modelling indicates between six and seven
- years of filling to reach that level.
- 29 MS SHANN: The batters above that level, are they now in a
- 30 process of being covered?
- 31 MR FAITHFUL: They are now, yes.

- 1 MS SHANN: When did that start?
- 2 MR FAITHFUL: Back in 2006.
- 3 MS SHANN: And what percentage are covered now as compared to
- 4 what will need to be covered in the future?
- 5 MR FAITHFUL: I can't remember the number off the top of my
- 6 head.
- 7 MS SHANN: About 50:50?
- 8 MR FAITHFUL: No, it's not 50:50.
- 9 MS SHANN: Is it like 10 per cent or lower?
- 10 MR FAITHFUL: It would be in the order of that, yes.
- 11 MS SHANN: In terms of the Loy Yang Mine, if I could ask the
- 12 same question?
- 13 MR RIENIETS: The Loy Yang Mine with overburden dumping
- internally commencing in 2017, that will start to see the
- 15 floor of the mine covered and the batters up to a certain
- level. Our intention is to cover all of the exposed coal
- down to the final water level within 15 years of mine
- 18 closure.
- 19 MS SHANN: So if mine closure is intended at this stage to be
- 20 2048?
- 21 MR RIENIETS: 2048 is when the coal supply to Loy Yang A power
- 22 station finishes. Loy Yang B power station may have a
- longer life than 2048 that will still take some of the
- 24 coal out of the mine.
- 25 MS SHANN: So it's potentially up to 50 more years where those
- areas will be uncovered?
- 27 MR RIENIETS: No. We will be covering quite a lot of those
- exposed batters once the overburden goes in and, as our
- mine develops the various stages, we will cover further
- from the top down to the final water level and, at the end
- of mining where any exposed coal is still there above the

- 1 water level, that will be covered within 15 years of
- 2 completion and in the interim it will have adequate fire
- 3 protection on those exposed coal.
- 4 MS SHANN: All right. In terms of the relationship between the
- 5 mines and government in this area of rehabilitation, you
- have been present in court whilst some questions have been
- 7 put to DEDJTR about taking a more active role in
- 8 monitoring compliance with work plans or imposing
- 9 conditions on work plans. Would the mines welcome more
- involvement from the regulator in terms of monitoring
- 11 compliance with rehabilitation plans?
- 12 MR METHER: I will commence here. We produce six-monthly
- milestone reports which we share with the department. As
- regulators, they are on site on a monthly basis doing
- stability reviews and other reviews and compliance reviews
- on site at a three-monthly basis. So I think we have
- 17 enough interaction currently.
- 18 MS SHANN: You wouldn't welcome, for example, the regulator
- 19 setting more detailed performance criteria against
- 20 rehabilitation goals?
- 21 MR METHER: Quite happy to have milestones. I'm certainly
- 22 proud of our performance.
- 23 MS SHANN: You would be happy for government to set those
- 24 milestones?
- 25 MR METHER: Happy to have milestones in line with our
- 26 rehabilitation plans.
- 27 MS SHANN: Mr Faithful?
- 28 MR FAITHFUL: We have milestones. We are obviously happy to
- 29 engage with DEDJTR in a proactive environment. So I'm
- 30 happy for that to occur.
- 31 MS SHANN: And happy for them to set performance criteria? For

- 1 example, a study on a particular topic needs to be
- 2 commenced by a certain date?
- 3 MR FAITHFUL: I'm happy for that to be the case, but providing
- 4 that it's done in a practical and a measured fashion and
- 5 it's not dictated to us but it's working with us, I'm
- 6 happy for that to occur.
- 7 MS SHANN: Mr Rieniets?
- 8 MR RIENIETS: I think it's quite clear in our work plan on the
- 9 stage plan show quite clearly the staging of
- 10 rehabilitation at AGL Loy Yang. So I think the milestones
- are there already right up until closure showing which
- areas will be rehabilitated by when. So, it's quite clear
- the milestones are there.
- 14 MS SHANN: Those stages in that plan, they are approximate
- 15 times, aren't they?
- 16 MR RIENIETS: Obviously it's based on output from the mine, but
- it is linked to certain volumes coming out and advancement
- of the mine. So it's quite easy to say, "Based on this
- volume removed, you should be at this stage of
- 20 rehabilitation."
- 21 MS SHANN: But is it appropriate to have it as an approximate
- time as opposed to a set time by which, for example, you
- need to obtain information about water sourcing?
- 24 MR RIENIETS: I think those milestones are fine. The physical
- 25 work can only be done once areas are freed up to do that
- work and that's related to mine output.
- 27 MS SHANN: You don't need to wait for work to be completed to
- have a conversation with DELWP about water sourcing, do
- 29 you?
- 30 MR RIENIETS: That's a condition in our currently approved mine
- 31 plan at the moment, so we will be engaging with the

- 1 regulators and the other authorities to do that.
- 2 MS SHANN: By approximately 2023?
- 3 MR RIENIETS: At the end of stage C, yes.
- 4 MS SHANN: Which is approximately 2023?
- 5 MR RIENIETS: Correct.
- 6 MS SHANN: You were each present, as I understand it, during
- 7 the evidence given yesterday by Mr Langmore. He talked
- 8 about the idea of a new structure, a coordinated approach.
- 9 Would you support the introduction of a structure which
- 10 coordinated, for example, the conversations between the
- mines, DEDJTR, water authorities on these complicated
- 12 issues?
- 13 MR METHER: We would welcome some coordination. I don't think
- it needs to be new bodies, but we would certainly welcome
- 15 coordination.
- 16 MR FAITHFUL: I don't see any issues with that.
- 17 MR RIENIETS: I would welcome the coordination, but I don't see
- that it needs to be a new body. There are sufficient
- bodies in place already that could pick up on that aspect.
- 20 MS SHANN: In the joint expert report there's been reference or
- 21 endorsement of the idea of an integrated rehabilitation
- 22 plan for the three mines in light of the interconnected
- issues, principally water. Is there support from each of
- you for the idea of an integrated rehabilitation plan?
- 25 MR METHER: Certainly happy to work with the other parties.
- 26 MR FAITHFUL: Elements of, yes. Yes, for elements that apply
- 27 to us all. But for specific site issues, that's down to
- the sites to manage.
- 29 MR RIENIETS: I think where there's common issues across all
- 30 three. The timing of each mine at closure is different,
- 31 so it all needs to be coordinated.

- 1 MS SHANN: Each of you have acknowledged the complexities
- 2 associated with final rehabilitation and the unknowns. Is
- 3 there a commitment that each of you can provide about
- 4 increased knowledge sharing in relation to solving these
- 5 issues between the three mines?
- 6 MR METHER: Certainly on our side that knowledge has been
- 7 increasing at an exponential rate for the last number of
- 8 years, last 10 years, and I must say the three mines
- 9 actively work together.
- 10 MR FAITHFUL: I agree with Ron. I think we are actively
- working amongst ourselves in a number of different
- 12 environments and talking amongst ourselves regarding what
- we can do. So, no, I don't have issues.
- 14 MR RIENIETS: I think it's good industry practice. It occurs
- already, so I don't see why that should not continue.
- 16 MS SHANN: Would that extend to, for example, sharing the
- 17 results of studies that are being undertaken about, for
- example, what is the best slope angle for stability
- 19 purposes or how do you manage water quality issues when
- there's aquifers and floors of mines interacting?
- 21 MR METHER: There's many and varied technical issues, as I have
- learnt over the years, in relation to batters and
- stability and slopes, so one size doesn't fit all, even
- within a single mine. We currently share a lot of
- documentation between the mines now, whether it be ground
- control plans, fire plans. We meet regularly. We arrange
- 27 engineering forums. So it's just an extension or what we
- do now.
- 29 MS SHANN: Is that shared, for example, when each of you have
- produced various reports by GHD which deal with the
- 31 specific mines? For example, does GHD have the permission

- of the mines to use the collective research or knowledge
- 2 that they obtain through dealing with you individually to
- 3 inform themselves better and be better able to provide
- 4 that research advancement?
- 5 MR METHER: I'm sure GHD, like most good consultants, have a
- 6 body of knowledge that they are able to put to use on each
- of the sites. They don't go from one site to another and
- 8 lose the knowledge of a single site.
- 9 MS SHANN: What I'm asking is do they have permission to have
- that knowledge used?
- 11 MR METHER: Not without our approval. If it is specific to our
- mine, we would have a discussion.
- 13 MS SHANN: So is it siloed in that a report that is done in
- terms of, for example, stability with Yallourn, is that
- report shared with the other mines?
- 16 MR METHER: No, it wouldn't be shared. But that's not to say
- I wouldn't share it. Currently within our own mine
- there's probably 20 or 30 different areas of our own mine
- 19 that are all different. So it would be hard to translate
- 20 a specific stability report from our mine to take it over
- 21 to Hazelwood or to Loy Yang.
- 22 MS SHANN: So you accept it may assist them in progressing
- their knowledge to know - -
- 24 MR METHER: If I saw something in our report that I thought
- could assist either Loy Yang or Hazelwood, I'd certainly
- be happy to share it or I'd bring it up in our
- 27 conversations.
- 28 MS SHANN: You accept they might be better placed to determine
- 29 whether or not it has relevance to their mine?
- 30 MR METHER: If they read it, I assume they would be more in
- 31 that place.

- 1 MS SHANN: Mr McKay from TRB and also GHERG, you are familiar
- 2 with him?
- 3 MR METHER: Yes.
- 4 MS SHANN: I will just read to you part of his statement to see
- 5 whether you agree with it. It is at WIT.0006.001.0001,
- of volume 10, tab 15. "There are considerable benefits to be
- 7 gained from establishing an open access knowledge
- 8 management system and database that is accessible by all
- 9 parties and into which all new data can be entered. This
- should integrate the existing databases held by the
- 11 government departments, the mines, the consultants and
- 12 GHERG and should be maintained as part of a wider
- consortium agreement covering knowledge management and
- mine rehabilitation closure planning." Do you agree with
- 15 that statement?
- 16 MR METHER: In general I do. I would have to understand from
- Rae what context he was putting in that, but if it is
- water interconnection or water learnings and those sorts
- of things, certainly.
- 20 MS SHANN: Mr Faithful?
- 21 MR FAITHFUL: Certain aspects, yes, I do agree. But there are
- 22 certain obviously commercial sensitivities and challenges
- that we each face at our own mine that we deal with. But
- I agree in the concept, just in regards to some of the
- 25 finer details around it.
- 26 MS SHANN: You agree from a scientific perspective it would be
- 27 advantageous?
- 28 MR FAITHFUL: Yes.
- 29 MS SHANN: Mr Rieniets?
- 30 MR RIENIETS: I think where the general conditions are similar
- 31 across all three mines it would be advantageous. But when

- 1 you get into stability aspects and the like, all three
- 2 mines are very different. Stability issues within each
- 3 mine within the same mine are very different. So I think
- 4 some of that knowledge may not be relevant from mine to
- 5 mine.
- 6 MS SHANN: The final thing that I want to ask you about relates
- 7 to progressive rehabilitation. Are the steps being taken
- 8 by each of you in the area of progressive rehabilitation
- 9 really tied to this idea that there will be a partially or
- 10 fully flooded lake realised at the stage of closure?
- 11 MR METHER: For Yallourn, that final rehab flooded lake is our
- vision, and our progressive rehab is in line with that.
- We certainly do interim stabilisation and other rehab.
- But when you are dealing with topsoil resources and that
- that are finite, you want to maximise the benefits of that
- 16 resource to the final product.
- 17 MS SHANN: Mr Faithful?
- 18 MR FAITHFUL: Progressive rehab for us is exactly that. It is
- working towards a final closure concept and that's what we
- are doing.
- 21 MR RIENIETS: Progressive rehab is exactly that, working
- towards the final closure concept. That said, until the
- areas that are freed up to be able to do progressive
- rehabilitation, that is a factor in getting access to the
- 25 real estate to do that progressive rehabilitation.
- 26 MS SHANN: Professor Galvin has said in his statement, which is
- 27 WIT.0004.001.0001, volume 10, tab 13, at paragraph
- 28 24 I will read it out to you, if you have some issue and
- 29 you need to see it in front of you. Everyone has that?
- 30 MR METHER: I'm not sure, but read it out.
- 31 MS SHANN: After acknowledging some of what is broadly termed

- operational constraints in relation to progressive
- 2 rehabilitation, Professor Galvin goes on to say,
- 3 "Nevertheless TRB believes that there is scope to increase
- 4 the rate of rehabilitation of exposed coalfaces albeit at
- 5 an additional cost impost. The issues are complex but not
- 6 insurmountable." Do you agree with that proposition?
- 7 MR METHER: In general terms. There can be more, but there are
- 8 constraints.
- 9 MS SHANN: Mr Faithful?
- 10 MR FAITHFUL: There can always be more.
- 11 MS SHANN: Mr Rieniets?
- 12 MR RIENIETS: I think where the mine infrastructure and mining
- areas allow, of course there could be more. But I speak
- for the Loy Yang Mine. Those areas are still part of an
- 15 active part of a mine. So it's good mine operating
- 16 practice to keep those areas active.
- 17 MS SHANN: I wanted to ask you about the cost or the amount
- which has been spent on progressive rehabilitation that
- has been provided as part of the statutory obligations by
- 20 each of the mines to the government. You were in court
- 21 yesterday when Mr Rozen was asking DEDJTR some questions
- about those figures. So, for Yallourn in 2014 there was
- \$200,000 spent out of a total spend of \$43 million?
- 24 MR METHER: That's incorrect.
- 25 MS SHANN: Okay. What's the correct figure?
- 26 MR METHER: The exact figure for 2014, it's in excess of
- 27 \$1 million. I think I put a statement in attached to mine
- that there's more than \$9 million spent in that area in
- the last nine years. That's specific on rehab, not to
- take into consideration the operational things we do as
- 31 part of supporting rehab.

