

PCA CASE No 2020-21

In the matter of an arbitration
under the Arbitration Rules of the United Nations
Commission on International Trade Law 1976

and

The Agreement between the Government of the Republic
of India and the Republic of Mozambique for the
Reciprocal Promotion and Protection of Investment
dated 19 February 2009

- between -

PATEL ENGINEERING LIMITED (INDIA)

(Claimant)

- and -

THE REPUBLIC OF MOZAMBIQUE

(Respondent)

The Arbitral Tribunal

Prof Juan Fernández-Armesto (Presiding Arbitrator)
Prof Guido Santiago Tawil (Arbitrator)
Mr Hugo Perezcano Diaz (Arbitrator)

ORAL HEARING
PORTO, PORTUGAL

Friday, 2 December 2022

Registry
The Permanent Court of Arbitration

A P P E A R A N C E S

The Tribunal:

Presiding Arbitrator:

PROFESSOR JUAN FERNÁNDEZ-ARRESTO

Co-Arbitrators:

PROFESSOR GUIDO SANTIAGO TAWIL
MR HUGO PEREZCANO DIAZ

Administrative Secretary:

MS SOFIA DE SAMPAIO JALLES

Registry, Permanent Court of Arbitration:

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MS LARA CRISTINA JERÓNIMO DUARTE

A P P E A R A N C E S

The Claimant:

Representative:

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Counsel:

Brick Court Chambers:

MR EDWARD HO

20 Essex Chambers:

MR BAIJU VASANI

Messrs CMS Cameron McKenna Nabarro Olswang LLP:

MS SARAH VASANI
MS LINDSAY REIMSCHUSSEL
MS DARIA KUZNETSOVA

Miranda & Associados:

MS SOFIA MARTINS
MR RENATO GUERRA DE ALMEIDA
MR RICARDO SARAIVA

Fact Witnesses:

MR KISHAN DAGA, Representative
MR ASHISH PATEL (via video conference)

Expert Witnesses:

PROFESSOR RUI MEDEIROS
MR KIRAN SEQUEIRA
MR PAUL BAEZ
MR DAVID DEARMAN
MR ANDREW COMER (via video conference)
MR DAVID BAXTER (via video conference)
MR GERARD LAPORTE (via video conference)

A P P E A R A N C E S

The Respondent:

Representative:

MR ANGELO MATUSSE, The Republic of Mozambique

Counsel:

Dorsey & Whitney LLP

MR JUAN BASOMBRIO
MS THERESA BEVILACQUA
MR DANIEL BROWN

Fact Witnesses:

MR LUIS AMANDIO CHAUQUE
MR PAULO FRANCISCO ZUCULA (via video conference)

Expert Witnesses:

MS TERESA F MUENDA
MR JOSE TIAGO DE PINA PATRICIO DE MENDONCA
MR DANIEL FLORES
MR LARRY DYSERT (via video conference)
MR DAVID EHRHARDT (via video conference)
MR MARK LANTERMAN (via video conference)
MR MARK SONGER (via video conference)

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1 (9.30 am, Friday, 2 December 2022)

2 **PRESIDENT:** Let us start. This is the
3 fifth day in the hearing on the merits in the
4 arbitration between Patel Engineering Ltd and the
5 Republic of Mozambique.

6 Is there any point of order?

7 **MR HO:** Not from the Claimant's side,
8 thank you, Mr President.

9 **PRESIDENT:** Very good. And from
10 Respondent?

11 **MR BASOMBRIO:** Yes, Mr President. The
12 transcription does not seem to be appearing.

13 (Pause)

14 **PRESIDENT:** So was there any point of
15 order from Respondent?

16 **MR BASOMBRIO:** No, nothing else. Thank
17 you.

18 TIAGO DE MENDONÇA, continued

19 **PRESIDENT:** Very good. So we greet
20 Mr Tiago de Mendonça. You remember, sir, that you
21 are still under oath, which you took yesterday.

22 **MR MENDONÇA:** Yes, of course. Thank you.

23 **PRESIDENT:** Very good. And, Mr Ho, this
24 is your expert. You have the floor.

25 **MR HO:** Thank you, Mr President.

1 Cross-examination by Claimant

2 **MR HO:** Good morning, Mr Mendonça. I'm
3 conscious you have a flight today --

4 **PROFESSOR TAWIL:** Sorry, counsel, can you
5 get the microphone?

6 **MR HO:** Yes.

7 I'm conscious you have a flight to catch
8 today, and I don't want to be the reason you miss
9 it, so it would help me greatly if you could keep
10 your answers short and to the point and where you
11 can, simply answer yes or no or I don't know. Is
12 that all right?

13 **MR MENDONÇA:** I'll try. Thank you for the
14 flight, Mr Ho.

15 **MR HO:** No problem.

16 I can see that you have some notes down
17 there with you. What is that document you have
18 there with you?

19 **MR MENDONÇA:** It's my presentation from
20 yesterday.

21 **MR HO:** I understand, OK. Super.

22 Now, you're here today to give evidence as
23 an independent expert, aren't you? You're not a
24 factual witness?

25 **MR MENDONÇA:** Yes.

1 **MR HO:** You weren't involved yourself in
2 any of the events the subject of these proceedings,
3 were you?

4 **MR MENDONÇA:** No.

5 **MR HO:** So you have no firsthand evidence
6 to give of the facts that are in dispute in this
7 case, do you?

8 **MR MENDONÇA:** I'll answer no to your first
9 question. I don't know if I quite understand your
10 second question. Your second question is what
11 I have, I think it's what everybody has here, like
12 you and me and all the persons who was not involved
13 in this process.

14 **MR HO:** I understand.

15 **MR MENDONÇA:** But I've received some --
16 I have something special, which is I have made a
17 report for the government that has asked me to
18 report on things, to saw the documents, everything,
19 make a compilation -- yes, I was involved in that
20 with the government. Thank you.

21 **MR HO:** I understand.

22 Now, can you explain to us what you
23 understand your duty to the Tribunal as an
24 independent expert to be?

25 **MR MENDONÇA:** You want me to explain what

1 I understand of why I'm here?

2 **MR HO:** No, I want you to explain what you
3 understand about your duty as an independent expert.
4 What do you understand your role is, your duty to
5 the Tribunal is, as an independent expert?

6 **MR MENDONÇA:** OK. So I'll try to answer
7 your question.

8 I'm here because I've worked for 25 years
9 in Mozambique, and as an independent expert I'm here
10 to help the court to decide on these matters. And
11 as an independent expert who deals with this every
12 day, this is my life doing prefeasibility studies,
13 working with Mozambican laws. I think my mission
14 here, it's to help this Tribunal to decide and bring
15 the expert -- my expertise and what is normally and
16 legal than in Mozambique. I think it's -- I don't
17 know if I explain it well in English. I'm sorry,
18 because of my English, but I think this is my duty.

19 And being totally independent, which I am
20 for 37 years.

21 **MR HO:** Are you aware that, as an
22 independent expert, you should only give evidence
23 about matters within your expertise?

24 **MR MENDONÇA:** Yes, of course. I only can
25 give opinions with my expertise, which is being a

1 civil engineer and dealing with contracts and
2 Mozambican laws for those years or those 25 years in
3 Mozambique. Yes, I can only give opinions about
4 this -- that, thank you.

5 **MR HO:** Now, your CV shows that a
6 substantial number of the projects you've worked on
7 were in Mozambique.

8 How many of the projects in Mozambique
9 that you've done were for the Government of
10 Mozambique or for public authorities in Mozambique,
11 including the MTC?

12 **MR MENDONÇA:** How many of the projects
13 I've done in Mozambique were for the government?

14 **MR HO:** Or public authorities.

15 **MR MENDONÇA:** Well, I've done dozens of
16 projects for CFM, which is a public authority within
17 the MTC. You know, it's -- normally in Mozambique
18 we are not -- we are hired by the agencies. It's
19 the normal way. For instance, for the MTC I'm hired
20 normally for CFM, which is the railway and ports
21 authority.

22 For instance, for infrastructures, I'm not
23 hired directly by the Ministry of Public Works but
24 its agency, and so you want me to tell you all the
25 projects I've done to ANE, or to CFM?

1 **MR HO:** If you could just give us a sense.
2 Are we talking about ten projects, a hundred
3 projects, fifty projects? Could you give us a rough
4 idea of the number, the ballpark figure?

5 **MR MENDONÇA:** It's difficult. Maybe for
6 ANE I've done, I don't know, more than 20. I don't
7 know. It's difficult for me. And for CFM, I don't
8 know, 50 -- now I'm dealing with -- at the moment
9 I have four or five, six projects ongoing to CFM.

10 CFM and ANE -- CFM is MTC, is one of
11 the -- our biggest clients. I'm seeing -- in front
12 of me I'm seeing two projects for CFM.

13 **MR HO:** So I think you just mentioned that
14 CFM is one of your biggest clients.

15 **MR MENDONÇA:** Yes.

16 **MR HO:** Do you have a sense of how much
17 CFM have paid you in the past? Again, just a
18 ballpark figure. Are we talking hundreds of
19 thousands of dollars, millions of dollars, tens of
20 thousands of dollars for your work for them in the
21 past and going forward?

22 **MR MENDONÇA:** I don't understand the
23 relevance of that. Sorry.

24 **MR HO:** Don't worry about the relevance of
25 it. You just answer my question.

1 **MR MENDONÇA:** You want me to tell you what
2 my company was paid by CFM in the last years? Is
3 that it?

4 **MR HO:** Very roughly. Are you able to
5 tell me, for example, that CFM have paid in the tens
6 of thousands of dollars or the hundreds of thousands
7 of dollars or in the millions of dollars?

8 **MR MENDONÇA:** Well, this year maybe CFM
9 paid us \$1 or \$2 million, this year, and, for
10 instance, with the biggest project in Mozambique was
11 the Katembe project which was a road to the south of
12 Mozambique and the biggest bridge -- one of the
13 biggest bridge in Africa, it was -- the contract was
14 about \$23 million.

15 **MR HO:** I understand.

16 And I think you've very helpfully
17 explained that CFM is one of your biggest clients.
18 Are there other government agencies in Mozambique
19 that you also work for regularly, or is it just CFM?

20 **MR MENDONÇA:** No, I work for -- the main
21 agencies -- I work for a lot of them, but the main
22 agency in Mozambique that are major clients are CFM,
23 which is within MTC, ANE, which is the railway
24 authority, and -- well, we have -- you don't want
25 private clients?

1 **MR HO:** No, just the government.

2 **MR MENDONÇA:** We have, for instance,
3 another agency in the government which is Revimo,
4 which is a road concession which is within the
5 public -- it's a public concession also, which is a
6 very important -- it's an important client also.

7 **MR HO:** Just the last question on this
8 topic, are you currently tendering for any projects
9 in Mozambique?

10 **MR MENDONÇA:** I'm always tendering.

11 **MR HO:** Always tendering?

12 **MR MENDONÇA:** Always. Always. It's my
13 life!

14 **MR HO:** Like lawyers always trying to be
15 billing!

16 **MR MENDONÇA:** Yeah.

17 **MR HO:** Could we look at your CV together
18 for a moment?

19 **MR MENDONÇA:** Yes, please.

20 **MR HO:** So that is in the annexe to your
21 first report. We can see it -- pick it up at page 1
22 there. We'll put that up on the screen for you.

23 Your CV is an accurate record of your
24 professional career and your expertise and
25 experience, isn't it?

1 **MR MENDONÇA:** Yes.

2 **MR HO:** If we just turn on in your CV to
3 page 11 in the annexe, it's page 79 of the
4 electronic --

5 **MR MENDONÇA:** Can you stop there, please?

6 **MR HO:** Well, no. We're quite tight on
7 time. I'm sorry.

8 **MR MENDONÇA:** OK.

9 **MR HO:** If there's something important,
10 your counsel will pick it up with you in their
11 questions.

12 **MR MENDONÇA:** OK, thank you.

13 **MR HO:** So we can see on page 11 internal,
14 page 79 of the pdf, at the bottom of the page
15 there's the heading "Education". Can you see that?

16 **MR MENDONÇA:** There's what, sorry?

17 **MR HO:** There's the heading, "Education".

18 **MR MENDONÇA:** Yes, yes.

19 **MR HO:** And we can see that you have a
20 degree in Civil Engineering and a Master's degree in
21 Structural Engineering.

22 **MR MENDONÇA:** Yes.

23 **MR HO:** You have no Mozambique law
24 qualifications, do you?

25 **MR MENDONÇA:** Sorry?

1 **MR HO:** You have no Mozambique law
2 qualifications, do you?

3 **MR MENDONÇA:** Law qualifications? I'm
4 a -- are you asking me if I'm a lawyer in
5 Mozambique?

6 **MR HO:** Yes.

7 **MR MENDONÇA:** It's not in my -- I'm not a
8 lawyer.

9 **MR HO:** No. You're not a lawyer. You
10 explained to us in your direct presentation
11 yesterday -- and for the record, that is Transcript
12 Day 4, page 959, lines 7 to 11. I think we'll put
13 that up for you.

14 I quote, you said: "If I want, I have to
15 help myself with the national consultants, with
16 national lawyers, because lawyers also need to be --
17 like us engineers -- lawyers need to be in the
18 professional association".

19 Now, you aren't a member of the
20 professional association of lawyers in Mozambique,
21 are you?

22 **MR MENDONÇA:** I think I've already
23 answered the question. I'm an engineer. I'm not a
24 lawyer. It's not in my CV, so that's not a
25 question, I think.

1 **MR HO:** So if you need help with
2 Mozambique law, you yourself will instruct a
3 Mozambique lawyer?

4 **MR MENDONÇA:** I'll try to answer that
5 question.

6 I deal in Mozambique with two or three
7 laws, and these two or three laws, of course I have
8 in my company lawyers that help me when I have
9 doubts about the law. Of course I have people who
10 help us on that.

11 But when we deal -- I'm a professional,
12 I'm the CEO of my company, and we have to make -- we
13 have to understand -- as an engineer I have to
14 understand and know the law which regulates my
15 activity. That does not make me a lawyer, no, but
16 that makes me an expert on my own -- my profession.

17 And my profession is regulated by law in
18 Mozambique, so I have to understand the laws that
19 regulate my activity. That's what I know about
20 laws. And I have in my company, when I need of
21 course, or it is mandatory, I always go and help --
22 get help with our lawyers. I'm not a lawyer. Do
23 I know some laws in Mozambique? Yes. Am I lawyer?
24 No.

25 **MR HO:** No. I think that's fair.

1 I think, then, you'd agree with me that if
2 a client came to you and asked you to give them a
3 legal opinion on what the effect of, let's say,
4 article 1, subparagraph 1 of Decree No 15/2010 is as
5 a matter of Mozambique law, you would refuse to do
6 that because you're not qualified or licensed to
7 give that advice?

8 **MR MENDONÇA:** I -- let me try to see --
9 sorry, my English is not perfect. And let me try to
10 understand your question.

11 You're asking me if somebody asked me for
12 a -- let's go to a specific law. One I know, OK?
13 The 1510 or 1511. If there's an opinion what is
14 happened because this is about my profession, the
15 laws are about my engineering profession, and
16 there's a connection with my profession and the
17 legal part, I cannot give no legal opinion on law.
18 I'm not allowed to do it. Can I give, as a
19 professional engineer, what should be done within
20 the law? Yes. But not -- I'm not a legal expert,
21 as I think you know.

22 **MR HO:** Now, given that you say you
23 understand your duty is to assist the Tribunal with
24 matters within your expertise, and given that you
25 accept that you're not a Mozambique lawyer, do you

1 accept that it was entirely inappropriate, both in
2 your reports and in your direct presentation last
3 night, to have given at length opinions on
4 Mozambique law?

5 **MR MENDONÇA:** No, of course not. And I'll
6 try to explain because this is very important.

7 I'm a professional engineer, and I work
8 under laws, rule, the exertion of my profession.
9 Sorry about my English.

10 So what I'm trying to say to the court is
11 I'm not here as a legal expert, no. I'm here as a
12 person who is working for Mozambique within these
13 laws for 27 years, and my professional testimony to
14 the court should be within this framework, also
15 which includes legal part. That doesn't -- but,
16 yes, I'm an engineer, I'm telling that to the court.
17 I'm an engineer. I deal with project management,
18 and in order to tender we have to know the laws,
19 because as I told, Mr Ho, I tender every week, so if
20 I don't know the law, I'm lost.

21 So in order to -- I don't know how to say,
22 "enquadrar" and to present the arguments of
23 engineer, it's my obligation as an independent
24 engineer to bring up the legal things. I cannot
25 come here and tell I know nothing about the law,

1 I don't even know the laws that are in Mozambique.
2 I cannot do that. Because if I would do this,
3 I would not be professional and I could not help the
4 court on this matter, because our professions, all
5 of us profession, they are ruled by the law, and we
6 have to be -- as a professional engineer I have to
7 "enquadrar" that also within the law but yes, I am
8 not a legal expert but I find my entire obligation
9 is to do what I've done yesterday, and this is the
10 only way I can help the court is trying to tell what
11 are the laws that rule Mozambique and what we should
12 do.

13 Because in order to do a PFS, we have to
14 do a PFS according to the law, according what is
15 written in the law, and if I -- Mr Ho, if I don't
16 bring you that, what can I bring you? Only my
17 opinion and say no, no, it's like this because it's
18 my opinion. No. It's my opinion and it's within
19 the law.

20 **MR HO:** Mr President, just so that we're
21 clear, we don't accept that a number of statements
22 that Mr Mendonça made in his direct presentation
23 last night and his reports are matters within his
24 expertise. I don't think it's productive to pursue
25 that any further now but I just want to lay that

1 marker down now.

2 So let's look a little bit more about what
3 your expertise is. If we go back to your CV, the
4 first page, page 1 of the annexe, page 69 of the
5 pdf, we can see at the top of the page that you
6 identify your profession as civil engineer, and then
7 at the bottom of that initial section we see the
8 line "Details of performed tasks" and then it says
9 Bridge Designer since 1985. Do you see that?

10 **MR MENDONÇA:** Yes, yes.

11 **MR HO:** Then we have the heading "Key
12 qualifications", and in the second paragraph of that
13 section it says you have a wide experience,
14 especially in rehabilitation and strengthening of
15 bridges.

16 Do you see that as well?

17 **MR MENDONÇA:** Yes, yes.

18 **MR HO:** So while you're qualified as a
19 civil engineer, your particular expertise is the
20 design of bridges and other civil engineering tasks
21 connected with bridges like construction or
22 maintenance, is that right?

23 **MR MENDONÇA:** I'm -- yes, that's my life,
24 yes. And your answer -- the answer is yes. I have
25 other qualifications, of course, like project

1 management and PFS, the other things. Yes, yes.

2 **MR HO:** In the second half of the page we
3 can see a table with some projects in it, and
4 immediately above that table there are the words
5 "From among the projects conducted recently by the
6 company, one may highlight the following".

7 Now, just so we're clear, have you worked
8 on all of the projects that are listed below, or
9 have you included in your CV projects which the
10 company has worked on but which you weren't actually
11 involved in?

12 **MR MENDONÇA:** I'm involved, unfortunately,
13 in many, many of the projects in the -- that my
14 company does, and all the projects that are here,
15 I was involved with.

16 **MR HO:** That's fine.

17 Now, because you're a bridge specialist,
18 where you have advised or worked on rail projects in
19 the past, your involvement has been limited to
20 assisting with the railway bridges, and I think in
21 one case a metro tunnel, hasn't it?

22 **MR MENDONÇA:** You're asking me if I'm only
23 a bridge man and if I only do bridge projects, is
24 that the question?

25 **MR HO:** No, what I'm saying is, of the

1 projects that are listed in your CV, they show that
2 where you have advised or worked on rail projects in
3 the past, your involvement was limited to assisting
4 with the railway bridges. You haven't worked on the
5 design, construction, or maintenance of a railway
6 line more generally, have you?

7 **MR MENDONÇA:** Yes, I have. I've had --
8 maybe there's a -- my CV is a lot focused in
9 bridges, you're right, and I've had -- for instance,
10 for six or seven years we have dealing with a big
11 project in Malawi for rehabilitation and
12 construction of a railway line.

13 We have been working in Mozambique with --
14 and now we have a contract to design a railway line
15 to -- part of the railway to South Africa in
16 Mozambique.

17 So I've had -- I have experience on these
18 matters of railway lines. A lot of experience.

19 **MR HO:** None of those projects are listed
20 in your CV, are they?

21 **MR MENDONÇA:** I don't know, but if we can
22 look at every part of the CV I can look if it is
23 there. If it isn't, it should have been there.
24 You're right, Mr Ho.

25 **MR HO:** Yes, it should have been there.

1 So when before you said your CV was a complete
2 record of your experience and expertise, that wasn't
3 right, was it?

4 **MS BEVILACQUA:** Mr President, may I object
5 as that was a different question and answer, and on
6 the screen what the CV says is from "among" the
7 major projects conducted recently by the company and
8 is merely a summary and not intended to be his
9 entire professional curriculum.

10 **MR HO:** Well, Mr President, we established
11 earlier that this CV was a fair record of his
12 expertise and experience and it appears now there
13 are projects that aren't included that are relevant.

14 **PRESIDENT:** I think, Mr Ho, that the
15 expertise of Mr Mendonça is quite clear, and what he
16 is an engineer and what he has done. I think this
17 line of questions will not lead us very much
18 further, I think.

19 **MR HO:** All right then. Thank you,
20 Mr President.

21 In that case, could we move on to look at
22 section 5.1 of your first report. We can see
23 that --

24 **MR MENDONÇA:** Can you tell me the page,
25 please?

1 **MR HO:** Yes, it's page 13, both of the pdf
2 and in the physical copy.

3 **MR MENDONÇA:** Mr President, can I ask you
4 a question, please? Thank you for your answer to
5 Mr Ho, but what I'd like to say is what I'm saying
6 here in the court is absolutely the truth about my
7 CV. I don't know if it was -- I've worked in a lot
8 of projects. If you need, I can do a new actualised
9 CV. I've worked in a lot of railway projects,
10 Mr President.

11 **PRESIDENT:** No, no. This is -- let me
12 explain to you the traditions of the court. I'm
13 sure there are certain traditions in engineering,
14 and it is just traditional to ask you all these
15 details, but that does not mean -- and I'm sure that
16 Mr Ho did not mean -- in any way to put in doubt
17 your CV. It's a standard procedure to ask an expert
18 about his CV, so it's perfectly all right.

19 **MR MENDONÇA:** Thank you, Mr President.
20 Thank you.

21 **PRESIDENT:** Totally within the tradition
22 of these type of examinations.

23 **MR MENDONÇA:** Thank you.

24 **MR HO:** So what I'd like to do now is to
25 look at section 5.1 of your first report in order to

1 understand the exercise you've conducted there.

2 So in paragraph 1 you say, "In this
3 section, the content of PEL's PFS will be analysed
4 aiming to assess completeness, comprehensiveness and
5 level of detail. The evaluations will be issued by
6 sub-chapters".

7 And then just skipping down to paragraph
8 2, you continue, "The conclusion reached through
9 this analysis, which will be described in more
10 detail below, was that the PFS does not reflect a
11 high degree of design development or a high degree
12 of resources mobilised (in terms of technical staff
13 and costs)".

14 So, as I understand it, what you have done
15 in section 5.1 is focused on the content of the PFS,
16 and on the basis of the information in the PFS
17 itself, you have given your opinion on whether the
18 PFS reflects a high degree of design development or
19 resource mobilisation, is that right?

20 **MR MENDONÇA:** Yes, but sorry, Mr Ho,
21 you -- can you listen to me?

22 You've transcribed and I'll continue.
23 "The PFS did not 'define the basic terms and
24 conditions for the granting of a concession ...' and
25 would not be a valid basis, based on industry

1 standards and our experience, to award a
2 concession".

3 Yes. What I'm telling here, it's not only
4 what you've read. All the paragraph, it's true,
5 yes. All the paragraph.

6 **MR HO:** I understand that. What I'm
7 trying to understand is the exercise that you have
8 done and what I'm saying is you have focused on the
9 content of the prefeasibility study itself and on
10 the basis of the information in that document you
11 have then given your opinion. You've not, just so
12 we're clear, examined the record as a whole to see
13 on the basis of the entire record there is evidence
14 of a high degree of design development or resource
15 mobilisation underlying the PFS, have you?

16 **MR MENDONÇA:** I don't understand which is
17 the record?

18 **MR HO:** All of the documents in this case.
19 All of the evidence in this case.

20 **MR MENDONÇA:** I'm analysing -- as an
21 engineer, I'm analysing the PFS, and the PFS in my
22 opinion can only be analysed according what is
23 written in the PFS, as I cannot analyse the PFS
24 with -- I don't know what is all the documents, and
25 could you please explain me what are all the

1 documents and how those documents are relevant to
2 the PFS that I have analysed? Did I miss -- I don't
3 know if there were geotechnical analysis done.
4 I don't know if there are topographic -- the PFS
5 doesn't address -- doesn't say nothing about that.

6 So if there are any documents that I
7 didn't knew that are related to PFS, some annexe or
8 whatever, they are not described that have been done
9 other analysis. All the records, sorry, Mr Ho,
10 I don't understand. Sorry, it's my fault.

11 **MR HO:** No, no. Not at all. I think it's
12 common ground that the prefeasibility study was
13 based on a study for the rail corridor from Macuse
14 to Moatize that was conducted by AARVEE Associates.
15 Are you aware of that?

16 **MR MENDONÇA:** There are a preliminary
17 study -- I don't know if this is what you're talking
18 about -- a Preliminary Study done by two Mozambican
19 engineers. Is that it?

20 **MR HO:** No, let me show you the PFS then.
21 We can see that at C-6B, page 3. That's in the Core
22 Bundle at volume 1, tab 8, page 3. We'll just get
23 that up on screen for you. Core Bundle volume 1,
24 tab 8, page 3.

25 So this is the prefeasibility study -- I'm

1 sorry, if you go back a page, Mr Mendonça. Yes.

2 That's it. It's the right-hand page.

3 Can you see there that it says "For rail
4 corridor from Macuse to Moatize by
5 AARVEE Associates?" That's because the PFS was
6 based on a study that AARVEE Associates prepared.
7 Are you aware of that?

8 **MR MENDONÇA:** No. Sorry, this is in the
9 PFS?

10 **MR HO:** Yes, that is the PFS.

11 **MR MENDONÇA:** But this study you're
12 telling me is within the PFS?

13 **MR HO:** No, I'm not saying it's within the
14 PFS. I'm saying the PFS was based on that study,
15 and all I'm asking is were you aware of that.

16 **MR MENDONÇA:** I've analysed the PFS.

17 **MR HO:** I understand.

18 **MR MENDONÇA:** In a PFS all the relevant
19 documents has to be within the PFS in order for the
20 government and independent technician analyse. I've
21 studied the things that are within the PFS.

22 And, Mr Ho, sorry, within the PFS I didn't
23 saw reference or saying nothing taken from this
24 study, but maybe you can enlighten me, please.
25 Sorry.

1 **MR HO:** No, no. Don't worry. Let's just
2 put that study up. It's C-6A. It's in the Core
3 Bundle volume 1, tab 7. I just want to be fair to
4 you.

5 This is the rail study that was performed
6 by AARVEE Associates. Now, have you ever seen this
7 document before?

8 **MR MENDONÇA:** Sorry, isn't this the
9 rail -- this is not within the PFS.

10 **MR HO:** No, it's not -- it's a separate
11 report that the PFS is based on and all I'm trying
12 to do, to be fair to you, is ask have you seen this
13 document before.

14 **MR MENDONÇA:** Is this presented with the
15 PFS?

16 **MR HO:** Don't worry about that. I'm
17 asking if you've seen this document before.

18 **MR MENDONÇA:** I've seen the PFS. I have
19 never seen this document.

20 **MR HO:** Right, I understand.

21 Now, if, and I'm asking you to assume
22 this, if this document or other documents in the
23 record contain information relevant to whether the
24 PFS reflects a high degree of design development or
25 resource mobilisation, then I think we're agreed

1 that that material hasn't been considered as part of
2 the analysis in your section 5.1, has it, because
3 all you've done is focus on the PFS?

4 **MR MENDONÇA:** Would you give me some
5 minutes? Yes or no, Mr President? Yes? Thank you.

6 **MR HO:** Mr President, I want to be fair to
7 the witness and give him a chance, but I'm not sure
8 my question actually involved looking through the
9 document. My question was simply asking him to
10 agree or not that if there is relevant information
11 in this document, he hasn't considered it as part of
12 his section 5.1, and I think that follows because
13 he's agreed that all he's looked at is the PFS, but
14 I just want for the record for him to confirm that.
15 I'm just conscious he has a flight to get to and if
16 he tries to read this one hundred page document --

17 **MR MENDONÇA:** Sorry, I'm not trying to
18 read this hundred page document. Thank you,
19 Mr President, for those minutes.

20 I wanted to have a look on this document
21 and try to get the content of this document and to
22 see -- I know it's impossible to see a document in a
23 few minutes, but I have 37 years of this, so this
24 talks about the railway line, the rolling stock, and
25 I should have read this of course.

1 But what I think is -- I've studied the
2 PFS, and this -- in this document I see no
3 information about the -- what's happening in
4 Mozambique. The problem we've got in the study,
5 it's more the environmental, technical, and
6 economical and finance viability. And this is not
7 in this document and if it was in this document it
8 should have been in the PFS.

9 And, Mr Ho, in my opinion the PFS is a
10 standalone -- I'll ask you your question. The PFS
11 is a standalone process, and the PFS was a document,
12 was presented to the Government of Mozambique, and
13 if in this document there are relevant issues that
14 should have been in the PFS, I believe they are here
15 in the PFS.

16 If there are different things and things
17 that are relevant for the government to take
18 decision or for me to analyse the PFS, my answer is
19 should I know any -- every previous document? Maybe
20 there are a lot of previous documents. Then I'm
21 here to analyse the PFS. It's not important for the
22 analysis of the PFS if I know all the previous
23 document. What's important is did I miss something
24 which is written in the PFS.

25 My analysis -- because sorry to say this,

1 but this is my profession and I have to -- I have to
2 defend what I believe, and they have to be clear for
3 me that the court understand that I'm here talking
4 about what I believe and what I should have done
5 because you're asking me if I should have done this
6 or should have done that. I should have done
7 analysed the -- let me -- can I talk?

8 **MR HO:** Mr Mendonça, we are I'm afraid on
9 the clock and I don't think you're answering my
10 question. My question wasn't about should you or
11 shouldn't you. My question is what you have in fact
12 done. And what you have in fact done is not look at
13 this document or other documents like this when
14 considering and preparing your analysis in section
15 5.1 of your report, have you?

16 **MR MENDONÇA:** Mr President, can I ask with
17 my words or -- can I answer, sorry, can I answer
18 with my words to Mr Ho's questions?

19 **PRESIDENT:** I think your answer is quite
20 clear, sir. I think you are basically saying this
21 should be in the prefeasibility study and that you
22 have looked at the prefeasibility study and that all
23 the information should have been in the
24 prefeasibility study. I think that was your answer.

25 **MR MENDONÇA:** Yes, it's my answer, and

1 it's my obligation to do that. Thank you.

2 **MR HO:** Right. Let's just very briefly
3 look at -- I think it's one aspect of this. Can we
4 go to paragraph 54 of your first report. That's in
5 page 33 of your report. Just hang on to that.

6 **MR MENDONÇA:** You don't need this?

7 **MR HO:** We will come back to that in just
8 a second, but that would be great.

9 So if you just go to page 33, paragraph
10 54, in this section of your report you're critiquing
11 the PFS, and you say "PFS did not have a chapter
12 dedicated to 'Risks' that can affect the Project and
13 its Feasibility, and did not make any considerations
14 about possible mitigation measures to be implemented
15 about them".

16 Do you see that?

17 **MR MENDONÇA:** Yes.

18 **MR HO:** If we go back now to C-6A, that's
19 the document in the file, and we go in that to --
20 it's page 119 in the pdf, it's between pages 103 and
21 104 -- can you help him with that?

22 **MR MENDONÇA:** I can manage. 103.

23 **MR HO:** It's between pages 103 and 104 in
24 C-6A. It's in tab 7. I don't think that's the
25 right page. Someone will help you find it though.

1 **MR MENDONÇA:** You're talking about the
2 document you have --

3 **MR HO:** I'm talking about C-6A, the AARVEE
4 report. You can see it on the screen in front of
5 you, but we'll get you the hard copy. It should be
6 a page that says risk analysis.

7 Can you just check he has the right page?
8 Yes, so just leave it there.

9 So you can see this is a section of the
10 AARVEE report dealing with risk analysis?

11 **MR MENDONÇA:** Mr President, can I ask you
12 a question, please? Mr Ho is -- I've come here,
13 I've analysed the PFS. It's my job to analyse the
14 PFS. And now Mr Ho brings me one document which is
15 not within the PFS and which was not object of my
16 analysis, of government analysis, or whatever.
17 There might be dozens of other documents, I don't
18 know.

19 Mr Ho is asking me about this. Do I have
20 to answer about this question?

21 **PRESIDENT:** No. You can say -- he's just
22 drawing your attention to that document, and you can
23 say you -- if you have not seen it, you can say that
24 you have not seen it. He puts you some questions,
25 and you answer if you have not analysed it, you have

1 not analysed it.

2 **MR MENDONÇA:** Mr Ho, what I've said in my
3 report is that there are no risk analysis within the
4 PFS, and this is my answer. You're bringing me
5 other documents that are not official documents, I
6 didn't analyse the -- I don't know who saw this
7 document. It's not important for me, and so I have
8 no opinion about this.

9 **MR HO:** Mr Mendonça, we don't want to
10 descend into argument. You really don't need to
11 worry about why I'm asking you the questions. You
12 just need to focus on answering them. And if you
13 feel you're unable to answer them because you
14 haven't seen the document, you can tell us that you
15 are unable to answer them. But we are on the clock
16 and if we have this back and forwards with you going
17 through the president every time I ask a question,
18 we are never going to get you to your flight on
19 time.

20 All I'm asking you is do you accept that
21 this is a section of the AARVEE report that is
22 dealing with risk analysis?

23 **MR MENDONÇA:** Mr President, again, can I
24 ask you some questions or I'll have to do what --

25 **PRESIDENT:** It's perfectly OK that you say

1 I really don't know, I have not seen this document. **10:15**

2 **MR MENDONÇA:** I'll answer you again --

3 **PRESIDENT:** You don't have to -- it's
4 perfectly normal.

5 **MR MENDONÇA:** OK, thank you.

6 **PRESIDENT:** It is perfectly normal for you
7 to say I have not seen this document and I have no
8 opinion.

9 **MR MENDONÇA:** Sorry. I'm new on this.

10 **PRESIDENT:** Yes, of course.

11 **MR MENDONÇA:** I'm very sorry.

12 **PRESIDENT:** Sometimes -- I'm sure that if
13 all the lawyers in this room designed a bridge, it
14 would fall down after five minutes, so yes, just
15 tell them -- just tell counsel "I don't know".

16 **MR MENDONÇA:** Mr Ho, again, I've analysed
17 the documents, the PFS, I'm here for that.
18 I don't -- so if there are other documents -- this
19 and other documents ...

20 **MR HO:** I understand. I think just one
21 final point. So I think it's then fair to say that
22 you haven't accounted for the time or the money that
23 was spent preparing the risk assessment in this
24 report, have you?

25 **MR MENDONÇA:** Mr Ho, maybe my

1 Portuguese -- my English is very lousy, so I'm
2 sorry.

3 **PRESIDENT:** No, he's asking you how many
4 hours you spent preparing your expert report.

5 **MR HO:** No, Mr President. What I'm
6 putting to him is that in his report, he has
7 suggested that the PFS is not the product of much
8 expense or cost. I'm showing him a report that
9 underlies the PFS, which he has not looked at, and
10 all I'm establishing with him, therefore, is that he
11 has not accounted for the time or the cost that it
12 took to prepare this risk analysis.

13 Because, of course, it's open to him to
14 say well, I've looked at the PFS and that looks like
15 it was very cheap to prepare, but if there are
16 millions of documents underlying it which for
17 whatever reason didn't make it into the PFS, we will
18 say it reflected a high degree of cost mobilisation,
19 and that's what I'm trying to establish with him. I
20 think it follows from his answer but I just want to
21 be fair to him. If everyone thinks we can move on,
22 I'm perfectly happy to?

23 **MR MENDONÇA:** Can I answer that,
24 Mr President?

25 **PRESIDENT:** Yes, of course.

1 **MR MENDONÇA:** What I've done is to analyse
2 what's within the PFS, and if within the PFS as this
3 work -- previous work within the PFS, in the PFS
4 there are no risk analysis, I cannot only talk about
5 the PFS, and in this document, if there is very
6 important risk analysis, it should have been showed
7 in PFS because nobody -- if you -- if we have more
8 and more documents, I can only analyse the PFS, and
9 the PFS, not lot of work have been done. No field
10 work have been done. No environmental issues.
11 People didn't address the right technical viability,
12 environmental and financial and economical
13 viability.

14 **MR HO:** I don't accept all of that is
15 right but I don't think it's going to be productive
16 for us to go into that.

17 What I do want to establish with you,
18 though, is the MTC has experts who are qualified to
19 review PFS studies, don't they?

20 **MR MENDONÇA:** That's a question?

21 **MR HO:** Yes. The MTC in Mozambique has
22 experts in the department who are qualified to
23 review PFS studies, don't they?

24 **MR MENDONÇA:** Normally they do it -- or
25 they do it internally or they do it -- they are a

1 consultant to do it. I don't know how it happened
2 this -- in this matter. I don't know.

