



Grenfell Tower Inquiry

Day 98

March 1, 2021

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Monday, 1 March 2021

(10.00 am)

SIR MARTIN MOORE—BICK: Good morning, everyone. Welcome to today's hearing. Today we're going to continue hearing evidence from Mr Stephen Howard, who, at the time with which we are concerned, was employed by the BRE.

So my first task is just to make sure that Mr Howard can see me and hear me and the rest of us clearly.

Mr Howard, good morning.

MR STEPHEN HOWARD (continued)

THE WITNESS: Good morning, I can hear you and see you clearly.

SIR MARTIN MOORE—BICK: Good, thank you very much.

Before we resume taking your evidence, let me just remind you that the procedure will be essentially as it was last week on Thursday. But we had better begin with a little bit of housekeeping: can you confirm that you're on your own in the room from which you're giving your evidence?

THE WITNESS: I am on my own.

SIR MARTIN MOORE—BICK: Thank you.

Can you confirm that you don't have any documents or other materials with you?

THE WITNESS: No.

SIR MARTIN MOORE—BICK: Can you also confirm that your

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mobile phone is in another room and that you don't have any other electronic device with you which is capable of receiving messages?

THE WITNESS: I don't have any electronic devices that are capable of receiving —

SIR MARTIN MOORE—BICK: Very good, thank you very much.

As last week, your legal representatives are in the virtual hearing room, although they know that they must keep their microphones and cameras switched off unless an emergency requires them to intervene.

Anything that you would like to raise before we start?

THE WITNESS: No, I'm fine, thanks.

SIR MARTIN MOORE—BICK: All right, thank you.

Well, we'll have the usual break at about 11.15.

At this point, I'll ask Mr Millett to continue putting questions to you. Thank you very much.

When you're ready, Mr Millett, thank you.

Questions from COUNSEL TO THE INQUIRY (continued)

MR MILLETT: Thank you very much, Mr Chairman, good morning, good morning, members of the panel, and good morning, Mr Howard.

Just to ask you first, can you hear me clearly?

A. I can, yes.

Q. Thank you.

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We were discussing together your role in the classification in September 2015 of the 2005 Kingspan K15 insulation. Can we look next, please, at the email {KIN00004791}. This is an email from Ivor Meredith to David Hoare and Sarah Colwell on 30 May 2005, and he explains who's going to be at the test the next day. He identifies himself and others from Kingspan.

Then if you go a little bit lower down the email, you can see, about two-thirds of the way down, it says: "COSHH data will follow in the morning for the Kooltherm K15 and the 6mm cement board that simulates the cladding."

Can you see that?

A. I can, yes.

Q. Would you agree that that description, using the word "simulates", indicates that the cement board was not truly representative of rainscreen cladding, at least so far as Mr Meredith thought?

A. Well, that's the first time I've seen that email, but on the basis of what's been said there, then yes, I would conclude that they considered that not to be — that they were simulating the cladding system.

Q. Yes.

Can we look at BS 8414 briefly, just so that we're

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clear about what's required. This is at {CEL00001205/5}, please. Let's look together at paragraph 2.1, "external cladding system", and this sits within the part of BS 8414—1:2002 which is the terms and the definitions.

2.1 says, "external cladding system", and it's defined as:

"[A] complete cladding assembly, including, for example, sheeting rails, fixings, cavities, insulation and weathering membranes or coatings."

If you look a little bit further down under "Principle", section 3, it says:

"The external cladding system is applied to a vertical external masonry surface simulating the external face of a building in the form of a main face together with a return wing."

Again, you see the word "simulating" there.

Then under paragraph 4.1.1 on page 6 {CEL00001205/6}, it says under "General" under "Test facility":

"The test apparatus shall be representative of the face of a building and shall consist of a masonry, or masonry infill, structure with a vertical main test wall and a vertical return wall (wing) at 90° angles to and at one side of the main test wall."

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1 Then at 5.1, if we go to page 9 {CEL00001205/9},
 2 under "General", it says:
 3 "The external cladding system shall include all
 4 relevant components assembled and installed in
 5 accordance with the manufacturer's instructions."
 6 Now, when you did your classification report for
 7 Kingspan in September 2015, were you familiar with these
 8 requirements in the BS 8414—1 standard from 2005?
 9 A. Yes.
 10 Q. As at that date, had you ever come across a cementitious
 11 particle board used in the real world as a rainscreen
 12 cladding panel on a high—rise?
 13 A. I believe I'd come across cement—based boards on
 14 cladding systems, yes.
 15 Q. Cement—based boards on cladding systems in general,
 16 perhaps, but my question was a cementitious particle
 17 board. No more, no less than that. As described,
 18 cementitious particle board; had you ever come across
 19 one of those used in the real world on a rainscreen
 20 cladding panel on a high—rise building?
 21 A. I can't recall, but as I said, cement—based boards are
 22 quite common on cladding systems.
 23 Q. On high—rise cladding systems?
 24 A. Yes.
 25 Q. Had you ever come across one in real life used above

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1 18 metres?
 2 A. Cement—based boards, but not specifically of that
 3 description, no.
 4 Q. No.
 5 Now, looking at Mr Heath's witness statement, can
 6 we, please, I'll show you what he said. If we can go to
 7 {KIN00020709/72}, please, paragraph 11.11 at the bottom
 8 of the page there, he says:
 9 "Ivor Meredith would have selected the exact
 10 materials. However, the decision to use a
 11 representative non—combustible cladding panel in the
 12 2005 BS 8414 Test would have been the result of more
 13 general discussions, which are likely to have taken
 14 place primarily between me, Ivor and the commercial team
 15 but also as part of wider discussions with the Technical
 16 Team. I agreed with the approach taken and the use of
 17 the selected panels as being representative of
 18 non—combustible cladding panels."
 19 So that's what he said, but I now want to show you
 20 what Mr Meredith says, and the transcript for his
 21 evidence to the Inquiry is at {Day75/69}, please.
 22 He is asked by leading counsel at line 16:
 23 "Question: And when you say 'a non—combustible
 24 board that was available', available to who, in what
 25 market?

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1 "Answer: That you could buy in the UK market.
 2 "Question: Right.
 3 "Answer: Obviously this wasn't supposed to be
 4 a cladding system, this was just supposed to be
 5 representative of a non—combustible outer layer."
 6 That's what he says. He explains that a little bit
 7 further on at {Day75/59:4}, if we can just go back to
 8 page 59. He says:
 9 "... although the BRE had suggested that if we test
 10 with a non—combustible cladding, we will be acceptable
 11 for use with all non—combustible cladding systems."
 12 Then he says at {Day75/63:17}, a little bit further
 13 on, and this is the question:
 14 "Question: So the discussion that you thought might
 15 have been with Sarah Colwell about being able to
 16 extrapolate from this test might have been with
 17 Philip Hoare?
 18 "Answer: David Hoare, yes.
 19 "Question: Sorry, David Hoare."
 20 Then he goes — and this is the final piece I'll
 21 show you — {Day75/70:10}, the question is:
 22 "Question: So would you accept that, as
 23 constructed, it wasn't representative of a real life,
 24 real world cladding system at that time?
 25 "Answer: No, we were looking just to put

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1 a non—combustible layer on the outside, so it could be
 2 extrapolated by the BRE to apply to many non—combustible
 3 outer layers, or any non—combustible outer layer.
 4 "Question: I see.
 5 "You began that answer with 'no'; did you in fact
 6 mean yes? The question I put to you was:
 7 "'So would you accept that, as constructed, it
 8 wasn't representative of a real life, real world
 9 cladding system at that time?'
 10 "You said, 'No'. Do you mean no?
 11 "Answer: It's not directly representative."
 12 So that was his evidence.
 13 Question: it looks from this — do you accept from
 14 this, at least, as a basis — that the BRE were aware at
 15 the time, 2005, that the purpose of using cement fibre
 16 board, or cement particle board, as the outermost layer
 17 was not to represent an actual cladding system but to be
 18 used as the basis for extrapolating systems for multiple
 19 use?
 20 A. Yes.
 21 Q. Yes. So in the light of the fact that the cladding
 22 system was simply supposed to be representative in that
 23 test, how could you justify issuing a classification
 24 report?
 25 A. Because my view at the time is that what you are testing

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1 is a product that is supplied by the manufacturer, is
2 defined by the manufacturer. If the product sits within
3 the scope of BS 8414, we're not involved within the
4 design and, on that basis, the classification is just
5 a pass/fail statement.

6 I was aware at the time that cement-based boards
7 were being installed and being used in buildings over
8 18 metres, and it was on that basis that there is a test
9 report available, and the test report is quite clear on
10 what was installed, that a pass/fail statement against
11 that system could be issued.

12 Q. In that last answer you say, "If the product sits within
13 the scope of BS 8414". I just want to follow that up
14 just a little bit more.

15 I've shown you the language quite carefully within
16 the text of BS 8414—1 from the time of the test. Given
17 those passages I've shown you, do you accept that you
18 were required to consider whether or not the external
19 wall arrangement as tested in 2005 was a complete system
20 representative of a system which would be applied to the
21 external face of a building in the real world?

22 A. Well, as I said, the report was a full BS 8414 report,
23 and that's what I based my decision on. I think in
24 light of emails and evidence that's come to light since,
25 which I wasn't aware of, then that is an area that

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1 I would probably reconsider.

2 Q. Could you not tell at the time you did your
3 classification report that the cementitious particle
4 board as described as the outer layer in the list of
5 components, without any further elaboration, at least
6 pointed in the direction of the fact that this was not
7 a representative rainscreen system in accordance with
8 BS 8414—1 which applied at the time?

9 A. Sorry, I — as I said, there are boarding systems —
10 there's non-combustible boards, there's non-combustible
11 systems, there's cement-based boards that go out on the
12 external façade systems. It didn't strike me that that
13 was particularly unusual.

14 Q. Given that you're testing a system, a whole system
15 comprising a number of separate components, did you
16 undertake an investigation to make sure that each of
17 those components, including the material forming the
18 rainscreen in the test, was one that was being used in
19 the real world?

20 A. Well, we're not system designers, and most testing, or
21 almost all testing, is approached from the way of: you
22 are testing what is supplied. If it's within the scope
23 of the standard — and I do accept the point that you're
24 making, that that forms a basis of what a fire test
25 laboratory does.

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1 Q. But you say you're testing what is supplied if it's
2 within the scope of the standard, and what I'm
3 suggesting to you is that, in order to be within the
4 scope of the standard and therefore qualify for a test,
5 it has to be a full system, each component of which
6 corresponds to a product or material being used in the
7 real world on real cladding systems above 18 metres; do
8 you accept that?

9 A. Well, I think I've answered that the position I was in
10 at the time and the knowledge I had at the time was
11 cement-based boards were being used on high-rise. So to
12 be presented with a test report, full test report, that
13 says, "It's a cement-based board" and for a pass/fail
14 statement to be issued against that, at the time
15 I didn't see that as a problem.

16 Q. But you see, Mr Howard, cement-based board or
17 cementitious particle board is a generic description,
18 and my question, one more time, is: why didn't you
19 undertake any specific investigations to work out what
20 the cementitious particle board actually was so as to
21 satisfy yourself that it was a material being used in
22 the real world in accordance with the demands of the
23 standard?

24 A. Because as I said, it gets back to this issue that most
25 testing or the vast majority of testing is based on what

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1 you are being supplied and what your client, in terms of
2 fire testing, submits. Now, if that product is within
3 the scope of the standard, and that test report is not
4 very different to what was submitted later on had been
5 tested or had been tested previously, then I would not
6 have questioned it.

7 Q. But you would only know if it's within the standard if
8 you undertake the relevant investigations to make sure
9 you know what it is; no?

10 A. Well, as I said, it was as a cement-based particle
11 board. I was issuing a classification which is
12 a pass/fail statement against the test report. The
13 description was there.

14 Q. But it was only a generic description; it wasn't
15 an identification of a particular product or any more
16 accurate than that, was it?

17 A. No, it was a generic description.

18 Q. And you couldn't therefore tell from the generic
19 description whether it did sit within 8414 or not, could
20 you, without further investigation?

21 A. Well, as I said, that specific board, no, I couldn't
22 tell, but cement-based boards and cement-based boards
23 are common on cladding systems.

24 Q. Now, did you ask Kingspan why they hadn't sought
25 a classification for a decade until they asked in 2015?

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1 A. I don't think I did directly, but there was an exchange
 2 of emails, and I think in one of those emails it just
 3 said it hadn't come up or hadn't been requested or had
 4 been overlooked or something along those lines.
 5 Q. Is there a reason why you didn't ask Kingspan the direct
 6 question: why do you want a classification report
 7 ten years after the test?
 8 A. No, because you need to separate — if you're requested
 9 that sort of paperwork or a test report or a contract,
 10 you're not asking why they need it. It is a process in
 11 place. If I thought it was legitimate to issue
 12 a classification report against the test report, how
 13 that is being used doesn't factor into that.
 14 Q. Does it not? Were you not interested in why it was that
 15 Kingspan waited ten years and then suddenly asked you
 16 for a classification report?
 17 A. No, I think the — I took the explanation at face value
 18 that they had not needed it and they were — it was now
 19 something that they were looking to source for that
 20 product.
 21 Q. Were you ever told in specific terms why Kingspan were
 22 now seeking this report, having not asked for ten years?
 23 A. Sorry, I missed that.
 24 Q. Were you ever told why Kingspan were now seeking this
 25 report, not having asked for one for ten years?

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1 A. Sorry, when you start your sentence, I think I'm
 2 overtalking to you. I'm not catching the first couple
 3 of words of the sentence, I'm sorry.
 4 Q. No, I'm sorry, I think that may be my fault. Let me ask
 5 it one more time.
 6 Were you ever told in specific terms why Kingspan
 7 were now seeking this report, not having asked for it
 8 for ten years?
 9 A. No.
 10 Q. Did the fact that a decade had passed since the BS 8414
 11 test had been carried out cause you any concern?
 12 A. No, not in particular.
 13 Q. Can I ask you to look at your witness statement at
 14 page 56, please, paragraph 245 {BRE00005771/56}. You
 15 say there:
 16 "For my part, I did not see how BRE could refuse to
 17 provide a classification report. Test reports, such as
 18 Test Report 220876, do not have a validity period or
 19 expiry date. For testing contracts, there is no ongoing
 20 review of the system or component parts; as such, test
 21 reports are a statement of fact (essentially a snapshot
 22 in time). Mr Baker's concern, as set out in
 23 Ms Gaubsaite's email above, related to the composition
 24 of the test system rather than the age of the report or
 25 its validity. In this respect, however, as Test Report

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1 220876 itself [says] ...
 2 "'Test results relate only to the items tested. We
 3 have no responsibility for the design, materials,
 4 workmanship or performance of the product or items
 5 tested. This report does not constitute an approval,
 6 certification or endorsement of the product tested.'"
 7 Then you refer to section 3 of the report as well.
 8 Was the fact — this is my question, having shown
 9 you that — that there was no explicit validity period
 10 or expiry date your only consideration?
 11 A. No.
 12 Q. What other considerations did you give —
 13 A. Whether the test report was a full test report or
 14 whether the test report had been issued as
 15 an indicative, and whether the tested performance was
 16 within BR 135 limits.
 17 Q. Was it normal for clients to come back to you and ask
 18 for a classification report a decade after the test,
 19 having been selling the product over that period?
 20 A. No, it's not normal.
 21 Q. Given that it wasn't normal, why did you not ask
 22 questions about why they wanted it?
 23 A. Because it's not — if procedurally I believe that we
 24 could do it, then there was nothing to invalidate the
 25 test report, there was nothing to invalidate the test

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1 data, test reports are a snapshot in time and the
 2 classification is just a pass/fail statement against the
 3 test. On that basis, it's not ongoing approval, we're
 4 not looking for revalidation; we are reporting: this
 5 system met these criteria — this system as described in
 6 the test report met this criteria on the day, and that
 7 was my approach.
 8 Q. Did you ask yourself: I wonder why they want this now?
 9 A. I can't really recall. I think I probably would have
 10 questioned it, but you often get requests that are
 11 coming from third parties to complete contractual
 12 arrangements and things like that. It's not something
 13 we really delve into, because it's got to be a black and
 14 white issue of whether the process that you're
 15 undertaking is permitted or allowed, or — it's not
 16 a case of the reason for the client wishing for
 17 something or their motivation would change that, that's
 18 not the approach I take.
 19 Q. Given that you say you probably would have questioned it
 20 yourself, which was my question, did you not have any
 21 suspicions about what it was that Kingspan were seeking
 22 to do with the report?
 23 A. No.
 24 Q. Can we go to {BRE00002511}, please. That is the test
 25 report issued on 8 December 2005 for the test carried

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1 out on 31 May 2005 under BS 8414—1. This is the first
2 page, just to refresh your memory of it. It's dated
3 8 December 2005, and it's done under part 1, as you can
4 see. Yes?

5 A. Yes.

6 Q. Let's go to page 4 {BRE00002511/4}, and let's look at
7 the third paragraph together. It says there, in the
8 third paragraph under "Introduction":

9 "The specification and interpretation of fire test
10 methods is the subject of ongoing development and
11 refinement. Changes in associated legislation may also
12 occur. For these reasons it is recommended that the
13 relevance of test reports over 5 years old should be
14 considered by the user. The laboratory that issued the
15 report will be able to offer, on behalf of the legal
16 owner, a review of the procedures adopted for
17 a particular test to ensure that they are consistent
18 with current practices, and if required may endorse the
19 test report."

20 Now, you say at paragraph 58 of your witness
21 statement, if we can just flip to that, please, page 13
22 {BRE00005771/13}, about this paragraph:

23 "My understanding is that the above phrase ..."

24 And the "above phrase" is contained in the question,
25 "the relevance of test and classification reports over

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1 five years old should be considered by the user":

2 "... was generated by the Fire Test Study Group
3 (which BRE is a member of) and that it was designed to
4 draw the user's attention to the possibility that the
5 relevant standard may have been revised or updated, or
6 that the regulations referring to a particular standard
7 may have changed."

8 Can I then take you, having shown you that, to
9 Mr Clark's witness statement at page 16. That's
10 {BRE00005768/16}, paragraph 67. He says, in response to
11 the same question, as you can see in Q2(s) above it:

12 "My understanding of the reasons for this
13 recommendation is that the end user was being warned to
14 consider carefully any changes that might have occurred
15 over that time period, in terms of the manufacturing
16 process, changes in legislation, change of ownership or
17 other aspects that might render the information in the
18 report unreliable."

19 Do you agree with what he says there?

20 A. Not via that statement. There are caveats or warnings
21 in the test report, but that one in particular just
22 refers a user to validity of the test report in terms of
23 legislation. There's other statements in the test
24 report that basically say, "We're not — there is no
25 ongoing monitoring, there's no approvals", and things of

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1 that nature.

2 Q. When you —

3 A. In a test, it's a one-off contract.

4 Q. When you say, "Not via that statement", do you mean the
5 statement in the question, the relevance of test and
6 classification reports?

7 A. Yes, I think there's other warnings in the report that
8 refer to the manufacturing process. I think the
9 Fire Test Study Group refers specifically to the changes
10 in legislation.

11 Q. So just in general terms, do you agree with Mr Clark —
12 I'm afraid it's disappeared from the screen, but I can
13 ask you anyway — when he says that the user should
14 consider the relevance of test and classification
15 reports which are more than five years old because the
16 manufacturing process may have changed?

17 A. But the — but you are totally in the hands of the
18 manufacturer or the test sponsor with any samples that
19 are supplied. So manufacturing processes can change the
20 day after you have tested a product or they can remain
21 the same for decades. There are warnings in the report
22 that basically draw the user's attention to that. Test
23 reports are just a snapshot in time of a record of
24 a specific test.

25 Q. Indeed, and what Mr Clark is saying is that one of the

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1 reasons why you have to consider the relevance of a test
2 report that's more than five years old is because the
3 manufacturing process of the material being tested might
4 have changed since then. That's something that he says
5 you should consider. Do you agree?

6 A. No, I think you should consider it immediately. It's
7 not on the basis — after five years. That is the point
8 that I'm trying to make. A test report is a snapshot in
9 time, so you need to consider that immediately. It's
10 within the hands of the test sponsor or the manufacturer
11 that — they are in control of that.

12 Q. Did you ask Kingspan whether the product had changed
13 since it was tested in 2005 when you came to classify it
14 based on the test done in 2005 in 2015?

15 A. No, because that's not — doesn't form part of the
16 process of the test and classification. It's outside
17 the scope of your test and classification.

18 Q. Well, it's not outside the scope of what the BRE was
19 itself warning in its own classification report, was it?

20 A. Sorry, as I said, those are standard statements in —
21 a lot of the caveats in the report are across BRE, but
22 some of the specific ones from the Fire Test Study Group
23 are in specific reports. The issue is that you are
24 totally in the hands of the test sponsor or the
25 manufacturer to ensure that the products that are

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1 continued — that are tested remain so. If they change
 2 the product in the intervening time, whether it's
 3 five years, whether it's five months, whether they
 4 remain the same after 20—plus years, is outside the
 5 hands of a test laboratory.
 6 Q. When you come to classify it ten years on, was it not
 7 incumbent on you at least to ask the question: is this
 8 the same K15 I'm classifying today that was tested in
 9 2005?
 10 A. No, because I didn't — I would have thought that if
 11 changes were being made to K15, there would have been
 12 a programme of re—tests to do that. I was on the
 13 understanding that, in essence, the K15 was the same
 14 that we were dealing with back in 2005 as it is now.
 15 Q. Why not just check?
 16 A. Because, as I said, it's outside the scope of your
 17 testing. You're not doing an ongoing check on
 18 the manufacturing process. You are (inaudible)
 19 third—party approval, but not — the test report and the
 20 classification report is a snapshot in time.
 21 Q. Can we go to {BRE00005837/79}, please. This is
 22 Fire Test Study Group (UK) resolution 72. Am I right,
 23 this is what you refer to in your witness statement at
 24 paragraph 58?
 25 A. This is where I understand the statements come to. I'm

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1 not particularly familiar with this document.
 2 Q. You mean where the statements come from?
 3 A. Sorry, yes.
 4 Q. You're not familiar with the document. Let's look at
 5 it, then, together.
 6 It's resolution 72, "A Cautionary Statement to be
 7 Added to Test Reports", agreed by the executive, if you
 8 look a little lower down, on 6 October 1993, and
 9 implemented on 1 December 1993, and it was still valid
 10 as at the date of this document. It says:
 11 "REASON:
 12 "Since fire tests are the subject of a continuing
 13 standardisation process, and because existing standards
 14 are the subject of review and possible amendment and new
 15 interpretations, it is recommended that reports should
 16 be considered by the user to ensure that the methodology
 17 adopted and the results obtained remain valid.
 18 "The objective of the review is to ensure that the
 19 marketplace remains equitable by preventing
 20 manufacturers with very old or inadequate test reports
 21 from competing on equal terms with those who have tested
 22 in accordance with later, possibly more onerous
 23 procedures."
 24 Then there is the resolution that's set out there,
 25 and in fact it appears on page 80 {BRE00005837/80},

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1 about what should go into reports. I don't think I need
 2 to show you that.
 3 Do you know whether that resolution, resolution 72,
 4 was still extant as at 2005?
 5 A. Sorry, I'm not sure I quite understand your question.
 6 Of that — I'm pretty sure that that was in the reports
 7 at that time and was something that BRE had agreed to
 8 for inclusion in the reports in certain technical areas.
 9 Q. Was it still valid as at 2015, when you came to do your
 10 classification report?
 11 A. The document was still in place, so in terms of
 12 validity, that I don't believe has been withdrawn, no,
 13 so that statement is still there.
 14 Q. Now, the test report that you issued on
 15 28 September 2015 was under BS 8414—1:2002, wasn't it?
 16 A. Yeah.
 17 Q. Did you classify to the British Standards prevailing at
 18 the time of the test in 2005 or to those prevailing at
 19 the time of your classification in September 2015?
 20 A. I can't, without seeing the actual classification
 21 report — is it possible to see that? I would have
 22 thought it would have been against the 2002 version.
 23 Q. Well, I'm asking you for your recollection, but we can
 24 certainly do that. If you go to {KIN00000134}, you can
 25 see that that's your report.

23

1 A. If you — can we go down, please?
 2 Q. Where do you want to go to?
 3 A. It would be about the third page in.
 4 Q. Certainly, let's go to page 3 {KIN00000134/3}.
 5 A. We're currently on 2.
 6 Q. Go down again. I'm on page 3, but is that what you're
 7 looking for? Page 4 {KIN00000134/4}, perhaps,
 8 "Classification of fire performance in accordance with
 9 BR 135:2013 Annex A"?
 10 A. Well, in answer to the question, that classification was
 11 issued against the standard that the system was tested
 12 to, which was 2002.
 13 Q. 2002 standard, but there was a revision, do you
 14 remember, to the British Standard in the April of 2015?
 15 Did you use the revised standard or did you use —
 16 A. (inaudible) 2002.
 17 Q. Right.
 18 Let's go to page 9 {KIN00000134/9}, and if you look
 19 at page 9, this is "Test results", can you see? Under
 20 "Test results" you can see a column, second from the
 21 left, "Parameter"; yes?
 22 A. Yeah.
 23 Q. And on the left—hand column, "Test method & test
 24 number". Under test method and number, you have
 25 BS 8414—1:2002; yes?

