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<p>1 (9:00 a.m.)</p> <p>2 CHAIRMAN:</p> <p>3 Q. Before we turn it over to Mr. Johnson again, I</p> <p>4 understand, Madame Solicitor.</p> <p>5 MS. GLYNN:</p> <p>6 Q. We have some housekeeping items.</p> <p>7 CHAIRMAN:</p> <p>8 Q. We have some housekeeping.</p> <p>9 MS. GLYNN:</p> <p>10 Q. Just a reminder that late yesterday afternoon,</p> <p>11 we had entered the binder relating to FPL</p> <p>12 Company as Consent No. 13. We also have a</p> <p>13 document from Mr. Johnson, which is a summary</p> <p>14 of Ms. McShane's recommendations, which we'll</p> <p>15 enter as Consent No. 14, and Newfoundland</p> <p>16 Power has provided the response to undertaking</p> <p>17 No. 2 from Ms. Perry for a group of the peer</p> <p>18 companies that she used for her comparison.</p> <p>19 Thank you, Mr. Chair.</p> <p>20 CHAIRMAN:</p> <p>21 Q. I think we're back to you, Mr. Johnson.</p> <p>22 MS. KATHLEEN MCSHANE, RESUMES STAND, CROSS-EXAMINATION BY</p> <p>23 MR. THOMAS JOHNSON (CONT'D)</p> <p>24 MR. JOHNSON:</p> <p>25 Q. Yes. Good morning, Commissioners. Good</p>	<p>1 CHAIRMAN:</p> <p>2 Q. I was just wondering whether I'd have to</p> <p>3 reconsider my comments about the next 25</p> <p>4 years, you know.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. Okay. Ms. McShane, if we could turn to Tab 1,</p> <p>7 please?</p> <p>8 MS. MCSHANE:</p> <p>9 A. I have that.</p> <p>10 MR. JOHNSON:</p> <p>11 Q. Yes. This gives a brief description of FPL</p> <p>12 Group. It's a provider of electricity related</p> <p>13 services. The company has two principal</p> <p>14 operating subsidiaries, Florida Power and</p> <p>15 Light, which is FPL, and Nextera Energy</p> <p>16 Resources. FPL is a--the Florida Power and</p> <p>17 Light is a rate regulated utility engaged</p> <p>18 primarily in generation, transmission,</p> <p>19 distribution and sale of electric energy.</p> <p>20 Nextera Energy Resources is the company's</p> <p>21 competitive energy subsidiary which produces</p> <p>22 the majority of its electricity from clean,</p> <p>23 renewable fuels. FPL Group Capital Inc. is a</p> <p>24 wholly owned subsidiary of FPL Group, holds</p> <p>25 the capital stock of or has equity interest in</p>
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<p>1 morning, Ms. McShane.</p> <p>2 MS. MCSHANE:</p> <p>3 A. Good morning.</p> <p>4 MR. JOHNSON:</p> <p>5 Q. We're going to go to Florida now with FPL.</p> <p>6 MS. MCSHANE:</p> <p>7 A. I have that.</p> <p>8 CHAIRMAN:</p> <p>9 Q. Are you going through all of these?</p> <p>10 MR. JOHNSON:</p> <p>11 Q. Just--there's four more. I'm not going to</p> <p>12 spend a lot of time on each of them, Mr.</p> <p>13 Chairman.</p> <p>14 CHAIRMAN:</p> <p>15 Q. Yeah, just wondering.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. Yeah. I would advise the Panel that given the</p> <p>18 fact that there was overlap between Ms.</p> <p>19 McShane and Mr. Cicchetti that there's only</p> <p>20 like a relatively small number for Mr.</p> <p>21 Cicchetti.</p> <p>22 CHAIRMAN:</p> <p>23 Q. Yeah.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. That I don't have canvas.</p>	<p>1 FPL's group operating subsidiaries other than</p> <p>2 FPL and provides funding for these</p> <p>3 subsidiaries, including Nextera. As well,</p> <p>4 Fibrenet LLC, a wholly subsidiary of the</p> <p>5 company provides fibre optic services to FPL,</p> <p>6 telecom companies and other customers</p> <p>7 throughout Florida. Ms. McShane, if you could</p> <p>8 tell us if this is--FPL Group, would they be a</p> <p>9 big generator?</p> <p>10 MS. MCSHANE:</p> <p>11 A. They have a fair amount of generation, yes.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. What would a fair amount be?</p> <p>14 MS. MCSHANE:</p> <p>15 A. I don't have the number of megawatts in my</p> <p>16 head, but they're a big generator.</p> <p>17 MR. JOHNSON:</p> <p>18 Q. And how about their non-regulated side, is</p> <p>19 that a significant aspect for FPL?</p> <p>20 MS. MCSHANE:</p> <p>21 A. Yes, it is.</p> <p>22 MR. JOHNSON:</p> <p>23 Q. And in terms of significance, what would be</p> <p>24 the proportion?</p> <p>25 MS. MCSHANE:</p>

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1 A. I think in 2008, their generation provided
2 maybe 45 percent of earnings.
3 MR. JOHNSON:
4 Q. Their non-regulated?
5 MS. MCSHANE:
6 A. Yes.
7 MR. JOHNSON:
8 Q. Okay, and if we could turn to Tab 2? This is
9 a recent story, October 8th, 2009, where FPL
10 announces an agreement with FERC and it's a
11 story about Juneau Beach, Florida that Florida
12 Power and Light, which is a subsidiary of FPL
13 Group, of course, today announced it has
14 agreed to a settlement with FERC and the North
15 American Electric Reliability Corporation
16 related to a--I think it's a February 26 '08
17 power outage.
18 MS. MCSHANE:
19 A. Yes.
20 MR. JOHNSON:
21 Q. I think that bears out in the second paragraph
22 that FPL had to pay out 10 million dollars to
23 each of the United States Treasury and the
24 NERC and had to undertake to invest five
25 million dollars in transmission reliability

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1 enhancements and that these amounts would be
2 coming from FPL Group shareholder funds and
3 will not affect customer bills?
4 MS. MCSHANE:
5 A. Correct.
6 MR. JOHNSON:
7 Q. So would this be a significant fine in the
8 United States' context?
9 MS. MCSHANE:
10 A. Yeah, I think it's a fairly significant fine.
11 MR. JOHNSON:
12 Q. Okay. Are you aware of previous occasions
13 where the company has been fined?
14 MS. MCSHANE:
15 A. Not specifically, no.
16 MR. JOHNSON:
17 Q. Okay, and I note that this, according to the
18 third paragraph there, they explained what
19 happened and essentially on February 26th,
20 2008, there was a service interruption due to
21 human error and it caused an outage that
22 affected approximately 600,000 FPL customers
23 in south east Florida for an average of one
24 hour. That's what's confirmed in that record?
25 MS. MCSHANE:

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1 A. That's what it says.
2 MR. JOHNSON:
3 Q. Okay, yeah. How typical in the United States
4 landscape is there to be fines for service
5 interruptions?
6 MS. MCSHANE:
7 A. I don't understand what you mean, how typical.
8 MR. JOHNSON:
9 Q. Is it typical in the United States regulatory
10 landscape to have fines for service
11 interruptions?
12 MS. MCSHANE:
13 A. There will be fines under--if you break the
14 standards, or in this particular case, they
15 agreed to the fine, rather than go through a
16 whole process to investigate it. It's not
17 something--it happens on occasion. I don't
18 think it's an ongoing problem.
19 MR. JOHNSON:
20 Q. Have you ever heard of a fine in Canada for a
21 service interruption?
22 MS. MCSHANE:
23 A. Not specifically, but I think these, you know,
24 reliability standards are still being
25 developed across the country and I believe

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1 that the--where they are cross-bordered, that
2 the same standards will apply. For example,
3 you know, in Quebec, Ontario, Alberta, where
4 they connect to the grid.
5 MR. JOHNSON:
6 Q. But you're not aware of any specific regime in
7 Canada that stipulates fines of this nature?
8 MS. MCSHANE:
9 A. Not at this point, no. But again, I mean,
10 this is something that continues to be
11 developed.
12 MR. JOHNSON:
13 Q. Okay, understood, and could you turn to Tab 4,
14 Ms. McShane, please?
15 MS. MCSHANE:
16 A. I'm there.
17 MR. JOHNSON:
18 Q. And this is a recent story of September 28th,
19 2009 out of the Palm Beach Post in Florida,
20 and I take it, the first paragraph states, and
21 in this is in relation to some political
22 squabbling in Florida. The first paragraph
23 states "for decades, the Sunshine State has
24 been utility friendly, making regulatory
25 decisions that have allowed its power

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<p>1 companies to earn some of the highest profits</p> <p>2 of the nation. That, in turn, has brought</p> <p>3 these companies a wealth of investors." Would</p> <p>4 that be a fair characteristic of the situation</p> <p>5 in terms of how it's been perceived in</p> <p>6 Florida?</p> <p>7 MS. MCSHANE:</p> <p>8 A. I think it's more how it's been perceived by</p> <p>9 investors, as opposed to how it's been</p> <p>10 perceived in Florida, but yes, it's been</p> <p>11 perceived as a utility friendly state.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. Where the profits have been pretty handsome?</p> <p>14 MS. MCSHANE:</p> <p>15 A. The utility, FPL, has been a profitable</p> <p>16 utility.</p> <p>17 MR. JOHNSON:</p> <p>18 Q. And I take it that there is--this is what we</p> <p>19 referred to yesterday with some political</p> <p>20 controversy and I take it that they are</p> <p>21 proposing a 1.3 billion dollar a year base</p> <p>22 rate increase and that it's got a public</p> <p>23 flack, even at the Governor level in Florida,</p> <p>24 right?</p> <p>25 MS. MCSHANE:</p>	<p>1 MS. MCSHANE:</p> <p>2 A. Well, if it's indeed the case, you may see a</p> <p>3 fall in stock prices.</p> <p>4 MR. JOHNSON:</p> <p>5 Q. And investors might expect a--demand a higher</p> <p>6 return in order to put their money with FPL,</p> <p>7 correct?</p> <p>8 MS. MCSHANE:</p> <p>9 A. They may, yes.</p> <p>10 MR. JOHNSON:</p> <p>11 Q. Indeed. Now Ms. McShane, this was just a</p> <p>12 threat back in September 29th to replace the</p> <p>13 Commission if they were going to vote for an</p> <p>14 increase. Could you just turn the tab please</p> <p>15 to Tab 5? This is an update, October 7th,</p> <p>16 2009. Could you indicate what actually did</p> <p>17 happen?</p> <p>18 MS. MCSHANE:</p> <p>19 A. Tab 5?</p> <p>20 MR. JOHNSON:</p> <p>21 Q. Yes.</p> <p>22 MS. MCSHANE:</p> <p>23 A. You mean in terms of dismissal of the</p> <p>24 Commission staffers?</p> <p>25 MR. JOHNSON:</p>
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<p>1 A. That's what the article says.</p> <p>2 MR. JOHNSON:</p> <p>3 Q. And if you go down to about midway, where it</p> <p>4 talks about "Crist heightened investors</p> <p>5 trepidation over the FPL case recently when he</p> <p>6 threatened not to reappoint Commission</p> <p>7 Chairman Matthew Carter and Commissioner</p> <p>8 Katrina McMurrian if they voted in favour of</p> <p>9 the increase."</p> <p>10 MS. MCSHANE:</p> <p>11 A. I see that.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. Would that constitute political risk, the</p> <p>14 likes of which this jurisdiction has never</p> <p>15 seen?</p> <p>16 MS. MCSHANE:</p> <p>17 A. I'm not aware that there's been any specific</p> <p>18 political risk to date in this jurisdiction.</p> <p>19 That doesn't mean it's not a risk and there</p> <p>20 have been situations across Canada of</p> <p>21 political risk in regulatory jurisdictions.</p> <p>22 (9:15 a.m.)</p> <p>23 MR. JOHNSON:</p> <p>24 Q. What happens when investors' trepidation</p> <p>25 heightens because of political risk?</p>	<p>1 Q. Well -</p> <p>2 MS. MCSHANE:</p> <p>3 A. And the replacement of the Commission members?</p> <p>4 MR. JOHNSON:</p> <p>5 Q. Yeah, the story is out of Talahassee on</p> <p>6 October 7th, 2009 covered by AP.</p> <p>7 MS. MCSHANE:</p> <p>8 A. I see that.</p> <p>9 MR. JOHNSON:</p> <p>10 Q. That "the bond rating firm, Moody's, says</p> <p>11 Governor Charlie Crist's opposition to</p> <p>12 proposed rate increases may raise borrowing</p> <p>13 costs for Florida's two largest utilities."</p> <p>14 MS. MCSHANE:</p> <p>15 A. Yes, it says it may raise them.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. Right. "The firm issued a statement Wednesday</p> <p>18 saying it viewed the highly politicized</p> <p>19 atmosphere surrounding rate increase from</p> <p>20 Florida Power and Light and Progress Energy as</p> <p>21 both negative to their credit quality."</p> <p>22 MS. MCSHANE:</p> <p>23 A. Yes.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. And so Crist did go ahead, by the looks of</p>