- 1 MS SHANN: All right. In terms of the document which is at
- 2 DEDJTR.1007.001.0206, tab 46, if you could have a look at
- 3 the second page of that document which is titled
- 4 "Expenditure"?
- 5 MR METHER: Yes.
- 6 MS SHANN: Does that have expenditure on rehabilitation as an
- 7 item with 204.7, I think it is?
- 8 MR METHER: I acknowledge the number that's there and have
- 9 since sent a letter to DEDJTR updating the spend on
- 10 rehabilitation.
- 11 MS SHANN: Did you complete this?
- 12 MR METHER: I did.
- 13 MS SHANN: So you are saying that you completed this form
- incorrectly?
- 15 MR METHER: I will explain my understanding of schedule 19 over
- the history that I have been doing this for perhaps the
- 17 last 10 years or so. My understanding of those reporting
- 18 expenditures were to demonstrate the mine was an active
- 19 mining licence and I had those discussions with the
- department and when filling out this schedule I only went
- 21 to the cost base of our contract mining cost base and put
- in the expenditure related to that. When we've had
- further discussions within the last 12 months about spend
- on rehabilitation and wanting to fully understand in
- detail what we'd been spending, I went back and reviewed
- the numbers and provided a letter to the department
- 27 clarifying the actual spend on our mining licence.
- 28 MS SHANN: And paragraph 286 of your witness statement refers
- I think to that, I'm told. In relation to that
- misunderstanding in terms of the spend, is it the case
- 31 that what is defined as fitting under progressive

- 1 rehabilitation as opposed to, for example, fire mitigation
- or some other, is that determined solely by the mine or
- does the government tell you what can and can't constitute
- 4 progressive rehabilitation for the purposes of this?
- 5 MR METHER: We do a five year rehabilitation plan, identify the
- 6 works that are going to be done, that's from the site, and
- 7 share that with the department. We do annual updates of
- 8 that. So there's certainly site based rehabilitation of
- 9 land disturbed.
- 10 MS SHANN: But the amount of money which is spent is determined
- 11 by the mines.
- 12 MR METHER: Certainly determined by the mine, or should I say
- the higher powers above the mine. But we certainly meet
- our obligations and put forward a plan to more than meet
- our obligations.
- 16 MS SHANN: In terms of Hazelwood, the figures that were put
- forward yesterday, \$123,000 spent in 2014 out of a total
- expenditure of \$76 million; is that correct?
- 19 MR FAITHFUL: I know that we spent more than that.
- 20 MS SHANN: Do you accept those are the figures within the
- 21 documents submitted to government?
- 22 MR FAITHFUL: I accept that they are in the figures that are in
- that document, yes.
- 24 MS SHANN: And with Loy Yang, \$1.3 million out of an
- expenditure of \$115 million?
- 26 MR RIENIETS: Yes, I accept that. They are in the figures.
- But let me just make one point. Cost is just one aspect.
- It's really how many hectares or how much area you are
- rehabilitating is the other aspect as well.
- 30 MS SHANN: There's no financial incentive imposed by government
- for expenditure on progressive rehabilitation, is there,

- in terms of linkage to the bond, for example?
- 2 MR RIENIETS: Not to my knowledge.
- 3 MR FAITHFUL: No, not to my knowledge.
- 4 MS SHANN: But in 2023 there's a change from Loy Yang's
- 5 perspective in terms of what's called the Loy Yang complex
- agreement where a trust fund is going to be set up; is
- 7 that right?
- 8 MR RIENIETS: That's correct.
- 9 MS SHANN: And the aim or the purpose of that is to take
- 10 10 per cent of the total expenditure of the mine into a
- trust fund each year which can then be drawn down for the
- 12 purposes of rehabilitation.
- 13 MR RIENIETS: It's a tri-party agreement between the
- 14 government, between Loy Yang A or AGL and Loy Yang B.
- 15 MS SHANN: Have there been any discussions with government
- about that happening sooner than 2023?
- 17 MR RIENIETS: Not with government, no.
- 18 MS SHANN: Has there been any discussions with either Hazelwood
- or Yallourn about a similar structure being set up with a
- 20 trust fund for rehabilitation?
- 21 MR METHER: Not to my knowledge.
- 22 MR FAITHFUL: No, not to my knowledge.
- 23 MS SHANN: If we take, for example, the total expenditure in
- 24 2015 for Loy Yang, being \$115 million, would that result
- in over \$11 million being put into that trust fund if it
- 26 existed today?
- 27 MR RIENIETS: It really depends on what development phase of
- your mine you are at. For example, at Loy Yang we are
- still developing the mine, but rehabilitation will
- increase significantly over the next five to 10 years once
- 31 the overburden gets inside the mine.

- 1 MS SHANN: But some of that money potentially could be used for
- 2 research related to solving some of these complexities;
- 3 isn't that right?
- 4 MR RIENIETS: We would fund that as part of good operating
- 5 practice anyway.
- 6 MS SHANN: But controlled by the mine rather than as something
- 7 that the government had some kind of direct involvement
- 8 in.
- 9 MR RIENIETS: Correct. So our own studies, we would fund that
- 10 ourselves.
- 11 MS SHANN: Thank you very much, the three of you.
- 12 MS NICHOLS: A question to Mr Faithful, just to follow up on
- that topic that has just been discussed. Can you say what
- your expectation is about how the rate of expenditure on
- rehabilitation will increase between now and the end of
- mine life, whether that's at 2026 or 2033? I'm not asking
- 17 you for the cost, but I'm asking you about the rate at
- which the costs will start to increase, because they are
- at a very low level of the overall expenditure at the
- moment.
- 21 MR FAITHFUL: The costs are matched to our progressive
- rehabilitation areas that we work to. So, as more areas
- 23 become open, there is obviously more cost expended on
- those areas.
- 25 MS NICHOLS: Yes, but can you give the Board some idea of
- financially what that will look like? Have you modelled,
- for example, the proportion of your annual budget that the
- rehabilitation spend will consume over the next two, five,
- 29 10 years?
- 30 MR FAITHFUL: Yes, it is in the order of I think it's roughly
- 31 about a 25 to 75 per cent split.

- 1 MS NICHOLS: Can you explain what that means?
- 2 MR FAITHFUL: So you would spend 25 per cent of your total
- 3 rehabilitation dollars within the next five to seven years
- 4 and then the remainder towards the end of mine life.
- 5 MS NICHOLS: So will the remaining 75 per cent be, do you know,
- 6 evenly spread or will most of that be spent - -
- 7 MR FAITHFUL: No, it is matched to our development of the mine.
- 8 MS NICHOLS: All right. Thank you. Can I ask the same
- 9 question to Mr Rieniets. Have you done that kind of
- 10 modelling in relation to the rehabilitation spend?
- 11 MR RIENIETS: Yes, we have. We would expect to spend circa
- 12 \$5 million on rehabilitation over the next 15 years. A
- key activity which we have currently under way is we have
- 14 board approval, \$60 million capital project to move our
- overburden dumping inside the mine commencing 2017.
- 16 MS NICHOLS: Thank you. Can I ask you, Mr Mether, the same
- 17 question?
- 18 MR METHER: Our progressive rehabilitation continues at a
- similar level to now. That's purely in the rehabilitation
- space. We will be certainly continuing to dump and cover
- 21 all the floors. Fortunately we do have a lot more
- overburden than the other sites and we will be able to
- cover a lot of coal in batters as we progress as well.
- 24 There are limitations with our infrastructure that
- 25 actually supports the mine and protects the mine from fire
- that will restrict some rehabilitation until end of life.
- 27 MS NICHOLS: But in terms of the projected costs to cover the
- rehabilitation plan, have you modelled - -
- 29 MR METHER: We have a detailed model of all of our
- 30 rehabilitation plan.
- 31 MS NICHOLS: Have you produced that to the Inquiry in terms of

- 1 the costing over the years between now - -
- 2 MR METHER: We have certainly produced it to the department.
- I don't know whether the department produced it to the
- Inquiry. We've worked on a number of rehabilitation
- 5 studies recently and have significant models out there.
- I'm not sure where they've all ended up, but a lot of that
- 7 has been shared recently.
- 8 MS NICHOLS: But in terms of your knowledge as you sit here
- 9 today, can you answer how the costs are likely to
- 10 escalate, say, over the next five, 10, 15 years in terms
- of the proportion of your budget?
- 12 MR METHER: The proportion of the budget, I haven't done those
- numbers. But we will spend around a million dollars plus
- each year and some years will be more as we can open up
- more areas, as Steve said.
- 16 MS NICHOLS: Thank you. Mr Rieniets, I just have some
- questions for you about the current recently approved work
- plan. Do you have a copy of that document with you?
- 19 MR RIENIETS: I think so.
- 20 MS NICHOLS: Can I ask you to go to section 6.3, which is at
- page 71 of the work plan. Do you have that there?
- 22 MR RIENIETS: Yes.
- 23 MS NICHOLS: In fact, before I take you to that particular
- 24 passage, can I just be clear about this work plan. This
- is the document that you submitted to the department and
- it was approved in the form that you submitted it, but
- with some conditions; that's right, isn't it?
- 28 MR RIENIETS: That's correct. Seven pages of conditions, to be
- exact.
- 30 MS NICHOLS: Yes, and in your first statement that is dated
- 30 October you had said that you regarded the plan as

- 1 submitted as containing a comprehensive rehabilitation
- plan. That's right, isn't it?
- 3 MR RIENIETS: Correct.
- 4 MS NICHOLS: It was really your view and that of AGL that the
- 5 plan as submitted was adequate and sufficient including as
- 6 to rehabilitation?
- 7 MR RIENIETS: Correct.
- 8 MS NICHOLS: And you have said that the conditions give rise to
- 9 a number of technical and operational issues?
- 10 MR RIENIETS: That's correct.
- 11 MS NICHOLS: Can we discern from that that you will be seeking
- to resist some of those conditions in your discussions
- with the department?
- 14 MR RIENIETS: Well, we are currently reviewing those
- 15 conditions. We only received them just recently. So we
- will go through those conditions and we will engage with
- the department to come to a resolution on those
- 18 conditions.
- 19 MS NICHOLS: Thank you. Can I now return to part 6.3 of that
- 20 plan. This has been discussed previously in the Inquiry.
- It is mentioned in the third sentence, "One concept is
- 22 based on all existing water licences and entitlements
- being available to flood the pit." You are aware that, as
- you have mentioned earlier, you need to get to an RL of
- 25 minus 22.5 and you say that based on the modelling done by
- 26 GHD in that report, you say that that report shows "lake
- 27 level will be at minus 18 to minus 20, 15 years after
- flooding commences depending on a range of expected
- 29 climatic conditions". That really represents what you
- have said to the department is an appropriate end of life
- 31 use; is that correct?

- 1 MR RIENIETS: That's correct.
- 2 MS NICHOLS: Can I just ask you briefly to have a look at the
- 3 GHD report which is in annexure 4 to the work plan. The
- 4 reference to that document to the page I want to take you
- 5 to is at AGL.0001.004.0591. In fact, I might take you to
- 6 page 595. I think that will make it quicker.
- 7 MR RIENIETS: Can you tell me which tab it is in, please?
- 8 MS NICHOLS: My document doesn't have tabs. It's the technical
- 9 references which is appendix 4 to the work plan. Does
- 10 that assist? Can you see the page numbers on the top
- right-hand corner of the document? It has been suggested
- to me it might be tab 3A. I'm sorry, I'm not sure whether
- 13 that's correct or not.
- 14 MS SHANN: I hopefully have a correct reference, I'm not sure.
- 15 Volume 1A, tab 3. I think that's right.
- 16 MS NICHOLS: Thank you. I can take you to the document as it
- appears on the screen, Mr Rieniets, if that's convenient?
- 18 MR RIENIETS: Yes, let's do that.
- 19 MS NICHOLS: The document I'm referring to is the mine lake
- water balance model. Are you familiar with that study?
- 21 MR RIENIETS: Yes.
- 22 MS NICHOLS: Do you agree that what GHD has done is to model
- various scenarios really based on water inputs?
- 24 MR RIENIETS: Correct.
- 25 MS NICHOLS: And they list the water inputs in that study, one
- of which is the bulk entitlement of 40 gigalitres per
- 27 year?
- 28 MR RIENIETS: Correct.
- 29 MS NICHOLS: And they have modelled those scenarios on the
- 30 basis of different climatic conditions?
- 31 MR RIENIETS: Correct. There are four different climatic

- 1 conditions.
- 2 MS NICHOLS: Yes. I want to direct you to GHD's conclusions
- 3 which is at the page ending 0605. GHD says this at 5.1
- 4 and it is up on the screen now. "The modelling results
- 5 indicate that diverting the full bulk entitlement
- 6 allocation" which is what's dealt with in scenarios 1
- 7 and 2 "results in the shortest time for the lake to
- 8 reach stabilisation of approximately 10 years. The
- 9 likelihood of accessing full bulk entitlements post mine
- 10 closure is unknown at this stage and could potentially be
- 11 affected by actual climate sequences, in particular during
- drought periods, so there is some uncertainty associated
- with relying on this allocation for mine closure
- planning." Are you aware of that conclusion?
- 15 MR RIENIETS: Yes, I did read it.
- 16 MS NICHOLS: What GHD go on to do is to discuss in the next
- paragraph that, "Ground water extraction volumes used in 4
- and 5 are likely to represent the range of possible future
- post mining groundwater extractions." As a result of
- that, at table 8 which is just further down the page, you
- 21 will see, if you have that there, that GHD's conclusions
- are that scenario 4 represents the best case scenario,
- scenario 5 is the likely case and scenario 6 is the worst
- 24 case. Do you see that there?
- 25 MR RIENIETS: I do.
- 26 MS NICHOLS: Is that a conclusion you were aware of before now?
- 27 MR RIENIETS: I did read that.
- 28 MS NICHOLS: Yes, so what that means is that in GHD's opinion
- 29 what is likely to be achievable and realistic in terms of
- 30 the considerations that they have had regard to is
- 31 scenario 5 and at best scenario 4 and at worst scenario 6.

- 1 You will see for each of those scenarios they give years
- 2 to RL minus 22.5 and scenario 5, which is most likely, is
- 3 55 to 75 years, which is quite different, isn't it, from
- 4 scenario 2 that you have selected?
- 5 MR RIENIETS: Obviously the inflows are a critical assumption
- 6 to determine when a lake will fill.
- 7 MS NICHOLS: That's right. But, if that's correct, and as far
- 8 as AGL is concerned this is the report it's relying on to
- 9 support its end of mine concept, then one can't take the
- figure of 15 years to get to minus 22.5 as a realistic
- 11 basis for any assumptions about what it will take to get
- 12 to that end of life concept, can you?
- 13 MR RIENIETS: I think what we are saying is there are a number
- of scenarios with different assumptions and at best case
- it is 10 years with all the inflows and, if all those
- inflows aren't there, it is somewhat less.
- 17 MS NICHOLS: Can I suggest, Mr Rieniets, that what you have
- actually done in your work plan that you have presented to
- the department is to suggest that an outcome of 15 years
- can be assumed and that that is a basis upon which the
- consequences of the end use can be assessed? In other
- words, you are supporting scenario 2 as the scenario which
- can be assumed as the basis going forward.
- 24 MR RIENIETS: That is our assumption, yes.
- 25 MS NICHOLS: Why is it that you have made that assumption when
- your own consultants have assessed it and dismissed
- 27 scenario 2 as being unrealistic and unachievable?
- 28 MR RIENIETS: I don't think it's dismissed. I still think it's
- a scenario and there have been six scenarios evaluated.
- The key question is what is the inflow and we will be
- 31 having discussions with the water authorities to firm up

- on some of those bulk entitlements and groundwater
- 2 licences going forward.
- 3 MS NICHOLS: But what you have actually done is to pick the
- 4 most extreme optimistic scenario and base your work plan
- 5 on that. That's correct, isn't it?
- 6 MR RIENIETS: No, it's not. I would have picked scenario 1 if
- 7 I did that. We didn't.
- 8 MS NICHOLS: You may be correct, but - -
- 9 MR RIENIETS: And I would have added the 20 gigalitres from Loy
- 10 Yang B as well. We didn't do that.
- 11 MS NICHOLS: Yes, but you have not chosen a scenario which
- reflects your own consultant's assessment about what is
- most likely.
- 14 MR RIENIETS: That's correct. We will be having discussions
- 15 with the water authorities as per a condition in our
- licence to firm up on those inflows.
- 17 MS NICHOLS: Can I just draw your attention to one more thing
- in the GHD report. Can you go to the next page of that
- 19 document, please. Sorry, the same page. In the final
- 20 paragraph it is noted that, "Lake level RL minus 22.5
- 21 required for long-term stability is based on the whole of
- life plan. To manage uncertainty associated with future
- water sources, particularly licensing of bulk entitlements
- and groundwater extractions, modification to the whole of
- 25 life plan could be considered at key locations to reduce
- the maximum stable lake level from RL minus 22. These
- 27 could include increasing the final mine grade and
- 28 placement of additional overburden at selected locations,
- thereby reducing stable lake level and void filling period
- 30 when it is reached."
- 31 Given the reservations that GHD express about the

- 1 water entitlements and the other evidence heard in the
- Inquiry, it would be prudent, wouldn't it, to at least
- 3 investigate what GHD says as an action that should be
- 4 taken in relation to your mine?
- 5 MR RIENIETS: I think I will go back to my statement earlier.
- I think a rehabilitation plan need not be static, it
- 7 should be a live document, and as conditions or
- 8 circumstances change in the mine such as reduced outputs,
- 9 such as earlier closure, it needs to be flexible enough to
- 10 take into account all of those things. This is just one
- of those options.
- 12 MS NICHOLS: With respect, it's not really an answer to the
- question. What GHD is saying to you is that, given doubts
- about water allocations, here are some steps that can be
- taken in the alternative to assuming that you will be able
- 16 to achieve the water allocation that you would like for
- the scenario that you prefer. My question to you is
- wouldn't it be a prudent thing to do to at least
- investigate the steps that GHD are recommending?
- 20 MR RIENIETS: I don't think anyone is saying we wouldn't
- investigate that step. But I think it's part of the
- 22 negotiations we will have with the water authorities at
- 23 the appropriate time.
- 24 MS NICHOLS: So you are not ruling out the options that GHD
- 25 have mentioned at the end of that page?
- 26 MR RIENIETS: No.
- 27 MS NICHOLS: Would you accept that in relation to water quality
- issues the current status of the work plan doesn't
- actually set any criteria, but rather says that they need
- 30 to be set in the future?
- 31 MR RIENIETS: That's what it says, yes.