3 **MR HO:** No, but whether they get
4 consultants to do it or they do it internally,
5 they're able to access experts to review PFS
6 studies, aren't they?

7 **MR MENDONÇA:** The government can do
8 whatever they want to do, to review. Normally it's
9 better for the government to -- such a study to be
10 reviewed outside -- I'm sorry, let me -- I don't
11 know who reviewed this document.

12 **MR HO:** That's not what I'm asking you.
13 We'll just try once more. The MTC has experts,
14 don't they, internally who are qualified to review
15 PFS studies?

16 **MR MENDONÇA:** I know -- yes and no. It
17 depends who revised this. But this is my opinion.
18 I don't know -- I cannot ask you -- I cannot answer
19 this question.

20 If you ask me, I don't know who reviewed
21 this documents I don't know.

22 **MR HO:** And if the MTC want to know more
23 details about any of the technical or economic
24 aspects underlying a PFS study, they can always ask
25 for those, can't they?

1 **MR MENDONÇA:** The MTC can do whatever they
2 want. Of course they can do whatever they want.
3 I don't know who reviewed and what was the process
4 of reviewing this document. I'm not aware. Sorry.

10:21

5 **MR HO:** That's fine. Can we look at
6 paragraph 2 of section 5 of your first report? That
7 should be on page 13. We were looking at it a
8 moment ago.

9 **MR MENDONÇA:** Page?

10 **MR HO:** Page 13, paragraph 2.

11 **MR MENDONÇA:** The same.

12 **MR HO:** Yes, the same we were looking at
13 earlier.

14 **MR MENDONÇA:** Yes.

15 **MR HO:** If we look at the end of the
16 paragraph, can you see that you say, "Today in
17 Mozambique and in many countries worldwide,
18 environmental issues are critical and mandatory. It
19 is completely impossible to define the basic terms
20 and conditions of a concession without this
21 important issue correctly addressed".

22 Do you see that?

23 **MR MENDONÇA:** Yes, yes.

24 **MR HO:** Now, that analysis is expressly
25 framed as at today, ie the date of your report,

1 which was March 2021, isn't it?

2 **MR MENDONÇA:** Sorry? I didn't understand
3 your question. Could you rephrase it?

4 **MR HO:** The way that is drafted is you are
5 saying "today" in Mozambique, and "today" must mean
6 when you drafted your report, which was March 2021.

7 **MR MENDONÇA:** Today -- maybe this is --
8 "today" is more broad. It's not today, it's on
9 these days. Maybe I've written this in Portuguese,
10 and "today" is in the times we are. It can mean the
11 21st century or whatever. It's not that day in May
12 or -- it's not exactly that day. It's a broad -- in
13 these times.

14 **MR HO:** I see.

15 And are you aware that the tender for this
16 project did not require any environmental study to
17 be submitted as part of a party's tender?

18 **MR MENDONÇA:** I'm aware of the -- the --
19 many of the -- I know two proposals for -- for this
20 tender, and I think even PEL made some
21 environmental -- I'm not sure, totally sure. I know
22 it did but I know that PEL did some issues on this,
23 because when we have to tender we have to know what
24 is the tendering in Mozambique or elsewhere, we have
25 to know the law.

1 And maybe if you could show me all the --
2 if you want me to analyse all the tender documents,
3 I can analyse all the tender documents for this
4 tender, but we must know the law, and in this tender
5 I think many of the proponents made environmental
6 questions in order to make a risk analysis for that.
7 And I know -- I reckon in the ITD proposals they
8 have put a lot of environmental and social issues,
9 and I think also in Patel proposal they have also
10 put some issues.

11 But we have to go on -- I cannot answer
12 you that. You're asking me do you know all the
13 tender documents for this tender. Maybe you asked
14 me that. I cannot answer you.

15 **MR HO:** That wasn't what I was asking.

16 **PRESIDENT:** His question was whether
17 under -- whether it was required. Whether all the
18 tenderers had to present some information about the
19 environment.

20 **MR MENDONÇA:** The tender -- I don't know.
21 The only answer I have is I don't know what the
22 tender asked. What I know is some proposals -- and
23 they had to because it's within the law, had to get
24 the -- make reference to environmental and social
25 issues, which is normal to do in a tender like that.

1 And, Mr Ho, I think -- I don't recall
2 because the tender is not an issue for this, I
3 think, for the Tribunal, but I don't recall. But I
4 think there was a punctuation in the tender for
5 people who address how this would help develop the
6 country, the communities, and that.

7 **PRESIDENT:** Do you have very long to go,
8 Mr Ho?

9 **MR HO:** No, I don't, sir.

10 Well, again, we don't accept that your
11 summary there of what you believe Mozambique law to
12 be is correct, but I don't think again that we're
13 going to go into that with you now --

14 **MR MENDONÇA:** Sorry? What did you told?

15 **MR HO:** Don't worry, I'm just stating
16 something for the record, Mr Mendonça.

17 **MR MENDONÇA:** But you're talking about me,
18 yes?

19 **MR HO:** Yes. I'm saying --

20 **MR MENDONÇA:** Can I understand what you're
21 saying, please?

22 **MR HO:** Yes. What I'm saying is we don't
23 accept that your summary of Mozambique law which
24 you've just given is correct but, since you're not a
25 legal expert, we're not going to go into that with

1 you now.

2 **MR MENDONÇA:** What my summary -- sorry.

3 **MR HO:** Don't worry. We're running quite
4 short of time. I'm just stating it for the record.

5 **MR MENDONÇA:** But, Mr Ho, I'm an engineer,
6 and things must be clear for me. You said my
7 summary on Mozambican laws. What have I said about
8 the tender, the summary about Mozambican laws,
9 sorry, I missed that part.

10 **PRESIDENT:** Let's go to -- I'm looking at
11 the watch with some --

12 **MR HO:** Yes, as am I.

13 **PRESIDENT:** We have been going for an
14 hour.

15 **MR HO:** Yes.

16 So, final topic. Can we please look at
17 something called the RSA Guidelines? We can see
18 those at C-382?

19 **MR MENDONÇA:** Page what?

20 **MR HO:** Don't worry. C-382, page 6 in the
21 pdf. For those with the Core Bundle, that's volume
22 4, tab 100. It's internal page 4. Page 6 of the
23 pdf but internal page 4.

24 If we look in the middle of the page, you
25 can see there's a paragraph that's headed "This

1 guideline". You see there's a paragraph which is
2 headed "This guideline"?

3 **MR MENDONÇA:** Sorry, page 4?

4 **MR HO:** It's internal page 4. It's on the
5 screen.

6 **PRESIDENT:** Let us start by basic things.
7 Have you ever seen these guidelines from the
8 South African -- from South African engineering?

9 **MR MENDONÇA:** No.

10 **PRESIDENT:** Very good.

11 **MR HO:** Sorry, Mr President. I was just
12 checking he had the right page. Did you establish
13 with him that he's never seen these guidelines
14 before?

15 **MR MENDONÇA:** This is a guideline for --
16 what can you explain me?

17 **MR HO:** These are the guidelines from
18 South Africa, and what the president --

19 **MR MENDONÇA:** Estimative fees of person
20 registered in engineer profession in South Africa.
21 Is this it?

22 **MR HO:** Yes. And what the president asked
23 you was have you seen this document before. And
24 what's your answer to that?

25 **MR MENDONÇA:** I -- well, I don't recall,

1 Mr President. I don't know. I've seen a lot of
2 those documents. I don't know exactly if I've seen
3 this one.

4 **MR HO:** Right. If we just pull up your
5 third report --

6 **MR MENDONÇA:** I don't know if it was
7 mentioned yesterday and I was here. So I've seen,
8 Mr Ho, only -- at least at that time I've seen it.
9 Sorry.

10 **MR HO:** Right. If we just pull up your
11 third report, that's RER-13. It's page --

12 **MR MENDONÇA:** Sorry, this guideline was
13 mentioned on the -- let me -- memory is -- this
14 guideline was mentioned in the report of Mr -- can
15 you -- will --

16 **MR HO:** Let me do it.

17 **MR MENDONÇA:** I've seen it, yes, and this
18 was mentioned on Mr -- can you help me --

19 **MR HO:** Let me try and help you,
20 Mr Mendonça.

21 **MR MENDONÇA:** Yes.

22 **MR HO:** If we look at your third report --

23 **MR MENDONÇA:** Yes, I've seen it. Yes.

24 **MR HO:** Page 12.

25 **MR MENDONÇA:** Yes, I've seen it.

1 **MR HO:** Your third report. It's on the
2 screen for you. Can you see that you're discussing
3 this document?

4 **MR MENDONÇA:** Can you -- where?

5 Yes, you're right. Because I've seen this
6 in Mr -- sorry --

7 **PRESIDENT:** Comer?

8 **MR MENDONÇA:** Yes, I think the second
9 gentleman, and this is in his report and I have
10 comment this -- yes, Mr Ho.

11 **MR HO:** But you're obviously not very
12 familiar with it if you don't remember having
13 written about it in your report?

14 **MR MENDONÇA:** Yes, I'm not very familiar
15 with a thing which is not applying in Mozambique,
16 yes. I have never -- Mr Ho, I've never worked in
17 South Africa, so I've never, as a professional --
18 I have never used these guidelines and you know
19 there are guidelines for fees in Mozambique and in
20 Portugal and in other countries that I work, so I'm
21 not professional on this. I cannot help you on
22 this. The only comments I make on this was based on
23 Mr Comer because Mr Comer addressed this report,
24 yes.

25 **MR HO:** Well, now we've established that

1 you remember seeing this report, can we go back to
2 the guidelines, please, in the file in front of you,
3 and if we turn back to page 4 internal, page 6 in
4 the pdf, you'll see in the middle of that page
5 there's the paragraph "This guideline". Can you see
6 that? It says "This" and then "Guideline" is in
7 bold.

8 **MR MENDONÇA:** Sorry?

9 **MR HO:** Can you see in the middle of the
10 page there's a paragraph that begins "This
11 Guideline" and the word "Guideline" is in bold?

12 **MR MENDONÇA:** Yes.

13 **MR HO:** So what I'm going to do is,
14 because you don't seem terribly familiar with it,
15 I'm just going to ask you to read that paragraph,
16 the paragraph "This Guideline" down for the next --
17 to the end of the page. OK? If you just read that
18 to yourself.

19 **MR MENDONÇA:** You want me to read?

20 **MR HO:** Not out loud. Just read it to
21 yourself.

22 **MR MENDONÇA:** Well, I'll read this to
23 myself.

24 **PRESIDENT:** Yes.

25 **MR MENDONÇA:** This is not -- nothing

1 applied in Mozambique. It could be from elsewhere.

2 **PRESIDENT:** Yes.

3 **MR MENDONÇA:** OK?

4 **PRESIDENT:** Yes. (Pause)

5 **MR HO:** Have you read that, Mr Mendonça?

6 **MR MENDONÇA:** Yes.

7 **MR HO:** What I want to put to you is that
8 we can see from the paragraphs that you've read that
9 in the interests of public health and safety, the
10 Engineering Council aims to avoid unrealistically
11 high or low fees for engineers. These guidelines
12 are intended to help that goal by providing both
13 clients and engineers a basis for negotiating fair
14 remuneration, and its purpose is to contribute to
15 sound business relationships and mutual confidence
16 and respect between clients and engineers.

17 Now, what I want to put to you is that
18 those are general policy goals which all countries,
19 including Mozambique, would seek to achieve, aren't
20 they?

21 **MR MENDONÇA:** Mr Ho, you're asking me
22 something I don't like to do. I don't like to do it
23 to read part of one document and give my opinion.
24 I never do that in my professional life. I don't --
25 so what you're asking me is you read part of this

1 and then you give -- you give me -- you say that
2 these generalities -- I don't -- if I'll have to,
3 I'll answer to you. If the president tells me "You
4 have to answer to Mr Ho", I'll answer.

5 I don't like to do this, which is read
6 part of a document which is not in the process -- a
7 document I don't know, a document from a country
8 I don't work. So it's -- I would not be fair to
9 myself and to my profession to do comments on a
10 thing I have no experience in working with.

11 So you're asking me -- you're trying to
12 force me if I have --

13 **PRESIDENT:** Your answer is clear.

14 **MR MENDONÇA:** -- Mr President, I'll
15 answer.

16 **PRESIDENT:** You are perfectly entitled to
17 say it is outside my sphere of experience and I have
18 little to comment. That's perfectly OK.

19 **MR MENDONÇA:** Yes. Mr Ho, I don't work in
20 South Africa and I would rather not answer this
21 because I don't know all the document and we get
22 some part of it, I will not give my professional
23 opinion. I will not be fair and right to my
24 profession.

25 **MR HO:** Well, Mr President, I don't accept

1 the question was in any way unfair. It's a question
2 about a document he's commented on in his report and
3 the question was about policy in Mozambique, but,
4 again, I don't think we need to pursue that further
5 now.

6 Thank you, Mr Mendonça. Those are all the
7 questions I had.

8 **MR MENDONÇA:** Thank you, Mr Ho. Thank you
9 to the court, and thank you, Mr Ho, especially for
10 giving the privilege so I can catch my plane. Thank
11 you very much. Thank you all.

12 **PRESIDENT:** Ms Bevilacqua, do you have any
13 follow-up questions?

14 **MS BEVILACQUA:** No. Thank you,
15 Mr President.

16 **PRESIDENT:** Any questions? Professor
17 Tawil has a question for you, Mr Mendonça.
18 Questions by the Arbitral Tribunal

19 **PROFESSOR TAWIL:** Good morning,
20 Mr Mendonça.

21 **MR MENDONÇA:** Good morning, Professor
22 Tawil.

23 **PROFESSOR TAWIL:** You know that the PFS
24 was approved by Mozambique, right?

25 **MR MENDONÇA:** Was?

1 **PROFESSOR TAWIL:** Approved.

2 **MR MENDONÇA:** Yes, I know.

3 **PROFESSOR TAWIL:** What effect should we
4 give to such approval?

5 **MR MENDONÇA:** Sorry?

6 **PROFESSOR TAWIL:** What effect should we
7 give to such approval?

8 **MR MENDONÇA:** The approval was given by
9 the Government of Mozambique and then the same
10 letter said that Patel could exert, exercise --
11 I don't know how to translate "exercer", the right
12 of preference. That's the -- and the question is
13 what effect is --

14 **PROFESSOR TAWIL:** I mean you criticise the
15 report.

16 **MR MENDONÇA:** Yes.

17 **PROFESSOR TAWIL:** But the report was
18 approved. Was it wrong, the Government of
19 Mozambique, in approving the report?

20 **MR MENDONÇA:** Professor Tawil, I cannot
21 say the government was wrong. It's not good for me
22 to say that. In my opinion it's not a very good
23 report, but the effect, what they did is --

24 **PROFESSOR TAWIL:** No, no. I'm asking your
25 opinion about the approval of the government.

1 **MR MENDONÇA:** Well, my opinion about
2 the -- in my opinion the government shouldn't have
3 approved this prefeasibility study. If I was the
4 consultant -- if you ask me if you were the
5 consultant of the government --

6 **PROFESSOR TAWIL:** No, no. I'm asking as
7 someone -- as an expert you reviewed the report, and
8 you know that it was approved.

9 **MR MENDONÇA:** Yes.

10 **PROFESSOR TAWIL:** Was it correct? Was it
11 wrong?

12 **MR MENDONÇA:** You know it's --

13 **PROFESSOR TAWIL:** Just answer. Nothing
14 else.

15 **MR MENDONÇA:** OK. I'll try to answer
16 directly.

17 That's a fact. They approved the report
18 and they gave the right of preference. That's a
19 fact. You're right, Professor Tawil. They approved
20 the report.

21 **PROFESSOR TAWIL:** If it was wrong, they
22 could have told Patel "You need to change X, Y or
23 Z".

24 **MR MENDONÇA:** If they didn't approve the
25 report --

1 **PROFESSOR TAWIL:** No. If they found that
2 the report was incorrect, they could have asked
3 amendments for the report?

4 **MR MENDONÇA:** They could have asked
5 amendment for the report, but there was time to --
6 but this report is to grant a concession, and they
7 approved the report but there's no terms and basic
8 conditions for continue the -- this issue, and
9 they -- they give the right of preference.

10 **PROFESSOR TAWIL:** OK. Thank you. I have
11 no further questions.

12 **PRESIDENT:** We are almost -- can I --
13 I know you are not a legal expert, I do not want to
14 ask you anything about the law, I just want you, as
15 an expert in tendering processes in the Mozambican
16 public administration, that you tell me whether
17 certain decisions which I will show to you in a
18 moment are usual and you have encountered them in
19 your professional experience. It's only your
20 professional experience. Is that clear?

21 **MR MENDONÇA:** I'll try.

22 **PRESIDENT:** Can I show you first C-19.
23 C-19 is a letter. Mr Ho, could you put it on the
24 screen? They will be showing you this document.
25 It's very short so it will not take a lot of time.

1 Can you go to point 3? This is a letter,
2 Mr Mendonça, from the minister and it is to Patel
3 and it is January 2013. I'm sure you have seen
4 this?

5 **MR MENDONÇA:** It's not this one.

6 **PRESIDENT:** C-19 is a letter 11th January.

7 **MR MENDONÇA:** OK, OK.

8 **PRESIDENT:** Could you remain with him to
9 help him? Thank you. Appreciate it.

10 Can you go -- it's a letter to Mr Kishan
11 Daga, and it's signed by the minister.

12 **MR MENDONÇA:** Yes.

13 **PRESIDENT:** Francisco Zucula.

14 And I am interested in paragraph 3, which
15 is the very last paragraph, and there it says in the
16 second phrase, "Assim o assunto foi levado ao
17 Conselho de Ministros".

18 You see that?

19 **MR MENDONÇA:** Yes, yes, yes.

20 **PRESIDENT:** So the matter -- the matter,
21 being the concession of this railway corridor, was
22 taken at the end of 2012 to the Council of
23 Ministers. And "Assim foi decidida a via do
24 concurso público, onde a Patel Engineering, se
25 concorrer, leva à partida o direito de preferência".

1 **THE INTERPRETER:** So the president reads
2 the last sentence that it was decided to have a
3 public tender.

10:44

4 **PRESIDENT:** So there is one meeting of the
5 Council of Ministers to decide on this corridor at
6 the end of 2012. OK? It's a fact.

7 **MR MENDONÇA:** Yes. They have decided
8 to --

9 **PRESIDENT:** No question.

10 **MR MENDONÇA:** OK, OK.

11 **PRESIDENT:** No question.

12 I would now like to take you to C-29.

13 **MS KUZNETSOVA:** It's tab 29.

14 **PRESIDENT:** C-29.

15 That is a letter of April. So it's
16 four months later.

17 **MR MENDONÇA:** Yes.

18 **PRESIDENT:** It is again a letter from
19 Minister Zucula. You see it?

20 **MR MENDONÇA:** The letter, yes.

21 **PRESIDENT:** And the "Assunto" is --

22 **THE INTERPRETER:** Subject: Negotiation of
23 the terms of the concession.

24 **PRESIDENT:** And he says, second paragraph
25 ... (Portuguese document read) ...

1 **THE INTERPRETER:** The Council of Ministers
2 in its 10th Ordinary Session held on the 16th
3 of April decided to invite this company to carry out
4 those projects.

5 **PRESIDENT:** The question, the corridor was
6 discussed on the 16th April 2013 for a second time
7 at the Council of Ministers.

8 Do you see that?

9 **MR MENDONÇA:** Yes.

10 **PRESIDENT:** Very good. And I now would
11 like to take you to C-34.

12 **MS KUZNETSOVA:** It's tab 34.

13 **PRESIDENT:** And this is a letter from
14 Mr Chaúque, who is the director of the juridical
15 team of the ministry. You may have heard about him.
16 And he now writes to Patel that -- and I will read
17 to you ... (Portuguese document read) ...

18 **THE INTERPRETER:** On its 12th Ordinary
19 Session held on 13 April the Council of Ministers
20 decided for a public tender represents the correct
21 option, there not being therefore space for direct
22 negotiations.

23 **PRESIDENT:** So we have a third time that
24 the matter goes to the Council of Ministers. So my
25 question to you is the following. You have done a

1 lot of -- you have tendered a lot of work for the
2 Mozambican government. Is that true?

3 **MR MENDONÇA:** Yes, sir.

4 **PRESIDENT:** You have extensive experience.
5 In any of your other projects, have there been three
6 decisions of the Council of Ministers regarding that
7 project?

8 **MR MENDONÇA:** Can I say something about
9 Mozambique?

10 **PRESIDENT:** No. No, no, please. Can you
11 answer my question, and then you can say anything
12 you want.

13 It's a yes-or-no question. Have you ever
14 had a project which went three times to the Council
15 of Ministers? It's a very factual question, and
16 I would like to take advantage of having someone who
17 has extensive experience in public tendering in
18 Mozambique.

19 Is this normal or not?

20 **MR MENDONÇA:** It's normal in Mozambique to
21 go on and back -- unfortunately it's normal to go on
22 and back and some decisions made by the government,
23 sometimes they go in this direction and other times
24 go another direction. It's very difficult for us
25 private companies who deal with that. Sometimes we

1 don't understand, but it's a little bit of
2 Mozambique sometimes acts that way. I'm not talking
3 about this --

4 **PRESIDENT:** No, no, no.

5 **MR MENDONÇA:** I'm not talking about this.

6 **PRESIDENT:** I'm asking you. So the answer
7 is yes, in other projects in which you have been
8 involved you have had several decisions of the
9 Council of Ministers?

10 **MR MENDONÇA:** I cannot tell you if the
11 decisions of the Council of Ministers or decisions
12 of the agencies. It's -- but you have many times
13 unfortunately in Mozambique -- unfortunate because
14 we -- it's not good for us private companies, but
15 there are some decisions we don't understand. They
16 go on this direction and they go in other
17 directions. I can tell you examples of that, if you
18 want one example of that I can tell you examples,
19 and it's very -- it's very difficult for us to work
20 in this -- in these conditions, but it's --
21 unfortunately it's not -- it's not every day that
22 happens, but sometimes it happens, yes. It's a
23 pity, yes.

24 **PRESIDENT:** And you have no explanation --

25 **MR MENDONÇA:** Yes, I have.

1 **PRESIDENT:** -- of why there are these
2 successive decisions?

10:50

3 Let me ask you another question. Do all
4 significant projects go to the Council of Ministers?

5 **MR MENDONÇA:** The most -- normally the
6 most important projects go to the Council of
7 Ministers. The most important projects go to the
8 Council of Ministers. And you ask me, Mr President,
9 why is that -- why does this happen, and I'll try to
10 answer you.

11 We have -- how do I say? There's a
12 cultural issue in Mozambique which is very relevant
13 and it's very important for us foreigners who work
14 there. It's Mozambican -- I don't know -- this is
15 Mr Matusse here, I hope you recognise and won't be
16 angry with me if I talk this.

17 Mozambican people, and this involves also
18 the government, it's very difficult for them to say
19 no. It's something -- it's in the culture. And
20 I don't know if you agree, Mr Matusse, but it's in
21 the culture of Mozambican people, it's difficult for
22 them to say no.

23 They take this cultural thing to the
24 highest point of the structure, and this
25 sometimes -- and we -- that we are in the private

1 sector, we have to understand what is Mozambique,
2 and we have to understand when the noes might say
3 yes. It's not if you tell me, Mr President, that
4 this is the decision of the Council of Ministers, of
5 course, it's something serious, but you ask me why,
6 and this is a little bit the cultural reason, and
7 sometimes I've seen decisions of the Council of
8 Ministers that have not been very well prepared from
9 the legal point of view, and if it is not prepared
10 from the legal point of view, after they correct. I
11 think this is one of the things.

12 But, yes, unfortunately it happens, and we
13 have to deal with that. It's not -- I'll tell you,
14 it's not nice for us. It's not nice.

15 **PRESIDENT:** Very good.

16 **MR MENDONÇA:** Thank you.

17 **PRESIDENT:** Thank you, Mr Mendonça.

18 Is there any follow-up question?

19 Mr Mendonça, we wish you a safe trip back
20 to Lisbon and then to Maputo. Thank you for being
21 here with us.

22 **MR MENDONÇA:** Thank you very much for all
23 of you.

24 **MR BASOMBRIO:** Mr President --

25 **PRESIDENT:** Yes. You have some follow-up

1 question? I asked. I didn't see you --

2 **MR BASOMBRIO:** You beat me to it. It's
3 not a question, and I just respectfully, because
4 I have to preserve our rights on the record, I just
5 have to note that the Tribunal has referred to these
6 letters as being Decisions. We just -- we note on
7 the record our objection that in our view these are
8 not decisions. The Council of Ministers acts
9 according to Decrees published in the
10 Official Gazette, as we have heard earlier this
11 week, and these are just letters being sent by the
12 MTC. They are not coming from the Council of
13 Ministers.

14 I just want to voice that objection.
15 Thank you.

16 **PRESIDENT:** Thank you. Duly noted.

17 Very good. Thank you very much. Thank
18 you very much for being here with us, and safe trip
19 back home.

20 **MR MENDONÇA:** Thank you.

21 **PRESIDENT:** So 10.54. We will come back
22 at 11.15.

23 (Short break from 10.54 am to 11.20 am)

24 **PRESIDENT:** Shall we resume? Very good.

25 We resume our hearing, and we call the expert

1 Mr David Ehrhardt.

2 DAVID EHRHARDT

3 (via videolink)

4 **PRESIDENT:** You are here as an expert, and
5 the first thing we have to do is to take your
6 declaration as an expert witness.

7 Mr Ehrhardt, do you solemnly declare upon
8 your honour and conscience that you will speak the
9 truth, the whole truth and nothing but the truth?
10 And that your statement will be in accordance with
11 your sincere belief?

12 **MR EHRHARDT:** Yes, I do.

13 **PRESIDENT:** Thank you, sir.

14 So with that, I think I will give the
15 floor to Ms Bevilacqua.

16 **MS BEVILACQUA:** Thank you, Mr President.

17 Examination by Respondent

18 **MS BEVILACQUA:** Good morning, Mr Ehrhardt.

19 **MR EHRHARDT:** Good morning.

20 **MS BEVILACQUA:** Do you have in front of
21 you a clean copy of your expert report submitted in
22 this matter dated 29 November 2021?

23 **MR EHRHARDT:** Yes, I do.

24 **MS BEVILACQUA:** And on the second to the
25 last page, is that your signature on the report?

1 **MR EHRHARDT:** So, yes, that's the
2 signature on my CV. There's also a signature on the
3 report itself at the end of the report and prior to
4 the CV.

5 **MS BEVILACQUA:** Thank you for correcting
6 me. Thank you, sir.

7 And do you have any additions or
8 corrections you would like to make to your report?

9 **MR EHRHARDT:** Yes, just one, thank you.

10 When I was reviewing my report I realised
11 that -- well, I'd been referencing the World Bank
12 PPP reference guide and I'd been referencing the
13 third edition, which is the most recent one, but in
14 the references I put in a reference to the edition
15 that Mr Baxter has used, which was actually the
16 second edition, and so the page numbers are wrong,
17 and some of the content in the report may -- in
18 the -- those two documents may differ, so thanks for
19 the opportunity to mention that.

20 **MS BEVILACQUA:** And, if I understood
21 correctly, you were referring only to citations
22 within the different versions of the World Bank
23 reports that may be on different pages within those
24 reports?

25 **MR EHRHARDT:** Yes. Yes, that's right.

1 That's correct.

2 **MS BEVILACQUA:** And do any of those minor
3 citation differences change in any way your opinions
4 expressed in your expert report, which is at RER-11?

5 **MR EHRHARDT:** No, not at all. It's just
6 that they're references to the most recent edition
7 of the international guidance.

8 **MS BEVILACQUA:** Thank you, Mr Ehrhardt.

9 With that, we would like to proceed with
10 his summary.

11 **PRESIDENT:** Thank you. We have a
12 PowerPoint presentation, and we will give it the
13 number H-7.

14 You have the floor, Mr Ehrhardt.
15 Presentation

16 **MR EHRHARDT:** So, as you know, my name is
17 David Ehrhardt. I'm the chief executive of
18 Castalia. I have 30 years' experience advising on
19 privately financed infrastructure. I am qualified
20 in law and economics. My company specialises in
21 economics and finance infrastructure. If you just
22 go on to the first slide, please. Thank you.
23 Because you'll see -- members of the Tribunal,
24 you'll see a summary of what I'm saying here on the
25 slide.

1 So because of this long experience, I've
2 quite often been asked by international institutions
3 such as the World Bank to provide guidance. Some
4 examples -- on public private partnership. Some
5 examples are here.

6 One thing that I was asked to do some
7 years ago was develop a report on key provisions in
8 concession contracts, to identify what are the key
9 provisions and what's good practice in drafting
10 those provisions.

11 I also drafted the standard utility
12 management contract, which is a kind of public
13 private partnership contract, and the associated
14 bidding documents, which is now a World Bank
15 standard procurement document.

16 And I was one of the authors of the public
17 private partnership reference guide, which Mr Baxter
18 referenced and which is the one I was just talking
19 about referring to the third edition in my report,
20 as well as the PPP body of knowledge which is the
21 underpinning for the C3P3 certification, which is a
22 certification as a public private partnership
23 professional.

24 Perhaps, more importantly, I've advised
25 many governments on their competitive procurements

1 through public tenders of public private
2 partnerships. I also advised some of the world's
3 leading investors when they're bidding on privately
4 financed infrastructure.

5 I've had the opportunity to advise on some
6 unsolicited proposals. I'd like to draw the panel's
7 attention in particular to two. One was when
8 I worked for the -- advised the Development Bank of
9 Jamaica, Jamaica's public private partnership unit,
10 on three unsolicited proposals for revitalisation of
11 Jamaica's rail network, which is largely a mineral
12 network, and in Mozambique last year and the first
13 months of this year I advised the government on an
14 unsolicited proposal for water supply to a number of
15 small towns in Mozambique.

16 So that's some of my relevant experience.

17 If we go to the next slide, what I think
18 might be helpful for the Tribunal is if I focus on
19 just four points, as you see here.

20 One, if you consider what international
21 guidance suggests should be included in a USP, we
22 can conclude that a prefeasibility study did not
23 rise to the level of an unsolicited proposal in
24 accordance with international guidance.

25 And the prefeasibility study did not

1 define the basic terms of the concession.

2 The predicates for award, direct or
3 otherwise, did not exist.

4 And the project was a risky project that
5 could have failed to be implemented or to be
6 profitable at many points and for many reasons.

7 Next slide, please.

8 I should say, Mr President, that unlike
9 Mr Baxter, when I advise a government or an investor
10 in the country on a public private partnership,
11 I always take care to know what the rules are for
12 public private partnerships in that country because
13 obviously that's what governs.

14 In doing that, I'm not acting as a legal
15 advisor, I'm acting as a commercial, strategic or
16 transaction advisor, but I have to take care to
17 understand the rules and how they affect the
18 commercial reality and the strategy.

19 And I did that when I was advising the
20 Government of Mozambique, and I also reviewed the
21 law in preparing this testimony with that in mind.

22 Now, that said, of course, there isn't --
23 there's nothing that defines what an unsolicited
24 proposal -- what an unsolicited proposal must
25 contain. I'm not here referring to Mozambique law

1 but, rather, to these international reference guides
2 that I've mentioned and to Mr Baxter's own
3 presentations, for example, to the government and
4 PPP professionals in Sri Lanka on what an
5 unsolicited proposal should contain.

6 And so, for what it's worth, international
7 practice suggests that an unsolicited proposal
8 should contain evidence that the proposal is
9 financially feasible. It should identify and
10 allocate the main risks. It should have a statement
11 of the qualifications of the proponent to implement
12 this project, and also some information on integrity
13 such as whether the proponent has been debarred or
14 blacklisted.

15 I've reviewed the prefeasibility study.
16 It doesn't have any of these things. And that's why
17 I can tell you simply that the unsolicited proposal
18 that was submitted doesn't contain items that are
19 generally considered necessary for something to be
20 an unsolicited proposal.

21 Next slide.

22 Now, we all know that the objective of the
23 MOI was to define the basic terms of the concession.
24 Again, there's no -- there's nothing that defines
25 what are the basic terms of a concession, but I've

1 put here some of the terms that I would consider to
2 be basic in a concession.

11:34

3 The first one is the right to use the
4 land. So if you're a project developer, site
5 control is key. Here you've got a 500 kilometre
6 rail line. You need 500 kilometres of right-of-way.
7 You need a lease or title to the port, or possibly
8 the right to build a port out to sea and an
9 associated causeway.

10 Land law in Mozambique is unusual. You
11 can't have freehold title. But this issue of who
12 has to acquire the land, who has to pay for it, what
13 happens if the land cannot be acquired. That was
14 just not addressed, and it's basic.

15 Concession fee. It's normal for
16 governments in letting concessions to charge a fee
17 for the valuable concession that they have let out
18 to a private partner, and it's required by
19 Mozambican law.

20 But that was not addressed except that the
21 financial projections submitted after the
22 prefeasibility study did not include a concession
23 fee, which would not have flown at all.

24 Now, I heard the opening statement from
25 counsel for Patel, and it was mentioned or suggested

1 that this rail line would be a near monopoly. In
2 fact, rail lines often are -- often do have market
3 power, and for that reason they're often subject to
4 economic regulation. That economic regulation could
5 be in the form of control of the tariffs that they
6 charge, or a requirement to allow open access. In
7 other words, other train operators to operate on the
8 same rail track.

9 We work in Australia on these issues.
10 Australia has numerous mining railroads, and these
11 issues come up all the time, and it's normal for a
12 concession contract for monopoly infrastructure to
13 provide for economic regulation. That's a basic
14 term. It was mentioned nowhere.

15 I already covered there's no risk
16 allocation.

17 Termination payment is very important in a
18 concession. Not mentioned. Political risk, force
19 majeure risk, not mentioned.

20 As an example, force majeure would be a
21 flood. Very unfortunately, we know from the news
22 Mozambique has suffered from numerous devastating
23 floods. This rail line was to be built close to a
24 river. The study mentioned the risk of flooding.
25 It said hydrological studies were needed.

1 But would the concessionaire, would PEL be
2 compelled to reinstate the rail line at its own cost
3 if there was a flood that washed away part of the
4 line? Would it be compelled to insure the railway
5 line against that kind of eventuality? These are
6 very important terms in the concession not
7 mentioned. None of these terms were there. No clue
8 about what to do.

9 Next slide, please.

10 Now, I did hear Mr Daga testify -- I heard
11 a lot of his testimony. I read the transcript.
12 I heard him say oh, no, we had decided on where the
13 port would be. Now, that may be true. I don't know
14 if they had decided. But I looked at the
15 prefeasibility study, and I didn't see that in the
16 study. So I saw two options for the rail line --
17 there were four options presented, two were ruled
18 out, and the other two, I didn't see where it said
19 "This is the route we're going to build".

20 There were two options presented for the
21 location of the port, one in the mouth of the Macuse
22 river and another about 60 or 70 kilometres away,
23 which would be an offshore port connected by a
24 causeway. The prefeasibility study says we needed
25 to give you this other option for the location of

1 the port because of the bottlenecks to development
2 of a port in the Macuse river. It doesn't say what
3 the bottlenecks are, but obviously they were
4 considered by PEL to be serious enough that a
5 different option was presented, and I didn't see in
6 the feasibility study where it said this is
7 definitely the one we're going to build.

8 The prefeasibility study contains a
9 chapter on the Quelimane-Macuba railway line.
10 That's a completely different rail line from the
11 proposed new line to carry coal from Tete province.
12 This is a line which existed and could be
13 rehabilitated. It's in the prefeasibility study,
14 but the study doesn't say anything about whether or
15 not that would be in the concession.

16 So even the basic terms like which rail
17 lines are included and where will they go, which --
18 where will the port be, I could not see those things
19 defined in the prefeasibility study.

20 Next slide.

21 So again, I heard the opening statement of
22 counsel for Patel, and if I paraphrase a section
23 where it was said, essentially, look, anything that
24 wasn't clear could have been negotiated because both
25 parties really wanted this project.

1 Now, I agree that both parties wanted the
2 project, but I must tell the Tribunal I don't agree
3 that that fact would have made it easy to negotiate
4 this concession. I think it would have been very
5 difficult to reach a conclusion in negotiations for
6 several reasons.

7 Number 1, the financial projections
8 submitted by PEL show that the project was not
9 financially viable and not bankable. The internal
10 rate of return was below the cost of -- the equity
11 internal rate of return was below the cost of
12 equity. That's the definition of not viable. The
13 debt service coverage ratio was one. That means no
14 bank would fund it. If the project is not viable,
15 there's no win-win deal to do, and so the parties as
16 they tussle with each other each trying to get
17 something that works for them financially rationally
18 couldn't reach an agreement because it's just not a
19 good deal.

20 Now, let's assume that I'm wrong and this
21 project was indeed going to be highly profitable, as
22 PEL said. In that case, there were numerous points
23 on which the parties would have disagreed. I'll
24 just focus on three. I've already mentioned the
25 concession fee, risk allocation, and the third one,

1 dispute resolution venue.

2 So we know a concession fee is required.

3 We know the Government of Mozambique is desperately
4 short of money. It would certainly want as large a
5 concession fee as it could get, and it's being told
6 this is a highly profitable project so it would
7 expect a concession fee in the upper range of what's
8 permitted by law.

9 PEL obviously would want to pay at the
10 lower range, and in their financial projections have
11 not made any provision for a concession fee at all,
12 so it would be hard to reach agreement on that
13 point.

