IN THE MATTER OF AN ARBITRATION UNDER CHAPTER ELEVEN OF THE NORTH AMERICAN FREE TRADE AGREEMENT AND THE UNCITRAL ARBITRATION RULES

## BETWEEN:

WILLIAM RALPH CLAYTON, WILLIAM RICHARD CLAYTON, DOUGLAS CLAYTON, DANIEL CLAYTON AND BILCON OF DELAWARE INC.

CLAIMANTS

- and -

GOVERNMENT OF CANADA
RESPONDENT
TRANSCRIPT OF PROCEEDINGS
HELD BEFORE JUDGE BRUNO SIMMA (PRESIDING ARBITRATOR), PROFESSOR DONALD McRAE, and PROFESSOR BRYAN SCHWARTZ held at the offices of Arbitration Place, 333 Bay Street, Suite 900, Toronto, Ontario
on Friday, February 23, 2018, at 8:39 a.m.
VOLUME 5 - FULL TRANSCRIPT \{REVISED\}
CONDENSED TRANSCRIPT WITH WORD INDEX
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A. That's correct.
Q. And at that point in time, what happened to this agreement?
A. In my opinion,
Q. Thank you.
If you could go to Tab 17, please. And, if you go to the page that Mr. Spelliscy took you to yesterday, which is page 18 on the bottom left or 829 on the bottom right of the page.
A. So this would be BIL
025818 in the lower right-hand side?
Q. 829.
A. 829. Okay.
Q. You will see and you will recall that this is a
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disagree.
MR. SPELLISCY: Then I ask for a ruling from the tribunal.

PRESIDING ARBITRATOR: I think if you want anything from me, at least, you would have to speak up a bit because I couldn't really follow.

MR. SPELLISCY: My point, Judge Simma, is that this is a direct examination -- redirect examination, and while Mr. Nash is taking him to a document that I certainly took him to, he is walking through the document, asking and pointing to things, reading them into the record and asking if that's correct. This is not a cross-examination. As Mr. Nash was at pains to point out the other day with one of our other counsel, leading questions are not appropriate on redirect. So if he would like to ask him generally about the document, he can do so. What he can't do is lead the witness by simply reading something into the record and asking him to agree with it. That's cross-examination.

MR. NASH: So what I was asking him to do was to look at a particular part of the written words on the document and just

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confirm that he read them and that he understood them. That's all --

PRESIDING ARBITRATOR: Are we through with that document?

MR. NASH: No.
PRESIDING ARBITRATOR: Not
yet?
MR. NASH: No. And it's perfectly permissible on redirect examination to take a witness to a document that's been put to him, take him to the certain portions of the document, point them out to him and go no further. I might ask some questions about that, but the questions about that will not be cross-examination questions. They will be non-leading questions.

PROFESSOR SCHWARTZ: As we understand it, the purpose of the prohibition on leading questions is to make suggestions that will influence the substance of the witness' response. Simply taking somebody to a section and asking that person to read it out doesn't undermine the purpose of not influencing the substance of the witness' responses, it is therefore acceptable. Does that answer the question?

MR. NASH: Thank you.

|  | Page 1473 |  | Page 1474 |
| :---: | :---: | :---: | :---: |
| 1 | BY MR. NASH: | 1 |  |
| 2 | Q. From your perspective as | 2 | Q. If you could turn to |
| 3 | a | 3 | Tab 16, please. |
|  |  | 4 | A. Okay, I've got nothing in |
|  |  | 5 | here, Mr. Nash. |
|  |  | 6 | Q. Nothing in 16? |
|  |  | 7 | A. That could have been |
|  |  | 8 | taken out after yesterday's stuff; right? |
| 9 | A. There is no distinction. | 9 | Q. It's the pro forma. |
| 10 | I mean, the | 10 | A. Okay, yes. |
|  |  | 11 | Q. Pro forma -- okay. So |
|  |  | 12 | you were taken to this document by counsel. It's |
| 13 | Q. And did you know anything | 13 | the pro forma for the statement of operations for |
| 14 | about the Q An | 14 | five years ending December 31st, 2015. And |
|  |  | 15 | specifically, you were taken to the matrix, |
|  |  | 16 | revenue matrix summary on page 8 , the last page. |
|  |  | 17 | A. Okay, so I am looking at |
| 18 | A. I was not made privy to | 18 | Document C-1046-010? |
| 19 | that information. | 19 | Q. Correct. |
| 20 | Q. Would that be normal, | 20 | Now, you were taken to some |
| 21 | from your perspective, from your experience? | 21 | figures yesterday regarding shipping and volume, |
| 22 | A. Yes, that would be the | 22 | and in order to assist the tribunal in the |
| 23 | standard, and that was the -- that was what we had | 23 | understanding of how this is put together and how |
| 24 | dealt with . I was not privy to | 24 | it's structured, can you go to 2012. On the very |
| 25 |  | 25 | first numbered line, which is shipping volume of |
|  | Page 1475 |  | Page 1476 |
| 1 | ; do you see that? | 1 | keeping your finger in the revenue matrix because |
| 2 | A. I see the number | 2 | we are going to come back to it. |
| 3 | yes. | 3 | A. Yes. |
| 4 | Q. And that's referred to as | 4 | Q. And if you go to page 7, |
| 5 |  | 5 | and you go to the left-hand side of the box in the |
| 6 | ; do you see that? | 6 | middle of the page, you see |
| 7 | A. That is correct, yes. |  | do you see that? |
| 8 | Q. And you will see the | 8 | A. I do. |
| 9 | figure ${ }^{\text {; do you see that? }}$ | 9 | Q. And do you see |
| 10 | A. I do see that number, |  |  |
| 11 | yes. | 11 | A. Ido. |
| 12 | Q. And below that, we see | 12 | Q. And there's certain |
| 13 | the figure | 13 | numbers there; what are those numbers? |
| 14 | A. Yes, I see that figure. | 14 | A. Those are the different |
| 15 | Q. And if you go across that | 15 |  |
| 16 | line to the left, the title for that part is |  |  |
| 17 | and then under | 17 | Q. And you see under that, |
| 18 | that, it says, that's Whites Point | 18 |  |
| 19 | Quarry, |  |  |
| 20 | and we see ; do you see that? |  | nd you see in the next line down, |
| 21 | A. I do see that, yes. |  | And then if |
| 22 | Q. Now, keeping that figure | 22 | you follow that line across to 2012, do you see |
| 23 | of in mind, I'd like to take you back to | 23 | the figure, the second line down, in the 2012 |
| 24 | the , which you were also | 24 | year, ? |
| 25 | taken through yesterday. And that is at Tab 9, | 25 | A. I do see that number, |

Page 1477
yes.
Q. Going back to the revenue matrix, then, what is the relationship between those two figures, the one in 2012 in the revenue matrix, , and that one there in the
A. They are exactly the same figure.
Q. And why is that?
A. Because that's what was

## proposed,


 says,
Q. So I understand, is the was it intended by you, to equate to something in the revenue matrix?


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go down to the next section, which talks about

A. I do.
Q. And if you go down a bit further, you see
A. Yes.
Q. Dollars is $\square$
A. Yes.
Q. And that figure is higher

Q. Why is that?
A. Because in this


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PUBLIC VERSION



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letters -- and I have to say, I mean, this has been despite Mr. Nash's promise yesterday that the overnight period would help him be more efficient. We've been going for an hour and a half. This has been very wide ranging. I have let this redirect, which is really a direct, go on and on. But at some point, with the time limited, I do think that I'm going to have to start objecting, and I object to this. If the letter wasn't put to him and if he wants to ask about

Otherwise, like many of the topics, we are outside of the scope of cross.

MR. NASH: I'm just trying to understand my friend's point.

you just said? I don't get that.
MR. SPELLISCY: Yes, sorry.


MR. NASH: Well, it forms the context in which that

We have a described event where one
a competitive price. They say in the second

## this is the

, as I recall. And
-
MR. SPELLISCY: I would say that, much like the discussion
that I didn't cross-examine on at all,
we are, again, beyond the scope of cross-examination.

MR. NASH: You have my submission.

PRESIDING ARBITRATOR: Give us a moment.

PROFESSOR SCHWARTZ: Mr. Nash, we are having a little trouble coming to a decision here. Documents could be linked to each other in any number of ways, inherently, logically, inextricably, but in order to be within the scope of redirect, it would have to be on the same subject matter. You would have to be covering the same subject matter as the document. So could you just explain to us how this is -- you are using the second document to address a matter that was cross-examined on in relation to the first document?

MR. NASH: Yes.

The questions in relation to the second document, the one that was put to Mr. Dooley yesterday, is my friend is correct about the and how does that


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And there's also another aspect to it, which is a component of On the second page, the document says:


PROFESSOR SCHWARTZ: Okay. Now that it's been explained to us, the panel's prepared to allow that question, but would take Mr. Spelliscy's point that, of course, redirect does have to be directly related to matters that were cross-examined on in the first place.




|  |  |  | Page 1545 |  |
| :--- | :---: | :---: | :---: | :---: |



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A. I will give you that, yes.

A. That's correct.

MR. SPELLISCY: Just give me one second. Thank you, Mr. Dooley. That is all I have for now.

PRESIDING ARBITRATOR: Thank you, Mr. Spelliscy. Mr. Nash has another question.

MR. SPELLISCY: I do want to raise one procedural point. I won't object. We have, in this hearing so far, consistently allowed re-direct from Mr. Nash. It's not provided for in the procedural order. If you look at the procedural order, it's very clear that there is cross-examination, redirect. It doesn't say recross either, which we have consistently allowed, but we are now into this game where we

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are constantly standing up and sitting down. I don't want to lodge an official objection to it, but I note we are not following what the procedural order says. And with the time constraints we have, I think we have to monitor what we are doing here.

PRESIDING ARBITRATOR: Did we exclude it in the order, or did we not mention the possibility?

MR. SPELLISCY: I will turn to Mr. Pulkowski for help, but my recollection of the order is that it said that the examinations shall proceed as follows, which is a short introduction or direct, cross-examination, followed by redirect.

DR. PULKOWSKI: That is correct. There was no specific exclusion of the possibility; rather, the procedural order proceeds by defining the ordinary course of examination, brief introduction followed by cross-examination, and then the side summoning the witness may then re-examine the witness with respect to any matters or issues arising out of the cross-examination. The tribunal may examine the witnesses at any point.


MR. SPELLISCY: But I do suggest that, with recross and redirect, that we, in general, become more rigid on this.

PRESIDING ARBITRATOR: Yes, fully agreed, and you have, how do you say, good faith two questions.

MR. NASH: Two questions. And I also recall, Judge Simma, that, after the tribunal has asked questions of the witnesses, either side has been invited to get up and, "Are there any questions arising out of those questions?" And I recall getting up myself. I don't recall if Canada got up in response to those invitations. But, again, I have got no objection at all for that practice -- procedure, as we move forward, to be equally distributed between both parties.

PRESIDING ARBITRATOR: Well, from now on, we are certainly going to be much more aware of what we do.

MR. SPELLISCY: Yes. This is fine. I note -- and I think, if we look at the time that has been used, I mean, just the constant examination of the same witness over and over has been one of the drags on the time when I have
looked back at the schedule.
MR. NASH: I fundamentally disagree with that.

MR. SPELLISCY: Sorry, you
fundamentally disagree?
MR. NASH: I do. I simply
disagree with that.
MR. SPELLISCY: With the
simple calculation of time?
MR. NASH: With your
characterization, but I don't propose to spend any more time debating it.
FURTHER RE-EXAMINATION BY MR. NASH:
Q. So the two questions are, Mr. Dooley, Mr. Spelliscy asked if you could have

A. Yes.
Q. Mr. Spelliscy also raised a question of document production, and he said -and I'm paraphrasing -- you didn't produce documents relating to a matter that he raised in re-cross. You left New York Sand \& Stone when?
A. Uh... December of 2015.
Q. And --

MR. SPELLISCY: That's two
questions.
MR. NASH: Well, there's a
follow-up.
MR. SPELLISCY: This seems to be a problem. It's exactly what I am pointing to. There was two questions. That's two questions.

MR. NASH: This is a subpart
of the same question.
PRESIDING ARBITRATOR: I think that's fair, because if then some conclusion, if it builds on Mr. Dooley having left in -- so let's see what comes.

> BY MR. NASH:
Q. Yes. The first question
was 2 A , and this is 2 B .
So were you aware of the status of this tribunal proceeding at the time that you left?
A. No.
Q. Did you have access -this is sub C. Did you have access to New York Sand \& Stone after you left in December?

## A. No.

MR. NASH: Okay. Thank you.
PRESIDING ARBITRATOR: I think
that was a fair connection between the
subquestions. Okay. All right. But point made.
So questions -- no questions
from the tribunal. So that concludes the long witness examination of Mr. Dooley. Mr. Dooley, you are a free man again, and we wish you a safe trip home.

THE WITNESS: Thank you.
Thank you. And I just want to say a special
thanks for you taking your jacket off so I wasn't the only guy in the room who took my jacket off.

PRESIDING ARBITRATOR: It's getting colder, so everybody may want to put their jacket on again.

Okay. And I think we could instantly call on Mr. Fougere.

Mr. Fougere, you are welcome to take the seat here.