24

1 A. Yes.
 2 Q. And under "Parameters" you have got four parameters:
 3 "External fire spread.
 4 "Cavity behind rainscreen (cavity 1)
 5 "Internal fire spread, Insulation layer."
 6 And then the bottom one:
 7 "Internal fire spread, Burn through."
 8 Do you see that?
 9 A. Yes.
 10 Q. Then you've got results in the right-hand block. The
 11 "Fire spread test result time" are all greater than
 12 15 minutes, and the results are all compliant in each of
 13 these four boxes; yes? Do you see that?
 14 A. Yes.
 15 Q. Did you put that into this report? When I say "that",
 16 I mean these test results.
 17 A. No, I would have thought it would have been Vida who —
 18 Q. Under your supervision?
 19 A. Yes.
 20 Q. I see. Do you know where she got the internal
 21 fire spread burn-through parameter from?
 22 A. Er ... I don't, but that's not applicable to a part 1
 23 test.
 24 Q. That's my next point. You're right. So, given that
 25 it's not applicable to a part 1 test, what's it doing

25

1 there?
 2 A. That has been a mistake.
 3 Q. Did you review this classification report in —
 4 A. I did.
 5 Q. — (inaudible) Vida?
 6 A. Yes.
 7 Q. Did you review this page?
 8 A. Yes.
 9 Q. How can you account for the fact that it contains
 10 burn-through data which applies only to a part 2 test
 11 and not a part 1 test, as I think you'll agree?
 12 A. It was an oversight on my part. I —
 13 Q. How can — sorry, I interrupted you. We spoke over each
 14 other. Did you want to finish your answer?
 15 A. I was just going to say, yeah, I've made a mistake, that
 16 shouldn't have gone out like that.
 17 Q. I'd like to understand how that mistake could have come
 18 about. Clearly you didn't review this page carefully
 19 enough to see that a parameter applicable only to
 20 a part 2 test had found its way into a part 1 test
 21 classification, had you?
 22 A. No.
 23 Q. Can you account for how Vida may have made that mistake?
 24 A. No, I can't, really. I think it's inexperience.
 25 Q. Did she cut it and paste it, do you think, from a part 2

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1 test classification report?
 2 A. Yes, or the actual base document that you used was
 3 potentially a part 2 test report — classification
 4 report.
 5 Q. How could she possibly have told that the test produced
 6 compliant data for burn-through when it would not have
 7 produced any data for burn-through at all?
 8 A. Because in the — there would be a statement of
 9 burn-through in a part 2 test. So, in essence, if it
 10 burns through, the system would have been reported that
 11 it would have burnt through.
 12 Q. But not for a part 1 test?
 13 A. No, not usually.
 14 Q. Therefore she was putting in to this report data which
 15 had never been produced by the part 1 test done in 2005,
 16 do you agree?
 17 A. A statement has gone in which is not addressed or not
 18 actually required by the part 1 test, that's correct.
 19 Q. And therefore would it follow that Vida's conclusion
 20 that the data for burn-through was compliant with the
 21 parameters in annex B was completely unfounded?
 22 A. Well, it's not completely unfounded, because it's not
 23 a requirement of part 1, so that's not something we
 24 measure. What's actually gone into the report is
 25 a statement that is accurate that is not required.

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1 Q. How did you know or how did she know it was accurate if
 2 there was no burn-through data in the 2005 test?
 3 A. Because in the — because you're sat on a masonry wall,
 4 quite heavy blockwork wall. The requirement that is the
 5 reason for that statement on a part 2 test is the
 6 lightness of proper construction. So there is a risk of
 7 burn-through on the lighter test, but the heavier tests
 8 or the part 1 tests were on a masonry wall, so that is
 9 assumed to comply.
 10 Q. In fact, Mr Howard, if you look at the results box, it
 11 says, "Compliance with parameters in Annex B
 12 BR135:2013". Could you tell me what relevance annex B
 13 has to a test done under BS 8414-1?
 14 A. It should be annex A. That's a mistake that's gone
 15 through.
 16 Q. That's quite a mistake, isn't it? Because the whole
 17 purpose of a classification report is to classify the
 18 tests done in accordance with the BS 8414 methodology to
 19 the criteria in BR 135. This classification report
 20 applies a whole set of wrong criteria, doesn't it?
 21 A. Well, there's one state — well, it's referred to the
 22 wrong annex and it's included a statement of additional
 23 tests and additional assessment that isn't applied to
 24 part 1. What it doesn't — it's not saying it has
 25 passed something that it hasn't. What it's saying is

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1 this isn't a factor that you report on in part 1
 2 systems.
 3 SIR MARTIN MOORE—BICK: Forgive my intervening, Mr Millett,
 4 but there is something I would just like to clarify.
 5 Mr Howard, did the original test data for the
 6 8414 test contain any readings for burn-through?
 7 A. No.
 8 SIR MARTIN MOORE—BICK: Well, then — go on, sorry.
 9 A. But, as I said, it's on a masonry wall, so there is no
 10 requirement in the standard to report that.
 11 SIR MARTIN MOORE—BICK: No, but if the test did not contain
 12 any data for burn-through, how can Ms Gaubsaite have put
 13 in a result in the BR 135 assessment?
 14 A. Because it will be a positive — it will be a — in
 15 either the part 1 — sorry, in a part 2 report, if you
 16 had burn-through, then that would be reported.
 17 Okay, is it possible to rephrase the question?
 18 SIR MARTIN MOORE—BICK: Well, at the moment I don't
 19 understand how anyone could include a reading for
 20 burn-through unless the test on which the document is
 21 based contained some data for burn-through. That's my
 22 problem. Can you help me?
 23 A. Well, as I said, I think it was a mistake that's been
 24 included. When you report on a part 2 test and you have
 25 burn-through, you would report, if it's burnt through,

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1 that it has done so in a particular time. If that
 2 statement's absent, then you would classify against
 3 that.
 4 SIR MARTIN MOORE—BICK: All right. Thank you very much.
 5 Yes, Mr Millett.
 6 MR MILLETT: Yes.
 7 As authors of BR 135, did you ask Tony Baker or
 8 Sarah Colwell for a view about whether you should be
 9 producing a classification report ten years after the
 10 test?
 11 A. No.
 12 Q. Why is that?
 13 A. Because, as I've explained, it was a procedural issue.
 14 Test reports are a snapshot in time. The
 15 classification, in my view, was just a pass/fail or is
 16 just a pass/fail statement against the test report.
 17 Q. Did you not consider it at the time at least to be best
 18 practice for tests to be repeated every five years?
 19 A. No. There is no requirement to do that, across the
 20 test — you're not running an approval scheme. Your
 21 contracts are one-offs, all of them.
 22 Q. No, I understand that, but my question was: did you
 23 consider it to be best practice for manufacturers to
 24 repeat tests every five years?
 25 A. No. The system across Europe is similar. It's all

30

1 based — there's large numbers of products on the market
 2 that are based on one-off tests, one-off classification
 3 reports, and that is a mechanism for them to place their
 4 products legally on the market. There's large numbers
 5 of products on the market that are never re-tested, huge
 6 numbers.
 7 Q. Given that, as you told us, you realised that this was
 8 unusual, it's unusual for a manufacturer to ask for
 9 a classification report ten years after the test, I have
 10 to suggest to you that you should have asked them why
 11 they were doing it. Do you accept that?
 12 A. No, because I'm not sure — unless — for what —
 13 I could not see a reason not to issue the classification
 14 report, and that is — we are not monitoring the market
 15 in that way. As I said, there's vast numbers of
 16 products on the market that are based on one-off tests
 17 and one-off classification documents. It's not
 18 an unusual circumstance at all for a test lab.
 19 Q. Given that this test was done a lot longer ago than the
 20 five-year recommended cut-off period, I have to suggest
 21 to you that it was inappropriate just to continue to
 22 classify this report without asking Kingspan why they
 23 needed it. Do you accept that?
 24 A. No. As I said, procedurally, if we can issue
 25 a classification report, we're not — fire test labs are

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1 not regulatory bodies. If it was within — if there was
 2 technical reasons or whatever not to issue it, then
 3 fine. But from a procedural point of view, my view was
 4 a classification report is a snapshot in time, it's
 5 a report on a test.
 6 Q. Was there any reason why you couldn't have put a clear
 7 caveat or warning on the face of this classification
 8 report to draw the reader's attention to the fact that
 9 the test had been done ten years ago?
 10 A. No, there's no reason that — and in other — there's no
 11 reason why we couldn't have put a clear caveat on the
 12 front.
 13 Q. Why didn't you do that?
 14 A. I think in hindsight, we probably should have.
 15 Q. I'd like to turn to a different topic, which is the
 16 BRE's relationship with Kingspan.
 17 Now, Mr Clark told the Inquiry in his evidence on
 18 Day 96 that you had a good relationship with Kingspan.
 19 That's {Day96/189:24–25}. There is no need to go to
 20 that, but is that correct? Would you agree with him?
 21 A. Yes, BRE had a good relationship with Kingspan.
 22 Q. Can we go to {BRE00003531}, please. This is an email
 23 sent by Ivor Meredith to you and Phil Clark on
 24 20 March 2014, copied to Steve Manchester, subject
 25 "Kingspan BS 8414 Test", and this is the day after

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1 Kingspan's test on 19 March to BS 8414—2 on K15 with
 2 a Trespa HPL rainscreen.
 3 Now, we've looked at this in some detail with
 4 Mr Clark, and we will come back later to look at it
 5 together, Mr Howard. I just want to look at the email
 6 for a moment.
 7 Can you see that in the first paragraph Mr Meredith
 8 is asking you and Mr Clark for confirmation of the test
 9 result; yes?
 10 A. Yes.
 11 Q. Yes. Let's go to the fourth paragraph down, please,
 12 which begins with the word "Phil", and he says:
 13 "Phil, I will get Astec in on Monday to start
 14 stripping out. I would like to be [there] to witness
 15 what was going on behind the cladding. Although I
 16 assume you will be taking lots of pictures of that that
 17 area?
 18 "Also can you make any unofficial comments with
 19 regards the falling debris this time compared to the
 20 previous test?"
 21 Do you remember that email?
 22 A. I don't recall it, no.
 23 Q. You don't recall it; do you recall perhaps at all what
 24 Mr Meredith meant by "unofficial comments"?
 25 A. No, I'm not clear what he would have been asking as

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1 unofficial comments, really.
 2 Q. Did Mr Clark, to your recollection, provide any
 3 unofficial comments to Mr Meredith as he had requested?
 4 A. Not that I'm aware.
 5 Q. Did you?
 6 A. No.
 7 Q. Did you or Mr Clark answer Mr Meredith's request for
 8 unofficial comments that he's asked for in this email?
 9 A. No. I mean, everything on email — no. I wouldn't —
 10 we wouldn't have provided unofficial comments.
 11 Q. You say that. Is that right? Were you or anybody else
 12 at the BRE in the habit of giving official and
 13 unofficial, online and offline, comments about the
 14 results of tests?
 15 A. All I can say is I didn't provide any unofficial
 16 comments to Ivor on that subject.
 17 Q. Would you agree with me this far, that at least looking
 18 at this email, it looks as if Mr Meredith certainly
 19 thought that the position was that Mr Clark might be
 20 prepared to offer an unofficial opinion?
 21 A. Yes, there's a request in there to make unofficial
 22 comments, but that doesn't mean ... as I said, I'm not
 23 aware of any unofficial comments being made to Ivor
 24 from — well, I didn't make any, and I'm not aware of
 25 anybody else making unofficial comments back to

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1 Kingspan.
 2 Q. No, my question is really: how did you think Mr Meredith
 3 came by the understanding that Mr Clark or you might
 4 give him unofficial comments as he'd asked for?
 5 A. I'm not sure that I know the answer to that. I mean,
 6 it's a statement in an email, it's one word in an email,
 7 and as I said, I'm not sure how — I don't know how Ivor
 8 would have come to that conclusion.
 9 Q. Did you yourself go back to Mr Meredith and tell him
 10 that the BRE did not provide unofficial comments that he
 11 had asked for?
 12 A. No, I'm pretty sure I didn't.
 13 Q. Did you discuss Mr Meredith's request with Mr Clark?
 14 A. Sorry, I missed that.
 15 Q. Did you discuss Mr Meredith's request with Mr Clark?
 16 A. No, I don't recall doing that.
 17 Q. Did you not tell Mr Clark to go back to Mr Meredith and
 18 tell him that he shouldn't be asking for unofficial
 19 comments?
 20 A. I don't believe that I responded in that way, no. Not
 21 to — because it wasn't practice — I don't understand
 22 what is meant by unofficial comments. You either go on
 23 record, and that can be verbal or via email, what would
 24 be unofficial?
 25 Q. Why didn't you go back to him, therefore, and ask him

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1 what he meant by unofficial comments and tell him that
 2 you don't provide those?
 3 A. Maybe the email was missed. I don't really recall that
 4 email. I don't recall what proceeded after that point,
 5 really.
 6 Q. Mr Clark told us — and only for the record, this is
 7 {Day96/188:1—7} — that he didn't correct Mr Meredith in
 8 his understanding as appears from this email, but he
 9 said that was because it wasn't within his remit to do
 10 so, because you and Mr Manchester were senior to him.
 11 Now, is it right or is it fair that Mr Clark would
 12 have expected you to respond, as the senior officer, to
 13 Mr Meredith's request for unofficial comments?
 14 A. No, I think all staff members are required to report
 15 inappropriate responses or requests from manufacturers.
 16 It's whether that — I mean, Ivor had a certain way of
 17 writing emails and containing stuff within them. It's
 18 whether it really flagged up as an inappropriate
 19 situation which required a response. All staff have
 20 a duty and a requirement to report if they're feeling —
 21 if they're being put in a compromising position.
 22 Q. Did you not think it important at the time that at least
 23 somebody, whether you or Mr Clark, should respond to
 24 Mr Meredith's request and tell him that you weren't
 25 prepared to offer unofficial comments?

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1 A. I can't recall reading that email in that sort of level
2 of detail. I can't recall the email, so I can't really
3 say what I was thinking at the time.
4 Q. You see, on the face of the documents that we've got,
5 we've got a request for unofficial comments and no
6 response either from you or Mr Clark. The absence of
7 a response would tend to suggest that unofficial
8 comments were something that you were either prepared to
9 give him or at least not prepared to resist. Is that
10 fair?
11 A. No, because, as I said, any comments that you make would
12 be on the record, because they would have to be via
13 verbal or email and I would expect there would be some
14 evidence of that sort of behaviour going on. As I said,
15 Ivor is ... well, has certain wording in emails that
16 I don't -- that, looking back, we should have responded
17 to, but we didn't at the time. As I said, I don't
18 really remember that email in detail ... it's hard to
19 comment, really.
20 Q. Right.
21 Let's go to {BRE00018859}, please. It's an email
22 chain between you and Ivor Meredith in April 2015 now.
23 If we go to page 2 {BRE00018859/2}, halfway down that
24 email chain, we can see the first email in the chain is
25 sent to you and Phil Clark on 8 April 2015 at 8.30 in

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1 the morning. Can you see that?
2 A. Yeah.
3 Q. He says in the first paragraph there:
4 "We would like to incorporate some additional
5 thermocouple in at level 1 (so we can understand when it
6 fails) Phil had a suggestion so we could understand
7 exactly what's going on at the lower levels. Perhaps
8 some below and above the fire [barrier] in the
9 insulation and void?"
10 Do you see that?
11 First of all, do you recall seeing this email?
12 A. Not specifically, no, but it's ... yeah.
13 Q. Do you recall thinking at the time that it was
14 inappropriate for Mr Clark to be making suggestions of
15 this kind to a test sponsor?
16 A. It did -- I wasn't party to that conversation, but to
17 add additional instrumentation during tests is not
18 uncommon. So unless I knew the context, ie Ivor was
19 asking, "Where could we possibly put thermocouples to
20 get above and below the barrier", I wouldn't know, but
21 it's not uncommon to add additional instrumentation into
22 tests across the board, or additional filming or
23 radiometers.
24 Q. Did you speak to Phil Clark or have a communication of
25 any other kind with him about his suggestion that this

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1 email reflects?
2 A. No, I don't recall a conversation with him.
3 Q. Could we look at your response, please, the next day, if
4 we just scroll up, please. This is your response to
5 Ivor Meredith, copied to Phil Clark, 9 April 2015 at
6 10.35, and in the last paragraph there you say:
7 "I take it you have sorted the additional
8 instrumentation between you and Phil? (For the record,
9 we shouldn't include in the report)."
10 Why did you write that?
11 A. Because it specifies what you should include in the
12 BS 8414 test, and if they wished for additional data to
13 be reported on, then that should be a different
14 document. It should have been a separate issue,
15 separate processing, separate checking, and issued
16 separately.
17 Q. If you had added thermocouples into the test rig, why
18 would you omit their presence from the test record?
19 A. Because the test -- well, the test standards are quite
20 specific as to what should be in there, so, on that
21 basis, it would be better to report additional
22 thermocouples at a -- separately. Now, we did change
23 that later on to start including when you get requests
24 for other standards to be included in the part 2, 8414,
25 but at the time my view was that the test reports should

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1 be in line with the standard and the data presented in
2 line with the standard, and if additional
3 instrumentation or measurements were being taken, they
4 should be reported separately for the sponsor's
5 information.
6 Q. Would the addition of further thermocouples have had any
7 effect on the test performance?
8 A. No.
9 Q. If the additional data was not to go into the test
10 report, how were you planning to communicate it to
11 Kingspan?
12 A. It would just probably have been a series of graphs and
13 a short letter and an Excel sheet, a spreadsheet.
14 Q. Right. But they wouldn't have formed part of the test
15 record, would they?
16 A. Yeah, should do. They just sat in the file. They would
17 just sit in the file with the rest of the ... they would
18 be accessible, you could go back to them to see what was
19 done at the time. Because of the way your thermocouples
20 and your instrumentation works, you would see, we would
21 know it was there because it would all be on the same
22 test record.
23 Q. Well, let's just look at the test standard.
24 Before I go to that, can I just be clear about what
25 you're saying. Are you saying that the test report

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1 would basically have two clear parts to it: one done
 2 exactly in accordance with the standard, and another set
 3 of data which showed these additional thermocouples, so
 4 that the reader of the test report could tell exactly
 5 what had happened?
 6 A. Yeah.
 7 Q. That's what you're saying, is it? So that the formal
 8 test report would identify the addition of extra
 9 thermocouples not within the standard?
 10 A. No, probably not. If there are additional
 11 thermocouples — you could see it from the test record,
 12 from the data that's generated in the test file, but you
 13 probably wouldn't include additional measurements that
 14 are outside the scope of the standard within the formal
 15 test report.
 16 Q. Right. So the additional measurements that are outside
 17 the scope of the standard would then have to be
 18 communicated informally (inaudible) test report?
 19 A. Well, they'd still be communicated, but they'd still be
 20 communicated in a formal way with another — potentially
 21 with another project number or secondary project against
 22 that initial one. There would be an email record of
 23 them going out. As I said, it will be on the data set
 24 that you download from the loggers.
 25 Q. I think you agree, but we'll clarify this by reference

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1 to the test standard, that additional thermocouples are
 2 not permitted within the BS 8414 test standard, are
 3 they?
 4 A. Well, I(?) don't specifically request them, no.
 5 Q. Well, let's have a look.
 6 A. I don't think they specifically exclude them, but ...
 7 Q. Let's have a look. BS 8414—1 is at {CEL00001205}. What
 8 I'm going to show you is the 2007 edition.
 9 Let's go to page 6 in that {CEL00001205/6}, please,
 10 at paragraph 4.2.2, under "External thermocouples",
 11 "General":
 12 "External thermocouples shall be positioned to a
 13 tolerance of [plus or equal to] 10 mm with the hot
 14 junction positioned (50 [plus or equal to] 5) mm in
 15 front of the face of the system under investigation."
 16 Then 4.2.2.2:
 17 "External thermocouples at level 1, positioned:
 18 "— on the main face of the façade, in positions on
 19 the centre line and at distances of 500 mm and 1,000 mm
 20 each side of the centre line (five locations)'
 21 "— on the wing, at distances of 150 mm, 600 mm and
 22 1,050 mm from the finished face of the cladding systems
 23 on the main face (three locations) (see Figure 2)."
 24 Figure 2 you will find on page 8 {CEL00001205/8}, if
 25 we just go to that, please.

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1 Looking at Figure 2, can you see the five
 2 thermocouples at level 1 on the front face and three on
 3 the wing?
 4 A. Yes.
 5 Q. Let's just go to the 2015 version of this document,
 6 which is at {BSI00000166/11}, and look at
 7 paragraph 5.6.2.2, again:
 8 "External thermocouples at levels 1 and 2."
 9 Again, you've got the stipulated number of five
 10 locations under (a) and three locations under (b) for
 11 the main test wall face and wing wall respectively.
 12 Yes?
 13 A. Yes.
 14 Q. Looking at both of those, do you agree that there is no
 15 room in either of the 2007 or the 2015 versions of
 16 BS 8414—1 for any discretion for the tester to add or
 17 subtract thermocouples at will?
 18 A. I agree that you can't subtract, but I disagree with —
 19 on the basis of additional thermocouples.
 20 Q. Where does it say in these standards that you can add
 21 thermocouples to make six or seven at the front wall or
 22 10 on the wing wall, where does it say that?
 23 A. Well, it doesn't, but BS 8414 and other tests are often
 24 accepted in other parts of the world and the
 25 jurisdictions in those parts of the world will request

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1 other instrumentation. Now, if we don't put the
 2 additional instrumentation in, what you're effectively
 3 doing is having to double the — repeat the test to add
 4 more instrumentation into the system, which is not
 5 practical. We can't really do that.
 6 And secondly, it's fairly common on fire test B(?)
 7 that ductwork or fire tests — sorry, fire doors,
 8 dampers, if additional instrumentation was required or
 9 additional videos or additional measurements are
 10 required, for those to be undertaken if they don't
 11 compromise the test.
 12 Q. But by adding thermocouples at these locations you're
 13 departing from the prescribed parameters of the test
 14 standard, aren't you?
 15 A. Yes, but you're not changing the end result and, as
 16 I said, it's common. You often put, across the
 17 fire testing field, additional instrumentation or
 18 additional cameras or ... or at the request of the
 19 consultant or a jurisdiction in another part of the
 20 world. There's nothing uncommon about that. It's
 21 nothing unusual.
 22 Q. Was this flexibility in the test apparatus something
 23 that you often offered to test sponsors?
 24 A. I don't think it was offered, I just don't think any
 25 request for additional information — instrumentation or

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1 cameras would have — would have been reviewed and if it
 2 was considered feasible we would do so. It doesn't —
 3 Q. — offered by Mr Clark —
 4 A. — as I said, it's pretty common. Sorry, we're talking
 5 over each other.
 6 Q. But it was offered, it was offered by Mr Clark, and my
 7 question again: was it common for the BRE to make
 8 suggestions such as that which Mr Clark made, namely to
 9 add thermocouples at level 1 or other additional
 10 instrumentation outside the parameters of the test
 11 methodology prescribed?
 12 A. I would say it wouldn't be offered, but it wasn't
 13 uncommon to put additional instrumentation or cameras in
 14 at the request of the client sponsor because they may be
 15 submitting the test report to other parts of the world
 16 that may need that data or for specific projects.
 17 Q. Right. So it was not uncommon if the client sponsor
 18 asked for it, but you say it wouldn't be offered by the
 19 BRE?
 20 A. No, I think there would be a general understanding that
 21 if it was requested then we'd try to accommodate, but
 22 you wouldn't — if the request was to do an 8414 test,
 23 that's what you were contracted to do.
 24 Q. So when Phil Clark made the suggestion, am I right in
 25 thinking that that was unusual?

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1 A. It's not something that I've come across personally as
 2 to making suggestions to test sponsors as to put
 3 additional instrumentation in, but it would depend on
 4 the content or contents of the discussion.
 5 Q. Would any additional charge be levied on Kingspan for
 6 using additional instrumentation outside the scope of
 7 the methodology?
 8 A. Potentially, depending on the level of work involved to
 9 instrument.
 10 Q. Would you agree that, in making the suggestion of adding
 11 extra thermocouples at level 1, the BRE were providing
 12 advice and suggestions to Kingspan?
 13 A. It depends on the context in which that discussion took
 14 place. I'm not clear on the actual exchange at the
 15 time. It could — the request could have been, "Can we
 16 put thermocouples here", and we would have accepted
 17 doing that. As long as it doesn't add considerably to
 18 the cost and ... or compromise the test, I can't see
 19 a reason why not.
 20 Q. How would making that suggestion fit with BRE's duties
 21 and obligations of impartiality?
 22 A. But I don't understand why that's impartial, or not
 23 impartial. It's addition of two or three temperature
 24 measurements at a point to — for the client to gain
 25 more information about what's happening at a level 1

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1 cavity barrier. As I said, it depends on the context,
 2 but it may have just been an agreement that we could put
 3 thermocouples at that location, and as I said, that was
 4 fairly common.
 5 Q. How could BRE remain impartial and yet be making
 6 suggestions to a client about the addition of
 7 thermocouples outside of that?
 8 A. As I said, I wasn't party to that conversation, so
 9 I don't know the context.
 10 Q. But on what you do know, do you agree with me that the
 11 BRE was acting inconsistently with its obligations of
 12 impartiality by making that suggestion?
 13 A. No, as I said, additional instrumentation or cameras is
 14 common. It's common in all the labs that were running,
 15 all the fire labs that were ... I don't — it's ...
 16 Q. I don't think you have understood my question. I'll put
 17 it one more time.
 18 Do you agree with me that, in making the suggestion,
 19 the BRE was acting inconsistently with its obligations
 20 of impartiality?
 21 A. No, and I don't believe that we — that is —
 22 compromises our impartiality.
 23 Q. Can we go, then, to —
 24 SIR MARTIN MOORE-BICK: Mr Millett, before we do, could
 25 I just raise something?

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1 Mr Howard, I'm getting the impression from your most
 2 recent answers that BRE regarded 8414 testing and maybe
 3 other testing as, in a sense, a collaborative exercise.
 4 Would that be right? Collaborative in the sense of
 5 collaboration between you and the customer.
 6 A. Well, I'm not sure — it's not a collaborative exercise,
 7 but you were producing a test report or working for
 8 a test sponsor on that contract, so therefore there's
 9 quite strict rules on the information that you pass on,
 10 but you would provide assistance, but without
 11 compromising your impartiality. So if they wanted
 12 additional instrumentation put in — as I said, this is
 13 across the board, it isn't just 8414, it's ductwork
 14 testing, it's fire doors, it's dampers. It's not viewed
 15 in that way, it's not viewed as problematic.
 16 So you would do it, and if a client requests
 17 assistance to put extra instrumentation in, then we
 18 would try to do that, and I can produce evidence of
 19 other areas doing that if necessary.
 20 SIR MARTIN MOORE-BICK: All right, thank you very much.
 21 Yes, Mr Millett.
 22 MR MILLETT: Mr Chairman, I'm just looking at the time, and
 23 I was about to go to another document, so perhaps this
 24 is a convenient moment.
 25 SIR MARTIN MOORE-BICK: Yes, all right.