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<p>1 this, to replace two of the five public 2 service commission members. 3 MS. MCSHANE: 4 A. He did. 5 MR. JOHNSON: 6 Q. Yeah. I'll just turn to the next one, Ms. 7 McShane. I think it's DUKE. 8 MS. GLYNN: 9 Q. DUKE would be Consent No. 15. 10 MS. MCSHANE: 11 A. I have DUKE. 12 MR. JOHNSON: 13 Q. 15? 14 MS. GLYNN: 15 Q. Yes. 16 MR. JOHNSON: 17 Q. On Tab 1, Ms. McShane, it gives a description 18 of DUKE Energy Corporation, an energy company 19 that provides services to three business 20 segments. The company's business segments are 21 US franchise electric and gas, commercial 22 power and international energy. During the 23 year ended December 31st, 2008, Crescent was a 24 reportable business segment of DUKE Energy. 25 However in '08, the company included the</p>	<p>1 They're headquartered in Charlotte, North 2 Carolina," et cetera. They carry on business 3 outside of the United States. Do they carry 4 on business in Canada? 5 MS. MCSHANE: 6 A. Do they carry on business in Canada? Well, 7 they spun off their operations which were 8 their gas operations, which were Canadian, 9 which were West Coast Union. I'm not sure 10 whether they still have an ownership position 11 in Spectra Energy, which were primarily 12 Canadian operations or largely Canadian 13 operations. 14 MR. JOHNSON: 15 Q. So I guess they would be talking about outside 16 of Canada and the United States as well then? 17 MS. MCSHANE: 18 A. Yeah, there are some international operations 19 that are not Canadian. 20 MR. JOHNSON: 21 Q. Okay, and because you mention in your direct 22 about some of the Canadian utilities holding 23 companies having operations outside of Canada 24 as well, didn't you? 25 MS. MCSHANE:</p>
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<p>1 operations of Crescent other business segment. 2 In September of '08, the company acquired 3 Catamount Energy Corp from Diamond Castle 4 Partners. In June '09, the company's 5 affiliate acquired Aquaytia Energy LLC from 6 the Maple Gas Corporation, a partially owned 7 subsidiary of Maple. I guess there's a lot of 8 corporate activity going on with these holding 9 companies, including DUKE. 10 MS. MCSHANE: 11 A. Well, in DUKE, I mean, there are some 12 relatively small unregulated operations. DUKE 13 is about 85 percent regulated operations. 14 MR. JOHNSON: 15 Q. And you say 15 percent unregulated, and would 16 that be--what's the unregulated, generation or 17 - 18 MS. MCSHANE: 19 A. Some would be generation, yes. 20 MR. JOHNSON: 21 Q. Okay. Now if you go into Tab 2, or Tab 3, 22 pardon me, page 5 of 16, at the overview 23 there, they again talk about what DUKE is and 24 they note in the second line, "the company 25 primarily operates in the United States.</p>	<p>1 A. I did. 2 MR. JOHNSON: 3 Q. Yeah, and regarding the amount of generation 4 that Duke Energy is into, do we have a sense 5 of what that amount is? I don't know right 6 offhand here. I'm wondering if you have a 7 sense of it. 8 MS. MCSHANE: 9 A. Well, they're a vertically integrated utility 10 and they're--so they're going to have, you 11 know, enough generation to meet their native 12 load in North Carolina. I don't know what the 13 number of megawatts is off the top of my head. 14 MR. JOHNSON: 15 Q. Do they use coal for generation? 16 MS. MCSHANE: 17 A. Yes, they do. 18 MR. JOHNSON: 19 Q. And just turn to Tab 2, and this is September 20 1st '09 story out of the Energy Economist and 21 what I'm referring to is the third paragraph 22 where they talk about "however, it is coal 23 that has seen the largest downturn in absolute 24 terms. Electricity generated from coal, the 25 United States' power industry mainstay,</p>

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1 dropped 13.27 percent between April 2007 and
 2 April 2009. By contrast, output from natural
 3 gas power plants rose 2.15 percent, supported
 4 by much lower gas prices and nuclear, 3.19
 5 percent. Conventional hydro electric was also
 6 up 5.58." So would this have been a hit on
 7 Duke, if they lost--if coal generation went
 8 down that much because of the price
 9 differences for natural gas?

10 MS. MCSHANE:
 11 A. Yeah, it would have had some impact on Duke.

12 MR. JOHNSON:
 13 Q. And just -

14 MS. MCSHANE:
 15 A. It wouldn't have had the impact in the
 16 regulated part of the business, which is again
 17 85 percent of their operating income.

18 MR. JOHNSON:
 19 Q. That paragraph we just looked at, three down
 20 from that, it talks about an earnings slump.

21 MS. MCSHANE:
 22 A. I see that.

23 MR. JOHNSON:
 24 Q. "The tough pricing environment has been
 25 reflected in second quarter earnings. North

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1 Carolina based Duke, one of the US largest
 2 electrical power companies, posted a small
 3 second quarter profit, but earnings were down
 4 21 percent from a year earlier." So are they-
 5 -what are they talking about there? The
 6 overall company, aren't they?

7 MS. MCSHANE:
 8 A. Yes, they are.

9 MR. JOHNSON:
 10 Q. So they were down 21 percent and they
 11 attribute that to what's happening with coal
 12 generation, don't they?

13 MS. MCSHANE:
 14 A. Partly, not in entirety, no.

15 MR. JOHNSON:
 16 Q. Okay, but it had a role to play in it?

17 MS. MCSHANE:
 18 A. Sure.

19 MR. JOHNSON:
 20 Q. Yeah. Just Tab 4 on Duke, the very first page
 21 dealing with the profile. "Duke Energy is the
 22 third largest electric power holding company
 23 in the United States based on kilowatt hour
 24 sales. Our regulated utility operations serve
 25 approximately four million customers located

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1 in five states in the southeast and midwest,
 2 representing a population of approximately 11
 3 million. Our commercial power and
 4 international business sections own and
 5 operate diverse power generation assets in
 6 North America and Latin America, including a
 7 growing portfolio of renewable energy assets
 8 in the United States." And Ms. McShane, does
 9 that sound comparable to a T & D like
 10 Newfoundland Power operating in Newfoundland?

11 MS. MCSHANE:
 12 A. Well, again, each of these companies has
 13 different characteristics. If you look at the
 14 overall investment risk profile of Duke
 15 Energy, it's highly regulated. It's viewed as
 16 a company that has--operates in the
 17 constructive regulatory environment. It's
 18 considered to have, you know, diversity of
 19 operations. If you look at the measures of
 20 investment risk, if you look at the Beta, the
 21 debt ratings, the financial risk, I mean, all
 22 of those factors lead to an overall investment
 23 risk profile that is, you know, from an
 24 investor's perspective, relatively low risk.
 25 So no, it's not completely comparable to a

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1 Newfoundland Power. No individual utility
 2 will be. I mean, every company is unique.
 3 Newfoundland Power is unique. But if you look
 4 at the, you know, overall sample of companies
 5 and the average of the various risk measures,
 6 I mean, this is a sample that you could view
 7 as in--of comparable risk to a Newfoundland
 8 Power. I mean, Duke Energy is considered to
 9 be one of the lower business profile--lower
 10 risk business profile integrated electric
 11 utilities. Not every vertically integrated
 12 electric utility is going to be viewed as
 13 relatively low risk, so they wouldn't be, you
 14 know, chosen for a sample.

15 MR. JOHNSON:
 16 Q. Ms. McShane, if you could--we'll revisit what
 17 we take generally from all of this, but if you
 18 could turn to page or Tab 4, page 22, where
 19 Duke gets into talking about a regulation
 20 focus.