14 Risk allocation. What happens if there's
15 a construction cost overrun? What happens if
16 there's a flood? Obviously each party would like
17 the other party to bear all of these risks. Hard to
18 reach agreement on that.

19 Who should acquire the land? I think PEL
20 may well have asked the government well, you should
21 get the right-of-way, but -- and you should pay for
22 the right-of-way. I don't know. That's a normal
23 thing for a developer in that situation to say, and
24 it would be normal for the government to say, no,
25 you do that.

1 There's no mechanism to force an
2 agreement, and this is where I think, you know, the
3 idea that because parties both want to deal, it
4 would be easy to reach a deal in a bilateral
5 negotiation, is just wrong. Economic theory and
6 evidence explains why it's wrong, and this is the
7 slightly complicated third point on the slide that
8 I want to make.

9 There's no truth revelation mechanism in
10 bilateral negotiation. In other words, if there's a
11 deal to be done, each party has their bottom line
12 and there's some surplus, and negotiation is about
13 dividing up the surplus, who gets how much of this
14 pie.

15 In bilateral negotiation neither party can
16 credibly reveal its bottom line. Each party thinks
17 that the other one is bluffing and so they keep
18 pushing at each other. This is why I advise my
19 clients -- government clients who say to me let's do
20 a direct negotiation, it will be quicker. I tell
21 them, no, it's not quicker. The negotiations drag
22 on for ever and frequently don't close. The tender
23 is actually going to be the quicker approach because
24 then you know your private party's bottom line
25 because they have to compete with others, you can

1 see what their bottom line is, you can see the best
2 deal you can get and you can do that deal or not.

11:44

3 So it's just not true that it would have
4 been easy to negotiate the terms -- all of these
5 numerous terms that have not been defined in the
6 prefeasibility study.

7 Next slide, please.

8 So we all know that governments have to
9 follow their own laws. It's no surprise that, if
10 there's a PPP Law, PPPs can only be awarded in
11 accordance with the law. The MOI also said the
12 project should be done within the laws approved by
13 the Government of Mozambique. And, if you want a
14 direct award, you need to have a Council of
15 Ministers decision saying that there's grounds for a
16 direct award.

17 And when I was advising the Government of
18 Mozambique on this unsolicited proposal for a small
19 town water supply -- and these were towns that
20 lacked a pipe for water supply, and the government
21 was desperate to try and help them and very keen to
22 do this deal, and so the Council of Ministers made a
23 decision that there were grounds for direct award,
24 and that decision was a formal decision of the
25 Council of Ministers.

1 I have not seen that here.

2 Apart from that point, which is what's
3 needed for a direct award, there's many other things
4 that the law requires for award of any concession,
5 and I worked with legal advisors, including
6 Portuguese and Mozambican lawyers, trying to help
7 the Government of Mozambique to do an unsolicited --
8 to reach an agreement on an unsolicited proposal.
9 We went through all of this because we knew all of
10 this was necessary.

11 A financial model approved by the Ministry
12 of Finance containing specific things such as the
13 net present value of the project, an economic
14 cost-benefit analysis, an environmental feasibility
15 study, those things must be in place for the award
16 of any concession, and none of them were in place.

17 Next slide, please.

18 And, finally, this is a megaproject
19 traversing 500 kilometres or more of terrain in a
20 very under developed country. It's obviously risky.
21 And for that reason it could fail for many reasons
22 and at many points.

23 I want to start with the first one, which
24 is the off-taker risk, and this is what features in
25 that puzzling letter from Minister Zucula where he

1 says, oh -- I don't want to say exactly what the
2 letter says, but the one that suggests maybe there
3 could be a direct negotiation.

4 One of the things that's asked for in that
5 letter is an agreement from the mining company to
6 pay for the use of the rail line, and the Government
7 of Mozambique nailed it with that one, because I
8 think that's the biggest risk. You can't finance
9 this project unless you have long-term off-take
10 contracts from creditworthy customers who are
11 signing up now to pay certain levels of revenue
12 for -- typically they'd be take or pay contracts or
13 minimum revenue contracts for the coming 20, 25
14 years.

15 They didn't have that, and it's quite
16 likely that PEL would not have been able to get
17 that, and if they couldn't get that, you couldn't
18 finance this project, so it would have just never
19 started.

20 I talked about site acquisition.
21 That's -- you know, that's difficult. Projects can
22 be delayed or in fact never happen because the site
23 can't be acquired. Environmental permitting, if
24 there's an endangered species. I heard Mr Daga say
25 that he's never heard of an infrastructure project

1 being stopped for environmental reasons. Perhaps he
2 hasn't, but I certainly have. That's quite a common
3 occurrence. Sophisticated developers that I know
4 will typically -- one of the first things they look
5 for is these environmental red flags, like is my
6 site the breeding ground of an endangered species,
7 because if it is I can't do that project. And that
8 was not known here.

9 Geotechnical risks. So the prefeasibility
10 study responsibly enough mentioned that they hadn't
11 investigated the sub surface of the soil, and soil
12 conditions might be such that construction of a port
13 would be hopelessly uneconomic, so had that risk
14 eventuated the project could not have gone ahead.

15 And even if the project got built, there's
16 quite a risk that it wouldn't make money. For
17 example, if the project was built and a part of the
18 rail line -- a large part of the railway line washed
19 away and had to be reinstated, the project would not
20 have been possible.

21 So, in summary, even if one assumes that
22 the MOI was a binding agreement for direct award of
23 a concession, I'd like the Tribunal to understand
24 that the prefeasibility study did not meet the
25 generally accepted requirements for an unsolicited

1 proposal.

2 It did not define the basic terms of the
3 concession.

4 The predicates for award of a concession
5 were not in place, and the project was risky, could
6 have failed to ever be financed, and if it was
7 financed, could have -- could well not have been
8 profitable.

9 And that concludes the overview.

10 **PRESIDENT:** Thank you, Mr Ehrhardt.

11 Is there any follow-up question from
12 Respondent? Ms Bevilacqua?

13 **MS BEVILACQUA:** No, thank you,
14 Mr President.

15 **PRESIDENT:** Very good. Mr Ho, I think
16 it's your turn.

17 **MR HO:** Thank you, Mr President.

18 Cross-examination by Claimant

19 **MR HO:** Good morning, Mr Ehrhardt. My
20 name is Edward Ho. I'm one of the counsel for the
21 Claimant. Can you hear me?

22 **MR EHRHARDT:** Good morning. I can hear
23 you fine, thank you.

24 **MR HO:** Mr Ehrhardt, you have given the
25 usual declaration that the opinions in your report

1 represent your independent professional opinion,
2 haven't you?

3 **MR EHRHARDT:** Yes.

4 **MR HO:** And doubtless you appreciate the
5 significance and importance of that declaration?

6 **MR EHRHARDT:** Yes.

7 **MR HO:** And again, doubtless in compliance
8 with that declaration, your report as supplemented
9 by your direct presentation contains your views on
10 all the matters which, in your opinion, are material
11 to the issues you've been asked to look at?

12 **MR EHRHARDT:** I'm sorry, you said that all
13 the issues that I think are material? I'm not sure
14 about that, because there's many material issues.
15 I tried to focus on the ones that are most helpful
16 to the Tribunal.

17 **MR HO:** Yes. What I said was that your
18 report and your direct presentation contain your
19 views on all the matters which in your opinion are
20 material to the points that you've been instructed
21 to look at.

22 **MR EHRHARDT:** I'm just wondering about
23 that word "all". I mean everything I've put in I
24 think is material. I agree with that. Could there
25 be some points that are material that are not there?

1 I'm not sure. It does depend on the definition of
2 "material".

3 **MR HO:** I see. So you think you may have
4 some relevant evidence to give on the topics you
5 were instructed to look at, but you haven't included
6 those in your report or your direct presentation.
7 Is that what you're saying?

8 **MR EHRHARDT:** Well, yes, because you see,
9 it's a judgment. There's so much one could talk
10 about here. There's always a judgment about what to
11 include and what not to include.

12 **MR HO:** Well, they are your reports,
13 Mr Ehrhardt. You could have included anything in
14 them that you wanted.

15 Are you telling us that there are things
16 that you wanted to include but you haven't?

17 **MR EHRHARDT:** I'm not telling you that at
18 all. Your question was are all things material
19 included. You've not defined "material", and so
20 it's a difficult question for me to answer.

21 **MR HO:** All right. Can we have a look at
22 your CV? That's on page 77 of the pdf. It's page
23 76 in the hard copy.

24 Your CV is an accurate record of your
25 career and your expertise, isn't it?

1 **MR EHRHARDT:** Yes.

2 **MR HO:** We can see about two-thirds of the
3 way down the page a summary of your education. You
4 have a BCom in Economics and an LLB from Victoria
5 University of Wellington in New Zealand. Is that
6 right?

7 **MR EHRHARDT:** Yes. Well, it's a Bachelor
8 of Commerce with Honours, which is a different class
9 of degree, but yes.

10 **MR HO:** Doubtless your LLB was in New
11 Zealand law, rather than the law of some other
12 jurisdiction?

13 **MR EHRHARDT:** Correct.

14 **MR HO:** You have no Mozambique law
15 qualifications, do you?

16 **MR EHRHARDT:** I do not.

17 **MR HO:** You've never worked as a
18 Mozambique lawyer, have you?

19 **MR EHRHARDT:** No, obviously not.

20 **MR HO:** You don't speak any Portuguese, do
21 you, which is the official language of Mozambique?

22 **MR EHRHARDT:** Well, since working in
23 Mozambique, I have learned to read some Portuguese
24 on the topics that are relevant to concessions, but
25 I certainly don't speak Portuguese.

1 **MR HO:** If we go over onto the next page
2 of your CV, you identify what languages you have
3 proficiency in, and there's no mention of Portuguese
4 there, is there?

11:54

5 **MR EHRHARDT:** As I -- that is correct,
6 and, as I just said, I don't speak Portuguese.
7 I have learned to read some Portuguese that --
8 particularly Portuguese that is about concessions,
9 because I'm constantly looking -- I've been looking
10 at documents that are in English and in Portuguese
11 and trying to make sure that I understand the
12 translation correctly, and in doing that, one does
13 pick up some knowledge of the language. But I do
14 not speak it.

15 **MR HO:** No, well, you haven't identified
16 in your CV that you read it either, but you've
17 identified that you speak, read, and write English.

18 **MR EHRHARDT:** That's correct.

19 **MR HO:** Do you think your Portuguese is
20 good enough that you can read and interpret
21 Mozambique statutes or judicial decisions?

22 **MR EHRHARDT:** That's a good question.

23 What I do is I try to understand them and
24 then I ask a bilingual, if possible lawyer, to help
25 me out. To check my understanding. I certainly

1 wouldn't rely on my own unassisted knowledge.

2 **MR HO:** I understand. That's very fair.

3 Could we just have a look at paragraph 210
4 of your report? That's on page 51 in the pdf, and
5 it's on page 50 if. You're in the hard copy?

6 **MR EHRHARDT:** Sorry, give me the paragraph
7 number again?

8 **MR HO:** Yes, it's paragraph 210, I'm
9 sorry. Under the heading "Tax treatment".

10 Do you have that?

11 **MR EHRHARDT:** I'll tell you when I have
12 it.

13 **MR HO:** Yes, OK.

14 **MR EHRHARDT:** Yes. Thank you.

15 **MR HO:** Just so I can check, Mr Ehrhardt,
16 are the documents also coming up on the screen in
17 front of you?

18 **MR EHRHARDT:** Yes, they are.

19 **MR HO:** OK, good. Just so you can see.

20 So in paragraph 210 you say, "The tax
21 treatment of the concession had not been agreed
22 between the parties. The default position would be
23 that the concession would pay Mozambique corporate
24 income tax of 20 per cent".

25 Now, you're not an expert on Mozambique

1 tax law, are you?

2 **MR EHRHARDT:** No, I'm not.

3 **MR HO:** Do you know what article 22 of the
4 Code of Tax Benefits approved by Law No 4/2009
5 provides?

6 **MR EHRHARDT:** I'm sorry. You're asking
7 me, without showing me a document, to recall if
8 I know what it provides, so that's a difficult
9 question to answer.

10 **MR HO:** I think is the answer no, you
11 don't know from memory what it says?

12 **MR EHRHARDT:** If I know from memory what
13 it says?

14 **MR HO:** Yes.

15 **MR EHRHARDT:** I do not.

16 **MR HO:** Do you know what the legal basis
17 for the 20 per cent tax rate that you say applies
18 is? Because you've not identified that in paragraph
19 210.

20 **MR EHRHARDT:** Look, I think, if I may,
21 I would let you know that when we're advising the
22 Government of Mozambique on an unsolicited proposal
23 and other concessions, I worked with Portuguese and
24 Mozambican experts who told me this, and that's why
25 I believe that to be true.

1 But if that's not true, just tell me.

2 **MR HO:** Right. But you've not footnoted
3 who these experts are or when they told you that?

4 **MR EHRHARDT:** That's correct.

5 **MR HO:** Do you accept that it was
6 inappropriate for you, as an independent expert
7 who's meant to be giving evidence to assist the
8 Tribunal on matters within your expertise, to
9 express views on topics for which you plainly have
10 no qualifications?

11 **MR EHRHARDT:** So your question was if I
12 think, as an independent expert, I shouldn't express
13 views on which I plainly have no qualifications?

14 **MR HO:** Yes, such as Mozambique tax law.

15 **MR EHRHARDT:** Well, which question is it?
16 Because the question you asked was the one
17 I repeated to you. I'm wondering if you're asking
18 me whether I think it's inappropriate for me to have
19 said what I said in paragraph 210, or whether you're
20 saying it's inappropriate for me -- or whether you
21 want an answer to the question whether it's
22 inappropriate for me to opine on things on which I'm
23 plainly not qualified.

24 **MR HO:** Let's do paragraph 210. Do you
25 believe that you have the qualifications to enable

1 you to opine on Mozambique tax law?

2 **MR EHRHARDT:** Yes, I think that it's
3 helpful for the Tribunal to know that income tax
4 would be an issue. I don't think the rate, whether
5 it's 20 per cent, matters.

6 The problem is that -- the point that I'm
7 trying to help the Tribunal with is that there were
8 numerous issues to be resolved in getting to a
9 concession contract, one of which would be the tax
10 treatment, because generally one pays -- companies
11 have to pay a tax on their profits. There are
12 special rules about tax treatment in the PPP Law,
13 and it's commonly the case that developers ask for
14 special tax concessions, so this would be a point
15 that is difficult to reach an agreement on, reducing
16 the likelihood of a concession being agreed. So
17 that's the point I was trying to make. I think
18 that's quite appropriate.

19 If you interpret this as me giving advice
20 on Mozambican corporate tax rates, I'm sorry it came
21 across like that. That's not what I meant.

22 **MR HO:** Thank you.

23 Could we just go back to your CV very
24 briefly? It's page 90 in the hard copy and page 91
25 in the pdf.

1 **MR EHRHARDT:** Yes.

2 **MR HO:** And at the bottom -- or towards
3 the bottom of the page you can see there's a heading
4 "Mozambique experience".

5 **MR EHRHARDT:** Yes.

6 **MR HO:** If we just quickly turn over the
7 page, we can see your experience in Mozambique began
8 in 2017 when you advised the water regulator in
9 Mozambique, is that right?

10 **MR EHRHARDT:** That's correct.

11 **MR HO:** And then coming back to where we
12 were, page 90, we can see that since 2019 you've
13 advised the Government of Mozambique itself?

14 **MR EHRHARDT:** I mean -- I'm not sure if
15 you're drawing a distinction between the water
16 regulator and the Government of Mozambique. Is that
17 important?

18 **MR HO:** No, I mean in both cases was it in
19 fact the Government of Mozambique. I was just
20 trying to understand who you'd been advising.

21 **MR EHRHARDT:** So my advice has always been
22 to entities -- to publicly owned entities in
23 Mozambique.

24 **MR HO:** Oh, so not to the government then?

25 **MR EHRHARDT:** Sorry. I meant public as in

1 owned by the government.

2 **MR HO:** Oh I see. I'm sorry.

3 **MR EHRHARDT:** It's a little complicated,
4 isn't it, whether an independent regulator or
5 independent implementing agency is the Government of
6 Mozambique, so that's why I'm just trying to be
7 precise.

8 **MR HO:** Yeah.

9 **MR EHRHARDT:** There are agencies that are
10 performing governmental functions. Whether they're
11 properly termed the Government of Mozambique,
12 I don't know. I don't know if it matters.

13 **MR HO:** You say in your CV at the first
14 bullet point there that we have on the screen that
15 you're leading a team advising the Government of
16 Mozambique, so that's why I had assumed you were
17 advising the Government of Mozambique.

18 **MR EHRHARDT:** Sure. And to be precise,
19 I advised the ministry responsible for water.
20 I advise an entity that goes by the acronym IASH,
21 which is a small town water supply agency, and
22 I advised what started off as the Commission -- the
23 CRA, Regulatory Authority for water which is now
24 called AURA.

25 **MR HO:** Thank you. So at the moment

1 you're working as the project director. How many
2 team members does the project have?

3 **MR EHRHARDT:** Sorry, I'm not working as
4 the project director at the moment. Not for this
5 project.

6 **MR HO:** I'm sorry. That project has
7 ended, has it?

8 **MR EHRHARDT:** Correct.

9 **MR HO:** My apologies.

10 So how many people were on the project
11 that you were the director of?

12 **MR EHRHARDT:** That's a complicated one,
13 because we were -- this project was done under a USA
14 project called WASHFIN. This work was done under
15 that. So -- and WASHFIN was a huge multinational
16 project. There was a large team in Mozambique. I'm
17 not sure I could name or enumerate all of the
18 members of that team. Castalia was a subcontractor
19 to Tetra Tech, and in the Castalia team there were
20 around five team members working with me.

21 **MR HO:** Thank you, that's helpful. Can
22 I move on now to look at the cash flow model which
23 PEL provided to Minister Zucula on the 15th
24 of May 2012, which you've commented on in your
25 report. We can see that under C-8.

1 **MR EHRHARDT:** Just hold on me for a
2 second.

3 **MR HO:** I'll let you find it.

4 **MR EHRHARDT:** I'll see this bundle -- it's
5 a hard copy bundle, it's the Respondent's index to
6 Respondent's Core Bundle. If somebody can help me
7 with the tab number for that.

8 **MR HO:** Sorry, I think you may be in the
9 wrong bundle. Sorry, do you have the Respondent's
10 bundle? You should have the Claimant's Core Bundle.
11 Maybe its in tab 11 of the bundle you have in front
12 of you.

13 **MR EHRHARDT:** I received a bundle by
14 FedEx. I had understood it would be coming from the
15 Claimant but the bundle that I received says on the
16 front "Respondent's Core Bundle" and the table of
17 contents says Index to Respondent's Mozambique Core
18 Bundle.

19 **MR HO:** Right. Let's see if we can make
20 it work anyway. Would you look behind tab 11 in
21 that bundle?

22 **MR EHRHARDT:** Yes.

23 **MR HO:** And do you there have a document
24 that's labelled C-8? It should be a letter. We'll
25 put it up on the screen for you. Is it the same as

1 the document that's on the screen?

2 **MR EHRHARDT:** It appears to be.

3 **MR HO:** Wonderful.

4 **MR EHRHARDT:** No, actually -- sorry,
5 sorry. Hold on. Sorry, it's not. It's not the
6 same.

7 **MR HO:** OK. Then what we'll do is I'll
8 just ask you to look at the document on the screen
9 and we will --

10 **MR EHRHARDT:** No, no. I need to have the
11 full document.

12 **MR HO:** Well, Mr President, I'm told that
13 what has happened is that we provided on Sunday an
14 electronic copy of our Core Bundle and asked that to
15 be provided to Mr Ehrhardt. I'm not quite sure
16 what's happened in between.

17 **MR EHRHARDT:** Sorry, Mr Ho, let me help
18 here, if I may. I have -- so I have the paper copy
19 which is my preference. I also have on my iPad here
20 an electronic copy, and I think this -- and this one
21 is the Claimant's bundle, so I have that
22 electronically.

23 **MR HO:** Right. Thank you.

24 **MR EHRHARDT:** It will just be a little
25 slower for me.

1 **MR HO:** No, no. That's fine.

2 I understand.

3 So are you able, in that Core Bundle, to
4 find C-8? It's in Core Bundle Volume 1, tab 11, if
5 that helps you navigate on your iPad?

6 **MR EHRHARDT:** Tab 11?

7 **MR HO:** Tab 6. Do you have that?

8 **MR EHRHARDT:** Which tab is it?

9 **MR HO:** Tab 11.

10 **MR EHRHARDT:** So I'm going to tab 11 on
11 the electronic bundle. I'm there now.

12 **MR HO:** Great. Sorry to overwhelm with
13 you references, but we think that the document may
14 also be in the hard copy bundle you have at tab 6.
15 Do you want to just have a look because I know hard
16 copy is your preference.

17 **MR EHRHARDT:** Yes, sure, I'll have a look.

18 **MR HO:** It will make your life easier.

19 **MR EHRHARDT:** At tab 6 I have something
20 that looks like what's on the screen here.

21 **MR HO:** Wonderful. If you just flick
22 through that, is there a spreadsheet sort of on the
23 fourth and the fifth page?

24 **MR EHRHARDT:** Yes, there is.

25 **MR HO:** Right. So it sounds like you've

1 got a hard copy of what we want to look at, so
2 you've got it electronically and in hard copy now.

3 **MR EHRHARDT:** Can we -- on the spreadsheet
4 the font is very small -- on the printout, I should
5 say, so can you help me where the electronic copy is
6 as well please?

7 **MR HO:** Sure. So that's in the Claimant's
8 Core Bundle, volume 1, tab 11.

9 **MR EHRHARDT:** What number is it, please?

10 **MR HO:** It should be document number C-8.

11 **MR EHRHARDT:** I'm not sure if we're
12 talking about the same tabs, because I have tabs 1
13 through 14 showing up in the electronic version, but
14 if you give me the number, just the number that's in
15 the electronic record, so not the exhibit number,
16 because they're all numbered more or less
17 sequentially. On my tab 11 it goes from 100 to 109.

18 **MR HO:** Mr Ehrhardt, let's try and do it
19 this way. You've got a hard copy in front of you,
20 and we can blow up on the screen for you the
21 relevant bits of the document that I want to go
22 through.

23 **MR EHRHARDT:** OK.

24 **MR HO:** Let's try and work with that and,
25 if that proves unworkable, we will try to do

1 something else, but I don't want to take up too much
2 time just finding the document, if that's all right.

3 **MR EHRHARDT:** Right. Fine. Absolutely.

4 **MR HO:** So we've seen the covering letter
5 from PEL to Minister Zucula under which the
6 projections were provided, and what I want to look
7 at with you is this spreadsheet that's on page 4.

8 **MR EHRHARDT:** Right.

9 **MR HO:** So just to orientate ourselves, in
10 the top left-hand corner, if we can zoom in on that,
11 we have the title of the spreadsheet, and below that
12 we see the word "Assumptions". Can you see that?

13 **MR EHRHARDT:** I do.

14 **MR HO:** And then in the rows immediately
15 underneath that we have all the various model
16 assumptions. Can you see that?

17 **MR EHRHARDT:** Are you representing that or
18 asking me if I see --

19 **MR HO:** I'm representing that to you and
20 asking you whether you can see that.

21 **MR EHRHARDT:** Yes. You said all the
22 various model assumptions. I don't know what
23 assumptions went into this model, partly because you
24 can't really tell if you don't get the Excel
25 spreadsheet and only get a printout.

1 So I see some assumptions.

2 MR HO: Then below those assumptions in
3 the middle of the page, if we could just scroll to
4 that, we can see the word "Year". Can you see the
5 word "Year" there?

6 MR EHRHARDT: I do.

7 MR HO: And then below that we have the
8 numbers 1, 2, 3, 4, 5 and so on.

9 MR EHRHARDT: You're making a statement.
10 Was that a question?

11 MR HO: I'm just asking you can you see
12 that?

13 MR EHRHARDT: I can see the numbers, yes.

14 MR HO: And these show what year the
15 figures in each column are for, aren't they?

16 MR EHRHARDT: That's how I interpreted it.

17 MR HO: Then we see the number one under
18 year 7 because that indicates the first year of
19 operation, doesn't it?

20 MR EHRHARDT: I -- would it be easier if
21 you represented that to me because it's a while
22 since I looked at this. If you want me to give my
23 professional opinion on in which year operations
24 started in this model, it will take a little longer.

25 MR HO: Well, Mr Ehrhardt, you're the one

1 that has considered this spreadsheet in your report.

12:11

2 **MR EHRHARDT:** Yes, I did.

3 **MR HO:** So I'm asking you whether you

4 understand that the number one under year 7

5 indicates that that's the first year of operation?

6 **MR EHRHARDT:** OK. Give me a minute.

7 I mean, it's some time ago since I wrote the report.

8 If it's important for me to know that, I'm going --

9 to tell you that as my opinion, I'm going to have to
10 have a look at it. It's quite hard to read.

11 (Pause)

12 Yes, I think that that -- well, sorry.

13 You say year one. I mean, it's actually year 7 of

14 the project, isn't it?

15 **MR HO:** Yes, that's what I'm saying to

16 you. The number 1 under year 7 indicates that that

17 is the first year of operation, doesn't it?

18 **MR EHRHARDT:** Yes. That's how I interpret

19 it.

20 **MR HO:** And under year 8 we have year 2 of

21 operation and so on.

22 **MR EHRHARDT:** I believe so.

23 **MR HO:** And then on the left-hand side we

24 see a description of each row of the cash flow

25 projections, don't we?

1 **MR EHRHARDT:** Sorry, are you asking me
2 questions, or are you just saying what the model
3 says?

4 **MR HO:** Well, here I'm just asking you to
5 confirm that on the left-hand side we see a
6 description of each row --

7 **MR EHRHARDT:** It's not a description, is
8 it? It's a label. I wouldn't describe -- the rows
9 are labelled, they're not described, to be precise.

10 **MR HO:** Very well. A label.

11 And if you move ten or so rows down,
12 you'll see the label "EBITDA". Can you see that?

13 **MR EHRHARDT:** Yes.

14 **MR HO:** And that is Earnings Before
15 Interest, Tax, Depreciation and Amortisation?

16 **MR EHRHARDT:** Yes.

17 **MR HO:** Now, what we're going to do to try
18 and make everybody's life easier is we're going to
19 go to a demonstrative that we've prepared, which is
20 H-4, and just to explain to you what that is, that
21 is the labels in C-8 which follow EBITDA, and it is
22 the data from year 11, operating year 5, of C-8.

23 So I'm just going to represent to you that
24 that's accurate and we'll just discuss these
25 figures. OK, Mr Ehrhardt?

1 **MR EHRHARDT:** Right.

2 **MR HO:** So we can see the figure for
3 EBITDA is 293.72.

4 **MR EHRHARDT:** Yes.

5 **MR HO:** Then the row below that just has a
6 dash.

7 **MR EHRHARDT:** Yes.

8 **MR HO:** And we see from the row
9 description, that means it's being assumed that
10 there is no depreciation or amortisation of assets,
11 don't we, because we see --

12 **MR EHRHARDT:** Right.

13 **MR HO:** -- the EBIT figure is exactly the
14 same.

15 **MR EHRHARDT:** Well, it means that no
16 depreciation and amortisation of assets has been
17 included in the cash flow which -- so I agree with
18 that statement.

19 **MR HO:** Yes. I'm not trying to trick you,
20 Mr Ehrhardt, I'm just trying to establish with you
21 what the model shows.

22 **MR EHRHARDT:** Sure.

23 **MR HO:** The next figure we have is 253.14
24 in brackets, so that's a negative figure. It's an
25 expense or a cost, isn't it?

1 **MR EHRHARDT:** Yes.

2 **MR HO:** And we see looking across that
3 that's the "Interest Exp" label.

4 **MR EHRHARDT:** Yes, that's correct.

5 **MR HO:** That means interest expense,
6 doesn't it?

7 **MR EHRHARDT:** I assume so.

8 **MR HO:** So that's the amount of interest
9 that is projected due that year which PEL has to
10 pay?

11 **MR EHRHARDT:** Yeah.

12 **MR HO:** Then the next figure we have in
13 the column is 40.59, and that's the figure for Pre
14 Tax Income. Do you see that?

15 **MR EHRHARDT:** Hmm-mm.

16 **MR HO:** And the way that that has been
17 calculated is by taking the EBITDA or the EBIT
18 figure, so 293.72, and subtracting the interest
19 expense. I mean technically there's a bit of
20 rounding. I think if you do the sum, it's 40.58.

21 **MR EHRHARDT:** Well, this is your
22 demonstrative. I'll take your word for it.

23 **MR HO:** OK.

24 Then below the pre tax income figure we
25 have another dash.

1 **MR EHRHARDT:** I see a dash.

2 **MR HO:** And that row is for tax expenses.

3 Do you see that?

4 **MR EHRHARDT:** I do see that. Just by the
5 way, isn't that interesting? No tax.

6 **MR HO:** Yes. That's because the model
7 assumes that there's no tax.

8 **MR EHRHARDT:** Right. The point I was
9 making earlier. Quite unrealistic.

10 **MR HO:** That's fine.

11 The next figure is 40.59 again, so that's
12 the after tax income amount.

13 **MR EHRHARDT:** You keep pausing like you're
14 asking a question. It's your demonstrative. If you
15 want to tell me what's in it, I'll listen to you.

16 **MR HO:** I just want to check that you're
17 following along and that you're happy with where we
18 are. Ultimately this comes from C-8. It's just to
19 make it clearer for you to follow and that's a
20 document you've studied, so before I start putting
21 questions to you about it, I just want to make sure
22 you understand what's in it.

23 **MR EHRHARDT:** I can see the demonstrative
24 that you have prepared.

25 **MR HO:** Fine. And it's unsurprising,

1 isn't it, that the pre tax figure is the same as the
2 after tax figure because the model assumes that
3 there's no tax.

4 **MR EHRHARDT:** Right. It follows from the
5 assumption of no tax, yes.

6 **MR HO:** Then we see the 40.59 figure
7 repeated again.

8 **MR EHRHARDT:** Yes.

9 **MR HO:** And this time we see it represents
10 free cash flow before debt retirement. Can you see
11 that?

12 **MR EHRHARDT:** Yes, I do.

13 **MR HO:** Then in the next row it's free
14 cash flow after debt retirement and there's just a
15 dash.

16 **MR EHRHARDT:** Right.

17 **MR HO:** Now, the reason that there's a
18 dash is because this model assumes that all free
19 cash flow that year is used to repay debt, doesn't
20 it?

21 **MR EHRHARDT:** I believe so.

22 **MR HO:** Now, if we come back to C-8 and we
23 just zoom -- we just move across -- so, Mr Ehrhardt,
24 you can see now we've just put up on screen the
25 figures that we've just been looking at in the

1 demonstrative. Can you see that? In the middle of
2 the screen we've got the 293.72 and then the 253.14
3 and so on that we've just been looking at. Do you
4 see that?

5 **MR EHRHARDT:** I'll take your word for it,
6 but I can't look at a little cut-off part of an
7 exhibit and tell you that I can see that it's the
8 same as the demonstrative you were just showing me,
9 but I will -- I am prepared to take your word for
10 it.

11 **MR HO:** Fine.

12 If we look across to subsequent years, we
13 can see the same pattern as the one that we've just
14 been looking at, can't we? We can see that EBITDA
15 is the same as EBIT --

16 **MR EHRHARDT:** I'm sorry, I can't see the
17 labels on what you're projecting at the moment, so
18 I can't tell which row is which. It's just a
19 practical problem with this exhibit.

20 **MR HO:** Can you see it on your hard copy?

21 **MR EHRHARDT:** Well, this is why it's so --
22 the type is so small that it does take me a little
23 while, but what is it you'd like me to check,
24 please?

25 **MR HO:** Just all I'm trying to establish

1 is that the same pattern follows throughout the
2 model, that we see EBITDA --

3 **MR EHRHARDT:** Which pattern is that that
4 follows throughout the model? Just describe it for
5 me.

6 **MR HO:** Yes, I'm just about to. That
7 EBITDA is the same as EBIT, that the interest
8 expense is deducted from EBIT to give the pre tax
9 income, that the pre and post tax income is the
10 same, and that all of that income is used to repay
11 debt.

12 **MR EHRHARDT:** You're representing that
13 that's what happens throughout the model?

14 **MR HO:** Yes, and I'm asking you to confirm
15 that because you've obviously looked at this model
16 and used it in your report.

17 **MR EHRHARDT:** Well, yes, I have looked at
18 it. What I did, Mr Ho, is I-- months ago I took
19 this data, I entered it into an Excel spreadsheet
20 and I manipulated it in that spreadsheet, and it's
21 months since I did that. And if you're asking me to
22 confirm something, I will, but I'd be grateful if
23 you could tell me how to access the electronic copy
24 so I can see the font.

25 **MR HO:** Well, as I say, it should be in

1 the Core Bundle that you should have been provided
2 by the Respondent in volume 1, tab 11. I'd
3 understood that that's what you found on your iPad.

4 **MR EHRHARDT:** I think we went through
5 this. I have your electronic bundle. I'm asking
6 you if you could give me the number in the
7 electronic bundle, because they're numbered more or
8 less consecutively. On tab 11 of the electronic
9 bundle it goes from numbers 100 to 109. I mean it
10 I see it says CMS -- oh, law tax future at the top.

11 **MR HO:** In that, all of the exhibits
12 should be numbered, and at number 11 should be this
13 document.

14 **MR EHRHARDT:** Sorry. I'm talking about
15 the -- are you looking at your electronic bundle?

16 **MR HO:** Yes.

17 **MR EHRHARDT:** OK.

18 **MR HO:** Mr President, I wonder whether --

19 **MR EHRHARDT:** Number 11 is C-8, letter
20 dated 15 May. Is that the right one?

21 **MR HO:** Mr President, this is an important
22 point. I'm sorry, I know it is a detailed point but
23 it is important to us. There's obviously technical
24 issues about Mr Ehrhardt finding the right document
25 -- ?

1 **MR EHRHARDT:** I've now found it. Sorry,
2 there's no technical issues. You just weren't clear
3 about where it was. Now I've found it.

4 **MR HO:** Fantastic.

5 So would you go in that to the
6 spreadsheet?

7 **MR EHRHARDT:** Yes.

8 **MR HO:** And then you can confirm to me
9 whether we see the -- in subsequent years the same
10 pattern that we saw in the demonstrative.

11 **MR EHRHARDT:** So, you see, the reason it's
12 difficult is it goes across several pages, and the
13 last -- and so there's no labels on the later years
14 in the exhibit.

15 **PRESIDENT:** Mr Ehrhardt, I think he's just
16 asking you -- counsel is asking you whether you
17 see -- the 40.59 you see that in year I think 11,
18 and he's just asking you whether this goes on in
19 year 12, 13, 14, 15, 16, 17.

20 **MR EHRHARDT:** OK. I understand that.

21 **PRESIDENT:** To be very frank --

22 **MR EHRHARDT:** I can see that up until year
23 16. Could you show me year 17, please, Mr Ho?

24 **MR HO:** Yes, well, that will be on page 5.

25 **MR EHRHARDT:** Yes. Could you project it

1 so everyone can see?

2 **MR HO:** I see. Yes, we can do that.

3 **MR EHRHARDT:** Because you're asking me
4 that through to the end, right? Which is year 30.

5 **MR HO:** So I will represent to you that
6 the -- so.

7 **MR EHRHARDT:** Where -- excuse me, excuse
8 me. Could you please show the Tribunal that there
9 are no labels on this exhibit.

10 **MR HO:** Yes, the Tribunal can see that,
11 and I will represent --

12 **MR EHRHARDT:** Right. And that's why --
13 that's why I need you to represent rather than ask
14 me.

15 **MR HO:** And I will represent to you that
16 the figure that you see -- can you see in the
17 left-hand column the figure 356.75?

18 **MR EHRHARDT:** Yes.

19 **MR HO:** That is the EBITDA figure. That
20 is the EBITDA row. And then below that we have a
21 dash, and then below that I'll represent to you
22 that's the EBIT row. Then below that there's a
23 blank space. The next row is the interest expense
24 row.

25 **MR EHRHARDT:** Yes.

1 **MR HO:** And there's a dash, and the next
2 row is the pre tax income and there's a dash like
3 before. Then it's after tax income, and then as
4 before, it's free cash flow -- before debt
5 retirement and free cash flow after debt retirement.

12:24

6 **MR EHRHARDT:** So just go to the -- one of
7 the labels, please.

8 So free cash flow after debt repayment.
9 Where is that?

10 **MR HO:** I said free cash flow before debt
11 retirement and free cash flow after debt retirement.
12 That's the last two rows we were looking at. That's
13 why when we went through the demonstrative I wanted
14 to take you through that so you could see how it
15 worked.

16 **MR EHRHARDT:** OK, sure. You were just
17 saying the last rows. It's not the last rows, so it
18 was just the last rows that you --

19 **MR HO:** That we have been looking at.

20 **MR EHRHARDT:** Yes. OK.

21 **MR HO:** So do you agree with me that in
22 subsequent years we see precisely the same pattern
23 or not?

24 **MR EHRHARDT:** You're representing that to
25 me, aren't you?

1 **MR HO:** No. I'm asking you, as someone
2 who has studied this spreadsheet for his report,
3 whether you can see that or not?

4 **MR EHRHARDT:** The reason I can't tell you
5 that now is the rows aren't labelled. If you want
6 me to count the rows, see which -- find which would
7 be the appropriate labels on the second sheet and
8 then agree with you, I'd be happy to do that, but it
9 would take a little while. Would you like me to do
10 that?