So good morning again.
Welcome. This will be your witness examination. Would you please be so kind and read out the statement that you have in front of you.

|  | Page 1561 |  | Page 1562 |
| :---: | :---: | :---: | :---: |
| 1 | WITNESS DECLARATION: DAN FOUGERE | 1 | Q. And were you in the |
| 2 | MR. FOUGERE: I solemnly | 2 | aggregates industry as a chartered accountant in |
| 3 | declare upon my honour and conscience that I will | 3 | the late '90s and through 2011 approximately? |
| 4 | speak the truth, the whole truth, and nothing but | 4 | A. I was indeed employed by |
| 5 | the truth. | 5 | Martin Marietta Materials from 1998 until 2011. |
| 6 | PRESIDING ARBITRATOR: Thank | 6 | Q. And what was your |
| 7 | you. Mr. Nash will direct you. | 7 | position there? |
| 8 | EXAMINATION IN-CHIEF BY MR. NASH: | 8 | A. I was administrative |
| 9 | Q. Good morning, | 9 | manager, which effectively was the controllership |
| 10 | Mr. Fougere. | 10 | function. And for an interim period in 2008-2009, |
| 11 | A. Good morning, sir. | 11 | I was the interim plant manager. |
| 12 | Q. You have signed two | 12 | Q. And you left Martin |
| 13 | witness statements in this matter; correct? | 13 | Marietta in 2011? |
| 14 | A. That is correct. | 14 | A. In September of 2011, I |
| 15 | Q. And you're a chartered | 15 | left Martin Marietta to go to work as director of |
| 16 | accountant, now a CPA, in Canada? | 16 | finance with the Sisters of St. Martha in |
| 17 | A. I am. | 17 | Antigonish. |
| 18 | Q. And how long have you | 18 | Q. Do you have any |
| 19 | been a chartered accountant? | 19 | corrections to make to your witness statement? |
| 20 | A. Approximately 40 years, | 20 | A. I have no corrections to |
| 21 | since 1977. | 21 | make. |
| 22 | Q. And you are still | 22 | MR. NASH: Thank you, |
| 23 | practising? | 23 | Mr. Fougere. My friend from Canada will ask you |
| 24 | A. I'm not in public | 24 | some questions. |
| 25 | practice, but I'm in industry. | 25 | PRESIDING ARBITRATOR: Thank |
|  | Page 1563 |  | Page 1564 |
| 1 | you, Mr. Nash. And examination will be by | 1 | record. |
| 2 | Mr. Spelliscy. | 2 | This is an article profiling |
| 3 | CROSS-EXAMINATION BY MR. SPELLISCY: | 3 | Martin Marietta's Auld's Cove Quarry in which you |
| 4 | Q. Good morning, | 4 | are quoted. The article itself doesn't have a |
| 5 | Mr. Fougere. | 5 | date on it, but I think you have testified in your |
| 6 | A. Good morning. | 6 | witness statement it was written in 2008; is that |
| 7 | Q. I have good news and bad | 7 | correct? |
| 8 | news for you. My good news is I have only one | 8 | A. That is correct. |
| 9 | question. The bad news is it has many, many sub | 9 | Q. Okay. Now, in the -- I |
| 10 | parts. This is an inside joke that, because you | 10 | just want to flip to the last paragraph of the |
| 11 | haven't been sitting here, you won't get. | 1 | article on the second page. In that last |
| 12 | MR. NASH: How many? | 12 | paragraph, you confirm that it is an operation |
| 13 | (Laughter) | 13 | running 24 hours a day and seven days a week; |
| 14 | MR. SPELLISCY: Many. | 14 | right? |
| 15 | BY MR. SPELLISCY: | 15 | A. That is correct. |
| 16 | Q. Let me first start with a | 16 | Q. And, in 2008 Auld's Cove |
| 17 | little background about the Auld's Cove Quarry, | 17 | was producing about 3.7 million tons of stone per |
| 18 | which you were the manager of. And as we go | 18 | year; is that right? I can take you to your |
| 19 | through, I'm going to ask you some specific | 19 | witness statement if you'd like to refresh your |
| 20 | questions. We are pressed for time, and so I'd | 20 | recollection. It's at page 8 of your first |
| 21 | appreciate if you can be as direct in your | 21 | witness statement -- or paragraph 8 , sorry, of |
| 22 | responses as possible. | 22 | your first witness statement. |
| 23 | Let's turn to Tab 1 of the | 23 | A. Yeah. This references |
| 24 | white binder that we have put in front of you | 24 | 2008, at the onset of the recession. 2007, the |
| 25 | there. Tab Number 1 is Exhibit C 893, for the | 25 | production was actually somewhat higher than that. |







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2007.
Q. Do you recall seeing any documents from prior to the decision by the government not to approve the Whites Point project in 2007 that led you -- or that assisted you in preparation of this pro forma?
A. Well, I did indeed see
the design, the design documents as developed by
LB\&W and Seabulk. I also, I visited the site in, I visited the site in August of 2015. I met Mr. Paul Buxton down there, and Digby Neck, and I was wowed, I must say. You know, I walked onto that site, and it was an expansive formation of basalt --
Q. Sorry, Mr. Fougere, my question was whether you saw any documents from prior to 2007 that assisted you in the preparation of your pro forma. The answer is no?
A. I saw design documents, and I saw the site, and I received, over the course of two and a half years, cost data from Mr. Wall and Mr. Buxton and Mr. Bickford that I used to put together these pro forma financial statements.
Q. And that was cost data

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practice of Martin Marietta nor the practice of me as a practising chartered accountant.
Q. Let's turn to Tab Number 9 in the binder in front of you, Mr. Fougere, which is Exhibit C-1046, for the record.

These are the pro forma financial statements that you prepared and submitted with your witness statements; correct?
A. That is correct.
Q. Okay. Now, just to clarify, you were not working for Bilcon of Nova Scotia in 2007; correct?
A. In 2007? No, no, I was not.
Q. You weren't the CFO of Bilcon of Nova Scotia; correct?
A. In 2007, I was working with Martin Marietta Materials Canada Limited.
Q. So you don't have any information as to what Bilcon of Nova Scotia actually expected in 2007 in terms of what their thoughts were on a pro forma; correct?
A. I'm trying to recall if there were any historical documents shared with me, but I, I don't recall seeing documents from

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pre-dating 2007; that's your testimony? That's my question, Mr. Fougere. Did you look at data from pre 2007?
A. No. It wasn't historical data. It was their best estimates that they could provide me on the cost of operating that quarry as designed.
Q. So the data you looked at, all of the data you looked at to prepare this pro forma, was prepared once -- long after this arbitration had begun in 2008; correct?

MR. NASH: That's not a correct representation of his evidence.

MR. SPELLISCY: Then he can correct me, Mr. Nash, and if you want to interrupt and lead your witness, I suggest you don't, because it's inappropriate. Just like we let you consistently ask questions, he can disagree with me. In fact, we had a conversation about this where we had the same objection, and you said, "I can put a statement to him, and he can disagree". I put a statement, and he can disagree. He can say, "That was not my testimony". I think it was. Let's let the witness decide what it says.

MR. NASH: Are you finished?

MR. SPELLISCY: No, I'm not
finished.
MR. NASH: Okay. Well --
MR. SPELLISCY: I'm going to ask my question again. Can we read it back?

MR. NASH: Well, I am going to object, and the reason is that Mr. Fougere has given a clear answer to the question with respect to what he saw prior to the pro forma or back in -- before in 2007, or documents existing as of 2007, which were then given to him for the preparation.

It's unfair to a witness when he has given clear evidence on a point to then represent that he hasn't given that evidence.

MR. SPELLISCY: I would point out I believe the other day there was a question where Mr. Little made the same comment to questions from Mr. Nash, and I believe the ruling from the tribunal was, if Mr. Nash wants to ask it three times, then I'm sure the witness can say no three times, even when the evidence was clear.

As for what his evidence was, I asked him about pre 2007, and I had a response that included a visit to the site in 2015, so I do
not think his evidence was clear.
PRESIDING ARBITRATOR:
Mr. Spelliscy, go ahead with your question. As far as I'm concerned, we don't need to go back. Just ask your question.

BY MR. SPELLISCY:
Q. Okay. So again, my question, for clarification, was: Did you, in preparing your pro forma -- you did not, in preparing your pro forma, review any documents pre-dating 2007; is that not correct?
A. Well, I did review the documents from the prior arbitration round available on, I think it was, the Permanent Court website, and there were some references there to financial representations. I did not use those in preparing my pro forma. But, you know, I think everyone has seen what was in the EIS document, and there were some financial representations included there.
Q. Okay. So you used for your data in the pro forma the information created after 2007?
A. I used the best contemporaneous documentation available to me,
which, in my mind, was what I received from Mr. Wall, Mr. Bickford, and Mr. Buxton.
Q. To be clear, what you received were documents and their best contemporaneous evidence from this process; correct?
A. That's correct.
Q. Thank you. In your pro forma, you have assumed production in the five years that's there

A. That is correct.
Q. And so, then, you would also be assuming production costs
correct?
A. That is correct.
Q. Let's come to the page in your pro forma, which is at Tab 9 in your binder, if you're there. And it is the page marked 006, -006 in the bottom right. It's page 4 of the pro forma, but it is marked 006, so it can be either one. It is the Whites Point Quarry where the personnel, energy, and supplies and raw materials costs are listed.
A. Um-hmm, yes.
Q. Okay. Here, you have a
line that says, "Tons per paid man-hour"?
A. Yes.
Q. And that line goes to


the rate of about 14 tons an hour; is that right? Auld's Cove, 14 tons an hour?
A. No, no. Better than
that.
Q. Okay. Let's go to Tab 1 in your binder. Maybe you can just help me understand. Back to the article that you had sent.

Tab 1, if you come to that last paragraph that we were looking at -A. Mm-hmm. Yes.

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stretch of 1,000 days, that's, you know, about three years, so that would include nine months of maintenance downtime, yes.
Q. And your number,
includes hours for maintenance crews too, correct, in the pro forma?
A. It does.
Q. It does. So it's apples
to apples to compare Auld's Cove maintenance time with Whites Point in the hours, and that's all I'm trying to do here. 704 person hours per day, you say, if we operate $24 / 7$, 365 days in a year, it's 256,000. If we multiply that, that's 256,960 person hours per year at Auld's Cove. I have done the math.

And I will put this to you.
At 3.7 million tons per year, at least in 2008, if we divide 3.7 million tons by 256,960 person hours, that's just over 14 tons per hour, isn't it?
A. Well, you know, for that particular year. But I think you are ignoring
Q. -- it's referencing an achievement in August 23rd of 2008. And it said they reached 1,000 days without a lost time incident. And you say:
"'In our operation, running $24 / 7$, that means 704,000 person hours,' says Fougere."[as read]
So 1,000 days, 704,000 person
hours, 704 person hours per day; correct?
A. What's your question?
Q. You said -- you were quoted in this article. You said 1,000 days at Auld's Cove means 704,000 person hours. Do you agree Auld's Cove has a rate of 704 person hours per day? 704 divided by 1,000 ; correct?
A. This is over 1,000 days, which includes winter months when we are not doing anything but shipping. I'm not sure where you are going with this.
Q. Well --
A. But I know the 14 tons
per hour is considerably lower than our production rate.

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that the production in 2007 and 2006 was considerably in excess of 4 million tons a year. So, you know, your math is not reconciling with me because tons per hour is something we measure on almost a daily basis, and if we were producing 14 tons an hour, I would have been hauled on the carpet. That is way too low.
Q. And yet you say the math doesn't reconcile. You would agree with me the math works. Your explanation was 2008 wasn't a good year. Is that not correct?
A. Well, that was the onset of the recession. It was not a good year, and it took us a while to idle back. We were operating with excess. We had guys sitting on their loader with no place to go. We had to take some time to idle back. Nobody at that time realized the recession was going to be as deeply entrenched as it was. We thought it's a temporary blip, but...
Q. But it was deep, and it
lasted for several years?
A. It was deep, and it lasted a long time.
Q. I want to look at the revenue matrix summary, which is on page 10 , the
last page of Tab 9 of your binder, your pro forma statement, C-1046 for the record.

Q. Okay. I will help you out. If we can come, Mr. Fougere, to Tab 6 in your binder, which is . And if you turn to page 7 of that you will see $ـ$ there; do you see that?

You would agree with me

do you see that?
A. Um-hmm. Um-hmm. I do.
Q. Okay. You weren't aware of that when you cited the pro forma?
A. I -- no, I did not have a copy of $\quad$ in hand when I was developing the pro forma. Retrospectively, when Mr. Dooley filed his witness statement in December, it was part of his documents, but by then, I had signed off on the pro forma.
Q. So you prepared the pro forma without knowing where those numbers came from?
A. They came from Mr. Dooley.
Q. Okay. You didn't verify
those numbers?
A. They appeared reasonable to me. I had no reason to suspect they weren't proper numbers.
Q. You will see

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Q. Right. Okay. You were

Going to the questions that Mr. Spelliscy asked you around what he called the representation of

see that?
A. I do see that line.
Q. Is that statement a
representation of what
asked a question about whether there were other

A. Yes, I do.
Q. And you were employed by Martin Marietta for the Auld's Cove Quarry; that's correct?
A. That is correct.
Q. And is Auld's Cove and

Porcupine Mountain interchangeable, because it's referred -- there are two names used.
A. Porcupine Mountain is the name specific to the quarry. Auld's Cove is the community --
Q. I see.
A. -- which includes

Porcupine Mountain, but it includes a residential area as well.
Q. Other than the Bayside site on the Bay of Fundy and the Whites Point site on the Bay of Fundy, were there any other Atlantic quarries of which you are aware that were closer in distance by ship to New York City and New Jersey than the Auld's Cove Quarry?
A. There were none.
Q. Where were the other Atlantic Maritime province quarries located of any size, of any significant size?
A. Of any significance?