- 1 MS NICHOLS: In relation to the type of monitoring and
- 2 assessment that would be required if indeed a filled lake
- 3 scenario is adopted, you could put in place now or in the
- 4 short term plans for those sorts of studies to occur? You
- 5 could design those studies now; is that right?
- 6 MR RIENIETS: We could design what those studies could consist
- 7 of.
- 8 MS NICHOLS: And you could set criteria now for measuring water
- 9 quality once the lake is being filled?
- 10 MR RIENIETS: Obviously we would do a risk assessment and
- assess the likelihood of the quality, work through that
- with the regulator at the appropriate time.
- 13 MS NICHOLS: Yes. But the fact that your plan has criteria to
- be developed presently, there's no reason why you can't
- develop the criteria for water quality objectives in the
- short term? You don't need to put that off until the end
- of mine life.
- 18 MR RIENIETS: End of mine life is 30 plus years away. We could
- 19 start working on that.
- 20 MS NICHOLS: Can I ask you to relation to the conditions of the
- licence which are at annexure A of the work plan. Do you
- have a copy of the conditions there?
- 23 MR RIENIETS: Yes.
- 24 MS NICHOLS: Can you have a look at condition 6.9, which is
- 25 that, "The licensee must review prior to the completion of
- 26 each stage in consultation with the department and
- 27 relevant water authorities the water quantity requirements
- for the lake filling described in section 6.4.4 and shall
- consider available weather and rainfall data and models."
- The requirements of that condition are something which
- 31 ought reasonably to be done for the purpose of

- 1 rehabilitation, aren't they? That is a reasonable
- 2 condition that AGL should abide by?
- 3 MR RIENIETS: Yes.
- 4 MS NICHOLS: So you have no difficulty with that condition?
- 5 MR RIENIETS: No.
- 6 MS NICHOLS: In relation to condition 7.1, you are being asked
- 7 there to, "Prior to any works that impact on the Latrobe
- 8 catchment water resources," including lake filling and so
- on, "develop a water resources risk assessment in
- 10 consultation with the Catchment Management Authority." Do
- 11 you have any difficulty with that condition?
- 12 MR RIENIETS: Not at this stage, but as I said before we are
- still working through all the conditions. We only got
- 14 them last week.
- 15 MS NICHOLS: Yes, but none of these should be a surprise to
- 16 you, should they, because they are matters that really go
- to the core of what the rehabilitation plan needs to
- achieve, don't they?
- 19 MR RIENIETS: To develop how much water you have available is a
- 20 critical input to the rehabilitation plan if it assumes
- 21 water is part of that plan.
- 22 MS NICHOLS: Yes, and so condition 7.1 is asking you to do
- things which currently aren't specified in the plan, but
- which are necessary to be done; that's correct, isn't it?
- 25 MR RIENIETS: That's what it says and, as I said, we are still
- 26 reviewing these conditions.
- 27 MS NICHOLS: But there is no valid basis on which you would
- object to that condition, is there?
- 29 MR RIENIETS: I can't give you yea or nay right here. We are
- 30 working through the conditions.
- 31 MS NICHOLS: Can I ask you whether you read condition 7.1 as

- 1 relating to water quality at all?
- 2 MR RIENIETS: I guess "impact on Latrobe catchment" may suggest
- 3 water quality.
- 4 MS NICHOLS: Yes. Do you read this as relating at all to water
- 5 quality in the mine void?
- 6 MR RIENIETS: It doesn't say "mine void" there in relation to
- 7 impacts on water quality.
- 8 MS NICHOLS: So that might be something you need to clarify
- 9 with the department?
- 10 MR RIENIETS: Maybe, yes.
- 11 MS NICHOLS: Can I ask you about condition 6.5, in particular
- subparagraph (b). This is requiring you to, prior to the
- commencement of stages D and E, which are 2030 and 2037?
- 14 MR RIENIETS: Correct.
- 15 MS NICHOLS: To "set out specific actions and timing of
- 16 commencement of those actions to implement rehabilitation
- 17 risk reduction, including but not limited to planning for
- rehabilitation, progressive rehabilitation works and any
- 19 relocation of infrastructure affected by the
- 20 rehabilitation works." Is that a condition that AGL has
- 21 difficulty with?
- 22 MR RIENIETS: I wouldn't have thought so. It is part of normal
- operation to review what areas are becoming available for
- 24 progressive rehabilitation, what infrastructure may need
- 25 to be relocated as it is freed up and the like.
- 26 MS NICHOLS: It is necessary, isn't it, in terms of assessing
- these conditions, setting out specific actions and timing
- of commencement of those actions is an important criteria,
- isn't it, for a rehabilitation plan?
- 30 MR RIENIETS: I think our work plan sets out stage plans when
- 31 certain works will be done.

- 1 MS NICHOLS: You have already discussed that topic with Counsel
- 2 Assisting so I won't repeat that. But is it fair to say
- 3 that that condition is one which AGL accepts as reasonable
- 4 and appropriate?
- 5 MR RIENIETS: I would have thought a plan to say what
- 6 rehabilitation you are going to do when is a reasonable
- 7 condition.
- 8 MS NICHOLS: Thank you. Can I ask you about the subject of
- 9 public access to the land at end use. You were already
- 10 asked some questions by Counsel Assisting this morning.
- 11 You indicated in answer to some questions that the current
- 12 end use plan, which anticipates only private use and
- accordingly will have fences and warning signs around the
- 14 property, that that may be subject to change; that's
- 15 right, isn't it?
- 16 MR RIENIETS: Well, it is 30 plus years away and who knows what
- access may be granted at the end of the life. But as we
- 18 sit here today, that's our plan.
- 19 MS NICHOLS: And it is also true that the land may be divested
- at some time in the future?
- 21 MR RIENIETS: May well be. Some of it, the surrounding land,
- 22 may well be.
- 23 MS NICHOLS: Given that and also given, as your community
- engagement plan acknowledges, that section 39A of the
- 25 Mineral Resources Sustainable Development Act requires
- 26 consultation and I will read from your
- 27 document "requires consultation with the community
- across the entire lifecycle of a project from exploration
- 29 to closure, rehabilitation by sharing information and
- 30 giving members of the community a reasonable opportunity
- 31 to express their views," given that obligation and given

1	the fact that the ultimate intention might change and
2	given that you had no explicit public consultation about
3	the change in use, wouldn't it be fair to say that that
4	question should be put back on the table for genuine
5	community consultation before it is rigidly committed to?
6	MR RIENIETS: I don't think we are saying we wouldn't do that.
7	We have upcoming environmental review committee meetings
8	and I'm sure the work plan will be probably a number 1 or
9	number 2 agenda topic.
10	MS NICHOLS: The question was put before and I think you agreed
11	with it, that environmental review committee meetings are
12	a particular forum, but they don't take in really the
13	broader community. Do you accept that genuine
14	consultation about this change in use needs to be done in
15	order to meet your objectives in your consultation plan
16	and the requirements of the Act about allowing the
17	community to have a reasonable opportunity to express
18	their views?
19	MR RIENIETS: I think there needs to be some consultation, but
20	we are not saying we are not going to do that.
21	MS NICHOLS: But do you accept that you really do need to do
22	that, because presently AGL has not met the obligation in
23	relation to allowing the community to have a reasonable
24	opportunity to express its views about the change from the
25	contemplated use in the previous work plan to the
26	contemplated use in this work plan in relation to public
27	access?
28	MR RIENIETS: I think we have had discussions with our
29	environmental review committee on the work plan, maybe not
30	on that specific topic, but it's not to say we won't into
31	the future.

- 1 MS NICHOLS: Just stopping on that specific topic, do you
- 2 accept that it is necessary for AGL to allow the community
- 3 a reasonable opportunity to express its views about that
- 4 particular topic?
- 5 MR RIENIETS: That would be - -
- 6 MS FORSYTH: I object to the question. If the question is
- directed to an interpretation of what the requirements of
- 8 the Act are, that requires - -
- 9 CHAIRMAN: Sorry, I can't hear you sufficiently.
- 10 MS FORSYTH: I object to the question on the basis that it
- seems directed towards an interpretation of the
- 12 requirements of legislation and would therefore require
- the witness to draw a legal conclusion, and that's the
- 14 basis of my objection.
- 15 CHAIRMAN: No, I'm not prepared to be troubled by that kind of
- 16 legal debate.
- 17 MS NICHOLS: I will continue. It's not directed to an
- interpretation.
- 19 CHAIRMAN: No, and that's why I say you can make it clearer
- that it's not intended to seek a legal opinion but a
- 21 factual assessment.
- 22 MS NICHOLS: Yes. Are you clear, Mr Rieniets? I'm not asking
- you to interpret the Act, which is one of the reasons why
- I read from your own plan, to which AGL says very clearly
- 25 it's committed, that it is obliged to give the community a
- reasonable opportunity to express its views. So I'm
- 27 asking you about the circumstances you discussed this
- 28 morning with Counsel Assisting in that you do have your
- 29 ERC meeting, but there was no wide open publication of
- this proposed change before it happened, there hasn't been
- 31 a publication of it on your website, in particular before

- it happened, and there's been no explicit notification to
- 2 the broader community about it. You accept those facts,
- 3 don't you?
- 4 MR RIENIETS: That's correct.
- 5 MS NICHOLS: Given those facts, wouldn't you say that AGL is
- 6 obliged to allow the community to have a reasonable
- opportunity to express its views, that it is now required
- 8 to engage in real consultation about this very point?
- 9 MR RIENIETS: And I maintain nowhere have we said we wouldn't
- do that.
- 11 MS NICHOLS: I'm not asking you about whether you've said you
- wouldn't. I would like you to commit to actually doing
- it. Will you commit to doing that?
- 14 MR RIENIETS: We will commit to explaining to the community the
- 15 contents of our work plan and seek information.
- 16 MS NICHOLS: What will you seek? You have said that you will
- 17 commit to explaining to the community your work plan. But
- allowing the community a reasonable opportunity to express
- its views is a bit more than that, isn't it?
- 20 MR RIENIETS: That's a process we will have to work our way
- 21 through.
- 22 MS NICHOLS: And in that process will AGL be open to
- reconsidering the extent to which public access to the
- land at the end of mine life needs to be incorporated into
- 25 the end of use mine plan?
- 26 MR RIENIETS: I can't give an answer on that right here today.
- 27 It is 30 years away and we will make that assessment based
- on the community feedback.
- 29 MS NICHOLS: My point really is that it is not 30 years away.
- It's happening now, isn't it, because if your end of mine
- 31 life concept is to allow for public access, there might be

- things you need to do now and in the time before the end
- of life to facilitate that happening; isn't that correct?
- 3 MR RIENIETS: I think we I mentioned before we have public
- 4 access to parts of our operation now.
- 5 MS NICHOLS: You do. But, with respect, that's not really an
- answer to the question. The aspects of the mine which
- 7 presently don't permit public access but which may, if
- 8 your end of life plan allowed for greater public access to
- 9 it, might need you to, for example, remediate batters to a
- 10 higher degree of stability or ensure a different water
- 11 quality standard, for example, there might be things that
- 12 have to happen now I don't mean just now, but in the
- intervening period before end of mine life that will
- 14 facilitate that. Do you accept that?
- 15 MR RIENIETS: There may.
- 16 MS NICHOLS: So it's important, isn't it, to, one, consult with
- the community; two, reconsider; and, three, be clear about
- what the end of life public access scenario will involve
- 19 now rather than later?
- 20 MR RIENIETS: I think I will repeat. We are not saying we
- 21 won't do that. It is an option open to us right at this
- 22 point.
- 23 CHAIRMAN: I think you have taken it as far as you can. He has
- given the same answer three times. You can't expect to
- 25 keep on pressing the same position.
- 26 MS NICHOLS: I won't, Mr Chairman. That's all, thank you.
- 27 DR COLLINS: If the Board pleases, I have some questions for
- Mr Mether. I wonder if Mr Mether and members of the Board
- 29 could be shown the document in hearing book volume 12, tab
- 30 51A. I think for the benefit of the members of the Board
- 31 we have some hard copies that can be annotated.