11 **MR HO:** No. Let's try and shortcut it,
12 since you're obviously not very familiar with this
13 at the moment.

14 **MS BEVILACQUA:** Objection --

15 **MR EHRHARDT:** Excuse me. I analysed this.
16 I don't accept -- what I'm saying is I'm not going
17 to tell you something that I can't see. I analysed
18 this. I put it -- the way I analysed it, because of
19 the difficulty of analysing this exhibit, was to
20 type the numbers out into a spreadsheet and look at
21 them there.

22 **PRESIDENT:** Let's cut the Gordian knot.

23 **MR HO:** I'll carry on as best I can.

24 **PRESIDENT:** Maybe you represent it to
25 him or --

1 **MR HO:** I'll represent to you,
2 Mr Ehrhardt, that that is what happens in this
3 model. That in this model, all of the free cash
4 flow before debt retirement is used to pay down debt
5 until the debt is extinguished.

6 **MR EHRHARDT:** OK. And how many years does
7 it take, and when is the debt extinguished?

8 **MR HO:** I believe in year 29, operating
9 year 23.

10 **MR EHRHARDT:** Are you sure?

11 **PRESIDENT:** He's representing that to you.

12 **MR HO:** But no doubt you'll tell me if I'm
13 wrong when we come on to some more questions later.
14 All right?

15 **MR EHRHARDT:** OK.

16 **PRESIDENT:** Can we go now to the
17 questions?

18 **MR HO:** Yes.

19 Now, if it's right that this model assumes
20 that, for the first 23 years of operation, every
21 single dollar of post tax income is used to pay down
22 debt, will you agree with me that what this model is
23 focused on calculating is whether, and if so how
24 quickly, debt can be repaid to the exclusion of all
25 else?

1 **MR EHRHARDT:** No. I mean it may or may
2 not be. That's a feature of the model. Whether
3 that's what the model is calculating -- I mean,
4 I would have thought the model was intended to show
5 the financial viability of the project.

6 **MR HO:** I see. And you've approached the
7 analysis in your report on the basis of that
8 assumption, have you?

9 **MR EHRHARDT:** Yes. I understood that the
10 Government of Mozambique, on seeing -- on being
11 presented with the prefeasibility study, said the
12 technical stuff was OK but the financial stuff is
13 not. Please send the financial analysis.

14 I understood that the Government of
15 Mozambique would want to see that the project was
16 financially viable and that this was intended to
17 show that, and I approached it that way.

18 **MR HO:** Normally a company does not have
19 an obligation to pay all post tax earnings to
20 discharge its debt. Normally a company has a
21 defined debt repayment obligation every year so
22 that, over the term of the debt, all the capital and
23 interest is repaid. Do you agree with that or not?

24 **MR EHRHARDT:** You're asking me to agree
25 with what's normal in debt repayment? There's many

1 different ways that debt repayment can work around
2 the world. For example, my company operates mostly
3 on a floating arrangement where we can repay when we
4 want so in our case that's not true.

5 It often is the case that it's the way
6 that you said. I just don't want to -- I'm not sure
7 what "normally" means in that. If you mean it's
8 quite common for companies to have defined debt
9 repayment obligations, I agree with that.

10 **MR HO:** Lenders will then be interested to
11 know, given a company's repayment obligations, what
12 a company's EBITDA or post tax earnings are so they
13 can work out whether a company generates enough cash
14 each year to meet its repayment obligations with
15 plenty of headroom to spare so that they have
16 comfort they will get repaid.

17 Do you agree with that?

18 **MR EHRHARDT:** I do.

19 **MR HO:** A metric that lenders can use to
20 do that exercise is something called a debt service
21 coverage ratio, or DSCR.

22 **MR EHRHARDT:** Correct.

23 **MR HO:** And using the figures in this
24 spreadsheet, you've calculated the DSCR for every
25 year until the debt is repaid, haven't you?

1 **MR EHRHARDT:** Yes.

2 **MR HO:** Now, the way you calculate the
3 DSCR is, step 1, identify the EBITDA figure. So
4 for --

5 **MR EHRHARDT:** Hmm-mm.

6 **MR HO:** -- year 11, if we go back to that,
7 we can show it with the demonstrative --

8 **MR EHRHARDT:** Debt service coverage ratio
9 is EBITDA divided by interest payment plus debt
10 repayment, and that's what I calculated.

11 **MR HO:** I just wanted to work through the
12 steps of that so everyone is clear.

13 So the EBITDA figure for year 11 is
14 293.72, yes?

15 **MR EHRHARDT:** Sorry, I don't know why we
16 have to keep doing this. You're putting up your
17 demonstrative and asking questions about it is not
18 going to work. If you want to explain what the
19 demonstrative says, please do so.

20 **PRESIDENT:** No, no, no --

21 **MR EHRHARDT:** I told you how I calculated
22 the debt service coverage ratio.

23 **PRESIDENT:** Mr Ehrhardt, let's try to make
24 this shorter.

25 These are numbers which counsel represents

1 to you come from these -- I don't want to call it
2 spreadsheet -- from this table, so that is the
3 spreadsheet for the year 11 is -- sorry, the EBITDA
4 for year 11 is 293.72. That's taken directly from
5 the table and counsel has represented to you that
6 that's a correct figure, and we all have seen that
7 it is a correct figure.

8 So let's work from there.

9 **MR HO:** Thank you, Mr President.

10 All I'm establishing is the way that you
11 calculate the DSCR is, step 1, you identify the
12 EBITDA figure, so for year 11, if we were doing it
13 for that, we would say that's the 293.72 figure, is
14 that correct?

15 **MR EHRHARDT:** Yes.

16 **MR HO:** Step 2, you add together the
17 interest expense figure, so in this it would be the
18 253.14, and the amount of debt repayment, so 40.59,
19 and as we know, that gives you exactly the same
20 figure, 293.72, doesn't it?

21 **MR EHRHARDT:** Yes.

22 **MR HO:** Step 3, you then divide EBITDA, so
23 293.72, by the figure you calculated in step 2,
24 which is of course precisely the same, and the
25 answer you get is one, correct?

1 **MR EHRHARDT:** Yes.

2 **MR HO:** Of course, you get one for every
3 year until the debt is repaid in this model, don't
4 you, because we know, or I've represented to you,
5 that all of the earnings every year are used first
6 to repay interest and then what is left is used
7 solely to pay down the company's debt.

8 Do you agree with that?

9 **MR EHRHARDT:** Well, I -- you see, as you
10 said before, it's usual in project finance for debt
11 terms to be defined, and so what I assumed was that
12 in the background there was -- this is what I would
13 normally do in building a model like this -- that
14 there were.

15 **PRESIDENT:** I think the answer is yes and
16 now you want to explain it. This is complex enough
17 so --

18 **MR EHRHARDT:** Yes, all right.

19 **PRESIDENT:** -- I think the answer is yes.

20 **MR EHRHARDT:** Yes. Thank you,
21 Mr President, yes.

22 **PRESIDENT:** And now you want to explain
23 why you thought that this was a correct calculation?

24 **MR EHRHARDT:** That is right, Mr President.
25 Thank you.

1 I assumed that -- well, the fact is
2 that -- Mr President, that 3 billion-dollar projects
3 are not financed on an overdraft that can be paid
4 down whenever you want with whatever cash you have.
5 They're financed, as Mr Ho said, with loans that
6 normally have defined repayment amounts and
7 normally, therefore, the cash flows go to pay the
8 defined debt service amount. They -- and if you
9 were doing a financial model you'd make an
10 assumption about what the financing terms would be,
11 the interest rate, the grace period, the maturity of
12 the loan. From that you'd calculate the debt
13 service, and, you know, then you try to show -- then
14 you try to check that you have -- that you're
15 generating enough cash flow, approximated by EBITDA
16 here, to be able to pay your defined debt service
17 amounts, because that's how project finance
18 companies work, project finance works. You can't
19 just pay down debt as the cash comes in.

20 So I didn't assume that Patel would be
21 making that assumption that just when cash --
22 whenever we have cash we pay down debt. I assumed
23 their model would be built in a way that is
24 realistic for a 3 billion-dollar project financed
25 project, which is to have defined debt terms, as

1 Mr Ho said is normal, and that would -- and that is
2 why -- so that was an important assumption that
3 I made about these financial projections.

12:36

4 **MR HO:** Thank you, Mr President.

5 So, Mr Ehrhardt, if we assume -- and I'm
6 asking you to assume -- if we assume that the way
7 this model is created is that all income will be
8 used, first of all, to pay interest and then what is
9 left is used to pay down the company's debt, if we
10 assume that that is how the model is structured, the
11 debt coverage service ratio for every year until the
12 debt is repaid will, by definition, be 1, won't it?

13 **MR EHRHARDT:** The debt service coverage
14 ratio will be 1, yes.

15 **MR HO:** Thank you. I'm sorry that that
16 was such a painful exercise to go through the
17 spreadsheet, but we have finally got to the end.

18 **MR EHRHARDT:** If I may, it's very
19 important to know that if it was built like this,
20 it's a completely unrealistic model, so the
21 assumption you're asking me to make, you're asking
22 me to assume that the financial feasibility
23 information that Patel submitted was entirely
24 unrealistic.

25 **MR HO:** Thank you, Mr Ehrhardt. We'll

1 leave commentary on the facts for the Tribunal and
2 for submissions.

3 **MR EHRHARDT:** This is my expert opinion --
4 excuse me, Mr Ho. It's not a commentary on the
5 facts. You asked me to assume something which in my
6 expert opinion as someone who's built and analysed
7 many project finance models, a model built the way
8 you asked me to assume this one is built is not an
9 acceptable or realistic project finance model and it
10 cannot demonstrate financial feasibility or
11 bankability. That's my professional opinion.

12 **MR HO:** Thank you. I want to move on to a
13 different topic now --

14 **PRESIDENT:** Let me ask you.

15 **MR HO:** Oh, sorry.

16 **PRESIDENT:** Because the debt is repaid in
17 year -- can you remind me?

18 **MR HO:** It's slightly nuanced. The debt
19 is finally repaid in year 29, operating year 23, but
20 to be strictly accurate, Mr President, I think in
21 year 26, operating year 20, there may be -- the
22 model assumes a refinancing of debt, so there's a
23 slight nuance if we're going to be really technical
24 about it.

25 **PRESIDENT:** Thank you.

1 **MR HO:** So, yes, can we move on to a
2 different topic --

3 **MR EHRHARDT:** Mr President, to your point,
4 so the model goes for 30 years, is that right? And
5 the debt is -- all the cash is going to debt
6 repayment for 30 years?

7 **PRESIDENT:** The model goes for 36 years, I
8 think.

9 **MR EHRHARDT:** Thank you, sorry.

10 **PRESIDENT:** Of which 30 seem to be
11 operational.

12 My question, it was just curiosity, is
13 that the ratio -- where the ratio once all the debt
14 had been repaid would go to zero, but it was really
15 a financial curiosity.

16 But then I think counsel has told us that
17 there was an assumption that there would be a
18 refinancing, so that then the ratio would of course
19 not go to zero.

20 I was wondering if it is normal. It seems
21 puzzling that over the whole life of the project, or
22 over many, many years, the ratio is always 1,
23 because in most projects the ratio varies, so that
24 is what -- that was my -- it was just curiosity. It
25 was financial curiosity.

1 **MR EHRHARDT:** Well, it's a very -- it's a
2 very important point, Mr President. That is the
3 point I was trying to make.

4 In most projects the ratio varies, and
5 it's always about 1.2 or it shows that your project
6 is not financially viable, so this is a very strange
7 model. I think that's what you're noticing.

8 **PRESIDENT:** Mr Ho, please.

9 **MR HO:** Thank you, Mr President.

10 So, yes, let's move topics.

11 And one of the risks that you've
12 identified, Mr Ehrhardt, which you say impacted on
13 the feasibility of the project is that, when
14 negotiating a concession agreement, agreement might
15 not be reached between the government and PEL on how
16 political and force majeure risks should be
17 allocated, and I think you, in particular, say that
18 financiers often contend that the government should
19 compensate investors for political risks like riots,
20 insurgency and war. Is that fair?

21 **MR EHRHARDT:** That's what I think, yes.

22 **MR HO:** I think it's clear from your CV
23 that you've never worked in the insurance markets,
24 have you?

25 **MR EHRHARDT:** I'm not sure what you mean

1 by that. I do advise project financiers on aspects
2 of political risk insurance, and I have worked for
3 MIGA, the Multilateral Investment Guarantee Agency,
4 which is a provider of political risk insurance.

5 **MR HO:** So do you have experience of
6 things like war risk insurance then?

7 **MR EHRHARDT:** Well, limited but some, and
8 I'll give you -- my most recent example was working
9 for the International Finance Corporation we
10 developed the standard concession contract for mini
11 grids, so small electricity grids, and this was
12 something which was to be a concession that the
13 International Finance Corporation was happy to
14 finance, and we had protracted discussions about who
15 should bear various kinds of force majeure risk, how
16 to classify them and how they could be insured and
17 whether insurance could be bundled into the project.

18 **MR HO:** You've not considered in your
19 report the availability or cost of obtaining war
20 risks insurance in this case, or the impact that
21 would have on the feasibility of the project, have
22 you?

23 **MR EHRHARDT:** I didn't consider it.

24 **MR HO:** The significance --

25 **MR EHRHARDT:** I'm sorry. I have thought

1 about these things. I'm not sure what level would
2 rise to consideration. I think it would be very
3 difficult to get political risk insurance for -- in
4 Mozambique at the moment.

5 **MR HO:** Yes, well, there's nothing about
6 war risks insurance written in any -- well, in your
7 report, is there?

8 **MR EHRHARDT:** No, there isn't, but that
9 wasn't the question you asked me. You asked me if
10 I'd considered it.

11 **MR HO:** I think actually I asked had you
12 considered it in your report but it probably --

13 **MR EHRHARDT:** I'm sorry.

14 **MR HO:** The significance to financiers or
15 investors of political risks will, of course, depend
16 on the size of those risks, won't it? I mean, the
17 bigger the risk, the more the concern.

18 **MR EHRHARDT:** Yes.

19 **MR HO:** And the size of the political risk
20 is heavily determined by the country where the
21 investor is proposing to invest, so the political
22 risks of investing in North Korea are likely to be
23 different to investing in, say, Portugal?

24 **MR EHRHARDT:** I agree with that.

25 **MR HO:** If a country is well known to

1 suffer from endemic political corruption and
2 unlawful State expropriation of assets, financiers
3 will have more concern, won't they?

4 **MR EHRHARDT:** Yes.

5 **MR HO:** And equally, if such behaviour
6 rarely happens, then financiers will have less
7 concerns?

8 **MR EHRHARDT:** Yes.

9 **MR HO:** Was Mozambique in 2013 a country
10 well known as suffering from political corruption
11 and unlawful State expropriation of assets?

12 **MR EHRHARDT:** I'm afraid I don't know.

13 **MR HO:** Do you know whether Mozambique, in
14 2013, was a country well known as subject to war and
15 insurrection of a sort liable to destroy
16 infrastructure such as the project?

17 **MR EHRHARDT:** Well, I can't remember when
18 the civil war ended but clearly the fact that there
19 had been a civil war in Mozambique in living -- in
20 recent memory would be considered a risk, would
21 increase investors' perception of risk.

22 **MR HO:** In your report you've not
23 identified a single case where financier concerns
24 over political risks in Mozambique have rendered a
25 deal unfeasible, have you?

1 **MR EHRHARDT:** I didn't address that in my
2 report.

12:44

3 **MR HO:** And are you aware of any such
4 case?

5 **MR EHRHARDT:** No.

6 **MR HO:** Another risk which you say
7 impacted the feasibility of the project is that,
8 when negotiating a concession agreement, an
9 agreement might not be reached on tariff and access
10 provisions, do you remember that?

11 **MR EHRHARDT:** Yes, I think that. I think
12 you're reading from my report, aren't you?

13 **MR HO:** At the moment I'm just asking you
14 whether you agree that that is a risk which you say
15 impacts the feasibility of the project.

16 **MR EHRHARDT:** I do agree that that's a
17 risk.

18 **MR HO:** Again, in your report you've not
19 identified a single case where an inability to agree
20 tariff and access provisions in Mozambique rendered
21 a deal on a concession agreement between an investor
22 and Mozambique unfeasible, have you?

23 **MR EHRHARDT:** Well, it's true that I did
24 not identify those things in my report, but I'm
25 telling you as -- that my expert opinion is that

1 it's very likely that they would. And, in fact,
2 I do know of a case where that's been a really
3 significant issue, which is the unsolicited proposal
4 for small town water supply which, you know, has not
5 been financed. Probably -- possibly never will be
6 financed. Being engaged as -- I talked with the US
7 DFC, which is interested in financing, that's the US
8 Development Finance Corporation which is interested
9 in financing projects in Mozambique, they thought
10 that the concession contract that was presented to
11 them was unbankable and one of their major concerns
12 was the tariff risk.

13 **MR HO:** That was not a rail or port
14 project, was it?

15 **MR EHRHARDT:** No, it wasn't, but the
16 principle is the same, and you did ask -- but, no,
17 to answer your question, of course, it's a small
18 town water supply project.

19 **MR HO:** I'm going to, to speed things
20 along, I'm going to represent to you that by a
21 letter dated 20 May 2011, the National Highways
22 Authority of India informed PEL that it was barred
23 from pre qualification, participating in or bidding
24 for future projects of or to be undertaken by the
25 NHAI for one year, so I'm just going to represent

1 that to you, to speed things along Mr Ehrhardt.

12:47

2 **MR EHRHARDT:** Very good. Yes.

3 **MR HO:** What I want to show you is the
4 Claimant's Reply on the Merits at page 179 in the
5 pdf. If we can scroll down to see that on the
6 screen, this is a sample of projects which PEL
7 entered into during the period of debarment.

8 Can you see that on the screen?

9 **MR EHRHARDT:** I see it.

10 **MR HO:** Now, have you seen this before?
11 Is this a table that you have looked at before,
12 Mr Ehrhardt?

13 **MR EHRHARDT:** I think so.

14 **MR HO:** So none of the public authorities
15 that are listed in this table thought that PEL's
16 debarment meant that PEL was not a fit and proper
17 person to award projects to or contract with.

18 **MR EHRHARDT:** Are you representing that?

19 **MR HO:** No, I'm asking.

20 **MR EHRHARDT:** I don't know. I don't -- if
21 you want me to assume that this table is true and
22 that the entities that are listed here awarded
23 projects, then it would naturally or logically
24 follow that they did not feel that the debarment
25 would prevent them from contracting with PEL.

1 **MR HO:** That's very fair.

2 **MR BASOMBRIO:** Excuse me, counsel. I'm
3 going to move to strike the question and the answer
4 on the grounds that the representations of counsel
5 omitted the decision of the Delhi court and the
6 Supreme Court and on the grounds that there's a huge
7 assumption here that all of these entities had full
8 knowledge of everything that happened in relation to
9 the blacklisting.

10 **PRESIDENT:** Let's move on. I see your
11 point, and let's keep it for the post-hearing
12 submissions, but I think we have to move on with the
13 examination.

14 **MR HO:** Now, Mr Ehrhardt, let's just cut
15 to the chase then. If we assume that this table is
16 accurate and we assume that the authorities that
17 contracted with PEL knew or could reasonably have
18 known of the debarment, you've not identified any
19 reason in your report why the Government of
20 Mozambique would have taken a different approach
21 than these public authorities in India took, have
22 you?

23 **MR BASOMBRIO:** Same objections. These are
24 gigantic assumptions that render the question
25 improper.

1 **PRESIDENT:** Mr Ehrhardt, do you have any
2 comment on the question of counsel?

12:50

3 **MR EHRHARDT:** Sorry, if I have any comment
4 on the question that I was just asked?

5 **PRESIDENT:** The question has, as counsel
6 to the Republic said, a number of assumptions --

7 **MR EHRHARDT:** Yes. Well, I'm not
8 comfortable testifying about the behaviour of Indian
9 government agencies. I'd really prefer not to do
10 that. I don't -- and obviously I don't know what
11 they know or what their rules are. That's --
12 I suppose that's my comment on the question.

13 **PRESIDENT:** Do you know of any rule in
14 Mozambique which regulates these type of situations?

15 **MR EHRHARDT:** No, I don't. I -- in my
16 report I talked about what's considered to be best
17 practice and what Mr Baxter considers to be best
18 practice in terms of what should be disclosed, and
19 one of the things is blacklisting. And of course,
20 you can be blacklisted by one entity and have other
21 entities continue to deal with you. So, for
22 example, companies are debarred by the World Bank
23 but they can continue to work for other entities.

24 **MR HO:** Thank you, Mr President.

25 Last topic. I think the last risk to look

1 at with you is that you say the feasibility of the
2 project might be in jeopardy because financiers
3 might not be comfortable with the risks associated
4 with it, and we can just, I think, pick that up in
5 your report. It's at paragraph 225. That's
6 internal page 52 if you're working in the hard copy,
7 and it's page 53 of the pdf.

8 **MR EHRHARDT:** So, 225?

9 **MR HO:** Yes, please. It should be at the
10 bottom of page --

11 **MR EHRHARDT:** Yes, I've got it.

12 **MR HO:** Can you see the heading
13 "Financiers not comfortable with risks".

14 **MR EHRHARDT:** Yes.

15 **MR HO:** If we go over the page, if we turn
16 over to 226, we can see that one of the risks and
17 you say financiers would be concerned by is that
18 "Lenders would expect the EPC contractor (presumably
19 PEL) to guarantee construction costs, something PEL
20 may not have been willing to do".

21 Do you see that?

22 **MR EHRHARDT:** Yes.

23 **MR HO:** Now, one of the key features of
24 EPC contracts is that they oblige the contractor to
25 deliver the project by a fixed date and for a

1 guaranteed price, is that right?

2 **MR EHRHARDT:** That's generally the case.

3 There can be some exceptions.

4 **MR HO:** Yeah. The contractor takes on
5 more risk under an EPC contracting model than under
6 other contracting models, but they normally charge a
7 premium for that, is that fair?

8 **MR EHRHARDT:** Well, I don't -- I don't
9 know about a premium. I agree with the risk.

10 **MR HO:** All right. And so, subject to any
11 change or variation orders which the developer
12 submits during the construction phase, an EPC
13 contract provides a developer cost certainty,
14 doesn't it?

15 **MR EHRHARDT:** Well, you said aside from
16 change in variation orders. So aside from those,
17 yes. Also there's a particular -- I mean, who would
18 have been the developer and who would have been the
19 EPC contractor is not very clear, but if the
20 developer is also the EPC contractor, if they're
21 both PEL, then the situation becomes more
22 complicated.

23 **MR HO:** In paragraph 227, so just below,
24 you say that lenders would have been concerned about
25 the risk of flooding, is that right?

1 **MR EHRHARDT:** Yes.

2 **MR HO:** Now, the risk of flooding was not
3 so severe on this project that it discouraged people
4 from tendering for the project, did it?

5 **MR EHRHARDT:** I'm sorry. You seem to be
6 thinking that people tendered for this project?

7 **MR HO:** Yes. Are you not aware --

8 **MR EHRHARDT:** I think they tendered --
9 I know there was a tender. I'm not sure it was for
10 this project. I mean was -- for example, this
11 project would have a particular -- if we're talking
12 about flooding, where the port is and where the
13 railway line are is very important, where the
14 bridges are, and for it to be the same project you
15 would have to know that the alignment and location
16 of the port are the same. As I say, I couldn't tell
17 from the PFS exactly what this project is in terms
18 of the location of the rail lines or of the port, so
19 that's why I'm not willing to assume that what
20 people tendered on was this project.

21 **MR HO:** All right. If we assume that the
22 tender notice in this case had the same description
23 as that in the PFS, if you just assume that for
24 me --

25 **MR EHRHARDT:** Sorry, there was not -- a

1 description of what? I told you in the overview --
2 sorry, I don't want to be argumentative, but,
3 Mr President, as you heard in my overview,
4 I couldn't tell from the PFS exactly where the rail
5 lines should go, which rail lines were included, or
6 where the port would be.

7 I can't really -- so this hypothetical is
8 very difficult for me.

9 **PRESIDENT:** Yes, but I think counsel wants
10 to take you that there was then a public tender, and
11 for a public tender to take place, there must be a
12 project. I think this is the question. And do you
13 think that the project in the tender was different
14 from the project of the prefeasibility study?

15 **MR EHRHARDT:** I know -- or sorry,
16 I understand that the winning bidder bid a rail line
17 that was, at least in some respects, a different
18 location from those that PEL had in its
19 prefeasibility study.

20 **MR HO:** Well, Mr President, it sounds like
21 that Mr Ehrhardt isn't very familiar with the tender
22 documents in this case so I'm not sure it's going to
23 really be productive for me to --

24 **MR EHRHARDT:** I have read -- I have read
25 the tender documents, and I believe it's true that

1 the winning bidder bid a different alignment from
2 that which was in the prefeasibility study.

3 **MR HO:** Well, Mr Ehrhardt, just so I put
4 it on the record what our position is, our position
5 is that that occurred years after the tender at the
6 time of the feasibility study, which was in 2015,
7 just so we've got that clear. But it's obvious, I
8 think --

9 **MR EHRHARDT:** So on the question of flood
10 risk, because you seemed interested in that,
11 obviously one could change -- possibly a reason for
12 changing the alignment was to reduce some of the
13 risks. Also the project's not yet been built, which
14 may have something -- I think because it's not
15 financeable, which probably has something to do with
16 all the risks.

17 **MR HO:** The risk of flooding is a risk
18 that can be insured against, isn't it?

19 **MR EHRHARDT:** Well, you were asking about
20 my knowledge of insurance markets. It depends in
21 which market. Some flood risks can't be insured.
22 Flood risk in Mozambique is pretty extreme, as I'm
23 sure you've seen in the news, so I don't know if
24 flood risk in Mozambique near to a river can be
25 insured.

1 **MR HO:** Thank you.

2 I don't have any further questions. Thank
3 you, Mr President.

4 **PRESIDENT:** Thank you. Ms Bevilacqua, do
5 you have any further questions for Mr Ehrhardt?

6 **MS BEVILACQUA:** No, thank you,
7 Mr President.

8 **PRESIDENT:** Any questions for our expert?
9 Dr Perezcano? I think Dr Perezcano may have some
10 questions for you. No? No.

11 Very good. No, we have no further
12 questions, Mr Ehrhardt. It was very clear, your
13 presentation. Thank you very much.

14 Thank you also very much for making this
15 early morning appearance, and for having been with
16 us this morning for you in Washington, and thank you
17 very much.

18 **MR EHRHARDT:** I appreciate the
19 opportunity, Mr President. Thank you very much.

20 **PRESIDENT:** Very good.

21 It is now exactly 1, so shall we come back
22 at 2? And we then continue with --

23 **MS BEVILACQUA:** I believe it's
24 Respondent's expert, Mr Dysert.

25 **PRESIDENT:** Exactly.

1 **MR HO:** But we are not cross examining
2 Mr Dysert. I think he's here to answer questions
3 the Tribunal may have so hopefully it will be -- or
4 it may be short, depending on the questions you
5 have.

6 **PRESIDENT:** But he will make a
7 presentation?

8 **MS BEVILACQUA:** Yes.

9 **PRESIDENT:** Very good. Excellent. So we
10 look forward to hearing him.

11 (Short break from 1.00 pm to 2.07 pm)

12 MR LARRY DYSERT

13 (via videolink)

14 **PRESIDENT:** We resume the hearing and we
15 do so in order to examine the expert, Mr Larry
16 Dysert. Mr Dysert, good -- I don't know if it's
17 morning or afternoon to you. Where are you, sir?
18 Mr Dysert?

19 **MS BEVILACQUA:** It appears to be on mute
20 on the Zoom, your Honour.

21 **PRESIDENT:** Mr Dysert, can you hear me?

22 **MR DYSERT:** Hello, this is Larry. Can you
23 hear me?

24 (Technical discussion).

25 **PRESIDENT:** Mr Dysert, is it a good

1 morning or good afternoon to you, sir?

2 **MR DYSERT:** It's a good morning for me.

3 I'm in Arizona in the United States.

4 **PRESIDENT:** Very good. Then a good
5 morning to you in Arizona.

6 Mr Dysert, you know that you are here as
7 an expert, and the first thing we have to do is to
8 take your declaration as an expert witness. So can
9 I kindly ask you to confirm that you solemnly
10 declare upon your honour and conscience that you
11 will speak the truth, the whole truth and nothing
12 but the truth, and that your statement will be in
13 accordance with your sincere belief?

14 **MR DYSERT:** I do so confirm.

15 **PRESIDENT:** Thank you, sir.

16 So Mr Dysert, without further ado, I will
17 give the floor to counsel for the Republic of
18 Mozambique to introduce you.

19 Examination by Respondent

20 **MS BEVILACQUA:** Good morning, Mr Dysert.
21 This is Theresa Bevilacqua. Do you have in front of
22 you a clean copy of your expert report in this
23 matter?

24 **MR DYSERT:** I do.

25 **MS BEVILACQUA:** And your report is

1 dated August 25, 2002?

2 **MR DYSERT:** That is correct.

3 **MS BEVILACQUA:** I'm sorry. I misspoke,
4 thank you, Mr President. 2022. Yes.

5 **MR DYSERT:** '22, yes.

6 **MS BEVILACQUA:** And is that your signature
7 above the date?

8 **MR DYSERT:** Yes, it is, on page 47.

9 **MS BEVILACQUA:** Thank you. And do you
10 have any corrections or additions you wish to make
11 to your report?

12 **MR DYSERT:** I do not.

13 **MS BEVILACQUA:** With that, Mr Dysert, you
14 have prepared a summary of your direct testimony?

15 **MR DYSERT:** Correct.

16 **MS BEVILACQUA:** And if you would like to
17 proceed with that summary, I will advance the slides
18 for you.

19 **MR DYSERT:** That would be fine.

20 **MS BEVILACQUA:** Could we get Respondent's
21 presentation on the screens?

22 Presentation

23 **MR DYSERT:** OK. Very good. I think we
24 can probably advance to the next slide, and I'll
25 provide just a brief introduction to my career.

1 I have over 40 years' experience now in
2 the engineering and construction industries. I'm a
3 principal with Long International, providing claims
4 consulting and arbitration/litigation support
5 primarily.

6 I'm also the managing partner of Conquest
7 Consulting Group, which is a relatively small
8 consulting group. We provide cost engineering and
9 cost estimating consulting services, primarily to
10 owner companies in the process industries.

11 I have worked both as an EPC contractor in
12 various owner organisations, and for the last going
13 on 18 years now in the consulting practice.

14 I have experience with basically all
15 aspects of the broader term of cost engineering,
16 which includes cost estimating, project controls,
17 risk analysis and risk management, benchmarking and
18 dispute resolution.

19 I've worked in a variety of industries,
20 mainly process oriented but also high tech,
21 manufacturing and other industrial facilities, and
22 many of those projects have involved either rail,
23 port loading/unloading facilities, and sometimes
24 boats.

25 I've also been very active in an

1 organisation called AACE International. It's often
2 referred to as the Association for the Advancement
3 of Cost Engineering. It's a professional
4 organisation related to, again, all aspects of cost
5 engineering, and in that organisation I have been
6 the chair of the Technical Board for 16 years.
7 I was the vice-president of the Technical Board for
8 four years.

9 The technical board is that part of the
10 organisation that develops the recommended practices
11 and other skills and knowledge or body of knowledge
12 documentation for the organisation.

13 I hold three certifications from AACE as a
14 certified cost professional, certified estimating
15 professional, and decision and risk management
16 professional. At various times I've won some awards
17 for contributions to the organisation and to the
18 industry as a whole.

19 I'm also the primary contributor of 14 of
20 AACE's recommended practices and a contributor to
21 now more than 30 recommended practices. And
22 important to the topics we're covering today, I'm
23 also the primary author/contributor to AACE
24 Recommended Practice 98R-18, which is the cost
25 estimate classification system as applied in the

1 road and rail transportation industries.

2 Next slide. The purpose of my expert
3 report was primarily to respond to the Ankura expert
4 report produced by Mr Dearman and by reference in
5 appendix C to Mr Dearman's report, the expert report
6 of Mr Comer, and primarily I'm providing my expert
7 opinion regarding what I think is the
8 misrepresentation of the prefeasibility study, or
9 PFS cost estimate, as a Class 4 estimate, provide my
10 expert opinion on the misapplication of AACE
11 Recommended Practice 98R-18, and also provide my
12 expert opinions on the bases of some of the lost
13 business opportunities valuations that were
14 presented by Mr Dearman. Next slide.

15 AACE Recommended Practice 98R-18 is the
16 cost estimate classification. The intent of all of
17 the cost estimate classification RPs is to primarily
18 to provide a table that identifies the various types
19 and the maturity levels for each of those
20 individuals, both planning deliverables and
21 technical deliverables, that support the
22 classification of an estimate.

23 The intent is that by identifying a
24 consistent classification of estimates, the
25 stakeholders of that estimate have a better

1 understanding of the underlying level of project
2 definition supporting an individual estimate.

3 Those estimate classes range from 5 at the
4 lowest level of project definition, up to 1 at the
5 very highest level of project definition, and RP
6 98R-18, and in fact all estimate classification RPs
7 mention that "The maturity level of project
8 definition is the sole determining (or primary)
9 characteristic of class" of estimate.

10 Next slide.

11 Really the guts of the RP is a matrix that
12 is contained at the end of each RP that identifies
13 categories of deliverables, and for 98R-18 applying
14 to the rail and road industries, there are 68
15 identified deliverables. 35 of those are what we
16 call general project data or planning deliverables,
17 and 33 of the 68 are more technical engineering
18 deliverables.

19 And across the classes, what you'll see at
20 the top of this -- we need the previous slide
21 please -- at the top of the table here which is an
22 extract out of RP 98 are classified 4, 3, 2 and 1.
23 Roughly in terms of overall project definition Class
24 5 is typically at 0 to 2 per cent project
25 definition; Class 4 at 1 to 15 per cent project

1 definition, and so forth.

2 Then for each of the deliverables there is
3 an indication of status which is identified by some
4 of the letters that you'll see in the boxes
5 according to the few project deliverables that are
6 identified here. Again, there are 68 in total.

7 For the planning deliverables there's
8 basically three status indicators, NR for not
9 required, P for preliminary status of completion,
10 and D meaning fully defined.

11 And for the technical deliverables there
12 are four classifications of maturity. Those are
13 again NR for not required. S stands for that
14 deliverable that has been started. P for a
15 preliminary or interim level of definition, and C
16 for complete for that particular definition.

17 Now we can move to the next slide.

18 In his expert report Mr Comer attempts to
19 show that the budgetary estimates associated with
20 the PFS lie between Class 5 definition and Class 4
21 definition for the 68 individual items of project
22 definition that were listed, and Mr Comer states
23 that in his view the inputs generated by Patel
24 Engineering, or PEL, are certainly at the upper end
25 of Class 5 and in a number of areas they meet the

1 inputs required for the inputs of a Class 4
2 definition.

3 To the right in the table as presented
4 here is again an extract from Mr Comer's report
5 where for just the three items or deliverables that
6 are identified, he's indicated the requirement in
7 the RP, so under Class 5 P stands for a preliminary
8 level of definition, and against Project Scope of
9 Work Description, then, he has identified several
10 areas of the PFS that he feels meets that
11 preliminary level of definition and satisfies that
12 maturity requirement to be a Class 5 estimate.

13 Similarly in Class 4, for the three
14 deliverables here they are -- or the four
15 deliverables, they all need to be at a preliminary
16 stage to be Class 4, and he has also identified
17 areas of the PFS, the various PFS sections that he
18 feels meet those requirements of a preliminary
19 maturity.

20 You'll notice that under Site
21 Infrastructure, one of the planning deliverables
22 under Scope, he has not identified any PFS
23 deliverables -- or sections that meet that maturity
24 status. We can move back to the existing slide.

25 So Mr Comer, after doing this

1 identification of areas of the PFS that he feels
2 meets the maturity expectations for the various
3 deliverables, states that it's more reasonable to
4 say that this work sits within the lower end of
5 Class 4.

6 Mr Comer makes an error here in that he
7 assumes there's a continuum between the estimate
8 classes, and that an estimate may be assigned as
9 perhaps being between one class and another. That
10 it meets Class 5, but it might be at the lower end
11 of Class 4, or perhaps at a 4.5 type of designation,
12 and it simply is not correct.

13 Next slide.

14 PGD 01, the Professional Guidance Document
15 01, is an overarching guide to the estimate
16 classification recommended practices, trying to
17 identify some of the principles and provide some
18 guidance on the usage of those recommended
19 practices, and it states very clearly that a
20 characteristic of class or the maturity of class is
21 intended as a threshold, not a continuous metric.

22 What that means is that a class level is
23 not achieved until all of the deliverables in each
24 of the classes of estimates reach the desired level
25 of definition or maturity status.

1 There is no class 3.5. There is no
2 Class 4.5. In order to be called a Class 4
3 estimate, then for all of the deliverables that
4 having maturity status of Not Required need to meet
5 that maturity status in order for that estimate to
6 be called a Class 4 estimate, and Mr Comer is
7 incorrect to then assert that the rail or the port
8 portions of the PFS estimate sits within the lower
9 end of Class 4. An estimate either meets all of the
10 requirements to be called a certain class, or it
11 doesn't, and for the PFS estimate, I would agree
12 that the PFS was adequate to support the project
13 definition of the Class 5 estimate, but it certainly
14 does not meet the maturity levels required for a
15 Class 4 estimate.