Well, there would be Belledune, up northeast coast of New Brunswick, considerably more distant away from New York than Porcupine --
Q. When you say "considerably", what do you mean? By what factor?
A. Well, it's double, again, the distance from Digby to New York. And there was a limestone quarry on the western coast of Newfoundland, which, again, would be considerably more distant, and the transportation costs would have made them uncompetitive.
Q. In terms of the distance being double, again --
 the magnitude of increase in the shipping cost to come from Belledune or the other quarry, the limestone quarry, in Newfoundland, approximately?
A. It's a difficult question to answer because I'm not familiar with the load-out rates in those locations, and that would factor in. But, you know, just based on distance,

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it's probably
Q. Is there another quarry in Atlantic Canada called Belleoram?
A. That's in Newfoundland.
Q. That's in Newfoundland?
A. They are -- they weren't operational during my time. I don't know if they are to this day.
Q. When were they -- did
they receive a permit? When I say "they" --
A. I'm not aware. I never viewed them as a competitor during my time because they were still mired in trying to develop a business case.
Q. Other than Bayside and the potential Whites Point site, was there any other competitor to Martin Marietta in Atlantic Canada, a quarry --
A. Well, of course, Black Point was on the horizon. And, you know, it's 2018, and they are about to break ground, I believe, down in Black Point, but...
Q. Did Black Point serve the
-- or was it intended to serve, by your knowledge,
the New York City market?
A. Well, no. They had no immediately obvious entry point to New York. And I , and I have taken a look at their 10 K filings in recent years, and they need that product to serve their markets along the Gulf Coast. They are running out of permitable areas, and they need Black Point to supply their traditional markets, not new markets.
Q. Mr. Spelliscy took you to a portion of your affidavit which referred to the year 2008, the turndown, the recession, and Martin Marietta's search for other markets because of capacity. Can you comment further on that and what the markets had been for Martin Marietta prior to
A. Just what years are you referring to?
Q. Speaking of 2008, which
was the year you were referred to, and that was as the recession was taking course.
A. Um-hmm.
Q. Did Martin Marietta --

Martin Marietta, I gather, had other markets
A. Well, absolutely. And, you know, up until 2008, we could ship and sell as much rock as we could produce. The recession of 2008 hit. It lingered into 2009. By 2009, the company, the company formed what was called a Strategic Operation Analysis and Review Team, SOAR team, and I was on it. And we met down in Atlanta for weeks on end. And we said, "We got to find new markets. We got to find new markets".
coincidently with that, I was approached at a Chamber of Commerce function in Halifax by Nova Scotia Business Inc. to go on a trade mission to Trinidad. And they were going to set it up for me, line me up with a navigator, set up appointments with the five largest aggregate producers in Trinidad. And it's Nova Scotia Business Inc., a government agency. So I took advantage with that with full encouragement from the company and the province, and it was a very successful trip. So the company did enter long-term contracts -- I don't want to say anything propriety there -- with a large aggregate consumer in Trinidad concurrently with

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Porcupine Mountain to start ramping up again to utilize potential. Fixed costs of a quarry are significant. It's a very capital intensive business. And if you are not using your quarry to potential, you know, you are losing out on profit opportunities.
Q. Who were Martin

Marietta's customers down the eastern seaboard down to the south of the United States prior to 2008?
A. Well, it was -- Martin

Marietta owned a series of -- or owned or leased distribution yards all the way from the Carolinas to as far as Texas, and most of our shipments went to these distribution yards to serve customers of Martin Marietta along the seaboard and Gulf Coast.
Q. And was the effect of the recession, as you experienced it in that company, Martin Marietta, greater or lesser in the south of the United States as -- than it was in the north, say, the Boston, New York City area in respect to the consumption of aggregate?
A. It was pretty widespread.

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I think the impact was felt throughout North America.
Q. If you go to the pro forma at Tab 9 and you go to the page that counsel took you to, page 4, at the bottom 006, and you go to Number 2 and seven categories down, "Tons Per Paid Man-Hour", which is what Mr. Spelliscy took you to. He took you to the figure of
A. What page are you on
again?
Q. I'm on page 4 of Tab 9,
page 4, "Tons Per Paid Man" --
A. "Tons Per Paid Man-Hour",
yes.
 question as to what the comparison of that tons per paid man-hour was as between




lunch break, at the beginning of the session, to come up and present me with their ideas as to how to cope with the remaining issues, because I'm afraid that the only -- Sunday being excluded, the only possibility will be to go into Monday and rob you of part of the time that you need to write your concluding statements.

So would you -- so we have Mr. Lizak, but yesterday I think you -- I think you announced that you thought that we would get two witnesses done, and we got about 60 per cent of one witness done, Mr. Dooley. So don't be optimistic, just be realistic. Is there a chance that Mr. Lizak might be treated fully before our lunch break, even if the lunch break -- we are on sandwiches too, so, I mean, we can -- if the lunch break extends to -- sorry, the end of that exercise extends to $1: 30$ or so, or -- okay, Mr. Spelliscy, you have an idea.

MR. SPELLISCY: My -certainly we have made efforts to streamline our examinations in light of the time. I would request in terms of -- well, I will say two things, one from my perspective and how long my questions will take. If Mr. Lizak answers them
directly, I would expect to be done before we need a lunch break. I can't speak to redirect examination. I think in terms of an overall planning perspective, it might be useful to hear from Mr. Pulkowski as to where the parties are, because one thing that we certainly want to make sure is the parties have 21 hours of party time this week. We will not consent to a minute more. We have been rigorous in ensuring that our examinations are slimmed down where we need to, if some go longer, and as long as we are staying to the 21 hours, I believe that we will have time to make it. It is only if there is any thought of going over 21 hours, which we reject, that is our view. But maybe we can hear from Mr. Pulkowski.

PRESIDING ARBITRATOR: Dirk, do you have --

DR. PULKOWSKI: Sure. I can provide an updated time count, which is, at this point, in fact, almost identical for each side. The claimants have used 13 hours and 13 minutes, and the respondent has used 13 hours and 14 minutes. So assuming that each side wants to set aside 3 hours for its clothing statements, this leaves each side essentially with 7 hours 45
for the entire remainder of the exercise.
MR. SPELLISCY: That's 7 hours
and 45 minutes, but only 4 hours and 45 minutes each.

DR. PULKOWSKI: Sorry, that leaves each side with 4 hours and 45 minutes for the reminder of the cross-examination and direct examinations, yes.

MR. SPELLISCY: So, by my count, that's nine and a half hours, Judge Simma, to get through today and tomorrow, which should be perfectly doable, between a day and a half.

PRESIDING ARBITRATOR: Okay. Can I have Mr. Nash give --

MR. NASH: Yes. May I make this modest proposal, that we take the lunch break now if it works, and that Mr. Little and Mr. Spelliscy and our team will discuss this over the noon hour and then come back, and I would request that we have a discussion, an-in camera discussion. This is a procedural question, and as with all procedural questions in the process, they are dealt with by the tribunal and counsel, and that we deal with it as a matter of dealings between the tribunal and counsel, and we have an

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open discussion about what's realistic and what's reasonable in the circumstances to achieve fairness to both parties but, from our perspective, to our client and our team. So that is what I would propose. And we can have a frank discussion between counsel over lunch and come back to you with a position, either a common one or a different one.

PRESIDING ARBITRATOR: If I have heard you correctly, we would break for lunch now. That is, Mr. Lizak would be number one in the afternoon, and you would use the lunch break to have some kind of conversation. And then, at the beginning of the afternoon meeting, there will be a, well, a procedural -- a discussion on how to handle the rest of the matters?

MR. NASH: Exactly.
And, in that context, I would
appreciate from Mr. Pulkowski just some clarification. Is it 4 hours and 45 minutes in total left for cross-examination of all witnesses for both sides, each, for each side?

DR. PULKOWSKI: Yes, 4 hours 45 per side.

MR. NASH: And we had 3 hours
set aside in the program in the schedule for the cross-examination of each of the valuators.
Tomorrow was scheduled to be a three-hour cross-examination of Mr. Rosen and a three-hour cross-examination of Mr. Chodorow. So that was -so, if we were to stick to that program, we would have, in effect, 1 hour and 45 minutes each side, as I understand the figures, to do all the rest of the other witnesses; is that right?

DR. PULKOWSKI: That's how I would understand these figures to work out. If you wanted to use the full three hours on the witnesses tomorrow, that would leave you with 1 hour 45 to deal with direct and cross-examination today.

PRESIDING ARBITRATOR: So
1 hour and 45 today with how many persons? Quite a number.

MR. NASH: It's a significant number. And if I can just express my preliminary concern here. I think we are returning into an artificial compression of the reasonable processes in order to have all of the relevant evidence properly presented from each of the witnesses, from both sides. As we are identical -- I think

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chance to review it over the lunch hour and come back either with a common position or one that's different.

PRESIDING ARBITRATOR: I think these are ideas that you need to be discussing with your counterpart.

MR. NASH: Yes, yes.
PRESIDING ARBITRATOR: I think we are already losing time. So I think we should break for lunch. You will have a lunch together, more or less, in camera caritatis, hopefully. And when we meet -- so the lunch will be 45 minutes. That is, we can -- are going to meet at, again, at 1:05, 1:05.

MR. NASH: Very good.
PRESIDING ARBITRATOR: Then we
will hear what you come up with and what solutions.

MR. NASH: Yes. And I would urge that we have an in-camera session, that it's a discussion between the tribunal and counsel on a procedural matter.

MR. SPELLISCY: I'm sorry. An
in-camera session? If we are talking about the schedule of the arbitration, including what would
it's a minute off, despite my friends urging that I was lagging the puck or lagging the time. We are identical at this stage. We will have -- if we use the intended time for the valuators, which is an extremely important part of this case, as it is with any damages claim -- it's extremely important. Those valuators have to take into account the evidence that's been given during the entire proceeding, and we are obviously not going to finish all of our witnesses today. We would obviously be pushed into tomorrow. There would be no overnight for them to consider, you know, the evidence of some extremely important witnesses that remain. So I just -- I guess I'm presaging a perception on my part that we are getting into an artificial compression of time for no good reason. This proceeding has been ongoing for 10 years, and so we have been in this portion of the proceeding dealing with the -- after Canada's preliminary motions on the stay and the damages for over two years. And my preliminary thoughts on where we are at and what we should consider to be doing is to consider an adjournment for the final argument.

So, with that thought, I know
I have heard my friend's view, but if we have a

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be potentially, if I hear Mr. Nash's suggestion right, an adjournment of the closing arguments, which I can tell you right now there is zero chance we will consent to, why would that be in-camera?

PRESIDING ARBITRATOR: Can we leave that to the --

MR. SPELLISCY: But why would we be -- I see no reason to be in-camera. I mean, the hearing is transparent; it's public.

PRESIDING ARBITRATOR: Right.
Can we leave that to 1:05?
MR. SPELLISCY: Sure.
--- Upon luncheon recess at 12:20 p.m.
--- Upon resuming at 1:06 p.m.
PRESIDING ARBITRATOR:
Preliminary question, have you agreed on an in camera session for what follows; is there an agreement on that?

MR. NASH: We have not. PRESIDING ARBITRATOR: You have not?

MR. NASH: No.
PRESIDING ARBITRATOR: You
have?

MR. NASH: We have not.
PRESIDING ARBITRATOR: Oh, you
have not. So let's have our in camera session.
MR. SCOTT LITTLE: We have not agreed to have one.

PRESIDING ARBITRATOR: What does it actually mean that --

MR. SCOTT LITTLE: In camera means it wouldn't be on the transcript, Judge Simma. That's my understanding.

PRESIDING ARBITRATOR: Yeah, it's not going to be on the transcript.

MR. SCOTT LITTLE: Well, no, Canada objects to it not being on the transcript.

PRESIDING ARBITRATOR: Not being on the transcript, oh.

MR. SCOTT LITTLE: Canada
thinks this should be fully open.
PRESIDING ARBITRATOR: All
right, so --
MR. NASH: And nor have we agreed on a common position with respect to how to proceed further with the hearing.

PRESIDING ARBITRATOR: Okay, so let me just add a few numbers to what we had

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PRESIDING ARBITRATOR: Four more.

MR. NASH: Yes.
PRESIDING ARBITRATOR:
Including quantum?
MR. NASH: Excluding
Mr. Rosen.
PRESIDING ARBITRATOR: Okay, so that means that you have a problem. Because you have the same amount available, one hour forty-five minutes, but -- and it's not quite clear to me how you can handle the examination of four witnesses within one hour and forty-five minutes, so one question will be -- so there might be difficulties. One possibility might be that, instead of four, you could just decide to only examine three because my impression is that maybe two of the remaining witnesses kind of, let's say, they focus on more or less the same problem, but I might be wrong on that.

Another possibility would be, I mean, in theory, to just give each party an hour in addition, but I think that would be unfair vis-á-vis Canada because you have done your job. And then you might end up with an hour and not
before the lunch break. I think the situation is as follows, that each party has available three hours, I am just adding three hours for the closing observation, three hours for the quantum and the -- the quantum phase, and one hour forty-five minutes for the cross-examination, which adds up to seven hours forty-five minutes. Canada's situation is that you have two more, let's say, witnesses to cross-examine?

MR. SCOTT LITTLE: That's
correct.
PRESIDING ARBITRATOR: The situation of the claimant is that they have four; right? Four? Three? Four?

DR. PULKOWSKI: Excluding the -- Mr. Rosen, so it would be five, three including Mr. Chodorow because, of course, that's one and the same time budget as far as procedural order number --

PRESIDING ARBITRATOR: No, I am not counting the quantum people. I am just counting the remaining people to be, let's say, witnessed before we turn to quantum.

MR. NASH: We have four more witnesses to cross-examine.

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really with anything much to do.
MR. SCOTT LITTLE: We agree with that entirely. We have not only done our job but we made choices, Judge Simma, on who we were going to cross before we even got here, who we were going to call in to cross based on the 21-hour limit. So we don't see how this can be undone at this point.

PRESIDING ARBITRATOR: So the last opportunity or possibility I see for claimant to somehow accommodate the entire thing would be that you cut off time from the time available for the quantum.

## DR. PULKOWSKI: Mr. Rosen. PRESIDING ARBITRATOR:

Mr. Rosen.
MR. NASH: Or Mr. Chodorow.
PRESIDING ARBITRATOR: Or maybe have a shorter closing.

DR. PULKOWSKI: Sorry,
Mr. Chodorow, my mistake.
PRESIDING ARBITRATOR: Have a shorter closing statement. So do you have a view on that?

MR. NASH: I do.

PRESIDING ARBITRATOR:
Mr. Nash, maybe it would not be, let's say, very, let's say, how shall I say, productive to go into the issue that at the beginning you asked that, the view was that you needed two more weeks, and then we cut it to one week and three days and that stuff, I mean, that's done.

MR. NASH: Yes. Can we have a decision from the tribunal on the question of this part of this proceeding being in camera? This is a procedural question purely. We deal with all procedural questions in --

PRESIDING ARBITRATOR: You mean from now on?

MR. NASH: From here on.
PRESIDING ARBITRATOR: In view of the present situation of the entire institution of ISDS at the great accent on transparency of the procedure, that we have decided that this will remain open.

MR. NASH: Thank you, Judge
Simma.
We are prepared to proceed on
the basis of our total time available under the budget, that's not an issue.

The issue is the timing of the hearing of the witnesses and the time to marshal the evidence in an appropriate way, in a timely way, in a fair way. We have been sitting now, and the tribunal has recognized that we needed to have more time for the hearing, and we have been sitting for six extra hours in this time-compressed time we have had, two and a half hours budgeted for today, we had two hours budgeted for yesterday, and I think with other parts of it, about an extra hour or so.

PRESIDING ARBITRATOR: May I
just make one reminder?
MR. NASH: Yes.
PRESIDING ARBITRATOR: I think
we had a couple of redirect which took almost as long as the cross-examination. Which is --

MR. NASH: It may be true, but we are prepared to live within our time availability, within the 21 hours, and we will allocate that time as required.