21 MS. MCSHANE:
 22 A. Sorry, page 22 of?

23 MR. JOHNSON:
 24 Q. Tab 4, and what I'm referring there to is
 25 they're talking about "imagine a regulated

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<p>1 utility where customers are charged for the</p> <p>2 value they receive instead of the cost</p> <p>3 incurred. In such a world, utilities would</p> <p>4 focus on lowering their cost and delivering a</p> <p>5 valuable service to customers. If the</p> <p>6 services don't produce value, the customers</p> <p>7 doesn't pay," and then they talk about "this</p> <p>8 is the basic premise behind Duke Energy's</p> <p>9 innovative Save-a-Watt approach to energy</p> <p>10 efficiency. It is a fundamental shift away</p> <p>11 from the traditional cost of service model,</p> <p>12 focusing instead on a value of service</p> <p>13 regulatory model. Under Save-a-Watt, Duke</p> <p>14 Energy must ensure that its energy efficiency</p> <p>15 programs produce value in the form of</p> <p>16 verifiable energy reductions in order for the</p> <p>17 company to reduce its cost. In order for the</p> <p>18 company," I'm sorry, "to recover its costs."</p> <p>19 Is that similar to the Newfoundland Power</p> <p>20 model?</p> <p>21 MS. MCSHANE:</p> <p>22 A. Well, all utilities are moving towards</p> <p>23 focusing on energy conservation.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. But that's not what I asked you. Does that</p>	<p>1 and again for the cost of power. But under</p> <p>2 the save-a-watt model, the utility takes the</p> <p>3 risk. If the intended energy efficiency</p> <p>4 results aren't achieved, the customer doesn't</p> <p>5 pay." Now that's not traditional cost of</p> <p>6 service, is it?</p> <p>7 MS. MCSHANE:</p> <p>8 A. No, it's slightly different from original -</p> <p>9 MR. JOHNSON:</p> <p>10 Q. It is slightly different, isn't it? And this</p> <p>11 is a new regulatory focus, is it?</p> <p>12 MS. MCSHANE:</p> <p>13 A. For?</p> <p>14 MR. JOHNSON:</p> <p>15 Q. For Duke?</p> <p>16 MS. MCSHANE:</p> <p>17 A. Yeah, and it's a focus that other utilities</p> <p>18 are moving towards.</p> <p>19 MR. JOHNSON:</p> <p>20 Q. And just look at the bottom paragraph on page</p> <p>21 22. They talk about the save-a-watt approach</p> <p>22 again. "Save-a-watt approach to energy</p> <p>23 efficiency would help customers save money and</p> <p>24 create jobs, et cetera. At the same time, it</p> <p>25 provides utilities with a way to grow their</p>
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<p>1 look like Newfoundland Power's model?</p> <p>2 MS. MCSHANE:</p> <p>3 A. Well, I mean, this company still operates</p> <p>4 generally under a cost of service regulatory</p> <p>5 model. I mean, they are talking about the</p> <p>6 specific save-a-watt approach to energy</p> <p>7 efficiency, but the model that Duke Energy or</p> <p>8 Duke Power operates under is a cost of service</p> <p>9 model.</p> <p>10 (9:30 a.m.)</p> <p>11 MR. JOHNSON:</p> <p>12 Q. But just go over to the right, Ms. McShane,</p> <p>13 the second paragraph from the top. Unlike--or</p> <p>14 first paragraph, "unlike other regulatory</p> <p>15 approaches to energy efficient, save-a-watt</p> <p>16 ensures customers only pay for actual</p> <p>17 reductions in energy use because all programs</p> <p>18 undergo a rigorous third party process to</p> <p>19 verify the savings. Under more traditional</p> <p>20 regulatory models, customers pay for energy</p> <p>21 efficiency programs on whether they achieve</p> <p>22 the intended results. If power has to be</p> <p>23 sourced to compensate for a shortfall in</p> <p>24 energy efficiency, customers end up paying</p> <p>25 twice, once for the energy efficiency programs</p>	<p>1 business." Again, reflective of an</p> <p>2 entrepreneurial approach that we've seen in</p> <p>3 other utilities in the United States, haven't</p> <p>4 we?</p> <p>5 MS. MCSHANE:</p> <p>6 A. Yeah, utilities are entrepreneurial.</p> <p>7 MR. JOHNSON:</p> <p>8 Q. Well, in this jurisdiction, if the intended</p> <p>9 energy efficiency results from Newfoundland</p> <p>10 Power's conservation program don't end up</p> <p>11 being achieved, will Newfoundland Power be</p> <p>12 hurt by that?</p> <p>13 MS. MCSHANE:</p> <p>14 A. Sorry, would you repeat that please?</p> <p>15 MR. JOHNSON:</p> <p>16 Q. Yes. If, in this jurisdiction, Newfoundland</p> <p>17 Power's energy efficiency efforts don't end up</p> <p>18 producing the results, will Newfoundland Power</p> <p>19 be hurt by that, like Duke tends to say that</p> <p>20 it will be?</p> <p>21 MS. MCSHANE:</p> <p>22 A. So you're saying if they don't achieve -</p> <p>23 MR. JOHNSON:</p> <p>24 Q. The intended results, in terms of conservation</p> <p>25 efficiency, will Newfoundland Power end up</p>