16 Next slide.

17 In RP 98-R, referring to rail projects and
18 rail estimates, there are 61 of those 68 total
19 deliverables that have a status -- that have a
20 maturity status that is other than not required. In
21 other words, they require either to be started or a
22 preliminary status or a complete status in order to
23 meet the expectations of a Class 4 estimate.

24 In Mr Comer's description of trying to
25 assign PFS sections to those deliverables, 32 of

1 those 61 Class 4 deliverables that require a
2 maturity status are left blank. Mr Comer could not
3 find a section in the PFS that supported the
4 maturity required for 32 out of the 61 Class 4
5 deliverables requiring some level of maturity. They
6 were actually separated, 32 between the general
7 project data and 32 between the technical or
8 engineering supporting deliverables.

9 And I've highlighted in red some of those
10 that would be very important to the estimate to be
11 used as a part of a review or any kind of approval
12 process, such as the site infrastructure
13 requirements, contracting/sourcing plans, any kind
14 of integrated project plans, meaning plans of how
15 you intend to execute the work. On the technical
16 deliverables side, utility systems plan, which often
17 involve relocation; erosion control plans; the
18 actual roadway and track discipline drawings.

19 And, very importantly, he identifies no
20 sections in the PFS regarding a risk register or any
21 identification of risks associated with the PFS
22 document itself or associated with the estimate
23 developed from -- based on the scope definition in
24 the PFS.

25 Next slide.

1 Mr Comer, I think, correctly identifies
2 areas of the PFS that meet Class 5 maturity as for
3 those deliverables that require a maturity status,
4 and I believe the PFS estimate can be classified as
5 a Class 5 estimate.

6 However, for 49 of the Class 4
7 deliverables that require an enhanced level of
8 maturity, a greater level of maturity than the Class
9 5 maturity, 49 out of the 61 deliverables, he has
10 not identified any PFS section that meets the
11 maturity status of a Class 4 estimate.

12 He does identify a section -- a PFS
13 section for 13 of those 49 deliverables requiring an
14 enhanced level of maturity to meet Class 4
15 expectations, but in my review of those, I would
16 claim that 11 out of the 13 deliverables do not
17 actually support a Class 4 level of maturity.

18 For example, the environmental impact
19 assessment, the fourth line down in this table where
20 he references section 10.3, section 10.3 only
21 indicates that an impact study could be completed.
22 It does not provide any indication that the PFS
23 supports that maturity level, or includes any
24 information that supports an environmental impact
25 study.

1 The line above it, a logistics plan,
2 Mr Comer identifies three sections. Those sections
3 do not comprise a preliminary logistics plan. They
4 provide no input as to how the logistics of
5 supporting construction will occur, where will
6 materials be procured from, where will they be
7 staged along the 500 to 600 kilometre railway length
8 in order to support construction, what kinds of
9 construction materials will be needed.

10 There is -- in all 13 -- or in all 11 that
11 I have identified here out of only the 13 that he
12 tries to identify a section for, I would state --
13 and you may review in your review of the PFS --
14 these sections identified by Mr Comer simply do not
15 meet the maturity level required by the estimate
16 classification RP 98R.

17 Next slide.

18 There is not an estimate classification RP
19 developed yet for port projects, and Mr Comer then
20 takes 98R and tries to make some adjustment to the
21 deliverables to support port projects, and it's
22 reasonable in what he did and in identifying both
23 the deliverables for port projects and the expected
24 maturity levels. However, he again repeats the same
25 mistakes. Again, out of 61 required port

1 deliverables, he only provides a PFS section for --
2 well, for less than half of them.

3 36 of the 61 required port deliverables
4 were left blank. The PFS simply does not have any
5 information to support that particular deliverable.
6 And, again, out of 49 of the deliverables that
7 require an enhanced level of maturity from Class 5
8 to Class 4, Mr Comer attempts to substantiate an
9 improved maturity for only 10 of those 49.

10 And similarly, for six out of the ten
11 deliverables, I would contend that Mr Comer is
12 incorrect in that the PFS does not support the
13 enhanced level of maturity required by a Class 4
14 estimate.

15 Basically, both the rail and the port cost
16 estimates associated with the PFS are not Class 4
17 estimates per the AACE Recommended Practices, and
18 although Mr Comer tries to indicate that maybe
19 they're reaching towards a low end of Class 4, there
20 is no low end of Class 4. You either meet Class 4
21 expectations or not.

22 But even if you wanted to say that maybe a
23 few of these things were creeping into Class 4,
24 I would contend that only two out of the
25 requirements that required an enhanced maturity for

1 rail projects from Class 5 to Class 4 were accurate,
2 and at the most only four out of the 61
3 deliverables, or out of the 49 deliverables
4 requiring an enhanced level of maturity for the port
5 projects, met that.

6 So it's very clear that neither the rail
7 nor port estimates should be classified in any way,
8 shape, or form even at a low end of Class 4. They
9 do not meet Class 4 estimate maturity.

10 Next slide.

11 Another misapplication of RP 98R-18 is
12 that both Mr Comer and Mr Dearman contend that the
13 accuracy ranges provided in the RP illustrate the
14 estimate accuracy that can be assigned or correlated
15 to an individual cost estimate, such as the PFS
16 estimate.

17 Again, the table at the bottom is an
18 extract directly from RP 98R, and for Class 5 and
19 Class 4, again it's listing that maturity level
20 project definition, in this case not as identifying
21 all the individual deliverables, that's in the other
22 table we saw earlier, but in general Class 5 is 0 to
23 2 per cent of overall project definition; class 4
24 typically is between that 1 to 15 per cent of
25 overall class definition; and it provides three

1 other characteristics which we call secondary
2 characteristics.

3 They might be the end usage of the
4 estimate. A Class 5 estimate is often used as more
5 of a concept screening estimate. Basically does the
6 concept -- do the economics or does the estimate
7 support a value for the capital cost alone, not
8 operating cost, not revenues, not a cost benefit
9 analysis, but does it support a cost for a screening
10 estimate, meaning, oh, perhaps at that value we
11 would decide to invest more money to move to the
12 next stage of project development.

13 Another secondary characteristic is
14 methodology, the type of estimating methodology that
15 might be applied for estimates by class, and it does
16 identify an expected accuracy range. That's what's
17 identified as an 80 per cent confidence level, and
18 these are a range of ranges. A Class 5 estimate on
19 the low side may be anywhere from minus 20 to minus
20 50. In other words, the range around the P50 value
21 of the estimate -- and I'll come back to that P50 in
22 just a second -- means that, yes, the actual cost
23 may end up being lower than that, but on the high
24 side it may grow typically from plus 30 to plus
25 100 percent for a Class 5 estimate.

1 These are expected accuracy ranges.
2 They're a generalisation that says if you meet the
3 maturity to be called a Class 5 estimate, if you
4 have identified the risks so that you can determine
5 an appropriate contingency that is the P50 -- in
6 other words, a 50 per cent probability of underrun
7 versus overrun, when you include contingency to get
8 to that 50 per cent of probability of underrun
9 versus overrun, then 80 per cent of the time your
10 project may lie within these ranges.

11 They are not to be identified to an
12 individual estimate. They simply provide a target
13 range that you might consider as you're working
14 towards completing the project definition and the
15 expected maturity for each class of estimate.

16 If we move to the next slide, this will
17 become very apparent, that over and over again, the
18 RP states while a target range may be expected,
19 accuracy range should always be determined by a risk
20 analysis for the specific project or the specific
21 estimate. It should never be pre determined, either
22 by the ranges identified in 98R-18, or by any other
23 means of simply assigning a fixed percentage.

24 I'll note that the PFS estimates basically
25 included roughly 10 per cent contingency, which

1 would be an extremely small amount of contingency
2 for a Class 5 estimate. But, again, it appears to
3 be a pre determined fixed amount that was perhaps
4 assigned to that.

5 But, again, at a minimum of three places
6 in 98R, it states "estimate accuracy must be
7 determined through a risk analysis".

8 In the professional guidance document to
9 cost estimate classification -- I'm sorry, the
10 previous slide just for a second -- it also states
11 that "It's worth repeating that accuracy range does
12 not determine the class, nor does the class
13 determine accuracy. Accuracy can only be determined
14 through quantitative risk analysis".

15 So those accuracy ranges that are
16 misapplied and misrepresented by both Mr Comer and
17 Mr Dearman in their expert reports, they cannot be
18 used to indicate accuracy associated with an
19 individual estimate, and they cannot be used, then,
20 as a value to try to de-risk the estimate in one way
21 or another.

22 In Mr Dearman's use of the report by
23 Mr Comer, he tries to use this misapplication of
24 estimate accuracy as trying to describe a derisking
25 of the project, and opines that if the estimate

1 could be considered Class 4, that perhaps that means
2 it has derisked the project to some extent. Well,
3 the first problem is the PFS estimate is not a Class
4 4 estimate. It doesn't come close to meeting the
5 expectations of a Class 4 estimate. It is clearly
6 Class 5.

7 He also hasn't demonstrated that the PFS
8 has derisked the project regardless of estimate
9 class.

10 Neither the PFS nor Mr Dearman ever
11 addressed project risks. The word "risk" appears
12 three times in the PFS. Twice it's just to say,
13 mention, de-risk, that perhaps the PFS can be used
14 to de-risk. It never identifies risks. I would
15 contend it's impossible to state that something has
16 been derisked if you don't understand what the
17 starting risks were and if you don't understand what
18 the ending risks were and what that difference might
19 be.

20 The expected accuracy ranges do not apply
21 to individual estimates and simply cannot be applied
22 in the way that Mr Dearman uses them in his expert
23 report.

24 Mr Dearman can't determine a legitimate
25 accuracy range for the estimate because neither the

1 PFS nor the estimate, nor Mr Dearman in his report,
2 identifies or quantifies risks in some form of risk
3 analysis that would give you a probabilistic range
4 of values that might -- that could be used to
5 accurately talk about risk.

6 Risks are never mentioned. A probability
7 distribution is never created, either in
8 Mr Dearman's report or in the PFS. And even if
9 Mr Dearman could use those expected accuracy ranges,
10 he overstates that potential derisking, and I go
11 into much more detail about that within my report
12 itself.

13 But basically his attempt to determine a
14 value for the contribution of the PFS by derisking
15 the project is entirely dependent on this
16 misapplication of the principles of AACE estimate
17 classification and some invalid calculations.

18 **PRESIDENT:** Mr Dysert, the secretary tells
19 me that you have been going on for something over
20 half an hour, so that you just --

21 **MR DYSERT:** I'm sorry. I meant to go
22 quite quicker.

23 Would you like to ask me questions, or
24 would you like me to very quickly summarise the last
25 two slides?

1 **PRESIDENT:** No, no. Do finalise your
2 presentation. It's just for you to keep in the back
3 of your mind.

14:44

4 **MR DYSERT:** Yes. Just these two last
5 slides then.

6 Mr Dearman's assumption that corporate
7 profit is correlated to an individual project's
8 profit I think is preposterous. There is no way
9 that corporate profit across many, many different
10 projects can be applied to an individual project,
11 and he makes no attempt to try to correlate
12 corporate profit with past profit from any
13 individual project, especially for a rail and port
14 project with similar characteristics as the project
15 in question.

16 He ignores any concept of uncertainty or
17 risk. I identify in the report that there's volumes
18 of public information that rail and similar
19 infrastructure projects often incur cost overruns
20 under the riskiest of all types of projects, and
21 I have some quotes here and they're in my report,
22 but basically Mr Dearman's attempt to quantify
23 project profit based on corporate profit is
24 completely flawed.

25 Next slide.

1 And Mr Dearman's contrived determination
2 of remuneration around engineering services again is
3 flawed. He tries to base it on a percentage of
4 overall profit. In his report he actually has a
5 quote by Karl Erik Sveiby that indicates that
6 although it may not be the best way that a time and
7 materials basis of compensation for engineering and
8 project development is the very most common, yet he
9 ignores that and tries to use a percentage of profit
10 that may or may not exist, may or may not have been
11 the final method of actually developing the project
12 itself. He makes assumptions that PEL would have
13 had all of the engineering work assigned to them.

14 But, again, he makes a lot of assumptions
15 and at the very best, his calculations are
16 speculative at best.

17 That finishes my slide presentation. I'm
18 sorry for running over, but I'm happy to address any
19 questions.

20 **PRESIDENT:** No, no problem, Mr Dysert. It
21 was very interesting. Thank you very much for your
22 presentation.

23 Let me ask Ms Bevilacqua if she has any
24 further questions.

25 **MS BEVILACQUA:** No questions, thank you,

1 Mr President.

2 **PRESIDENT:** Very good. Mr Ho, have you
3 changed your opinion, or you don't have any
4 questions?

5 **MR HO:** No, we don't have any questions.
6 Thank you, Mr President.

7 **PRESIDENT:** Any questions for the expert
8 for Mr Dysert?
9 Questions by the Arbitral Tribunal

10 **PRESIDENT:** I do have one question to you,
11 Mr Dysert, which to me looked counter intuitive.
12 You said that rail are among all projects the
13 riskiest, and I was surprised. I would not have
14 instinctively thought that rail projects are
15 especially risky. I would have thought that maybe
16 constructing a refinery is more risky.

17 Could you expand on this?

18 **MR DYSERT:** Yes.

19 Again, what I was referring to was a lot
20 of industry documents, I reference some of them in
21 my report, and others are referenced within 98R-18
22 and the list of references is at the back. Rail
23 projects -- one of the primary problems is that
24 infrastructure projects in general, which are
25 typically government sponsored or funded by

1 governments in one fashion or another, there's a lot
2 of political issues that sometimes become involved
3 in those types of projects.

4 So there's political risk around funding,
5 around keeping the funding going. So even -- for
6 example, I was involved in the California high-speed
7 rail project as an example. Yes, it's a linear
8 function, rail is linear, and you would think that
9 therefore it's easy to quantify of, but it's all the
10 political issues, and especially when you're dealing
11 with any project that crosses a long period of time,
12 maybe crossing jurisdictions, and now you're having
13 to get the agreement between government entities,
14 whether it's -- in the United States it would be
15 city, county, state, there may be regional
16 differences or villages or cities within Mozambique
17 that come into play, and they sometimes change over
18 the course of time.

19 The other is that often these
20 infrastructure estimates and rails in particular, as
21 an example, sometimes are funded at a relatively
22 early stage. Sometimes the funding decision is made
23 at perhaps a Class 4 estimate, because they're
24 long-term projects, there's a need to get them on,
25 and so you're funding them at a Class 4 stage of

1 definition, whereas in the refinery or in the
2 process industries that is not done. Almost
3 exclusively they wait until Class 3 definition,
4 which is an order of magnitude greater, before they
5 make a funding decision, so early funding decisions,
6 political differences, and in many infrastructure
7 cases -- and this is where Mr Flyvbjerg's research
8 comes into play, is that sometimes in order to get
9 bonds passed or to get the government to agree,
10 there is an inclination to want to support a lower
11 level of cost or to not address all of the risks
12 associated with the project. We can fund it at
13 5 billion but if the real answer is 6 billion, well,
14 let's call it 5 billion and fund the project and
15 let's get it going.

16 In some cases that may still be of value
17 to the government entity that yes, finally it gets
18 built and it has benefits that go beyond simply
19 obtaining the revenue to pay off the loans to build
20 it in support of other activities, in support of
21 growing the economy or other things, but sometimes
22 the decisions are not the correct decisions, they're
23 often made much earlier than they would be in other
24 industries, and the political aspects of
25 jurisdictions and all of those issues are often not

1 contemplated as fully as they should be, and so
2 infrastructures in general have a very poor state of
3 accuracy in comparison with most industries.

4 **PRESIDENT:** Thank you. Thank you for that
5 explanation.

6 Is there any other follow-up question?

7 No?

8 Mr Dysert, thank you very much. We let
9 you out into the sun of Arizona, and enjoy the
10 day -- thank you -- and the weekend. Thank you very
11 much --

12 **MR DYSERT:** Thank you very much.

13 **PRESIDENT:** -- for having been here with
14 us and illustrating us on this AACE classes, which
15 always come up in projects, and it's always
16 interesting to hear about them.

17 **MR DYSERT:** OK.

18 **PRESIDENT:** Thank you very much.

19 **MR DYSERT:** Very good. Thank you very
20 much. And good luck to Portugal in the World Cup!

21 **PRESIDENT:** OK. To the Portuguese here,
22 we'll pass on your congratulations.

23 **MR DYSERT:** Very good. Bye for now.

24 **PRESIDENT:** Thank you. Very good. So
25 that was Mr Dysert.

1 Let's now take a short break. It's 14.52.

14:52

2 Let's come back at 1500 with the next expert, who
3 should be --

4 **MR HO:** That will be Secretariat.

5 **PRESIDENT:** Secretariat. We now start
6 with Claimant. Very good.

7 (Short break from 2.53 pm to 3.07 pm)

8 KIRAN SEQUEIRA

9 **PRESIDENT:** We resume the hearing, and we
10 do so in order to depose Mr Sequeira. How do you
11 do, sir.

12 **MR SEQUEIRA:** Very well. Thank you,
13 Mr President.

14 **PRESIDENT:** Mr Sequeira, you are here as
15 an expert, so the first thing we have to do is we
16 have to take your declaration as an expert. Would
17 you kindly stand up?

18 Do you solemnly declare upon your honour
19 and conscience that you will speak the truth, the
20 whole truth and nothing but the truth and that your
21 statement will be in accordance with your sincere
22 belief.

23 **MR SEQUEIRA:** Yes, I confirm.

24 **PRESIDENT:** Very good. Mr Ho, do you want
25 to introduce the expert?

1 **MR HO:** I will.

2 Examination by Claimant

3 **MR HO:** Good afternoon, Mr Sequeira.

4 You've produced two reports in these proceedings.

5 The first is dated 30 October 2020, and that's at

6 CER-2 for those in the electronic version.

7 Could you turn to page 97 in that report,

8 please? And you'll see there are two signatures at

9 the top of the page. Is one of those signatures

10 yours?

11 **MR SEQUEIRA:** Yes, it is.

12 **MR HO:** And do the opinions which you've

13 expressed in this report represent your true and

14 complete professional opinion on the matters to

15 which you refer?

16 **MR SEQUEIRA:** Yes, they do.

17 **MR HO:** Thank you. And your second report

18 is dated 9 August 2021, that's at CER-5, and if you

19 turn in that to page 90, again you'll see two

20 signatures towards the bottom of the page. Is one

21 of those yours?

22 **MR SEQUEIRA:** Yes, it is.

23 **MR HO:** And do the opinions which you've

24 expressed in this report represent your true and

25 complete professional opinion on the matters to

1 which you refer?

2 **MR SEQUEIRA:** Yes, they do.

3 **MR HO:** Thank you. We will put up your
4 slides for your direct presentation then.

5 **MR SEQUEIRA:** Thank you.

6 **PRESIDENT:** You have a presentation, and
7 it is H-9. I forgot to say, by the way, that
8 Mr Dysert's presentation had been H-8.

9 You have the floor, Mr Sequeira.

10 Presentation

11 **MR SEQUEIRA:** Good afternoon,
12 Mr President, members of the Tribunal, and thank you
13 for this opportunity to summarise my findings on
14 damages.

15 So this is just a list of the topics that
16 I will cover with you over the next 30 minutes or
17 so. Next slide.

18 So I'll start with a discussion of some
19 background information on the project and Claimant's
20 investment that are relevant to the valuation of the
21 project in this case.

22 So on this slide here to the left you see
23 a map of the Tete region which is known for vast
24 reserves of high quality coal, and in the map in the
25 middle we zoom into the coal producing area of

1 Mozambique, and there you see the mines which are
2 represented by these stars. Some of the more
3 significant mines that would supply coal to the
4 project would be the Benga mine which you see in the
5 middle, and the Chirodzi mine at the top left. The
6 Benga mine is owned by ICVL which is a consortium of
7 Indian public sector companies producing steel and
8 power. The Chirodzi mine is owned by Jindal which
9 is also another large Indian steel and power
10 producer.

11 These mines contained a mix of both
12 thermal coal used for power production as well as
13 metallurgical coal which is used in steel
14 production.

15 Historically, however, the production
16 levels of these mines were far lower than the
17 production capacity of these mines, and that was
18 because the cost to transport coal from the mines to
19 the port on the east was very expensive, and I'll
20 talk about this a bit more on the next slide.

21 Now, this slide is quite important to
22 understand the business case of the project so I'll
23 spend a few minutes on it. If you look at the map
24 here on the bottom right, you see there are -- it
25 shows both the existing and proposed rail corridors

1 that would connect Tete to Moatize to the coast, so
2 there are three different lines you see there. At
3 the very top there's a red line which is about 912
4 kilometres. That's the Nacala line, the Nacala
5 corridor. The dotted line in the middle is the line
6 to Macuse, which is what this project is all about,
7 and that's the proposed line, and then the line in
8 blue at the bottom is what we call the Sena line,
9 which connects to the Beira port on the south.

10 If we focus for a minute on the blue line,
11 the Beira line or the Sena railway, this was the
12 only access point or the only transportation channel
13 for most of the coal mines that were located on the
14 prior site to send coal from the Tete region down to
15 the ports, but historically it has been both
16 unreliable and inefficient in large part because of
17 capacity constraints at the Beira port.

18 The Beira port is not a deep water port.
19 It can only berth small ships. There were many
20 disruptions due to silting and weather, and there
21 are also issues with capacity because it also
22 handles many other bulk commodities, so this
23 therefore has limited both the efficiencies in this
24 line and the costs on this line historically.

25 Now if you move to the red line at the

1 top, what we call the Nacala line, that is really a
2 patchwork of both brownfield railway, it's about 680
3 kilometres of brownfield railway, and greenfield
4 rail lines, different segments that were built by
5 Vale totalling roughly about 230 kilometres or so,
6 so a total of 912 kilometres. Now, this line goes
7 through Malawi. That's the grey area there. It
8 crosses Malawi at two points. And historically this
9 has been used only by Vale to transport coal from
10 the Moatize mines, it was a captive railroad, and,
11 again, the travel times on this line have been very
12 long and the costs have been extremely high.

13 And travel times are long in part because
14 there are two border crossings and there are
15 regulatory issues, customs and other clearances that
16 are needed, which has also limited the efficiency of
17 this line. And the last line is the Macuse line
18 which is the shortest distance. The Beira line was
19 about 600 kilometres. The line to Macuse which is
20 the dotted line is under 500 kilometres, and it was
21 going to be built as a single track railway
22 connecting the Moatize area to Macuse.

23 Now, it's important to understand the cost
24 to transport coal on these different lines, and we
25 show that in the bar chart to the left, and you can

1 see at the top the Nacala corridor, the average cost
2 in 2019 was \$89 per ton. This is based on the
3 actual data disclosed by Vale in its 2019
4 financials. So that's a very high cost.

5 The Sena-Beira line which is the blue line
6 also has a high cost of \$51 per ton to transport the
7 coal, and finally the Macuse line, based on the data
8 in the bankable feasibility study, is a much lower
9 cost of \$27 per ton.

10 Now, as a rule of thumb, in order for you
11 to have a sustainable thermal coal mining operation
12 the total cost to incur to get the coal from the pit
13 to the port should be no more than \$70 to \$75 for
14 sustainable coal mining, and you can see that
15 includes not just the cost of transport but also the
16 cost of mining.

17 So you can see just from the chart here
18 both the Nacala and the Sena-Beira lines are
19 unsustainable because that's just the cost of
20 transports. You add to that the cost of mining, it
21 significantly increases the cost to transport it to
22 the port. This is the main reason why most of these
23 mines suffered a lot of pain during the 2014 to 2017
24 timeframe when coal prices were low because they
25 still had obligation to supply coal and had to send

1 coal through these lines at high costs and they
2 incurred losses in the bargain. Had they had
3 something like the Macuse line with lower costs,
4 they would not have suffered such financial losses
5 because the Macuse corridor is the only cost
6 efficient corridor to export Mozambique coal. And
7 this, in essence, is the business case for this
8 project.

9 Next slide.

10 Now, where does the coal go? So the coal
11 from Mozambique, the most likely destination is in
12 India, and here I agree with Dr Flores that India
13 over time will reduce its imports of thermal coal,
14 but there will always be a certain level of thermal
15 coal that India will import because India has
16 certain power plants on its coasts that require
17 higher quality thermal coal with lower ash content,
18 so roughly 20 per cent of Indian thermal coal
19 demand, so roughly about 20 per cent of Indian
20 thermal coal demand would be met by imports over the
21 long run. India also imports a lot of metallurgical
22 coal. In fact, roughly 80 per cent of that will be
23 because India simply does not have metallurgical
24 coal domestically, so both those factors will drive
25 coal imports into India.

1 Besides India, you would also have options
2 to export the coal to China and other African
3 nations, and at the end of the day coal is a
4 commodity. So you can always sell the coal either
5 on the spot market or in the forward contracts so
6 long as you can get it to the port in an economic
7 manner.

15:17

8 Next slide.

9 Now, on the left of this slide, this is a
10 timeline that the Tribunal is already familiar with
11 I'm sure. I just wanted to point out here that
12 PEL's investments were made primarily in the
13 2010/2012 timeframe, that's both the Preliminary
14 Study and the PFS that was completed, and this PFS
15 was approved by the MTC in June 2012, but after that
16 PEL was not able to get the concession. Instead,
17 there was a public tender for the concession, which
18 was awarded to TML in July 2013.

19 And on the right side of this slide you
20 see the alignment that was proposed by PEL in its
21 prefeasibility study, which is generally similar to
22 the alignment that was finally arrived at in the
23 bankable feasibility study in the chart below.

24 Next slide.

25 Now I'll move to a summary of the

1 positions on damages, so for my valuation we have
2 assumed, based on instruction, that the concession
3 would have been awarded to Claimants but for
4 Respondent's breaches on terms no less favourable
5 than the concession that was awarded to TML. And
6 Claimant is of the view that it was far better
7 positioned to advance this project than TML because
8 it had a greater level of familiarity with the
9 project, but in order to model the projections from
10 the project we have relied on actual developments in
11 the real world to estimate the progress.

12 Now, the results for valuation are shown
13 on the left of this table. You see we calculate
14 ex post value of 156 million and ex ante value of
15 49 million, and for the ex ante we also calculate
16 pre award interest to get the total nominal damages
17 you see in the middle row of the table, and then
18 we've been asked to apply a loss of a chance to 90
19 per cent to those values. That's an amount the
20 Tribunal can change if it sees fit. On that basis
21 we calculate a value, total damages of 70 million
22 under the ex ante and 140 million under the ex post.

23 Now, Dr Flores' conclusion is the project
24 has zero value in both the ex post and the ex ante
25 scenarios, and the Claimant would only be entitled

1 to sunk costs.

2 Now, the differences between the two
3 experts can be explained in part by legal
4 instruction, but in part by the inputs and
5 assumptions that we use for our respective
6 valuations, which I will explore in the following
7 slides.

8 So before I get into a discussion of the
9 differences between the experts, I just wanted to
10 focus on the fact that Dr Flores' conclusion is zero
11 value for both ex ante and ex post.

12 Now, I believe there are several
13 indicators that suggest that the project has
14 positive value, and while there can be a debate on
15 what that positive value is, I believe that there
16 should be less debate or no debate on the fact that
17 the project has some positive value, so we have
18 listed some of those indicators here.

19 So, for instance, there was a significant
20 interest from bidders in the public tender, over 20
21 bidders that were interested. All of those bidders
22 were willing to pay an upfront concession premium
23 for the rights to develop this project. We know
24 there was a bankable feasibility study that was
25 conducted that approved the economics of the

1 project, there was a high IRR of 17.5 per cent, and
2 a significant positive NPV.

3 And while the project has been delayed in
4 the real world, in part because of lower coal prices
5 and the pandemic, it is still moving forward in two
6 phases. In the first phase it will entail
7 construction of the port at a lower level of
8 capacity. The financing for this has been
9 completed. And the second phase involves
10 constructing the railway and expanding the port.

11 In fact, as recently as August 2022 TML
12 announced that the conditions right now are
13 favourable for building the railway given the
14 current outlook for coal which is the best it's been
15 in a long time, and I think Respondent in its
16 opening suggested that the project was dead. That
17 is not correct. And I think the current environment
18 is quite relevant. So coal prices were rising in
19 the latter half of 2021, but after the Ukraine
20 conflict, both because of the embargoes on Russian
21 coal, Russia being a big exporter, and because of
22 the plan to reduce the reliance on Russian gas, the
23 outlook for coal has improved significantly.

24 For instance, at the time of the PFS, the
25 long-term price expectation for coal was \$80 per

1 ton. Today, if you look at futures prices
2 four years out, December 2026, the futures prices
3 are well above \$150 a ton, and the long-term view on
4 coal prices is in the realm of \$90 to \$100 a ton, so
5 a significantly higher pricing compared to when the
6 PFS was done, all of which would support a more
7 favourable outlook compared to the past, you know,
8 five or ten years, as far as looking out into the
9 outlook in the future for this project going
10 forward.

11 Next slide.

12 Now focusing on the framework for
13 quantifying loss, here one of the differences
14 I mentioned was legal instructions so we assumed
15 Claimants were entitled to the rights to the
16 concession. Dr Flores was instructed that the MOI
17 does not give Claimants the rights to the
18 concession.

19 Then with the valuation method we rely on
20 the DCF method, both in the ex post and the ex ante,
21 and Dr Flores relies on sunk costs, so these explain
22 the differences in our conclusions.

23 Next slide.

24 Now, in terms of the appropriate method to
25 value this project or the concession, in my

1 experience concessions like this for pre operational
2 infrastructure projects are universally valued using
3 the DCF method because that is the only method that
4 can be used to evaluate the revenues and costs and
5 risks that are specific to the project, and that's
6 what investors use to evaluate and make investment
7 decisions on projects like this.

8 It's hard to use market or asset-based
9 approaches because these are constructions,
10 concessions are specific in terms of the terms and
11 conditions, duration, and so the DCF method is by
12 far the method that is used by real-world investors
13 to value such projects in the real world.

14 Now, for this project we know we have a
15 PFS. We also have the bankable feasibility study,
16 and the technical and economic status of this
17 project was proved in that bankable feasibility
18 study.

19 Dr Flores and Respondent have said these
20 feasibility studies tend to offer overly rosy
21 pictures of the project's prospects. As a licensed
22 engineer, I would disagree with that. We have a
23 code of ethics and we're obligated to do this work
24 with a level of diligence and rigour on a bottom-up
25 basis, and the results are what they are.

1 I should flag here this feasibility study
2 was completed by CRCC, China Railway Construction
3 Corporation. It's a highly credible entity with
4 significant experience with greenfield rail
5 projects, both in Africa and across the globe, so
6 there's no reason to question the findings and the
7 results of the feasibility study. And in fact it
8 does confirm the project was both technically and
9 economically feasible.

10 Next slide.

11 So now I'll move to the discussion of the
12 ex post valuation, which has a date of July 2021.
13 As I noted earlier we calculate an ex post value of
14 156 million. On this slide I've listed the major
15 assumptions for the DCF valuation, and I've also
16 listed the sources for these assumptions, and as you
17 can see on the right of this table most of these
18 assumptions come from the TML bankable feasibility
19 study because I believe that is the most reliable
20 input that's project specific that can be used to
21 develop projections for this project.

22 Next slide.

23 Now, this slide is the same slide as the
24 prior slide except in blue I've highlighted the
25 different assumptions where the experts disagree,

1 and you see there's, you know, some at the top and a
2 few below. I will go through these in the following
3 slides, but I'll go through them quickly.

4 And so on these slides -- next slide --
5 I've listed each of those areas of disagreement with
6 Dr Flores' argument, together with my responses to
7 those arguments. I won't go through each of these
8 but they are here with references to the record for
9 the Tribunal's benefit.

10 For instance, here, if you look at just
11 the last one, the tariffs, you know, Dr Flores
12 argues that there would be downward pressure on
13 tariffs because of competition from existing rail
14 corridors, so we disagree with that. As I showed
15 earlier, the tariffs for this railway line were much
16 lower than those of competing railways, so if
17 anything there's perhaps room to increase tariffs,
18 but I don't see there being downward pressure from
19 competition.

20 Next slide.

21 This again relates to the O&M costs and
22 Dr Flores says those costs we use are too low.
23 Again, I don't believe there's a reason to question
24 these costs. They were done based on a bottom-up
25 analysis for the project in the feasibility study.

1 You'd expect these to be low because this is a
2 fairly simple greenfield, single track railway, very
3 different from the more complex and older systems
4 that we might use for a benchmarking analysis.

5 Next slide.

6 Here there's some differences regarding
7 the construction start date, the capex amount. The
8 capex, I should say Dr Flores runs some sensitivity
9 analyses and he says that the construction costs are
10 22 per cent higher. You know, it could reduce or
11 eliminate damages. Again, and he relies on a
12 flawed -- at least I view it as a flawed -- reliance
13 on a study that talks about cost overruns. I think
14 the cost estimate that was prepared is detailed,
15 it's conservative, and includes a contingency of
16 10 per cent. And in these cases a lot of the cost
17 risk is passed on to the EPC contractor, so there is
18 protection on cost overruns to the lump sum EPC
19 contract.

20 Next slide.

21 **PRESIDENT:** Can I ask you what do you mean
22 by a 2 per cent pre operational premium?

23 **MR SEQUEIRA:** What we have done is,
24 because this project was not yet operational, we
25 have taken the discount rate of the cost of equity

1 of an operational company in Mozambique and added an
2 additional 2 per cent premium for the fact that
3 there are some additional risks for a pre
4 operational company such as construction risks and
5 financing risks. So that is an additional risk
6 premium that we apply over and above the baseline
7 discount rate that we calculate.

8 **PRESIDENT:** During the period of
9 construction?

10 **MR SEQUEIRA:** Correct. From the time --

11 **PRESIDENT:** Then you reduce the discount
12 rate by 2 per cent?

13 **MR SEQUEIRA:** Correct. That's right.
14 That's right.

15 Coming to discount rate, and you'll see
16 some of that in here as well, so, you know, we both
17 use the CAPM model to calculate the discount rate
18 but, as you know, the discount rate is calculated as
19 a build up. You start with a risk free rate and you
20 add on different premia to the risk free rates. In
21 here I've highlighted in red the rows where we
22 disagree, that is Dr Flores and I disagree, but if
23 you look at the bottom row, just to start, we
24 calculate a cost of equity of 18 per cent levered,
25 that is levered meaning when you have debt on your

1 books, and unlevered, which is when the debt is paid
2 down entirely, which is about 15 years later, the
3 cost of equity drops to 10.32 because there's no
4 longer any debt on the books.

15:31

5 Dr Flores has much higher discount rates
6 of 26 per cent levered and 18 per cent unlevered,
7 and those differences are driven by those four rows
8 within the red box which I'll briefly discuss in the
9 next few slides.

10 Next slide.

11 The first difference relates to the equity
12 risk premium. We've used three reliable sources,
13 all of which give you estimates of the current ERP.
14 Dr Flores uses a source from Duff & Phelps that
15 looks at historical data over an 80 to 90 year
16 period. It doesn't give you a view on the current
17 ERP. In fact, the very source he relies on,
18 Duff & Phelps, cautions against using such
19 historical data to estimate the current ERP which
20 we've quoted here on the slide.

21 Next slide.

22 Country risk premium. We use a country
23 risk premium of 5.68 per cent. Dr Flores has a
24 country risk premium of 7.89 per cent. There are
25 two main differences that drive the delta in these

1 two numbers. The first is we rely in part on a
2 survey by Professor Fernandez. It's a survey we've
3 used for country risk assessments for many other
4 projects across the globe. I believe it's a
5 reliable basis to apply country risk but Dr Flores
6 does not use it. He does not believe it's reliable.

7 The second is the fact that we assume that
8 country risk should not include risks that are
9 protected under the BIT, and this is based on a
10 legal instruction where risks related to
11 expropriation and repatriation of capital are not
12 included or are stripped out from the total country
13 risk, whereas Dr Flores takes the view that those
14 risks should all be included in the country risk,
15 and that's the second reason we have a difference
16 here.

17 Now, these are some additional risk
18 premia. Dr Flores applies a 2 per cent pre
19 operational risk. We also apply the same risk but
20 we apply it only for the period to operations or
21 until the project starts operating.

22 There's also an illiquidity or a size
23 premium that Dr Flores applies. Again, we don't
24 believe this applies because this project is not a
25 small project. The size premium is applied because

1 of small projects or small companies. This project
2 is not a small project for Mozambique, it's actually
3 a large project, and even if you were in the US and
4 trying to apply size premiums, there's a lot of data
5 in recent years that shows the size premium no
6 longer applies and is not relevant, and I've
7 provided several cites in my second report that talk
8 about this.

9 Next slide.

10 Now, I just wanted to comment briefly on
11 some reasonableness checks for valuation. In our
12 first report we relied on a 2017 transaction for the
13 NLC, that's the Nacala Logistics Corridor, for a
14 potential reasonableness check. Now, Dr Flores has
15 identified a 2021 transaction for NLC, which he says
16 implies a zero equity value.

17 We believe this transaction cannot be used
18 as a reasonableness check because this was
19 associated with Vale's decision to exit coal all
20 together, it was a strategic decision driven by
21 Vale's ESG agenda and its goal to become a carbon
22 free coal miner or a carbon free miner, and the
23 other piece to remember, as I mentioned earlier, is
24 that the costs to transport coal on this NLC
25 corridor were very high, \$89 per ton, which did not

1 enable a profitable operation of that route.

15:35

2 Now, on the right-hand side I also want to
3 comment on the use of the ITD market cap. Dr Flores
4 looks at the ITD market cap and says that that shows
5 that the project valuation we come up with is too
6 high. Now, I don't think the ITD market cap can be
7 used as a reasonableness check because it was
8 significantly impacted by a negative investor
9 sentiment in recent years, and you can see that in
10 the chart on the bottom right where you see that the
11 debt load of the company has gone up significantly
12 and its equity value has dropped significantly.