- 1 Mr Mether, is that a document you prepared for
- 2 the purpose of giving evidence before this Board of
- 3 Inquiry?
- 4 MR METHER: It is.
- 5 DR COLLINS: Is it a document that depicts the final approved
- 6 lake solution for the Yallourn Mine void?
- 7 MR METHER: It does.
- 8 DR COLLINS: Can I just get you to explain to the members of
- 9 the Board what we are looking at on that diagram?
- 10 MR METHER: The diagram shows our approved final rehab plan to
- 11 RL 37, and that's the blue outline that is there. I got
- this diagram put together in response to a Jacobs report
- that looked at different filling options for the mine. It
- is to show the Yallourn Mine one size doesn't fit all to
- 15 the Jacobs report. The topography of the Yallourn Mine
- varies across the whole site. If I put it simplistically,
- it's a bit like a swimming pool, a deep end and a shallow
- 18 end. On the right-hand side you have the deep end where
- the water will fill right to the top and flow out to the
- 20 Latrobe River. On the left-hand side the water goes
- 21 towards the shallow end and actually the old overburden
- dumps of township field actually stick out of the water.
- So, actually the water doesn't get to the edge of the
- 24 mines in the left-hand side of that drawing.
- 25 DR COLLINS: I will ask you a bit about the topography in a
- 26 moment, but just to orientate us, at the top right of the
- 27 depiction of the lake there's an arrow. Does that depict
- the connection of the proposed final lake solution with
- the Latrobe River?
- 30 MR METHER: That's correct.
- 31 DR COLLINS: The arrow which appears in the centre at the

- 1 bottom, does that depict the proposed interconnection of
- 2 the final lake solution with the Morwell River?
- 3 MR METHER: It does.
- 4 DR COLLINS: In the middle of the diagram it's as if we are
- 5 looking at two lakes with, on your diagram, a pink line in
- 6 the middle. What does the pink line and then the yellow
- 7 line depict?
- 8 MR METHER: Those pink lines, if you actually go to the
- 9 northern, the top right-hand side, that's representative
- of a drawing that Jacobs did showing a fully flooded lake
- option. So the water is filled to the capacity within the
- 12 lake.
- 13 DR COLLINS: I think we might have been slightly at
- 14 cross-purposes, Mr Mether. I'm just asking about the
- middle of the diagram where we see a pink line and then a
- yellow line bisecting the lake from north to south. What
- 17 does that depict?
- 18 MR METHER: That cross-section actually takes us through the
- 19 southern end of our Morwell River diversion. On the
- 20 right-hand side you have the lake coming up to the
- 21 diversion structure, so that predicts a full lake type of
- option in the Jacobs report. If you then go through the
- river diversion, you get to the other side and there's
- 24 actually an overburden dump up against the other side of
- it, so you actually have an unflooded lake type of form in
- the Jacobs form until you get down to a level that the
- 27 lake water would come up against the dump.
- 28 DR COLLINS: Does the proposed solution as approved in the
- 29 Yallourn Mine rehabilitation plan accord with any of the
- 30 six options mentioned in the Jacobs report?
- 31 MR METHER: A combination of all of them is the approved plan,

- 1 not one.
- 2 DR COLLINS: The Jacobs report says that the Yallourn approved
- 3 solution is most consistent with what is described as the
- 4 "partial fill below the water table" solution. Do you
- 5 agree with that conclusion?
- 6 MR METHER: No, it's a difficult one when I get into the water
- 7 table and the partial water tables. But ours depicts a
- 8 full lake option.
- 9 DR COLLINS: Is it therefore the case that the Yallourn
- 10 approved solution is more consistent with what Jacobs
- describes as a "full lake" option?
- 12 MR METHER: Yes, and I probably got myself a little bit
- confused in the first question. When it says "partially
- filled" or "fully filled", if you say "partially filled
- 15 with overburden", yes, ours is partially filled with
- overburden and then a full lake on top of the overburden.
- 17 DR COLLINS: What is it about the topography of the Yallourn
- 18 Mine that makes it impossible, in your view, to implement
- 19 what Jacobs describes as the "partial fill below the water
- 20 table" solution?
- 21 MR METHER: For a start, if you go lower than our RL 37,
- 22 effectively you will have more dry land within our mine,
- so it will be an unflooded option in parts of our mine.
- 24 DR COLLINS: Anything else?
- 25 MR METHER: So if you went lower, say we have backfilled in the
- 26 mine, I don't believe with our catchment that it will stay
- 27 at that level. It will fill up anyway and then flow out
- into the river system.
- 29 DR COLLINS: So your view is that a function of the topography
- or the characteristics of the area is that eventually you
- 31 will end up with an RL plus 37 lake in the Yallourn void

- 1 over time?
- 2 MR METHER: That's our modelling.
- 3 DR COLLINS: Without human intervention.
- 4 MR METHER: Without human intervention or without intervention
- from elsewhere.
- 6 DR COLLINS: One of the features of the Yallourn final solution
- 7 as depicted on this graph is interconnection by way of
- 8 inlet in the south centre and then outlet at the
- 9 north-east with existing water courses. Can you explain
- 10 why that is a feature of the Yallourn final solution?
- 11 MR METHER: In all the readings that I've done and all the
- things that I've seen, interconnection to the river system
- certainly improves the water quality within the lakes. It
- can allow water to come into the mine in a planned way and
- then go out, and it has the characteristics where it can
- actually then be of beneficial use to the lakes and to the
- 17 river systems.
- 18 DR COLLINS: When you talked about improvement of the quality
- of the water in the lake, what about the quality of the
- 20 water in existing water courses from which water in the
- lake might enter?
- 22 MR METHER: From our current understanding of the Morwell River
- and the water quality within the Morwell River,
- 24 potentially that water quality could be improved by
- actually moving through the lake system.
- 26 DR COLLINS: What work has been done to give you that
- assurance?
- 28 MR METHER: There's been a number of reports over time. HRL
- have done a report and GHD have done a report in that
- 30 area.
- 31 DR COLLINS: Does Yallourn presently release water used in its

Τ	operations into existing water courses?
2	MR METHER: It does. We have a discharge licence under the EPA
3	and notionally discharge around 15 gigalitres a year out
4	into the river systems. Currently we only have to treat
5	that for suspended solids. No other treatment is put into
6	that water which we discharge, and generally speaking that
7	discharge water is as good or better than the water
8	quality within the Morwell River.
9	DR COLLINS: You said to the Board that you thought the final
10	lake solution had the potential to be a beneficial
11	resource for the community. Could you develop that for
12	the Board?
13	MR METHER: Yes, this is something that I think is an
14	opportunity for the state and an opportunity for certainly
15	Gippsland. As a resident, I live beside the Blue Rock
16	Lake and I have experienced the acquisition of the land up
17	at Blue Rock and then the use of that land for the water
18	in the lake up there and it's a magnificent resource and
19	gone through the heartache of land acquisitions to what it
20	is today, and to know that we have the opportunity at
21	Yallourn to provide a lake to the community that's
22	probably three and a half times bigger than the Blue Rock
23	Lake from a visual amenity, from a water sports point of
24	view and equally as important, I think, for the river
25	systems itself. It has the potential to mitigate against
26	floods for downstream and certainly we have experience at
27	Yallourn that, when there's flooding situations, water
28	actually doesn't have a high value, it probably has a
29	negative value in a flood and no one wants more water when
30	they are being inundated.
31	So this reservoir or this lake would have the

1	potential to buffer some of the downstream areas and
2	that's something we could work with the State on. It also
3	has the capacity - as I say, it's three-quarters the size
4	of the Thompson dam. It has the capacity to be used as a
5	surcharge lake. Currently our plans are it is a fixed
6	lake level interconnected RL 37, but if you extend your
7	mine to some outlet structure that would allow some water
8	harvesting, a four metre drop in lake height would
9	potentially give 80 gigalitres of water to the river
10	system.
11	So, if you followed that on the climate change
12	discussion which I've heard a little bit about, and not
13	forming opinion either way, but I think there's a certain

amount of expectation that climate change will bring more severe events. If that happens and you do have more severe events, you may have less water overall. But if you have severe events, this lake has the ability to cope and mitigate against that, as well as in the dry times to be able to release it.

So, I think this is a magnificent opportunity for the State, and Yallourn and Energy Australia are quite happy and more than willing to work with the State on optimising those solutions.

DR COLLINS: Another extreme event is fire. Do you see any 25 potential benefit from the final solution in terms of fire suppression? 26

MR METHER: Certainty a fire solution when you have a big lake 27 28 is very attractive. A fully flooded lake in the Yallourn 29 Mine situation covers most of the coal. The balance 30 obviously would be rehabilitated. So certainly it has a benefit within that site, but as there's more and more use 31

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- of planes, et cetera, in fighting fires, accessing large
- water bodies certainly does assist.
- 3 DR COLLINS: Are you able to say whether there are advantages
- 4 or disadvantages to the lake being filled quickly over a
- 5 short period of time as opposed to allowing it to fill
- 6 more naturally over a period of perhaps decades?
- 7 MR METHER: There are a couple of positions on this. There is
- 8 the geotechnical position, and I'm certainly not a
- 9 geotechnical expert, but all the advice I have is the
- 10 quicker filling certainly reduces your exposure to some
- instabilities during the filling process. Our advice is
- once the lake is full it will be at its most stable.
- 13 Certainly we have some experiences of water wanting to
- come into holes, so if you can eliminate the hole by
- filling it with water, it has an equal and opposite
- 16 pressure. I'm certainly of the opinion that the quicker
- we can fill this lake, the quicker the state and the
- residents of the Latrobe Valley can get the benefit out of
- 19 it.
- 20 DR COLLINS: Having regarded to the staggered closure or
- foreshadowed closure of the mines, does a quick filling of
- the Yallourn lake have potential advantages for the other
- 23 mine operators?
- 24 MR METHER: I certainly believe there is coordination between
- 25 Hazelwood and Yallourn and I think a quick filling of
- Yallourn would certainly open up opportunities elsewhere.
- 27 DR COLLINS: Energy Australia currently has a bulk water
- 28 entitlement made available for use in its power station
- operations I think of 36.5 gigalitres a year?
- 30 MR METHER: Correct.
- 31 DR COLLINS: If that bulk water entitlement were made available

1	to Energy Australia after the cessation of the power
2	station for the purpose of filling the lake void, what
3	implications would that have for available water to the
4	Valley more broadly?
5	MR METHER: Our modelling, and without referencing the exact
6	numbers, shows that with the catchment and the bulk water
7	entitlement it takes it down to about 17 years. But if
8	you are talking to the river systems more generally and if
9	I went on to the water that's currently used at the mine
10	and the power station, we are pumping out around 30
11	gigalitres of water out of the Latrobe River system and in
12	very broad terms, depending on our generation, 20
13	gigalitres of that water, 18 to 20 gigalitres, goes up in
14	steam out of the cooling towers. The balance then comes
15	down to the mine, it mixes with a small amount of
16	groundwater at Yallourn and with the surface water. We
17	use that water for fire mitigation, dust suppression and
18	our road maintenance. So we probably have another three
19	or four gigalitres of water that evaporates from that
20	operation. So, currently you are in the order of 22, 23
21	gigalitres of evaporation going out of the river system
22	currently. Under our fully flooded lake option, that
23	evaporation is probably only in the order of 17, maybe
24	towards 18 gigalitres, so there actually will be a net
25	increase of water into the system under a full lake system
26	than what is currently at Yallourn.
27	DR COLLINS: Members of the Board, I should have formally
28	tendered Mr Mether's diagram. Could I take the
29	opportunity to do that now?
30	CHAIRMAN: It is not part of what's already in?

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DR COLLINS: No, it is not. It is a document he prepared for

- 1 the purpose of giving evidence.
- 2 #EXHIBIT 15 Diagram prepared by Mr Mether.
- 3 DR COLLINS: Thank you. Mr Mether, there's been some evidence
- 4 about the extent of cover necessary for fire protection
- 5 purposes. In the Jacobs report there's a suggestion of
- two metres. In some other materials there's a suggestion
- of one metre or even less. What experience does Energy
- 8 Australia have in respect of that question?
- 9 MR METHER: I would suggest in my 20 years of operation, if you
- 10 are talking fire cover and fire mitigation,
- 50 millimetres, 100 millimetres, a small cover over coal
- stops coal burning and we have certainly experience of
- 13 that. None of our roads which have sand over them caught
- fire through all of our fire events. So, a very small
- cover on coal from a fire point of view, it doesn't catch
- 16 fire.
- 17 The issue on batters is a different issue. The
- cover being able to stay there via erosion and depending
- on your drainage management, there are a whole range of
- other things that come into what should be the cover. But
- if you were specifically asked what amount of cover do you
- need to stop fire on coal, it is very little.
- 23 DR COLLINS: Are you aware of any scientific support for the
- two-metre cover postulated in the Jacobs report?
- 25 MR METHER: Not to my knowledge.
- 26 DR COLLINS: Is that an area that requires further research?
- 27 MR METHER: I don't believe so in relation to fire.
- 28 DR COLLINS: You have considered the Jacobs report insofar as
- it concerns the Yallourn Mine?
- 30 MR METHER: I have.
- 31 DR COLLINS: Have you also considered the joint report of the

- experts who were present on 3 December 2015 to discuss
- their respective expert reports?
- 3 MR METHER: Not in detail. I have scanned over the list of
- 4 questions they were asked.
- 5 DR COLLINS: One of the questions that was put to the joint
- 6 expert panel perhaps I will go back a step. No one from
- 7 Energy Australia was represented at that joint hearing?
- 8 MR METHER: That's correct.
- 9 DR COLLINS: One of the questions which was put was whether the
- 10 experts agreed that the Jacobs report had appropriately
- identified the risks and control measures relevant to the
- rehabilitation options that were discussed. The group's
- response was, "Generally the risk assessment in the Jacobs
- report is at a very high, broadbrush level and is
- 15 consistent with Jacobs' brief from the Inquiry. However,
- the Jacobs risk assessment falls well short of the
- standard required in order to properly assess the risks
- and controls for an option." Do you agree or disagree or
- have a different view in respect of that?
- 20 MR METHER: I would strongly agree with it. It is certainly a
- 21 high level and not site specific.
- 22 DR COLLINS: You were asked some questions by Counsel Assisting
- concerning progressive rehabilitation spend at the
- 24 Yallourn site. Could I ask you to look at paragraph 258
- of your statement, please, exhibit 14. I think you said
- in answer to a question from Counsel Assisting that you
- 27 had provided the department with updated or more accurate
- figures in respect of progressive rehabilitation spend.
- Is that the matter to which you are addressing yourself in
- 30 paragraph 258?
- 31 MR METHER: That's correct.