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<p>1 getting hurt by that?</p> <p>2 MS. MCSHANE:</p> <p>3 A. They would be hurt by not achieving the sales</p> <p>4 that they said they were going to achieve.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. Yeah, but will it be a pocketbook effect on</p> <p>7 them? Will they be denied their cost of the</p> <p>8 program, for instance?</p> <p>9 MS. MCSHANE:</p> <p>10 A. Well, I don't believe that there is any</p> <p>11 indication that they will, no.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. No, but that's what Duke is indicating though,</p> <p>14 isn't it?</p> <p>15 MS. MCSHANE:</p> <p>16 A. In this particular case, yes.</p> <p>17 MR. JOHNSON:</p> <p>18 Q. Well, it's only their filing. That's all I</p> <p>19 can go on.</p> <p>20 MS. MCSHANE:</p> <p>21 A. Well, it's in Ohio, which is one of the</p> <p>22 jurisdictions. It's not the big jurisdiction.</p> <p>23 MR. JOHNSON:</p> <p>24 Q. So are you saying that--you know for a fact,</p> <p>25 do you?</p>	<p>1 States, don't they?</p> <p>2 MS. MCSHANE:</p> <p>3 A. Apparently so, yes.</p> <p>4 MR. JOHNSON:</p> <p>5 Q. Yeah. That's all I was trying to get you to</p> <p>6 acknowledge. The next one is Dominion</p> <p>7 Resources.</p> <p>8 MS. GLYNN:</p> <p>9 Q. Dominion will be Consent No. 16.</p> <p>10 MS. MCSHANE:</p> <p>11 A. I have Dominion.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. Okay. Tab 1, Ms. McShane.</p> <p>14 MS. MCSHANE:</p> <p>15 A. I have that.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. Again, business description, is a producer and</p> <p>18 transporter of energy. The company's</p> <p>19 portfolio of assets include approximately</p> <p>20 27,000 megawatts of generation, 6,000 miles of</p> <p>21 electric transmission lines, 56,000 miles of</p> <p>22 electric distribution lines in Virginia, North</p> <p>23 Carolina, 14,000 miles of natural gas</p> <p>24 transmission gathering and storage pipelines,</p> <p>25 28,000 miles of gas distribution pipeline,</p>
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<p>1 MS. MCSHANE:</p> <p>2 A. It says so. It says it's Ohio. It's on that</p> <p>3 page. It doesn't say it's North Carolina,</p> <p>4 which is where their big -</p> <p>5 MR. JOHNSON:</p> <p>6 Q. Yeah, just see what it says in the last</p> <p>7 sentence there, in that last paragraph.</p> <p>8 MS. MCSHANE:</p> <p>9 A. That they--I see that they continue to seek</p> <p>10 approval of other programs.</p> <p>11 MR. JOHNSON:</p> <p>12 Q. Yeah, they -</p> <p>13 MS. MCSHANE:</p> <p>14 A. But, you know, all utilities are dynamic.</p> <p>15 They're not sitting still in terms of</p> <p>16 developing -</p> <p>17 MR. JOHNSON:</p> <p>18 Q. But Ms. McShane, in fairness to me now, you</p> <p>19 said that this is Ohio and you've tried to</p> <p>20 isolate it to Ohio. But the last paragraph</p> <p>21 says "we continue to seek its regulatory</p> <p>22 approval in the other states where we have</p> <p>23 regulated utility operations." It seems like</p> <p>24 a corporate philosophy of Duke that they want</p> <p>25 to spread that save-a-watt around the United</p>	<p>1 exclusive of service lines. They also own</p> <p>2 underground natural gas storage system and</p> <p>3 operate over 975 billion cubic feet of storage</p> <p>4 capacity and serves retail customers in 12</p> <p>5 states. They operate in three segments,</p> <p>6 Dominion Virginia, Dominion Energy and</p> <p>7 Dominion Gen, and page--so do they have--what</p> <p>8 proportion of this company would be</p> <p>9 unregulated, Ms. McShane?</p> <p>10 MS. MCSHANE:</p> <p>11 A. About a third.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. About a third?</p> <p>14 MS. MCSHANE:</p> <p>15 A. Yes.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. You indicated yesterday that five percent</p> <p>18 would be significant?</p> <p>19 MS. MCSHANE:</p> <p>20 A. Well, it would be measurable, yeah. It would</p> <p>21 be significant in the sense that it's</p> <p>22 measurable.</p> <p>23 MR. JOHNSON:</p> <p>24 Q. Yeah, and could you go to page--Tab 3?</p> <p>25 MS. MCSHANE:</p>

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<p>1 A. I have that.</p> <p>2 MR. JOHNSON:</p> <p>3 Q. And if you could flick into the fourth page in</p> <p>4 that form 10K.</p> <p>5 MS. MCSHANE:</p> <p>6 A. It's the page marked page four?</p> <p>7 MR. JOHNSON:</p> <p>8 Q. No, actually it's marked page two at the</p> <p>9 bottom.</p> <p>10 MS. MCSHANE:</p> <p>11 A. Okay, I have that.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. Yeah. In the second long paragraph that</p> <p>14 starts with "our principal direct legal</p> <p>15 subsidiaries," you have that?</p> <p>16 MS. MCSHANE:</p> <p>17 A. I do.</p> <p>18 MR. JOHNSON:</p> <p>19 Q. Yeah. Around in the middle of that paragraph,</p> <p>20 they talk about DEI, "DEI is involved in</p> <p>21 merchant generation."</p> <p>22 MS. MCSHANE:</p> <p>23 A. Yes.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. Okay. Would this--they're involved in</p>	<p>1 MR. JOHNSON:</p> <p>2 Q. Yeah, better than utilities?</p> <p>3 MS. MCSHANE:</p> <p>4 A. Over the past couple of years, yes.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. Yeah.</p> <p>7 CHAIRMAN:</p> <p>8 Q. Meaning like in return on equity, oil</p> <p>9 companies have?</p> <p>10 MS. MCSHANE:</p> <p>11 A. In return on equity, maybe not.</p> <p>12 CHAIRMAN:</p> <p>13 Q. I'm sorry for interrupting, but -</p> <p>14 MR. JOHNSON:</p> <p>15 Q. Yeah.</p> <p>16 MS. MCSHANE:</p> <p>17 A. Sorry, probably not, just because they're so</p> <p>18 much more equity heavy than utilities. So if</p> <p>19 you actually looked at the return on equity in</p> <p>20 a percentage basis and if you're 70 percent</p> <p>21 equity, you'd see the actual percent return</p> <p>22 probably lower than it would be for, you know,</p> <p>23 companies like utilities which are 45 percent</p> <p>24 equity. But profitable, yes, very profitable.</p> <p>25 Exxon, for example.</p>
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<p>1 merchant generation, energy marketing, price</p> <p>2 risk management activities and natural gas and</p> <p>3 oil exploration and production in the</p> <p>4 Appalachian Basin?</p> <p>5 MS. MCSHANE:</p> <p>6 A. Yes.</p> <p>7 MR. JOHNSON:</p> <p>8 Q. So they're into the oil business as well then?</p> <p>9 MS. MCSHANE:</p> <p>10 A. A little bit, yes.</p> <p>11 MR. JOHNSON:</p> <p>12 Q. Yeah. How has the oil business been for</p> <p>13 Dominion?</p> <p>14 MS. MCSHANE:</p> <p>15 A. I haven't looked at specifically how the oil</p> <p>16 business has been for Dominion.</p> <p>17 MR. JOHNSON:</p> <p>18 Q. But oil companies -</p> <p>19 MS. MCSHANE:</p> <p>20 A. I've looked at the overall operations.</p> <p>21 MR. JOHNSON:</p> <p>22 Q. - oil companies over the last few years have</p> <p>23 done pretty well, haven't they, Ms. McShane?</p> <p>24 MS. MCSHANE:</p> <p>25 A. Yes, they have.</p>	<p>1 CHAIRMAN:</p> <p>2 Q. But their ROE is only around nine percent,</p> <p>3 isn't it? That's what I read. Now, I mean, -</p> <p>4 MS. MCSHANE:</p> <p>5 A. That's possible. If you think of it in terms</p> <p>6 of 9 on 70. I haven't specifically looked at</p> <p>7 those numbers, but that would not be an</p> <p>8 unreasonable number.</p> <p>9 MR. JOHNSON:</p> <p>10 Q. And at page six, the small page six at the</p> <p>11 bottom left.</p> <p>12 MS. MCSHANE:</p> <p>13 A. Yes.</p> <p>14 MR. JOHNSON:</p> <p>15 Q. They talk about competition, "Dominion</p> <p>16 Energy's gas transmission operations compete</p> <p>17 with domestic and Canadian pipeline</p> <p>18 companies". Would that be regulate or</p> <p>19 unregulated? Unregulated, I presume.</p> <p>20 MS. MCSHANE:</p> <p>21 A. Gas transmission is regulated.</p> <p>22 MR. JOHNSON:</p> <p>23 Q. That would be regulated?</p> <p>24 MS. MCSHANE:</p> <p>25 A. Yes.</p>