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1 We will have our short break at this point,
 2 Mr Howard, and start again at 11.30, please, and I had
 3 better remind you, hadn't I, please, not to talk to
 4 anyone about your evidence during the break. All right?
 5 THE WITNESS: Thank you very much.
 6 SIR MARTIN MOORE-BICK: Thank you, we will see you a bit
 7 later on. Thank you.
 8 (11.17 am)
 9 (A short break)
 10 (11.30 am)
 11 SIR MARTIN MOORE-BICK: Welcome back, everyone. We're now
 12 going back to Mr Howard, who is going to continue giving
 13 his evidence.
 14 Mr Howard, can you see me and hear me?
 15 THE WITNESS: I can see and hear you, thank you.
 16 SIR MARTIN MOORE-BICK: Thank you very much. I hope you're
 17 ready to continue, are you?
 18 THE WITNESS: Yes, I am.
 19 SIR MARTIN MOORE-BICK: Thank you very much.
 20 When you are ready, Mr Millett.
 21 MR MILLETT: Thank you, Mr Chairman.
 22 Mr Howard, can we go to {BRE00003908/5}, please.
 23 Now, this is page 5 within an email exchange in
 24 April 2005. Just to help you, if we can scroll, please,
 25 to the bottom of page 4 {BRE00003908/4}, you can see

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1 what this is. It's an email from KIL-PB Techline
 2 Enquiries, which is Kingspan, to somebody called
 3 Paul Dunphy on 13 April 2015, subject "FW: Kooltherm K15
 4 enquiry". Paul Dunphy, just so you know, is
 5 an architect working at Sheppard Robson Architects, and
 6 it relates to a project called Barts Square.
 7 You can see the enquiry on page 5 {BRE00003908/5},
 8 if we can just go back to that. It's a façade query
 9 form, which is a standard form document generated by
 10 Kingspan, and it's been filled in, can you see? And the
 11 insulation to be used is K15 there, with an outer face
 12 of James and Taylor terracotta rainscreen baguettes.
 13 If we go up to page 3 {BRE00003908/3}, please, we
 14 can see that there is a communication from Paul Dunphy
 15 on 13 April, and he asks a question to Kingspan:
 16 "Kim,
 17 "As discussed we are currently in the process of
 18 trying to commission a desktop study to see if your
 19 Kingspan K15 is acceptable for use within a rainscreen
 20 cladding system at a height above 18m and are seeking
 21 written confirmation that you are willing to allow the
 22 testing authority to use your data in carrying out there
 23 study.
 24 "As you have requested please find the technical
 25 information relating to the project below.

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1 "If anything is unclear please do not hesitate [to]
 2 contact us."
 3 We can see the response to that which comes from
 4 Adam Heath at Kingspan on 15 April, and he says, and
 5 it's copied to Ivor Meredith and Gary Johnson:
 6 "Dear Paul,
 7 "Many thanks for your recent enquiry. After
 8 reviewing your façade query form it appears your
 9 proposed detail is very similar to one of our tested
 10 arrangements. Could I ask that you also send us over
 11 elevations and a section of the proposed detail for our
 12 information?
 13 "Can you confirm which testing authority you are
 14 using and your contact there? We can then get in
 15 contact to approve the use of our test evidence."
 16 Then on page 2 {BRE00003908/2}, if we just scroll up
 17 a little bit further, we can see an email of 16 April
 18 from Paul Dunphy back to Adam Heath, copying in
 19 Tom Lennon. Can you see?
 20 A. Yes.
 21 Q. Tom Lennon is BRE, isn't he?
 22 A. Yes.
 23 Q. Yes, and he says:
 24 "Adam,
 25 "Thanks for the email below please see the attached

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1 for our proposed details.
 2 "With regard to the testing authority we are
 3 proposing to use BRE and we have been in discussion with
 4 Tom Lennon (copied in and details below)
 5 "Tom Lennon.
 6 "Principal Consultant.
 7 "Fire Safety.
 8 "BRE ..."
 9 There it is, and at the bottom he says:
 10 "Hope this helps but please do not hesitate to
 11 contact me if you require any further information."
 12 If we go up to page 1 {BRE00003908/1}, we can see
 13 that there is a further response to this from
 14 Tom Lennon, who writes to you on 20 April, copied to
 15 Steve Manchester and Andy Russell, "FW: Barts Square",
 16 and then he writes:
 17 "Steve,
 18 "I know you have just gone off to Belgium but we
 19 need to come to a decision as to how we proceed with
 20 this as this will potentially be a huge source of income
 21 over the coming years but could also be a huge liability
 22 if not managed properly. We have to have some very
 23 clear rules about what does and does not constitute
 24 reasonable grounds for an assessment/desk top study. We
 25 should also draw on available expertise in this area

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1 within the Fire Safety Group."
 2 You respond to that, as we can see from the top of
 3 the email run, at the top of page 1, on 20 April, copied
 4 to Steve Manchester and Andy Russell:
 5 "Agreed.
 6 "I have both testing and assessments flying in from
 7 all directions at present.
 8 "Plus each test we generate seems to spawn further
 9 openings...
 10 "I think the first job is to get handle on the
 11 number and scope of enquiries."
 12 Now, I've shown you the whole of that email run so
 13 you have the full context, but my question is: is it
 14 right that, at the time of the request for
 15 the classification report in respect of the 2005 test,
 16 which is of course mid-2015 to September 2015, Kingspan
 17 were in the process of carrying out a major testing
 18 programme at the BRE?
 19 A. I can't remember the exact dates of when tests were
 20 done, if — there was quite a lot of cladding work going
 21 on at the time, so there were test programmes going on,
 22 but from a personal point of view, I had fire resistance
 23 testing ongoing, cable testing ongoing, reaction to
 24 fire, so I can't remember the exact details of the
 25 number of tests that were performed in that period.

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1 Q. No, but in general, can you remember that, as at spring
 2 to summer 2015, Kingspan were in the process of carrying
 3 out a major testing programme at the BRE?
 4 A. As I said, I can't remember specifically, but I would
 5 accept that if the data is there in support of that in
 6 terms of number of tests.
 7 Q. Do you also recall that, off the back of that testing
 8 programme, the BRE were also receiving many requests for
 9 desktop assessment reports?
 10 A. Yes.
 11 Q. And, as Tom Lennon has said in the email we've just
 12 seen, (inaudible) desktops based on Kingspan's testing
 13 at the BRE were potentially going to be a "huge source
 14 of income over the coming years".
 15 A. Yes.
 16 Q. Is the reality that Kingspan was potentially
 17 a significant source of revenue for the BRE in 2015?
 18 A. Yes, I believe so.
 19 Q. Is it fair to say that you didn't want to upset BRE's
 20 relationship with Kingspan and the revenue that it was
 21 bringing in or might bring in by refusing to issue the
 22 classification report in 2015?
 23 A. No, I mean, it's — you need, as I said, to — it didn't
 24 come down to upsetting Kingspan. That wasn't factored
 25 in. We had — cladding wasn't the largest source of

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1 income. BRE is a commercial test laboratory. We have
 2 a lot of clients who spend a lot of money with BRE. We
 3 don't wish to upset any of them.
 4 Q. No, I'm sure, but in relation to Kingspan specifically,
 5 was one of the reasons why you didn't ask the question:
 6 why do they want this classification report now,
 7 ten years after the test, because you didn't want to
 8 upset a major client who had the potential to generate
 9 a significant amount of revenue for the BRE?
 10 A. No.
 11 Q. Before I move on, I want to take you back to 2009.
 12 Were you aware that in May of that year, 2009,
 13 Kingspan had obtained a systems approval certificate
 14 from the LABC for Kingspan K15?
 15 A. I wasn't aware at the time, no.
 16 Q. Do you remember whether you read an LABC certificate at
 17 around that time, 2009, in respect of K15?
 18 A. I can't recall.
 19 Q. Did you ever —
 20 A. I don't know, unless — I can't recall it at this time.
 21 Q. Did you ever come to read such a document?
 22 A. I believe so. I think there was quite a bit — there's
 23 been quite a lot of information post-Grenfell, so it's
 24 quite hard to determine what I've read since or what
 25 I've read at the time. I don't recall in 2009 reading

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1 an LABC document.
 2 Q. Can we go to {BRE00012252}, please. This is an email
 3 from Sarah Colwell to you, among others, but it's the
 4 one at the bottom of the screen I just want to ask you
 5 about first. It's from John Raybould and it's dated
 6 14 May 2009, to you, Sarah Colwell and Tony Baker, in
 7 reverse order. The subject is "Cladding test — LABC
 8 assessments":
 9 "Hi Folks
 10 "I have managed to get an LABC certificate — from
 11 Hertfordshire, that says the Kingspan K15 insulation can
 12 be used in a mixture of insulation thicknesses, masonry
 13 or steel-framed substrates, a min cavity gap of 50mm
 14 with a range of rainscreen claddings.
 15 "I am sure that this will be sent to us officially
 16 by Kingspan when Mark Stevens gets back from the
 17 Middle East. I would like to think we have tried to
 18 establish some guide lines like I was proposing, so that
 19 we could at least give Mark some help with his system
 20 configurations.
 21 "Also note that this appears to give automatic
 22 acceptance for [systems] over 18m.
 23 "Let me know how we want to move forward.
 24 "Cheers
 25 "John."

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1 If we move up to the top email, we can see that
 2 Sarah Colwell sends the email I identified earlier to
 3 you and Dr Debbie Smith, and she attaches some
 4 documents, and you can see from the attachments that the
 5 second document she attaches is the LABC system approval
 6 certificate for Kingspan Kooltherm K15. Do you see
 7 that?
 8 A. Yes, I can see the attachment.
 9 Q. She says:
 10 "Debbie/Steve
 11 "We need to discuss this urgently.
 12 "Regards
 13 "Sarah."
 14 Did you have a discussion?
 15 A. I can't recall exactly. I would imagine there would
 16 have been, but I can't recall that discussion.
 17 Q. Do you recall who was or you would say would have been
 18 party to that discussion?
 19 A. I can't recall exactly, but if there was a meeting that
 20 was addressed from Sarah to myself and Debbie Smith,
 21 then, by inference, I would guess that there was
 22 a meeting on that subject, but I can't recall it.
 23 Q. Do you recall anything of what Sarah Colwell's concerns
 24 were about this certificate?
 25 A. I don't. I can't recall that.

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1 Q. Do you recall what the urgency was?
 2 A. Well, reading down the email, there did seem to be a —
 3 basically a broad-brush approach to acceptance of
 4 cladding systems.
 5 Q. Do you remember being concerned that Kingspan had
 6 managed to acquire an LABC certificate that gave
 7 automatic approvals for use of Kingspan Kooltherm K15
 8 for use over 18 metres?
 9 A. I think there was concern, I can imagine there would be
 10 concern, but it would depend on the basis on which that
 11 certificate was issued.
 12 Q. Do you remember reading the certificate at the time?
 13 A. I don't remember reading the certificate. I probably
 14 did, but I don't recall.
 15 Q. Right.
 16 A. Is it possible to see the certificate?
 17 Q. Yes, it is. We'll go to that, {KIN00005705}. I have
 18 some questions before we get to it, but if it helps you.
 19 There is the system approval certificate. Do you
 20 think you read it at the time?
 21 A. I don't recognise it.
 22 Q. Right.
 23 Do you remember whether any action was taken by the
 24 BRE as a result of Sarah Colwell's message that there
 25 should be an urgent discussion about what to do about

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1 this certificate?
 2 A. I don't recall what happened after that point.
 3 Q. Do you remember reading this certificate at the time
 4 when you received it?
 5 A. As I said, I don't recall reading this certificate.
 6 I probably did.
 7 Q. Okay. So then, if you probably did, can we go down to
 8 page 4 {KIN00005705/4}, you can see it's from
 9 Herefordshire, not Hertfordshire as the email says, and
 10 then if you go, please, to, "Requirement B ... Safety
 11 Considerations", which is in the middle of page 4:
 12 "K15 has been tested in accordance with ..."
 13 And you can see there the BS 8414—1 and then the
 14 pair of BS 476 tests. Do you see that there?
 15 Then it says:
 16 "From the results, it can be considered as
 17 a material of limited combustibility and meets the
 18 criteria for Class 0 classification for surface spread
 19 of flame."
 20 When it says from the results of those three tests
 21 it can be considered as a material of limited
 22 combustibility, that was wholly inaccurate, wasn't it?
 23 A. Yes, as defined by ADB, no, that is inaccurate.
 24 Q. Yes. The fact that it had passed a BS 8414 test did not
 25 mean that it was a material of limited combustibility,

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1 did it?
 2 A. No.
 3 Q. Did it not occur to you at the time when you read it, or
 4 probably read it as you tell us, that this certificate
 5 certified K15 as a material of limited combustibility
 6 and therefore could be used in any cladding system over
 7 18 metres?
 8 A. As I said, I don't recall reading this, but — and
 9 then ... have BRE been specifically asked in terms of
 10 their response to this document?
 11 Q. Well, John Raybould identifies the fact in his email
 12 that I showed you that it appears to give automatic
 13 approval for the use of K15 over 18 metres. Did that
 14 not prompt you to look at the certificate and realise or
 15 work out why it was that Mr Raybould was saying that?
 16 A. As I said, I can't recall reading that document
 17 specifically, but nor do I know ... I mean, has any
 18 request gone into BRE as to what actually happened,
 19 whether this was dealt with as a complaint or something
 20 like that at that time?
 21 Q. Did it occur to you at the time when you read this
 22 certificate, to the best of your recollection, that that
 23 statement there, that as a result of these three tests
 24 K15 could be considered as material of limited
 25 combustibility, was dangerously untrue?

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1 A. As I said, I can't recall reading the document, but if
 2 presented with that now, then, yes, it's untrue. It's
 3 not representative of the product. It's not
 4 representative of K15. So that's — in terms of
 5 Approved Document B.
 6 Q. Do you remember whether the BRE raised this question of
 7 this statement and its accuracy with the LABC at the
 8 time, or at all?
 9 A. I don't recall.
 10 Q. Do you remember whether the BRE raised the question of
 11 this statement and its accuracy with Kingspan at the
 12 time or at all?
 13 A. I don't know. I — as I say, if ... I mean, would it be
 14 possible to request what other correspondence is
 15 available to this statement?
 16 Q. If you'd read this at the time and seen Mr Raybould's
 17 statement at the time, you would have realised that K15
 18 was now accompanied by a certificate which would allow
 19 it to be put on high-rise buildings above 18 metres with
 20 a range of different configurations.
 21 A. But, as I said, I don't recall reading that, and there
 22 may have been a — if we've had a meeting, the agreed
 23 response may have come out from someone else to both the
 24 LABC and Kingspan, and I'm not — I do not recall what
 25 the sequence of events was after that point.

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1 Q. Very well. We've seen no documents which show that the
 2 BRE ever took the inaccuracy of this statement up with
 3 either the LABC or with Kingspan. Does the absence of
 4 any such communication accord with your recollection?
 5 A. I don't really recall. I don't — if we'd have seen
 6 that documentation, I would have thought there would
 7 have been a formal response out of BRE on that point.
 8 Q. Well, let me see if I can leave it with you this way: if
 9 there had been a response either to the LABC or to
 10 Kingspan about this statement in this certificate, you
 11 would have seen it at the time, wouldn't you?
 12 A. Potentially, yes. But, as I said, I don't recall.
 13 Q. I would like now to look, please, at the content of the
 14 BR 135 report, the classification report that was issued
 15 for the May 2005 test for K15.
 16 Can we start with your witness statement, please,
 17 paragraph 247 on page 56 {BRE00005771/56}. You say here
 18 that, having cited parts of the test report I've shown
 19 you:
 20 "For me, this was simply a matter of looking at the
 21 results set out in the test report; if whatever system
 22 the test sponsor had installed met the performance
 23 criteria in BR 135, then I did not see how (or why) BRE
 24 could refuse to classify it. Details of the system
 25 tested, however it was made up, would be set out in both

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1 the test report and the classification report. The
 2 classification report would be clear about the test
 3 standard to which the test was carried out (i.e.
 4 BS 8414-1:2002) and the classification would be carried
 5 out to the current version of BR 135 (i.e. BR 135, third
 6 edition, 2013)."
 7 Pausing there, when you say "results" in the first
 8 line there, it was "simply a matter of looking at the
 9 results", do you accept or agree that a classification
 10 to BR 135 involves looking at more than just
 11 thermocouple data, doesn't it?
 12 A. Yes.
 13 Q. What if the BRE no longer held the original test file?
 14 What would happen then?
 15 A. Well, all the information for the classification reports
 16 should be laid out in the test report.
 17 Q. Right.
 18 Now, we went through this a little bit last week.
 19 Would the fact that the BRE no longer held the original
 20 test file not be a good reason to refuse to issue
 21 a classification report?
 22 A. No, because you should be able to — what's actually put
 23 into the public domain is the test report, so on the
 24 basis of that document you should be able to issue
 25 a BR 135. There should be nothing in the file

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1 (inaudible) would be entirely transparent on that basis.
 2 Q. What if you weren't able to verify all the components of
 3 the test rig, would that not be a good reason to refuse
 4 to issue a classification report?
 5 A. No, as I said, the classification report is issued
 6 against the test report.
 7 Q. What if there are inaccuracies or inadequacies in the
 8 test report that, if carried across, would render your
 9 classification report similarly inaccurate or
 10 inadequate? If that existed, would that be a good
 11 reason to refuse to issue a classification report?
 12 A. It could potentially, but as I said, if the test report
 13 has been issued and the test report is considered to be
 14 representative or a full test, then as I said, the
 15 classification report is just a pass/fail against that
 16 test report. So the information in the test report, if
 17 that's accepted, that carries through to the BR 135.
 18 Q. Going back to where we started this morning, I just want
 19 to ask you, then, about the thing you were classifying.
 20 Can we start by looking at BS 8414, the test report
 21 itself, which is {BRE00002511}. This is the 2005 test
 22 report. The title of the report is:
 23 "BS8414 Part 1: 2002 Test on a Phenolic Insulated
 24 Rainscreen system."
 25 Note the word "system" there.

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1 Now, we're going to come back into the report
2 shortly, but let's just go to a different document. Can
3 we go to {NHB00001317}, please. This is a document
4 published by the NHBC in January of 2015, and you can
5 just see the date at the bottom of the screen in front
6 of you, Mr Howard. I think it's there. Can you see
7 that?

8 A. Yes.

9 Q. There it is, thank you. It's entitled "2015 Cladding
10 Systems".

11 Can we go to page 9 in that document
12 {NHB00001317/9}. Here we see, under the heading
13 "Cladding Systems, 3. Rainscreen Cladding system
14 properties", it says there in the first paragraph — do
15 you see that? — that:

16 "Rainscreen cladding is an external jointed skin
17 that prevents the majority of rain water from
18 penetrating a wall."

19 Do you see that? It goes on to say:

20 "The inner airtight structure acts as a final
21 barrier against water with any water that does penetrate
22 the outer skin of cladding, through joints due to forces
23 of wind, surface tension and capillary action, being
24 drained away. Between these two skins is a ventilated
25 cavity where water is drained or allowed to evaporate."

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1 That then goes on underneath that. You will see
2 a diagram at the bottom of the page. Do you see that?
3 It's got three bullet points there.

4 It's clear from that, isn't it, that the outer
5 layer, the rainscreen itself, just looking at the first
6 paragraph, is to stop the majority of rainwater from
7 penetrating the wall. That's the purpose of the
8 rainscreen cladding forming part of the system; do you
9 agree?

10 A. Well, I agree that that is what that system — that
11 document says, but I don't — we fire test façade
12 systems, I don't design — we don't get involved in the
13 design of systems in terms of water ingress.

14 Q. No, I understand that. But do you agree with me that
15 the outer layer used in any BS 8414 test, which is
16 a full system test, should have or should be comprised
17 of a panel which prevents the majority of rainwater from
18 penetrating a wall?

19 A. I think this comes down to design, because a lot of the
20 façade systems can be very open-jointed. So I don't —
21 it's — it would come down to the materials properties,
22 but I understand from rainscreen cladding systems that
23 they're not watertight. The design of the system is
24 that the water can penetrate. What that means in terms
25 of majority, I don't know. But rainscreen systems would

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1 allow water to penetrate because they're designed in
2 that way to try and ventilate. So I don't know at what
3 point the — you move across the line from majority
4 to ...

5 Q. Well, do you agree that, in simple terms, the purpose of
6 a rainscreen panel is a screen against the rain?

7 A. To some extent, yes.

8 Q. When you say "To some extent", to what extent would it
9 not be a screen against the rain?

10 A. Because you can get very — it's not my area of
11 expertise, but you can get rainscreen cladding systems
12 with quite wide joints, so you will almost inevitably
13 have water penetrating in through the rainscreen
14 cladding system, and that is why they're designed as
15 they are, to allow drainage down and ventilation of the
16 systems. It's not my area of expertise, but just —
17 it's not entirely waterproof — a rainscreen cladding
18 system is not an entirely waterproof outer layer.

19 Q. No, it may not be entirely waterproof because of jointed
20 gaps and matters of that nature, but would you expect
21 the material from which a rainscreen panel was
22 manufactured to be water resistant?

23 A. As I said, yes, I think if it's going to be used in
24 an outdoor application, then yes, I would, but
25 rainscreen cladding systems are not watertight systems.

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1 Q. And you wouldn't use a cement fibre board as the outer
2 layer of an actual building as a rainscreen because it's
3 not an adequate screen against the rain.

4 A. But we wouldn't be checking on performance of moisture
5 content on outside layers to perform a fire test. As
6 I said, there are examples of cement-based boards that
7 you can use in rainscreen claddings, and rainscreen
8 cladding systems, by design, are not watertight.

9 Q. But this wasn't, I'm going to suggest to you,
10 a rainscreen cladding system because it did not have
11 cladding panels which operated as a rainscreen, they
12 were just building boards.

13 A. Well, as I said, I don't — we wouldn't check the
14 material properties of the rainscreen systems to confirm
15 water penetration or water uptake.

16 Q. Unless you had checked to make sure that the
17 cementitious particle board used in the 2005 test,
18 whatever it was, was actually effective to repel
19 rainwater, it wouldn't be a rainscreen cladding system
20 that you had tested.

21 A. But those checks are not conducted. We do not check on
22 that and (inaudible) we would not check on the
23 wind loading performance, we would not check on the rain
24 performance of the system. That comes down to the
25 system designer and the test sponsor to make sure that

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1 the system that they are testing is representative. We
 2 wouldn't comment on anything other than the
 3 fire testing.
 4 Q. What if the test sponsor came along with an outer
 5 rainscreen made of paper, blotting paper, for example.
 6 Would you still go ahead and classify that under BR 135
 7 in accordance with the test methodology under BS 8414?
 8 A. I think some of these things need to be looked at, but
 9 in principle it ... I think that's a more difficult
 10 question from something that's — you wouldn't test
 11 blotting paper. I do think there is a line to be drawn
 12 that labs shouldn't comment on design, and if you can
 13 test to a standard and it falls within the scope of the
 14 standard, then that is the reason for classification.
 15 Q. In 2015, Mr Howard, where did you draw that line?
 16 A. My view was that the system was in compliance with
 17 BS 8414 and therefore we could issue a classification on
 18 that basis.
 19 Q. I know that was the consequence. My question is: where
 20 did you draw the line which you referred to a moment ago
 21 when you said you wouldn't test blotting paper?
 22 Well, you wouldn't test blotting paper, but you
 23 would classify a test which had used cementitious
 24 particle board; where is the line to be drawn between
 25 blotting paper and a cementitious particle board,

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1 please?
 2 A. I'm not sure that I could answer — I can answer that
 3 question currently. I think things have moved on
 4 considerably, experience is different. I think the
 5 system that was classified in my view complied with the
 6 BS 8414 standard. I think if it had been a more fragile
 7 system, if we'd got asked to, say, classify without
 8 a façade at all, then that I think I would have taken
 9 advice on, because that's beyond the limits of the
 10 standard.
 11 Q. Who would you have taken advice from?
 12 A. Possibly Sarah Colwell, Tony Baker, Debbie Smith.
 13 Q. So I think from that last answer, it's right, is it,
 14 that at the time, in mid to late 2015, you did
 15 understand that there was a line between what was
 16 compliant with the BS 8414 standard so far as components
 17 were concerned to make up the system and what wasn't; is
 18 that right?
 19 A. No, it's more a procedural and classification issue,
 20 really. It's whether BRE — whether we regarded a —
 21 just a pure insulation test or something with blotting
 22 paper on the front as an indicative test and reported it
 23 accordingly, or whether that would be given the status
 24 of a full test report. If it's given the full status of
 25 a test report, then I think my position is it should be

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1 classifiable.
 2 Q. I just want to explore that a little bit, please. You
 3 say it's whether the BRE regarded it as a pure
 4 insulation test or something with blotting paper on the
 5 front.
 6 Just taking it in stages, do you agree that the
 7 BS 8414 test was a full system test?
 8 A. Yes, it's a system test.
 9 Q. Not a product test?
 10 A. No, it's a system test.
 11 Q. And that, in order to test the full system, the system
 12 has to be a rainscreen system?
 13 A. Yes, you are testing a system in accordance with
 14 BS 8414.
 15 Q. And in order to be that system, that system has to have
 16 a material or product acting as the rainscreen which
 17 in fact does act as a rainscreen?
 18 A. Yes, but as I said, we would make no checks on other
 19 aspects of board performance, because what the
 20 manufacturer or test sponsor is doing is supplying
 21 a product to market. All we're engaged to do is review
 22 the fire performance of that board. We wouldn't go on
 23 from there and check things like wind loading,
 24 durability, water ingress, of what the rest of the
 25 product on the system was tested.