- 1 DR COLLINS: I wonder if you could have a look at tab 9.92 in
- 2 volume 6A, which is the document referred to in paragraph
- 3 258. Does that document show what are, to the best of
- 4 your belief, the accurate direct progressive
- 5 rehabilitation costs expended by Energy Australia in
- 6 respect of the Yallourn Mine?
- 7 MR METHER: The direct cost, yes.
- 8 DR COLLINS: In paragraph 259 of your statement you say that
- 9 those figures account for only direct rehabilitation in
- 10 that they are specific measures undertaken for the sole
- purpose of rehabilitation. Then in paragraph 260 you
- refer to what might be called indirect rehabilitation
- 13 costs. Could you just explain to the members of the Board
- how you draw that distinction?
- 15 MR METHER: The distinction to rehabilitation are the direct
- ones of topsoiling, sewing, some profile, some drainage.
- 17 It doesn't go to the case of overburden back into the
- mine, for instance. It doesn't go to the case of carting
- dirt back in, which we do truck and shovel. This year we
- are going to about 1.6 million cubic metres of dirt. When
- we place that, we strategically place it and profile it.
- Even with our dozer mining method at Yallourn, some of the
- end batters lend themselves more readily to rehabilitation
- 24 with the profile we leave them.
- 25 DR COLLINS: Are you able to estimate what proportion of total
- rehabilitation costs would be divided as between the
- 27 direct costs reported to the department and those indirect
- 28 costs?
- 29 MR METHER: That would be a long bow.
- 30 DR COLLINS: I don't want you to guess.
- 31 MR METHER: Perhaps if I use what Jacobs and those were using,

- 1 that all overburden removal back into the mine was
- 2 rehabilitation, I'd be into probably orders of a third of
- 3 our expenditure.
- 4 DR COLLINS: You were asked some questions about constraints on
- 5 progressive rehabilitation by reason of the fact that the
- 6 Yallourn Mine is an operational mine. Could you explain
- 7 the extent to which, if any, the fire suppression
- 8 infrastructure present at Yallourn is a constraint on
- 9 progressive rehabilitation activities?
- 10 MR METHER: We have an extensive fire infrastructure at
- 11 Yallourn. It is based on a pumping system interconnected
- 12 with our large in-pit storages, our external river
- 13 systems. We also then pump up to a high level dam which
- 14 gives us the benefit of being able to gravity feed water
- down into the mine at quite high pressure, about a
- 16 100-metre head, and we have those pipes that have high
- capacity. Even up to about 2,500 litres a second we can
- pump in these pipes. The downside of all of that is they
- wrap all around the mine, the old part of the township
- 20 mine, and go up to this high level storage. Those pipes
- are a constraint on our future rehabilitation because
- 22 effectively in that part of the mine, if I wanted to
- rehabilitate that part, I'd actually have to pull out fire
- infrastructure that has certainly served us well over the
- 25 period of time.
- 26 DR COLLINS: You have been present throughout the present
- hearings, haven't you?
- 28 MR METHER: I have.
- 29 DR COLLINS: You will have heard a tenor of some of the
- 30 questions that were put to representatives of the
- department was to the effect that they have been inactive

- or less than fully diligent in their interactions with
- 2 the mine operators. I just want to ask you some questions
- 3 about that topic. You said in answer to a question from
- 4 learned Counsel Assisting that you at Yallourn meet with
- 5 representatives of DEDJTR monthly on site. Could you
- 6 explain what the nature of those interactions comprise?
- 7 MR METHER: Predominantly mine technical team and at times,
- 8 probably every second meeting, myself as well, to review
- 9 our monitoring results, our stability results and any
- 10 progress in drainage and the broad technical issues, the
- 11 geotechnical issues of the mine.
- 12 DR COLLINS: Who visits from DEDJTR on these monthly meetings?
- 13 MR METHER: There is a range of people. It's the regional
- manager often, it's the geotechnical engineer, the
- 15 hydrogeologist and another mining engineer. So up to four
- people on a monthly basis.
- 17 DR COLLINS: How long do they typically spend on site during
- these monthly visits?
- 19 MR METHER: That is a variable, but several hours.
- 20 DR COLLINS: You also referred to I think you called them
- 21 three-monthly site reviews. Can you explain to the Board
- what happens in the course of those meetings?
- 23 MR METHER: In the operation of the mine we have a range of
- 24 compliance activities to ensure that we are meeting our
- 25 compliance. The regional manager comes out and meets with
- us and discusses a whole range of issues from the progress
- of the mining, rehabilitation, geotechnical, water, the
- whole gamut within our mining licence.
- 29 DR COLLINS: Again, who visits from the department for those
- 30 three-monthly meetings?
- 31 MR METHER: It can be the same four, or it can be the regional

- 1 matter on the run.
- 2 DR COLLINS: Typically how long do those meetings last?
- 3 MR METHER: Several hours.
- 4 DR COLLINS: You said in answer to the same question from
- 5 learned Counsel Assisting that Energy Australia also
- 6 provides six-monthly rehabilitation reports. Who are they
- 7 provided to?
- 8 MR METHER: They are provided to DEDJTR by the regional
- 9 manager.
- 10 DR COLLINS: What do those reports show?
- 11 MR METHER: They are very detailed reports. We are refining
- what we supply to the department, but historically we have
- given them every bit of monthly geotechnical information
- we have on site. Our rehabilitation progress, all our
- 15 bore monitoring, our water monitoring; they are very
- 16 extensive.
- 17 DR COLLINS: How would you characterise the nature and extent
- of the communications between Energy Australia and the
- 19 regulator?
- 20 MR METHER: Regular and often.
- 21 DR COLLINS: Do you have a good relationship with the
- regulator?
- 23 MR METHER: We have a good relationship.
- 24 DR COLLINS: Do you consider there to be anything fundamentally
- 25 broken in relation to Energy Australia's journey towards
- rehabilitation or its relationship with the regulator or
- the State more broadly?
- 28 MR METHER: No, I think it's a fundamental at Yallourn that our
- right to mine comes with the responsibility to
- rehabilitate and provide our flooded mine option at the
- 31 end, and we are progressing that towards that end in

- 1 milestones that we continually update with the department.
- 2 DR COLLINS: There was some evidence yesterday doubting whether
- 3 DEDJTR had formally responded to the suite of materials
- 4 that were provided by Energy Australia in 2012 in response
- 5 to what was described as condition 7. Are you able to
- 6 shed any light on that matter?
- 7 MR METHER: There has been no formal response to that tabling
- 8 of that. There has certainly been informal discussions
- 9 acknowledging that the department has the document.
- 10 DR COLLINS: Could you describe the circumstances in which
- 11 those informal communications occurred?
- 12 MR METHER: At those compliance meetings and following up when
- they have been on site, noting that the work plan was
- 14 provided and the conditions had been met.
- 15 DR COLLINS: Can I turn to a different topic. I wonder if
- Mr Mether could be shown the document under tab 9.04,
- which has the Ringtail number EAY.0003.001.0291. Is that
- an aerial depiction of the area of the Yallourn Mine?
- 19 MR METHER: It is.
- 20 DR COLLINS: Can you identify where on that aerial depiction we
- see the Yallourn ash pond?
- 22 MR METHER: The ash ponds are on the northern side of the mine
- there.
- 24 DR COLLINS: Is it the area surrounded with a red line or have
- 25 I got that wrong?
- 26 MR METHER: I'm a little bit colour deficient, but I will go
- with your red.
- 28 DR COLLINS: There is a red, oval-shaped line towards the top
- 29 right?
- 30 MR METHER: Correct.
- 31 DR COLLINS: Mr Langmore, one of the members of the community

1	panel, in his written submission to the Board raised
2	whether it would be possible at Yallourn to relocate the
3	ash pond to another suitable site within the mine so as to
4	enable earlier rehabilitation of the ash pond area. Are
5	you able to comment on that proposal?
6	MR METHER: The ash pond area is still an active part of our
7	mine. Whilst it is the old Yallourn North open cut, it is
8	an active area. It is where we pump our ash out to and
9	where we do our land fill from. It is being
LO	rehabilitated. The reality is up in that area of the mine
L1	there are some legacy issues from way back from our
L2	earlier pioneers that are still there and the continued
L3	rehabilitation with ash of that area is part of what we're
L 4	planning.
L 5	DR COLLINS: What would be the consequences for the flooded
L 6	lake solution if the ash pond area were to be relocated
L 7	elsewhere in the mine?
L 8	MR METHER: To relocate in the mine we would have to get
L 9	another EPA licence, which would obviously come with a lot
20	of stringent conditions, and my involvement and
21	discussions previously along that path would be you would
22	always try and put your ashing facilities where possible
23	above water line.
24	DR COLLINS: Could I ask you to go to paragraph 242 of your
25	statement. Do you see there under the heading "Reporting
26	and accountability" reference to the reports provided by
27	Energy Australia in relation to its progressive
28	rehabilitation work, and then in paragraph (a) you refer
29	to the ERC or environmental review committee. When was
30	that committee formed?

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MR METHER: The environmental review committee was formed as a

- licence condition from memory back in about 2001, 2002.
- 2 DR COLLINS: It is condition 1.3 to licence MIN 5003. If you
- 3 take it from me that that licence was granted in 1996,
- 4 does that assist you?
- 5 MR METHER: That's very helpful. I was referring probably to
- the EES process, thinking it was tabled then. But I will
- 7 be corrected that it was back on the original licence.
- 8 DR COLLINS: I think that's called cheekily leading the
- 9 witness. You then say the ERC meets quarterly. Do you
- mean by that it's met quarterly since the time it was
- first established or just in more recent times?
- 12 MR METHER: No, quarterly since it was established.
- 13 DR COLLINS: Who attends those meetings, how many people?
- 14 MR METHER: It varies, but probably in the order of a dozen to
- 15 15 people.
- 16 DR COLLINS: Are there community representatives on the
- 17 committee?
- 18 MR METHER: There's community representatives on the committee
- and I'm pleased to say one of them is here today.
- 20 DR COLLINS: How are the community representatives selected?
- 21 MR METHER: That's gone out they've been longstanding, the
- ones we've had. They have been advertised in the past,
- too, and had volunteers apply.
- 24 DR COLLINS: Was the last meeting of the ERC held in November
- of this year, that is a month or so ago?
- 26 MR METHER: It was.
- 27 DR COLLINS: And was that meeting advertised in the Latrobe
- Express newspaper?
- 29 MR METHER: Yes. Noting the desire for more community
- 30 consultation, we made the decision that it would be good
- 31 to get more people in and share actually some of the good

1	work that has been done at Yallourn. We had some previous
2	ones, we had the Voices of the Valley in and some other
3	people in to show and we have had positive feedback of the
4	activities we have done. So we thought we might extend
5	that to the broader community and we advertised to get
6	more people if they wanted to come along.
7	DR COLLINS: To your knowledge did anyone attend the meeting as
8	a result of having seen and responded to the advertisement
9	in the Latrobe Express?
10	MR METHER: The regular community members were there, but we
11	didn't get any additional community members or people
12	wishing to come for that meeting.
13	DR COLLINS: No further questions, thank you.
14	PROFESSOR CATFORD: Mr Mether, I just had a very quick
15	question. Thank you very much for explaining your
16	exciting plans. Can you say something about the water
17	quality in the finished lake and is your intent to
18	actively manage that?
19	MR METHER: Again, not being a water quality expert, my
20	understanding is that if we can interconnect the lake with
21	the river systems and get in the order of about, I think
22	it was 10 gigalitres, or some flow through, the water
23	qualities in the lake would have no detrimental effect to
24	the river systems. So, there have been a number of
25	reports along that line. I have read about
26	stratification, different layering of water and those sort
27	of things in confined lakes. The reading I've had is that
28	an interconnection of the rivers would assist that water
29	quality. Currently, obviously, we have very big voids
30	that we manage and the water quality that we currently
31	have in the voids managing a whole range of different

- 1 things does not take a lot of external influence to get it
- 2 to a reasonable quality. Once obviously you fill it with
- 3 water, some issues go away and you introduce some new
- issues. But, as I say, from the readings I have done and
- 5 the reviews we have had done, the water quality within the
- 6 Yallourn lake system will be at a standard that is
- 7 complementary to the river system.
- 8 MS DOYLE: I have some questions for Mr Faithful. Mr Faithful,
- 9 if I could start with the topic raised with you, the
- 10 question of one metre coverage of coal versus two metres
- 11 coverage of coal. You will probably recall you were asked
- some questions about that by Counsel Assisting. In
- response to those questions you said that since 2006
- 14 Hazelwood has been using about one metre coverage and that
- that approach had held up well in a range of operating
- 16 circumstances. I just want to tease out some of that with
- 17 you. Does that mean that since that time or during the
- period that one metre coverage has been used, that no
- 19 problems have emerged in terms of that depth of coverage
- in the arena of stability or slippage?
- 21 MR FAITHFUL: That's right.
- 22 MS DOYLE: What about erosion?
- 23 MR FAITHFUL: There's no issues with erosion, providing that
- the drainage is managed.
- 25 MS DOYLE: What about the level of success or the takeup rate
- of vegetation that's then put in those areas? Has any
- 27 difficulty arisen by dint of using one metre coverage?
- 28 MR FAITHFUL: No, not at all.
- 29 MS DOYLE: In terms of your reference to one metre coverage
- having stood up well in a range of operating
- 31 circumstances, it may be there was a little coyness on

- 1 your part in not referring to a particular event in which
- 2 the success rate of the one metre coverage could be
- determined or looked at. Were you in part there referring
- 4 to the fact that during the fire last year there was an
- 5 opportunity, not a welcome one, but an opportunity to see
- 6 how the rehabilitated slopes stood up or responded to that
- 7 event?
- 8 MR FAITHFUL: That's right.
- 9 MS DOYLE: What was the result of that?
- 10 MR FAITHFUL: Well, they didn't burn.
- 11 MS DOYLE: Are you aware I think Mr Mether has just been
- 12 asked this question of any studies that suggest that two
- metres coverage is required in order to mitigate, or
- 14 mitigate to an acceptable degree, fire risk of
- rehabilitated slopes?
- 16 MR FAITHFUL: I'm not aware of any studies.
- 17 MS DOYLE: Are you aware of any work that's been done, even if
- the studies don't relate to Hazelwood, any work that has
- 19 been done in other mines or across Victoria in relation to
- whether one metre or two metres is required?
- 21 MR FAITHFUL: No, I'm not aware, no.
- 22 MS DOYLE: When you were asked some questions this morning, you
- were asked about whether or not that one metre coverage or
- 24 what surface area it would apply to, and in that context
- you said that it would apply to the slopes above the RL
- 26 minus 22 layer, but not below. When you were giving that
- 27 explanation, you said that below the level therefore of RL
- 28 minus 22 there would not be anything mitigating fire risk
- other than the fire services. Could you just explain what
- you meant by that? First of all, what are fire services
- 31 and how would they be deployed in order to deal with fire

- 1 risk below RL minus 22?
- 2 MR FAITHFUL: So, the discussion there was related to ensuring
- 3 that until that level of RL minus 22 is achieved in that
- 4 six to seven year period, those batters are covered by a
- 5 suitable fire service system. So that means that the
- 6 batters aren't covered, but you are able to put fires out
- 7 through the use of the fire service system because it
- 8 covers them.
- 9 MS DOYLE: Just to confirm, those parts of the batters or that
- 10 portion of the batters aren't covered by clay or dirt, but
- are still serviced by a network of pipes, sprinklers and
- 12 the like?
- 13 MR FAITHFUL: That's right.
- 14 MS DOYLE: Perhaps that's a good point for me to ask about the
- 15 questions you were taken to in relation to progressive
- rehabilitation and it was suggested to you that Professor
- Galvin had commented in his report that there were
- opportunities for more progressive rehabilitation at a
- 19 cost. In that context, each of the three mine
- representatives agreed, when you were asked these
- 21 questions this morning, that that may be so, although
- there would be operational constraints. Can I ask you,
- 23 Mr Faithful, to elaborate on what the operational
- constraints are and in that context there's a matter you
- 25 touch on in your statement called the "retreat mining
- principle". Perhaps if you can elaborate on that and how
- 27 that plays into how and when progressive rehabilitation
- can be done?
- 29 MR FAITHFUL: As I highlighted to the people who were asking
- questions at the time, progressive rehabilitation is built
- in line with the developing mine plan. So areas, and as

1	. the	other members up here have said, that rehabilitation
2	is	done on those areas that become available that
3	eit	her have infrastructure on them, that limit the
4	dev	elopment of mining, or are there to ensure that
5	ade	quate fire service systems or infrastructure is there
6	5 to	service the operating mine. So, as areas progressively
7	bec	ome available, whether they have been mined through or
8	whe	ther they have had their infrastructure relocated
9	bec	ause it's no longer required, those areas are the areas
10	tha	t become available for rehabilitation.