13 This is in part because the company has
14 taken on projects that have been loss-making. It
15 has suffered net losses of 40 million in the past
16 two years, has not paid dividends, and it's also at
17 risk of violating its debt covenants. You see some
18 quotes here from the analysts that talk about the
19 high level of debt and the risk of financial
20 distress, all of which has contributed to a negative
21 sentiment on the stock, and explains the low market
22 valuation ascribed to ITD today.

23 **PRESIDENT:** Can you give us a little bit
24 of background what ITD's stock represents and where
25 it's traded?

1 **MR SEQUEIRA:** ITD is Italian Thai
2 Development, the lead entity, right, that was part
3 of the TML consortium, right? And it trades on the
4 Bangkok Stock Exchange, and it implements
5 infrastructure projects globally but primarily in
6 Thailand, a lot of work for the Thailand government.
7 These are some long-tail projects, infrastructure,
8 some rail, bridges, highways, so a broadbased
9 portfolio of infrastructure projects, but in recent
10 years it has had a tough time with its performance.
11 Some of the projects have had some trouble, they
12 have not taken off, they've had some losses suffered
13 in projects, so the analyst coverage indicates that
14 investor sentiment has not been good in recent
15 years.

16 Now, moving to the ex ante valuation, we
17 calculated an ex ante value of 49 million. This is
18 a similar table which lists all of the DCF inputs
19 for the ex ante valuation and, again, we've outlined
20 in blue the assumptions where Dr Flores disagrees
21 with us. Some of these are similar to the ex post
22 disagreements, but some of them are specific to
23 ex ante.

24 Next slide.

25 In this slide I have listed in the upper

1 part of the slide the issues that overlap with the
2 ex post disagreements but then the bottom part of
3 the slide there are a few additional items that are
4 specific to ex ante which I'll briefly cover in the
5 next few slides.

6 Next slide.

7 So again, here I've listed the issue,
8 Dr Flores' argument, and our response to it.
9 I won't go through these one by one but the Tribunal
10 has these for reference for its benefit.

11 Next slide.

12 Country risk. I'll briefly comment on
13 this one. So Dr Flores relies on a Duff & Phelps
14 country risk rating model which shows a country risk
15 of 17.5 per cent for Mozambique in 2013. Now, we
16 believe this data is unreliable, and you can glean
17 this if you look at Mozambique's credit ratings.

18 Mozambique's credit ratings actually
19 deteriorated between 2013 and 2021 but, according to
20 this source, this Duff & Phelps source, they show
21 the country risk actually going down from 17.5 in
22 2013 to 8.3 in 2021, which cannot be right because
23 the credit rating dropped and so country risk should
24 be going up, so again, we believe that data point is
25 unreliable and cannot be used for a country risk

1 premium calculation in 2013.

2 Next slide.

3 This is a reasonableness check we ran on
4 our ex ante valuation using the concession premium.
5 Now, the concession premium is the amount that the
6 buyer -- in this case TML -- would agree to pay and
7 the seller, the government, would agree or be
8 willing to accept for the rights to develop and
9 operate the project.

10 This concession premium was made up of two
11 parts. There was an upfront payment you see in the
12 chart of \$5 million, and then there were royalties
13 that were payable to the government over time, there
14 was 2 per cent royalties initially and then going up
15 to 5 per cent of revenues over time, so you can
16 calculate the net present value of this cash flow
17 stream by discounting these royalties back to the
18 present date and adding the upfront payment, and if
19 we do that, we get an NPV of 105 million, and if you
20 were to allocate that to PEL's stake, we get a value
21 of 46 million which is generally in line with our
22 ex ante valuation. And I should note here that when
23 discounting the royalties, we use a discount rate
24 that is between the cost of debt and the cost of
25 equity, because royalties are similar to debt except

1 that they don't have any collateral tied to them so
2 they are riskier than debt, but they don't have the
3 same cost side risks that equity cash flows have,
4 and so we use an intermediate discount rate to
5 discount these future cash flows.

6 **PRESIDENT:** I'm lost. Why do you
7 calculate the present value of the future royalty
8 payments?

9 **MR SEQUEIRA:** So what we were trying to do
10 here is evaluate the amounts that the government is
11 getting for the concession. Right? So it was
12 getting two things. It was getting an upfront
13 payment, \$5 million, but it was also going to get a
14 royalty stream over time, so if you want to
15 calculate the value of that, so from a standpoint of
16 a fair market value assessment of what a buyer and
17 seller agreed to pay for a certain asset, these are
18 the rights being the concession rights, you would
19 consider both the upfront payment that's being made
20 and the future stream of cash that would be paid
21 from the operations of the concession.

22 So in order to convert that to a point
23 estimate of value, we have to discount the expected
24 royalty stream that the government would get.

25 **PRESIDENT:** And you would make the

1 argument that this is the value of the contracts to
2 the government?

15:41

3 **MR SEQUEIRA:** That's right. This is the
4 value that the government is getting from this
5 concession, over and above the tax. You know,
6 there's always going to be taxes but the taxes is
7 something the government would get on any project.
8 Any private project would also get taxes but these
9 are the incremental proceeds the government would
10 get from concessioning these rights to a private
11 entity.

12 **PRESIDENT:** And you apply which discount
13 rate?

14 **MR SEQUEIRA:** So we apply a discount rate
15 that is the average of the debt and the equity, so
16 we take the cost of debt, take the cost of equity,
17 and we take the average of the two because the
18 royalties are a little bit of a hybrid instrument.
19 They're not like equity dividends because they don't
20 have any cost side risks, but they're also not like
21 debt because debt has secured against this
22 collateral against the debt whereas royalties don't
23 have any collateral so we take an intermediate
24 discount rate between the two.

25 **PRESIDENT:** OK.

1 **MR SEQUEIRA:** So this is our damages
2 conclusion. I've gone through this before, but
3 essentially we add pre award interest to the ex ante
4 values to calculate damages as of August 2021, then
5 apply a 90 per cent loss of a chance to get damages
6 in the range of 70 to 140 million.

7 Next slide.

8 And, finally, just a few comments on pre
9 award interest. So it only applies to the ex ante
10 damages because ex post damages don't have any pre
11 award interest, so we use a pre award interest of US
12 prime plus 2 per cent, which is roughly about
13 6 per cent for the period over which we calculate
14 interest.

15 Now, US prime is a rate that banks charge
16 their most creditworthy customers, so it's not
17 widely available in the market, so to reflect a rate
18 that's more widely available, we consider a 2
19 per cent premium over the US prime rate as a proxy
20 for a reasonable commercial rate.

21 Now, Dr Flores argues for a risk-free rate
22 of interest. I would disagree with using a
23 risk-free rate. His main argument supporting a
24 risk-free rate is to say that the damages award is
25 not exposed to any risk. It's risk-free.

1 I disagree with that. Damages award, you know,
2 there's uncertainty as to whether or when a damages
3 award will be paid, how much will be collected, and
4 so arguably a damages award has as much risk as
5 Mozambique's sovereign bonds, so I think it's
6 certainly exposed to risk.

7 The second point is that the risk-free
8 rate only compensates for time value of money, it
9 doesn't compensate for the opportunity cost of
10 money, so I don't think that can be considered a
11 commercially reasonable rate.

12 And, finally, I should say that if you
13 look at the data on awards, if you look at the last
14 five years of awards from 2016 to 2021 of over 90
15 awards that have been issued, I think only four
16 awards have issued a risk-free rate of interest.
17 More than half of those awards have issued interest
18 based on a benchmark rate such as LIBOR or prime,
19 plus a small premium.

20 So again, I think from a standpoint of
21 awards as well a risk-free rate does not align.

22 So, in conclusion, I would say that with
23 regard to pre award interest from an economic
24 standpoint, a risk-free rate would under-compensate
25 the Claimant for the loss it has suffered.

1 That concludes my presentation. Thank
2 you.

3 **PRESIDENT:** Thank you, Mr Sequeira.

4 Mr Ho, any further questions for the expert?

5 **MR HO:** No, thank you, Mr President.

6 **PRESIDENT:** Mr Brown, I see you with the
7 intention of taking the floor, so I give you the
8 floor.

9 **MR BROWN:** Thank you, Mr President.

10 Cross-examination by Respondent

11 **MR BROWN:** Good afternoon, Mr Sequeira.

12 Will you turn to slide 5 of your
13 presentation, please?

14 **MR SEQUEIRA:** Yes. I'm there, counsel.

15 **MR BROWN:** Very good. In this slide you
16 said it's important for us to understand a few
17 things here, and you first started talking about the
18 rail lines that are depicted in the map of
19 Mozambique, correct.

20 **MR SEQUEIRA:** That is correct.

21 **MR BROWN:** And the Nacala line is the one
22 that runs east and west, correct?

23 **MR SEQUEIRA:** The red line, yes, correct.

24 **MR BROWN:** And the Nacala line has been
25 improved since 2012, correct?

1 **MR SEQUEIRA:** So I don't think that's
2 exactly right. If I can provide a little context
3 there.

4 So the Nacala line is essentially a
5 combination of existing railway, brownfield railway,
6 that was connected with new rail lines that were
7 built by Vale, and that all came together over a
8 fairly long period of time, and I think ultimately
9 the integrated or stitched together kind of railroad
10 I think started operating in 2017.

11 But there were projects under way over a
12 fairly long period of time to pull it all together
13 into an integrated line that would connect the Tete
14 region to the port of Nacala.

15 **MR BROWN:** And those projects that you're
16 describing included projects from 2012 through 2017,
17 for instance?

18 **MR SEQUEIRA:** They would, yes.

19 **MR BROWN:** Yes, OK.

20 And then the blue line that you've
21 depicted runs down to the Beira port, correct?

22 **MR SEQUEIRA:** That is correct.

23 **MR BROWN:** And, in fact, you know that in
24 2017, ESSAR ports, an Indian port and terminal
25 company, signed a 30-year concession agreement with

1 Mozambique, correct?

2 **MR SEQUEIRA:** I believe that's correct,
3 yes.

4 **MR BROWN:** And, in that concession
5 agreement, ESSAR ports is developing a new
6 20 million ton a year coal terminal at the Beira
7 port, correct?

8 **MR SEQUEIRA:** Can you point me to where
9 that is in the record?

10 **MR BROWN:** Sure. If you care to look at
11 QE-92, I can get that on the screen and I can get
12 you a little sister computer that we've got here so
13 you can look at it as well.

14 **MR SEQUEIRA:** Sure.

15 **MR BROWN:** I apologise because it's the
16 first time we'll do this so it will take just a
17 moment to get you oriented to that document as well
18 but I have displayed it on the screen too.

19 **MR SEQUEIRA:** I'm happy to look at the
20 screen too.

21 **MR BROWN:** We can blow it up if you would
22 care to or flip to the next page as well.

23 **MR SEQUEIRA:** Can we go down a page?

24 Right. So I read this here, counsel, I'm
25 looking at the 20 MTPA, it's really talking about

1 the rail line there so if you look at the second
2 paragraph, the upgrades they're talking about are to
3 the rail line going to 20 MTPA.

4 **MR BROWN:** In fact the port is now also
5 being improved, is it not?

6 **MR SEQUEIRA:** That doesn't say out here.
7 Is there another exhibit that discusses that?

8 **MR BROWN:** No, I'm asking whether you know
9 on that.

10 **MR SEQUEIRA:** I'm not aware of that. So
11 I do know that the rail line had some expansions and
12 I discuss that in table 6 of my second report where
13 I go through and talk about the fact that the rail
14 line does have a lot of capacity but the port does
15 not, and so that creates constraints at the port.

16 **MR BROWN:** And if Mozambique was
17 interested in making sure that its coal exporting
18 capacity was increased as between building an entire
19 new 600 kilometre rail line, another option in fact
20 would be simply improving the port at Beira,
21 correct?

22 **MR SEQUEIRA:** I think there's some
23 significant limitations to the Beira port, so I
24 think I have explained this in my reports. The port
25 has weather related disruptions, there's a lot of

1 silting there, it's not a deep water port, you can't
2 berth large ships, so there are significant
3 limitations with the Beira port.

4 **MR BROWN:** And I think I asked you already
5 but you're not aware of what improvements are being
6 made to the Beira port, correct?

7 **MR SEQUEIRA:** I am not. If you take me to
8 an exhibit we can discuss it but I have not seen
9 any, no.

10 **MR BROWN:** Another question on this slide.
11 You've reported on the left-hand side of the slide
12 that the Nacala -- it says "Rail and port tariff".
13 Do you see that?

14 **MR SEQUEIRA:** Let me get my glasses.

15 **MR BROWN:** Very good.

16 **MR SEQUEIRA:** Yes.

17 **MR BROWN:** And I think you described the
18 number 89 for Nacala, correct?

19 **MR SEQUEIRA:** Yes.

20 **MR BROWN:** And that's actually a
21 calculation that you did to get that 89 number,
22 right?

23 **MR SEQUEIRA:** That is correct. It's based
24 on data in Vale's financials.

25 **MR BROWN:** Actuals, correct?

1 **MR SEQUEIRA:** Actuals, correct.

2 **MR BROWN:** And the Sena-Beira 2017 number
3 of 51, that's also an actuals number, correct?

4 **MR SEQUEIRA:** That is correct, yes.

5 **MR BROWN:** The Macuse number that you use
6 is actually based upon the TML study, correct?

7 **MR SEQUEIRA:** That is correct, yes.

8 **MR BROWN:** It's not an actual number?

9 **MR SEQUEIRA:** That is correct. It's based
10 on the detailed cost estimates that were prepared in
11 the TML feasibility study.

12 **MR BROWN:** And that feasibility study is
13 now five years old, correct?

14 **MR SEQUEIRA:** It is five years old, but
15 I would say that the tariff charged there was done,
16 was developed at a time when coal prices were quite
17 low. So 2017, you know, coal prices slumped in the
18 2015, 2016, and 2017 period, so if anything, if you
19 were to revisit that today, if anything there might
20 be some upward pressure on that tariff, but I think
21 that's still a pretty reasonable tariff in today's
22 coal price environment.

23 **MR BROWN:** If we look at history for a
24 moment, in fact, in your ex ante analysis you use a
25 tariff price of \$39 a ton, correct?

1 **MR SEQUEIRA:** That is correct, and that is
2 going back to the 2013 timeframe when the coal price
3 expectations were much higher than they were in
4 2017. That shows the point I'm making -- the same
5 point I was making earlier, that we're back there
6 today. In fact we're at a much higher level in
7 terms of the outlook of coal prices compared to even
8 2013.

15:52

9 **MR BROWN:** To be clear, though, as of
10 right now, there is no Macuse rail line or deep
11 water port, correct?

12 **MR SEQUEIRA:** Correct. It has not yet
13 been built, no.

14 **PRESIDENT:** Sorry. It's not quite clear
15 to me how you get to 27. Where do you get it?

16 **MR SEQUEIRA:** So how we calculated the 27?

17 **PRESIDENT:** Yes.

18 (Discussion off the record)

19 **PRESIDENT:** We are now back on the
20 transcript and my question was how you calculated
21 this 27 US dollars per ton expected cost for the
22 Macuse railway. This includes railway or railway
23 and port?

24 **MR SEQUEIRA:** It's railway and port
25 together, yes.

1 So this comes from the detailed analysis
2 in the bankable feasibility study that was done by
3 TML prepared by China Railway Construction
4 Corporation, and it's done based on -- there was a
5 dual tariff system in there, so there was one price
6 model for thermal coal which was \$25 per ton, and
7 there was a second price model for the metallurgical
8 coal, which was \$35 per ton, so there were two
9 different prices.

10 But the majority of the coal there was
11 thermal coal that was to be transported, so this is
12 the weighted average of the two tariffs which is the
13 \$27 per ton that we have reflected here.

14 **PRESIDENT:** Because Dr Flores is also
15 raising some issues about monopoly, monopoly
16 pricing, and I just wonder, this is just the minimum
17 price which would guarantee the bankability of the
18 project, or is it the price which the rail and port
19 provider thought it could press out of the mining
20 companies?

21 **MR SEQUEIRA:** Yeah. It's a good question,
22 and I think there is discussion of this in the
23 bankable feasibility study. They commissioned a
24 separate report from Wood Mackenzie, which is, you
25 know, a kind of coal market expert, if you may, and

1 they came to some assessments of what is a
2 sustainable tariff you can charge that will ensure
3 the mining operation can be profitable, right?
4 Because ultimately this is all about the
5 profitability of the mines, because you're
6 transporting coal and the miners have to be
7 profitable for you to support that operation.

8 So this comes back to the point I think
9 that was made, I think it was Wood Mackenzie that
10 said that, in order for you to support sustainable
11 mining operations, you need to have a total cost to
12 the port of \$75 or less, so meaning that the cost of
13 mining plus the cost of transport should be no more
14 than \$70 to \$75, because coal prices can go up, they
15 can go down, so you want to make sure that even
16 during the down periods there is still some cushion
17 left for those miners to make some money.

18 So on that basis, they came up with an
19 analysis of what is a sustainable tariff they
20 charge. It's charging a little more for the
21 metallurgical coal because metallurgical coal
22 typically sells for a higher price on the world
23 market than thermal coal. It's not true today
24 because of some distortions, but generally speaking
25 that is the case, and that was the analysis that was

1 done in the feasibility study.

2 **PRESIDENT:** Thank you. Sorry, Mr Brown.

3 **MR BROWN:** I wonder if I could follow up
4 actually with a question that you had asked for a
5 moment. This will take us just a little bit of
6 gymnastics here, I apologise.

7 It's page 44 of the exhibit, I believe
8 it's page 45 of the second. Can I help you for just
9 a moment?

10 **PRESIDENT:** So we are in page 45 of his
11 second witness?

12 **MR BROWN:** I will say it again. Where I'd
13 like to be is on page 44 of Dr Flores' second
14 report. It's RER-9.

15 **MR SEQUEIRA:** Yes, I'm there counsel.

16 **MR BROWN:** You see figure 3 that we've put
17 on the screen and that you've got in front of you?

18 **MR SEQUEIRA:** Yes.

19 **MR BROWN:** And you do recognise this is a
20 sensitivity analysis, correct?

21 **MR SEQUEIRA:** This is a sensitivity
22 analysis that you could run on any DCF, right. When
23 you vary inputs and assumptions, you're going to get
24 changes in your outputs. But yes.

25 **MR BROWN:** I think actually you had been

1 asked the question by the president about where the
2 27 million tons of throughput came from, correct?

3 **MR SEQUEIRA:** So that was not throughput,
4 counsel. The 27 dollars per ton --

5 **MR BROWN:** I'm sorry.

6 **MR SEQUEIRA:** -- was the tariff that was
7 being charged.

8 **MR BROWN:** You are quite right, and I've
9 mistaken those things and I apologise. We'll move
10 on, thank you.

11 I would like you to turn to page 9 of your
12 presentation, thank you.

13 **MR SEQUEIRA:** Yes.

14 **MR BROWN:** I believe that when we got to
15 this point in the presentation you had made the
16 comment that you were going to be using the TML
17 feasibility study for some of the inputs because --
18 and I think I wrote this down approximately
19 correctly -- because you want to rely on actual
20 developments, correct?

21 **MR SEQUEIRA:** Right. So if I may just
22 provide some context, what we're trying to do is
23 model what would have happened in a but-for world,
24 so but for the breaches where you would have had a
25 concession awarded to PEL, PEL intended to do its

1 own bankable feasibility study. We have therefore
2 used this bankable feasibility study as a proxy for
3 what might have happened in the but-for world.

4 **MR BROWN:** There have been some other
5 events in the but-for world as well. Can we look at
6 QE-99? If you need a copy of that, you're welcome
7 to use the computer there, but we are going to put
8 it on the screen.

9 **MR SEQUEIRA:** That's fine. Thank you.

10 **MR BROWN:** QE-99. Correct. Thank you.

11 Are you familiar with this article?

12 **MR SEQUEIRA:** This is Ethos Asset

13 Management. Yes, I am.

14 **MR BROWN:** If we could blow up the text of
15 the article itself, we've heard something about
16 Ethos in this matter already and I just want to make
17 sure we get some context here. You see at the top
18 of the article, "The US company Ethos Asset
19 Management Inc on Friday announced that it will
20 invest \$400 million in the construction of a deep
21 water port at Macuse, in the central Mozambican
22 province of Zambezia".

23 Do you see that?

24 **MR SEQUEIRA:** Yes, I do.

25 **MR BROWN:** If you go down to the next page

1 though, if we can highlight about the first half of
2 what's there, please, in fact, there's a few things
3 going on here. The second paragraph that we've now
4 blown up starts with "The Ethos Asset Management".
5 Do you see that?

6 **MR SEQUEIRA:** Yes.

7 **MR BROWN:** And the Ethos Asset Management
8 release said its investment "will ensure the
9 construction of a multi-purpose port designed to
10 handle export and import of dry bulk, agricultural
11 products, general cargo and liquid bulk".

12 Correct?

13 **MR SEQUEIRA:** That's what it says here,
14 yes.

15 **MR BROWN:** It further goes on to
16 explain -- and this is Ethos Asset Management,
17 correct?

18 **MR SEQUEIRA:** Yes.

19 **MR BROWN:** And they're investing in the
20 port in Macuse, right?

21 **MR SEQUEIRA:** That is correct.

22 **MR BROWN:** So they know what's going on
23 there, right?

24 **MR SEQUEIRA:** That's correct. This is a
25 news article and I think -- and it's quoting from

1 Ethos but I think we have another article with a
2 full Ethos release, I think it is C-343 that may
3 be more useful -- I'm happy to go through this with
4 you but it would be useful to look at the full Ethos
5 release as well, but please go ahead.

6 **MR BROWN:** The quote here from Ethos says
7 it will handle a multi product cargo such as wood
8 chips, fertiliser, grain and fuels and be capable of
9 accommodating vessels of 65,000DWT capacity,
10 correct?

11 **MR SEQUEIRA:** That's correct.

12 **MR BROWN:** But then it also says here,
13 "But it expects this cargo to reach Macuse by road".
14 Correct?

15 **MR SEQUEIRA:** Yes, says that.

16 **MR BROWN:** Then it says the rail corridor
17 to Macuse will be -- it says "a later development",
18 right.

19 **MR SEQUEIRA:** Right.

20 **MR BROWN:** In fact the article goes on to
21 say just after that that "At no stage did the
22 release or the statement by Ethos Asset chairperson
23 Carlos Santos mention the word coal".

24 **MR SEQUEIRA:** That is what it says here,
25 yes, but I will say that I guess you got to look at

1 it in the context of the full release and also the
2 more recent statements that have been made by TML I
3 think as recently as August 2022, confirming that
4 the rail connection from Chitima to the Macuse port
5 is on and the conditions are conducive for moving
6 forward with that rail project, so there is more
7 recent developments that supersede this.

8 **MR BROWN:** Let me ask a couple of other
9 questions if I may for a moment. Can we go back up
10 to the top of this page, if we can blow up the first
11 paragraph.

12 You see that it says here that the project
13 that's being described now will be a railway that
14 will cost 2.7 billion dollars, and then in
15 parentheses it says "about 1.9 billion for the
16 railway and about 800 million for the port".

17 Do you see that?

18 **MR SEQUEIRA:** Correct, I do.

19 **MR BROWN:** Mr Sequeira, do you happen to
20 remember about how much PEL had proposed it would
21 cost to build those two components, the rail and the
22 port?

23 **MR SEQUEIRA:** If I recall correctly -- and
24 you can take me to the document, I think it's around
25 3.1 billion.

1 **MR BROWN:** And do you remember in fact the
2 court was going to cost -- when PEL proposed it the
3 port was going to cost 1.5 billion and then the rail
4 was only going to be 1.1 billion.

5 **MR SEQUEIRA:** That is possible, but I will
6 caution you from the splits between the port and the
7 rail because unless you have a detailed cost
8 estimate allocating costs to things like your coal
9 yard, your terminal, site development can go either
10 way, so unless you have a detailed cost breakdown,
11 I wouldn't put too much weight on the allocations
12 between the port and the rail, if you want to really
13 do a comparison. The total is a better way to look
14 at it.

15 **MR BROWN:** Can we take a look at -- it's
16 Claimant's Exhibit C-7, it's going to be slide --
17 that's not working quite the way we thought it
18 would. We'll do something else. I apologise.

19 OK. Do you happen to know how much it was
20 that PEL had predicted that Mozambique would make
21 per year on this project?

22 **MR SEQUEIRA:** I don't. Are you referring
23 to make from taxes or -- I don't know, no.

24 **MR BROWN:** OK.

25 **MR SEQUEIRA:** It's a broad -- it's a broad

1 question.

2 **MR BROWN:** You do understand that if the
3 port and rail was a viable project, Mozambique has
4 plenty of incentive to actually get it built,
5 correct?

6 **MR SEQUEIRA:** I think Mozambique has an
7 incentive to develop the country economically. This
8 is one of the avenues in which you could do that.

9 **MR BROWN:** And, in fact, TML, if this is a
10 viable project, would have every incentive to
11 actually get the rail built as well, correct?

12 **MR SEQUEIRA:** That's right, and I believe
13 they're still persevering to do that, based on the
14 most recent releases we've seen.

15 **MR BROWN:** They certainly haven't done it
16 yet, have they?

17 **MR SEQUEIRA:** They have not yet built it
18 but they're in the process of doing so. I think
19 their work on the port is under way and they're
20 trying to get the railway going.

21 **MR BROWN:** They're trying to, correct?

22 **MR SEQUEIRA:** Correct.

23 **MR BROWN:** They don't have the financing
24 yet, correct?

25 **MR SEQUEIRA:** They don't have the

1 financing yet for the rail, and like I said the
2 current environment is favourable, more favourable
3 than it's been over the last seven/eight years. As
4 it stands today no they don't have the financing.
5 I will say the other thing you have to compare for
6 the analysis is the but-for world. You know, I
7 think Claimant has always been of the view that they
8 would have had -- they would be in a better position
9 to progress this project relative to the current
10 concessionaire given their familiarity with the
11 project, but we have used the actual development as
12 some proxy for our projections.

13 **MR BROWN:** And other of the developments
14 are that the rail has not yet been built, correct?

15 **MR SEQUEIRA:** So that's right, but I think
16 you have to consider that in the context of ITD and
17 some of the issues that ITD has had. So I think you
18 could argue that Claimant would have been in a
19 better position to progress this, particularly in
20 the recent analyst coverage. If you look at some of
21 the reports, QE-79, for example, there's some
22 serious concerns being raised about ITD.

23 **MR BROWN:** Let's take a look at one of the
24 financial statements. You do understand that when
25 companies put information in their financial

1 statements in the notes to the financial statements, **16:10**
2 that they have to be truthful to their investors,
3 correct?

4 **MR SEQUEIRA:** Generally agree, yes.

5 **MR BROWN:** And we should expect that
6 whatever is put in those financials is going to be
7 accurately reflecting the company's current plans,
8 correct?

9 **MR SEQUEIRA:** Generally that's true.

10 I will say that I've seen instances where companies
11 keep in texts and forget to update them over time,
12 it's not deliberate but it happens, so you have to
13 scrutinise things carefully. But in general,
14 I agree, yes.

15 **MR BROWN:** Can we turn to pdf page 114 of
16 QE-65? There's a paragraph near the bottom of the
17 page that starts "Due to the challenges".

18 **PRESIDENT:** Sorry, give me one second.

19 **MR BROWN:** Very sorry. Yes.

20 **PRESIDENT:** Which page?

21 **MR BROWN:** It is pdf page 114,

22 Mr President.

23 **PRESIDENT:** OK. I'm there.

24 **MR BROWN:** Just to be clear for the
25 record, I hope I said QE-65. My transcription came

1 up at QE-56. OK.

2 We're on QE-65 and we've looked at a
3 paragraph here that says "Due to the challenges in
4 the coal export business including the decline in
5 market price of coal along with the economic
6 slowdown caused by Corona virus 2019 pandemic,
7 management of the subsidiary" -- and this is a
8 subsidiary of ITD, correct?

9 **MR SEQUEIRA:** Correct.

10 **MR BROWN:** "Decided in 2020 to revise its
11 business plan to develop the project in phases",
12 correct?

13 **MR SEQUEIRA:** Correct.

14 **MR BROWN:** In fact, that's something you
15 are aware of, that phase 1 is just the port?

16 **MR SEQUEIRA:** That is correct.

17 **MR BROWN:** At the bottom of this paragraph
18 it then says that "Management of the subsidiary will
19 start phase 2 development when the economics of the
20 project can be justified".

21 **MR SEQUEIRA:** Correct.

22 **MR BROWN:** You would agree with me there's
23 a fair implication by that sentence, right, that
24 right now the economics of the project cannot be
25 justified?

1 **MR SEQUEIRA:** Well, I think that this was
2 done in 2020 during the pandemic. I think it was a
3 statement made at the time. Like I said, things
4 have changed quite a bit since then, and the most
5 recent disclosures of TML indicate that, you know,
6 the outlook right now is conducive for moving
7 forward, but this was the disclosure in 2020 during
8 the pandemic and this is also a time, as I
9 mentioned, and we can go through some of the analyst
10 reports, I think QE-79 sticks out to me, but where
11 there is some concern about ITD's financial health
12 as well, and the analysts have a pretty scathing
13 review of their overall performance during this
14 timeframe.

15 **MR BROWN:** I think you had mentioned that
16 some of the reasons why the economic outlook looks
17 better for coal right now is the Russian embargo.
18 Is that one of them?

19 **MR SEQUEIRA:** That's one of the reasons.
20 I think the --

21 **MR BROWN:** The other one --

22 **MR SEQUEIRA:** I think you were getting to
23 it -- is also the reduced reliance on gas.

24 **MR BROWN:** Yes, sir. There had been some
25 efforts to move away from Russian gas, correct?

1 **MR SEQUEIRA:** Correct.

2 **MR BROWN:** What are the downward pressures
3 on coal prices?

4 **MR SEQUEIRA:** Currently, I don't see any.
5 There's always going to be the view that coal is
6 environmentally not friendly, so that's going to be.
7 So, for example, there will be some countries like
8 Germany that will switch to a temporary bridging
9 plan for using coal until they have sufficient
10 renewables, but there are other countries who won't,
11 so many, many parts of emerging markets in other
12 parts of Europe would be willing to use coal much
13 longer to offset the reliance on Russian gas.

14 **MR BROWN:** Let me shift gears just a
15 little bit, if I may. I'm on slide page 13 now of
16 your presentation. This is a slide in which you're
17 supporting a DCF analysis, correct?

18 **MR SEQUEIRA:** That is correct.

19 **MR BROWN:** And you're certainly aware of
20 instances in which, for instance, the World Bank has
21 said that compensation is not appropriate under a
22 DCF analysis for speculative or indeterminate
23 damage, correct?

24 **MR SEQUEIRA:** I think you're referring to
25 the World Bank Guidelines.

1 **MR BROWN:** I am.

2 **MR SEQUEIRA:** Yeah. So I've had that put
3 before me on many an occasion in these arbitrations.

4 I will say, yes, I am aware of them, to
5 answer your question. I think you need to take them
6 in context. You know, they were developed I think
7 in 1992. I think a lot has changed since then. For
8 instance, there are many instances where you have
9 pre operational projects that are valued on a DCF
10 basis in the real world, so there's a divergence
11 between what the World Bank Guidelines say there in
12 that publication and how investors value these
13 projects in the real world, but, yes, I am familiar
14 with those guidelines and there's a lot been written
15 about them and the pros and cons of using them.

16 **MR BROWN:** You're also aware as a general
17 principle that using a DCF analysis for a business
18 who has no operations can be speculative as well,
19 correct?

20 **MR SEQUEIRA:** So I would agree that it can
21 be speculative, but if you're using reasoned inputs,
22 particularly when you have a bankable feasibility
23 study where there's a detailed study done, there was
24 \$50 million spent to get project-specific data,
25 talking to vendors, talking to off-takers, I think

1 that's a pretty reasonable basis upon which to do a
2 projection. Is it sensitive to your inputs? Of
3 course it is because any project that has
4 frontloaded construction costs is going to be
5 sensitive to inputs, but that does not mean it's a
6 basis to not use the DCF.

7 **MR BROWN:** Well, you knew it was coming,
8 but I am going to put QE-82 up in front of you.

9 This is an article from 2001, correct?

10 **MR SEQUEIRA:** Correct.

11 **MR BROWN:** I see you smiling, so I do want
12 to take you to page 9 of the pdf, and in fact we can
13 see in this instance if we -- if we're looking at
14 this article that in fact it does say that
15 feasibility reports tend to offer very rosy
16 prospects for the projects they're assessing, and
17 you've expressed your disagreement with that,
18 correct?

19 **MR SEQUEIRA:** I do, yes.

20 **MR BROWN:** Because as a professional
21 engineer, you consider yourself to be truthful?

22 **MR SEQUEIRA:** I think you have an
23 obligation when you do feasibility studies to do a
24 bottom-up assessment of the underlying technical and
25 economic aspects of any project, and you have to

1 remember, when you put -- so a bankable document
2 doesn't necessarily mean that you will get a loan.
3 It's simply a document that has a level of rigour
4 and detail that would be considered acceptable by a
5 lender to do its assessment.

6 But in order to do that, if you want the
7 lenders to take you seriously, you have to apply a
8 certain minimum level of rigour, and that's what is
9 done in most bankable feasibility studies.

10 **MR BROWN:** To be clear, we're talking
11 about TML's bankable study, correct?

12 **MR SEQUEIRA:** Correct. And I would
13 include TML's bankable study in that same universe.

14 **MR BROWN:** You just expressed a moment ago
15 concern with ITD in terms of some problems that it
16 was having?

17 **MR SEQUEIRA:** Financially, yes.

18 **MR BROWN:** You're still very comfortable
19 saying that the TML study is just fine?

20 **MR SEQUEIRA:** So I would say that the TML
21 study was done with input from specialised firms, so
22 if we go to the front page of the 2015 feasibility
23 study, it let's you see the contractors, the outside
24 consultants that worked on it. I've seen those
25 consultants before on other rail projects. CRCC,

1 China Railway Construction Corporation, it's a
2 highly credible entity, they've built many different
3 rail projects across the globe and do detailed
4 studies.

5 I don't see a reason to view that as an
6 overly rosy assessment of the project's technical or
7 economic parameters.

8 **MR BROWN:** You do agree with me that the
9 assumptions and inputs of any feasibility or
10 bankability study must be validated critically when
11 employed in a fair market value valuation, correct?

12 **MR SEQUEIRA:** Yes, I agree. You have to
13 evaluate them. You have to test them when you use
14 them.

15 **MR BROWN:** Do you have your first report
16 in front of you?

17 **MR SEQUEIRA:** Yes, I do.

18 **MR BROWN:** What's the date on that report,
19 please?

20 **MR SEQUEIRA:** It's 30th of October 2020.

21 **MR BROWN:** And you performed an ex post
22 analysis, DCF analysis in that report, correct?

23 **MR SEQUEIRA:** I did, yes.

24 **MR BROWN:** And you came to the conclusion
25 that the damages that PEL would be claiming were

1 1,000,015 -- sorry, 115.3 million, correct?

16:20

2 **MR SEQUEIRA:** Correct, that's right.

3 **MR BROWN:** At the time you signed that
4 report, you believed it was accurate, correct?

5 **MR SEQUEIRA:** It was my best estimate
6 based on the information that I had at the time
7 I prepared the report, and I don't want to take too
8 much time but there's several instances in that
9 report where I noted that I reserved the right to
10 reserve my -- to revisit and refine my assumptions
11 pending the production of documents such as the
12 bankable feasibility study for the project.

13 So I did the best I could based on
14 information I could gather in the public domain, but
15 I was aware at the time that there was a bankable
16 feasibility study that was being done and had been
17 completed, and I realised that if we did get that
18 document I'd need to consider that and update my
19 analysis accordingly, which is what I did in my
20 second report.

21 **MR BROWN:** You reserved your rights
22 because you understood there was some uncertainty
23 around some of the assumptions you were making,
24 correct?

25 **MR SEQUEIRA:** Absolutely. I think when

1 you do a bankable feasibility study, you get way
2 more information. You're spending years, one to
3 two years, getting project-specific data, doing
4 project-specific analysis, that would be far
5 superior to a rough benchmark you may use based on
6 other market parameters or comparables out there.

7 **MR BROWN:** In a typical bankability study
8 you would actually have a concession contract,
9 right?

10 **MR SEQUEIRA:** So if I understand your
11 question, are you asking me the sequencing? So,
12 yes, you would need to get a concession agreement in
13 hand in order to do a bankable feasibility study.
14 That's the typical sequence.

15 **MR BROWN:** You'd know specific terms and
16 conditions, correct, of the concession?

17 **MR SEQUEIRA:** Yes, you would. Yes.

18 **MR BROWN:** And those would be inputs into
19 whatever study you were doing, correct?

20 **MR SEQUEIRA:** That is correct.

21 **MR BROWN:** And you'd know the duration?

22 **MR SEQUEIRA:** You would know the duration
23 of the concession, yes.

24 **MR BROWN:** The concession fee, any tax
25 rebates, all of those things, correct?

1 **MR SEQUEIRA:** Correct. The specific terms
2 of the concession would be known and would be
3 factored into your economic assessment in the
4 bankable feasibility study.

5 **MR BROWN:** And we don't have any of that
6 information as it relates to PEL, correct?

7 **MR SEQUEIRA:** Correct, because PEL did not
8 have the opportunity to get the concession and do
9 the feasibility study.