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1 SIR MARTIN MOORE—BICK: Mr Millett, forgive my interruption,
 2 but didn't we investigate this pretty thoroughly last
 3 week?
 4 MR MILLETT: We did, Mr Chairman, it's a precursor to where
 5 I'm going next.
 6 SIR MARTIN MOORE—BICK: Well, perhaps we could go there.
 7 MR MILLETT: Can we go to page 6 of the classification
 8 report. That's at {KIN00000134/6}. We will see
 9 a description of the rainscreen system. Paragraph 2.2,
 10 "Description of product":
 11 "Phenolic Insulated Rainscreen System."
 12 I'll just read it to you. It says:
 13 "Fixing details: Kooltherm K15 Zero ODP Phenolic
 14 Rainscreen Insulation Boards (1200mm x 900mm x 60mm
 15 thick) were mechanically fixed to the block work
 16 substrate. 1200mm x 900mm x 6mm thick cement particle
 17 boards, manufactured by UAC, were mechanically fixed at
 18 600mm centres to an aluminium railing system which was
 19 also mechanically fixed to the block work substrate.
 20 The cement boards provided the overcladding for the
 21 rainscreen system. A 40mm deep ventilated cavity was
 22 created between the Kooltherm K15 Zero ODP Phenolic
 23 Rainscreen Insulation Board and the cement particle
 24 board. Fire stopping was provided by a ventilated
 25 rainscreen barrier system, comprising of nominal 2.5mm

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1 thick graphite based intumescent strip bonded to nominal
2 0.6mm thick galvanised steel sheet, and positioned 0.5m
3 and 4m above the fire chamber on both the main face and
4 the wing face."

5 Did you take that straight from the 2005 test report
6 or did you redraft it in any way, do you think?

7 A. I can't recall. That looks like it was taken straight
8 from the test report.

9 Q. Right. Were you able to verify all the components of
10 the test rig that you described here?

11 A. Well, the description there probably needs to be checked
12 back against the test report. If the test report is —
13 if that is the description within the test report, then
14 that was what was used as part of this classification.

15 Q. I see. So you didn't actually take steps to go behind
16 the original test report to check the components of the
17 test rig?

18 A. No. As I said, we would issue — the process for
19 issuing a classification report is the classification is
20 issued against the test report.

21 Q. Yes. So you didn't, just to be clear, look at the
22 delivery notes, the full set of photographs or the video
23 files?

24 A. No. By the time the test report is issued, it's in
25 place.

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1 Q. Now, we know that the system didn't in fact incorporate
2 a cement particle board manufactured by UAC; the
3 building board in fact used was a cellulose fibre cement
4 board. Did you know that?

5 A. No, I didn't.

6 Q. Right.

7 Looking at the description of the fire barriers —
8 I've read this to you, if we can go back to it, please,
9 page 6 {KIN00000134/6} — it says, do you see, in the
10 fourth line, nearly third line up from the bottom:

11 "Fire stopping was provided by a ventilated
12 rainscreen barrier system, comprising of nominal 2.5mm
13 thick graphite based intumescent strip bonded to nominal
14 0.6mm thick galvanised steel sheet ..."

15 You say that there.

16 Can I just show you a document. In {BRE00003278},
17 if we can go to that, please, this is an email from
18 Ivor Meredith, 3 November 2005, to Phil Clark, copied to
19 David Hoare. He, three lines down into that, asks or
20 proposes for the confidential section of the BRE report:

21 "Promaseal RSB ventilated rainscreen barrier system
22 comprising of nominal 2.5mm Intumex LPSK graphite based
23 intumescent strip bonded to nominal 0.6mm."

24 "Z2 bright spangle galvanised steel sheet complying
25 with BS EN 10142:1991 for base steel and BS 2989 for the

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1 Z2 bright spangle galvanising."

2 Do you see that?

3 Now, Mr Meredith told the Inquiry that, by
4 "confidential section", he was referring to the BRE's
5 file for the test, and for our note that's {Day75/78} to
6 {Day75/80}.

7 My question, having shown you this, is: were you
8 aware of this description given by Mr Meredith when
9 authorising the classification report?

10 A. No.

11 Q. So is it right, then, that you had no idea who the
12 manufacturer of the fire barriers was?

13 A. Not at that time, no.

14 Q. Did you have the manufacturer's details on the file
15 anywhere?

16 A. Well, as I've said, the only file that we had access to
17 was the test report.

18 Q. If we put the 2005 test report and the 2015
19 classification report up at the same time, can we just
20 do that, {BRE00002511/6} and {KIN00000134/6}, you can
21 compare the two paragraphs. You can see that in the
22 version on the right—hand side of the screen, do you see
23 that, which is the 2005 test report, in the last few
24 words of that paragraph under "Fixing Details", the
25 words in brackets say:

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1 "Full [manufacturer's] details are held on file."

2 Those words have been deleted or not carried across,
3 at least, to the description of product in the
4 classification report in 2015. Do you see that?

5 A. Yes.

6 Q. Yes. Did you notice that those words hadn't been
7 carried across when you authorised the 2015
8 classification report?

9 A. I don't recall. I mean, the classification report
10 refers specifically to a test report, so the
11 classification report should be read in conjunction with
12 the test report, and therefore it's regarded as
13 a summary of the test report.

14 Q. Yes, my question is: when you authorised the 2015
15 classification report, did you notice that the words
16 "Full [manufacturer's] details are held on file" had not
17 been carried across into the 2015 version from the 2005
18 test report?

19 A. As I've checked the report, yes, I would have been aware
20 that those statements had been removed.

21 Q. Yes, and did you ask yourself why that statement had
22 been removed?

23 A. No. As I said, the classification report — the
24 description in the classification report is a summary.
25 So you would expect whoever's reading the classification

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1 report, if they need the level of detail, should go back
 2 and refer to the test report.
 3 Q. If they'd done that and asked for the full
 4 manufacturer's details held on file, what would have
 5 happened?
 6 A. Then it would have been a referral back to Kingspan to
 7 provide the details of what was there. We wouldn't have
 8 entered into discussion directly on that test report.
 9 The referral would have been made back to Kingspan.
 10 Q. Why were you issuing a classification report without the
 11 manufacturer's details available, as had been the case
 12 when the test report had been produced?
 13 A. It's very, very common in classification reports,
 14 especially reaction to fire ones, for certain
 15 information to be withheld at the request of the test
 16 sponsor. It didn't strike me as anything unusual at
 17 that time.
 18 Q. Did Kingspan ask you to withhold any information which
 19 otherwise would go into this classification report?
 20 A. No.
 21 Q. So to ask my question again, please: why were you
 22 issuing a classification report without the
 23 manufacturer's details available, as had been the case
 24 at the time of the issue of the test report?
 25 A. Because, as I said, it's pretty common practice for

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1 reaction to fire test reports to have certain items
 2 removed. Now, if we were asked that question, although
 3 we didn't have the test file, we probably would have
 4 been able to come up with those details, what was in
 5 that test report, if we were asked directly. As I said,
 6 issuing test reports and classification reports with
 7 specific manufacturers' details is common.
 8 Q. Yes. I'm sorry to press you a little bit. I'm not
 9 quite sure we've got to the bottom of this.
 10 You could see, when you authorised the 2015
 11 classification report, that the original 2005 test
 12 report referred to a file containing manufacturer's
 13 details; yes?
 14 A. Yeah.
 15 Q. When you authorised the 2015 report, did you ask Vida or
 16 ask Kingspan for that manufacturer's details file?
 17 A. I didn't, no.
 18 Q. Why is that?
 19 A. Because, as I said, it wasn't — didn't strike me that
 20 we were doing anything particularly different to test
 21 reports and classification reports that are issued on
 22 a regular basis, withdrawing specific bits of
 23 information. The information — that information would
 24 have been accessible by the manufacturer, and ultimately
 25 I suspect we would have been able to find it at BRE if

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1 necessary.
 2 Q. Why didn't you simply copy across from the 2005 test
 3 report into the classification report full
 4 manufacturer's details held on file?
 5 A. Because the description of the product in
 6 a classification report is usually a summary, so there
 7 is an element of — it refers you from the
 8 classification report back to the test report, and
 9 I didn't think that statement was considered
 10 necessary — I don't know, really. Probably I didn't
 11 feel that that statement was necessary.
 12 Q. Well, every other statement in the fixing details has
 13 been copied across, more or less, into that passage
 14 I read to you under "Description of product". Why
 15 wasn't the full manufacturer's details held on file also
 16 copied across?
 17 A. Because, as I said, the description of product — it's
 18 a summary document and, as I said, that sort of detail
 19 was usually held in the test reports. The
 20 classification report refers you to the test report. If
 21 they've read the test report, then there would have been
 22 a statement there of, "Full manufacturer's details held
 23 on file".
 24 Q. Do you agree that being able to confirm the components
 25 of the test rig when authorising the classification

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1 report is crucial?
 2 A. I think there should have been further checks, but it's
 3 not uncommon to have certain information withheld from
 4 fire testing reports. It's common.
 5 Q. If anybody was going to be using this classification
 6 report and the test report to build a cladding system
 7 that corresponded exactly with what had been tested and
 8 classified, they would need to know precisely what the
 9 components of the test rig were, wouldn't they?
 10 A. Yes, and that could be obtained from the test sponsor,
 11 which is Kingspan.
 12 Q. Do you accept that it was impossible for anybody to
 13 replicate the system tested using these two documents?
 14 A. It would depend on what information is contained within
 15 the drawings. You couldn't tell exactly what was on the
 16 rig from that description, but in conjunction with the
 17 test sponsor, who knew, and if it came to it we could
 18 have found out as you have demonstrated, we could have
 19 found out exactly what was in that system if it needed
 20 to be replicated.
 21 Q. Do you accept that it was impossible for anyone to
 22 design a compliant building on the basis of this test
 23 report and this classification report?
 24 A. But you wouldn't use a test and classification report to
 25 solely design a building, but I would say, in

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1 conjunction with the information provided by the test
 2 sponsor, which they were aware that they had withheld
 3 from the report, a test system could be developed and
 4 installed on a building.
 5 Q. Can we look —
 6 SIR MARTIN MOORE—BICK: Sorry to keep interrupting you,
 7 Mr Millett, but I'm rather concerned about this.
 8 We all understand that BS 8414 is a system test.
 9 A. Yes.
 10 SIR MARTIN MOORE—BICK: And, as such, it simply determines
 11 the response of the specific system to the fire test.
 12 Now, why is it not appropriate to identify all the
 13 components of the system, including the manufacturer of
 14 those components?
 15 A. It is, but the manufacturer — across — on the European
 16 scale, across Europe, it's — there's a framework for
 17 testing, under the Construction Products Regulation,
 18 a system, and under that system, manufacturers are
 19 permitted to withhold data, and it's common within the
 20 test reports. Now, BRE can provide substantial evidence
 21 of this in terms of the standards that have been
 22 referred to, but beyond that, it's down to the test
 23 sponsor to act and provide the additional information.
 24 SIR MARTIN MOORE—BICK: So your understanding is that the
 25 test sponsor, as you put it, can decide the extent to

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1 which the products used in his system are identified?
 2 A. A lot of testing, especially reaction to fire, they can
 3 put in statements that essentially ... it's not
 4 adequately specified, and that is fairly common across
 5 reaction to fire testing.
 6 SIR MARTIN MOORE—BICK: All right. Thank you, that's
 7 helpful. I didn't realise that.
 8 Yes, Mr Millett.
 9 MR MILLETT: Mr Chairman, we may have to revisit that with
 10 the witness at a later point.
 11 Can I ask you whether you were aware that, by the
 12 time the 2015 classification report was issued, K15 had
 13 undergone a number of major changes?
 14 A. No.
 15 Q. Did you know, for example, that in September 2006, new
 16 technology in relation to the introduction of
 17 perforations to the foil facings of K15 had come into
 18 K15?
 19 A. No, I wasn't aware of any modifications to the product.
 20 Q. Were you aware that the K15 that had been tested in 2005
 21 had no perforations in the foil facings, whereas that
 22 being sold after 2006 did?
 23 A. No, I wasn't aware of any changes to K15.
 24 Q. Was that something that you would expect to be told by
 25 Kingspan when asking you to classify K15 based on a 2005

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1 test in 2015?
 2 A. Yes. I think, yes, there should have been a declaration
 3 in place to say — if we were going to do that, there
 4 should have been a manufacturer's declaration to say
 5 nothing had changed.
 6 Q. You say there should have been a manufacturer's
 7 declaration in place; was that a formal step that BRE
 8 required of its clients when asking to classify
 9 a product —
 10 A. No.
 11 Q. — based on an earlier test?
 12 A. No.
 13 Q. So when you say there should have been a manufacturer's
 14 declaration, is that something you have ever seen
 15 before? As of 2015, had you ever seen such
 16 a declaration before that?
 17 A. We'd ask for statements, in effect, that products had
 18 not changed following — when requests had come in for
 19 change of name. Not — you wouldn't usually ask for
 20 that sort of declaration against a test report, because
 21 the test report's a statement of fact at a specific
 22 moment in time. If they're asking for modifications to
 23 the test report or classification report, classification
 24 letters, then you would start asking for that sort of
 25 declaration.

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1 Q. You say classification report/letters, what are those?
 2 A. There's a — when you classify to class 0, it's issued
 3 as a letter, it's not necessarily a classification
 4 report. The European system for testing is a defined
 5 report, in defined format. Cladding — 8414's a defined
 6 format as defined by BR 135, but for class 0 you would
 7 just issue a separate classification letter.
 8 Q. At what point when issuing a classification letter would
 9 you ask for a declaration that nothing had changed in
 10 the product?
 11 A. Only if we were following EGOLF procedures and they were
 12 requesting things like a change of name or re-badging of
 13 the test report.
 14 Q. Are you aware that, in October 2020, the BS 8414 test
 15 and BR 135 classification reports were withdrawn by
 16 Kingspan because K15 that had been tested was
 17 an entirely different product to what was being sold in
 18 the market after 2006?
 19 A. The first I heard of that was when the letter was issued
 20 by Kingspan.
 21 Q. Is that fact not something that you should have checked
 22 expressly with Kingspan before proceeding to issue the
 23 classification report in September 2015?
 24 A. As I said, test reports across the fire industry in my
 25 experience are snapshots in time. There's no ongoing

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1 monitoring of the testing whatsoever. There's no
 2 contract in place, we do not do any surveillance. My
 3 view at the time is we were issuing a classification
 4 report against a document, test report. We wouldn't —
 5 there are — the responsibility is on the manufacturers
 6 for test reports and classification reports. It sits
 7 with them. There is no surveillance, there is no
 8 auditing of what goes on.
 9 Q. I understand that, but given the lapse of a decade, was
 10 it not the obvious question to ask?
 11 A. I didn't expect to be asked to issue a classification
 12 report if the product had changed.
 13 Q. No, that's not my question. Or, rather, it's an answer
 14 to a different question.
 15 Let me ask the question one more time: given the
 16 lapse of a decade, was it not the obvious question to
 17 ask, very simply: can you confirm that this product —
 18 A. No. No, it wasn't, because of the view that I had of
 19 test and classification reports. You are — the
 20 classification report is a statement of pass/fail.
 21 There is no ongoing validity. It was a statement of
 22 pass/fail against that test. It's no endorsement of
 23 future manufacturing. It is a statement of pass/fail
 24 against that test.
 25 Q. Can we then turn to the test carried out in March 2014

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1 by Kingspan on a system incorporating a Trespa
 2 rainscreen over K15 insulation. The test — I think
 3 we've seen the documents relating to it earlier — was
 4 carried out on 19 March 2014.
 5 At that time, March 2014, is it right you were the
 6 business group manager?
 7 A. Yes.
 8 Q. Would you therefore have had oversight of the test
 9 programme at that time?
 10 A. Yes.
 11 Q. I think you attended this test, didn't you?
 12 A. There was two Trespa tests on different dates. There
 13 was — it depends on which test we're now talking about,
 14 because there was two, I believe.
 15 Q. Right. Let's go to your witness statement to see if we
 16 can clear that up. Page 43 {BRE00005771/43},
 17 paragraph 195. The question is Q7:
 18 "Test report 293940 ... dated 26 June 2014, a copy
 19 of which is attached for your reference, was approved
 20 and signed by you. The test sponsor was Kingspan
 21 Insulation Ltd and the system, tested to BS 8414-1: 2005
 22 on 19 March 2014, incorporated K15."
 23 At 195, if you just go down the page, you say, in
 24 answer to the question, "Who was present during this
 25 test, both from the BRE and from the test sponsor?":

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1 "I understand the following people were present from
 2 BRE: Phil Clark, Harry Granados, Tom Lennon and myself."
 3 So we can take it that you did attend this test.
 4 A. Yes, I did. There was two, hence ...
 5 Q. Yes, all right.
 6 If we go back a little bit, please, up the screen at
 7 paragraph 193, we can see that you say there, in the
 8 middle of the paragraph:
 9 "... this test was deemed to be terminated
 10 prematurely due to flames off the top of the rig."
 11 Do you see that?
 12 A. Yeah.
 13 Q. You go on to say:
 14 "As such, the test system could not be classified to
 15 BR 135. This was disputed by Kingspan, who disagreed
 16 with BRE's interpretation of BS 8414 in this respect.
 17 BRE treated this as a formal complaint and maintained
 18 its unwillingness to classify the system to BR 135."
 19 Now, is it right, just tracking through the history
 20 as briefly as I can summarise it, that Kingspan
 21 disagreed and took the point that paragraph 8.5 of
 22 BS 8414-2, because this is a part 2 test, only applied
 23 during the first 30 minutes of the test?
 24 A. Yes, I understand that that was their objection or the
 25 point in which they wished to contest the result.

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1 Q. And the BRE considered that to be a formal complaint and
 2 the formal complaint procedures were invoked?
 3 A. Yes.
 4 Q. Let's go to {BRE00015608/2}, please. This is an email
 5 in May 2014. It's an email from Tony Millichap, bottom
 6 part of the screen, 21 May 2014 to BRE Group Quality,
 7 and you are one of the people copied in on that email;
 8 do you see that?
 9 A. Yes.
 10 Q. It's also copied to T Randle at Fenwick Elliott, who
 11 I think were Kingspan's lawyers at the time, weren't
 12 they?
 13 A. I wasn't aware of that, no.
 14 Q. Right. Well, take it from me that (inaudible).
 15 In the second paragraph, you can see that
 16 Mr Millichap refers to a meeting that took place on
 17 9 May, and he says:
 18 "At a recent meeting dated Friday 09th May between
 19 your Mr Stephen Howard and Mr Tony Baker our
 20 Mr Ivor Meredith and myself we confirmed we still wish
 21 to receive the test report according to the test
 22 standard BS 8414 Pt2:2005, and would also like a
 23 classification against BR135."
 24 Then he goes on to say:
 25 "Points verified at the meeting include:

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1 "Full draft test report to be supplied at the
2 earliest opportunity.
3 "The test was valid and accorded to all needs of the
4 standard.
5 "Video evidence from the rearward camera's was
6 requested.
7 "Interpretation against the BR135 criteria is not
8 limited to the BRE.
9 "BRE has proposed an amendment to the standard to
10 define the test duration at 60 minutes."
11 Then questions underneath that:
12 "Mr Philip Clark confirmed on the day of the test it
13 was not terminated before ts +60mins was reached, this
14 has been retracted.
15 "Definition of the test duration, it is our
16 contention the full test duration is variable between ts
17 +30mins and ts +60mins.
18 "This is evidenced in the standard B3.4 and BR135,
19 B2."
20 Now, does his record thus far — and there is more
21 of it over the page — correspond with your recollection
22 of the meeting?
23 A. Some aspects do, others do not. I mean, the second
24 line, "The test was valid and accorded to all the needs
25 of the test standard", well, that was being ... well, it

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1 depends on what he meant by that, I don't really know.
2 Q. At all events, do you recall the basic point, which is
3 that at that meeting Kingspan made it clear that they
4 wanted a test report from the BRE?
5 A. Yes.
6 Q. Did they explain why they wanted a test report?
7 A. The inference was that they were going to take it to
8 someone else to obtain a BR 135 classification.
9 Q. You say that was the inference; did you ask the
10 question: why do you want a test report, given that it
11 was terminated early?
12 A. No, because they're entitled to a test report.
13 Q. What —
14 A. It's contractual.
15 Q. I'm so sorry?
16 A. It's contractual. We contracted to conduct a test, the
17 test had been conducted, we were contracted to issue
18 a test report.
19 Q. Right.
20 It looks from the first bullet point that that point
21 had to be verified at this meeting:
22 "Full draft test report to be supplied at the
23 earliest opportunity."
24 If you were contractually bound to produce one
25 notwithstanding that it had been terminated, why was

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1 this even up for discussion?
2 A. Because it's quite common, if you had a test that
3 doesn't complete or fails to — basically to ask whether
4 a test report is required. If the test report is — if
5 the test sponsor requires a test report, irrespective of
6 the result, we're obliged to issue that test report.
7 Q. Now, you said a moment ago in your evidence that the
8 inference was that they were going to take it to someone
9 else to obtain a BR 135 classification. Was that your
10 inference, as you put it, at the time?
11 A. Well, the question was: was BR 135 exclusive to BRE?
12 And I think the answer to that is no, it's not exclusive
13 to BRE. It's a classification report.
14 Q. I'm just trying to understand what you mean in your
15 evidence when you say, "The inference was they were
16 going to take it to someone else to obtain a BR 135
17 classification".
18 Did you suspect that they were going to take the
19 test report and go and get a BR 135 classification from
20 somebody else?
21 A. Yes.
22 Q. Because you were refusing to do one?
23 A. Yes.
24 Q. Who would produce one? What sort of person would
25 produce one?

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1 A. Well, another test laboratory could produce it. But
2 classification reports are not exclusive to
3 laboratories.
4 Q. Now —
5 A. They are a public domain document. A consultant could
6 produce it.
7 Q. Go, please, to {BRE00004980}. I think your inference,
8 as you just described it, is actually reflected at the
9 time. This is an email from you to Dr Debbie Smith and
10 Richard Hardy on 26 May 2014, and if you look at the
11 first paragraph, you say:
12 "There were flames over the top of the rig at around
13 43mins. This in our view means that the test at that
14 point is terminated and if you do not run for the full
15 60 mins you cannot be classified against BR135.
16 "Kingspan Insulation are contesting the
17 interpretation.
18 "The email was send[sic] for info really. I suspect
19 that they will get A. N other to offer a classification
20 against the test report."
21 Does that email reflect your view at the time, or
22 the inference that you have described just now?
23 A. That is what I understood was going to happen with that
24 test.
25 Q. Right.

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1 Now, the BRE did prepare a report for the test and
 2 they sent it through to Kingspan in early July. Do you
 3 remember that?
 4 A. Yes.
 5 Q. Let's look at that. If we go to the email first, it's
 6 {BRE00015735}. It's an email from you to Robbie Scott,
 7 and if you look a little bit lower down the page, you
 8 can see there is an email from you to Ivor Meredith. Do
 9 you see that? 2 July at 14.53, Ivor Meredith, "Kingspan
 10 cladding report":
 11 "Ivor,
 12 "The report of the recent test.
 13 "I am aware you need a response to other issues
 14 raised in emails."
 15 The report itself is at {BRE00015736}. Can we just
 16 go to that. Is this the test report that you sent
 17 Mr Meredith on 2 July?
 18 A. Yes, I believe so.
 19 Q. It's dated 26 June 2014, and it bears the number 293940.
 20 Just note that number, please, for the time being,
 21 293940.
 22 I think, if you look at page 2 {BRE00015736/2}, you
 23 will see you authorised this report. Can we just look
 24 at that. There is your name and signature.
 25 Now, can we go to {BRE00018037/4}, please. This is

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1 an email from Phil Clark on 16 January 2015, so a little
 2 bit later, and you can see that he says to
 3 Amaury Queuille, who is another client, I think, of the
 4 BRE, and he says in the first paragraph, he says there:
 5 "Good morning Amaury, I hope you are well, I would
 6 suggest that you discuss the issuing of a report with
 7 Mr Howard as we do not issue BS8414 reports [if] the
 8 system did not complete the test requirements. I am
 9 happy to draft a quick letter report showing the data
 10 which Steve may be able to forward to you."
 11 I know you didn't see this at the time necessarily,
 12 but when Mr Clark says, "we do not issue BS8414 reports
 13 [if] the system did not complete the test requirements",
 14 was Phil Clark stating the formal policy of the BRE?
 15 A. No, I don't believe so.
 16 Q. Why did he say it then, do you know?
 17 A. I don't. If you run a test and the client requests
 18 a test report, whatever that test result is, my
 19 understanding is that we're contractually obliged to
 20 issue it.
 21 Q. Right. So Mr Clark is telling Amaury Queuille something
 22 which wasn't correct, is that right, when he says that
 23 the BRE doesn't issue BS 8414 tests if the system
 24 doesn't complete the test requirements?
 25 A. Yes. I don't believe that that is correct.