The point about the retreat mining was that as Hazelwood's conveyer systems are built on its final, on its southern, its western and its northern areas of the mine, the northern north field is the last area to be developed within the mine and as the mine retreats out, so as in when the station is due to close, the batters are pushed down and fed to the bucket wheels as the bucket wheels and the conveyor systems are progressively removed out of the mine and during that stage it is when the batters are pushed down and covered with coal down to that minus RL 22 level.

22 MS DOYLE: So, as you say, as different parts of the mine become available or conversely as different parts of the 23 mine are mined through, is it the case that parts of the 24 25 mining infrastructure or parts of the infrastructure required to keep operating will be moved strategically, 26 27 first of all in the most sound way to enable operations to 28 continue but, secondly, so as to free up areas for 29 progressive rehabilitation?

- MR FAITHFUL: Yes, that's right. 30
- 31 MS DOYLE: You have also been asked some questions about the

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1	amount spent on progressive rehabilitation and a figure
2	from 2014 was put to you and that figure was \$123,000 as
3	reported in the schedule 19 form. When responding to
4	questions about that, Mr Faithful, you indicated that you
5	were aware of the figure and you were aware "that we spend
6	more". Can you just elaborate on that?
7	MR FAITHFUL: It is similar to what Ron was saying, that that
8	was a number - and from memory I remember a large amount
9	of activity last year that was focused on rehabilitation.
10	So the number of 123 really didn't line up to me at the
11	time and it doesn't represent the full rehabilitation
12	expense. Similar to the other mines, we do a large amount
13	of in-pit dumping and if that is seen as a way of
14	rehabilitating or serving a rehabilitation end goal, then
15	that is potentially classed as rehabilitation as well.
16	MS DOYLE: So, in a way the question of how one characterises
17	what is progressive rehabilitation and/or what are
18	operational costs will impact on what one reports or
19	records as having been spent on progressive
20	rehabilitation?
21	MR FAITHFUL: That's right.
22	MS DOYLE: Does the number spent or the amount spent each year
23	on progressive rehabilitation always increase or does it
24	go up and down and, if so, what are the factors that would
25	lead to it either going up or down in a given year?
26	MR FAITHFUL: It changes and it is linked to those progressive
27	rehabilitation targets and when areas become available,
28	whether there's more practical methods of being able to
29	achieve those slopes, whether there's other considerations
30	such as geotechnical, hydro-geological considerations that
31	need to be taken into play, they all become considerations

- 1 that can have an impact on the development of that
- 2 rehabilitation.
- 3 MS DOYLE: When Mr Mether was answering questions a moment ago
- 4 on the same topic, he indicated that the amount spent or
- 5 the dollar value that you might see recorded would also
- 6 change as a result of whether or not one sought to capture
- 7 just direct costs or direct and indirect costs. I assume
- 8 you would agree with Mr Mether's answer in relation to
- 9 that?
- 10 MR FAITHFUL: I do agree with that.
- 11 MS DOYLE: You have been asked some questions about the filling
- of the pit lake or the filling of the void, as it is
- sometimes described, and this morning you indicated that
- 14 you didn't have to hand the precise numbers in terms of
- the volume of water that would be required. In relation
- to those questions of rate of fill and amount of water
- 17 required, is it the case that you principally rely on the
- work undertaken by GHD consultants, a report that you have
- attached to your statement that happens to be annexure 14?
- 20 MR FAITHFUL: That's right, I do.
- 21 MS DOYLE: That report is an analysis of certain scenarios that
- GHD have modelled. Do you know whether in that modelling
- or in that analysis GHD has made any particular
- 24 assumptions about whether Hazelwood will continue to use
- 25 its full allocation of water or will be entitled to use
- its full allocation of water under licences and
- 27 entitlements?
- 28 MR FAITHFUL: That's an area that needs to be worked on. It
- 29 has assumed that we continue to get access to that water.
- 30 MS DOYLE: Is it the case that GHD has made what might be
- 31 called, and I think you used this word in your statement

- 1 at paragraph 154, I think, that GHD has made a
- 2 conservative assumption, namely that although it assumes
- 3 Hazelwood will continue to use its entitlement, it equally
- 4 assumes it will continue to use much less than its full
- 5 entitlement as has been the case for a number of years?
- 6 MR FAITHFUL: That's right.
- 7 MS DOYLE: Do you have those numbers to hand or do you need to
- 8 be taken to your statement?
- 9 MR FAITHFUL: No, from memory our groundwater allocation is in
- 10 the order of 23 gigalitres and the modelling has been done
- on nine.
- 12 MS DOYLE: And it has been done on nine because Hazelwood
- traditionally uses about nine; is that right?
- 14 MR FAITHFUL: That's right.
- 15 MS DOYLE: A number of witnesses have been asked about the
- question of whether there will be an ongoing entitlement
- to use water across each of the three mines. I just want
- to ask you about Hazelwood and any work plan variations
- that you have been part of. Has the mine ever been asked
- 20 by the department to demonstrate to the department's
- 21 satisfaction that it has secured licences into the future
- with water authorities, say, through to 2026 or 2033?
- 23 MR FAITHFUL: Not to my knowledge.
- 24 MS DOYLE: If the department did ask as part of the work plan
- 25 variation process, if the department did ask the mine to
- either liaise with water authorities or get some assurance
- from water authorities on that matter, is it something
- that the mine would do?
- 29 MR FAITHFUL: Of course we would.
- 30 MS DOYLE: Again, when you were answering questions about that
- 31 topic, you indicated that you weren't aware of anything

- formal but that you had been made aware of a conversation
- with a representative of a water authority. If
- 3 I understood that correctly, your understanding of that
- 4 conversation, admittedly one you weren't part of, was that
- 5 an informal indication had been given that licences were
- 6 likely to be rolled over in the future?
- 7 MR FAITHFUL: That's right.
- 8 MS DOYLE: But nothing more formal than that has been entered
- 9 into?
- 10 MR FAITHFUL: No.
- 11 MS DOYLE: I want to ask you about a couple of suggestions that
- have been made in materials provided to this Inquiry after
- your statement was completed. So they are not things you
- have expressly addressed in your materials. In the
- document that's been commonly referred to in the
- 16 proceedings as the Jacobs report, I'm not going to go into
- the details of the dollar figures or the costings, but you
- may recall that in the Jacobs report one assumption built
- into costings made by the authors of that report is that
- when Hazelwood presents at the end of life of mine as a
- 21 partial lake, pit lake, that there will be a drain
- 22 constructed of some five metres width and two metres depth
- around the perimeter of the lake. First of all, have you
- seen the Jacobs report includes that assumption in terms
- of the works that will be done?
- 26 MR FAITHFUL: Yes.
- 27 MS DOYLE: Has that type of work, namely inclusion of a drain
- running around the perimeter of the top of the lake, has
- 29 that species of work formed any part of Hazelwood's work
- 30 plan or its variation application it intends to put in
- 31 next year?

- 1 MR FAITHFUL: No.
- 2 MS DOYLE: Has it ever been suggested to you by anyone at the
- 3 mine or consultants who have been engaged by the mine that
- 4 such a drain is required for any reason, be it
- 5 geotechnical or any other reason pertaining to the final
- 6 structure of the mine?
- 7 MR FAITHFUL: No.
- 8 MS DOYLE: Has the department ever suggested to you that that
- 9 species of drain will be required or will be imposed upon
- 10 the mine at the end of the project?
- 11 MR FAITHFUL: No.
- 12 MS DOYLE: One other report that's been submitted to the
- 13 Inquiry has been prepared by consultants URS, or now known
- 14 as AECOM. Again, I'm not going to the detail of the
- 15 costings, but are you aware that in the costings prepared
- by that consultants group there is an assumption that the
- pit lake will be required to be lined with what is called
- 18 "rip rap"?
- 19 MR FAITHFUL: Yes, I'm aware of that.
- 20 MS DOYLE: For the uninitiated, rip rap in the context of a pit
- 21 lake is what, in your understanding?
- 22 MR FAITHFUL: Larger materials of a rock base quality that are
- going to prevent erosion of the batters.
- 24 MS DOYLE: And is it your understanding that the idea behind it
- 25 is that they break the surface of wave action in bodies of
- water so as to minimise erosion, as you say?
- 27 MR FAITHFUL: That's right.
- 28 MS DOYLE: Is it any part of the work plan now in place or the
- 29 variation application intended for next year for the
- Hazelwood pit lake landform that this lake will be lined
- 31 with rip rap?

- 1 MR FAITHFUL: No.
- 2 MS DOYLE: And has it ever been suggested to you by consultants
- or by the State or by the department, I should say, that
- 4 rip rap is an essential component of the ultimate
- 5 landform?
- 6 MR FAITHFUL: It has been identified that it's a consideration,
- but never to specify that rip rap is a requirement.
- 8 MS DOYLE: Do you have any experience for example, there's
- 9 the cooling pond already in place at Hazelwood. Is rip
- 10 rap something that has been installed there or been
- 11 required to be installed there?
- 12 MR FAITHFUL: No.
- 13 MS DOYLE: I take it, then, it seems to flow from the answers
- 14 you have just given that no work has been done internally
- on costing the installation of rip rap or considering how
- often it would need to be moved or changed or
- 17 re-installed?
- 18 MR FAITHFUL: No.
- 19 MS DOYLE: You were asked some questions this morning about the
- 20 percentage of batters that have already been covered in
- 21 the current approach, the one metre coverage, and you said
- you didn't have precise figures to hand, but it would be
- in the order of 10 per cent. Can I ask you to translate
- the 10 per cent to areas of the mine. Is it the case that
- in terms of parts of the mine that are presently covered,
- the floor of the mine is substantially covered already
- with a combination of the overburden dump, ash and water
- ponds?
- 29 MR FAITHFUL: That's right.
- 30 MS DOYLE: In terms of batters, if we can shift from the floor
- 31 to the batters, again can we translate percentages to

- areas and perhaps use designations or the names that have
- become familiar in the Inquiry, northern, southern,
- 3 et cetera, which batters or parts thereof are already
- 4 covered by the one metre as you have described it?
- 5 MR FAITHFUL: There's a significant amount of the east field
- 6 northern batters that have been covered.
- 7 MS DOYLE: And in terms of the detail pertaining to which will
- be next, at present if anyone wanted to track that
- 9 through, that is contained either in the current work plan
- or it will be updated in the 2016 variation application?
- 11 MR FAITHFUL: That is right.
- 12 MS DOYLE: Not so much today, but in questions that were put to
- the community panel yesterday and in submissions that have
- been made to the Inquiry there have been suggestions made
- in general terms that rehabilitation work, particularly
- towards the end of life of mine, is likely to be
- 17 productive of jobs or increase jobs for the local
- 18 community. I want to ask you a couple of questions about
- that. Are you able to say, in terms of the work and
- 20 planning you've done, whether there's likely to be an
- injection of a particular number of jobs by dint of the
- rehabilitation work that will be undertaken at Hazelwood?
- 23 MR FAITHFUL: I can't see a massive increase in the number of
- jobs or activities that need to be required. A lot of the
- work is done by in-house employees and a small contractor
- workforce in the order of 10 to 20 people.
- 27 MS DOYLE: And the skill set required for members of any
- contractor workforce who would come in to do
- 29 rehabilitation work is what?
- 30 MR FAITHFUL: Professional earthmoving and mining professions.
- 31 MS DOYLE: Is that because for the most part anyone working on

- 1 rehabilitation will need to be part of a team of people
- 2 using the dozer push methodology?
- 3 MR FAITHFUL: Dozer push or truck and shovel, yes.
- 4 MS DOYLE: And, look, if you were asked to put a number on it
- 5 in terms of the number of people who might be devoted to
- 6 that activity, is that something you have given any
- 7 thought to?
- 8 MR FAITHFUL: In terms of what we are doing at the moment, it
- 9 is in the order of 10 to 20 people.
- 10 MS DOYLE: Finally, this is just in order to identify some
- documents, Mr Faithful. Yesterday I took witnesses to the
- topic of community briefing sessions that GDF Suez has
- held and I'm just going to ask that you undertake the task
- of formally identifying these documents. There are three.
- They are just going to be shown to you.
- I will seek to tender them just as one bundle,
- I think, for ease. All three are of the same type,
- Mr Chairman, if the Board pleases. They can all be called
- 19 Hazelwood community briefings. One is from October 2014,
- one is from February 2015 and one is from October 2015.
- 21 For identification purposes, each starts with the initials
- GDFS.0001.004. The first of those documents ends in 0021,
- the second in 0002 and the third in 0047.
- If they have made their way to you, Mr Faithful,
- do you recognise these as three briefing packs that those
- 26 running community briefing sessions at GDF Suez used over
- 27 the last year or so to update the community on responses
- to the last Inquiry, fire management and preparedness and
- 29 rehabilitation works?
- 30 MR FAITHFUL: Yes, I do.
- 31 MS DOYLE: I tender those, if the tribunal pleases.

- 1 #EXHIBIT 16 Three Hazelwood community briefing documents
- from October 2014, February 2015 and October 2015.
- 3 MS DOYLE: I have no further questions for Mr Faithful.
- 4 PROFESSOR CATFORD: Mr Faithful, just another question about
- 5 quality of the water following rehabilitation. Are you
- able to help us to understand what the quality will be and
- 7 will you need to actively manage the quality?
- 8 MR FAITHFUL: I can't help you in that regard. All we have
- 9 committed to or we will commit to in our 2016 work plan
- variation is an area of work we have ahead of ourselves,
- 11 so we will address it.
- 12 PROFESSOR CATFORD: So it is something that will be considered,
- obviously, down the track?
- 14 MR FAITHFUL: Absolutely, yes.
- 15 PROFESSOR CATFORD: Thank you.
- 16 MS FORSYTH: If the Board pleases, I have some questions for
- 17 Mr Rieniets. The first is a matter of classification. If
- I heard correctly, it was put to you by Counsel Assisting
- that the Loy Yang complex agreement requires 10 per cent
- of mine expenditure to be put into a trust fund annually
- from 2023. Your witness statement at paragraph 87, this
- is the first witness statement in court book volume 1A,
- document 3, describes the Loy Yang complex agreement. If
- I could just ask you to go to paragraph 87. The Ringtail
- 25 reference is AGL.0001.001.0013.
- 26 MR RIENIETS: Yes.
- 27 MS FORSYTH: At paragraph 87, the second sentence says, "From
- 30 June 2023 the parties are to annually contribute
- 29 10 per cent of the total site rehabilitation expenses
- 30 until 30 June 2032."
- 31 MR RIENIETS: That's correct.