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<p>1 MR. JOHNSON:</p> <p>2 Q. So they face competition?</p> <p>3 MS. MCSHANE:</p> <p>4 A. Pipelines do face competition, pipeline pipe</p> <p>5 competition, if there are a couple of</p> <p>6 pipelines that are going into the same end</p> <p>7 market. They usually have contracts on the</p> <p>8 pipelines, though.</p> <p>9 MR. JOHNSON:</p> <p>10 Q. Could you turn to the bottom of page 12 -- I'm</p> <p>11 sorry, page 12, small 12, on the bottom left.</p> <p>12 MS. MCSHANE:</p> <p>13 A. I see that.</p> <p>14 MR. JOHNSON:</p> <p>15 Q. I'm referring to the status of electric</p> <p>16 regulation in Virginia.</p> <p>17 MS. MCSHANE:</p> <p>18 A. Yes.</p> <p>19 MR. JOHNSON:</p> <p>20 Q. As I understand that, they talk about the 2007</p> <p>21 Virginia Regulation Act and fuel factor</p> <p>22 amendments. They say that, July 1st, '07,</p> <p>23 legislation amending the Virginia Electric</p> <p>24 Utility Restructuring Act, and the fuel factor</p> <p>25 statute became effective, which significantly</p>	<p>1 - it has limits as to what the bottom end of</p> <p>2 the range can be.</p> <p>3 MR. JOHNSON:</p> <p>4 Q. And page 13 just below that talks about</p> <p>5 Virginia fuel expenses. "Under amendments to</p> <p>6 the Virginia fuel cost recovery statute passed</p> <p>7 in 2004, our fuel factor provisions were</p> <p>8 frozen until July 1st, 2007. Fuel prices</p> <p>9 increased considerably during that period,</p> <p>10 which resulted in our fuel expense being</p> <p>11 significantly in excess of our fuel cost</p> <p>12 recovery. Pursuant to the 2007 amendments to</p> <p>13 the fuel recovery statute, annual fuel rate</p> <p>14 adjustments would defer fuel accounting for</p> <p>15 over or under recoveries of fuel costs where</p> <p>16 we instituted at the beginning of July 1st.</p> <p>17 While the 2007 amendment did not allow us to</p> <p>18 collect any unrecovered fuel expenses that</p> <p>19 were incurred prior to July 1st, 2007, once</p> <p>20 our fuel factor was adjusted, this mechanism</p> <p>21 ensures dollar for dollar recovery for</p> <p>22 prudently incurred fuel". So they were at</p> <p>23 risk for fuel?</p> <p>24 MS. MCSHANE:</p> <p>25 A. They were.</p>
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<p>1 changed electricity regulation in Virginia,</p> <p>2 and do you know much about that?</p> <p>3 MS. MCSHANE:</p> <p>4 A. I know that in Virginia, Virginia was a state</p> <p>5 that restructured, separated their generation</p> <p>6 from transmission and distribution, and then</p> <p>7 decided to go back to bundled regulation.</p> <p>8 MR. JOHNSON:</p> <p>9 Q. If you can just go to the top of the next</p> <p>10 page, starting with, "After the 2009 rate</p> <p>11 review, the Virginia Commission will conduct</p> <p>12 bi-annual reviews of our rates, terms, and</p> <p>13 conditions beginning in 2011. As in the 2009</p> <p>14 rate review, our ROE in the bi-annual reviews</p> <p>15 can be no lower than that reported by not less</p> <p>16 than a majority of comparable utilities within</p> <p>17 the southeastern US, with certain limitations</p> <p>18 as described in the Act". So are they now</p> <p>19 embarking upon, like, some sort of regulatory</p> <p>20 or legislative ROE tied to other states in</p> <p>21 their area?</p> <p>22 MS. MCSHANE:</p> <p>23 A. That would appear to be that they can't -- I</p> <p>24 mean, obviously, it sounds like the Commission</p> <p>25 can allow a higher ROE, but it is limited to -</p>	<p>1 MR. JOHNSON:</p> <p>2 Q. Okay.</p> <p>3 MS. MCSHANE:</p> <p>4 A. Before, and now they're not.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. Now they're not, okay. That was a pretty</p> <p>7 hectic risk item, I imagine.</p> <p>8 MS. MCSHANE:</p> <p>9 A. But it doesn't exist any more.</p> <p>10 MR. JOHNSON:</p> <p>11 Q. Con Ed is #2.</p> <p>12 MS. GLYNN:</p> <p>13 Q. That would be Consent #17.</p> <p>14 MR. JOHNSON:</p> <p>15 Q. Tab 1, Ms. McShane, if you're there.</p> <p>16 MS. MCSHANE:</p> <p>17 A. Yes, I have that.</p> <p>18 MR. JOHNSON:</p> <p>19 Q. Gives a business description of Con Edison</p> <p>20 Inc., holding company of Con Edison Company of</p> <p>21 New York Inc., and Orange & Rockland Utilities</p> <p>22 Inc., both of which are regulated utilities.</p> <p>23 Con Edison's principal business segments are</p> <p>24 Con Edison of New York's regulated electric,</p> <p>25 gas, and steam utility segments, O & R's</p>