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1 Q. Why would he say it?
 2 A. I don't know. But, as I said, contractually BRE or any
 3 test lab, you are contractually obliged to issue a test
 4 report.
 5 Q. Let's go back, then, to the email run we were looking at
 6 before, which is May 2014, so a little bit earlier in
 7 time, {BRE00015608}, please. I broke off halfway
 8 through that email to come into this later one, but
 9 let's go back to it.
 10 If you go a little bit further down the page to the
 11 bottom of page 2 and on to the top of page 3
 12 {BRE00015608/3}, you can see that after the further
 13 bullet points, in the third paragraph down it says:
 14 "This issue ..."
 15 Do you see that?
 16 A. Yes.
 17 Q. "This issue is of such significance to Kingspan's
 18 business that we have consulted with our lawyers who
 19 have confirmed that in their view BRE's current position
 20 cannot be justified. We recognise the influential
 21 position BRE hold and do not wish to contradict its
 22 views however our conviction is such that we may have no
 23 other option".
 24 Did the fact that Kingspan were getting their
 25 lawyers involved perhaps influence the BRE's decision to

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1 issue a BS 8414 test?
 2 A. No, and that is the reason, once the complaint has got
 3 to that stage, we got independent QA department. It was
 4 raised as a complaint, there was visibility of what we
 5 were doing, no — there was — even throughout the QA
 6 and compliance department, there's no suggestion that we
 7 shouldn't issue a test report, and my position is
 8 whether a test passes or fails, we'd been paid to issue
 9 a test report and that is what we are contracted to do.
 10 There wasn't a position where BRE would refuse to issue
 11 a test report based on test performance, or I am not
 12 aware of it.
 13 Q. Mr Clark's evidence is that it was very unusual for the
 14 BRE to issue a test report where the test had been
 15 terminated early.
 16 A. It is unusual, because — but it's not unheard of. It's
 17 unusual because, for the most part, the way you conduct
 18 the testing, they don't want the full test report for
 19 a failed test. Clients don't generally want that. So
 20 it's offered, and often you will close a contract with
 21 just a simple letter. But that won't be the only
 22 example of BRE offering a test report on a test that's
 23 failed.
 24 Q. He also I think indicated in his evidence that he was
 25 very uncomfortable when the BRE agreed to produce a test

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1 report for this test notwithstanding that it had been
 2 emanated early.
 3 A. But, as I said, the contractual position is: run the
 4 test and, as part of that, you produce a test report.
 5 Then ... it doesn't say on the basis if the test passes.
 6 It's a test report.
 7 Q. Yes, that wasn't the impression one got from his
 8 evidence. He wouldn't be uncomfortable with producing
 9 a test report if in fact it was something that the BRE
 10 was contractually obliged to do anyway, would he? Can
 11 you comment on that?
 12 A. Well, all I can say is a statement that we don't issue
 13 or we didn't issue test reports for failed tests is
 14 incorrect, or as I'm here, that's not my understanding,
 15 and the QA — this complaint was under the scrutiny of
 16 our QA department and others, and there's no mention in
 17 there that we should not issue a test report. There's
 18 nothing within our procedures to say we shouldn't issue
 19 a test report against a failed test.
 20 Q. Is it the position that if a client doesn't ask for
 21 a report and the test fails, then you don't issue a test
 22 report?
 23 A. Pretty much (inaudible).
 24 Q. So it's only if the client asks that you do?
 25 A. Yeah, and there's other examples of that within both

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1 cladding and other areas.
 2 Q. But you say it's very rare — not unheard of, but very
 3 rare — for a client to ask for a test report where the
 4 test has been terminated early?
 5 A. I think "rare" is too strong a word. It's not common.
 6 We do not routinely issue test reports against failed
 7 tests because the clients don't usually require them and
 8 don't need to do anything with them at that point. What
 9 they're looking for is a test that passes. But, as
 10 I said, it's — there are other examples of tests that
 11 fail where we've issued reports.
 12 Q. And your inference or guess at the time was that they
 13 were going to go off and ask another test house to
 14 classify the test to BR 135?
 15 A. Well, from the question that we were asked, whether
 16 anyone could issue a BR 135, then yes, that was my
 17 impression.
 18 Q. Given that the test had been terminated early, was it
 19 your view at the time that it couldn't be classified
 20 under BR 135?
 21 A. Yes.
 22 Q. And therefore when you suspected that Kingspan wanted
 23 the test report so that they could go off and get it
 24 classified by somebody else to BR 135, did that not
 25 alert you to something, that something might be wrong?

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1 A. It did, and, as I said, it was raised within BRE, others
 2 could see the complaint progressing, but ultimately
 3 there's a difference of opinion as to whether the test
 4 should have been run or should have been terminated or
 5 whether the test met the requirements of BR 135, and
 6 other people are quite within their rights to express
 7 a different opinion.
 8 Q. We don't see you anywhere saying to Kingspan, "Well, we
 9 don't agree with you, but the view you're taking about
 10 test failure is a tenable view, so by all means get
 11 a second opinion". You don't say that anywhere in the
 12 documents we've seen.
 13 A. No, what actually happened, the agreed way forward,
 14 because it comes down to a — because the Kingspan
 15 position was it was an interpretation of the BS 8414
 16 test standard, so the resolution proposed was to go back
 17 to the committee that issued the document or is
 18 responsible for drafting and get a definitive
 19 determination from the drafting committee of the
 20 standard as to whether they viewed the test as a pass or
 21 as a fail, or whether ... whether they agreed with
 22 Kingspan's position or whether they agreed with BRE's.
 23 But that was to go back to the BS committee for review.
 24 Q. Sorry, I'm going to ask my question again: it's right,
 25 isn't it, that we don't see anywhere in the documents

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1 you advising Kingspan to go and get a second opinion, do
 2 you?
 3 A. No.
 4 Q. If in fact you were of the view at the time that the
 5 point being run by Kingspan about why you should produce
 6 a test report or why early termination wasn't a failure
 7 was a tenable view, as a professional, impartial testing
 8 house, you would have said to them, "Of course, that's
 9 our view, but go and get a second opinion". My question
 10 is: why didn't you do that?
 11 A. We did, but that second opinion would have come from the
 12 BS drafting committee of 8414, to get a definitive
 13 statement as to the interpretation of the standard at
 14 that point.
 15 Q. Let's see how this progresses.
 16 Can we go to {BRE00003597}, please. This is
 17 an email from Robbie Scott to you and Phil Clark on
 18 12 June 2014, and he asks the question, "What bit is
 19 inconclusive?"
 20 If you look at the screen, the top email is an email
 21 of 11 June.
 22 Can you go down the bottom of the screen. There is
 23 an email from Robbie Scott, 11 June 2014, to you and
 24 Phil Clark:
 25 "Hi Steve/Phil,

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1 "Following the investigation meeting last Friday
2 please find my summary attached.
3 "I am proposing to set up a meeting with you both at
4 the earliest opportunity as I feel this complaint is
5 inconclusive. I would advise not to send out the test
6 report until we have resolved the complaint."
7 Then you, I think, respond on 12 June, if we scroll
8 up, please, the next day, and you say:
9 "What bit is inconclusive?
10 "DS — Kingspan/Cladding not passing etc."
11 Do you see that?
12 A. Yes.
13 Q. Did you write that? Are those your words?
14 A. Yes.
15 Q. I'm just trying to work this out, because, "What bit is
16 inconclusive?", is that your question?
17 A. To Robbie, yes.
18 Q. And the bit underneath it, "DS — Kingspan/Cladding not
19 passing", did you write that or was that his embedded
20 response?
21 A. No, I wrote that.
22 Q. I see, you wrote that, okay. What does that mean?
23 A. What it actually means is, to Debbie Smith, just to put
24 the email in context, because you have a large volume of
25 emails — we had a large volume of emails at BRE, and it

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1 was just a note to Debbie to give a reminder to say the
2 email below is regarding Kingspan cladding and the
3 outstanding complaint against them.
4 Q. I see. Because this was copied in to Debbie Smith, and
5 this was a reminder to her, who would see this, that
6 this was —
7 A. Yes.
8 Q. Is that how it works?
9 A. It was literally just to say — Debbie was extremely
10 busy, we're all busy, it was just a note on the line to
11 say — just as a bit of an aide memoire to say: this is
12 what this email exchange is about.
13 Q. We haven't been able to find a record of any response
14 from Mr Scott to your question, "What bit is
15 inconclusive?" Is that right? Did you respond to him
16 by email, do you remember?
17 A. I don't think I ever got a response back from Robbie or
18 Stephen Phillips or the QA department.
19 MR MILLETT: Can we go to {BRE00005596}.
20 Mr Chairman, this is probably the last document
21 before lunch.
22 SIR MARTIN MOORE—BICK: All right.
23 MR MILLETT: We can see from this, which is an internal BRE
24 document, that it's part of the complaint file. Do you
25 see that? It seems that you had a meeting with

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1 Mr Scott — is this right? — on 4 November 2014. Is
2 that right?
3 A. I — that's not a form I'm particularly familiar with.
4 Q. Right.
5 A. That just looks like a database download, and ...
6 Q. Do you remember having a meeting with Robbie Scott about
7 this inconclusive ...?
8 A. I don't, no.
9 MR MILLETT: You don't?
10 Mr Chairman, we'll break there, if that's convenient
11 to you, and we'll come back to this.
12 SIR MARTIN MOORE—BICK: Yes, I think that's a good point,
13 thank you very much.
14 Well, now, Mr Howard, we're going to have a break
15 now so we can all have some lunch. We will resume,
16 please, at 2 o'clock. Again, no talking about your
17 evidence over the break. All right?
18 THE WITNESS: Thank you very much.
19 SIR MARTIN MOORE—BICK: Thank you. See you at 2 o'clock.
20 Thank you very much.
21 (1.00 pm)
22 (The short adjournment)
23 (2.00 pm)
24 SIR MARTIN MOORE—BICK: Welcome back, everyone. We're now
25 going back to hear further evidence from

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1 Mr Stephen Howard.
2 Mr Howard, are you there?
3 THE WITNESS: I am.
4 SIR MARTIN MOORE—BICK: Good, hello. And you're ready to
5 carry on, I hope?
6 THE WITNESS: Yes, I am.
7 SIR MARTIN MOORE—BICK: Thank you very much.
8 Then, Mr Millett, when you're ready.
9 MR MILLETT: Yes.
10 Mr Howard, did you ever get to the bottom of
11 Mr Scott's conclusion that there was something
12 inconclusive about the test report in its current draft
13 form?
14 A. I don't believe I did, no.
15 Q. Why is that?
16 A. Sorry, the screen's no longer full screen. Do you mind,
17 can I —
18 SIR MARTIN MOORE—BICK: Top right—hand corner, it should say
19 "View" or something like that. Are you full screen now?
20 THE WITNESS: Yes, I'm full screen now, sorry.
21 SIR MARTIN MOORE—BICK: Well done. No, it's quite
22 all right.
23 MR MILLETT: My question was: why is that?
24 A. I think at the time Robbie was taking — there was quite
25 a bit of absence from BRE and I just don't think it was

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1 ever resolved.

2 Q. Right. Did you know that the report was sent out?

3 A. Yes.

4 Q. I will come to it. It was on 2 July. Are you saying

5 that it was sent out without its inconclusive nature

6 ever being resolved?

7 A. Yes, if that was the ... yes, the test report went out.

8 I didn't get a response back to why it was inconclusive.

9 Q. Can we look, please, at {BRE00003595}. This is the BRE

10 internal audit report in relation to this complaint.

11 It's on a form dated 6 February 2013, as Mr Clark told

12 us, but the date of this document is 6 June 2014, and

13 you can see that from the top right—hand corner.

14 "BGM: Steve Howard.

15 "Auditee(s): Phil Clark."

16 What does BGM stand for?

17 A. Business group manager.

18 Q. The activity is a technical complaint investigation, and

19 you can see the background.

20 Can we go to page 3 {BRE00003595/3}, please. At the

21 very end of the document, it says:

22 "It is advised not to send the test report to

23 Kingspan until this complaint has been concluded."

24 Just pausing there and going to another document,

25 {BRE00003597}, can we just go to that, please, this is

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1 an email also of 12 June 2014, which we saw before, and

2 if we go to the second email we looked at before, you

3 can see that this is where he says that it's

4 inconclusive, and in the last sentence he says:

5 "I would advise not to send out the test report

6 until we have resolved the complaint."

7 So there we have it in two places: the report of

8 6 June and this email of 11 June.

9 Do you know why the report was sent out before the

10 complaint had been resolved?

11 A. I can't remember exactly whether there was a discussion

12 over it or whether it was agreed to release the report.

13 I don't think there was any response back to the email

14 regarding the — why the complaint is felt to be

15 inconclusive.

16 Q. Why would the BRE have sent the report to Kingspan at

17 a time when the complaint was still being investigated

18 and when the person charged with the investigation,

19 Robbie Scott, had advised that the test report not be

20 sent to Kingspan until the complaint had been resolved?

21 A. As I said, I can't recall the exact details around that,

22 but the report that was issued was — we weren't clear

23 on what was inconclusive. We had a position over

24 whether in our view the sample wouldn't have met or the

25 system wouldn't have met BR 135 and felt it appropriate

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1 to send the report in that way.

2 Q. Was there, to your recollection, a degree of pacifying

3 Kingspan as a good client by sending them this report

4 even though the complaint hadn't been resolved?

5 A. No, I think the test report reflected the situation and

6 the contract as it stood. We issued a report. The

7 report basically stated that the test was terminated

8 early. I think the only bit that could be inconclusive

9 is if the report was then changed to say it was a pass,

10 which it wasn't. It was basically sent out stating the

11 test had been terminated.

12 Q. Can we go back, please, to {BRE00003595}. We looked at

13 page 3 in this document. Can we go to page 2

14 {BRE00003595/2}.

15 Here we see a heading "TESTING", and it says:

16 "The test data was reviewed with Phil Clark and the

17 following was noted:

18 "1) The cladding wall logger and thermocouples

19 IN 3884/5/6 was last calibrated on 18 September 2012 and

20 was due calibration on 24 September 2013. This is now

21 classed as a Major Non-Conformance."

22 Then you can see item 5 — there are several other

23 notations — "Internal test procedures and result sheets

24 are not controlled".

25 First, what does "not controlled" mean there? What

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1 did you understand that to mean when you saw this

2 document?

3 A. Essentially any documentation that should ultimately end

4 up in the BRE quality system and be signed off and

5 approved.

6 Q. Did it concern you at the time that there was

7 documentation which had not ended up in the BRE quality

8 system and been signed off and approved?

9 A. No.

10 Q. You weren't concerned about that?

11 A. Not that they were not controlled, no.

12 Q. Did it not concern you that there were internal test

13 procedures and result sheets not controlled?

14 A. Well, they would probably — I think, as we described

15 earlier, some of this documentation was in development

16 and we were working through it. It wasn't uncommon to

17 develop new systems of working with documentation and

18 software and integration with that and run those through

19 the test process.

20 Q. What was the point of Mr Scott noting the fact here if

21 it wasn't uncommon?

22 A. Because it's against what — BRE's policy I would

23 imagine would be to have controlled documents, but, as

24 I said, it wasn't unusual to run off draft documents if

25 you were developing tests and you hadn't got round to

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1 that point of agreeing all the parameters that should be
 2 within those documents.
 3 Q. Did you take the matter up with Robbie Scott and ask him
 4 what procedures and what result sheets were not
 5 controlled?
 6 A. No, I didn't. As I said, Robbie was off for
 7 considerable periods around that time, I believe.
 8 Q. Well, he wasn't off, was he, in early June 2014 when
 9 produced his reports? Why didn't you ask Mr Scott, once
 10 you saw this document, what he was talking about at
 11 item 5 there?
 12 A. Because I probably didn't need to. I probably knew
 13 which was — which documentation we were using in the
 14 files to record test results.
 15 Q. Looking at item 1, then, the cladding wall logger and
 16 thermocouples in three places last calibrated in
 17 September 2012, due calibration September 2013. This is
 18 now June 2014, so nine months later. Were you not
 19 concerned to learn that there had been a nine-month
 20 delay between the last due date for calibration and the
 21 date of this report, and a six-month delay between the
 22 date of the calibration and the date of the test?
 23 A. Yes, that is of concern.
 24 Q. Were you concerned at the time to learn that?
 25 A. Yeah.

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1 Q. What did you do about it?
 2 A. The procedure would have been that we would have
 3 rechecked the calibration on the logger to make sure
 4 that that hadn't changed results in the meantime, to
 5 make sure the calibration hadn't shifted.
 6 Q. That may have been the procedure at the time; what did
 7 you do about it? Did you do anything when you learnt
 8 this fact?
 9 A. Yes, I think I arranged for the loggers, in conjunction
 10 with Phil, to be recalibrated.
 11 Q. That was quite a serious failing, wasn't it?
 12 A. Yes.
 13 Q. Can you account for how it had come about that the BRE
 14 had left its wall logger and thermocouples in those
 15 three places uncalibrated for six months after the due
 16 date for recalibration?
 17 A. No, I can't. Shouldn't operate in that way.
 18 Q. When you say "Didn't operate in that way" —
 19 A. Shouldn't operate in that way.
 20 Q. I'm afraid I didn't hear you and I don't think the
 21 transcriber did either. Can you repeat the answer one
 22 more time, please?
 23 A. You shouldn't operate in that way. You shouldn't
 24 operate with uncalibrated equipment.
 25 Q. Thank you.

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1 Did you tell Kingspan that, at the time of the
 2 19 March 2014 test, the wall logger and thermocouples
 3 were six months past their due calibration date?
 4 A. I don't believe I did, no, I can't recall.
 5 Q. Why is that?
 6 (Pause)
 7 A. Well, I don't know why that was. It may have been that
 8 by that time, we knew the calibrator — we knew the
 9 calibration of the logger had been reinstated, we
 10 verified the performance of the logger at that point.
 11 So that the gap between the test and the recalibration
 12 of the logger meant that we knew that that — the
 13 temperature of the rig were within calibration.
 14 Q. Well, maybe, but do you know that?
 15 A. No, I don't know that for a fact.
 16 Q. Would that mean that in fact, at the time that you
 17 issued the test report, as happened in July 2014, the
 18 BRE would not have been in a position — and in fact
 19 nobody would have been in a position — to issue
 20 a reliable BR 135 classification report, would they?
 21 A. It depends on when — or the results of the review and
 22 the recalibration of that logger, depending on when that
 23 took place.
 24 Q. Have you — sorry, did you want to finish your answer?
 25 A. Now, this is something that we could look at, to see

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1 when the recalibration of the logger was redone. It may
 2 have been in that intervening period. I wouldn't have
 3 those dates to hand.
 4 Q. Okay, let's see how this would have worked
 5 chronologically.
 6 Before 6 June 2014, did you know that the cladding
 7 wall logger and the thermocouples were six months or
 8 seven months, in fact, I think, past their due
 9 recalibration date at the time of the March test?
 10 A. I can't recall. I may have known, but if we could
 11 get — look at the evidence of what went on — the
 12 calibration of that logger, then there would be
 13 a definitive answer to that.
 14 Q. Well, I'm asking for your recollection. So do you
 15 remember or not?
 16 A. I don't recall, no.
 17 Q. Do you know, to the best of your recollection, whether
 18 after 6 June 2014, but before 2 July 2014 when the test
 19 report was sent to Kingspan, the cladding wall logger
 20 and the thermocouples were recalibrated and checked?
 21 A. I can't recall the exact date when it was done.
 22 Q. This would have fallen under your responsibility,
 23 wouldn't it, as the business group manager responsible
 24 for cladding; yes? But you can't tell us whether or not
 25 there was in fact a recalibration so as to check whether

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1 the cladding wall logger and thermocouple data which was
 2 produced by the March 2014 test was re-verified?
 3 A. No, I can't tell you without reviewing the material at
 4 the time.
 5 Q. Did you tell Kingspan that the test data produced by the
 6 March 2014 test would have to be reviewed against
 7 recalibrations of the cladding wall logger and the
 8 thermocouples?
 9 A. No.
 10 Q. Why not?
 11 A. Because, as I said, that may have been done. The
 12 recalibration of the logger may have been done before
 13 reports were issued.
 14 Q. You would know that, wouldn't you, as the person in
 15 charge; no?
 16 A. Sorry?
 17 Q. You would know that, wouldn't you, as the person in
 18 charge?
 19 A. I would have hundreds of instruments, thousands. We
 20 literally have hundreds and hundreds of items of
 21 calibrated equipment. It's a major issue calibrating
 22 all the equipment in the lab. We even have our own
 23 in-house calibration services. I wouldn't know about
 24 the specific equipment in a specific lab.
 25 Q. Sorry, I don't understand that answer, so far as I could

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1 hear it.
 2 The cladding wall logger and the thermocouples are
 3 at the BRE's premises, aren't they?
 4 A. They are.
 5 Q. And recalibrating them would have been a relatively
 6 simple job, wouldn't it?
 7 A. No, it's probably days of work to recalibrate a logger.
 8 Q. Days of work?
 9 A. Yeah.
 10 Q. So you would remember whether there had been days of
 11 work to recalibrate the logger, wouldn't you?
 12 A. No, because I wouldn't — I wasn't in the labs on
 13 a day-to-day basis. Whilst it was my responsibility
 14 ultimately, the responsibility for calibration of
 15 equipment would be down to local area managers. So the
 16 fire resistance laboratory would have hundreds of items
 17 that required calibration, reaction to fire cables,
 18 there are literally hundreds of instruments within just
 19 my department that I was responsible for at the time
 20 requiring calibration. It was a constant ongoing
 21 process.
 22 Q. That I understand. But focusing on what you're told
 23 here, in the middle of a challenge to a test result, you
 24 would have remembered, surely, wouldn't you, whether or
 25 not you did actually order the recalibration of the

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1 cladding wall logger and the thermocouples that had been
 2 used for this test?
 3 A. I wouldn't have ordered it. It didn't fall directly
 4 within my responsibility. It fell within the
 5 department's, but, as I said, I was responsible for the
 6 items that I used on testing for their calibration, but
 7 the laboratories, each of the individual laboratories,
 8 and there was maybe five or six, were responsible for
 9 the calibration of the systems in their own departments.
 10 I wouldn't know whether a specific item of equipment,
 11 unless I went down there and checked, was in
 12 calibration.
 13 Q. Coming back to my question, Mr Howard, why didn't you
 14 simply tell Kingspan that the test data for the
 15 March 2014 test was not reliable because the cladding
 16 wall logger and the thermocouples needed calibration at
 17 that date and hadn't been recalibrated?
 18 A. I don't know the answer to that. It may have been by
 19 the time the report was issued, the system had been
 20 recalibrated.
 21 Q. But you don't know (inaudible)?
 22 A. I haven't got that information to hand.
 23 Q. Do you remember telling any other test sponsors that,
 24 between 24 September 2013 and June 2014, their tests may
 25 not be reliable because the cladding wall logger and the

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1 thermocouples in three places had not been recalibrated
 2 on 24 September 2013 as required?
 3 A. No, I don't recall that. I didn't make those
 4 notifications.
 5 Q. Why not?
 6 A. Because, as I said, it would come down to when we were
 7 aware and when the systems were recalibrated. If those
 8 two dates were very close to each other, then you —
 9 there's no — we should make contact or we should have
 10 made contact, but technically, if it's not going to
 11 change the result, it's ... probably wouldn't do it.
 12 Q. Let's go to {BRE00005596}, please, which is the document
 13 I think we looked at before. We may need this in the
 14 native version. There it is, thank you, we have that
 15 there.
 16 Now, can we please go to row 32, which I think is on
 17 the next page, page 2 {BRE00005596/2}. Row 32 seems to
 18 be a chronology of what happened with this investigation
 19 into the complaint between 8 May 2014 and
 20 26 January 2016.
 21 First, can you just help me: who would have been
 22 responsible for inputting the data that we see under
 23 column B?
 24 A. I don't know. That — I would imagine that that would
 25 sit with the QA department.

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1 Q. Was that Robbie Scott on this occasion?
 2 A. I couldn't tell you specifically .
 3 Q. Right.
 4 Let's go down, then, if you look, please, at the
 5 date 12 June, about a third of the way through the text,
 6 it says 12 June — just to remind you, that's the same
 7 day when you ask Robbie Scott, "What is inconclusive?"
 8 in response to his 11 June email. Do you remember we
 9 saw that before?
 10 A. Yeah.
 11 Q. As against 12 June 2014 it says:
 12 "Robbie Scott met with Stephen Howard. Report to be
 13 revised before being issued."
 14 Do you remember meeting Robbie Scott on that day or
 15 around that time?
 16 A. I don't recall specifically , no.
 17 Q. You have no reason to think, though, that you didn't, do
 18 you?
 19 A. No.
 20 Q. Again, it says, "Report to be revised before being
 21 issued". Do you remember telling Robbie Scott, or
 22 perhaps him telling you, that the report needed to be
 23 revised before it was issued?
 24 A. I don't recall that specifically .
 25 Q. Again, you can't deny that it happened, given that this

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1 is a contemporaneous record, is that right, or do you
 2 deny it?
 3 A. No, I don't recall that specific meeting.
 4 Q. Can you tell us what parts of the report needed to be
 5 revised before being issued?
 6 A. I think the only thing I can think of was the addition
 7 of comments into the observations, but, as I said, I've
 8 no specific evidence of that or recollection , or I can't
 9 remember whether that was from Robbie Scott or whether
 10 that come from someone else.
 11 Q. In the next line down we see that, on 2 July 2014, you
 12 send the report through to Ivor Meredith. Do you see
 13 that?:
 14 "02/07/2014 Stephen Howard to Ivor Meredith. The
 15 report of the recent test."
 16 Now, again, you've got no reason to think that it
 17 wasn't sent on that day, do you?
 18 A. No.
 19 Q. No.
 20 Now, at this point, it's right, isn't it, that the
 21 complaint was still unresolved?
 22 A. In terms — well, as I said, in terms of QA, possibly,
 23 but Robbie Scott was absent over those periods of time,
 24 I believe.
 25 Q. Just looking at the document on the screen in front of

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1 you, Mr Howard, you can see, can't you, that the
 2 complaint was still open until January 2016, some
 3 18 months later, but the bulk of the entries relate to
 4 the period after July 2014, do you see, August 2014 and
 5 into October and November of that year; you see that,
 6 don't you?
 7 A. Yeah.
 8 Q. So the complaint was still unresolved when you sent the
 9 test report to Mr Meredith; that's right, isn't it?
 10 A. Yes.
 11 Q. Do you know why the decision was taken to issue the
 12 report to Kingspan before the complaint was resolved?
 13 A. Because of — we'd had a contract in place, we'd been
 14 requested for a test report, we were basically
 15 completing that project, and the test report was
 16 reporting a system that didn't meet the requirements of
 17 BR 135 and, as I said, the only way forward from there
 18 would be a report that did. So a test report that was
 19 issued that in my view reflected the situation as it
 20 was.
 21 Q. When you sent the test report to Mr Meredith on 2 July
 22 as this record shows, why didn't you tell Mr Meredith
 23 that the results were unreliable because the cladding
 24 wall logger and the thermocouples had not been
 25 recalibrated at the time of the test as they should have

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1 been?
 2 A. It would be dependent on when the loggers were
 3 recalibrated . If they were recalibrated after that
 4 date, then yes, I should have said something to them
 5 regarding the calibration of the loggers. If the
 6 loggers were recalibrated before that date, all that
 7 calibration would have confirmed was that the loggers
 8 were functioning correctly .
 9 Q. I think you told us earlier — just help me with this —
 10 that you never saw any document between 6 June and
 11 2 July 2014 to tell you that the test report could go
 12 out because the test data was reliable notwithstanding
 13 the need for recalibration .
 14 A. I can't recall seeing that, no, but it may not have been
 15 recorded in that way, and if we could have a look at
 16 those items of evidence, then we may be able to resolve
 17 this.
 18 Q. We can look at the report itself , but you can confirm
 19 for us that it nowhere says, does it, at least
 20 expressly, that the system could not be classified to
 21 BR 135?
 22 A. No, the test report will not include any — BS 8414
 23 doesn't include any pass/fail criteria , and therefore it
 24 is a statement on the test standard.
 25 Q. Given that you knew that the test report might be used

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1 by Kingspan to obtain a BR 135 classification from
 2 another test house, perhaps, why not simply add a bit of
 3 black lettering or red lettering in bold at the bottom
 4 or at the top so that anybody seeing it would realise
 5 that this test report, in the opinion of the producer of
 6 that report, namely the BRE, was of the view that it
 7 could not be classified to BR 135?
 8 A. Well, there is a statement in the observations that
 9 basically says the test was terminated at the point in
 10 question. Now, the BS 8414 reports do not include
 11 reference to the classification document in the BR — we
 12 do not record in the test report details of the
 13 classification report, and that is the procedure across
 14 all reaction to fire testing. The report is a statement
 15 of fact as to what was tested to BS 8414, part 1 or 2.
 16 The classification can be BR 135 or it can be another
 17 document. We wouldn't specifically put in a test report
 18 that it didn't meet a certain document. I felt that the
 19 test report as issued was clear on the basis that it had
 20 not been tested for the full duration.
 21 Q. In fact, it's right, isn't it, that the test report
 22 simply records that the test ends at 43 minutes, doesn't
 23 it? It doesn't, I think, actually say terminated.
 24 A. I think it refers you to the clause in BS 8414 that the
 25 test needs to go for the full duration.