- 1 MS FORSYTH: My question then is: is the view you have put in
- 2 your witness statement that it's total site rehabilitation
- 3 correct, or is the proposition that was put to you by
- 4 Counsel Assisting that it is 10 per cent of mine
- 5 expenditure correct?
- 6 MR RIENIETS: It's 10 per cent of the total site rehabilitation
- 7 expense, as my witness statement suggests.
- 8 MS FORSYTH: Thank you. Can I please ask you to stay with that
- 9 witness statement and to turn to annexure I, which has a
- document reference ending in 0188. Can I just have the
- 11 next document, thank you. This figure is for stage B.
- 12 Can I take it that that's the stage of mining that's just
- 13 been complete?
- 14 MR RIENIETS: That's correct.
- 15 MS FORSYTH: Does that plan more or less represent the current
- location of mine infrastructure?
- 17 MR RIENIETS: That's correct.
- 18 MS FORSYTH: With reference to that plan and in particular
- 19 using the different colours that are shown there for those
- of us who are colour literate, can you please identify the
- 21 major infrastructure which sits within or within the
- vicinity of the mine pit?
- 23 MR RIENIETS: Certainly. The light brown area or dark brown
- area with the white lines across it, that's the current
- 25 coal mining faces. The white lines are the conveyors.
- You will see three conveyors, three different levels, and
- 27 you will see one conveyor sort of in a V-shape sort of in
- the middle of the photo, that's our bottom coal system.
- The blue is the water management or water area. The pink
- or salmon-coloured colour is an area reserved for site
- infrastructure, so that would carry roads, fire service

- 1 pipelines and the like. The yellow, bright yellow area is
- 2 the major transport route, so that carries conveyors to
- 3 the power station up to the interchange area which is sort
- 4 of to the bottom of the photo.
- 5 MS FORSYTH: So is that the yellow that you have identified
- 6 generally to the south of the existing working area up to
- 7 the power station?
- 8 MR RIENIETS: That's correct.
- 9 MS FORSYTH: And the yellow bit to the north?
- 10 MR RIENIETS: The yellow bit to the north is an access route
- for bringing the overburden stacker into the mine from
- 12 2017. So there's earthworks currently going on there at
- the moment to enable ramps to be built to bring the
- stacker into the mine from 2017.
- 15 MS FORSYTH: While you are on that plan, can you see in the
- north-west corner there's an insert of green into the
- yellow section that you were just describing and it has
- the number 2 on it. Can you explain what that area
- 19 represents? So back in the northern yellow section and to
- the west there's a small green area there with the number
- 21 2 on it.
- 22 MR RIENIETS: Yes, I can see that. That's an area where we
- have a trial rehabilitation slope in the mine that we've
- 24 put in and we're monitoring that as a trial slope for
- 25 future rehabilitation.
- 26 MS FORSYTH: Can you please now turn to the next plan, which is
- 27 two Ringtail pages further on, which is figure 5. Does
- that plan represent stage C which is the current stage of
- 29 mining?
- 30 MR RIENIETS: That's correct. So that's at the end of stage C,
- 31 which is about 2021, thereabouts, based on 30 million

- tonnes per year. So, between now and the end of stage C 1 2 there's about 200 million tonnes of coal that will be mined in that dark brown area. You will see some 3 differences with the overburden has come into the base of 4 5 the mine. You will see in the middle of the photo a light That's you are starting to see overburden 6 brown area. placed into the mine and the water infrastructure area has 7 moved further to the east, and you will notice that all 8 coal conveyors are in block movement heading in an 9 10 easterly direction. MS FORSYTH: Can you turn to the next plan which is stage D 11 12 figure 6 and go through the same exercise? 13 MR RIENIETS: So that's an extension of the mine further to the east. So that's at about 2030, thereabouts, and you will 14 15 notice that the mine is approaching its eastern limit. 16 there's another 200-odd, 250 million tonnes between stage C and this stage. You will notice extensive 17 rehabilitation around, which is the green, around the 18 19 north, north-east and into the south. The transport 20 corridor is maintained on the southern side of the mine, the yellow. You will notice both stackers are now inside 21 22 the mine, which is the light brown coloured area where overburden has been dumped inside the mine. 23 24 MS FORSYTH: Can I now ask you about some figures contained in 25 the work plan, approved work plan variation, which is in court book volume 1B and it is document 3A. I'm going to 26 27 take you first to figure 3 and I will just provide the 28 Ringtail reference so it can be put up on the screen. 29 It's 0001.004.0145. Do you have figure 3 there in front 30 of you?
- 31 MR RIENIETS: Yes, but it's not in colour.

- 1 MS FORSYTH: I might ask you to have a look at the screen then
- 2 and do your best. You were asked a question earlier about
- 3 the extent of the Loy Yang land holding. Does the yellow
- 4 shaded area represent the - -
- 5 MR RIENIETS: Yes, the yellow shaded area is the extent of our
- 6 land holding. It is approximately 6,000 hectares and you
- 7 will see within that the mining licence area is contained
- 8 within that land holding.
- 9 MS FORSYTH: Is the mining licence area the area shown within
- 10 the purple line?
- 11 MR RIENIETS: Correct.
- 12 MS FORSYTH: Does that exclude the power stations and the ash
- ponds associated with those power stations?
- 14 MR RIENIETS: Correct.
- 15 MS FORSYTH: Does that plan also enable you to identify the
- external overburden dump to the south of the mine pit?
- 17 MR RIENIETS: Correct. It's to the south or to the right of
- that photo and you will be able to see on there as well
- 19 the extent of rehabilitation that has occurred which is
- the green feature of that dump.
- 21 MS FORSYTH: I wanted to ask you about that with reference to
- figure 16, so that's the plan that ends in 0187?
- 23 MR RIENIETS: Yes.
- 24 MS FORSYTH: This figure represents development at stage B. So
- is that reflective of the figure you have already taken us
- to in your witness statement?
- 27 MR RIENIETS: Correct.
- 28 MS FORSYTH: Similarly, does the next figure, figure 17,
- 29 reflect development stage C that you had already taken us
- to in the figure in your witness statement?
- 31 MR RIENIETS: Correct. In addition it's showing the

- 1 rehabilitation occurring between the stages as well.
- 2 MS FORSYTH: Is that the red hatched version that's labelled as
- 3 "Rehabilitate area reserved for rehabilitation trials"?
- 4 MR RIENIETS: That's where we will conduct the trials. But you
- 5 will see the dark green and light green area, the dark
- green is what's been achieved since stage B,
- 7 rehabilitation.
- 8 MS FORSYTH: Just sticking with that plan, being the plan for
- 9 the current stage, what do you say about the constraints
- in undertaking further rehabilitation during that stage,
- having regard to the placement of infrastructure that you
- have just taken us through?
- 13 MR RIENIETS: The key area for rehabilitation in this phase is
- 14 the development of the overburden to the base of the mine,
- which is that light brown area in the base of the pit. So
- that's the key activity during this phase.
- 17 MS FORSYTH: Can you explain whether or not those areas that
- are not identified as being green, if you like, on the
- 19 southern batters and on the northern batters, what the
- 20 constraints continue to be in terms of rehabilitation for
- 21 those batters?
- 22 MR RIENIETS: Sure. To the south, as before on the previous
- diagram, to the south all our transport and conveyor run
- along those southern batters. To the north we have a
- 25 series of fire protection powerline main access corridors
- to the mine to allow safe entry and egress to the mine, a
- 27 series of horizontal bores and drains to the north as
- well.
- 29 MS FORSYTH: Where are the fire services located?
- 30 MR RIENIETS: The fire service pipes are located on each and
- 31 every level in the mine. It's supplied by two gravity fed

- dams external to the mine. A key part is a ring main,
- which is a pipeline 900 millimetres to 1,200 millimetres,
- 3 that runs all the way around the mine. That is extended
- 4 each and every year as the mine develops.
- 5 MS FORSYTH: Can I take you back to your first witness
- 6 statement, which is document 3 at court book 1A, and take
- you to paragraph 187 with the Ringtail reference ending in
- 8 0027.
- 9 MR RIENIETS: Sorry, which paragraph?
- 10 MS FORSYTH: Starting from paragraph 187 through to paragraph
- 11 189, is that the relevant place in your evidence where we
- find a summary of the operational constraints on
- rehabilitation generally in accordance with what you have
- just taken the Board through?
- 15 MR RIENIETS: That's correct.
- 16 MS FORSYTH: I want to hand up a document to you which is a
- 17 copy of AGL's submission to the Inquiry. It's tender
- document 53, but I understand that a hard copy has not yet
- made it into the books. So we have a copy for the witness
- and a copy for the Board. I will just have those handed
- 21 up. Can you identify that as a copy of AGL's submission
- to the Inquiry?
- 23 MR RIENIETS: Yes.
- 24 MS FORSYTH: Have you had a chance to read over the section on
- 25 fire mitigation at paragraphs 152 to 189 of that document?
- 26 MR RIENIETS: Yes.
- 27 MS FORSYTH: Does that description represent an accurate
- statement of AGL's fire mitigation and preparedness?
- 29 MR RIENIETS: Yes.
- 30 MS FORSYTH: What do you say about the need to fast track
- 31 progressive cover of worked out coal batters in light of

1	AGL's fire management practices as set out in that
2	submission?
3	MR RIENIETS: AGL has a very extensive fire network in place
4	and very good fixed infrastructure, close to 100
5	kilometres of pipework installed within the mine fed from
6	two gravity dams external to the mine. So it's not
7	reliant on power supply or any of the like for water
8	pressure. Areas that aren't covered with coal have
9	extensive fire protection on those areas. We also perform
10	extensive fire mitigation works leading up to the fire
11	season. We spend approximately \$4 million to \$5 million
12	per year extending and improving the fire service network
13	in and around the Loy Yang Mine. So that's our fixed
14	infrastructure.
15	In addition we have some very good mobile
16	infrastructure on-site with the purchase of additional
17	equipment, particularly since the Hazelwood mine fire with
18	compressed air foam trucks, high-reach excavators,
19	additional plant on-site. Our mantra is to have a fast
20	determined response to any fire outbreak in the mine.
21	Accordingly, our people are trained adequately to do that
22	with the excellent fixed equipment we have and the
23	excellent mobile equipment we have such that any outbreak
24	of fire in those areas can be attacked very quickly and
25	extinguished.
26	MS FORSYTH: Thank you. I have no further questions.
27	PROFESSOR CATFORD: Mr Rieniets, could I ask you the same
28	question about water quality after the rehabilitation.
29	What are your intents and what's your commitment to
30	maintain safe water?

31 MR RIENIETS: It is a condition in our licence. We will need

- 1 to work with the regulator to set those objectives and
- work towards meeting those objectives accordingly. So it
- 3 is a consideration.
- 4 PROFESSOR CATFORD: I don't understand then why you have
- 5 changed the public amenity use of the mine pit. You
- 6 previously had said you were going to make that available
- as a public amenity but you are not now. So why have you
- 8 changed your mind?
- 9 MR RIENIETS: I think that's what our plan says now. But will
- 10 that be what it is at the end? Let's wait and see.
- 11 PROFESSOR CATFORD: You may change your mind again. But what
- was the thinking that required you to change the use? It
- is not water quality, is it, because you just said you are
- going to keep safe water there?
- 15 MR RIENIETS: I think until we get to a point where we could be
- more certain that the batters and everything is safe and
- stable, once we get to that point there is probably no
- reason why the public can't have access to that facility
- in the future. But at this point in time until we have
- got more certainty we will need to work through those
- 21 issues.
- 22 PROFESSOR CATFORD: So it is precautionary and it may well
- revert to your initial intent then?
- 24 MR RIENIETS: Correct.
- 25 PROFESSOR CATFORD: Thank you very much. Could I just thank
- you and your colleagues from the industry for your
- 27 participation in the health consultations which took
- various forms. I think it was excellent to see you at
- 29 those meetings and for your contribution. Thank you for
- 30 that.
- 31 MS SHANN: I hopefully won't keep you long. The first question

- I have is for you, Mr Rieniets, just in relation to that
- 2 issue of rehabilitation expenditure and the Loy Yang
- 3 complex agreement. With that clarification about what
- 4 percentage the expenditure has been taken out of, if you
- 5 are saying the total expenditure on rehabilitation at
- 6 least at this stage is about \$1 million a year - -
- 7 MR RIENIETS: I think I said we would be looking to increase
- 8 that in coming years.
- 9 MS SHANN: To what extent? Really, if it is about \$1 million,
- then over a 20-year period 10 per cent of that only
- equates to \$2 million going into a rehabilitation trust
- 12 fund, doesn't it?
- 13 MR RIENIETS: How it works, at 2023 the rehabilitation
- 14 liability will be calculated as at 2023, what it is at
- 15 that point. From that point onwards ourselves, the uses
- of the coal, will contribute 10 per cent of that in the
- trust fund each and every year for 10 years.
- 18 MS SHANN: Why is it that that can't happen tomorrow, next
- 19 year?
- 20 MR RIENIETS: Because there's a contract, that we would need to
- get three parties to that contract to agree to that.
- 22 MS SHANN: That's two Loy Yang companies and the government?
- 23 MR RIENIETS: Correct.
- 24 MS SHANN: Are you able to expand why that can't happen now as
- 25 opposed to 2023?
- 26 MR RIENIETS: It may be a consideration we explore, but at this
- point we haven't explored it.
- 28 MS SHANN: Each of you has been asked about operational
- constraints in regards to progressive rehabilitation.
- 30 Each of you has given some evidence explaining in a bit
- 31 more detail what that notion actually entails. This

- 1 question is really for all of you. Is what's being
- 2 asserted by each of you that those operational constraints
- is the reason why there can't be more progressive
- 4 rehabilitation at this stage or in the next few years as
- 5 opposed to it being really expensive to do progressive
- 6 rehabilitation?
- 7 MR METHER: Certainly at Yallourn the infrastructure that is
- 8 there is a restriction, whether it be the pipes, whether
- 9 it be the powerlines or whether it actually be the roads,
- 10 the roads so you can actually get access - -
- 11 MS SHANN: I think there's quite a bit of detail in your
- 12 statements about what the operational constraints are.
- 13 The question is is that the reason why more progressive
- rehabilitation isn't being done as opposed to a costing
- issue that the mines don't want to spend more?
- 16 MR METHER: It's certainly not a costing issue per se at
- 17 Yallourn. It is an access to area issue.
- 18 MS SHANN: Mr Faithful?
- 19 MR FAITHFUL: It is the same thing.
- 20 MS SHANN: Mr Rieniets?
- 21 MR RIENIETS: Similarly with AGL it is not a cost issue at all.
- It is about having those areas freed up to do the
- progressive rehabilitation, but also those areas have to
- 24 be either mined out or the infrastructure remain to ensure
- a safe mine operation.
- 26 MS SHANN: So is there money available or that can be made
- available to be put into additional research, whether it's
- 28 monitored by the mines or monitored and regulated
- elsewhere, to solve some of these unknowns; money that
- might be spent on progressive rehabilitation now but can't
- for operational reasons? Is the money there to do that?