10 **MR BROWN:** And my only question was we
11 don't have that information as it relates to PEL,
12 correct?

13 **MR SEQUEIRA:** That is correct.

14 **MR BROWN:** Instead, the assumption has
15 been that the TML feasibility study would have to
16 suffice, so to speak, right?

17 **MR SEQUEIRA:** It's the best proxy so, you
18 know, I think many of the firms that do bankable
19 feasibility studies perform rigorous independent
20 analyses. I think it's reasonable to assume a
21 similar analysis would have been performed by PEL.

22 PEL feels strongly -- and I've spoken to
23 them about this -- that they could have done this
24 quicker and more efficiently than TML, but for
25 purposes of my analysis I've had to rely on the

1 actual study that was done.

2 **MR BROWN:** Just to be clear, since you
3 mentioned it, you're not actually here to express an
4 opinion as to whether or not TML could not have done
5 this project, correct?

6 **MR SEQUEIRA:** Sorry, there were two
7 negatives in there.

8 **MR BROWN:** Yes, I did say that that way.
9 Can I rephrase it so that it's easier to answer?

10 You're not here to express an opinion
11 about TML's ability to do the work, correct?

12 **MR SEQUEIRA:** No, I'm not. No, I'm not.
13 But I think that the work that was undertaken by TML
14 is instructive in forming the projections that you
15 would use to evaluate the economics of the project.

16 **MR BROWN:** And just like the delays in
17 doing anything with the project, they're also
18 instructive, isn't that true?

19 **MR SEQUEIRA:** To an extent you could say
20 that. I think there are times where you have to
21 kind of separate out company-specific issues from
22 market issues, but I would say that, yes, to some
23 extent, yes.

24 **MR BROWN:** Now, the TML project is
25 actually longer in rail than the PEL project,

1 correct?

2 **MR SEQUEIRA:** That is correct, because --
3 and this was discussed in the 2017 update to the
4 bankable feasibility study, where they decided to
5 extend the railway another 129 kilometres to access
6 a few additional mines in the Chitima area.

7 **MR BROWN:** That was a TML idea, correct?

8 **MR SEQUEIRA:** I wouldn't say it was a TML
9 idea necessarily. It is part of the feasibility
10 process that you go through to evaluate what is the
11 best alignment and route that would support the
12 economics of the project.

13 Yes, it came about when that bankable
14 feasibility study was being done and when they were
15 talking to the miners and the suppliers of coal.

16 **MR BROWN:** The TML feasibility report
17 presumes a 20 per cent longer rail, too, right?
18 Sorry -- pardon me -- presumes 30 per cent more
19 capacity.

20 **MR SEQUEIRA:** That's correct. So I think
21 the idea there was that you would have a longer rail
22 line, but you'd also be able to carry more coal
23 so -- which makes sense.

24 I should note that -- I know you said it
25 was a TML idea, but I recall that the main reason

1 that was being extended was to access the mines
2 owned by Jindal, and I believe PEL had also spoken
3 to Jindal. You heard from Mr Patel earlier and PEL
4 had spoken to Jindal about their interest back in
5 time.

6 **MR BROWN:** Bear with me for just a moment
7 here.

8 You understand that PEL put a PFS study to
9 Mozambique, correct?

10 **MR SEQUEIRA:** That is correct, yes.

11 **MR BROWN:** PEL formed a consortium and put
12 another bid to Mozambique, correct?

13 **MR SEQUEIRA:** Yes. I think you're
14 referring to the PGES Consortium. Yes.

15 **MR BROWN:** I am, and in neither of those
16 instances, despite the comment you just made, did
17 PEL propose extending the rail line and adding these
18 offtake agreements and accessing these offtake
19 agreements through that extension, correct?

20 **MR SEQUEIRA:** I think that's right, but
21 like I said, a lot of that work will be done in a
22 detailed feasibility, whether you call it definitive
23 feasibility study or bankable feasibility study, so
24 it does not surprise me that it was not done at the
25 prefeasibility stage.

1 **MR BROWN:** Did you make any adjustments in
2 your calculations in using the TML feasibility study
3 to reflect the fact that PEL had not proposed the
4 extra extension and the extra offtake agreements?

5 **MR SEQUEIRA:** No, I didn't but, again,
6 I assume there would have been a logical, you know,
7 decision reached based on discussions that PEL and
8 the feasibility study consulting firms would have
9 had when they went through the process of doing a
10 bankable feasibility study.

11 **MR BROWN:** In fact, without the extra rail
12 length and offtake agreements, TML's version of the
13 project is not viable, correct?

14 **MR SEQUEIRA:** I don't know if that's
15 right. If you can point me to the document, I will
16 be able to look at it.

17 **MR BROWN:** We'll see if we can explore it
18 in a couple of sensitivities, although I'm also
19 mindful of the time.

20 Let me do something else first for just a
21 moment, OK?

22 We took a look at it a moment before, and
23 I apologise again for my mistake, but can we take a
24 look at Dr Flores' report at page 45 of the pdf?
25 It's page 44 of the internal report.

1 Mr Sequeira, I'm not going to spend all
2 afternoon, to anyone's detriment, going through each
3 and every one of these sensitivities, but I wonder
4 if I could walk through a few of them with you, OK?

5 **MR SEQUEIRA:** OK.

6 **MR BROWN:** You understand what Dr Flores
7 has done in creating this sensitivity table is
8 determined what some adjustments between the second
9 report that you wrote, the one that supports a
10 \$156 million ex post number, and some other inputs
11 that he believes are reasonable and appropriate, and
12 what that does to the damages calculation, correct?

13 **MR SEQUEIRA:** Correct. I mean, I would
14 call this a sensitivity analysis, but I would call
15 it a uni-directional sensitivity analysis. All he's
16 doing is trying to find ways to reduce value to
17 zero. I mean you could equally run analyses in the
18 other direction, right, and say what if your
19 throughput was higher, what if you had higher
20 capacity reservation fees, what if your O&M costs
21 were lower, so I think you could run these
22 sensitivity analyses but I think you would want to
23 run it symmetrically. He has done it in ways to say
24 OK, what changes can I make that would drop the
25 value to zero or close to it, but that's been the

1 basis of his analysis.

2 **MR BROWN:** OK. Well, I'll submit to you
3 I don't know that he was looking for ways to reduce
4 the damages to zero so much as putting inputs in
5 here that have some support in the record.

6 How much capacity was the project the way
7 PEL had proposed it, sir?

8 **MR SEQUEIRA:** It was 25 million tons
9 capacity but that was, like I said, for a different
10 length of rail.

11 **MR BROWN:** Correct. So the project as PEL
12 had proposed it, according to this sensitivity
13 analysis, would be worth zero, correct?

14 **MR SEQUEIRA:** So I would disagree with
15 this, right? You cannot do this in isolation. If
16 you're going to then run it at a lower capacity,
17 then you should also have a shorter rail line and
18 reduce your capex.

19 So, again, doing this in isolation can be
20 dangerous. Yes, you can run the numbers and I will
21 agree that that's mathematically what you get. Does
22 it make sense practically or from a standpoint
23 commercially? I would say no.

24 **MR BROWN:** Actually, TML proposed a longer
25 rail line for a lower price, didn't they?

1 **MR SEQUEIRA:** Correct, but that's what
2 comes out of a bankable feasibility study. You do a
3 detailed -- much more detailed estimate. You get
4 survey data. You do far more detailed engineering
5 to get to a much more reasoned and informed view.

6 Just to give you an idea, a PFS,
7 prefeasibility study, typically has a level of
8 accuracy 25 to 30 per cent. Rule of thumb. It
9 could be --

10 **THE REPORTER:** Please repeat that. You
11 are speaking too fast.

12 **MR SEQUEIRA:** Sorry. So a prefeasibility
13 study has a level of accuracy about 25 to 30
14 per cent. A feasibility study has a much higher
15 level of accuracy. Typically 10 per cent or 10 to
16 15 per cent, so you will have variations from a
17 prefeasibility level to a feasibility level study.

18 **MR BROWN:** Thank you, Mr President.

19 Can I focus on another one with you for a
20 moment? Do you see that the capex cost overrun
21 there?

22 **MR SEQUEIRA:** Yes.

23 **MR BROWN:** I'm going to ask you two
24 questions here for a moment.

25 What stage was the project in when PEL

1 proposed the PFS?

2 **MR SEQUEIRA:** What stage was the project
3 in when PEL proposed the PFS? So I think you would
4 go from a concept to a prefeasibility to a
5 feasibility, so it was in that sort of concept
6 development stage perhaps.

7 **MR BROWN:** There was a cost estimate in
8 the PFS, correct?

9 **MR SEQUEIRA:** Yes, there was a high level
10 cost estimate in the PFS.

11 **MR BROWN:** Have you had an opportunity to
12 review the transcripts in this matter?

13 **MR SEQUEIRA:** Not in any detail, no.

14 **MR BROWN:** You haven't heard the testimony
15 of Mr Comer in this matter?

16 **MR SEQUEIRA:** I have not, no.

17 **MR BROWN:** Or Mr Dysert in this matter?

18 **MR SEQUEIRA:** No, I heard Mr Dysert
19 briefly before I came on, but I wasn't -- wasn't
20 listening to everything, no.

21 **MR BROWN:** Well, let me represent to you,
22 sir -- and I'm sure people will hold me to account
23 if I don't represent it correctly, but are you aware
24 that at a feasibility stage, it's still
25 considered -- first of all, it is still considered a

1 pretty uncertain project, correct?

2 **MR SEQUEIRA:** Well, if you have a bankable
3 feasibility study, I wouldn't call it a pretty
4 uncertain project, no.

5 **MR BROWN:** Maybe we can put up LRD-8.
6 It's Dysert 8. I'd just ask you, first of all, if
7 this is an article that you're familiar with.

8 **MR SEQUEIRA:** I don't believe I've seen
9 this before, counsel.

10 **MR BROWN:** Can I turn you to the second
11 page of this document, please? And if we could blow
12 up that figure.

13 Perhaps you haven't seen this particular
14 document but have you seen concepts like this that
15 try to describe how much at each stage of a process
16 there is variability in cost estimates?

17 **MR SEQUEIRA:** So I'm familiar with the
18 fact that as you progress a project from a concept
19 to bankable feasibility to the engineering as part
20 of the EPC, the level of accuracy will progressively
21 go up. That I would directionally agree with.

22 **MR BROWN:** And the very first on the left
23 of this diagram written sideways for all of us to
24 read, it says "Order of magnitude feasibility
25 study". Do you see that?

1 **MR SEQUEIRA:** That's right, and that's not
2 what a bankable feasibility study is, so in common
3 parlance in my experience, when you see an order of
4 magnitude study, it's like what they call a scoping
5 study. That's what's usually used.

6 **MR BROWN:** More similar to a PFS, a
7 prefeasibility study?

8 **MR SEQUEIRA:** Possibly. Or sometimes
9 something even more premature than a PFS.

10 **PRESIDENT:** Because I was wondering on
11 this chart and I was wondering also, you speak a lot
12 about -- or we have spoken a lot about bankability
13 studies, and I have never seen the one really
14 important element, namely when you have the banking
15 commitment, because correct me, the banking
16 viability study does not guarantee that then, when
17 you raise the flag, the banks salute and give you
18 the money. Is that correct?

19 **MR SEQUEIRA:** That is correct, and that is
20 presumably the reason why it has been delayed in the
21 real world, that between -- and this goes back to
22 the market environment I was talking about. So the
23 bankable feasibility study was completed in 2017,
24 originally 2015 but then updated in 2017, and during
25 that time coal prices were very low.

1 And the miners in Mozambique were having
2 financial difficulties because they were suffering
3 some losses from transporting the coal out to fulfil
4 contractual obligations on their supplies, so it was
5 a tough time to go to secure financing. I think --
6 and this is where I was telling counsel in part
7 I agree -- some of these delays were somewhat
8 inevitable given the market environment that was
9 present.

10 But things did improve in 2018 and '19,
11 but right around then I'm sure there were attempts
12 to secure financing, but you had the pandemic come
13 on the heels of that. I think now for the first
14 time after that, given some of the post pandemic
15 issues, the environment and the outlook, even for
16 the mid term and long term has been quite positive.

17 So from a bank -- from a lending
18 standpoint, you have a much stronger or better shot
19 today than maybe in 2017 when coal prices were quite
20 low, but you're right that the bankable feasibility
21 study does not guarantee financing. Financing is
22 driven by not only the underlying intrinsic
23 parameters of your study but the external market
24 environment as well, and both of those have to come
25 together to support it.

1 **PRESIDENT:** So, summing up, the project up
2 to now still has no banking commitment, is that
3 correct?

16:39

4 **MR SEQUEIRA:** It has a commitment for
5 financing of only a small phase -- smaller phase 1
6 portion. It does not include the railway. They are
7 still seeking to get financing for that bigger rail
8 component.

9 **PRESIDENT:** But for the port, phase 1,
10 that does have banking commitments, to the best of
11 your knowledge?

12 **MR SEQUEIRA:** It does have financing, yes.

13 **PRESIDENT:** Financing commitments.

14 **MR SEQUEIRA:** Yes.

15 **PRESIDENT:** Sorry, this is now pure
16 curiosity. In these type of projects the big
17 financing banks are now Chinese?

18 **MR SEQUEIRA:** Sorry, can you -- I missed
19 the question.

20 **PRESIDENT:** My question is who is
21 financing -- if you know and if it's public, is
22 this -- because I saw a lot of Chinese banks,
23 Chinese construction companies, typically in
24 projects of this type is this now being financed by
25 Chinese lenders?

1 **MR SEQUEIRA:** So, in my experience, the
2 answer is yes. However, the financing that was
3 provided for the port, that phase 1 was not a
4 Chinese entity, it was a US entity, but I know that
5 there were discussions with the Chinese before, so
6 I don't know exactly what happened and why they
7 didn't conclude, but there are a lot of other
8 examples of railways in Africa that have been funded
9 by Chinese banks that come with a requirement of
10 using Chinese EPC contractors as well. Like a --
11 it's like by China -- it's almost like a full
12 package deal of EPC contracting together with
13 Chinese financing.

14 **PROFESSOR TAWIL:** In most countries, most
15 Portuguese -- former Portuguese colonies the issue
16 is that most of the investment came from Chinese
17 companies, so the Chinese constructors enter and
18 they enter with the banks.

19 **MR SEQUEIRA:** Right. There are many
20 examples of, yes, full Chinese financing and EPC
21 work, yes.

22 **PRESIDENT:** Let me -- how long do you have
23 to go, Mr Brown?

24 **MR BROWN:** I would hope to go about 20 to
25 30 minutes still. Is that all right, Mr President?

1 **PRESIDENT:** Yes, but we'll make a break
2 for our interpreters and our court reporters. They
3 need a break.

16:41

4 **MR BROWN:** I appreciate that.

5 **PRESIDENT:** So let's come back at -- it's
6 now 16.42. Let's come back at 17 hours.

7 (Short break from 16.42 to 1700)

8 **PRESIDENT:** Very good. We resume the
9 hearing, and Mr Brown, you know we want -- we have
10 to hear another expert today, so everything you can
11 do to speed up would be appreciated.

12 **MR BROWN:** I do know, and thank you very
13 much, Mr President. I did spend a couple of --
14 I apologise for being a minute after the hour.
15 I did actually reorganise to get ourselves done on
16 this. OK?

17 **PRESIDENT:** That is appreciated. Thank
18 you, Mr Brown. In any case, let me also say this.
19 If -- are you staying, Mr Sequeira? Can you stay
20 until tomorrow when Dr Flores will be here?

21 **MR SEQUEIRA:** Yes, I can.

22 **PRESIDENT:** So, at the end, there may or
23 not be some questions to both experts.

24 **MR BROWN:** Yes, great.

25 **PRESIDENT:** We'll see.

1 **MR BROWN:** Thank you very much.

2 Can we take a look at QE-52, please?

3 You're familiar with this article,

4 correct?

5 **MR SEQUEIRA:** Yes, I am familiar with this

6 article.

7 **MR BROWN:** And you're aware that this

8 references megaprojects, correct?

9 **MR SEQUEIRA:** It does reference

10 megaprojects, yes.

11 **MR BROWN:** In the interests of time I will

12 simply ask you, since you're familiar with it, do

13 you understand that in fact this commentary opines

14 that large cost overruns and benefit shortfalls

15 exist more often in megaprojects, correct?

16 **MR SEQUEIRA:** Yes, but I think you have to

17 take this in context, and it would be helpful --

18 I know we're short on time so I want to be

19 careful -- but there is a list of all the projects

20 that were studied in this particular paper at the

21 very end in table 2. I think it's instructive to

22 look at that because what you see there are projects

23 that really are not comparable to the project we

24 have.

25 There are some which are -- projects like

1 the Space Centre, the Sydney Opera House, the
2 Montreal Summer Olympics, and then when you get to
3 the rail projects, and there are a few, they're all
4 of them in highly urban areas and they are metro
5 rail projects, where the risks of cost overruns on
6 those types of jobs are far greater because when
7 you're doing a rail project in a densely populated
8 urban area, disruptions are significant, so the
9 risks of overruns are greater.

10 So I would say that the sample set that
11 you see here is not reflective of the dynamic we
12 have for our project, which is primarily through a
13 rural area, a single track connecting two points.

14 **MR BROWN:** Just to be clear, from the
15 standpoint of the 3 billion cost estimate of the
16 project, that would qualify as megaproject, correct?

17 **MR SEQUEIRA:** So from a size standpoint,
18 I would agree that it's a big project, but from a
19 complexity standpoint I would strongly disagree that
20 it would fit the portfolio of projects that are here
21 in table 2. If we can go to it, I'm happy to
22 elaborate on it, but, if not, I will tell you I've
23 looked at that list quite closely.

24 **MR BROWN:** And I think we've gotten your
25 opinion as to what the list looks like, so I think

1 we'll be OK on that one in the interests of time.

2 **MR SEQUEIRA:** OK, sure.

3 **MR BROWN:** Can we return for just a moment
4 to the sensitivity table at page 45. This is in
5 Dr Flores' report, RER-9.

6 **MR SEQUEIRA:** Yes, I'm there, Counsel.

7 **MR BROWN:** When we broke we had been
8 talking about the cost overruns in the capex. Do
9 you see that?

10 **MR SEQUEIRA:** That's correct.

11 **MR BROWN:** In fact, Dr Flores identifies
12 using 22 per cent as a cost overrun number, correct?

13 **MR SEQUEIRA:** Correct.

14 **MR BROWN:** And indicates that at
15 22 per cent the project would have no value,
16 correct?

17 **MR SEQUEIRA:** Right. And I -- yes, and
18 I would obviously disagree with that. I explained
19 that in my direct presentation. He uses this paper
20 we just were looking at, QE-52, as a justification
21 for it. I don't think the two can be conflated.
22 The paper is looking at a different set of projects
23 than the one we have.

24 As I have explained in my report, you
25 know, when you do have an EPC contract which is lump

1 sum, it does limit the risks of overruns as well.

17:07

2 **MR BROWN:** In fact, though, that does
3 depend on whether or not you get an EPC contractor
4 who's willing to take on all of that risk, correct?

5 **MR SEQUEIRA:** Yes, but jobs like this --
6 for example, this job did have an EPC contract that
7 was bid out to a combination of a Chinese firm, CCEC
8 and a Portuguese firm, Mota-Engil, but yes, I would
9 think jobs like this would attract interest from
10 large EPC contractors.

11 **MR BROWN:** Did you say "did" have?

12 **MR SEQUEIRA:** Yes.

13 **MR BROWN:** In the past tense?

14 **MR SEQUEIRA:** That's right, because the
15 scope of the project has since changed, but the
16 original job was bid out on an integrated basis, in
17 other words one complete construction to those two
18 firms.

19 **MR BROWN:** So once we're building a
20 multi-use port instead of the coal, rail and deep
21 water port, the EPC contractor who had been on the
22 project left, correct?

23 **MR SEQUEIRA:** I don't know if they --
24 I would say left, but since the scope changed they
25 have to rebid the EPC work.

1 **MR BROWN:** What amount was in the
2 contingencies that you used in your DCF ex post
3 analysis?

4 **MR SEQUEIRA:** I believe it would have been
5 10 per cent of the cost, so I think it was roughly
6 about \$290 million, give or take. I can confirm
7 that if you want me to.

8 **MR BROWN:** But it sounds about right to me
9 as well so I think we'll -- in the interests of time
10 we'll move on from that.

11 You certainly didn't use 22 per cent,
12 correct?

13 **MR SEQUEIRA:** No, and I would strongly
14 disagree with using 22 per cent.

15 **MR BROWN:** Can I shift forward to a
16 different sensitivity analysis? I apologise, but
17 I would like to do the ex ante sensitivity analysis
18 which is on pdf page 56 of this same document. This
19 is RER-9 still.

20 **MR SEQUEIRA:** Yes.

21 **MR BROWN:** So this looks fairly similar to
22 what we'd been looking at, correct?

23 **MR SEQUEIRA:** That's right.

24 **MR BROWN:** And I think you might have even
25 mentioned in your presentation that a lot of the

1 concerns were about the same?

2 **MR SEQUEIRA:** Similar set of issues, yes.

3 **MR BROWN:** In this particular instance I'm
4 going to focus for a moment on a few of these
5 numbers just to make sure we know where they're
6 coming from.

7 Where does the \$39 in the rail and port
8 tariff come from in the Versant DCF on the ex ante
9 basis?

10 **MR SEQUEIRA:** So I think that was a
11 combination of PEL's expectation on the rail tariff
12 on a unit basis. I think we used -- we can go back
13 to my first report -- my second report if you'd
14 like, but I think it's 5.5 cents per kilometre per
15 ton, and then we did a benchmarking for the port
16 tariff and we combined the two, I believe, but if
17 you would like the precise input I'll need to go
18 back to my second report.

19 **MR BROWN:** Actually, I think maybe we'll
20 take a look at those PEL financials in a bit and you
21 may be able to see that number in there for just a
22 moment.

23 So on the cost overrun, do you see that
24 number for a moment? That's 12 per cent in this
25 one, in Dr Flores' sensitivity column. Do you see

1 that?

2 **MR SEQUEIRA:** Yes.

3 **MR BROWN:** You do not have any cost
4 overrun in this ex ante analysis, correct?

5 **MR SEQUEIRA:** So there's a contingency
6 built into the cost estimate, so I think that again
7 would kind of factor in, you know, potential risks
8 of overruns. There's also a pre operational risk
9 premium in our discount rate of 3 per cent that also
10 accounts for some of these deviations for a pre
11 operational project, so there's multiple aspects to
12 our projections that capture risks of cost overruns.

13 **MR BROWN:** Just to be clear for a moment
14 on the ex ante, the goal on the ex ante is to value
15 the project immediately before the alleged breach,
16 correct?

17 **MR SEQUEIRA:** That is correct, yes.

18 **MR BROWN:** And, in fact, we know that at
19 that stage the alleged breach would have had a PFS
20 cost estimate and nothing else, correct?

21 **MR SEQUEIRA:** That is correct. You would
22 have had a PFS level information at that time.

23 **MR BROWN:** And if you can keep in your
24 head for a moment -- we could put it back up but if
25 you can keep that figure that we saw earlier with

1 the bands of variation and cost estimates, do you
2 recall that at the feasibility band, that it was a
3 25 to 40 per cent band for the variation in cost
4 estimates at that stage of the project?

5 **MR SEQUEIRA:** In that publication, yes.
6 My experience has been a little narrower band, but
7 I can take the representation that's made there for
8 the variation, yes.

9 **MR BROWN:** From the standpoint of just
10 knowing that that project was at that point at a
11 prefeasibility stage, it wouldn't seem unreasonable
12 to be making sure that we're keeping a contingency
13 around the neighbourhood of 20 per cent in there,
14 correct?

15 **MR SEQUEIRA:** So it all depends upon how
16 the estimate was prepared. It was prepared on a
17 conservative basis. I think you heard Mr Daga talk
18 about that earlier when he testified, together with
19 the contingency that's in there. I think that's an
20 adequate level of support, together with the risk
21 premium that we apply in our discount rate, right?
22 You can't ignore that as well.

23 So I think taken together, that's a
24 reasonable and appropriate way to model the expected
25 costs for the project.

1 **MR BROWN:** We're going to take a look at
2 those financials that we were just discussing.
3 There we go.

4 OK. Let's go to the last two pages of
5 this document. This document is Claimant's
6 Exhibit 8. Is that computer working OK for you?

7 **MR SEQUEIRA:** Yes, it is.

8 **MR BROWN:** Well, none of us has the eye
9 left at the end of the day to read this document
10 this way. I actually just want to ask a couple of
11 simple questions about this. I wonder if you could
12 blow up the assumptions there for a moment. In
13 fairness to your previous -- I think you might have
14 to do it in halves.

15 So I actually wanted to make sure I gave
16 you a chance to confirm what you had told me
17 earlier, that in fact the initial revenue per
18 kilometre ton is that .055, is that right?

19 **MR SEQUEIRA:** That's correct.

20 **MR BROWN:** And this document is where that
21 number had come from, is that fair?

22 **MR SEQUEIRA:** I believe that's fair.

23 **MR BROWN:** Very good. I appreciate that.

24 I just have a general question about this
25 document for a moment. Do you believe it would be

1 appropriate to use this document to come to the
2 conclusion that this project was financially viable?

3 **MR SEQUEIRA:** So I would say that if you
4 want to determine whether the project is economic,
5 you'd need to do a detailed feasibility study. You
6 may be able to do a preliminary desktop analysis to
7 give you some rough sense of commercials, but
8 I would say doing this type of analysis is a little
9 premature at the stage of project you were at, which
10 is the prefeasibility stage. In my experience, the
11 prefeasibility stage is focused on the technical
12 aspects of the job. You know, can you build a
13 railway, are the site conditions good enough, is the
14 alignment going to work. It provides a validation
15 of the concept from a technical standpoint.

16 Typically to do the economic assessment,
17 you need more detailed information that you would
18 only gather doing a definitive feasibility study or
19 a bankable feasibility study.

20 So at this stage you may be able to get
21 some sense of it, but I don't think you can do it in
22 a definitive way.

23 **MR BROWN:** To be clear, you wouldn't say
24 that this project was financially viable on the
25 basis of these two pages, correct?

1 **MR SEQUEIRA:** So I think the purpose of
2 this analysis was a little different, if I
3 understand it. It was trying to say can you -- is
4 the potential of this project such that you can
5 repay debt, which is a little different from saying
6 what is the equity value of the project, right? I
7 think there's two different things.

8 So I would say that, you know, you could
9 perhaps do it to evaluate the potential cash flow,
10 but it would be preliminary at best, because many of
11 the inputs you need to do a proper analysis need to
12 be vetted and validated with more information and
13 more data. That would only be forthcoming in a
14 bankable feasibility study.

15 **MR BROWN:** And I apologise, I'm going to
16 persist in my question.

17 You would not confirm this project as
18 financially viable on the basis of these two pages,
19 correct?

20 **MR SEQUEIRA:** I think it depends. Sorry,
21 I don't want to be difficult, but I think it depends
22 what you mean, "financially" viable. I think if you
23 want to kind of have a definitive view on value,
24 then no, I don't think you could use this analysis.

25 **PRESIDENT:** Are you finished with this

1 table?

2 **MR BROWN:** With this table I am, yes.

3 **PRESIDENT:** Can I ask --

4 **MR BROWN:** Yes, please.

5 **PRESIDENT:** Can I interrupt you, in the
6 interest of not coming back afterwards.

7 I was interested in the capex. The capex
8 is the 3115?

9 **MR SEQUEIRA:** Correct.

10 **PRESIDENT:** The way I think it was
11 calculated -- now you correct me if it's wrong -- is
12 they took it rail length, which is 516 kilometres,
13 and then there was, they said, \$2.5 million per
14 kilometre average cost given the terrain. That
15 makes it 1,290. And the port capacity is 7 -- was
16 obtained by multiplying the tonnage capacity by the
17 port cost per ton. Is that the way the calculation
18 was made?

19 **MR SEQUEIRA:** So I would say no, it's a
20 little different. You're right -- in the right
21 direction, but it's a little different.

22 This was more of a -- sort of a reverse
23 engineered way of doing it. What they did was they
24 did a bottom-up cost estimate, which is in the PFS,
25 saying what would it cost if you take the different

1 components of the railway project, different -- you
2 know, site development, embankment work and all
3 that, and they added that all up and came up with a
4 number. Let's say that's, you know, a billion for
5 the rail, another billion for the port.

6 And then if you were to use those numbers,
7 the 12 -- so that came up with 1290. So in the PFS
8 they came up with a value of 1290 for the rail and
9 they said, OK, now if I want to know what the unit
10 cost of that is, I can divide that by 500 and get
11 the 2.5.

12 So I think you just flipped it. I think
13 the 1290 was the driver for the 2.5 and not the
14 other way round, so, you see, they came up with the
15 full cost and then divided it by the rail length to
16 get the unit cost as opposed to the other way
17 around.

18 **PRESIDENT:** Thank you.

19 **MR BROWN:** I have just one more line of
20 questions. Thank you very much.

21 Can I turn you to page 32 of your
22 presentation, please?

23 **MR SEQUEIRA:** 32?

24 **MR BROWN:** Yes, sir.

25 **MR SEQUEIRA:** Yes, Counsel.

1 **MR BROWN:** I need to do one thing with you **17:20**
2 just to make sure that we're all on the same page
3 for a next set of questions but, before I do,
4 there's a loss of a chance line down here. Do you
5 see that?

6 **MR SEQUEIRA:** Yes.

7 **MR BROWN:** That's literally just
8 multiplying 90 per cent times the numbers that are
9 immediately above that, correct?

10 **MR SEQUEIRA:** That is correct.

11 **MR BROWN:** And that 90 per cent is based
12 literally upon the fact that counsel had informed
13 you that it was a virtual certainty that this
14 contract would be awarded, correct?

15 **MR SEQUEIRA:** That is correct. That is
16 the chance that they would have gotten a concession
17 in a direct negotiation with the Respondent.

18 **MR BROWN:** There's some math, Mr Sequeira,
19 that you had done that isn't on this page, but
20 I just want to make sure that we've got some
21 visibility to it for a moment.

22 When you did the math to determine the
23 damages, you actually first calculated the equity
24 value of the project as a whole, correct?

25 **MR SEQUEIRA:** That is correct, yes.

1 **MR BROWN:** So for the ex post -- and
2 I apologise and I may have to do this by memory
3 because I left my other set of notes upstairs -- but
4 I believe that your ex post was approximately
5 \$448 million. I bet we could check it by dividing
6 156 by 47.2.

7 **MR SEQUEIRA:** Yeah -- actually it's a
8 little more complicated than that but I'm happy to
9 take your representation, or if you give me just one
10 minute, I will confirm it.

11 **MR BROWN:** I bet it is in your report as
12 well, but I apologise.

13 **MR SEQUEIRA:** But you are right that we
14 had to first come up with an equity value --

15 **MR BROWN:** Yes.

16 **MR SEQUEIRA:** -- and then calculate the
17 PEL's share. I just know it is not as simple as
18 taking the full equity value and multiplying it to
19 the equity share.

20 **MR BROWN:** That's fair.

21 **MR SEQUEIRA:** Because of the way in which
22 some of the capex was going to be financed.

23 **MR BROWN:** Perfect. Will you double-check
24 me on what the equity value in the ex post analysis
25 is?

1 **MR SEQUEIRA:** Yes. Yes. So it is
2 448 million.

3 **MR BROWN:** Thank you. And then there's
4 also an equity value for the ex ante, correct?

5 **MR SEQUEIRA:** Yes.

6 **MR BROWN:** And I think that's 179?

7 **MR SEQUEIRA:** Yes, 177.

8 **MR BROWN:** 177, thank you. Sorry.

9 Would you agree with me that
10 reasonableness checks are an important part of
11 conducting a valuation?

12 **MR SEQUEIRA:** Yes, to the extent that you
13 can do a reasonableness check, yes.

14 **MR BROWN:** In your original report, the
15 first one that you did, you cited a transaction
16 between Mitsui & Co and Vale where Mitsui acquired a
17 14 per cent share of Vale's Moatize coal line,
18 correct?

19 **MR SEQUEIRA:** That is correct, yes.

20 **MR BROWN:** In that particular transaction
21 that you cited as comparable, Mitsui was not just
22 purchasing a share of the railway and port, it was
23 purchasing a share of the mine itself too, right?

24 **MR SEQUEIRA:** That's correct. I believe
25 it was a 14 per cent interest in the mine and a

1 35 per cent interest in the rail corridor.

2 **MR BROWN:** In fact, they paid, as they
3 reported, \$348 million for half of a 70 per cent
4 equity in the rail line, correct?

5 **MR SEQUEIRA:** Sounds about right. If you
6 can -- I can take your representation for it.

7 **MR BROWN:** I'm happy to give you that
8 representation, sir. Thank you.

9 You're aware that in January of 2021, Vale
10 bought back that same share for a nominal \$1,
11 correct?

12 **MR SEQUEIRA:** That is correct.

13 **MR BROWN:** And, in fact, Dr Flores has
14 used that nominal \$1 to help indicate that from his
15 opinion, there's zero value to a project such as
16 this project, given the value of a project that
17 already exists being sold for \$1, correct?

18 **MR SEQUEIRA:** Yes, that is Dr Flores' view
19 and I addressed this in my direct presentation. You
20 have to consider the fact that since 2017, there's
21 been a lot of data made available on the cost
22 incurred for this Nacala corridor, and the costs are
23 quite high, substantially higher than what would be
24 incurred for the Macuse railway.

25 And so for most types of coal that you're

1 mining, it's not going to be economic to transport
2 the coal with those high level of costs on the NLC.

3 **MR BROWN:** Well, in fact, Vale recently
4 sold 100 percent of the coal rail and line, correct?

5 **MR SEQUEIRA:** I know they were looking for
6 a buyer. Can you point me to the record where
7 there's a sale?

8 **MR BROWN:** Actually, I don't know that
9 it's in the record, but have you heard of Vulcan?

10 **MR SEQUEIRA:** Vulcan, yes. I'm trying
11 place them. I have heard the name, yes.

12 **MR BROWN:** Do I take it from your reaction
13 that you had not heard of the transaction where
14 Vulcan acquired the mine and rail?

15 **MR SEQUEIRA:** No.

16 **MR BROWN:** Then I will leave that well
17 enough alone today, sir. I have no further
18 questions. Thank you.

19 **PRESIDENT:** Thank you, Mr Brown.

20 Mr Ho, is there any redirect?

21 **MR HO:** Yes, just two questions I think,
22 Mr President.

23 Re-examination by Claimant

24 **MR HO:** Mr Sequeira, you were asked about
25 Ethos Asset Management and you mentioned C-343.

1 I just wanted to show that to you in case you had
2 anything else to add. I wonder if we can get that
3 up on the screen somehow.

4 **MR BROWN:** What number is it, Mr Ho?

5 **MR HO:** C-343.

6 **MR BROWN:** We'll accommodate.

7 **MR HO:** Thank you, that's very kind of
8 you.

9 **MR BROWN:** Or maybe we won't! Sorry.

10 **MR HO:** Thank you. So that should be a
11 document which begins in the first main paragraph
12 "Ethos Asset Management, Inc USA announced a new
13 long term financing partnership". Do you see that?

14 **MR SEQUEIRA:** Yes.

15 **MR HO:** Would you just perhaps read the
16 third paragraph there, the one that starts "The
17 Macuse port was conceived in 2013". If you just
18 read that to yourself.

19 **MR SEQUEIRA:** Yes. (Pause)

20 Yes. I think this is what I was referring
21 to. So they do refer here to -- I think counsel's
22 suggestion to me was there was no discussion of the
23 rail corridor or the transport of minerals, but in
24 this press release they do say there was later
25 development of the rail corridor in phase 2, "the

1 port will be expanded to handle more bulk cargoes
2 ... such as minerals from Tete and the Copperbelt
3 region as well as passengers and general cargoes".

4 So there was reference here to the fact
5 that this would be a two-stage development with the
6 initial construction of the port and a subsequent
7 construction of the railway to move the minerals
8 from the Tete region.

9 MR HO: Do you know what the minerals from
10 the Tete region were?

11 MR SEQUEIRA: The primary mineral is coal,
12 yes.

13 MR HO: The only other question I have is
14 you were asked about the TML feasibility study and
15 the length of the rail that was proposed in that
16 study.

17 When one moves from a PFS to a feasibility
18 study, what refinements or developments, if any, is
19 it common to see being made?

20 MR SEQUEIRA: So in my experience there's
21 two types of adjustments that can be made. One
22 relates to purely the design itself. So, for
23 example, the alignments can be moved, you could
24 perhaps use a different gauge. I know there was
25 discussion of, you know, standard gauge versus

1 narrow gauge, those types of detailed analyses can
2 get done.

3 But you also revisit the scope of the
4 project itself to ascertain the overall economics of
5 the project and the commercial aspects of the
6 project.

7 So both those come together because
8 there's a technical element to it and a commercial
9 and economic element to it, and both of those have
10 to be considered in conjunction with each other
11 during that feasibility study, which is what was
12 done during the TML feasibility study.

13 **MR HO:** Thank you. Just one moment,
14 Mr President.

15 That's everything that we had. Thank you.

16 **PRESIDENT:** Thank you, Mr Ho. Yes,
17 Mr Brown?

18 **MR BROWN:** No, no, thank you.

19 **PRESIDENT:** I thought you had some
20 follow-up questions?

21 Any questions? Mr Sequeira, thank you
22 very much. You are staying with us tomorrow?

23 **MR SEQUEIRA:** Yes, I will be here.