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1 Q. Somebody reading it would have to work out what had
 2 happened. They would have to work out that it had been
 3 terminated.
 4 A. (inaudible) read that from the associated standard, yes.
 5 Q. Yes.
 6 Now, just going back to the document that I think we
 7 still have up in front of us, which is {BRE00005596/2},
 8 the complaint log, you can see that Kingspan's complaint
 9 was simply closed in January 2016, in essence because
 10 they gave up the point.
 11 Now, is that a fair way of summarising it?
 12 A. I think we'd had — well, I recall that they were
 13 contacted a number of times across that period
 14 primarily, and I think that there is email evidence of
 15 us contacting to ask them whether they considered the
 16 report — complaint to be still open.
 17 Q. Yes. We can look at this document, I think, for that,
 18 because it's a summary of the documents at the time.
 19 For example, look at 26 August 2014:
 20 "Robbie Scott emailed Tony Millichap. Please
 21 respond if issues still unresolved."
 22 Then 28 August 2014:
 23 "Ivor Meredith, Kingspan emailed Stephen Howard and
 24 Robbie Scott. Are you any closer to resolving [the]
 25 complaint ... not directly related but I have

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1 a telephone meeting with Sarah at BSI ..."
 2 Et cetera, and then 21 October:
 3 "Emailed Stephen Howard for an update since report
 4 sent to Kingspan in July."
 5 And then underneath:
 6 "Mike Pratt assigned to investigate."
 7 On 4 November.
 8 Did you give Mr Meredith an update or Mr Scott
 9 an update, can you remember?
 10 A. I can't recall. But the management or the procedural
 11 process — as I recall, the issue was going to be raised
 12 at that BSI meeting.
 13 Q. Look on, 4 November 2014:
 14 "Stephen Howard replied. The complaint centred
 15 around standard interpretation and our position has been
 16 that this is the way the standard is interpreted and
 17 this is how it is applied. Robbie Scott was going to go
 18 back to Kingspan and say politely, if we have not
 19 received any further correspondence or submissions from
 20 them we will consider the complaint closed."
 21 Pausing there, is that how it ended up?
 22 A. Yes, I believe that's a fair summary of the complaint.
 23 No further correspondence or request was received by the
 24 date of that.
 25 Q. So basically, is this right: BRE stuck to its guns in

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1 relation to its interpretation, Kingspan never pushed
 2 the point further, and in the end the complaint was
 3 closed?
 4 A. No, the complaint was raised at the BSI committee, which
 5 is referred to on 28 August. Now, I haven't got the
 6 exact dates of that committee meeting, but they can be
 7 obtained, and the issue and interpretation of the
 8 standard would have been discussed at that meeting, and
 9 as I understand it, because Sarah attended and I believe
 10 that Ivor Meredith was invited — I do not know who else
 11 attended — it would have been discussed at that point.
 12 Q. Sorry, we spoke across each other. Did you attend?
 13 A. No.
 14 Q. I imagine Sarah Colwell —
 15 A. Yes.
 16 Q. Did she debrief to you after that meeting?
 17 A. Yes.
 18 Q. What did she say?
 19 A. I think that she relayed that it had been raised at the
 20 BSI committee meeting and the position that we took was
 21 confirmed by the BSI committee.
 22 Q. Right. Does that explain why we see no further —
 23 sorry, let me put it again. Does that explain why, when
 24 you reply on 4 November, you stick to your guns, so to
 25 speak?

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1 A. Well, we're not sticking — well, we have interpreted
 2 that we can't issue a BR 135 because the test hasn't
 3 gone to full duration, and that has been confirmed by
 4 the BSI committee responsible on which — and
 5 Kingspan — Ivor Meredith would have got the papers for
 6 that as well.
 7 Q. Are you aware that this test report has also now been
 8 withdrawn by Kingspan and was withdrawn in October 2020?
 9 A. Yes.
 10 Q. Now, can we go to {BRE00004066}. This is a desktop
 11 assessment report done by the BRE in relation to fire
 12 performance of the external wall systems at 190 Strand,
 13 Westminster, London prepared for Total Façade Solutions,
 14 and the date is 29 June 2015.
 15 If we look at page 2 {BRE00004066/2}, we can see
 16 that the report was prepared by Andrew Russell and
 17 authorised by you, and the date is 29 June 2015.
 18 If we look at page 5 {BRE00004066/5}, please,
 19 section 2 —
 20 A. Have we, on that assessment though, I've not signed
 21 that.
 22 Q. Right. Are you saying you didn't sign off on this
 23 document?
 24 A. Well, I would — there could be — it could have been
 25 me, it could have been others, but the version of the

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1 report that you've got there is not the one that I have
 2 authorised.
 3 Q. Fair enough.
 4 Do you recall — perhaps you don't, perhaps it's not
 5 a fair question — signing off on the desktop assessment
 6 for this project, 190 Strand?
 7 A. I don't recall whether I signed it off. I do recall
 8 this project.
 9 Q. You do. Well, we will see if we can find you a signed
 10 copy, but bear with me in the meantime.
 11 Can we go to page 5 {BRE00004066/5}. This is
 12 "Scope", and it says:
 13 "This assessment report considers the fire
 14 performance of the external wall systems for 190 Strand,
 15 Westminster, London against the criteria of BR 135,
 16 Third Edition if tested in accordance with
 17 BS 8414-2:2005."
 18 So this is basically a desktop study done by BRE for
 19 Total Façade Solutions for that project; yes?
 20 A. Yes.
 21 Q. If we go to page 6 {BRE00004066/6}, we can see the basis
 22 of the desktop study, "Supporting data", and then if you
 23 go down, you can see by paragraph 3.1:
 24 "BRE test report no. 293940 Issue 1.
 25 "A fire test in accordance with BS 8414-2:2005 was

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1 carried out on an external wall system on 19 March 2014.
 2 The system was described as a Kingspan K15 insulated
 3 system with a ventilated Trespa rainscreen."
 4 You can see there the components set out below it.
 5 If we go to page 11 {BRE00004066/11} then, please,
 6 we can see the assessment, and you can see that the
 7 level 2 thermocouples are assessed in terms of their
 8 performance, aren't they?
 9 A. Yes.
 10 Q. Do you see table 1?:
 11 "Temperatures measured at level 2 in tested
 12 systems."
 13 Yes?
 14 A. Yes.
 15 Q. In the table in the first column, you can see:
 16 "BRE report no. 293940 (BS 8414-2 test with Trespa
 17 rainscreen cladding)."
 18 Just to be clear, that's the one from 19 March 2014,
 19 isn't it?
 20 A. Yes, sorry.
 21 Q. Yes, that's the number I asked you to remember: 293940.
 22 Yes?
 23 A. Yes.
 24 Q. This is the report that we were talking about until
 25 two minutes ago.

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1 Now, this report, this desktop report, doesn't
 2 anywhere refer to the fact that the test could not be
 3 classified to BR 135, does it?
 4 A. Without reading — no, I doubt whether it would, no.
 5 Q. I'm grateful to one of my team who's managed to find
 6 a signed version of this. Perhaps I should show you the
 7 one with your signature on it. {BRE00004067/2}, can we
 8 just have that. There is your signature.
 9 A. Thank you.
 10 Q. Now, it may be a while since you've seen this document,
 11 but take it from me that this report doesn't anywhere
 12 refer to the fact that that test, the March 2014 test,
 13 couldn't be classified to BR 135.
 14 My question is: why doesn't it?
 15 A. Because it's an assessment using data to draw
 16 a conclusion on another system. There's no requirement
 17 to — or I'm not aware of any requirement to meet BR 135
 18 for the documents then to be used for the purposes of
 19 supporting data to perform a review.
 20 Q. Have you ever come across a desktop report based on
 21 a test that couldn't be classified to BR 135 for the
 22 purposes of a cladding system?
 23 A. Have I — not that — no, not that I'm aware, but
 24 there's no requirement to test to — for a product to
 25 receive BR 135 classification to be used in

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1 an assessment report.
 2 Q. Let's go back to page 11. We can do it on the signed
 3 version {BRE00004067/11}. Here we've got table 1,
 4 "Temperatures measured at level 2 in tested systems",
 5 and there are the temperatures in accordance with
 6 thermocouples at level 2 in each of the systems. But
 7 there is nothing there, is there, to tell you that the
 8 report in the leftmost column, report number 293940, had
 9 to be terminated early, is there?
 10 A. No.
 11 Q. Nor is there anything in there to tell you that, as
 12 a result, it could not be classified to BR 135?
 13 A. No, but, as I said, this is basically a technical review
 14 of another system, and what you are doing is taking
 15 evidence from other reports in support of the technical
 16 arguments that you make to classify systems. There's no
 17 absolute requirement for cladding systems to meet the
 18 requirements of BR 135 — to meet the recommendations of
 19 BR 135 — sorry, there is no requirement within or no
 20 recommendations within ADB for the systems having to
 21 meet BR 135. It's acceptable to use data from other
 22 sources in support of your review.
 23 Q. Do you accept that anybody reading this report, and this
 24 assessment in particular within it, would be led to
 25 believe that the system could in fact be classified to

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1 BR 135, when in fact it couldn't?
 2 A. No.
 3 Q. You don't?
 4 A. No, because it's — the system that is being classified
 5 will be summarised elsewhere in the document, and the
 6 assessment would be specific to that system. The
 7 supporting data that you use to do that does not
 8 necessarily have to meet the requirements of BR 135.
 9 Q. So are you saying that a BRE desktop could just take
 10 bits of test data from a test and then use that to
 11 extrapolate to a desktop study for another project?
 12 A. You potentially would use multiple reports covering
 13 various tested combinations, and you may also use
 14 reports from cavity barrier testing and things like
 15 that. But all of the documentation and all the reports
 16 that are referred back to are listed in the assessment.
 17 Q. But what is there in this report to tell you that the
 18 test done on 19 March on K15 with a Trespa rainscreen
 19 cladding had to be terminated early and therefore
 20 couldn't be classified to BR 135?
 21 A. I don't imagine there's anything in that report to say
 22 that, but that doesn't stop you using a test report with
 23 test data in support of the — to build a technical case
 24 to assess the system.
 25 Q. The technical case would be based on only part of the

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1 picture, wouldn't it? Because although it may be based
 2 on accurate readings from the thermocouples during the
 3 test, it would be omitting a critical fact, which is
 4 that the test had to be terminated before the requisite
 5 period was up.
 6 A. But the person undertaking the assessment would have had
 7 visibility of the test report. You wouldn't do it
 8 without.
 9 Q. The person undertaking the assessment is the BRE, isn't
 10 it?
 11 A. Yes.
 12 Q. Yes, and therefore my question is: why is the BRE, as
 13 the person undertaking the assessment, not giving the
 14 full picture here, namely that although the temperatures
 15 measured at level 2 in the tested systems reached these
 16 temperatures for this test, the test had to be
 17 terminated early and therefore couldn't be classified?
 18 A. Well, as I said, you can use data in support of your
 19 argument. If the data is from a test report that we
 20 felt at the time was clear as to the restrictions on it,
 21 then I can't see an issue with using data in support of
 22 a technical argument to look at the — to undertake
 23 a desktop assessment on another system. It's fire test
 24 data.
 25 Q. What argument?

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1 A. Sorry?
 2 Q. You refer to an argument. What argument are you talking
 3 about?
 4 A. A technical review.
 5 Q. Done by the BRE?
 6 A. Well, the technical assessment of the system to be
 7 classified.
 8 Q. I'm not sure I'm understanding your evidence, Mr Howard.
 9 Do you accept that anybody, an architect or
 10 a cladding subcontractor, reading this desktop report,
 11 would look at it and think that the 19 March 2014 test
 12 done with the Trespa was a sound basis for the
 13 extrapolation exercise done by the BRE? Do you accept
 14 that?
 15 A. Yes.
 16 Q. And do you accept that it wasn't a sound basis, because
 17 although the thermocouples showed those temperatures,
 18 in fact the test had to be terminated early and couldn't
 19 be classified to BR 135?
 20 A. No.
 21 Q. You don't accept that?
 22 A. No.
 23 Q. You're saying, are you, that it was a perfectly sound
 24 basis to perform a desktop study on a failed test?
 25 A. Yes, because it's used in conjunction with other test

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1 evidence to construct your technical justification for
 2 the acceptance of the system.
 3 SIR MARTIN MOORE-BICK: Can I just come in here, Mr Millett?
 4 If I've understood you correctly, Mr Howard, what
 5 you're saying is you're just using these earlier reports
 6 for the data they contain, which is related to certain
 7 times during the test, as one can see from them, and
 8 I think you're saying it's irrelevant whether they went
 9 on to or would have gone on to pass or fail, you're
 10 basically just taking the data; is that right?
 11 A. You're using the data from the test report for
 12 assessment purposes.
 13 SIR MARTIN MOORE-BICK: Yes. All right. Thank you.
 14 MR MILLETT: Supposing during the 19 March test, having
 15 achieved these thermocouple temperatures, the rig had
 16 then exploded and burnt down the Burn Hall, would you
 17 still use it as the basis of a desktop study?
 18 A. It — probably not, but it would be limited by the data
 19 that you would achieve under that circumstance. Data is
 20 data. What you select from that and what you use in
 21 support of your argument, that — all we are using is
 22 the test data gained.
 23 Q. Mr Howard, that would be fine if you identified the test
 24 data for the 2014 test as limited to that test data, and
 25 gave the reader a clear warning that that test in fact

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1 was terminated and therefore couldn't be classified, and
 2 then the reader would understand the basis of the
 3 extrapolation. But I put the point to you again: aren't
 4 you misleading the reader when you don't give them the
 5 full information but only part of it?
 6 A. No, because the assessment is for a specific system. We
 7 are not approving or — sorry, we are not saying the
 8 other systems within — contained within the document
 9 are BR 135 compliant, we are not saying anything other
 10 than — any other data that we've used in terms of
 11 cavity barriers are compliant, we have not classified
 12 those. You are using test data to produce a technical
 13 argument in support of the system that you are
 14 assessing.
 15 Q. It's not an argument, is it? It's an assessment.
 16 A. A technical case, a technical submission.
 17 Q. It's not a case either. It's a statement, isn't it, of
 18 appropriateness of extrapolation? You're telling the
 19 reader that you can extrapolate from these three tests
 20 and therefore safely build the system proposed for
 21 190 Strand. Isn't that what the purpose of this is?
 22 A. No, the purpose is to give an opinion that it meets the
 23 requirements of BR 135 and, as I said, the data in the
 24 test reports that are contained within are there to
 25 justify that case. It doesn't — the systems don't need

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1 to be BR 135 compliant, as I understand it.
 2 Q. Is there any reason why you couldn't simply spell out in
 3 the desktop, so that the reader could understand, the
 4 fact that the test had to be terminated early and that
 5 the system couldn't be classified to BR 135?
 6 A. Is there any particular reason? No, I don't — there's
 7 no reason but, as I said, the justification for using
 8 the test report is for the data it contains.
 9 Q. Are you aware that this test report, 293940, even though
 10 in fact the system did not meet the criteria in BR 135,
 11 has been used in or as the basis for no fewer than 29
 12 desktops in total?
 13 A. I wasn't aware of the numbers but, as I said, it
 14 doesn't — if it's going into desktop assessments, it's
 15 a set of data that you can then use, if it's going in to
 16 fire safety engineers to justify the inclusion or the
 17 construction of a cladding system. We are not saying
 18 that that system complies with BR 135.
 19 Q. Well —
 20 A. — system that we assessed in our view would.
 21 Q. Mr Clark said in his evidence that he was shocked that
 22 the test report from the March 2014 test, which was
 23 unclassifiable to BR 135, had been used in this way, in
 24 other words in so many desktops.
 25 Can you just explain — perhaps you can't — why he

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1 would have been so shocked if it was a proper basis for
 2 a desktop assessment?
 3 A. Well, I don't believe that Phil Clark ever got involved
 4 in assessment, so, as I said, test data's test data.
 5 That is what you — what you are using is the
 6 information contained within that report for your
 7 technical assessment.
 8 Q. So just before we close off on this, so I really
 9 understand your evidence, are you saying that the BRE,
 10 you, authorising this report, could just select any
 11 piece of test data from the 19 March test and just
 12 insert it into the assessment, and then say, "Well,
 13 that's okay, that forms the basis of a proper
 14 extrapolation in this desktop study"?
 15 A. But you — in a situation that you're in, you would
 16 never use just a single report, but what you are doing
 17 is basically assembling a technical justification for
 18 the systems as assessed. I don't — that is pretty
 19 commonplace, and there's extended application rules,
 20 there's — assessments go on to extrapolate data from
 21 test reports.
 22 Q. Mr Howard, it may be my fault, but let me have one more
 23 go.
 24 Why was the fact that the 19 March 2014 test
 25 terminated early, meaning it was unclassifiable to

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1 BR 135, irrelevant when it came to producing this
2 desktop study?

3 A. Because all you are — because what you are not — what
4 you are using is that report to construct a technical
5 argument to say a system meets the requirements of
6 BR 135 in our opinion. Now, say — there could have
7 been, without looking at the report and reading it in
8 detail, it's — you are just using a test report, one of
9 three that are referenced in there. You could be using
10 five, you could be using ten test reports. It is to
11 construct a technical argument that a system that is
12 going to be installed complies with BR 135. Whether
13 that in the end meets — whether the systems that you
14 are using — if the data within the desktop assessment
15 justifies that conclusion, then that conclusion is
16 justified.

17 SIR MARTIN MOORE—BICK: Mr Millett, excuse me again, I'm
18 sorry to keep interrupting you.
19 Mr Howard, is your point, at least in part, this:
20 that you're not extrapolating from a single BR 135 or
21 test result data; you are using data derived from
22 a variety of different sources —

23 A. Yes.

24 SIR MARTIN MOORE—BICK: — in order to reach a conclusion
25 and, as we've seen from the report we had on the screen

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1 earlier, in this case it was data as to the maximum
2 temperature reached in a certain location within
3 a certain time?

4 A. Yes. It's specific data.

5 SIR MARTIN MOORE—BICK: And that goes into a melting pot,
6 you I think are saying, with data derived from other
7 sources in order to draw conclusions?

8 A. Yes.

9 SIR MARTIN MOORE—BICK: Yes, all right. Thank you very
10 much.
11 Yes, Mr Millett.

12 MR MILLETT: Can you just help me with one thing. Can you
13 go back to page 6 {BRE00004067/6}, please. You can see
14 that the first report on that page is the one we've just
15 been discussing, 293940, which was a steel—frame test
16 done under part 2; yes?

17 A. Yes.

18 Q. This desktop assessment, what kind of cladding system
19 was this for?

20 A. If you read through, there should be a summary of the
21 assessed systems further down in the document.

22 Q. There is. 190 Strand, if you go to page 4
23 {BRE00004067/4}, was going to be — do you see that
24 there? — a "stone faced precast cladding, brick
25 cladding, an aluminium rainscreen façade and a stone

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1 lattice framework with timber rainscreen panels".
2 Now, if you were asked to do a primary test on that
3 system, would you do it under part 1 or part 2 of
4 BS 8414?

5 A. It depends on what the — it depends on how that's
6 constructed. You haven't got enough information on that
7 point to say.

8 Q. Right. I think in fact it's a part 2, isn't it? If you
9 go to page 13 {BRE00004067/13}, I think we can answer
10 the question there. On page 13, "Conclusion", it says
11 that:
12 " ... the external wall systems for 190 Strand ... as
13 described in section 4, would satisfy the criteria of
14 BR 135, Third Edition if subjected to a test in
15 accordance with BS 8414—2 ..."

16 So is the answer to my question that, in fact, this
17 was a part 2 structure?

18 A. Yes. I mean, what we're saying is — or what the
19 assessment report is saying is it would meet BR 135
20 criteria if assessed to that standard, which is the —
21 which is not the masonry substrate.

22 Q. No, indeed. So, therefore, can you just help me with
23 one thing. When you go back, then, to page 6
24 {BRE00004067/6}, you can see there the supporting data.
25 The first test is the one we've just been looking at,

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1 which was indeed a part 2 test, 293940; yes? That was
2 indeed a part 2 test; yes?
3 (Pause)

4 A. Yes, sorry, this is a part 2 test.

5 Q. Yes. Indeed.
6 If you go down the page, you see that the second
7 piece of supporting data for it was one on 7 July,
8 part 2 as well, but then you've also got at page 7
9 {BRE00004067/7}, item 3.3, a BRE test report
10 number 220876, which was done under part 1. That's the
11 2005 test, isn't it?

12 A. Yes.

13 Q. My question is: why are you using a part 1 test as the
14 basis of a desktop study designed for a part 2 system?

15 A. Because what you are doing is looking at materials'
16 performance and looking at the performance of the system
17 and using multiple data sets to understand the fire
18 performance of the system in writing the assessment
19 report. The data that is contained in those reports is
20 valid to perform a technical assessment of the system
21 that you wish to assess.

22 Q. I now want to look at a different topic, which is how
23 Kingspan's marketing literature and the results of the
24 BS 8414—1 test in 2005 were being viewed by the market.
25 Can we look first, please, at an email exchange in

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1 2013 between you and a gentleman called Wesley Bourne.
 2 This is {BRE00003529}. You can see there that on the
 3 first page of that there is an email of 19 March from
 4 him to you, Wesley Bourne, Far East Global, and the
 5 attachment is "Kooltherm K15 Rainscreen Board" as a pdf.
 6 He says:
 7 "Hi Stephen,
 8 "Please find attached for your perusal technical
 9 literature off the Kingspan website relating K15
 10 KOOLTHERM, it appears to satisfy BS8414 and BR135 for
 11 buildings above 18metres in height.
 12 "Per our discussion this afternoon, we look forward
 13 to your favourable feedback after you confer with your
 14 colleagues in relation to our project specific details.
 15 Should you require anything further please don't
 16 hesitate to contact us."
 17 Attached to that email — I'll show it to you — is
 18 a copy of the ninth edition of Kingspan's marketing
 19 literature for K15 from March 2011. Can I show that to
 20 you. That's at {BRE00003528}.
 21 First of all, do you remember receiving Mr Bourne's
 22 email and opening it and seeing this document?
 23 A. No, I'm afraid not, I don't recall that.
 24 Q. It's a document issued in March 2011 by Kingspan and
 25 it's called "Kooltherm K15 Rainscreen Board, insulation

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1 for rainscreen cladding systems". Is it a document that
 2 you think you were familiar with from that time, or at
 3 least from 2014 onwards, when you became in charge of
 4 cladding?
 5 A. I think to say for me — no, I wouldn't say I was
 6 familiar with that document.
 7 Q. Right.
 8 I'll show you the text in a moment, but perhaps,
 9 actually, before we leave the document, just look at it.
 10 Third bullet point down it says:
 11 "Successfully tested to BS 8414:2002, can meet the
 12 criteria within BR135 and is therefore acceptable for
 13 use above 18 metres."
 14 Now, when you got Mr Bourne's email, do you think
 15 you opened this document and read that?
 16 A. I can't recall doing so, no.
 17 Q. Had you done, what would your reaction have been?
 18 A. Erm ...
 19 (Pause)
 20 I'm not sure, really, looking at that.
 21 Q. Well, that's a guarded way of putting it, if I may say
 22 so. I would suggest to you that your reaction would be
 23 that that is a misstatement, because the fact that
 24 an insulation product had successfully tested to BS 8414
 25 was acceptable for use above 18 metres —

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1 A. But it does say "can", doesn't it? It doesn't say
 2 "does", it says "can meet the requirements of BS 8414".
 3 Q. "... and is therefore acceptable for use above
 4 18 metres."
 5 Would that not have struck you at the time, if you
 6 had looked at this, as a misleading statement, because
 7 it suggests that it could be used on any building over
 8 18 metres?
 9 A. I wouldn't read that as — I would read that as there is
 10 a qualification in there saying, "Successfully tested to
 11 BS 8414:2002, can meet the criteria within BR135". It
 12 doesn't say "does meet the criteria" as a standalone, it
 13 says "can meet the criteria within BR135".
 14 Q. I was just trying to direct your eye to the last part of
 15 the sentence, which says "and is therefore acceptable
 16 for use above 18 metres", that part of the sentence;
 17 would that not have struck you as a misleadingly
 18 extravagant claim?
 19 A. No, it doesn't — it ...
 20 Q. No?
 21 A. I think in the light of current circumstances, yes, it's
 22 not the sort of material you should put out, but in
 23 context of when this was going around and looking at
 24 the — it's a qualified statement, or I read that as
 25 a qualified statement. It's not saying it does meet the