- 1 MR METHER: The research that we require we will fund as needed
- going forward so we can deliver the final rehab plan.
- 3 MS SHANN: Is each mine committed to spending a significant
- 4 amount of money on that type of research?
- 5 MR METHER: We are committed to delivering our final rehab
- 6 plan. So we have to meet all of the obligations there.
- 7 So, if there are unknowns, they will have to be solved
- 8 between now and the final rehabilitation.
- 9 MS SHANN: Mr Faithful?
- 10 MR FAITHFUL: I agree with Ron. I would also like to point out
- 11 that Hazelwood contributes to a fund each year, an amount
- each year, for I believe it's GHERG and I believe that
- that's to provide an opportunity in order to address this
- work.
- 15 MR RIENIETS: I think AGL Loy Yang has significant expenditure
- on rehabilitation happening in the next few years because
- we are at a point in our mine life where the overburden in
- particular starts to come back into the mine. So there's
- 19 significant expenditure we will be doing in addition to
- contributing to the GHERG and other areas as well.
- 21 MS SHANN: Just going back to that idea of what does and
- doesn't equate to rehabilitation expenses, there's been
- some issues really by Mr Mether and Mr Faithful about how
- to fill in the schedule 19 return and what does and
- 25 doesn't fall within it and some differences in terms of
- direct rehabilitation and incidental rehabilitation. From
- 27 at least your perspective, Mr Rieniets, is there a need
- 28 particularly before the Loy Yang complex agreement starts
- for those terms to be clearly defined?
- 30 MR RIENIETS: Perhaps. But I think if you are removing
- overburden and covering coal with that overburden, to me

- 1 that is rehabilitation.
- 2 MS SHANN: But if you are committing in a contractual sense to
- 3 10 per cent of something, we all need to have an objective
- 4 knowledge of what the something is, don't we?
- 5 MR RIENIETS: And obviously at that point in time under the
- 6 contract that will be agreed between the three parties.
- 7 MS SHANN: Mr Mether, you were asked some questions about the
- 8 contact between Yallourn and the regional manager of
- 9 DEDJTR and gave some evidence about monthly meetings and
- some compliance conversations over several hours and
- providing some reports, and you agreed with the
- 12 proposition that there was regular and often contact with
- that particular representative of the regulator.
- 14 MR METHER: Correct.
- 15 MS SHANN: During any of that contact have you raised with that
- person the issue of whether or not Yallourn is going to be
- able to source water in the way that it desires?
- 18 MR METHER: It's certainly part of our condition 7 which we
- presented and discussed, but no formal discussion in those
- 20 proceeding period on that specific issue.
- 21 MS SHANN: But it can't be said that Yallourn hasn't had plenty
- of opportunity to initiate that conversation?
- 23 MR METHER: Correct.
- 24 MS SHANN: But it just hasn't taken that opportunity?
- 25 MR METHER: It hasn't been front of mind at those discussions
- in the last three years.
- 27 MS SHANN: Mr Mether, you were asked about whether or not
- Yallourn had an expert at the joint expert meeting. You
- are aware, aren't you, that there was an invitation for
- any expert which Yallourn wished to have present to come
- 31 along?

- 1 MR METHER: I made an offer to attend, not being necessarily an
- 2 expert, and I wasn't allowed to attend.
- 3 MS SHANN: You have indicated to the Board your lack of
- 4 expertise in geotechnical issues earlier. But you agree
- 5 that that invitation was expressed and indeed you had an
- 6 expert you consulted but Yallourn declined the invitation
- 7 for that person to attend?
- 8 MR METHER: Correct.
- 9 MS SHANN: Mr Faithful, you were asked some questions about
- asking permission essentially or requesting the water
- authorities to provide some clarity about water sourcing
- issues, and you indicated that if the government made it a
- condition of the work plan variation, for example, in the
- 2016 variation that's proposed to be submitted that of
- 15 course Hazelwood would then go and ask those questions.
- 16 MR FAITHFUL: That's right.
- 17 MS SHANN: Why do you need to wait until it is a condition of a
- work plan to ask that question?
- 19 MR FAITHFUL: I don't.
- 20 MS SHANN: In terms of some questions that you were asked,
- 21 Mr Faithful, about the issue of rip rap and wave erosion,
- it's the case, isn't it, that one of the two experts
- consulted by Hazelwood for the purposes of this Inquiry
- and who provided a report and attended the meeting,
- 25 Dr McCullough is a water expert?
- 26 MR FAITHFUL: That's right.
- 27 MS SHANN: And that he recommended in his report, which is at
- 28 GDFS.0001.003.0001, tab 18, at page 15 of 27 are you
- familiar with this report?
- 30 MR FAITHFUL: I have read over it briefly, I think. Yes.
- 31 MS SHANN: If we go to page 15 of that. Dr McCullough was

- asked a question by Hazelwood, "What further work is
- 2 required at the Hazelwood Mine in order to successfully
- 3 implement the approved final rehabilitation model," and
- 4 then asked, "Are you able to identify some short, medium
- 5 and long-term work priorities?" Are you aware of the 17
- 6 suggestions which were expressed by Dr McCullough in
- 7 response to that?
- 8 MR FAITHFUL: I can't recall them all off the top of my head,
- 9 but I can certainly see them in the document here.
- 10 MS SHANN: And you are aware that he provided detail of a
- 11 significant number?
- 12 MR FAITHFUL: Yes.
- 13 MS SHANN: Do they include, over on the next page under 4.1.9,
- 14 a reference to "wave action and erosion and that Hazelwood
- have proposed to assess the potential for wave action to
- erode batters and batter profiles. Wave erosion studies
- should form part of a separate assessment to determine the
- 18 effects of long-term wave action on proposed wildlife
- habitat", and he goes on and then also refers to stability
- of safe access for swimmers.
- 21 MR FAITHFUL: Yes.
- 22 MS SHANN: Firstly in terms of the proposal, Hazelwood have
- proposed to assess the potential for wave action, are you
- aware of any action that Hazelwood has taken in that
- 25 space?
- 26 MR FAITHFUL: No. We haven't done that yet. It's a work to
- come.
- 28 MS SHANN: It's a work to come. When is that going to
- 29 commence?
- 30 MR FAITHFUL: I can't give an answer to that right now.
- 31 MS SHANN: That exact issue would go to whether or not rip rap

- is necessary, wouldn't it?
- 2 MR FAITHFUL: Based on my judgment and what I see out there,
- 3 it's not required; but agree with what Clint is saying
- 4 here, that there is an area of work there, that it is an
- issue we will work through as that body of work is done.
- 6 MS SHANN: And that body of work may indicate that your view
- 7 that rip rap isn't available is actually not the view of
- 8 whoever the experts are who undertake that work?
- 9 MR FAITHFUL: It may identify a number of different ways to
- 10 address wave action.
- 11 MS SHANN: In terms of these proposals by Dr McCullough
- overall, are these being implemented by Hazelwood? Are
- these studies going to be done?
- 14 MR FAITHFUL: We have only just got the report. In terms of
- committing to when these activities are going to be
- 16 completed, I can't give a timeframe. In terms of
- certainly going through them and reviewing them,
- absolutely, I don't see any issue with following through
- on all of them.
- 20 CHAIRMAN: Can I just interrupt because it may lead to further
- 21 questions. One of the things that I suppose concerns me
- is that the expert Tim Sullivan says what is all important
- in these matters is stability. There has been a bare
- 24 mention of stability in the questions that have been put
- 25 to you. I have tended to assume that when you talk about
- you would have to think about the mines separately, but
- you also have to think of particular parts, it is because
- there are stability problems in relation to particular
- 29 parts; is that right?
- 30 MR METHER: That's correct, in the case of Yallourn.
- 31 CHAIRMAN: So at least so far as Yallourn is concerned

- 1 I understand one of the problems was what is called block
- 2 sliding.
- 3 MR METHER: That's a geotechnical term for some things that
- 4 happen in certain areas of the mine under different
- 5 conditions.
- 6 CHAIRMAN: Is it a major problem or just one thing that
- 7 happened to be bad luck at the time so far as Yallourn?
- 8 MR METHER: One geotechnical feature of stability.
- 9 CHAIRMAN: But no other mention has been made of stability as
- an issue by any others in relation to questions, as I have
- 11 been listening.
- 12 MR FAITHFUL: No, there is certainly recognition that stability
- is a major consideration to rehabilitation - -
- 14 CHAIRMAN: But Mr Sullivan says it is all important. Is he
- 15 overstating the position?
- 16 MR FAITHFUL: No, it is very important. But it is one of a
- 17 range of considerations that need to be taken into account
- when planning for rehabilitation.
- 19 CHAIRMAN: With a thing like block sliding one needs to have
- research into the form of the terrain, if you like,
- 21 underneath the areas of the slopes which potentially can
- lead to instability.
- 23 MR FAITHFUL: Yes, that's right.
- 24 CHAIRMAN: Is that kind of thing something that you do
- routinely or is it a matter that's only been of concern to
- 26 Yallourn?
- 27 MR METHER: Certainly at Yallourn we have detailed models all
- around the mine and they all differ from the geology.
- 29 Some, as you said, underneath the coal it's different
- 30 slopes, different angles. So they have different needs in
- 31 different areas. That was certainly recognised when we

- did our review of what our rehabilitation costs would be,
- 2 because there are geotechnical reports in various areas
- 3 that say we will need to address specific situations
- 4 around the mine. So it is a major consideration for our
- 5 mine when we move to that final rehab stage.
- 6 MS SHANN: Just finally, Mr Faithful, you have made reference a
- 7 number of times to what is and isn't in the 2016 work plan
- 8 variation. In answers to Ms Doyle you have indicated in
- 9 relation to rip rap what the position is and in various
- 10 other areas. Is that document in draft form?
- 11 MR FAITHFUL: It is partially in draft form.
- 12 MS SHANN: It hasn't been provided to the Inquiry in draft?
- 13 MR FAITHFUL: No, it hasn't been.
- 14 MS SHANN: Indeed in your statement that was provided to the
- 15 Inquiry you haven't actually detailed any of the content
- of any such draft; do you agree with that?
- 17 MR FAITHFUL: That's right.
- 18 MS SHANN: Is there some reason why that information hasn't
- been provided to the Inquiry?
- 20 MR FAITHFUL: It's a work in progress. It's not a document
- 21 that's out there at the moment. It is something we are
- working on, and there's a lot of work that's going on to
- 23 put that forward into a position that it is able to be
- 24 presented next year.
- 25 MS SHANN: You have been prepared to answer questions from
- 26 counsel representing GDF Suez about the content of that
- work in progress document.
- 28 MR FAITHFUL: Yes, addressing our commitments that we will be
- 29 making in our 2016 work plan variation.
- 30 MS SHANN: Is there any difficulty with that document being
- 31 provided to the Inquiry for its assistance?

- 1 MR FAITHFUL: I think it is incomplete at the moment and it
- doesn't address all the items that need to be addressed in
- 3 it.
- 4 MS SHANN: Incomplete as it may be and with that caveat
- 5 attached, is there any difficulty in providing it?
- 6 MR FAITHFUL: I don't think so.
- 7 MS SHANN: Do you undertake to do so?
- 8 MR FAITHFUL: I can do.
- 9 MS SHANN: Thank you.
- 10 CHAIRMAN: Yes, Mr Rozen.
- 11 MR ROZEN: I note the time. I'm in a position to call the
- 12 expert panel. I think they are all here, but I don't
- think there's much point in doing it at 20 to 5.
- 14 CHAIRMAN: I think that's pretty right.
- 15 MR ROZEN: What I would like to do, though, is just take five
- minutes if I could to just address some housekeeping
- matters. I know that Professor Catford has a commitment
- and, if you need to leave, that might be an appropriate
- time to do that now. It is really just for the benefit of
- the parties and also of the Board that I raise these
- 21 matters now because I think they may be of assistance to
- 22 people in their preparation.
- 23 If I can perhaps start with the expert panel. It
- was originally proposed to call all experts who met in the
- 25 meeting on 3 December. Perhaps it might be appropriate to
- excuse the witnesses at this point in time.
- 27 CHAIRMAN: Yes. You are excused.
- 28 MR ROZEN: If I can express the Board's gratitude to them for
- the time they have spent here.
- 30 < (THE WITNESSES WITHDREW)
- 31 MR ROZEN: It was originally proposed to call the experts in

1	two groups: those who met on 3 December and then
2	separately Professors Galvin and McKay. That was only
3	because of availability issues. It had always been
4	considered preferable to call them all and, as it has
5	turned out, I think we will be able to call them all as a
6	panel tomorrow morning.

Having said that, a number have travelled to be here and the Board appreciates that. Several will be unavailable on Friday. So I'm very keen to get through their evidence tomorrow. We have estimates of examination from the parties ranging from three and a half to four and a half hours plus I would expect I would be probably an hour and a half or two hours with them as a group.

In those circumstances, subject of course to the
Board, we have raised with the parties the possibility of
a 9 o'clock start tomorrow.

- 17 CHAIRMAN: Yes, we will assume that we have a 9 o'clock start.
- I should have raised it with Professor Catford.
- 19 MR ROZEN: I have asked Professor Catford.
- 20 CHAIRMAN: So he's going to try to be here at 9?
- 21 MR ROZEN: He, as it turns out, can't be here until later
- anyway tomorrow. He has another commitment in Melbourne.
- 23 CHAIRMAN: We will start at 9.

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- 24 MR ROZEN: It will be just yourself I think tomorrow morning.
- 25 That's the first issue.
- The second issue relates to some evidence next

 week from the DEDJTR witnesses, Mr Wilson and Mr McGowan.

 They are coming back. It was always intended that they

 would come back to deal with TOR 10 issues. There have

 been two matters that have arisen in the evidence over the

 course of the last two days which I think should be put to

them at the same time as their returning. For the benefit of the parties I will indicate what those areas are. The first is a matter which arose after they gave their evidence and that is the evidence from the water panel today specifically around what the Board will recall was action 6.8, that is discussions between the various departments about water access issues that arises from exhibit 11. They are matters which I think should be put to the DEDJTR witnesses. I will raise it with them and if any of the parties have matters arising from that then that will be the opportunity.

The other issue is a matter which I should have raised with them yesterday but I didn't and I think it should be raised, and that is the evidence of Mr Langmore about concerns about the lack of transparency around the work plan variation process and whether there ought to be more transparency, more community engagement in relation to that. That's a matter which has been raised with a number of witnesses now and I think should appropriately be raised with them. So I will also raise that with them next week. Once again if the parties want to raise anything about that then that would be the time to do it.

The other issue also relates to evidence next week about the question of costing of rehabilitation options. The structure of the terms of reference is that costing matters arise under both term of reference 9 and term of reference 10. In those circumstances, tomorrow we will have representatives of Jacobs, Mr Hoxley and Mr Spiers. I have had discussions with counsel for GDF Suez, and this may also affect other counsel. If I can just indicate that if there are questions of costing that

Τ	are relevant to Jacobs that counsel don't raise tomorrow
2	then it is possible for Mr Hoxley to come back next Monday
3	to address those questions. I suspect from his point of
4	view he would prefer to deal with them all tomorrow. But
5	I have indicated to Ms Doyle anyway that there is some
6	flexibility there if it is not considered appropriate to
7	deal entirely with that issue tomorrow, then Mr Hoxley is
8	able to come back and the Board will facilitate that.
9	I think they are all the issues that I have to
10	raise. If we do get through the expert panel tomorrow,
11	which I think we should be able to with a 9 o'clock start,
12	then I'm happy to report to everyone that that means we
13	should be able to have an early finish on Friday. That's
14	the carrot.
15	CHAIRMAN: Okay. Thank you, Mr Rozen.
16	MR ROZEN: In those circumstances I think we can adjourn.
17	CHAIRMAN: Adjourn until 9 o'clock tomorrow morning.
18	ADJOURNED UNTIL THURSDAY, 10 DECEMBER 2015 AT 9.00 AM
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