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<p>1 regulated electric and gas utility segments, 2 and Con Edison's competitive energy 3 businesses. What proportion of Con Ed would 4 be unregulated?</p> <p>5 MS. MCSHANE: 6 A. I don't have the precise amount, but it's 7 quite small.</p> <p>8 MR. JOHNSON: 9 Q. Quite small, okay. Tab 3, page seven at the 10 bottom. That's where they talk about their 11 competitive energy businesses. They pursue 12 competitive energy opportunities through three 13 wholly owned subsidiaries; Con Edison 14 Development, Consolidated Edison Energy Inc., 15 and Consolidated Edison Solutions. Over on 16 the next page, the third paragraph down, page 17 8, "Con Edison Solutions reported by KEMA 18 Consulting as of August, 2008, the 10th 19 largest non-residential retail electricity 20 provider in the United States".</p> <p>21 MS. MCSHANE: 22 A. I'm not sure where you are.</p> <p>23 KELLY, Q.C.: 24 Q. We're not sure either, Tom.</p> <p>25 MR. JOHNSON:</p>	<p>1 A. You're talking about page eight of the 10K 2 perhaps.</p> <p>3 MR. JOHNSON: 4 Q. Do you have it now? Okay. Yeah, I was just 5 referring to that third paragraph, "Con Ed 6 Solutions reported as the 10th largest non- 7 residential retail electricity provider in the 8 United States". So that would be obviously the 9 non-regulated piece?</p> <p>10 MS. MCSHANE: 11 A. It is, yeah.</p> <p>12 MR. JOHNSON: 13 Q. Page 13.</p> <p>14 MS. MCSHANE: 15 A. I have that.</p> <p>16 (9:45 a.m.)</p> <p>17 MR. JOHNSON: 18 Q. Actually, I'm falling prey to my -- I 19 understand, and I had a reference here that 20 this Con Ed generates 2.8 million megawatt 21 hours of electricity. Now I can't seem to 22 find it.</p> <p>23 KELLY, Q.C.: 24 Q. Page 13?</p> <p>25 MR. JOHNSON:</p>
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<p>1 Q. I'm sorry, page eight of that same tab, the 2 next page over.</p> <p>3 MS. MCSHANE: 4 A. I see page eight.</p> <p>5 MR. JOHNSON: 6 Q. And the third paragraph down from the top on 7 the left.</p> <p>8 KELLY, Q.C.: 9 Q. Which tab, Tom?</p> <p>10 MR. JOHNSON: 11 Q. Tab 3. It's just the page after the one we 12 were looking at.</p> <p>13 KELLY, Q.C.: 14 Q. Is this it?</p> <p>15 MR. JOHNSON: 16 Q. No. You don't have it, Tab 3, page eight. 17 Well, I guess we can straighten it up later if 18 there's a problem, but it indicates that that 19 competitive --</p> <p>20 MR. SIMMONS: 21 Q. There's another page eight about eight pages 22 on.</p> <p>23 MR. JOHNSON: 24 Q. Okay.</p> <p>25 MS. MCSHANE:</p>	<p>1 Q. Page 13, I believe. That's what I thought.</p> <p>2 MS. MCSHANE: 3 A. Page 13, if you look at the first little 4 block, electric energy, and this is only Con 5 Ed of New York, right, so it doesn't include 6 Orange & Rockland. So they generated 10 7 percent of their own power, it looks like, 8 because it says 2,857,711 megawatts, or I 9 guess those are kilowatt hours, and purchased 10 23.</p> <p>11 MR. JOHNSON: 12 Q. At page 18, I hope that's five pages beyond 13 the one we just talked about, at the left hand 14 column, the bottom paragraph, this is the idea 15 of the super fund.</p> <p>16 MS. MCSHANE: 17 A. Right.</p> <p>18 MR. JOHNSON: 19 Q. Yeah. The Federal Comprehensive Environmental 20 Response Compensation and Liability Act of 21 1980, and similar state statutes, super fund 22 imposed joint and several liability regardless 23 of fault upon generators of hazardous 24 substances for investigation costs, 25 remediation costs, and environmental damages.</p>

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<p>1 MS. MCSHANE: 2 A. Right. 3 MR. JOHNSON: 4 Q. And so that would be a material risk for any 5 generator in the United States, right? 6 MS. MCSHANE: 7 A. Manufactured gas lights, they're talking about 8 here. 9 MR. JOHNSON: 10 Q. Well, that would refer to more than just gas 11 lights, though, wouldn't it? I'm talking 12 about the super fund, what that attaches to 13 generally. 14 MS. MCSHANE: 15 A. We're talking about Con Ed specifically and 16 they're talking about manufactured gas lights. 17 MR. JOHNSON: 18 Q. Yes, but, Ms. McShane, this piece of 19 legislation, would that -- do you know 20 anything about that at all, what risk that 21 poses to generators in the United States? 22 MS. MCSHANE: 23 A. If you have a liability that's assigned to 24 you, you have to cover it, but here we're 25 talking about manufactured gas lights.</p>	<p>1 Q. And just at page 11, right hand column, 2 regarding competition. Con Edison of New York 3 is primarily a wires and pipes energy delivery 4 company, and the second hyphen there, provides 5 its customers the opportunity to buy 6 electricity and gas from other suppliers. So 7 what sort of competition are they talking 8 about there, Ms. McShane? 9 MS. MCSHANE: 10 A. They're talking about retail competition. So 11 its customers don't have to buy electricity or 12 gas from Con Ed, they can buy it from other 13 companies. 14 MR. JOHNSON: 15 Q. And would that -- that would be a difference 16 than what we're talking about in Newfoundland 17 Power? 18 MS. MCSHANE: 19 A. Sure, it's a difference. It's not different 20 in terms of -- particularly in terms of risk 21 because to the extent that Con Ed doesn't 22 supply the electricity, they don't incur any 23 cost, and to the extent that they do supply 24 the electricity or the gas, they have pass 25 throughs for those costs.</p>
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<p>1 MR. JOHNSON: 2 Q. Yeah, okay. Do you have any knowledge of 3 super fund beyond what you're seeing here? 4 MS. MCSHANE: 5 A. Not with respect to Con Ed, no. 6 MR. JOHNSON: 7 Q. How about -- 8 MS. MCSHANE: 9 A. I know generally that what we've discussed 10 today and yesterday, that the government can 11 assign liability for clean ups for sites to 12 utilities. In Con Ed's case, we're talking 13 about manufactured gas lights. 14 MR. JOHNSON: 15 Q. But it's just not utilities, it would apply to 16 other companies that have sites? 17 MS. MCSHANE: 18 A. Yes, of course. 19 MR. JOHNSON: 20 Q. Right. So the super fund would apply not just 21 to manufactured gas, but other utilities that 22 produce other means of electricity generation? 23 MS. MCSHANE: 24 A. It could, yes. 25 MR. JOHNSON:</p>	<p>1 MR. JOHNSON: 2 Q. So it makes no difference whatsoever? 3 MS. MCSHANE: 4 A. I wouldn't say it makes no difference. I 5 mean, everything can be said to be somewhat of 6 a difference, but in terms of the overall 7 risk, I mean, Con Ed is covered. 8 MR. JOHNSON: 9 Q. But if you're geared up to supply "x" hundreds 10 of thousands of customers, and then, you know, 11 a certain percentage of those customers decide 12 for reasons that maybe they can get better 13 service somewhere else, would that not impose 14 a risk for these companies? 15 MS. MCSHANE: 16 A. We have similar situations, for example, with 17 the gas distributors in Ontario where they 18 have choices, and it hasn't imposed any 19 particular risk for them. They manage their 20 portfolios in such a way that that risk is 21 covered off. 22 MR. JOHNSON: 23 Q. Yes, but it is a risk, it's just that they 24 manage it? 25 MS. MCSHANE:</p>