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1 recommendations of BS 8414, it says it can meet, under
 2 certain circumstances.
 3 Q. Let's go to {BRE00003530}. You will see that you
 4 respond to Mr Bourne, and you say:
 5 "Wesley,
 6 "In our opinion you need to test to BS 8414. But
 7 ultimately the decision and responsibility rests with
 8 building control, building owners etc. I think these
 9 parties need to be consulted on this issue.
 10 "The system you have described to me is different to
 11 that supplied on the PDF. BS 8414 is a system test and
 12 therefore provides evidence that the system complies
 13 with BR135. It cannot be assumed that if a system has
 14 reached an adequate performance to be classified to
 15 BR135, that individual components will perform the same
 16 way in a different construction."
 17 Now, by this date — this is March 2014; in fact,
 18 it's the day after the Kingspan Trespa test, by
 19 coincidence — was it your experience that Mr Bourne's
 20 interpretation of Kingspan's sales literature was
 21 typical of the market?
 22 A. Not — well, not by that stage, no. I think it was just
 23 slightly later than that.
 24 Q. Right. When was that, do you think?
 25 A. There was a meeting with the NHBC, which I think that

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1 was when it ... there was obviously — or, as
 2 I understood it, reports were being accepted without
 3 BR 135s.
 4 Q. Right. When was that?
 5 A. I think I've raised that in my evidence, so there would
 6 be a date on that meeting.
 7 Q. There are lots of meetings with the NHBC. Was this
 8 a meeting you —
 9 A. — one in my evidence, I believe.
 10 Q. I see.
 11 Did it come as a surprise to you at that stage to
 12 learn that the market was interpreting Kingspan's
 13 marketing claims in the way in which Mr Bourne has
 14 reflected here?
 15 A. Well, as I've said, there's no — BRE — sorry, Approved
 16 Document B's advisory, so there's no absolute
 17 requirement to test and get classified to BR 135, which
 18 is why the reference is back to the building owner and
 19 building control. I think there was a perception within
 20 BRE that there was a lot of systems going on to walls
 21 without testing and without BR 135, but ultimately it's
 22 not a regulatory requirement, it's advisory.
 23 Q. Well, when you say it's not a regulatory requirement,
 24 it's advisory, it's guidance within the regulation; it
 25 guides you as to how to comply with a mandatory

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1 obligation.
 2 A. But it also says in the introduction —
 3 Q. Sorry, do you agree with me: it's guidance which guides
 4 you as to how to comply with a mandatory obligation;
 5 yes?
 6 A. It's guidance, but it makes it quite clear in the
 7 introduction to even the latest version of BRE — sorry,
 8 ADB, that it's acceptable for other sort of like routes
 9 to demonstrate compliance. It's not — BR — BS 8414
 10 and BR 135 is not the only route to compliance with ADB.
 11 Q. Sorry, let me just be clear about this. At the time,
 12 this is spring 2014 — I'd assumed that you understood
 13 this, but maybe just help me — you couldn't use
 14 insulation above 18 metres unless either it was
 15 a material of limited combustibility or had passed the
 16 criteria in BR 135 and had been tested under the
 17 methodology in BS 8414.
 18 A. But that is from Approved Document B, which is guidance.
 19 Q. I see. So you're saying that it's only guidance and
 20 didn't have to be complied with?
 21 A. Well, it says in the document itself that there's other
 22 routes to demonstrate compliance with the
 23 Building Regulations. It's not the only route — sorry,
 24 this is quite ...
 25 Q. Well, what other routes? If it's not a material of

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1 limited combustibility, and hasn't passed a full system
 2 test, what are the other routes to compliance, apart
 3 from a holistic fire engineering study, which we
 4 understand —
 5 A. Well, it could be holistic fire engineering, it could be
 6 desktop assessment, it could be the use of other data to
 7 justify the use of the product on the building.
 8 Q. What's that, then, the use of other data to justify the
 9 use of a product on the building? What system or route
 10 to compliance is that?
 11 A. Well, as I said, BS 8414, you could potentially use
 12 a cladding test from another part of the world as your
 13 justification for submission to building control. As
 14 I said, ADB is advisory. There could be fire
 15 engineering solutions, there could be desktop
 16 assessments, people could have accepted fire resistance
 17 tests on the outside of the system if properly
 18 conducted.
 19 Q. Just coming back to the point, then, on the email in
 20 front of us, we've got a customer in the market asking
 21 you in the BRE the question he's asked, I've shown you
 22 that, and you've given him an answer.
 23 My question to you was whether it was your
 24 experience that Mr Bourne's interpretation of what
 25 Kingspan were telling the market about the usability of

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1 K15 was typical of the market, and your answer was not
 2 until a later meeting with the NHBC. That's your
 3 evidence so far, is it?
 4 A. Yes. I think really the point at which it — well, we
 5 understood it was obvious that there was a lot of
 6 systems going on to buildings without BR 135s, but it
 7 was at a later meeting when the terms of those — that
 8 acceptance ... yeah, it become apparent that people were
 9 not asking for BR 135s.
 10 Q. Were you concerned at the time that Kingspan were
 11 marketing K15 as a product suitable for use over
 12 18 metres, rather than making it clear that K15 when
 13 used in a specific system only could be used over
 14 18 metres?
 15 A. No, I wasn't overly concerned. That concern was later.
 16 At that time, no, I don't believe I was concerned.
 17 Q. Right.
 18 Let's look at the document again, {BRE00003528}, and
 19 see if there are any other aspects of the literature
 20 which caused you concern at the time.
 21 If you look at the third bullet point down,
 22 "Successfully tested to BS 8414:2002", were you not
 23 concerned that Kingspan didn't make it clear that the
 24 test was only to BS 8414—1?
 25 A. No, I wouldn't — as I said, I don't recall reviewing

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1 this document in detail.
 2 Q. Were you not concerned that Kingspan were implying here
 3 that they had a BR 135 report for a system incorporating
 4 K15 when in fact they didn't?
 5 A. Well, at that time, no, I've not reviewed this document
 6 on that basis and I wouldn't have had a knowledge of all
 7 the tests that Kingspan had undertaken. As I said, it
 8 was something that's sent through to you —
 9 Q. Did you not —
 10 A. — as I said, I don't recall seeing this or reviewing it
 11 in that level of detail.
 12 Q. Did you not think to yourself: oh, I wonder where they
 13 got a BR 135 classification from? This is March 2014.
 14 This is 18 months before you classified it, don't
 15 forget. At that time, did you not wonder where they got
 16 a BR 135 classification from?
 17 A. Yeah, but there's an assumption there that the BS 8414
 18 test to 2002 was the only one that was conducted, and
 19 I was aware that there was quite a lot of other testing
 20 going on. I didn't have a list of tests in front of me
 21 that BRE — that Kingspan would have tested or —
 22 there's no reference to a specific test there.
 23 Q. Were you not concerned that Kingspan were saying that
 24 K15 as a product could meet the criteria in BR 135 when
 25 in fact it's not a product test at all?

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1 A. No, because it says it can meet. It doesn't say it does
 2 meet, it says it can meet, and I took that as reading in
 3 there as a qualified statement.
 4 Q. Did you read the whole of this document?
 5 A. Sorry?
 6 Q. Did you read the whole of this document?
 7 A. No, I doubt it.
 8 Q. Right. You wouldn't have been aware that it says that
 9 K15, "when subjected to [BS 8414] ... achieved the
 10 result shown", later on in the document at page 6
 11 {BRE00003528/6}.
 12 A. I wouldn't have reviewed this document in detail. It
 13 depends on what questions I was being asked by the
 14 client, and I think I've referred him back to the route
 15 that he needs to take to comply.
 16 Q. Do you agree with me, looking at it now, that this was
 17 a thoroughly misleading document in a number of
 18 respects?
 19 A. I think it should have been better qualified and it
 20 should have been more accurate. It should give the
 21 standard number and there should maybe be a note in
 22 there to say — make it clearer the circumstances under
 23 which the product could be used and meet BR 135, but, as
 24 I said, at the time I don't really remember reviewing
 25 this in detail or seeing it.

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1 Q. Let me just push the point. I'm suggesting to you that
 2 it's a thoroughly misleading document, among other
 3 reasons, because it presents K15 as a product which has
 4 achieved a pass under BS 8414, which is not a product
 5 test at all. Do you accept that?
 6 A. No, I think it says successfully tested to BS 8414 and
 7 can meet the criteria within BR 135.
 8 Q. Do you accept that it's —
 9 A. Under a certain qualified system, that statement's true.
 10 Q. Do you accept that it's misleading when it says it is
 11 therefore acceptable for use above 18 metres without any
 12 qualification?
 13 A. That statement needs to be qualified, and I accept that,
 14 and if reviewing this, that would have been my comment,
 15 really, that that should have been a qualified
 16 statement.
 17 Q. And as unqualified, it's a thoroughly misleading
 18 statement; do you accept that?
 19 A. Well, I wouldn't call it thoroughly misleading; it's not
 20 as clear and concise as I believe it should be.
 21 Q. Did you discuss this marketing literature with Kingspan
 22 at all?
 23 A. No.
 24 Q. Why is that?
 25 A. Because, as I said, I doubt whether I gave this

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1 a thorough review. It was possibly a scan through. The
 2 question was back to the client, there was an email
 3 exchange with the client which is quite difficult to
 4 remember, so I doubt whether I've read this in detail.
 5 Q. Did you discuss this piece of marketing literature with
 6 anyone internally within the BRE?
 7 A. No, I don't believe so.
 8 MR MILLETT: Mr Chairman, it's now just gone 3.15. I'm
 9 going to turn to a different document, but it's about
 10 the last document in this run before we turn to
 11 a different topic, so —
 12 SIR MARTIN MOORE-BICK: Do you want to take the document
 13 now? How long is it going to take?
 14 MR MILLETT: Five minutes, probably, it depends on various
 15 things.
 16 SIR MARTIN MOORE-BICK: If you're going to go to a new topic
 17 afterwards, let's do the document first, shall we?
 18 MR MILLETT: Yes, thank you.
 19 Can we go to {BRE00003397}, please. This is
 20 an email from Tony Baker to you, and it's dated
 21 24 July 2013:
 22 "Hi Andy.
 23 "Strangely enough me and Steve have just come out of
 24 a meeting with Wintech and this project was mentioned,
 25 or one very similar. I would need more info on the

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1 through system build up before commenting but in general
 2 the answer would be no unless the system to be assessed
 3 was very similar to that tested. I believe the test
 4 data available from KS would be very limited and the
 5 market is starting to get very confused through clever
 6 marketing by KS. I know Norman did an assessment some
 7 time ago but from what I can recall it was an enclosed
 8 system but from what we understand today it wasn't built
 9 in accordance with the assessment!
 10 "Cheers Tony."
 11 Do you remember this email?
 12 A. No.
 13 Q. Can you help, do you know what the "clever marketing"
 14 was that Mr Baker was talking about?
 15 A. I don't, really.
 16 Q. Did you ask him?
 17 A. I don't recall.
 18 Q. Did you read the email?
 19 A. Yes, I believe I'd have read such an email.
 20 Q. Were you not interested to know why the market was
 21 starting to get very confused through clever marketing
 22 by Kingspan?
 23 A. Well, I think there was ongoing discussions at the time,
 24 but it depends on what that marketing was saying, and
 25 I can't really remember the sort of ongoing discussions

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1 with Tony or others over Kingspan marketing material.
 2 Q. It's clearly been raised as a concern by Tony Baker
 3 internally within the BRE. Did you take any steps to
 4 investigate what it was that the market was getting
 5 confused about as a result of Kingspan's clever
 6 marketing, Mr Howard?
 7 A. I don't recall doing so, no.
 8 Q. Why is that?
 9 A. Because we are — because ultimately I'm not sure
 10 that — we are providing and supplying into
 11 a professional market. I wouldn't question how confused
 12 architects and building control are over that material.
 13 As I said, it was only later that concerns over what was
 14 being accepted and what base — that I started to have
 15 concerns over what was being accepted on what basis.
 16 MR MILLETT: Mr Chairman, is that a convenient moment?
 17 SIR MARTIN MOORE-BICK: Yes, certainly.
 18 Mr Howard, we'll have a break now. We will come
 19 back at 3.35, please, and no talking to anyone about
 20 your evidence over the break, please. All right? We'll
 21 see you a bit later.
 22 Thank you very much.
 23 (3.20 pm)
 24 (A short break)
 25 (3.35 pm)

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1 SIR MARTIN MOORE-BICK: Welcome back, everyone. We're going
 2 to continue hearing from Mr Howard.
 3 Are you there, Mr Howard? Can you hear me and can
 4 you see me?
 5 THE WITNESS: Yes. You're not full screen. That's it.
 6 SIR MARTIN MOORE-BICK: Are you full screen again now?
 7 THE WITNESS: Full screen again now.
 8 SIR MARTIN MOORE-BICK: The one technical problem I was able
 9 to solve. Good.
 10 Are you ready to carry on?
 11 THE WITNESS: I am, thank you.
 12 SIR MARTIN MOORE-BICK: Thank you.
 13 When you're ready, then, Mr Millett.
 14 MR MILLETT: Yes, Mr Chairman.
 15 Can we go to your witness statement, please, at
 16 page 4 {BRE00005771/4}. I'm turning to a new topic, and
 17 I want to ask you about paragraphs 17 and 18. These two
 18 paragraphs appear under the question Q2(a):
 19 "What advice or guidance, if any, does or should the
 20 BRE give to test sponsors in respect of the design and
 21 installation of test rigs for BS 8414 testing?"
 22 At paragraph 17 you say:
 23 "BRE does not, and should not, provide any advice on
 24 the design or installation of the cladding system other
 25 than as necessary for the safe construction of the test

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1 sample and compliance with the specimen requirements of
 2 the test standard. Indeed, those involved in testing
 3 are not permitted — by BRE's accreditation provider,
 4 UKAS — to offer any such advice and/or consultation
 5 services."
 6 Then you say in paragraph 18:
 7 "In this respect, UKAS audits BRE for compliance
 8 with ISO 17025 (for the testing laboratories) and
 9 ISO 17065 (for the certification services) respectively.
 10 These are internationally recognised standards for such
 11 activities. As BRE is a European 'notified body', there
 12 are rules associated with this as well. These standards
 13 require BRE to have rules in place to maintain its
 14 impartiality and integrity; these are backed up by BRE's
 15 procedures. The information which BRE obtains in
 16 relation to cladding tests is acquired from running
 17 tests for clients (who pay for those tests), as such, if
 18 BRE's testing staff were to then become involved in
 19 direct consultancy, they could be divulging confidential
 20 information. This risk is managed by preventing testing
 21 staff from undertaking consultancy work."
 22 Now, you also say in your statement, I should say,
 23 at paragraph 9 {BRE00005771/2} — there is no need to
 24 scroll back to it — that the BRE is an independent and
 25 accredited testing laboratory.

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1 Is it part of your accreditation by UKAS that you're
2 required to meet the standard ISO 17025?
3 A. Yes, that is what you are audited against.
4 Q. Its full title, I think, is BS EN ISO 17025: 2017.
5 A. That would be, yes, one of the later versions.
6 Q. That was the later version, and there was a previous one
7 I think in 2005, wasn't there?
8 A. I wouldn't know if ...
9 Q. Let's look at this a little bit more closely.
10 {BSI00001726}, please, and this is the 2005 version of
11 ISO 17025. That's the first page of it, and it
12 incorporates corrigendum 1, which I think was from 2006.
13 Am I right in thinking that this version would have
14 been in place throughout the period 2005 to 2017?
15 A. Yes.
16 Q. Can we look at page 12 {BSI00001726/12}, please. Let's
17 look at clause 4.1.4 under the heading "Management
18 requirements", 4.1, "Organization", and 4.1.4 says:
19 "If the laboratory is part of an organization
20 performing activities other than testing and/or
21 calibration, the responsibilities of key personnel in
22 the organization that have an involvement or influence
23 on the testing and/or calibration activities of the
24 laboratory shall be defined in order to identify
25 potential conflicts of interest."

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1 Then if we go on to page 13 {BSI00001726/13} —
2 bottom of page 12, top of page 13 — you can see under
3 clause 4.1.5(d):
4 "The laboratory shall ..."
5 That's how it starts, and then (d) says, it's the
6 third one down:
7 "d) have policies and procedures to avoid
8 involvement in any activities that would diminish
9 confidence in its competence, impartiality, judgement or
10 operational integrity."
11 Do you see that?
12 A. Yes.
13 Q. So when we talk about the BRE's impartiality in this
14 context, is this what we are referring to?
15 A. Yes.
16 Q. At all times from 2006, and certainly from 2014 when you
17 became more involved in cladding at the BRE, were you
18 conscious that the BRE should have policies and
19 procedures in place for this purpose?
20 A. Yes.
21 Q. To the best of your knowledge, were policies and
22 procedures in place which ensured that the BRE's testing
23 activities were carried out impartially and with
24 operational integrity?
25 A. Yes.

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1 Q. What were they?
2 A. Sorry?
3 Q. What were they?
4 A. There was a standard of operating procedures that were
5 available, there was lab-specific operating procedures
6 within that period, there was codes of conduct for staff
7 as well.
8 Q. Were those procedures monitored?
9 A. I'm not sure I understand the question, really.
10 Q. All right. Did anybody have particular responsibility
11 for ensuring that those procedures were followed?
12 A. Well, the — you were subject to internal audits in the
13 labs. Obviously line management would have
14 a responsibility for the staff within their — who they
15 were supervising.
16 Q. Yes. So the line manager of, for example, Phil Clark
17 would be responsible for ensuring, would he, or she,
18 that, for example, Phil Clark — and I just identify him
19 as an example — would avoid involvement in activities
20 that would diminish confidence in the BRE's competence,
21 impartiality, judgement or operational integrity?
22 A. Yes.
23 Q. And you were Phil Clark's line manager, weren't you, at
24 least —
25 A. Not until 2014, maybe, 2015, something like that.

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1 Q. My question — perhaps you didn't pick up the end of
2 it — was: at least from 2014.
3 How did you go about monitoring or enforcing or
4 supervising Phil Clark's compliance with the obligation
5 to avoid involvement in the activities we've seen
6 identified in the standard?
7 A. It's difficult to recall, really. There was a lot of
8 effort — emphasise placed on team meetings and there
9 was training available for staff, and I believe that BRE
10 offered training in those sort of areas, but I can't
11 remember any specific activities I undertook with
12 Phil Clark with that.
13 Q. Phil Clark told us in his evidence — and it's
14 {Day97/88:23} to {Day97/89:3} for the record — that he
15 never received any training on impartiality or, in
16 particular, where the line was to be drawn between
17 acting impartially and the giving of consultancy or
18 advice. That was his evidence. Is he right about that?
19 A. Well, for the record, it would be possible to check his
20 training records and see what courses he attended
21 internally.
22 Q. Well, I —
23 A. But not — my impression was he understood — sorry,
24 it's very difficult, because we're talking over, so ...
25 Q. I'm asking you: is he right? Did he never receive any

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1 training? That's his evidence. He says he never
 2 received any training on where the line was to be drawn
 3 between acting impartially on the one hand and giving
 4 consultancy or advice on the other. I'm just asking
 5 you: is he right?
 6 A. I'm not aware of specifically any training he was given,
 7 but I would suspect he would have been given training at
 8 some point and BRE should be able to produce details of
 9 that.
 10 Q. Did you yourself ever receive any training of that
 11 nature?
 12 A. Erm ... I can't recall, really. But it may have been --
 13 I believe I have had discussions with people, advice
 14 from more senior members of staff throughout my career,
 15 because I've worked in both certification and testing,
 16 that you don't divulge confidential information.
 17 Q. Did you ever have any specific training on what
 18 constituted advice or consultancy on the one hand --
 19 A. I can't recall.
 20 Q. -- as opposed to simply conversations, chitchat,
 21 observations on the other?
 22 A. I can't recall. As I said, BRE should have training
 23 records for specific individuals.
 24 Q. You can't recall. Is it that you can't recall one way
 25 or the other, or, as you sit here today, you don't

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1 remember ever receiving any such training yourself?
 2 A. I don't remember ever receiving such training, but it
 3 was part of the culture there and part of your
 4 procedures that you didn't divulge confidential
 5 information and you endeavoured not to offer advice.
 6 Whether that was from a specific training course,
 7 I can't recall whether that was given or whether it's
 8 historic over a number of years through exposure to
 9 colleagues, senior colleagues or whatever. I cannot
 10 actually state categorically that I attended a course at
 11 BRE on that subject.
 12 Q. If that's the case, and you can't recall ever receiving
 13 any training of that nature, how did you go about your
 14 task of supervising Phil Clark and making sure that he
 15 stayed the right side of the line when dealing with
 16 clients?
 17 A. I think the general instruction was not -- try not to,
 18 or not to engage in conversations talking about
 19 competitors' products, talking about offering advice as
 20 to an opinion as to what would pass. As I said, as
 21 a culture in a place that you worked, it was pretty much
 22 the norm, and it was one of those that it was the done
 23 thing, working in both certification and testing, or
 24 even a lot of the testing that you deal with outside of
 25 UKAS is all highly confidential. It's not something you

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1 should discuss.
 2 Q. You say the general instruction; was that general
 3 instruction written down so that each BRE employee
 4 involved in a test would know to the letter what to do
 5 and what not to do?
 6 A. There was a code of conduct that was issued to the
 7 staff, which is probably worth reviewing. That's not in
 8 my evidence, because it wasn't actually prepared --
 9 asked in this, but there was definitely codes of conduct
 10 with instructions of information on what staff should
 11 and shouldn't do.
 12 Q. Right. Let's look at that and let's see how far we go.
 13 Could you go, please, to {INQ00014067}. This is
 14 a document dated 24 March 2017, BRE Global publication,
 15 revision 0.1, can you see that?
 16 A. Yeah.
 17 Q. It's a statement of impartiality, and it says,
 18 "Statement of Impartiality" at the top.
 19 Now, I'm going to show you some of the details in
 20 this document in just a moment, but when you referred to
 21 a code of conduct just a moment ago in your evidence,
 22 were you referring to this document?
 23 A. No, there was another one that was signed by members of
 24 staff.
 25 Q. Oh, I see.

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1 You can see that the date of the publication of this
 2 document is 24 March 2017. Was there a precursor to
 3 this document, an earlier document?
 4 A. I don't know specifically. I would imagine. I would be
 5 surprised if there wasn't.
 6 Q. Right. Okay. Do you know what prompted the publication
 7 of this document?
 8 A. It might have been the change of the standard, because
 9 the dates of the standard, you got a new ISO 17025
 10 issued at 2017.
 11 Q. I see.
 12 Let's just look at this. It says "Publication".
 13 What committee or group of people within the BRE would
 14 decide whether a document such as this should be
 15 published?
 16 A. This would be at board level.
 17 Q. Right.
 18 A. (inaudible) quality system.
 19 Q. Did you sit on that board?
 20 A. No.
 21 Q. When it was published, do you think you would have seen
 22 it at the time or very shortly after it was published?
 23 A. There would have been notifications out for issuing of
 24 those sort of QA documents, quality documents, yes.
 25 Q. Now, you mentioned the code of conduct a moment ago.

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1 Let me see if we can identify that from the record. Is
 2 this the document at {BRE00005388}? Let's have a look.
 3 A. Yeah.
 4 Q. Okay. When did that document come into force? When was
 5 it first used, to the best of your recollection, within
 6 the BRE?
 7 A. I wouldn't know. It was quite — maybe in 2000 —
 8 between 2000 and 2010.
 9 Q. Just scanning down that document, there's clearly
 10 an undertaking to comply with, among other things, the
 11 ethical requirements of BRE certification. But just
 12 help me with it: I don't think we see in there any clear
 13 undertaking not to give advice or act as a consultant in
 14 any way to your client. Am I right about that or am
 15 I wrong about that?
 16 A. Well:
 17 "To treat as confidential all information received
 18 or obtained while performing duties for BRE
 19 Certification and not to divulge such information for
 20 personal advantage."
 21 Possibly it could be within that one.
 22 Q. Okay.
 23 Can we go back, then, to the statement of
 24 impartiality we were looking at a moment ago, the last
 25 document, {INQ00014067}. Were you involved at all in

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1 the decision to publish this document?
 2 A. No.
 3 Q. Were you involved at all in its drafting?
 4 A. No.
 5 Q. Can we take it that, nonetheless, you agree with the
 6 principles set out in it?
 7 A. Yes.
 8 Q. Now, the principles set out in it are quite broad.
 9 For example, if we look at paragraph 2:
 10 "BRE Global also recognises the following potential
 11 threats to impartiality."
 12 And there is a list of them set out there.
 13 Did you ever receive any further guidance in
 14 relation to how to maintain impartiality other than that
 15 set out in the code of conduct we've seen or this
 16 statement of impartiality?
 17 A. I can't remember specific training but, as I said, it
 18 was part of your day-to-day work that you kept things
 19 confidential, avoided giving advice. It was just known
 20 as a no-go area, really, but I can't remember specific
 21 training.
 22 Q. Looking at paragraph 3 it says:
 23 "BRE Global has therefore established a 'Committee
 24 for safeguarding impartiality' whose primary function
 25 is:—

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1 "a) to assist in developing the policies relating to
 2 the impartiality of our certification activities,
 3 "b) to counteract any tendency on the part of BRE
 4 Global to allow commercial or other considerations to
 5 prevent the consistent objective provision of our
 6 certification activities,
 7 "c) to advise on matters affecting confidence in
 8 certification, including openness and public perception,
 9 and
 10 "d) to review the impartiality of the audit,
 11 certification and decision making processes of the
 12 certification business of BRE Global ..."
 13 I've read all that to you.
 14 In relation to the committee that's referred to
 15 there, who was on that committee from this time,
 16 March 2017?
 17 A. I don't know. The sign-off for those, it would have
 18 been the responsibility of the compliance department to
 19 draft and produce those documents, so who was actually
 20 involved in that I wouldn't know prior to publication.
 21 Q. I see.
 22 Looking at item 3(b):
 23 "To counteract any tendency on the part of BRE
 24 Global to allow commercial or other considerations to
 25 prevent the consistent objective provision of our

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1 certification activities."