The question is the timing of the procedure -- the proceeding from here to Tuesday. And the reality of it is that in order to get from here to Tuesday, I think the tribunal
is already recognizing that we need more time rather than just to the end of tomorrow. And the compression of this time into these number of days has resulted in everything getting pushed back to where we are. And to have the two full days to prepare for final argument, which is always contemplated within the order, was requested by both parties, the full two days, which would be Sunday and Monday, in order to come back before the tribunal on Tuesday means, the result of that, is that these witnesses, including Mr. Chodorow, including Mr. Rosen, have to be finished tomorrow. And the quantitative experts, those two experts, it was always contemplated that they would have at least overnight to review the evidence, look at the evidence and then take it into account in presenting their evidence. The reality is they will not have that. We are not going to finish all of our other witnesses today. We have six more witnesses to go. And the requirement, from our position, to have some fundamental fairness to the process, this case has been going on for ten years, as I said before lunch, we've had almost three years since the liability decision was given, and it is the way it is, but what we are
proposing is that all of the evidence be done by the end of Monday, we take Sunday off, that we finish all of the other witnesses by the end of tomorrow, which is Saturday, take Sunday off, the quantitative experts, remember, keeping in mind, this case is about damages. We spent an awful lot of time in this proceeding, in this hearing, so far this week on the question of environmental assessment, the question of ministerial discretion, and those related questions. The quantum is a complex issue, it's evidence voluminous. It should be marshalled in a comprehensive way, in an understandable way so that the tribunal has the opportunity to properly deal with and properly assess it. And I can say, from my perspective and from our team's perspective, it is not possible to finish all of the evidence by tomorrow, including the quantitative experts, and to complete this task and then to provide on Tuesday a comprehensive presentation which does the evidence in this case justice. And it is prejudicial to our clients, I am saying that, it is unfair to our clients, who have been in this for ten years, it's not a large multinational, these are three brothers who have
been in this for ten years, to not adjourn for the shortest mutually convenient time for the tribunal and for counsel to reconvene at a later date for one day for the closings on the available time left for the parties to deal with that so that a proper marshaling of the evidence can be presented, and that's what we are requesting. And, in my vigorous and strong submission, anything less would render a fundamental unfairness upon our clients. And we, there's no reason, there is absolutely no reason for this proceeding to adjourn for a few weeks, whatever time it is, to have one day extra. We have already recognized, I think, Judge Simma, you said before lunch, that it looks like we might be into Monday for -- or Sunday for the remainder of the evidence that we could be going over from tomorrow, which is contrary to the combined wishes of the parties and the agreement of the tribunal that we have two full clear days to make our -prepare our arguments.

And so to go anything further than tomorrow is a breach of the procedural order, is not contemplated by the procedural order, and we will have one day to prepare final arguments.

And, so, in my submission, there should be an adjournment on that basis, we finish all of the evidence of the non-quantitative witnesses tomorrow in the time available tomorrow, we come back on Monday, we have the evidence of the quantitative experts, we then have an adjournment of the shortest possible duration as a convenience of the tribunal and the parties and counsel, and we come back at that time for one day.

PRESIDING ARBITRATOR: And Tuesday would not be used?

MR. NASH: Tuesday would not
be used.
PRESIDING ARBITRATOR: Maybe Mr. Little or Mr. Spelliscy?

MR. SCOTT LITTLE: First of all, I still don't think that that addresses the fact that we have governed ourselves accordingly in the matter to date. We have, by my count, three more witnesses left to cross, and we can finish that by tomorrow night without an issue. We might have to sit a little bit late, but we can finish that by tomorrow night. And the time that the parties have remaining, I think we are pretty
on track for where we should be right now at this time to be finished tomorrow night. Maybe it takes a little bit of starting early in the morning or later at night, but we are pretty on track, so --

PRESIDING ARBITRATOR: By "we", you mean?

MR. SCOTT LITTLE: Both sides. I think the party time that's remaining, we are not really that far off. So with diligence and obviously keeping to the time that is available that's left to the parties, we shouldn't have any problem making it, having a closed evidentiary record by tomorrow night.

Now, in terms of doing closings, I think it was a luxury in this case to have two days for closings. I think that's something that the parties asked for and were granted, and it's, it is a luxury, but there's many cases -- in fact, typically, we have no more than one day to do it. I believe that was the case in the liability phase. And there's cases that we are involved in where we break into closings the next day. So, overall, the plan for this arbitration was that it was to start last

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Monday, evidence was to close on Saturday, there would be two days to prepare closings, and then closings would be offered.

We think that the entire schedule up to Saturday can be met tomorrow night, and the parties can have their two days. Time is going to expire if we -- in any event, although the parties are free to eat into their closing time. But we think we can do that, and we don't think that there should be any change to the schedule because Canada has adhered to that, kept the time limits in mind and governed itself accordingly, and, at this point, to change that is going to cause prejudice to Canada.

PROFESSOR McRAE: I was just going to ask Mr. Nash, you said you can finish it during the time. That means keeping the one hour forty-five or whatever it is for your four witnesses, or do you envisage you have the freedom to eat into your experts' time or eat into your closing time?

MR. NASH: We will have to eat into some of the remaining time. Yeah, we will have to cannibalize some of that time.

PRESIDING ARBITRATOR: I am
very sorry.
MR. NASH: Not a problem.
So the question was how would
we organize ourselves to utilize the time available to us but to use less for the quantitative experts or the closing. We can do -we will abide by that. We don't think the timing of doing that is proper, fair, because the experts, the quantitative experts should have some time between the end of the cross-examination of the other witnesses, which are quantum witnesses. We started the quantum of the actual damages witnesses for the first time yesterday morning, and what we are contemplating, what is being contemplated now is that, obviously, we are not going to sit late, late, late tonight, until 9 o'clock, that's not reasonable. We've started early and we have ended late on a number of days now. And so in order to accomplish that reasonable separation of time between quantum witnesses, non-quantitative experts, not Mr. Rosen, not Mr. Chodorow, the only realistic way to do that is to have Sunday, either for their evidence or on Monday, and to proceed from there. In any event, what will occur under any scenario
is that the time for preparation of closing will be shortened and will be shrunk, and that's not contemplated at all in the procedural order. And luxury or not, that was what the parties agreed to, that's what they asked for, that's what the tribunal also agreed to. That forms part of the procedural order.

Procedural fairness is important, it's important. This is a substantive issue for our clients who have been at this for a very, very long time, and there's absolutely no reason to artificially constrain and to compress the time in order to stick to a schedule when a short adjournment for a reasonable time to finish this case off in the way it should be finished off at this last part of the process.

PRESIDING ARBITRATOR:
Mr. Little, you have to say something?
MR. SCOTT LITTLE: I don't really see what's artificial about the constraint that Mr. Nash is talking about. We both have had a given set of time, and we have to adhere to the time that we have and then closings can unfold. Nothing artificial about it.

PRESIDING ARBITRATOR: Dirk,

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maybe can you read out what you put together?
DR. PULKOWSKI: Just solely
relates to the number, the hours that we do have left, and it builds on questions raised by the parties as to how much time we might have available on each day.

We -- just to recall, we
currently have 15 hours and a half left. Now, depending on how much you want to subtract from that for closing statements, of course, if we were to subtract six hours, that would leave us with nine and a half hours to be split across the afternoon today and tomorrow. So, on that assumption, just in terms of time allocation, there is obviously plenty of time to get done, including some time if closing statements were to be shortened somewhat.

So, indeed, there is
certainly, if we count four and a half hours today and five hours tomorrow, or six hours tomorrow, we would be done with the five- or six-hour time allotment for closing on Tuesday. So I think the only question, there is no difficulty in fitting the remaining, the remainder of those 42 hours allocated to the parties within the remaining two

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and a half days that are allocated for the hearing.

The only question, I believe, is the one put to you by Mr. Nash, Mr. Chairman; namely, the question whether there is anything that should be done by the tribunal in order to leave a separation after the fact witnesses and before the valuation experts. In terms of the actual time budget, I think we are doing okay.

PRESIDING ARBITRATOR: At the moment, I don't see a solution for that separation, that's an overnight separation.

Mr. Nash, are you convinced that the examination of -- if we go into Saturday with the witness examination, that the testimonies of these people is particularly relevant for the quantum part of the exercise?

MR. NASH: Fundamentally relevant, from our perspective. Fundamentally.

MR. SCOTT LITTLE: All I can say is that we do this all the time. Two days is a luxury.

PRESIDING ARBITRATOR: No, what I meant was the, for instance, if we go into Saturday morning with the remaining witnesses, and
then after, maybe hopefully before lunch, we would start with Mr. Rosen and the, so with the quantum people in the strict sense. And I think that is your problem; right, that they should have --

MR. NASH: They should have
Mr. Rosen on our side -- I am not speaking for
Mr. Chodorow -- Mr. Rosen on our side should have a period of time, it would normally -- it was scheduled to be overnight between the end of Friday and the beginning of Saturday, overnight, a period of time to take into account whatever admissions are made on the cross-examinations for those witnesses and to incorporate that into a comprehensive presentation by him, and that would require us to go beyond tomorrow into Sunday.

PRESIDING ARBITRATOR: Would one kind of solution that I see is that we start even earlier tomorrow morning, finish, I say deal with the remaining gentlemen, which hopefully would not be too many, by tomorrow morning, and then give the quantum experts like two hours, two to three hours to kind of digest what was said in the morning and then have the statements into Saturday night?

MR. NASH: No, there has to be

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schedule just like all the other witnesses have.
There's nothing that talks about them having a
period of time to review their evidence.
In fact, if you look at
paragraph 5.4 , it contemplates that one of the experts could give evidence the day after the other one. It had to make that provision because the presentation that that expert was to provide was to be held in escrow by Mr. Pulkowski in that kind of a situation.

So they are just like the
causation witnesses. As it turned out, Mr. Estrin and Mr. Sossin, I believe, ended Tuesday, but had they ended Wednesday morning, our causation witnesses, that is the EA decision-making and JRP witnesses, would have followed right in their wake.

So there's nothing special about the quantification or damages witnesses that Mr . Nash is calling that would warrant their being this break taken. They are just like every other witness.

MR. NASH: With this
exception, they were always scheduled to be on Saturday, Mr. Rosen in the morning, Mr. Chodorow

Page 1652
a reasonable limit on the number of hours that we are sitting every day. We have had six hours already added. There is no reason, in fairness, to compress this process into --

PRESIDING ARBITRATOR: I mean, if you are ready to go into, even further into the night, that doesn't seem to me to be an artificial compression. It's a, we are ready to do that, and I think we could do it, physically speaking.

MR. NASH: Well, speaking personally, whatever time we sit at the end of the day or started earlier is two and a half hours of extra hearing time and two and a half hours less preparation time, and every minute counts on these things in order to conduct an effective presentation, every minute counts. It always counts. And we have lost about six hours. And if we start earlier tomorrow, we will lose that many more. It's not fair. It's simply not fair.

PRESIDING ARBITRATOR: Sorry, Mr. Little?

MR. SCOTT LITTLE: First off, there's nothing in the procedural order that supports what Mr. Nash is saying about the quantum experts. They roll into their place in the
in the afternoon.
MR. SCOTT LITTLE: That's not correct. Because it says if the presentations cannot be made on the same day, then at the end of the day on which FTI Consulting gives its presentation, the Brattle Group's presentation shall be provided to the tribunal secretary and held by him in escrow. So it contemplates that they could be on different days. And I am assuming that means that -- or the way this reads is that FTI could have been giving evidence today.

MR. NASH: The schedule, as it's been set for this hearing, has always scheduled them on Saturday, one in the morning, one in the afternoon. That has been from the beginning of the scheduling of witnesses. It was contemplated that every other witness would be finished by Friday, and then there would be an overnight, and then there would be a presentation by Mr. Rosen in the morning, tomorrow, and Mr. Chodorow in the afternoon.

MR. SCOTT LITTLE: I don't
want to belabour the point, but Mr. McLean was scheduled for Tuesday night -- sorry, not
Mr. McLean. Mr. Geddes was scheduled for Tuesday
night, but Mr. Estrin's and Mr. Sossin's exams and re-exams took a little longer and they started the next day. One witness must roll after the next. That's how an efficient proceeding unfolds.

PRESIDING ARBITRATOR: I think the tribunal will have...
--- Brief recess taken at 1:34 p.m.
--- Upon resuming at 1:51 p.m.
PRESIDING ARBITRATOR: Okay, so the tribunal will be ready to handle things in the following way: that tomorrow is devoted to the examination of witnesses. By "witnesses", I mean the people that I -- I call the others the quantum experts, such as the quantum people, which means the two, Mr. Rosen and Mr. Chodorow, I think.

So tomorrow, examination of witnesses. Sunday, first day for the teams to prepare their closing statements. On Monday, have the two quantum experts. On Tuesday, you will have the second day of preparation of closing. The closings will be on Wednesday in a very disciplined manner. I think we could put them into Wednesday and still get our original planes, because we need to leave on Wednesday. Would that
be something that would be acceptable to the parties?

I repeat, so the quantum people would be heard and examined on Monday. Sunday and Tuesday would be off for the preparation of closing. And on Wednesday would be devoted to the closing statements of the parties.

So I think on Wednesday, I think the absolute time bar would be around 4, 4:30 in the afternoon.

Mr. Little?
MR. SCOTT LITTLE: We are already losing a member of our team. A member of our team has to be in another place on Wednesday.

PRESIDING ARBITRATOR: And you would need that person for the, just for the presentation of the closing?

MR. SCOTT LITTLE: Well, just let me discuss.

PRESIDING ARBITRATOR: Sorry?
MR. SCOTT LITTLE: Let me discuss with my colleagues here.

PRESIDING ARBITRATOR: Please.
MR. SCOTT LITTLE: Okay.
There's the logistical issue of the member of our

Page 1655
team not being here; I think we can manage. There is going to be significant cost consequences of this. We are going have to have flights changed, we are going to have to have additional nights in hotels, and we are going to probably have to deal with cancellation fees. So I want the tribunal to take that into account in the new arrangement.

PRESIDING ARBITRATOR: Okay, all right, thank you.

Mr. Nash?
MR. NASH: We can live with that and thank the tribunal for that. I am sorry, did you hear me?