24 **PRESIDENT:** If you are tomorrow here there
25 may or may not be some final questions. Otherwise,

1 we thank you for your presentation today and for
2 your explanations.

3 **MR SEQUEIRA:** Thank you, Mr President.
4 Thank you, counsel.

5 **PRESIDENT:** Very good. So let us now make
6 a five-minute break so that we can get to the last
7 expert for the day. Five-minute break.

8 (Short break from 5.30 pm to 5.40 pm)

9 DAVID DEARMAN

10 **PRESIDENT:** Very good. Mr Dearman, good
11 afternoon to you, sir.

12 Thank you for being here with us, and as
13 you know and you were anticipating, the first thing
14 we have to do is take your declaration as expert
15 witness, so I will kindly ask you that you stand up.

16 Mr Dearman, do you solemnly declare upon
17 your honour and conscience that you will speak the
18 truth, the whole truth and nothing but the truth,
19 and that your statement will be in accordance with
20 your sincere belief?

21 **MR DEARMAN:** I do.

22 **PRESIDENT:** Thank you, sir.

23 **MR BROWN:** Mr President, before the
24 witness begins, may I raise a quick point of order?

25 **PRESIDENT:** Of course.

1 **MR BROWN:** I appreciate the co-operation
2 that we've received from counsel in trading the
3 demonstratives in the hour before the hearing. We
4 had the benefit of getting that today. On slide 15
5 of Mr Dearman's presentation, I do believe that
6 there is a number entry on there that we have agreed
7 to excise from the presentation.

8 When the supplemental quantum submission
9 was agreed to, I believe one of the stipulations was
10 that it could not exceed the \$156 million that was
11 already in the record at that point. There happens
12 to be data point on slide 15 that includes
13 202.5 million.

14 **PRESIDENT:** Very good. So I am here in
15 page 15, and the number you want to delete is?

16 **MR BROWN:** It's the 202.5 million in the
17 second column of numbers at the bottom.

18 **PRESIDENT:** Very good. That should be
19 taken away.

20 **MR BROWN:** It should, but we've agreed to
21 simply ignore that number for the purposes of
22 proceeding promptly here.

23 **MR HO:** Yes.

24 **PRESIDENT:** Mr Ho, do you agree on that?

25 **MR HO:** Yes, we do agree, Mr President.

1 We're going to pretend it's not there, rather than
2 reprint it for you.

3 **PRESIDENT:** Very good. But it's only that
4 number? The other numbers are correct?

5 **MR HO:** That's right.

6 **MR BROWN:** Yes.

7 **PRESIDENT:** Very good. Mr Ho, I give you
8 the expert to introduce.

9 **MR HO:** Thank you, Mr President.

10 Examination by Claimant

11 **MR HO:** Mr Dearman, your report dated
12 20 May 2022 is at CER-8 for those following in the
13 electronic. Do you have a hard copy there?

14 **MR DEARMAN:** I do.

15 **MR HO:** If you turn in that to page 33, or
16 for those in the electronic version it's page 37 of
17 the pdf, you'll see a signature at the bottom of the
18 page. Do you see that?

19 **MR DEARMAN:** I do.

20 **MR HO:** Is that your signature?

21 **MR DEARMAN:** Yes, it is.

22 **MR HO:** And do the opinions which you've
23 expressed in this report represent your true and
24 complete professional opinion on the matters to
25 which you refer?

1 **MR DEARMAN:** Yes, they do. I have one
2 correction I would like to make, and I've also got
3 some updated figures. In the interests of time I've
4 presented updated figures in my presentation so
5 I won't go through those now. Just one brief update
6 which is in paragraph 4.3.7 --

7 **PRESIDENT:** 4.3.7. You have to get closer
8 to the microphone, sir.

9 **MR DEARMAN:** 4.3.7, which starts "Mr Comer
10 concludes".

11 **PRESIDENT:** Yes.

12 **MR DEARMAN:** And I would like to change
13 that, please, to "I assume comma based on Mr Comer's
14 evidence comma".

15 **PRESIDENT:** "I assume, based on
16 Mr Comer's" --

17 **MR DEARMAN:** "Evidence".

18 **PRESIDENT:** "Evidence". That -- and now
19 it goes on "that before the PFS was completed"?

20 **MR DEARMAN:** That's correct, sir.

21 **PRESIDENT:** Very good.

22 **MR HO:** So subject to those corrections,
23 do the opinions which you've expressed in your
24 report represent your true and complete professional
25 opinion?

1 **MR DEARMAN:** Yes, they do.

2 **MR HO:** Thank you. I think we will then
3 move to your direct presentation.

4 **PRESIDENT:** Which should have the number
5 H-10.
6 Presentation

7 **MR DEARMAN:** Thank you, Mr President,
8 members of the Tribunal. Thank you for the
9 opportunity to present to you this afternoon.

10 So my name is David Dearman. I'm a
11 chartered accountant by background qualifying in
12 England. I've spent the last 30 years specialising
13 in forensic accounting and expert witness work.

14 So, moving on, I've set out on this slide
15 a table of contents. In the interest of brevity
16 I won't go through that table of contents, and
17 I won't necessarily speak to every slide that I've
18 prepared, again in the interest of brevity, but the
19 Contents page gives you a roadmap of what I want to
20 present in summary form.

21 Again, in overview, I submitted my report
22 on the 30th of May, which accompanied the Claimant's
23 Additional Submission on Quantum. That report was
24 responded to by Dr Flores, Mr Dysert, and MZ Betar,
25 accompanying the Respondent's Response to the

1 Claimant's additional submission, so I've reviewed
2 those responses and submissions that relate to my
3 expert report and incorporate my responses to them
4 in this presentation where appropriate.

5 So, my instructions. I am instructed to
6 provide my opinion on the value of PEL's lost
7 business opportunity, so how much PEL and Mozambique
8 would have agreed in a hypothetical negotiation
9 conducted around June 2013 for PEL to waive its
10 rights under the MOI.

11 Now, the timing of that date is broadly
12 between April 2013, when the tender was sent out,
13 and July 2013, when it was awarded to a third party.

14 So, in providing my opinion, I've
15 considered based on PEL's rights under the MOI, and
16 I've prepared that on two bases, trying to establish
17 both the perspective of Mozambique but also from PEL
18 the value of those rights, and also separately the
19 value of PEL's work.

20 A full list of the documents I have
21 reviewed are set out in my report and I've also, as
22 I say, considered Dr Flores' third report,
23 Mr Dysert's report, and the MZ Betar report, the
24 third report that responds to my report.

25 I'm not instructed to consider and have

1 not considered Dr Flores' first two reports and
2 Mr Sequeira's expert reports, and you've just heard
3 from Mr Sequeira on those reports.

4 So to begin by giving an overview of the
5 Claimant's case on the release fee from each party's
6 perspective, Mozambique derived value from the
7 contents of the PFS. It derisked a project which
8 Mr Daga and Mr Patel state Mozambique previously
9 considered was unfeasible.

10 Mozambique benefited from being released
11 from its obligations under the MOI. The PFS, which
12 I'm instructed was required by law prior to the
13 launch of a public tender, allowed that public
14 tender to progress, and based on Mr Ehrhardt's
15 evidence Mozambique would have derived numerous
16 benefits from a tender, driving value for money,
17 creating a range of options from different bidders,
18 and achieving clarity, predictability, and
19 transparency.

20 From PEL's perspective, by giving up its
21 rights PEL would have lost the business opportunity
22 in relation to the project. At a minimum, PEL would
23 have wanted to recover the value of its work. Now,
24 that value comprises both the cost of the time and
25 material spent by PEL but also the intellectual

1 property underpinning the PFS, the concepts, the
2 vision which are captured within the PFS.

3 PEL would have wanted to be compensated
4 for potential profits that it would have earned had
5 it been awarded the concession for the construction
6 and operation of the project, that is the concepts
7 sort of underpinning my approach to considering what
8 the parties might have agreed to.

9 So did PEL and Mozambique consider the
10 project to be valuable? Given each party's
11 perspective, if the project was expected to be
12 economically viable in or around June 2013, it
13 follows that a positive release fee could have been
14 agreed.

15 And there is evidence that it was
16 considered to be commercially or economically viable
17 to both parties at that time. Mr Daga and Mr Patel
18 explained the Preliminary Study completed by PEL
19 prior to the PFS indicating the project was
20 feasible. Mr Patel states that he had no doubt when
21 he prepared the preliminary cash flow estimate
22 in May 2012 that the project would have been
23 profitable and economically viable, and we've heard
24 from him earlier this week about the purpose of that
25 cash flow.

1 Nine months after that cash flow was
2 prepared Mozambique launched its tender process for
3 the project in January 2013. 21 companies expressed
4 interest. PEL as part of the PGS consortium
5 submitted its own proposal, and in that proposal PGS
6 estimated significant benefits to Mozambique in
7 terms of tax benefits and also corporate social
8 responsibility benefits, as I've set out on the
9 slide there.

10 So, just briefly, a summary of the release
11 fee data points that I have derived as a result of
12 my work. So I've considered the potential release
13 fee on two bases, as I say, considering PEL's
14 profits foregone, and that is on the basis of PEL's
15 expected profits based on its average profits that
16 it typically earns on projects, and I'll come on to
17 speak more about that.

18 Then from Mozambique's perspective, what
19 was the derisked value of the PFS, the reduction in
20 risk of cost overruns to Mozambique as a shareholder
21 in the project. I then considered the value of
22 PEL's work by reference to the early termination
23 fee. For this I rely on Mr Comer's evidence and the
24 RSA Guidelines around the reimbursement for
25 engineering consultancy fees from inception, and

1 also the termination provisions that are set out in
2 the RSA Guidelines.

3 And, finally, I just set out as a matter
4 of fact the PEL offers that were made in 2013 and
5 2014.

6 Now, there are a range of different data
7 points, and there is, I accept, a large range of
8 data points that are set out in summary on that
9 slide, and I'll come on to explain how I arrive at
10 each one.

11 So to begin with, PEL's profits forgone.
12 By giving up its rights of first refusal and
13 exclusivity in MOI, PEL ran the risk that it
14 wouldn't be awarded the project directly, or any
15 public tender, and therefore giving up its potential
16 to earn profits. The assumption in this approach,
17 the implicit assumption, is that PEL could have
18 expected profits from the project of a similar order
19 of magnitude, so the average profits across
20 historical and current projects.

21 Now, PEL's tender proposal doesn't set out
22 its anticipated profit margin for the project, so
23 I have looked at the historical track record at a
24 corporate level. Mr Dysert called that approach
25 preposterous earlier this morning -- or earlier this

1 afternoon. I disagree and that's possibly in part
2 economists and accountants -- sorry, engineers and
3 accountants coming at things from very different
4 approaches.

5 So I have looked at the audited financial
6 statements, so that is information that has been
7 independently scrutinised and verified. Now,
8 I accept that historically PEL did not have any
9 projects in Mozambique, so that historical
10 information is not project specific. I accept that,
11 and I don't have project-specific information.

12 However, by taking the audited financial
13 statements, I have comfort that that information has
14 been scrutinised. It also gives a portfolio effect
15 of multiple projects across multiple jurisdictions.
16 It is actual information, so it captures all of the
17 risks inherent in those individual projects, and it
18 provides a -- as I say, it smooths over, because
19 I've taken five year periods and I've taken three
20 different sets of five year periods, as I set out on
21 the screen there, to identify what the expected
22 profits could have been.

23 I've also taken a very conservative
24 approach. Because I don't have project-specific
25 data I've taken the profit before tax, so that is

1 after all overheads which would be incurred in any
2 event.

3 Now, looking at 2013 and 2014's financial
4 statements, that would add between five and 7 and a
5 half per cent to the margins that I have set out on
6 the slide there, so whilst I haven't and don't have
7 the information to do a project-specific risk
8 analysis, I have allowed a significant contingency
9 in the approach that I've used by taking PEL's
10 profit margins. And I used three five year periods,
11 2011 to 2015, 2010 to 2014, and 2009 to 2013 with
12 the percentages set out on the screen there, and
13 I apply those to the anticipated cost estimate of
14 3.115 billion US dollars in the PFS.

15 So I set out on this slide the
16 calculation. There is a range of profit margins
17 between 2.78 per cent and 6.15 per cent multiplied
18 by the 3.115 billion cost, multiplied by two
19 alternative assessments of PEL's share of that
20 profit, so 47.22 per cent was the diluted share it
21 would end up with under the PGS consortium, and
22 75 per cent if the project had been awarded direct,
23 which gives you the range of values in the blue
24 boxes on the right-hand side.

25 So to move on to derisked value approach,

1 I won't dwell on this slide too much because you've
2 heard from Mr Dysert and Mr Comer on the
3 underpinnings of this approach, and I do rely on
4 Mr Comer for his evidence on the release fee.

5 But Mozambique would have derived various
6 benefits from agreeing a release fee, including the
7 ability to launch the public tender, and the
8 principle of this, based on Mr Comer's evidence, is
9 that the more information available for a project,
10 the less risk that's associated with any cost
11 estimate. Now, pre PFS, I understand Mozambique had
12 no cost estimate and so I assume that the project
13 would have been at the lower end of class 5, and
14 I have reproduced the chart on the next slide and
15 I'll speak to it then.

16 And then Mr Comer gave evidence yesterday
17 on his assessment that it falls post PFS between
18 Class 5 and Class 4, and I also -- I haven't
19 reflected on the slide here because I obviously only
20 heard Mr Dysert's evidence earlier today, but I've
21 also reflected on his evidence as well, and I'll
22 come on to speak about that.

23 But I used these classes from the AACE
24 guidelines and Mr Comer's opinion and Mr Dysert's
25 opinion to estimate the amount by which the risk of

1 cost overruns was decreased.

2 So on the next slide I reproduce that
3 chart, which you will be familiar with now.

4 So, pre PFS, I assume that the project was
5 on the far left-hand side at the top of the Y axis,
6 so a potential risk overrun at that stage of up to
7 100 percent. Then, as Mr Comer has said, as you
8 move down and you move through the classes, the risk
9 of cost overruns decreases.

10 Now, one point that Dr Flores has pointed
11 out is there's also a second line on that chart,
12 which is below the X axis, which is the converse, if
13 you like, of that principle, that as you get more
14 and more information the potential upside of
15 overstating your costs at the outset diminishes over
16 time -- not to such a great extent, but I've also
17 taken onboard Dr Flores' comments in that regard.

18 So on the next slide I just reproduce from
19 my report, which again is reproduced from the AACE
20 guidelines in the top table, they are the high range
21 and the low range, so at Class 5 plus 30 per cent to
22 plus 100 percent, and in Class 4 plus 20 per cent to
23 plus 50 per cent. And in the bottom chart, bottom
24 table, I then set out by reference to the project
25 cost of 3.115 billion what that potential range

1 could have been. Potentially those cost overruns
2 could lead to a total project cost, which is what's
3 set out in the bottom chart.

4 I would just like you to make note of the
5 Class 5 range, which is plus 30 per cent to plus
6 100 percent in particular.

7 So what I have done is applied that
8 potential cost decrease in cost overrun risk to the
9 project cost being the benefit to Mozambique. I've
10 applied that to their 20 per cent shareholding to
11 give their benefit. I have then considered to what
12 extent would Mozambique have been willing to share
13 in that cost upside, is essentially my approach.

14 I don't consider that they would have
15 wanted to share all of it or anything more than half
16 of it at the absolute extreme, but PEL's share would
17 then need to be discounted to reflect the fact that
18 Mozambique would have borne the risk of realising
19 its share of the derisked value through the project,
20 and Mozambique would have received its benefits over
21 time through that public tender process, and its
22 direct and indirect economic interest in the project
23 and the development of the project.

24 PEL's negotiating position would have been
25 strengthened on the basis that a release fee would,

1 on PEL's case, need to be paid to continue with the
2 project and put it out to public tender.

3 So, to summarise, this is my calculation.

4 I have assumed that at the outset we are at
5 100 percent potential cost overrun pre PFS. I've
6 amended my calculations -- no, these aren't the
7 amended calculations. Sorry, I do have another
8 version of the slides where I have amended these
9 calculations. This isn't they.

10 Where I have amended the deduction in the
11 second box, where it says 20 to 50 per cent, I've
12 changed that to 35 per cent to 50 per cent.

13 **MS VASANI:** That's correct on their slide
14 printout.

15 **MR DEARMAN:** Sorry, it's just the one that
16 I'm looking at here.

17 **PRESIDENT:** The presentation here on the
18 screen is not exactly the one I have in front of me.

19 **MR DEARMAN:** So yes, my apologies. I'll
20 talk to the hard copy, if I may.

21 So I have reflected on Mr Dysert's
22 evidence and Mr Comer's evidence and reduced the
23 benefit to 35 per cent to 50 per cent. Now, if you
24 remember the Class 5 overrun potential was
25 30 per cent to 50 per cent so I brought it within

1 the Class 5 parameters. It also, as we saw on the
2 chart and Mr Comer gave evidence on, and indeed I
3 think Mr Dysert, about the overlap between Class 4
4 and Class 5, so there is some overlap there, but
5 what I've done is adjusted the calculations to
6 reflect on Dr Flores' and Mr Dysert's evidence in
7 that regard to bring it to within that envelope of
8 the Class 5 parameters, but also to reflect on the
9 fact that Mr Comer's evidence is that a large number
10 of the riskier items in Class 4 were also covered.

11 So multiplied by the 3.115 billion,
12 Mozambique's share of 20 per cent gives you a range
13 of derisked values there of 311.5 million to
14 405 million. On the next slide, I have then updated
15 this slide as well, so in the table below I set out
16 for illustrative purposes a range of different
17 percentages that might have been agreed between 5
18 per cent, 50 per cent is the maximum, and obviously
19 there's a figure there that should be ignored, but
20 for illustrative purposes I give a range of 5, 10,
21 15, and 25 per cent of what the share might have
22 been of that de-risked value.

23 I've also taken account of Dr Flores'
24 comment that I haven't included the potential
25 reduction in upside risk, upside, if you like.

1 I don't personally consider that that in a
2 negotiation would necessarily have been a point that
3 would have been taken into account because that is
4 upside for both parties. If that happens, what we
5 would be concerned with is the risk of the cost
6 overruns, but I've set out those figures as well on
7 this slide.

8 So, early termination fee. Again, I won't
9 dwell too much on this slide because Mr Comer has
10 given evidence on this point, but he has said that
11 the fee for the inception engineering phase of a
12 project, in this case the PFS, is approximately 5
13 per cent of the total engineering cost, and the fee
14 for early termination of an engineer's services
15 would include remuneration for the services provided
16 plus 10 per cent. That's his opinion based on the
17 RSA Guidelines.

18 So on the next slide I have set out the
19 calculation. I've also reflected on Dr Flores'
20 observation that the PFS includes a total for the
21 engineering cost of 107 million, so rather than
22 using Mr Comer's percentages to calculate the total
23 engineering cost, I have taken the 107 million as
24 being the total engineering cost and applied the 5
25 per cent to that. However, I understand that the

1 engineering consulting fee in the PFS doesn't
2 include the cost of the PFS itself, so what I do in
3 the second box on this chart is to gross up the cost
4 of the engineering cost to include the inception
5 fee, so it grosses it up from \$107 million to around
6 \$112.6 million, multiplied by the inception fee and
7 the termination fee of 10 per cent gives you a
8 numerical number of \$16.9 million for the
9 termination fee.

10 PEL's offers to settle. There were two,
11 as I understand it, offers to settle
12 in December 2013, an offer of 4 million US dollars
13 plus all other related costs incurred by PEL, plus a
14 royalty of 5 -- half a per cent, sorry, 0.5 per cent
15 of the investment. That equates to \$19.575 million
16 based on a half a per cent of the \$3.115 million --
17 sorry, \$3.115 billion project cost, plus potentially
18 the cost of the PFS, the inception fee of
19 5.6 million that we were just looking at, and that
20 offer was repeated in February, I understand.

21 Then on the 18th of August 2014 an offer
22 of \$10 million plus all other related costs plus
23 royalties. The royalty isn't set out in that offer
24 so I can't quantify it.

25 But both offers refer to "all other

1 [related] costs" and, on the basis of the early
2 termination fee, the cost of the PFS equates to
3 approximately 5.6 million.

4 I'm conscious of time so, very briefly,
5 I set out on this slide my response to the key
6 criticisms of my report, principally Dr Flores'
7 report, as he states that the project was not viable
8 based on PEL's 2012 projections.

9 Now, obviously we've heard from Mr Patel
10 on the purpose of those projections and how they
11 were prepared and what they were prepared for, so
12 I won't repeat that evidence.

13 These financial plans would have been
14 expanded on and progressed and updated as the
15 project progressed, and they don't provide any
16 information on the value and, as I said earlier,
17 these projections came nine months before the
18 project was put out to tender, which suggests of
19 itself that the parties considered there was value.

20 Consistency with the Claimant's case.

21 Dr Flores states that I don't account for
22 PEL's obligations to operate the project under a
23 concession. I was specifically instructed not to
24 consider an O&M phase of the project but just to
25 base my assessment on the construction phase.

1 Dr Flores considers the non-recoverable
2 costs approach as the only reliable approach.
3 However, as I said earlier, that doesn't capture the
4 value intrinsic in the PFS and PEL's work. And,
5 finally, Dr Flores suggests that there's no
6 opportunity cost to PEL because, by failing to win
7 the tender, it had time and resources for other
8 projects, but that is the same in the but-for and
9 the actual world in a release fee negotiation. PEL
10 would have been free to use its resources for other
11 projects.

12 So on the final slide I just bring
13 those -- sorry, yes, that slide -- I just bring
14 those points together. I won't repeat the numbers
15 that I've set out, but I set out in a summary table
16 at the bottom there the range of values based on
17 those four different approaches. That is based on
18 an absolute amount, and I provide a range of data
19 points to assist the Tribunal in its determination,
20 and obviously it is a matter for the Tribunal, not
21 for me, what two parties would have negotiated and
22 agreed between the parties, but I hope those data
23 points are helpful.

24 Obviously there would be, if there is an
25 award, interest that would be then payable on that

1 amount from a negotiating point of June 2013.

18:10

2 Thank you, and apologies if that was a bit
3 of a canter through my presentation.

4 **PRESIDENT:** Thank you. Thank you,
5 Mr Dearman. Let me see if Mr Ho has any follow-up
6 questions.

7 **MR HO:** Nothing further. Thank you,
8 Mr President.

9 **PRESIDENT:** Very good. So I turn over to
10 you, Mr Brown.

11 **MR BROWN:** Thank you, Mr President.

12 Cross-examination by Respondent

13 **MR BROWN:** Good afternoon, Mr Dearman.

14 **MR DEARMAN:** Good afternoon.

15 **MR BROWN:** Can I talk to you about these
16 hypothetical negotiations first for a couple of
17 minutes?

18 **MR DEARMAN:** Yes.

19 **MR BROWN:** In these hypothetical
20 negotiations you're expecting PEL to be reasonable,
21 correct?

22 **MR DEARMAN:** I expect it to be an arm's
23 length negotiation, yes.

24 **MR BROWN:** And that means you'd also be
25 expecting the Republic of Mozambique to be

1 reasonable, correct?

2 **MR DEARMAN:** Yes.

3 **MR BROWN:** But you wouldn't be expecting
4 PEL to just simply abandon its positions, correct?

5 **MR DEARMAN:** I'm not sure I understand the
6 question.

7 **MR BROWN:** Well, would you be expecting
8 the Republic of Mozambique to abandon its position
9 of the MOI as part of these negotiations that you're
10 describing?

11 **MR DEARMAN:** I'm not commenting on any of
12 the legal or factual issues which are before the
13 Tribunal. I was simply instructed to consider a set
14 of circumstances where a hypothetical negotiation
15 was happening in June 2013.

16 **MR BROWN:** Generally speaking, the
17 parties' views of their legal rights and obligations
18 would be data points in a negotiation, correct?

19 **MR DEARMAN:** Sorry, can you repeat the
20 question?

21 **MR BROWN:** Sure. Generally speaking, the
22 parties' perceptions of their legal rights and
23 obligations would be data points in a good faith
24 negotiation, correct?

25 **MR DEARMAN:** Again, I'd repeat my previous

1 answer.

2 I'm assessing a hypothetical negotiation.
3 I haven't considered, and obviously it's outside my
4 expertise to consider, the various issues that are
5 before you legally and factually.

6 **MR BROWN:** Have you ever worked in
7 Mozambique?

8 **MR DEARMAN:** No, I haven't.

9 **MR BROWN:** Have you ever worked on a
10 project in Mozambique?

11 **MR DEARMAN:** No, not to my knowledge.

12 **MR BROWN:** Have you ever negotiated the
13 terms of a concession in Mozambique?

14 **MR DEARMAN:** No.

15 **MR BROWN:** Have you ever conducted
16 negotiations on a disputed PPP matter in Mozambique?

17 **MR DEARMAN:** No.

18 **MR BROWN:** Do you have your slides still
19 in front of you?

20 **MR DEARMAN:** I do.

21 **MR BROWN:** Can I turn your attention to
22 slide 5, please.

23 This slide purports to describe both
24 Mozambique's perspective and PEL's perspective in
25 this imaginary -- I'm sorry, are you doing OK? Are

1 you with me on slide 5?

2 **MR DEARMAN:** I am.

3 **MR BROWN:** This slide purports to describe
4 both Mozambique's perspective and PEL's perspective
5 in your hypothetical negotiation, correct?

6 **MR DEARMAN:** Yes, I'm summarising on slide
7 5 the Claimant's case.

8 **MR BROWN:** Can I focus your attention on
9 the benefits that you say would derive from the
10 public tender based upon Mr Ehrhardt's evidence?

11 **MR DEARMAN:** Yes.

12 **MR BROWN:** Are you suggesting that, as a
13 data point, Mozambique would agree to pay PEL in
14 order to achieve clarity, predictability, and
15 transparency?

16 **MR DEARMAN:** What I'm setting out on the
17 slide here is the benefit that Mozambique derives
18 from PEL giving up its rights under the MOI.

19 So the benefits that Mr Ehrhardt has
20 identified are benefits that -- they may not be
21 quantifiable as, you know, individual components of
22 the fee, but they are benefits, qualitative
23 benefits, that Mozambique derives from opening the
24 project open to a public tender.

25 **MR BROWN:** Can I turn your attention to

1 slide 7, please?

2 In this summary of the release fee data
3 points you summarise the PEL profits forgone data
4 point as between 40.9 million and 143.7 million.
5 I'm going to ask, with all due respect, do you
6 consider that range to be a useful data point?

7 **MR DEARMAN:** Yes, I do. I accept it is a
8 wide range, but it reflects what I didn't set out in
9 my presentation but is in my report, there was a
10 deteriorating margin that PEL had suffered in the
11 recent past which is reflected in that wide range.

12 I used three different five-year periods,
13 as I say, to smooth the risks and to smooth the
14 profile of profits. I don't have project-specific
15 data, but what that does give you is an expectation
16 based on the historical achievements across all of
17 their projects of the types of profits that they do
18 and have historically earned on projects and
19 reflects all of the risks associated with those
20 projects that they've delivered.

21 **MR BROWN:** Can I show you what we've
22 marked as Dysert 5, please?

23 We've sort of eliminated that sister
24 computer, and in the interest of time you're welcome
25 to use that to look at these documents as well, but

1 we can also show them on the screen.

2 I suppose I would propose that we proceed
3 by showing it on the screen, and if you feel
4 concerned at any point, please do let me know.

5 **MR DEARMAN:** OK.

6 **MR BROWN:** Do you know whether or not you
7 reviewed this particular brochure from Patel?

8 **MR DEARMAN:** During the course of my work,
9 I don't recollect.

10 **MR BROWN:** I wonder if you could maybe
11 just move through -- page down on these brochure
12 pages for just a moment. Keep going for a moment,
13 I'll ask you to stop in just a moment. Keep going.
14 All right. Can you go back one, please?

15 So PEL does dams, and they do power, and
16 underground works, and water works and
17 transportation. They do structures. I'll represent
18 to you, sir, they do real estate. They do a lot of
19 those things in India. I would represent to you,
20 sir, they don't do any of the things they just
21 described in Mozambique.

22 Do you know whether they do or not?

23 **MR DEARMAN:** I certainly recollect
24 Mr Daga's evidence that, prior to this project, they
25 had not undertaken projects in Mozambique before.

1 They had undertaken rail projects. I think I'm
2 right in saying he said that they were principally
3 in India. But, as I said earlier, I have taken a
4 portfolio approach and I accept I haven't gone down
5 an industry-specific or project-specific approach
6 given the information I had available to me, but
7 I consider that using the audited information and
8 using five -- sorry, three different five-year
9 periods to smooth any anomalies and projects that
10 have been particularly successful and projects that
11 haven't been successful, those will be smoothed by
12 using that methodology, and also by using the profit
13 before tax. So I've included all overheads have
14 been deducted in arriving at the profit margin, and
15 those overheads wouldn't have been incurred in any
16 event.

17 So there is already an allowance for --
18 I mean, I don't know whether or not a project in
19 Mozambique of this particular nature is higher or
20 lower risk than these projects that are set out on
21 this brochure but, by using the profit before tax,
22 there is a large degree of contingency in my
23 approach.

24 **MR BROWN:** You understand that profits are
25 never guaranteed on a project, correct?

1 **MR DEARMAN:** It depends at what stage of
2 the project you're assessing those profits, and it
3 depends on the nature of the contract as to whether
4 or not profits are guaranteed.

5 **MR BROWN:** Very good. In our
6 hypothetical --

7 **PRESIDENT:** Would you move the microphone
8 a bit closer?

9 **MR DEARMAN:** Sorry. Is that better?

10 **PRESIDENT:** You are getting lower and
11 lower.

12 **MR BROWN:** In our hypothetical negotiation
13 at the point at which you're describing a release
14 fee about the time of the public tender, you
15 understand that profits would not be guaranteed on
16 the project that PEL proposed, correct?

17 **MR DEARMAN:** Correct.

18 **MR BROWN:** And whether or not PEL expected
19 or didn't expect some consolidated corporate profit,
20 you would understand if Mozambique wouldn't be that
21 interested in that as a data point, correct?

22 **MR DEARMAN:** I don't know what would be in
23 the minds of the parties. The best data point that
24 certainly PEL and Mozambique would have as to PEL's
25 anticipated profits is the historical profits that

1 they have earned on a portfolio of projects.

2 **MR BROWN:** Can I talk to you about your
3 de-risking theory for a moment, please?

4 You have no basis to disagree with either
5 Mr Dysert or Mr Comer as it relates to the
6 application of AACE 98R-18, correct?

7 **MR DEARMAN:** No, that's right. I am
8 reliant upon those experts.

9 **MR BROWN:** And if, in fact, the PFS is
10 still a Class 5 stage cost estimate, there's no
11 calculation for you to make, correct?

12 **MR DEARMAN:** No, that's not correct. As
13 I've said, my updated calculation is all within
14 Class 5. As we've seen, Class 5 has a large range
15 from plus 100 percent down to plus 30 per cent, and
16 my revised calculations are within that, so it
17 intrinsically assumes that the project is still
18 within Class 5 but there's more information has been
19 received to de-risk the project and to move it down
20 that graph.

21 **MR BROWN:** I'd like you to take a look
22 with me at -- it's Dysert Exhibit 3. This is page
23 12 internally but page 14 of the pdf. At the top of
24 that page it says here, "Note that these plus/minus
25 percentage measures associated with an estimate

1 class are intended as rough indicators of the
2 accuracy trend provided the company and project are
3 well managed and no major risks occur. These are
4 merely a useful simplification given the reality
5 that every individual estimate will be associated
6 with a unique probability distribution explaining
7 its unique level of uncertainty and risk that must
8 be determined through a quantitative risk analysis
9 for each particular estimate".

10 Do you see that?

11 **MR DEARMAN:** I do see that.

12 **MR BROWN:** And you have no basis
13 whatsoever to disagree with that statement from the
14 AACE, correct?

15 **MR DEARMAN:** I haven't seen where this
16 document -- what this document is. If you're
17 representing to me that that's the AACE document,
18 then I've no reason to disagree with obviously a
19 statement that's made in that document.

20 **MR BROWN:** I've put page 1 on the screen
21 for you, sir.

22 **MR DEARMAN:** Thank you.

23 **MR BROWN:** May I talk to you for just a
24 moment about the engineering fee?

25 I'll use slide 17 of your presentation so

1 we can focus on the engineering fee, the early
2 termination fee as you call it.

3 I understand that you've actually altered
4 this calculation a bit, correct?

5 **MR DEARMAN:** I've altered it since my
6 report was prepared, yes.

7 **MR BROWN:** And you've altered it in order
8 to make use of the line item for the engineering in
9 the PFS, correct?

10 **MR DEARMAN:** That's correct. The
11 107 million US dollars.

12 **MR BROWN:** But you also understood that
13 the costs of the PFS are not in that line item,
14 correct?

15 **MR DEARMAN:** Yes.

16 **MR BROWN:** And you've, in fact, reverse
17 engineered a cost for the PFS based upon an
18 assumption that that would be 5 per cent of the
19 engineering costs, correct?

20 **MR DEARMAN:** I have -- well, I wouldn't
21 necessarily call it "reverse engineered", I would
22 call it grossing up, as I have on the slide, and
23 it's based on Mr Comer's evidence that 5 per cent of
24 the total engineering cost is a conservative
25 estimate of the inception fee, which he equates to

1 the PFS.

2 **MR BROWN:** A better basis for the costs of
3 the PFS would be, in fact, the actual costs of the
4 PFS, correct?

5 **MR DEARMAN:** I'm not sure what you mean by
6 the actual costs.

7 **MR BROWN:** Well, do you know the actual
8 costs of the PFS?

9 **MR DEARMAN:** I'm not sure I understand the
10 question.

11 **MR BROWN:** Do you know how much PEL spent
12 to create the PFS?

13 **MR DEARMAN:** Oh, I see. No, I don't.

14 **MR BROWN:** The division, the 5 per cent
15 inception fee and the 10 per cent termination fee,
16 do you see those boxes?

17 **MR DEARMAN:** I do.

18 **MR BROWN:** Those are based entirely on
19 Mr Comer applying RSA Guidelines, correct?

20 **MR DEARMAN:** That's correct.

21 **MR BROWN:** Those are those South African
22 guidelines that we looked at yesterday, correct?

23 **MR DEARMAN:** With Mr Comer, yes.

24 **MR BROWN:** And you don't have any reason
25 or basis to say that those South African guidelines

1 apply to Mozambique, correct?

2 **MR DEARMAN:** I have no reason to dispute
3 Mr Comer's evidence on the point as to whether or
4 not they apply to Mozambique. I've applied them
5 based on Mr Comer's evidence.

6 **MR BROWN:** Can I turn your attention to
7 slide 18, please.

8 On slide 18 you recount PEL's offer to
9 settle this matter, correct?

10 **MR DEARMAN:** Yes.

11 **MR BROWN:** Because you consider the offers
12 to settle as data points in any hypothetical
13 negotiation, right?

14 **MR DEARMAN:** Yes.

15 **MR BROWN:** And the December 20, 2023 offer
16 to settle says \$4 million, correct?

17 **MR DEARMAN:** Sorry, can you repeat the
18 date for the record? It came out as 2023.

19 **MR BROWN:** Yes, I'll -- and I've said it
20 poorly because I was trying to switch the number and
21 the month and my head.

22 I'll say it again.

23 The 20 December 2013 settlement
24 communication requested compensation damages in the
25 amount of \$4 million, do you see that?

1 **MR DEARMAN:** \$4 million plus all other
2 related costs as incurred by PEL including royalties
3 for identification of the project at half a per cent
4 investment, yes.

5 **MR BROWN:** And royalties would require
6 that the project was actually operating, correct?

7 **MR DEARMAN:** Yes, a royalty has to be
8 based on some measure.

9 **MR BROWN:** So in a hypothetical
10 negotiation, if the project wasn't operating and
11 making revenue, the royalty number would be zero,
12 correct?

13 **MR DEARMAN:** Well, no. My understanding
14 of this offer was that it's based on the anticipated
15 cost of the project.

16 **MR BROWN:** Why would -- I'm sorry. You're
17 saying the royalty would be multiplied times the
18 costs?

19 **MR DEARMAN:** Yes, the investment. The
20 offer is royalties for identification of the project
21 at half a per cent of the investment.

22 **MR BROWN:** And if Mozambique didn't
23 consider that to be a particularly relevant data
24 point, that would be up to them to determine,
25 correct?

1 **MR DEARMAN:** Obviously this is a
2 hypothetical negotiation between two parties.

3 **MR BROWN:** You have a lot of data points,
4 Mr Dearman. I'm just wondering, do you consider all
5 of the data points that you've proposed to be
6 reasonable data points for a hypothetical
7 negotiation?

8 **MR DEARMAN:** Yes, I consider they provide
9 a framework under which the parties could have
10 operated. They're all relevant data points that
11 I've tried to objectively set out, based on the
12 criteria that we've just gone through, a range of
13 values which would frame those negotiations.

14 **MR BROWN:** I have no further questions.
15 Thank you.

16 **PRESIDENT:** Thank you. Thank you,
17 Mr Brown.

18 Mr Ho, it's your turn now. Do you have
19 any follow-up questions?

20 **MR HO:** My turn will be very short,
21 Mr President. We don't have any further questions.

22 **PRESIDENT:** Very good. Let me
23 double-check with my colleagues.

24 Mr Dearman, we have no further questions.
25 Thank you very much for your presentation.

1 And I think with this, we close the
2 transcript for the day. Thank you, Mr Dearman.

18:30

3 (The hearing was adjourned at 6.30 pm)

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