2 Had there been a concern before March 2017 that the
 3 BRE had been allowing commercial or other considerations
 4 to prevent the consistent objective provision of
 5 certificates?
 6 A. None that I was aware of, but can I ask that maybe
 7 this — the date of publication of this document and the
 8 reasons for doing so? Maybe that's something that BRE
 9 can address, because I haven't got the background or
 10 knowledge of the reasoning for the re-issue of that
 11 document.
 12 Q. What about (d), lack of impartiality in the audit,
 13 certification and decision-making processes of the
 14 certification business of BRE Global? Had there been
 15 a concern about that?
 16 A. No.
 17 Q. Has the committee ever had to consider you or your work
 18 during the time you had at the BRE, at least from 2014
 19 onwards?
 20 A. No.
 21 Q. Can we look at {BRE00003670}, please. This is an email
 22 exchange in July 2014 between the BRE and Kingspan
 23 regarding LPS 1581 and BS 8414—2 assessments.
 24 If we go to the bottom of page 2 {BRE00003670/2}, we
 25 can see there is an email from Ivor Meredith to you and

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1 Damien Ward of 10 July 2014. Do you see that? If you
 2 could go on from the bottom of page 2, it goes on over
 3 a few pages, to page 4 {BRE00003670/4}. At the top of
 4 page 4, item 9, it says:
 5 "Finally we wish to progress the next two tests at
 6 your earliest convenience however have requested some
 7 feedback off Stephen Howard as to the best way to test
 8 going forward. Stephen can you please advise how soon
 9 we can look at this?"
 10 If we go back to page 2 {BRE00003670/2}, we can see
 11 your response to Ivor Meredith on 11 July. At page 2
 12 you say, "See below, Stephen Howard", and that
 13 indicates, I think, that you have responded to his
 14 various queries by commenting in his email in text
 15 highlighted in yellow; is that right?
 16 A. Yes.
 17 Q. I see.
 18 So just following it down, then, bottom of page 2,
 19 where it says:
 20 "Ok — the quote is straightforward ..."
 21 That's you, is it?
 22 A. Yes.
 23 Q. I see. So then if we go back to page 4 {BRE00003670/4},
 24 under item 9, it's you, isn't it, then, who says this:
 25 "I think the time now is opportune. What I don't

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1 have is an idea of all of the variables that need to be
 2 covered (or more importantly what stays the same), and
 3 what your main commercial drivers are. Would 1/2 day
 4 with the Kingspan insulation team (at yours) be the way
 5 forward?"
 6 Now, do you recall Mr Meredith asking you for
 7 feedback as to the best way to test going forward?
 8 A. The conversation would be around basically testing so
 9 that you identify what are the worst—case scenarios to
 10 test, ie what are the hardest systems to test, and the
 11 aim would be — and it's common across the fire industry
 12 and it's common across the test labs — to set your
 13 testing up so you are testing the worst—case scenario.
 14 So potentially, if the testing's successful, you can
 15 then via assessment say, "We accept this data and we
 16 believe on this basis, on the basis of that test report,
 17 that this modification to the system is suitable".
 18 Q. Did you actually have a meeting, the half day with the
 19 Kingspan Insulation team?
 20 A. No, I don't believe that ever happened.
 21 Q. Why did you suggest it?
 22 A. So that I could understand the number of different
 23 systems that they wished to place on the market or what
 24 they perceived they could get from a set of tests, and
 25 to provide basically a framework where we could identify

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1 the systems and the samples that we considered would be
 2 the hardest to test, or the hardest to meet the BR 135
 3 criteria.
 4 Q. Why did you need to understand what they perceived they
 5 could get from a set of tests?
 6 A. Because what — if they're doing multiple tests, that
 7 data could, at the time, and still can, be used for
 8 assessments or extended applications, and knowing those
 9 rules means that you can test for the test reports to be
 10 accepted into a set of rules that exist in the standard
 11 or within the organisation.
 12 Q. You say that you wanted to understand the number of
 13 systems they wanted to put on the market and to provide
 14 a framework, you say, "basically a framework where we
 15 could identify the systems and the samples that we
 16 considered would be the hardest to test".
 17 In summary, are you saying that you wanted to have
 18 this meeting with them so that you could glean more
 19 information from them with a view to being able to give
 20 them that advice?
 21 A. Well, as I said, it's standard laboratory practice to
 22 advise the clients of the most onerous testing
 23 configurations. It's done often. Now, without knowing
 24 what they were aiming to achieve, it's — we couldn't do
 25 that. As I said, that's standard laboratory practice.

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1 In some areas there's documents and guidance and rules
 2 in place; in other areas, like cladding, that's only
 3 recently been developed. But without knowing what they
 4 looked to achieve, we can't set the test programmes up.
 5 Q. Can't set the test parameters, did you say?
 6 A. The test programmes. Well, test ...
 7 Q. Was it common for feedback of this type to be sought
 8 from you by clients?
 9 A. It's common across the fire testing sector. It's common
 10 across the test labs.
 11 Q. Yes. Was it common for feedback of this type to be
 12 sought from you by clients?
 13 A. Yes, either directly or indirectly.
 14 Q. Was it common for this type of feedback to be given by
 15 the BRE and for these types of meetings and discussions
 16 to be held with clients?
 17 A. Yes.
 18 Q. It looks, on the basis of what you have told us just now
 19 on this email, that this is a request by them for
 20 commercial advice; do you accept that?
 21 A. No, it's not commercial advice, it's stipulating — it's
 22 actually defining what you should test to maximise the
 23 scope of the testing, and, as I said, it's common,
 24 there's things called extended application rules that
 25 are associated with test standards, there's direct

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1 application rules that are extended — that are
 2 associated with standards, and laboratories are expected
 3 to know and implement those rules.
 4 Q. Why did you ask Mr Meredith what his main commercial
 5 drivers are?
 6 A. To understand the systems that they were looking to
 7 cover, not actually what's going to — it was: what's
 8 your main commercial drivers, in that what have you been
 9 asked to put up on walls?
 10 Q. That's not quite the same. Why did you ask him what the
 11 main commercial drivers are, rather than what
 12 configurations you want to test?
 13 A. Turn of phrase. It would be: what's your main — what
 14 are you being asked to put up on walls, basically.
 15 That's what I meant: what's your drivers?
 16 Q. Well, what are your main commercial drivers, we can
 17 argue about the language, but you're asking him what his
 18 financial goals are or what his financial motives are.
 19 Why was that of any concern of yours?
 20 A. Well, I don't believe it was asking him what his
 21 commercial — it was the turn of phrase, and — which
 22 I'd used at the time was: what's your drivers, ie what
 23 are you being asked to produce the most of, or what
 24 market are you being asked to address? What systems are
 25 you being asked for BR 135 or testing to 8414 and

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1 BR 135? As I said, it's a common question.
 2 Q. Who was the Kingspan Insulation team that you were
 3 suggesting you should meet to be able to gather more
 4 information?
 5 A. It would have been at that time Ivor Meredith and
 6 whoever else he wished to bring in.
 7 Q. Well, you didn't suggest a half-day meeting with
 8 Ivor Meredith, you suggested one with the
 9 Kingspan Insulation team. My question was really
 10 directed at who else you wanted to see in order to
 11 obtain the information so that you could provide the
 12 feedback he'd requested?
 13 A. Well, it would have been other people that could have
 14 supported Ivor or provide the information on what they
 15 needed to test or what they were being asked to supply
 16 into the market, and the technical configuration of
 17 those.
 18 Q. Let's go to {BRE00005054}, please. This is quite a long
 19 email chain in August 2014 between Kingspan and the BRE,
 20 so we'll take it in stages.
 21 Can we start with page 4 {BRE00005054/4}. This is
 22 an email from Ivor Meredith to Phil Clark and you, and
 23 to Damien Ward as well, copied to others at the BRE.
 24 Ivor Meredith says, under the subject "Scan from
 25 SINGER":

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1 "Thanks Phil.
 2 "Another question for you and Stephen and Damien.
 3 "Once this is boxed off we are good to go.
 4 "We would like to test 200mm of insulation however
 5 my current lead time for this product is very long thus
 6 it would be more practical to test using two layers of
 7 100mm. This would be installed using exactly the same
 8 construction as previously tested.
 9 "If we do this are the BRE happy to write into
 10 a classification assessment that this result would cover
 11 exactly the same construction with an individual or
 12 multiple layer insulation thickness varying from 80mm
 13 200mm?"
 14 Just to be clear, this email chain is in relation to
 15 BS 8414 tests on systems incorporating K15, at least
 16 have you any reason to disagree with what I've just put
 17 to you?
 18 A. No, it would have been based on that.
 19 Q. Yes.
 20 If we go, then, up to page 3 {BRE00005054/3},
 21 please, we can see that you respond to Ivor Meredith on
 22 18 August 2014, copied to Phil Clark, subject "Cladding
 23 tests", and you say:
 24 "Ivor,
 25 "As a minimum, we would need tests at either end of

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1 the insulation thickness range.
 2 "Building up 200mm in layers for a single test
 3 doesn't really give us that info. (if I have understood
 4 correctly)
 5 "Is the 200mm system going to be repeat of one of
 6 the existing tested systems?
 7 "I am also aware of the request below from you."
 8 Then in italics you say:
 9 "I appreciate your position/comments on the other
 10 queries. With regards the next ten tests we need to
 11 move on this quickly thus we will try and sketch out the
 12 sort of scope we desire."
 13 Then you go on to say:
 14 "I need to fully understand the variables we need to
 15 consider. The offer still stands for me to come up to
 16 you and go through this so we can try to meet your
 17 requirements."
 18 You then quote a section from an earlier email,
 19 I think, regarding Mr Meredith's request for feedback on
 20 the best way to test going forward and your offer for
 21 the half day. You can see that that's now become
 22 item 1, but it was item 9 in the email we looked at
 23 earlier; yes?
 24 A. Yes.
 25 Q. Then at the end of that little section, you put:

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1 "How do you want to progress the planning of the
2 next series of tests?"
3 Now, just pausing there, what are the other queries
4 that you're referring to in the italicised section?
5 A. There might have been other testing going on. I don't
6 have a specific recollection on that point. There's
7 probably other emails around that time that I don't
8 recall that would actually directly answer that
9 question.
10 Q. Now, I think you told us that the half-day meeting that
11 you suggested never went ahead. Did the discussion go
12 ahead in another form, on the telephone, email, matters
13 of that nature?
14 A. I don't believe it did, I just don't think we ever got
15 to that point of reviewing their systems and basically
16 saying, "If you want to — if you wish to test — if you
17 wish the scope of the document to be max and min
18 insulation, then you have to test both". I don't
19 believe we ever got there.
20 Q. If we go up to page 2 {BRE00005054/2}, we can see
21 Mr Meredith's response to you the same day,
22 18 August 2014, again copied to Phil Clark, and he says:
23 "Hi Stephen, thanks for coming back to me.
24 "This would be tested in exactly the same
25 configuration as the last test however we would be

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1 looking to do an extreme of thickness i.e. so we can
2 extend our approval to 'perhaps' state behind terracotta
3 K15 within a system can meet the requirements of BR 135
4 at thickness in single and multiple layers from 80mm to
5 200mm. As discussed we are capped at 120mm at the
6 moment but would like to cover up to 200mm could we do
7 this in 2 x 100 or 80 plus 120mm.
8 "We [seek] your guidance at the earliest possible
9 opportunity as I would like to start shipping materials
10 and bring the left over material back."
11 Then he goes on, over the page {BRE00005054/3}:
12 "With regards the other questions that are secondary
13 compared to this query. Please call if easier."
14 Do you recall whether you did in fact call
15 Mr Meredith to discuss the subject of this email?
16 A. I don't remember whether I called him. It ...
17 Q. It's very clear from what he's asking you, isn't it,
18 that he was wanting your guidance? Did you go back to
19 him and say, "Well, I'm terribly sorry, I can't give you
20 this kind of guidance"?
21 A. All we're being asked there, which is standard
22 laboratory practice, is to define the limits in which he
23 would need to test if we could then feed into
24 an assessment report from it. That is standard
25 laboratory practice across reaction to fire, fire

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1 resistance and other areas.
2 Q. We can see your response, if we go to page 2
3 {BRE00005054/2} a little bit higher up the page. You
4 say, and this is now 20 August 2014:
5 "The approach seems sensible and we can accommodate
6 the range of insulation.
7 "Same build—up of system but with thicker
8 insulation.
9 "We will likely need to consider how the boards are
10 mounted (in terms of liner) so that there is no
11 discussion 'later' if you want to mix and match foam
12 thicknesses.
13 "On the strip down, it will be probably worth
14 looking at how far in the board was affected by the fire
15 for future reference.
16 "When are you going to start to ship?"
17 Then if we go to the bottom of page 1
18 {BRE00005054/1} we can see Mr Meredith's response to
19 you, also on 20 August, and he asks you the question:
20 "What are the possibilities to mix and match the
21 foam thicknesses i.e. can two x 100 be argued to perform
22 the same as a 150 and a 50?? Ideally we would test with
23 200 but it's simply not available at this time."
24 Then he goes on over the page, at the top of page 2
25 {BRE00005054/2}:

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1 "As far as mounting goes they will just be thrown up
2 in a brick bond pattern with plastic fixers. I'm
3 looking to ship as soon as we have this question
4 answered.
5 "Any advice is appreciated."
6 Note that: "Any advice is appreciated".
7 You respond the next day, if we can go back to
8 page 1 {BRE00005054/1} again, please, 9.36 on 21 August,
9 middle of the screen there:
10 "Morning Ivor.
11 "We were on the same wave length. I had made the
12 assumption that it would be '200mm' either as a single
13 slab or in sections.
14 "The comment regarding the mounting (which I should
15 have been clearer on) was in reference the facing
16 material on the insulation. Current thinking is that
17 this should be installed with no facing material between
18 sections. This should provide a 'worse' case scenario
19 and answer any questions should these be raised in the
20 future.
21 "Can you let me know timescales for shipping.
22 "Are we at the point now where we should look at
23 options to allocate a frame for your future tests (so
24 you go back on the same frame) or do we need to see how
25 this one performs?"

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1 Now, when you say, "Current thinking is that this
2 should be installed with no facing material between
3 sections" — it's highlighted in yellow — what did you
4 mean by that?
5 A. Insulation material can come in a variety of facing
6 materials on the front for various purposes. The
7 current thinking was if they wished us to state that 80
8 and 120—mil insulation would be — have a similar
9 performance or the same performance as 200 millimetres
10 of insulation, those facing materials shouldn't be
11 present because the view at the time was that was the
12 worst—case scenario.
13 Q. I see. So just so that I've got your evidence, did you
14 mean that when it was mounted for the test, the section
15 slabs of K15 joining each other to make up the total
16 thickness required should not be faced?
17 A. That's right.
18 Q. Because that would then provide a worst—case test rig?
19 A. That was the proposal at that time.
20 Q. Was that not advice about the design of a test rig?
21 A. As I said, it's standard — we don't regard that as
22 consultancy advice, it's just standard laboratory
23 practice, to review all the parameters that you were
24 going to test, ask the questions to make the test the
25 most effective. It's not saying to Ivor, "Well, you

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1 shouldn't test like that because it will pass or fail",
2 it's saying to Ivor or saying to others, "If you test
3 the 200 millimetres in this configuration, we can
4 express the opinion that this is a worst—case scenario".
5 It's not providing advice that the system will pass or
6 fail, it's telling them what is laboratory practice and
7 what is fire testing practice for dealing with multiple
8 thicknesses of insulation.
9 Q. No, but isn't it advice about the best way to set up the
10 test rig?
11 A. It's advice in terms of the most onerous test
12 configuration, ie if you test without facings, then we
13 are going to be — we would be in a position to say you
14 can test with either homogeneous insulation or in slab
15 form. It's not advice saying: if you do this, you will
16 pass.
17 Q. No, I understand the qualification you're putting, but
18 I think you accept that it was the giving of advice
19 about the design of a test rig in order to achieve or in
20 order to establish a worst—case kind of rig?
21 A. Yes, it's information provided to the test sponsor —
22 which, as I said, is common across the whole of the
23 labs — what the standard approach would be and how we
24 should do that.
25 Q. Do I take it from that answer that this sort of advice

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1 was something the BRE commonly gave its clients other
2 than Kingspan?
3 A. It's common across the fire testing labs, yes.
4 Q. I was talking about the BRE. I will repeat the
5 question —
6 A. It's common across the BRE fire test (inaudible).
7 Q. Can we look at {BRE00003449/2}, please. This is part of
8 an email chain from September 2013. Page 2 is an email
9 which starts on 12 September 2013, in fact I think it
10 ends that day as well, it's the last email on the screen
11 in front of you, and it's to Martin Gilbride and
12 Jay Humphries.
13 (Interruption)
14 Let's go back to the document. This was an email of
15 12 September 2013 from you to Martin Gilbride and
16 Jay Humphries, and can you just tell us who they were,
17 do you know?
18 A. Jay Humphries and Martin Gilbride basically worked out
19 of Holywell, which is to the north of Wales. So they
20 dealt specifically with the sandwich panels, which are
21 the twin skin products with a PIR insulation between the
22 outer skins.
23 Q. Right. Which organisation do they work for, just to be
24 clear?
25 A. It's Kingspan Limited.

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1 Q. You say:
2 "Martin, Jay.
3 "Has Kingspan any further thoughts on the scope of
4 the cladding tests?"
5 Do you see that?
6 A. Yes.
7 Q. Were you referring there to tests involving K15?
8 A. No.
9 Q. What were you referring to, is this sandwich panels?
10 A. Yes.
11 Q. Going up then to page 1 {BRE00003449/1}, we can see
12 Martin Gilbride responds to you on 11 October 2014, and
13 he says:
14 "Apologies for the delay in getting back to you.
15 The attached info is a helicopter view of things. If
16 you need extra details, we can drill into these when
17 needed."
18 Then he sets out a summary, "There are 8 types of
19 construction for consideration", and some further
20 details below that.
21 He then asks a basic question, just below those six
22 bullet points. He says:
23 "The basic question is:
24 "# Would the testing of items 4, 6, 8 allow for the
25 assessment of other systems eg. Take system 8, its

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1 vertical AWP. Would the testing of it approve system 7
 2 i.e. horizontal AWP or would we test the horiz AWP to
 3 approve both orientations?
 4 "One other point, on the thickness of panel that we
 5 test, do we go with the thinnest or the thickest? At
 6 this moment [the] guys are only looking for 150mm on the
 7 Kreate system and 100mm on the CS and AWP systems.
 8 However, the CS based system in the future could be
 9 100–175mm and the AWP could be 100–150mm, so could do
 10 with your opinion on this also.
 11 "The end game being Approval to BR135.
 12 "If we can iron out some of this, we can then start
 13 making plans. Let us know what you think."
 14 I know it wasn't K15, as we can see, it's sandwich
 15 panels, but this was a clear request for advice from you
 16 from Kingspan, wasn't it?
 17 A. It's a clear request for us to stimulate — sorry,
 18 stipulate what we thought was a worst—case scenario for
 19 testing, and to therefore allow data to be used for
 20 assessment purposes. It's not, "If you test in this
 21 configuration, we think you will pass", it's, "We think
 22 you need to test at both ends of this variable, from
 23 experience we believe this configuration would be worse
 24 to test than that one."
 25 Q. Your response comes at the top of page 1, 11 October,

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1 about 30 minutes later on the same day. You just say:
 2 "Thanks very much — we will begin to review."
 3 You don't say, "I'm terribly sorry, we can't give
 4 you an opinion about how to set up your test", do you?
 5 A. No, because the scope of what we were doing was clear,
 6 and the limitations of that is to define what we
 7 considered to be the most onerous set of test
 8 configurations then to be used for assessments. Now,
 9 that is the process that's going on, and all I can say
 10 is that's common across BRE and fire testing labs.
 11 Q. Can we go to {BRE00003448}, please. This, I think, is
 12 a further email run in the communications between you
 13 and Jay Humphries and Martin Gilbride. If we look at
 14 the second email down on that page, you will see that
 15 it's an email of 1 November 2013 from you to those two
 16 gentlemen:
 17 "Jay, Martin,
 18 "We have been through all of the systems and this is
 19 our current thinking on a test and assessment
 20 programme."
 21 Then you set out some details, and then you say in
 22 the penultimate line:
 23 "We are happy to use this as a starting point for
 24 discussion."
 25 Again, this is clearly, isn't it, the BRE giving

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1 advice to Kingspan about their testing plans; yes?
 2 A. No, it's advice telling them what we considered to be
 3 the most onerous configurations. So if we do this, then
 4 we're not saying whether it passes or fails, what we are
 5 saying is that will give you a set of data that we can
 6 use for other extrapolations. And as I said, it's
 7 common throughout the fire industry — fire testing
 8 industry.
 9 Q. Yes. Was this question not one solely for the test
 10 sponsors? Namely they come along with a rig, they ask
 11 you to test it, you test it and you produce the results?
 12 A. No, as I said, the current system is there's
 13 considerable numbers of extended application rules,
 14 direct application rules, product standards,
 15 classification documents, that give a whole list of
 16 parameters that you should consider in test programmes.
 17 There's a lot of documentation out there. I cannot —
 18 I think it's appropriate for test laboratories to know
 19 those and to be able to say, "If you wish this range of
 20 insulations to be — insulation thicknesses to be
 21 covered, you should test at max and min; if you want the
 22 range of colours to be tested, then the information or
 23 guidance that we can access is this".
 24 It's not telling them what they need to do to get
 25 through a test; it's telling them what we consider to be

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1 the worst—case scenario.
 2 Q. Well, it's clear from this email, and all the others
 3 we've seen up to this point, but at least on this one,
 4 that you're setting out the BRE's opinion on
 5 an appropriate test and assessment programme.
 6 Given that, as we can see from this email, your own
 7 words, how do you consider you were able to give that
 8 advice while at the same time remaining impartial?
 9 A. Because the advice is not on the — the advice is not
 10 advice on how to get through the test. The advice is
 11 giving experience or knowledge on what test parameters
 12 are critical and what should be tested to maximise the
 13 effectiveness of the test programme. As I said, it's —
 14 there's lots of rules, there's lots of documentation
 15 that's available in support of this.
 16 Q. Why would that not be the giving of advice or
 17 consultancy?
 18 A. Because what we're not doing is — all we're doing is
 19 imparting standard knowledge with regard to testing, and
 20 all we are saying is, "You need to test in this
 21 configuration". We're not saying, "If you test in this
 22 configuration you will pass" because we don't know the
 23 results of that.
 24 Q. When you are answering my question about impartiality,
 25 are you telling us that in fact you thought that you

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1 crossed the line into partiality when you advised on
 2 what would pass or what would fail? Is that where you
 3 draw the distinction between partiality and
 4 impartiality?

5 A. Yes, I think at that point, if you get into the
 6 expression of an opinion, then you are — yeah, I think
 7 that is problematic.

8 Q. But you were giving an opinion, weren't you, frequently,
 9 on the best kind of rig to test?

10 A. No, I was giving an opinion on what the upper and lower
 11 parameters would be and what the worst kind of rig to
 12 test is. There is no information in there that says,
 13 "This will pass"; it's, "The best data you will get will
 14 be — or the most usable data is if you follow this
 15 configuration", and it passes.

16 Q. Is it fair to say that, throughout the emails we have
 17 been looking at, and I've given you a selection, it was
 18 the BRE's practice to work closely with, collaborate, to
 19 use the Chairman's word, with Kingspan on the design and
 20 configuration of their test rigs?

21 A. There was a — it wouldn't go as far as design, it would
 22 be setting the parameters between which your client
 23 should test. So, again, it would be max insulation,
 24 minimum insulation, you might have to consider colours
 25 and things of that nature.

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1 Q. In an email we've just looked at — not the one on the
 2 screen, but we've just looked at — (inaudible) that the
 3 end game was approval to BR 135, so you were being
 4 sought your views with that as the ultimate goal,
 5 weren't you?

6 A. Well, as I said, they would ask what technical reviews
 7 we could carry forward from a set of test data, and that
 8 was the information that we were providing. As I said,
 9 it's knowledge of testing principles and extended
 10 application rules used on a regular basis.

11 Q. Do you agree that while you were in this role as joint
 12 business group manager at the BRE, you were closely
 13 involved in providing guidance and advice to Kingspan in
 14 relation to testing and assessment of a variety of
 15 external cladding façades, and gave advice as to which
 16 of a number of specific construction types you would
 17 recommend?

18 A. Well, the guidance is basically: what is the most
 19 onerous to test and what system — what we could cover
 20 with that test data. I think that the scope of what —
 21 that scope of information provided to the client I think
 22 is there in the emails. It's not advice, it's not
 23 telling them how to pass, it's not telling them,
 24 "Actually, you need to do this, actually we know that
 25 this product type performs better than this one", it is

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1 the parameters to consider when they're putting forward
 2 a test structure(?).

3 Q. Do you accept that you did not maintain, by giving this
 4 advice, the standards of impartiality that we've seen in
 5 the standard, the ISO standard, and the rule that BRE
 6 was not supposed to advise clients?

7 A. No.

8 MR MILLETT: You don't.

9 Mr Chairman, is that a convenient moment?

10 SIR MARTIN MOORE-BICK: I was just about to suggest it might
 11 be, Mr Millett, so I think it must be.

12 You have some more questions, I imagine, for
 13 Mr Howard, have you?

14 MR MILLETT: We have. We've come to a natural point in the
 15 questioning anyway for a break, quite apart from the
 16 fact that it's —

17 SIR MARTIN MOORE-BICK: I think he might like to know how
 18 much longer you will detain him.

19 MR MILLETT: Yes. Well, I think we have already said that
 20 it would be for the morning tomorrow, but if we can go
 21 a little shorter than that, it would obviously be
 22 helpful for him. It is likely it will take the morning.

23 SIR MARTIN MOORE-BICK: Right.

24 Well, Mr Howard, I think you were warned that we
 25 might need you again tomorrow.

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1 THE WITNESS: I was.

2 SIR MARTIN MOORE-BICK: It sounds as though we shan't need
 3 you beyond lunchtime, if that's of any help, I don't
 4 know.

5 So we will stop there for the day. Please remember
 6 not to talk to anyone about your evidence or anything
 7 relating to it over the break.

8 We will resume at 10 o'clock tomorrow, and I think
 9 there is a fair chance that you'll get away by
 10 lunchtime.

11 THE WITNESS: Thank you.

12 SIR MARTIN MOORE-BICK: All right. So we will see you
 13 tomorrow. Thank you very much.

14 10 o'clock tomorrow, thank you.

15 (4.30 pm)

16 (The hearing adjourned until 10 am
 17 on Tuesday, 2 March 2021)

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