PRESIDING ARBITRATOR: I think the present position of the tribunal is to go along with -- to adopt that solution, including the Wednesday for the closing statements. Of course, we are aware that costs will arise for both parties, but we haven't heard anything about costs yet, and we can devise ways to consider that. The problem that you've left is that we are not sure whether the Arbitration Place is in a position to accommodate that, but we will find out until the end of the day. Okay. All right.

MR. SCOTT LITTLE: Thank you.

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PRESIDING ARBITRATOR: Okay, so no further statement?

MR. NASH: No further statement.

PRESIDING ARBITRATOR: Okay, that means we instantly turn to the cross-examination of Mr. Lizak.

THE WITNESS: Good afternoon, gentlemen.

PRESIDING ARBITRATOR: Yes, good afternoon, Mr. Lizak.

THE WITNESS: It's good to be back.

PRESIDING ARBITRATOR: Good to see you again. And would you please read the statement that is in front of you?
WITNESS DECLARATION: JOHN LIZAK
MR. LIZAK: Yes.
I solemnly declare upon my
honour and conscience that I will speak the truth, the whole truth and nothing but the truth and that my statement will be in accordance with my sincere belief.

PRESIDING ARBITRATOR: Okay, thank you. Going to turn over the floor to

|  | Page 1657 |  | Page 1658 |
| :---: | :---: | :---: | :---: |
| 1 | Mr. Johnston for direct. | 1 | Q. And you are the principal |
| 2 | EXAMINATION IN-CHIEF BY MR. JOHNSTON: | 2 | of Mineral Valuation \& Capital, Inc., which |
| 3 | Q. Thank you, Judge Simma. | 3 | specializes in the valuation of minerals, mineral |
| 4 | You are John Lizak? | 4 | extraction companies, mineral development, and |
| 5 | A. Yes, I am. | 5 | market studies, among other things? |
| 6 | Q. You signed two expert | 6 | A. Yes. |
| 7 | reports for this phase of the arbitration? | 7 | Q. And you hold various |
| 8 | A. Yes, I did. | 8 | degrees, including a BSc in fundamental sciences, |
| 9 | Q. Your first statement is | 9 | with a specialty in geology and geotechnical |
| 10 | dated November 30th, 2016, and is titled "An | 10 | engineering, and a master's in science and |
| 11 | analysis of the regional market for crushed stone | 11 | geology? |
| 12 | imports into the United States from the Whites | 12 | A. Yes. |
| 13 | Point Quarry, Nova Scotia"? | 13 | Q. And you have completed |
| 14 | A. Yes, it is. | 14 | post-grad studies in mineral economics, mining |
| 15 | Q. And your second report is | 15 | engineering, corporate finance, and the valuation |
| 16 | dated August 8, 2017, and is prepared in reply? | 16 | of mineral and mineral extraction companies? |
| 17 | A. Yes. | 17 | A. I have. |
| 18 | Q. And you signed, also, one | 18 | Q. And you hold professional |
| 19 | statement for the merits phase of this | 19 | designations as a licensed professional geologist |
| 20 | arbitration? | 20 | in four states? |
| 21 | A. Yes, I did. | 21 | A. I do. |
| 22 | Q. And you are a | 22 | Q. And you are a member of |
| 23 | professional geologist and mineral valuation | 23 | the Society of Mining and Exploration Valuation |
| 24 | expert? | 24 | Standards Committee? |
| 25 | A. Yes. | 25 | A. I am. |
|  | Page 1659 |  | Page 1660 |
| 1 | Q. And you have | 1 | tendered in this phase of the arbitration? |
| 2 | professionally evaluated over 500 domestic and | 2 | A. I don't. And I'd also |
| 3 | international mineral ventures and markets? | 3 | like to add, gentlemen, that I have had an |
| 4 | A. I have, and I think | 4 | opportunity, a couple of my clients are Vulcan, |
| 5 | what's noteworthy to this proceeding is I have had | 5 | CRH - Oldcastle, U.S. Concrete, they are major |
| 6 | the opportunity to literally evaluate all of the | 6 | market participants in the markets in which I |
| 7 | exporting companies in New Brunswick, Nova Scotia, | 7 | value. |
| 8 | those in Mexico, et cetera, and also virtually all | 8 | Q. Thank you. |
| 9 | the quarries in the New York City metro market and | 9 | PRESIDING ARBITRATOR: Thank |
| 10 | New Jersey. | 10 | you, Mr. Johnston. |
| 11 | Q. Sir, have you been | 11 | And examination will be done |
| 12 | qualified by a court to give expert testimony? | 12 | by Mr. Spelliscy. You have the floor. |
| 13 | A. I have, many courts, | 13 | CROSS-EXAMINATION BY MR. SPELLISCY: |
| 14 | federal, state and local courts in the United | 14 | Q. Good afternoon, |
| 15 | States. Many on behalf of the U.S. Department of | 15 | Mr. Lizak. |
| 16 | Justice. | 16 | A. Good afternoon, |
| 17 | Q. And have you also been | 17 | Mr. Spelliscy. |
| 18 | appointed a court master, arbitrator and mediator | 18 | Q. You have been here |
| 19 | to resolve disputes concerning minerals and | 19 | before, so you know the drill, so we can get right |
| 20 | construction materials? | 20 | into it. |
| 21 | A. I have, gentlemen, and I | 21 | Let's turn to page 29 of your |
| 22 | prefer my job in lieu of yours. | 22 | second report. |
| 23 | Q. And do you have any, sir, | 23 | A. And where do I find that, |
| 24 | any corrections or clarifications to make to | 24 | sir? |
| 25 | either of the two statements that you have | 25 | Q. Your counsel has given |

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you --
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A. Just in mine, okay, 29 in
my second report.
Q. We should go into
confidential session, for the record.
--- CONFIDENTIAL PORTION OF TRANSCRIPT RESUMES AT 2:03 P.M.

THE WITNESS: Okay.
BY MR. SPELLISCY:
Q. Third sentence of
paragraph 29 of your second report, I am just
going to read it for now:

read]
My question, Mr. Lizak, is a simple one: You would agree with me that the expert reports and witness statements that you reference were done in 2016; correct?
A. I am sorry?
Q. The expert reports and witness statements that you mention in this sentence were done in 2016; right?
A. Yes.
Q. They were not due diligence conducted before this arbitration; correct?
A. That's correct.
Q. Let me try to understand another one of your statements. It's in the next paragraph of the same report, the reply report -sorry, it's on page 30 of your reply report.
A. May I say something, sir?
Q. No. I will ask the
questions, Mr. Lizak. We are short on time. You will have the chance.

MR. JOHNSTON: No, members of tribunal, I am not going to have Mr. Spelliscy cut off Mr. Lizak if he has got something to add. He
has been taken to a paragraph, and if he has got something to add, it can be short and controlled and managed, but I won't have Mr. Spelliscy cut off Mr. Lizak.

MR. SPELLISCY: He was taken to a paragraph simply to ask a question on time.

MR. JOHNSTON: He needs to be fair to the witness.

MR. SPELLISCY: I am being fair to the witness. My question was solely on time, and when that was conducted, he answered it. If Mr. Johnston would like to use his time on redirect, he can do that.

PRESIDING ARBITRATOR: We don't have paragraphs. It's pages; right?

MR. SPELLISCY: Pages, I am
sorry.
BY MR. SPELLISCY:
Q. Page 30 of your second report, Mr. Lizak, and it is in the second-to-last paragraph on the page. You say:


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 Mr. Lizak, that economic viability depends not just on the size of the stone reserves but also on how much it will cost to develop the quarry, operate it, send the products to market, how much you could sell it for and the prices you could obtain, you would agree with that; right?
A. Can we say that again,
please?
Q. So economic viability depends not just on the reserves but also on other factors such as how much it will cost to develop the quarry, how much it will cost to operate it, how much it will cost to send the product to market, how much product you can sell, what you could sell it for?
A. Let me comment on that statement. What I am saying is that we have,



when the industry starts moving forward. Okay, if you look at the mid-'70s, y

And, you know, so, it's a function of
Q. Mr. Lizak, the snapshot that you took and you put in your report was$\square$
wouldn't you agree with me?
A. Yes, but I am pointing out to the tribunal, that's the element of complexity. You have to look at when you start the snapshot and what market you are looking at.

If you look at the


What's impressive, also, if I might, please, if I can go to my table here, can I do that?
Q. I am sure your counsel can take you. Actually, I want to move on to a different subject.
A. All right.
Q. You could turn to your reply report, and let's turn to page 19 in your second report. So same report we are in now, page 19.

The last sentence on this page.
A. I am sorry. Page?
Q. Nineteen of the second report, the same one we were in.
A. Okay.
Q. Turn to page 19, and I want you to look first at the last sentence and then at the next sentence following, and then I will ask you some simple questions.
A. Where? Would you start the paragraph for me?
Q. The last paragraph, so the last sentence on the page, the very last sentence on page 19.


Page 1679

Page 1680

A. Yes.
Q. Okay. You would agree
with me, then, that simply because no
correct?
A. Let me provide some context. I would also like to point out that it's been 40 years since a new quarry has been developed in Nova Scotia. I spend my time looking globally for new quarries. We can't find them. Okay? I have -- literally scouring the Maritimes, the Gulf Coast, Columbia, Jamaica. I have clients that are looking for this stuff all over the planet. We can't find them. Okay? We can't find those that meet the quality and the quantity of Whites Point, and we can't find a place to offload these quarries. So my point is that, if




chart, Mr. Spelliscy.
DR. PULKOWSKI: I am happy to provide my binder.

MR. JOHNSTON: That would be better.

DR. PULKOWSKI: That might make things easier.

MR. JOHNSTON: The title is I am sorry, there's no page reference.
It's two pages after the title page figures. It's titled "Figure 2", and we are in the first report of Mr. Lizak, dated November 30th, 2016.

THE WITNESS: Um-hmm, yes.
PRESIDING ARBITRATOR: I am almost there. Okay.

BY MR. JOHNSTON:
Q. Mr. Lizak, thank you, and I apologize, I think I started us off on the wrong report.

Mr. Lizak, is this the figure that you referenced in responding to Mr. Spelliscy's questions about

A. Yes, it is.
Q. And what does this figure

Page 1701

Q. And you referenced a contract in one of your answers to Mr. Spelliscy's questions, and I would just like to have you reference that document, please, Mr. Lizak. If you can...
A. It's -- I think it's part of my first report. It's one of my exhibits, I think. One second.
Q. I think I have identified it here, Mr. Lizak. It's Appendix 4 to your first report.
A. It doesn't seem to be part of my package.

DR. PULKOWSKI: Would you like to show him in this binder?

MR. JOHNSTON: If we can.
Thank you, Dr. Pulkowski.
Why don't we use this set
here, if we can, Mr. Lizak.
THE WITNESS: Okay.
BY MR. JOHNSTON:
Q. We will put this one

Page 1703
A. Well, again, if you look at the contract, my primary task was $\quad 2$

 any, to your knowledge, does that relate to
A. Well, again, that's, you know, one of the things that is crucial is to make sure that the

MR. JOHNSTON: Thank you.
Those are my questions on redirect.
--- CONFIDENTIAL PORTION OF TRANSCRIPT ENDS AT 2:51 P.M.

PRESIDING ARBITRATOR: Okay,
thank you. Any -- no questions, questions from
the tribunal? That is not the case. So that
brings to an end your witness examination,
Mr. Lizak. Thank you.
aside. So your first report, and it is Appendix
4. It should be behind Tab 4.
A. Okay.
Q. That's it there. Thank
you.
And would you just please describe for the tribunal what this document is?
A. Yes, my initial engagement on this project happened in April 2002, and this is the -- essentially my first part of the project, and this is the contract specifically related to the project.
Q. And, Mr. Lizak, there's -- I just refer you to the second paragraph of the letter dated April 25, 2002, that covers the contract, and I direct your attention to, just for clarification and comprehension purposes here,
do you see those six letters?
A.
Q. What is that in reference to with respect to your contract and your mandate for the Claytons, please?

Page 1704
THE WITNESS: Okay.
PRESIDING ARBITRATOR: You are
free.
THE WITNESS: Thank you, sir. PRESIDING ARBITRATOR: I think it's a bit early for our break. No? All right, so we are going to have a break until three sharp.
--- Upon recess at 2:52 p.m.
--- Upon resuming at 3:05 p.m.
PRESIDING ARBITRATOR: Good afternoon. Before we start, just an announcement that the Arbitration Place will provide us with the room, et cetera, for Wednesday, so this is a final decision. That will be Wednesday. And we will decide about the hour of start in the morning on Monday. Okay. Thank you. Yes?

MR. SPELLISCY: Logistically, will it be this room, or will we be informed?

PRESIDING ARBITRATOR:
Dr. Pulkowski?
DR. PULKOWSKI: Sure. Sorry, I understand that this room will have to be vacated by the end of Saturday, and the tech equipment will actually be broken down on Saturday evening. So it will have to move, or we will be
moved to another hearing room, and having consulted both with the AV company and Arbitration Place, the decision has been taken to use the Cabernet room after all, which can be more flexibly configured, the one that's closest to the reception. Seems, from the tech point of view, that that is more appropriate for this hearing. It will be ready, we are being told, for Monday morning start.

PRESIDING ARBITRATOR: Well, at least it's a wine that we all know. I have never heard of this one before. Okay. All right. Thank you.

Would you be so kind and please read the statement that is in front of you, sir.
WITNESS DECLARATION: MICHAEL WICK MR. WICK: Yes. I solemnly declare upon my honour and conscience that I will speak the truth, the whole truth, and nothing but the truth and that my statement will be in accordance with my sincere belief.

PRESIDING ARBITRATOR: Thank you, Mr. Wick, and you will be directed by Mr. Johnston.

Page 1707
A. Correct.
Q. And John T. Boyd Company
is an international mining and geological consulting firm?
A. Correct.
Q. And prior to joining John
T. Boyd, you were vice president of mining operations with Rogers Group, which was the largest private building materials company in the US from 2005 to 2009?
A. Correct.
Q. And you also served as
the manager of greenfield and business development with Lafarge North America, establishing Lafarge aggregate and cement operations in Chicago and conducting in-depth market studies for Lafarge?
A. Yes. And, also, one of my focus areas was New York City, so Chicago and New York City.
Q. While you were with

Lafarge?
A. Correct.
Q. And you also served, sir, as manager of operations services for American Limestone TN, Zinc Division, which is now CEMEX,

MR. JOHNSTON: Thank you, Judge Simma.
EXAMINATION IN-CHIEF BY MR. JOHNSTON:
Q. You are Michael Wick?
A. Yes. Correct.
Q. And you prepared two
expert reports for this arbitration?
A. Correct.
Q. And your first report is dated December 16th, and your second report is dated 2017?
A. Correct.
Q. And your December 2016 report is titled "Independent Market Review of Crushed Stone Aggregate Use in the Construction Industry in New York City and Concrete Sand Use in Northern New Jersey"?
A. Correct.
Q. And you hold a bachelor
of science in mining engineering and a master's of business administration in finance?
A. Correct.
Q. And you are currently employed as vice president with John T. Boyd Company, located near Pittsburgh, Pennsylvania?

Page 1708
from 1995 to 2000; is that correct?
A. Correct.
Q. And you have served, as
well, as a senior mining engineer from Lhoist from
1991 to 1995 ?
A. Correct.
Q. And, sir, since
delivering your reports, have you identified any corrections or clarifications that you wish to make?
A. No.
Q. Would you please answer
the questions of Canada's counsel? Thank you.
A. Yes.

PRESIDING ARBITRATOR: Thank
you. I turn over to respondent, and Mr. Spelliscy
is going to subject you to cross-examination.
CROSS-EXAMINATION BY MR. SPELLISCY:
Q. Good afternoon, Mr. Wick.
A. Good afternoon.
Q. I think I will remember
this time. Let's just go into confidential
session now.
--- CONFIDENTIAL PORTION OF TRANSCRIPT RESUMES AT
3:10 P.M.

BY MR. SPELLISCY:
Q. I would like to start,

Mr. Wick, by trying to understand some of the basic distinctions that you seem to be drawing in your report. So let's start by turning to page 1 of your second report. By that, I mean the page numbered 1 in the report, not in the cover letter.
A. Okay.
Q. You say in the second
paragraph, at paragraph Number 2 here, you say:
"In reality, a seaborne
Canadian stone quarry is
not a market participant of the New York City
building and construction
markets."[as read]
You say:
"The notion that, if a
company operates a quarry
in Canada, then it
automatically becomes a
market participant is a
fallacy."[as read]
MR. JOHNSTON: There is a word in parentheses, "competition". I just want to
make sure my friend reads the full text.
MR. SPELLISCY: I can also note that the words "is" and "not" are bolded and capitalized, but I think we can all read it.

A. New York Sand \& Stone,
correct.
 do any study of the coarse aggregate market in New Jersey; correct?
A. Not the coarse aggregate,
correct.
Q. And, in your first
report, you say that -- this is in your scope of
work -- that the potential market areas for stone

Page 1711
produced from Canadian seaborne quarries includes
New York City, New Jersey, and other markets; does that sound familiar?
A. Yes. Correct.
Q. Okay. And so your
report, your opinion, does not actually concern who would supply New York Sand \& Stone, just what the market for New York Sand \& Stone's products were in New York City; correct?
A. Correct.
Q. Now, your projections, as well, they only go to 2020, and that is because projections beyond 2020 are inherently inaccurate; correct?
A. Yes, that's correct.
Q. Now, let's turn to something where I hope you can help me understand, Mr. Wick. It's in paragraph 6 of your second report.
A. Okay.
Q. About halfway down that
paragraph, there's a sentence that says:


Page 1712


Do you see that sentence?
A. Yes.
Q. My question is as

## follows, Mr. Wick.

correct?
A. Yes. I'm not sure of what
Q. Right. So I'm trying to









Page 1739
 report, you considered the New York City market in your analysis?
A. The New York City market?
Q. Yes.

Page 1738
Q. And in respect of the first point, I will read it:


And does that accurately set out at least part of what your analysis is in your report?
A. Yes.
Q. You were asked questions as well, sir, in which I heard you use the terms
A. Yes.
Q. And if you can go, sir, please, to page 5-3 of your first report.
A. Okay.
Q. And once you have that
page.
A. Yes.
Q. You recall Mr. Spelliscy
asked you questions about the recession?
A. Yes.
Q. And the effect of the
recession?
A. Correct.
Q. And I will just direct your attention, sir, to the second paragraph on page 5-3. The first line you will see reads:


And it goes on. Can you elaborate on what you are saying here and how that relates to, if at all, your evidence about


Page 1745
 now take you, sir, to Tab 9 of the binder Mr. Spelliscy put in front of you.

And it was page 3. There was a table there that Mr. Spelliscy took you to.
A. Yes.
Q. Okay. And the first column, is the column that -- or the first row, $\quad$ is the row that you were asked about; do you recall that?
A. Correct.
Q. And do you have any understanding of what
A. No. I would assume it's both the
Q. But you have no particular understanding of that one way or the other?

Page 1747

this sentence?
A. Yes.

MR. SPELLISCY: Thank you.
That's all I have.
--- CONFIDENTIAL PORTION OF TRANSCRIPT ENDS AT 3:51 P.M.

PRESIDING ARBITRATOR: Thank
you. No further from...
MR. JOHNSTON: No.
PRESIDING ARBITRATOR: Okay.
Questions of the tribunal? No, that is not the
case. Mr. Wick, this is the end of the exercise
as far as you are concerned. You are a free man

Page 1746
A. No.

MR. JOHNSTON: Those are my questions on redirect.

PRESIDING ARBITRATOR: Thank you very much. Thank you very much.
Mr. Spelliscy, any...
FURTHER CROSS-EXAMINATION BY MR. SPELLISCY:
Q. I'm sorry, Mr. Wick. I don't mean to step up again. I just had a question. We were looking, again, at the page 4 of your second report and at the sentence on the 15 years again.
A. Okay.
Q. It says -- you said, I
think -- just now in response to Mr. Johnston's question, you said,
A. Right.
Q. Right. But, Mr. Wick, the sentence says:


expert. I solemnly declare upon my honour and conscience that I will speak the truth, the whole truth and nothing but the truth and that my statement will be in accordance with my sincere belief.

PRESIDING ARBITRATOR: Thank you.

I give the floor to Ms. Zeman for the direct.

MS. ZEMAN: Yes, thank you. EXAMINATION IN-CHIEF BY MS. ZEMAN:
Q. Good afternoon,

Dr. Sterling. Can you briefly describe for the tribunal your background and experience?
A. Yes, thank you. I am trained as an economist. I have an undergraduate degree from MIT as an -- in economics, a master's in economics from Northwestern University and a PhD in macroeconomics and finance from the MIT Sloan School.

I am one of the founders of Marsoft, my company, and I am the president of Marsoft Incorporated. I serve on the board of two companies, the Balticmax Holding Company and the Acquisition Company One, Maltese companies. We
own a fleet of 24 small container ships.
My area of expertise for the past nearly 35 years has been in the maritime industry. We started our business in the basement of the Sloan School doing research on oil trade and tanker market analysis and since then have grown to span almost all the major shipping markets.

My personal role has been in developing models for the market research, developing the credit rating models for shipping market -- or for the ship finance based on our market research. I advise investors with regard to investments in shipping, banks with regard to pricing a debt, and have served as an expert witness in a number of shipping cases in the past several years.
Q. Do you have any corrections to make to your opinions?
A. I do. On page 34 of my first report,



CROSS-EXAMINATION BY MR. NASH:

## Q. Good afternoon,

Dr. Sterling. How are you?
A. I am well, thank you, sir. How are you?
Q. Very well.

You have signed these two reports that you referred to. The first is in Tab 1, you will see that your report there is dated June 9th?

> A. That's correct.
> Q. And in Tab 2, your report
is dated November 6th, 2017; do you see that?
A. Yes, I do.
Q. Please turn to Tab 1, and we are in the binder now. Or you can stay in that document if you wish, but to page 44 of your first report, which you will find is your CV. Do you see that?
A. Yes, sir.
Q. And this CV was complete and up-to-date as of the date you presented it to the tribunal for this proceeding?
A. Yes, sir.
Q. And it fully and
the shipping industry, that implies to me that there is risk in the shipping industry; is that fair?
A. There is a risk in the shipping industry. The specific area in which I've focused my time is in the use of scenario tools to evaluate risk and the use of a number of statistical tools to evaluate the probability of default and loss given default on shipping loans.
Q. So going back to my
question, there are risks involved in the shipping industry; that's correct?
A. Yes, sir.
Q. And part of what you have been doing for the last 39 years is developing models to assist shipowners, investors and financial institutions in the management of the risk in the shipping industry; is that correct?
A. Yes. Yes, sir.
Q. And if you go down for a moment to the bottom paragraph on that page, page 44, you'll see that under part of your experience, there's credit risk evaluation and management; do you see that?

The last paragraph.
big part of what you do; is that correct?
A. Yes, sir.
Q. And then if you go down
to the next line, well, actually, just continuing
on in that sentence:
"Risk analytics and deal
evaluation, portfolio
management systems for
the highly fragmented and
volatile maritime
shipping markets."[as
read]
Now, you have been in the
shipping industry for 40 years, thereabouts, and you have experienced, and you have described here, that shipping markets are fragmented and volatile; correct?
A. As I describe here, the tools that we have developed are specialized in those -- for the shipping industry, which is a volatile industry, and the ownership is highly fragmented across the industry. Ownership of ships, I should say.
Q. The ownership of ships is
fragmented and volatile; correct? Sorry, the
A. Yes, risk analytics and deal evaluation/portfolio management systems, that's the paragraph we are getting to, that sentence?
Q. Yes.
A. Yes.
Q. So an important part of
what you do is the development of risk analytics, and that's to address the risks in the shipping market; that's correct?
A. Indeed. And the tools to help our clients manage those risks.
Q. And you have been making your living for the last 40 years assisting your clients in whatever aspect of the shipping industry they are involved with managing and analyzing risk; that's correct?
A. Our focus in the shipping industry spans the dry bulk, tanker, container, LNG, and large parts of the ship finance industry. That is not the totality of shipping.
Q. I understand. But there is certainly an important component of managing risk, analyzing risk, providing your clients with advice about risk in the shipping industry is a
shipping industry generally is volatile, and the ownership is fragmented; have I got that right?
A. The ownership is
fragmented. There are many small owners, and charter rates and vessel values in the shipping industry are highly volatile. They move up and down quite a bit.
Q. And part of the risk that needs to be managed arises from the fact that the shipping industry is a highly competitive industry; correct?
A. No, sir, I am not sure I'd characterize the degree of competition as a risk. Many industries are competitive and don't show the same risk profile.

The characteristics that drive shipping industry risk are the volatility of trade, changing trading patterns, changing commodities, prices, tendencies in the industry to excessive ordering driving excess supply in the markets, I would characterize those as the drivers of risk, not competition per se.
Q. Well, isn't competition
based, in part at least, on excess supply in the market, for example? There could be more
availability of ships to transport goods than
there is the need for them; isn't that fair?
A. Sir, it's my
understanding of competition is that it refers to competition between shipowners for business.
Q. And doesn't that exist
here in the shipping industry?
A. You better step me back.

What exactly is your question again?
Q. I am talking about
competition between shipowners for market, that is the import of my question.

Isn't there competition
between shipowners for market share, and isn't there price competition or price competition between them?
A. Yes, shipowners will bid for business from charters and traders. They will often compete on price. There are other parameters under which they will compete, contract duration, quality of ship, et cetera, et cetera, et cetera, and related services. But competition for the business of moving cargo is an intrinsic part of the shipping industry, yes.
Q. So would you call it a
highly competitive industry?
A. I would agree that the
shipping industry is highly competitive. I think the different segments of the industry will show different degrees of competition and concentration, but, on the whole, I think it's fair to characterize the shipping industry as highly competitive.
Q. And there are
uncertainties involved in the shipping industry; that is correct?
A. Yes, sir. There are
uncertainties, as I mentioned earlier, having to do with the volume of pattern of trade, the demand for ships and the supply of ships. Those factors are translated into volatile charter rates in the short term and volatile vessel values as well.
Q. In the short and the long term; correct?
A. The short-term
volatility, if you will, has its upsides as well as its downsides. In the long-term, those tend to average out.
Q. And you were retained to help manage the risks that you describe inherent
in the shipping industry; that's correct, at least that's part of what you do?
A. Does your question refer to this, these proceedings, sir?
Q. No, my question refers to what you do in your consulting business. You advise --
A. Yes --
Q. -- shipping owners, investors and financial institutions on uncertainties and risks in the shipping markets; correct?
A. Yes, we advise our clients with regard to the outlook for the markets and the uncertainties in that outlook and how those uncertainties translate into the financial performance of vessels and loans.
Q. If we go back up to the top paragraph, we refer to risk management services for the shipping and ship finance markets; are you with me?
A. That's the second and third line of the first paragraph, yes, sir.
Q. Yes. And you advise
shipowners, investors and financial institutions

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on the development and execution of effective investment, chartering and risk management strategies.

Now, for in -- for shipowners,
the -- that's the existing shipping lines; correct?
A. I don't understand your
question, sir.
Q. Shipowners are -- what do you mean by "shipowners"?
A. Well, individuals or companies that own ships.
Q. So they would be normally categorized as shipping lines?
A. Not necessarily, no. No.

They would be characterized as shipowners.
Q. Shipowners, okay.

Investors are investors in the shipping industry, or potential investors?
A. Investors span --
investors in shipping, they invest in many different aspects of the shipping industry, from ships to, to, shipping services, to the companies themselves that own the ships. So there are a wide range of ways to invest in shipping. They
could invest in securitized debt that originated against loans collateralized by ships.
Q. Under the heading
"Experience" a little bit below, down the page, under "cycle management", what is cycle management?
A. The shipping industry is characterized by sharp cycles. Rates are high and then rates are low, and then rates hopefully rise again. They -- broadly, that's the cycle in the shipping business. The shipping, the success or failure of shipping investments typically is driven by the timing in the cycle. If you buy a ship at a low point in the cycle and sell it at a high point in the cycle, you can make a lot of money. Indeed, that's where great fortunes are made in shipping. Buying at a high point in the cycle and selling at a low point is a way to lose a lot of money.

And it's those capital gains components, cyclical components of the financial performance which are generally the difference between success and failure as a shipping investor in the business. And it's one of our roles is to help identify the timing and magnitude of cycles
in the market and, related to that, what might be the best type of ship or alternative financing mechanism that would give an investor access to those -- the financial gains from those market cycles.
Q. So, as I understand it, the timing of the purchase of a ship can be critical to whether or not you make money or lose money on the purchase of that ship; is that fair?
A. The timing is often a critical element. The key, though, again, there are, if you think about the various tools available to an owner or an investor, timing is one critical tool. The extent to which employment is available or confirmed for a ship is another alternative -- is a related alternative. If you buy a ship, a very expensive ship, charter it out long term, then there's, there may be relatively low risk even if the market falls.

So you have to think about shipping risk as in various dimensions, the timing, the employment, the degree of financing associated with a project, they all contribute to risk in different ways.
Q. And you provide to
clients timing-critical decision tools to assist them in engaging in the exercise and analysis of whether time A is a good time to buy a ship or a bad time to buy a ship; is that part of what you do? So they get the timing right?
A. We help our clients
evaluate the market cycles and the entryway, if you will, or the type of ship or the contract that they choose to enter those cycles and understand their financial performance in those cycles.

What a specific investor or charter or other player in the market does depends on what they're interested in. If they need a ship to move aggregates from A to B for 50 years, they will have a different perspective from someone who might want to buy into what is perceived to be a cyclicly depressed market, so they will have different attitudes towards the opportunities.
Q. So the question of the timing of the purchase of either a ship or of shipping services can very much depend on the flexibility around the timing of the purchase of a ship; isn't that correct?
A. Again, there's, there's

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several dimensions of shipping risk in financial performance. The timing of an investment is one, the employment of the ship is -- can mitigate that risk or not, and the extent of the financing. So timing is one important part of several factors which determine the overall performance, and it's getting that whole package right which is one of our, one of the things that we try to help our customers with.
Q. And you try to help them with timing-critical shipping investments; that's correct?
A. That's correct.
Q. I have read through
your -- the first page and the top of the second page of your CV, and I think I have seen the word "risk" either six or seven times in that. It looks to be a significant part of what you have done and what you do. Analyzing, assessing, advising on, developing models for, all of those things around reducing risk, managing risk; is that fair?
A. With risk comes reward.

The reason many of our clients are interested in shipping is that they see that there is an
opportunity to make substantial gains, and so they seek those opportunities. At the same time, they may take risk, they do take risk associated with that, and managing that risk is critical.

In many of our conversations with our clients, we find that it's important to challenge our clients' assessment of risk and the risk profile because it may -- they may sometimes perceive things as more certain than they actually are.
Q. And you're there to identify the uncertainties and the risks associated with a particular investment; correct, at least --
A. As I say, the risks comes with upsides, and so our job is to help evaluate the upside potential as well as the uncertainty around that, both in the markets and in the financial performance of the markets.
Q. On page 45 of your CV, if
you go down to -- from the "Investment and Restructuring" to "Professional Affiliations", I see that you have been an expert witness before. You have got where you refer to "Management", and it appears from your CV that you are, your only

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Q. And I understand that you have actually never been involved with the management of a shipping company; that's correct? The management, not being a board member but actual management.
A. No, sir, I have, as you
say, been on the boards of BHC and AC One, but I have not been a line manager of a ship-owning company or a charterer.
Q. Have you ever been
employed in any capacity by a ship-owning company?
A. All the time, sir. Our
business is, we have been employed, been retained.
Q. I mean employed as distinct from retained. Employed in the shipping company.
A. No, we have been retained by many shipowners and continue to be retained by many shipowners. I am not a full-time employee of a ship-owning -- nor a part-time employee of a ship-owning company.
Q. You have never been a full-time or part-time employee of a shipping company; that's correct?
A. That's correct, sir.
management experience is, in fact, the founder and sponsor with Peter Lorange of the Investment and Risk Management in Shipping Program for management and development; is that right?
A. I spend a fair amount of my time, sir, managing Marsoft and its efforts. I may have not fully expanded on those, but I find managing Marsoft to be a time-consuming part of my time. But Peter Lorange and I are very proud to have built this investment risk management program which we have developed and delivered in Switzerland for many years. And Peter Lorange and I continue to have a strong professional relationship.
Q. The models you developed
over the years include probability of default
model and loss given default model; is that right?
A. The output of these
models is what is known in the banking industry as the probability of default and loss given default, yes.
Q. So you are --
A. Excuse me, sir, as it relates to shipping loans. I didn't mean to suggest that it relates to all sorts of debt.

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shipping --
Q. We can have a short
discussion about that.
A. Yes, and I appreciate is
the time.
Shipping is in a category of
volatility that is associated with office buildings, residential, real estate.
Q. I am just talking about
the shipping industry.
A. So it's in a high risk,
high volatility segment of the world, and it has a relatively high level of bankruptcies commensurate with that style of business.
Q. So it is known in the shipping industry that shipping lines, even very large shipping lines, can go bankrupt, become insolvent, fail to meet -- to able to meet their obligations; that's right?
A. Shipping, shipowners may
become insolvent, liner companies may become insolvent, yes, shipowners as well as commodity owners can become insolvent, yes.
Q. Any number of factors
could contribute to the failure of a shipping
line, shipowners, any segment of the shipping industry, and some of those factors, I am going to suggest to you, could be, for example, overexpansion?
A. There are a number of factors which contribute to the financial performance of a shipping company. It may -there are a number of factors which may contribute to the performance of a shipping company.
Q. And one factor leading to potential insolvency could be overexpansion at the wrong time; would you agree with that?
A. It is certainly a risk in the shipping industry if an owner decides to build or buy a lot of ships at the wrong time or even one ship, one expensive ship at the wrong time, then it can cause financial difficulty, yes.
Q. So you buy one ship which is a very big capital investment, you buy it at the wrong time, it can lead to serious financial problems for entities involved in the shipping industry; correct?
A. Again, sir, there are multiple dimensions of this. It is possible one ship, highly leveraged, bought at the wrong time

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can be a very risky investment. One ship with little leverage with long-term employment can be a very secure investment.

I think it's, it's critical to look at all of these factors in judging the financial performance of a shipping investment.

No shipowner thinks of a single ship, sorry, only very specialized kinds of shipowners think of a single ship investment highly leveraged, et cetera, et cetera. Most shipowners will think of themselves as running a business and having a portfolio concern rather than a -- or a portfolio strategy, excuse me, rather than a single ship strategy.
Q. So using a portfolio strategy of multiple ships within a portfolio, the, that objective is to amortize the risk of that shipping fleet over the portfolio so that you get ups and downs and you average them out; is that a fair description?
A. A large fleet can provide the opportunity to diversify across multiple markets. It can provide the opportunity to be -have multiple age profiles. It can provide a number of advantages for an owner.

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diversification of the portfolio that can be one of those advantages; would you agree with that?
A. The extent of
diversification in the shipping industry is -- or the potential for diversification as a risk mitigation tool in the shipping industry has been demonstrated not to be great, as we saw in the most recent crisis. All the markets crashed at the same time. Diversification across shipping types offered very little hedge to that cycle.

And changes in the sourcing of commodities, et cetera, can change the structure of the industry and change correlations dramatically, as we have seen over the past several years.

So, yes, diversification across ship types and ages may provide a degree of security, that's -- may provide a degree of risk mitigation. You'd have to take a look specifically at the, at what is being diversified and how to assess the potential gains from that.
Q. Got it. So there can
be risk -- diversification of portfolio can be a positive factor in reducing risk for, say, a
shipping line, but it's not a guarantee that the bottom won't fall out of the market and the company goes bankrupt; is that a fair summary?
A. Diversification offers potential benefits. In itself, there is no guarantee in the shipping business, or, I believe, in any other business, that risk will be avoided.
Q. Are you familiar with the bankruptcy of the Hanjin shipping lines?
A. Yes, sir.
Q. And was that the eighth
largest shipping line in the world?
A. It was the top ten, sir.

I cannot honestly remember whether or not it was the eighth. It was certainly one of the largest.
Hanjin is a big Korean liner company.
PRESIDING ARBITRATOR:
Container.
THE WITNESS: Yes, exactly, it was in the container business.

BY MR. NASH:
Q. And it went bankrupt. It
was unable to meet its obligations, and there were ships stranded, Hanjin ships were stranded around the world?
A. Hanjin ships and cargo on those ships were stranded around the world. The Hanjin -- the withdrawal by the Korean government of its support for Hanjin was a traumatic event for shipping and, of course, for Hanjin, but Hanjin had enjoyed long-term support from the Korean government so that it endured even weak times in shipping. The Korean government decided it was going to focus its support elsewhere, and Hanjin was quickly eliminated from the scene.
Q. It went under. Right.

Now, have you ever negotiated contracts, I don't see it on your CV, for the shipment of goods from the Canadian Maritimes to New York City?
A. I have never negotiated contracts for the shipment of goods from the Canadian Maritimes to New York City, no.
Q. Have you ever negotiated contracts for the shipment of goods from Canada to anywhere on the East Coast in the United States?
A. As an advisor --
Q. As a negotiator --
A. I personally have not, have never been an employee of a shipping company
that would have negotiated contracts of affreightment or other employment agreements from between Canada and the United States, no.
Q. So you have never negotiated a contract from Canada, anywhere in Canada to anywhere in the United States; is that true?
A. I have not had that responsibility or opportunity, no.
Q. And you have never actually negotiated any contracts related to shipping as an employee of any shipping company; that's correct?
A. My job as the president of Marsoft has been to ensure that we provide the kind of consulting services that our clients need to support that negotiation.
Q. So that's -- the answer
to my question is yes?
A. We do not negotiate those
contracts.
Q. So the answer to my question is yes?
A. We have not negotiated
those contracts.
Q. You were instructed to
conduct your analysis in this case from the vantage point of October 22nd, 2007; that's correct?
A. Yes, the date of the breach, yes.
Q. Do you know the date in this case when the federal Minister of Environment denied approval for the quarry?
A. I am not familiar with that date, no, sir.
Q. You performed your
analysis in this case on the basis of information, information available to you as of October 22nd, 2007; that's correct?
A. Yes. We relied on
information available to us as --
Q. As of that date?
A. Let me be more precise,
sir.
We were -- when we were retained to provide this analysis, we were provided a range of information, all of which dates prior to November -- excuse me, October 2007. We have, of course, as a matter of
business practice, skills and expertise and knowledge that we have accumulated subsequent to that date. So we have a degree of understanding of the business that I hope has grown since 2007.
Q. I understand. Could you turn to Tab 1, please, page 19, of your Number 1 report. Tab 1 in the binder, if it's easier. Page 19, paragraph 65.
A. Page 19, paragraph 65.
Q. You say there:


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Q. Did you know that when you wrote your opinion?
A. It was clear as we read the EIS that it was early thoughts about the project. It was -- in some areas, it appeared to be inconsistent or not fully thought through, so certainly our interpretation of it is that it was at an early stage in the project.
Q. An early stage, conceptual stage of the development of the project; correct?
A. Well, conceptual, I mean, they seemed to have a very good idea about what equipment they would need, what stone they expected to pull out and that they needed a ship to run it. There were lots of details that you need to drill down in to write a real business plan, but I think the concepts were quite clear.
Q. You say in the
second-to-last line:
as read
A. I see that, sir, yes.
Q. You made that assumption;
correct?
A. Yes, this is -- yes.
Q. So have you ever heard of an EIS before, a Canadian EIS before being retained in this case?
A. An environmental
impact -- or EIS?
Q. Yes, yes.
A. The term of trade was --
certainly I had heard of environmental impact statements prior to that time. It was -- I cant recall the particular context.
Q. Did you know that a Canadian EIS was developed at an early development stage of a project and was to be used for conceptual purposes when you wrote this opinion?
A. That's one of the points that I think has been emphasized as I have been sitting in the back of the room, that this EIS was developed at an early stage of the project.

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Correct?
A. That is my statement,
sir.
Q. And that was what you
understood you were doing?
A. And that was my understanding at the time,
Q. And your opinion was
developed and was based on that assumption; that's correct?
A. That was the, yeah, the -- yes, we used that, that was one of the assumptions that we used, as well as there were other descriptions and other factors that




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Whites Point Quarry to New York City based upon your understanding of the ship travelling from Auld's Cove to New York City; that's correct?
A. To be precise, we asked for data from the Canadian Coast Guard on voyages of $\quad$ and speed of those voyages and asked the Canadian Coast Guard to identify the starting point and the ending point of those voyages. And so as, in the table that we got from the Canadian Coast Guard, it showed us origin, destination, and average speed over that track, and that's what we relied upon.
Q. And you used that average speed over the voyage and applied it to a voyage of a same or similar ship from Whites Point to New York City; correct?
A. We believe that that -that the performance of
 is -over that voyage from Auld's Cove is representative of its performance of what it would achieve from Whites Point to New York.
Q. You believe that?
A. I am sorry, yes. That was a question.
Q. Could you turn to page 21
of your first report, please, at Tab 1. At the bottom paragraph, Number 3:

A. Yes.


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 questions.

PRESIDING ARBITRATOR: Thank you, Ms. Zeman.

No further --
MR. NASH: Nothing arising. PRESIDING ARBITRATOR: Okay. Questions from the tribunal? QUESTIONS FROM THE TRIBUNAL:

PROFESSOR SCHWARTZ: The first question, maybe I didn't hear or understand correctly, just a comment you made en passant, but you were asked about the difference between

THE WITNESS: I recall a
discussion around a paragraph in Paul Buxton's report, yes.

PROFESSOR SCHWARTZ: Yes. I think I remember you saying you found

THE WITNESS: I --

PRESIDING ARBITRATOR: No, no. It was you found mysterious the term, as I do also,

PROFESSOR SCHWARTZ: Oh, okay. THE WITNESS: It was in
reference to
. It was an odd --

PROFESSOR SCHWARTZ: Oh, okay. THE WITNESS: It was not how someone -- it was not how I would have described anything. I would have used different -- I didn't understand exactly what that description meant.

PROFESSOR SCHWARTZ: Okay. Thanks for clarifying that.

The second question: You are advising clients about risks in the shipping industry. What sort of plus or minuses -- what sort of standard deviations do you provide to clients when you are advising them? Are you able to say, "Yeah. This is going to work out within plus or minus 5 per cent with one standard deviation or" -- is that something you typically do in the business? How does that work?

THE WITNESS: Professor
Schwartz, we spend a lot of time talking about
standard deviations and how to measure (a) the uncertainty around a forecast, and we measure it both in a statistical sense, using the extent to which our most likely scenarios deviate from actual or -- and how frequently actuals deviate from our extreme high and low cases. So we try to capture confidence intervals from a scenario perspective as well as a risk perspective -- as well as, excuse me, a statistical perspective.

And translating that characterization of the uncertainty to the outlook into the uncertainty of the financial performance is another key step. And for the banking sector risk, as I mentioned earlier, it's typically thought of in two -- at least two dimensions, the probability that you will fail to have sufficient cash flow to meet your debt obligations and the likelihood in that case that the value of the ship will be below the debt outstanding. So it's the translation all the way from those scenarios of future market development, the uncertainty around the scenarios, then down to the likely or to the possibility of default and the cost of that default. All of those are statistically characterized.

PROFESSOR SCHWARTZ: Do you look back at your previous predictions, compare them with actual performance, and, in the long run, get a sense of how reliable your estimates are?

THE WITNESS: Sir, we provide services to the leading shipping banks, and we have done so for 30 years. As part of that, we are scrutinized by their regulators. The performance of shipping banks has been such that they have come under particular scrutiny, and the inputs that we provide to their decision-making are part of the review process. As a matter of fact, when I get -- one of the projects we just completed before I came here was an assessment of the ECB stress scenarios and their consequences for the shipping markets. We provide historical track record of our forecast, of our base case forecast, and comparison of what we call base case to actual and high and low cases to actual and try to provide a full range and are obligated to provide a full range of transparency of our analysis to our clients and to the regulators ultimately.

PROFESSOR SCHWARTZ: So this

1 -- feel free to tell me you can't give me a
$\square$ meaningful answer to this, but if you are looking over shipping costs over 50 years and a client comes to you and says, "What are my shipping costs over the next 50 years on this route?" what sort of band of standard deviation around certainty am I looking at here? Like, I'm able to say, "Okay. I've got this within 25 per cent, 50 per cent". Are you able to give me any rough guidance as to what kind of precise science or guesswork is involved here?

THE WITNESS: First, to characterize the historical variation in the market, in the dry bulk market we have recently come out of one of the very weakest points since -- in our memory, where Panamax ships, Handymax ships were all earning about the same thing, and that was about \$5,000 a day. In 2008, I believe in June of 2008, those ships were earning $\$ 65,000$ a day -- excuse me, 50 to 60,000 dollars a day. That's the historical range. That's the maximum we have to deal with. Typically, the markets will not show that much variation.

They might show, in our more

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First of all, could you
explain or clarify the meaning of these terms, Panamax and Handymax? Especially -- I would have thought that they do not -- there is no necessary correlation between tonnage and the max, whatever, Panama Suez, whatever, because it's more a matter of the draft and the size, whether you can pass a canal or not. So could you clarify that, especially what Handymax means?

And the second question would be: I have the impression that the shipping part of our -- the case here, the shipping strikes me as a relatively cozy business.


THE WITNESS: Let's start with the easier one of those two questions, which is what the heck is a Handymax.

This is a term of art that the industry artfully uses over time. A Handymax in the good old days was worth 48,000 -- sorry, it
recent analysis, plus or minus 10 to 15,000 dollars a day.

Our -- so that's the actual historical variation. Forecasting where the markets go is, as you can imagine, a humbling exercise. We measure our precision both in the sense that the extent to which the actual markets deviate from our most likely forecasts, the next quarter, six months, nine environments hence and also to the extent to which they deviate from the range that we have indicated as a plausible range on the basis of our scenario analysis. And the analysis going out two years ahead is that -sorry, one year ahead is that we have an 80 per cent success record in finding those turning points in the market when they flip from declining to rising, but that, in terms of the point estimates of the charter rates -- and I'm sorry for all this jargon I'll throw at you, but about two-thirds of the time rates are within 30 per cent of our base case forecast.

PROFESSOR SCHWARTZ: Thank you very much.

PRESIDING ARBITRATOR: A couple of questions.

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was 48,000 dead weight tons. I have no idea why that was regarded as handy, but it has gear on it --

PRESIDING ARBITRATOR: A few hours ago, one participant -- I forgot who it was -- said Handymax means a ship which has all the loading gear on board and doesn't -- which is actually handy to load and unload; is that correct?

THE WITNESS: And, sir, you are absolutely right. There is a size component, and there is a gearing component. So typically ships less than, nowadays, 64,000 dead weight ton, which is called an Ultramax, just to confuse things, they have gear on them, and that gearing is -- makes it easier to load and discharge at ports which don't have cranes. And so, in that sense, they facilitate trade to areas which have less well-developed port infrastructure.

PRESIDING ARBITRATOR: They are called Handymax in the jargon?

THE WITNESS: And, again, the jargon has gone from Handymax to Supramax to Ultramax, sir. So the jargon of the trade is generally Handymax is less than 50,000 dead weight
ton. Supra is probably less than 60, and ultra is less than 70 dead weight tons, and they all have gear on them. And they are all, you know, as you can, imagine wonderful ships.

A Panamax is a ship that starts -- again, depends how old you are, but think of it now as a ship larger than 60,000 dead weight ton, now typically averaging about 85,000 dead weight ton, and it's got no gear, no cranes on it. So it relies on cranes at the port or terminal to load or discharge. So you have got a bigger ship. It -- Panamax used to be defined by what was the biggest ship that could go through the Panama Canal. Then they dug a deeper Panama Canal, and so that term of the trade is obsolete is the fact. There's a whole new class of ships that will fill that gap.



Sorry, I could talk a lot more about this, but have I got the high points?

PRESIDING ARBITRATOR: No, no. I think that was -- but it was -- I mean, for instance, during crises, I remember having read that, on the Singapore, you had 300 or several

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hundred ships just lying there, waiting for some business to do. And the same is true even in The Hague. You see in Scheveningen, you see some ships lying out there for weeks and weeks. So they cannot just lie there in order to save a port going in.

Compared to that, this seems to be a pretty good business, and risks, the risks involved seem to be minimal.

THE WITNESS:
that trade within the United States is governed by the Jones Act, and the Jones Act is a highly restrictive and very costly trade to be engaged in. If you can start in Canada, you are no longer subject to the Jones Act. And if you can match your cargo flows down from Canada up from the US Gulf, say, or from Latin America, then you can --

PRESIDING ARBITRATOR: Could you, just for the record, in a few words, explain what "Jones Act" means?

THE WITNESS: Yes. The Jones Act restricts the carriage of goods between US harbours to US-owned, US-built, US-operated ships. US built means they are generally three times the

PRESIDING ARBITRATOR: Thank you very much.
PROFESSOR SCHWARTZ: If I
could just ask you to -- I find your earlier answers very helpful, but if you could just give me a bit more precision.
You mentioned that about two-thirds of the time your projections were within 30 per cent of the base case forecast?
THE WITNESS: Yes, sir.
PROFESSOR SCHWARTZ: Over what period of time are those forecasts?
THE WITNESS: Well, we will
have a forecast -- our typical forecasts range from three months out to five years out. So every quarter we will update our five-year outlook. So that confidence interval I gave you was at, I think, six months.
PROFESSOR SCHWARTZ: So are
you ever in the business of giving 10-, 20-, 50-year forecasts.
THE WITNESS: Well, this was
an exercise in such a forecast, if you will, and

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PROFESSOR SCHWARTZ: Thank you very much.

THE WITNESS: Thank you, sir. --- CONFIDENTIAL PORTION OF TRANSCRIPT ENDS AT 5:48 P.M.

PRESIDING ARBITRATOR: No
follow-up questions on the part of -- no? Okay.
That brings to an end your cross-examination. And
thank you very much for helping here.
THE WITNESS: Thanks for the
opportunity. I love talking about this business, so appreciate it.

PRESIDING ARBITRATOR: Thank
you.
I have a question to the
parties now. It's getting close to six. We are
going to have Saturday -- that is tomorrow -- for
the rest of the questions. Do the parties want to
-- or I mean -- to examine -- that would be -- who
would it be? Mr. Mike Power tonight. And that
would, in all probability, mean that it would be
interrupted. So...
MR. SPELLISCY: We actually
have a scheduling issue with Mr. Power. We have a
scheduling issue with Mr. Power that needs to be
so you do it the best you can. You take a look at what you know of the key drivers, and you say, "This is how they look. This is how you build out an infrastructure to serve the needs". But there's certainly some intrinsic uncertainty to that style of calculation.

PROFESSOR SCHWARTZ: I will
just pursue that a bit further. I don't have an intuition about this. If it's 50 years, does that mean the uncertainty is less because the ups and downs average it out, or is it just the sheer accumulation of time that adds more to the uncertainty band?

THE WITNESS: Over a 50-year span, we tend to think of technology as a huge disruptor, and industries that plan for 50 years, for example, that were planning to export crude oil from Saudi Arabia to the United States find that that market goes away, and so -- whereas we can do a -- we can run a spreadsheet with the best of them and roll out numbers for 50 years. There's always a discussion about what you do when something changes, and it's that discussion which, frankly, is sometimes the most useful thing when -- that we do for our clients.

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discussed, because if we are -- we now past -- as the tribunal will recall, from Procedural Order Number 25, witnesses were to make themselves available for half a day before and half a day after. Mr. Power has a -- we are now past that for Mr. Power. He has a flight and another commitment. He has a flight at noon and another commitment that he cannot miss. So I would suggest that, if we are not beginning very, very early, that it would be more advisable to do him tonight.

PRESIDING ARBITRATOR: Would it make a difference for him if he had to stay another -- I assume that you are referring that he would have to stay another night. But he would have to stay another night anyway, right, because, as far as I am concerned, tonight, I really need to get out of here at seven sharp. This is the only night during the entire hearing, so...

MR. SPELLISCY: Mr. Power, as I understand it, cannot stay another night, Saturday night, so he is on the noon flight back to Halifax tomorrow. And I'm not sure. I think that the next flight is not available for him either. So essentially it means that it's either
now or it is bright and early, and he would have to be probably on the road by, I'm guessing, you know 10:00 a.m. or earlier, 10:00 a.m., I'm guessing, to get to the airport.

PRESIDING ARBITRATOR: You mean finish him at ten?

MR. SPELLISCY: He would have to be completely finished at that point, maybe even a little earlier, if we don't do him tonight.

PRESIDING ARBITRATOR: But what will you do if I tell you that I really need to leave here? Would you just say, "Well, Simma doesn't understand what's going on anyway, so just let's do it". Or I -- this is -- I don't mean I seriously understand everything. This is -- what is the situation?

MR. SPELLISCY: Let me -- give me a minute to talk to Mr. Power --

PRESIDING ARBITRATOR: Yes.
MR. SPELLISCY: -- and we can see what it is. As I said, Procedural Order 25 only requires half a day before and after. So he has arranged his life accordingly, so let me check in with him to see what --

PRESIDING ARBITRATOR: Let me

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MR. NASH: Did he check with
Porter?
MR. SPELLISCY: I believe his ticket is on Air Canada out of Pearson.

PRESIDING ARBITRATOR: You mean he would have to leave here, or be in the taxi to the airport at 9:45?

MR. SPELLISCY: Yes.
PRESIDING ARBITRATOR: So we would have today. Tonight, we would have quite a bit of time left, and tomorrow, if it's not -- I mean, I don't have a problem starting even at eight.

MR. SPELLISCY: I have been told by Mr. Power and Mr. Ward that we can use quarry hours and start at 5:00 a.m., but that seems perhaps a little excessive. We could have an early morning start, perhaps. It depends on Mr. Nash and how much time he thinks he needs.

PRESIDING ARBITRATOR:
Mr. Nash, do you have an estimate?
MR. NASH: If we start at 8:30, he will be out of here with time to spare.

PRESIDING ARBITRATOR: So
including the time available tonight and then

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tomorrow.
MR. NASH: We don't need any tonight. If we start at 8:30-- if we start at 8:30 tomorrow, we don't need tonight. He will be finished with plenty of time.

PRESIDING ARBITRATOR:
Mr. Nash, for a number -- in a number of cases now, we have had -- or at least I understood you as indicating we are fine; we are going to have these two; we are going to finish, and then it took much longer. So are you really confident that -- I mean, it's -- in a way, it's in your hands; right?

MR. NASH: I am confident. If we start at $8: 30$, he'll be easily out of here by 9:45 so far as I'm concerned.

MR. SPELLISCY: From my perspective, as the tribunal has seen from the letters, Mr. Power's involvement is limited here. I don't expect to have much, as well. So if we can tell him -- I mean, he will need to leave at 9:45, and so that will be a hard deadline.

MR. NASH: That will not be a problem.

PRESIDING ARBITRATOR: Okay.

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| :---: | :---: | :---: | :---: |
| 1 | If that is no problem, then I would say that we | 1 | to be resumed on Saturday, February 24, 2018 at |
| 2 | end this for tonight, and tomorrow we really make | 2 | 8:30 a.m. |
| 3 | every effort to be there, as already the case. We | 3 |  |
| 4 | are all here at 8:30, and Mr. Power can be | 4 |  |
| 5 | confident that he will catch his plane. Okay. Is | 5 |  |
| 6 | that -- | 6 |  |
| 7 | MR. SPELLISCY: This sounds | 7 |  |
| 8 | fine. I will get our evening time check, so that | 8 |  |
| 9 | we know where we are, from Dr. Pulkowski. | 9 |  |
| 10 | DR. PULKOWSKI: I suspected | 10 |  |
| 11 | you would ask that, Mr. Spelliscy. The claimants | 11 |  |
| 12 | have used 14 hours and 51 minutes, and the | 12 |  |
| 13 | respondent has used 14 hours and 33 minutes. | 13 |  |
| 14 | PRESIDING ARBITRATOR: That | 14 |  |
| 15 | means, too, Mr. Nash, how you want to spend the | 15 |  |
| 16 | rest of your time and spend time tomorrow a bit | 16 |  |
| 17 | taking from either the three hours or the other | 17 |  |
| 18 | three hours. | 18 |  |
| 19 | MR. NASH: We fully | 19 |  |
| 20 | understand. | 20 |  |
| 21 | PRESIDING ARBITRATOR: Thank | 21 |  |
| 22 | you. Okay. Thank you very much, also, for this | 22 |  |
| 23 | understanding. And then we will see each other | 23 |  |
| 24 | again at 8:30 sharp tomorrow. Thank you. | 24 |  |
| 25 | --- Whereupon proceedings adjourned at 6:02 p.m., | 25 |  |


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