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<p>1 A. Well, there may be some underlying risk, but</p> <p>2 it's not a large risk. I mean, it's not even</p> <p>3 noted as a risk when you look at investment</p> <p>4 reports.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. Ms. McShane, at Tab 3, page four on the</p> <p>7 bottom, this is a Glossary of Terms.</p> <p>8 MS. MCSHANE:</p> <p>9 A. Sorry, Tab 3, page four?</p> <p>10 MR. JOHNSON:</p> <p>11 Q. Right. I'm sorry, Tab 3.</p> <p>12 KELLY, Q.C.:</p> <p>13 Q. We're still on the 10K, though?</p> <p>14 MR. JOHNSON:</p> <p>15 Q. We're still on the 10K. There's four on the</p> <p>16 bottom.</p> <p>17 MS. MCSHANE:</p> <p>18 A. Yeah.</p> <p>19 MR. JOHNSON:</p> <p>20 Q. It's the glossary.</p> <p>21 MS. MCSHANE:</p> <p>22 A. Yes.</p> <p>23 MR. JOHNSON:</p> <p>24 Q. You see regulatory state agencies, ALJ's</p> <p>25 Administrative Law Judges.</p>	<p>1 it works in New York. I know, for example, in</p> <p>2 Illinois, it's a panel of Administrative Law</p> <p>3 Judges, but it's not the same across the</p> <p>4 country either. I mean, there are some</p> <p>5 states, for example, Missouri, where you</p> <p>6 appear before the entire Commission, but in</p> <p>7 any case, I mean, the Commission, whether it</p> <p>8 sits there through the whole case or reviews</p> <p>9 the case, I mean, it is the final arbiter of</p> <p>10 the decisions.</p> <p>11 MR. JOHNSON:</p> <p>12 Q. Thank you, Ms. McShane. Finally, AGL</p> <p>13 Resources Inc.</p> <p>14 MS. GLYNN:</p> <p>15 Q. AGL will be Consent #18.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. At Tab 1, of course, we have the description,</p> <p>18 Energy Services Holding Company, whose</p> <p>19 principal business is the distribution of</p> <p>20 natural gas, six states; Florida, Georgia,</p> <p>21 Maryland, New Jersey, Tennessee, and Virginia.</p> <p>22 Company is involved in various related</p> <p>23 business, including retail natural gas,</p> <p>24 marketing to customers primarily in Georgia.</p> <p>25 On that point, you noted that this company in</p>
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<p>1 MS. MCSHANE:</p> <p>2 A. Yes.</p> <p>3 MR. JOHNSON:</p> <p>4 Q. What is that?</p> <p>5 MS. MCSHANE:</p> <p>6 A. An Administrative Law Judge is a person who</p> <p>7 basically is a proxy for the Commissioners and</p> <p>8 they hear cases, and they write initial</p> <p>9 decisions, and then the Commission, itself,</p> <p>10 will review the Administrative Law Judge's</p> <p>11 decision and either accept it or change it.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. So there's not a -- like, in this jurisdiction</p> <p>14 on applications, the company would appear</p> <p>15 right before the Commissioners themselves.</p> <p>16 That doesn't happen in most jurisdictions in</p> <p>17 the -- well, it doesn't happen down in New</p> <p>18 York, is that what you're saying?</p> <p>19 MS. MCSHANE:</p> <p>20 A. It doesn't happen in New York, no.</p> <p>21 MR. JOHNSON:</p> <p>22 Q. So you'd have to appear before a single</p> <p>23 Administrative Law Judge?</p> <p>24 MS. MCSHANE:</p> <p>25 A. No, not necessarily. I don't know exactly how</p>	<p>1 your schedule to CA-NP-18.</p> <p>2 MS. MCSHANE:</p> <p>3 A. Sorry, yes.</p> <p>4 MR. JOHNSON:</p> <p>5 Q. Yes.</p> <p>6 MS. MCSHANE:</p> <p>7 A. That may have been confusing, yes, okay. They</p> <p>8 sell gas to -- AGL Resources sells gas.</p> <p>9 Atlantic Gas Light, the utility, does not sell</p> <p>10 gas. So what I was dealing with in that table</p> <p>11 were the regulatory mechanisms of the</p> <p>12 utilities.</p> <p>13 MR. JOHNSON:</p> <p>14 Q. Okay.</p> <p>15 MS. MCSHANE:</p> <p>16 A. So Atlantic Gas Light, because it does not</p> <p>17 sell gas, does not require a purchase gas</p> <p>18 adjustment in its regulated business.</p> <p>19 MR. JOHNSON:</p> <p>20 Q. So they do that through unregulated side of</p> <p>21 the company in Georgia, okay. They have as</p> <p>22 well natural gas, asset management, and</p> <p>23 related logistics activities for its own</p> <p>24 utilities, as well as for non-affiliated</p> <p>25 companies, natural gas storage arbitrage and</p>

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<p>1 related activities, development and operation</p> <p>2 of high deliverability, underground gas</p> <p>3 storage, et cetera. What proportion of this</p> <p>4 company would be regulated versus unregulated?</p> <p>5 MS. MCSHANE:</p> <p>6 A. I think it's about 75 or 80 percent regulated.</p> <p>7 (10:00 a.m.)</p> <p>8 MR. JOHNSON:</p> <p>9 Q. If you could turn to Tab 2. This is a August</p> <p>10 5th, 2009, story regarding their ratings, and</p> <p>11 I note that in the third paragraph, they say,</p> <p>12 "The strong cash flow generation from AGL's</p> <p>13 regulated gas distribution operations, the</p> <p>14 supported regulatory environment, and low</p> <p>15 operating risk and gas distribution utility</p> <p>16 support credit quality. These are offset by</p> <p>17 continued focus on the wholesale and retail</p> <p>18 gas marketing operations. Fluctuating working</p> <p>19 capital leads to unregulated businesses, and</p> <p>20 historical pursuit of opportunistic</p> <p>21 acquisitions".</p> <p>22 MS. MCSHANE:</p> <p>23 A. Yes.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. So this company would be, you know,</p>	<p>1 utility operations.</p> <p>2 MR. JOHNSON:</p> <p>3 Q. But also it increases portfolio of non-</p> <p>4 regulated businesses?</p> <p>5 MS. MCSHANE:</p> <p>6 A. I thought you were talking about its regulated</p> <p>7 business.</p> <p>8 MR. JOHNSON:</p> <p>9 Q. I'm talking about an investor in this holding</p> <p>10 company.</p> <p>11 MS. MCSHANE:</p> <p>12 A. Yeah, I think that investors would look at</p> <p>13 this company as a company that pursues growth</p> <p>14 opportunities.</p> <p>15 MR. JOHNSON:</p> <p>16 Q. Yeah, on the non-regulated side?</p> <p>17 MS. MCSHANE:</p> <p>18 A. And on the regulated side, and what we were</p> <p>19 just talking about, the Virginia Natural Gas,</p> <p>20 Florida Natural Gas, Elizabeth Town Gas, those</p> <p>21 are all regulated operations.</p> <p>22 MR. JOHNSON:</p> <p>23 Q. Ms. McShane, if you could turn to the last</p> <p>24 page of Tab 2. Under energy investments, they</p> <p>25 talk about Jefferson Island Storage and Hub</p>
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<p>1 entrepreneurial on their regulated side, I</p> <p>2 take it?</p> <p>3 MS. MCSHANE:</p> <p>4 A. I don't understand what you mean by</p> <p>5 entrepreneurial on their regulated side.</p> <p>6 MR. JOHNSON:</p> <p>7 Q. You know, they talked about their historical</p> <p>8 pursuit of opportunistic acquisitions. In</p> <p>9 other words --</p> <p>10 MS. MCSHANE:</p> <p>11 A. In other words, they've started out as</p> <p>12 Atlantic Gas Light, and in the last few years</p> <p>13 they've acquired Chattanooga Gas, they've</p> <p>14 acquired Elizabeth Town Gas, they acquired</p> <p>15 Virginia Natural Gas, Florida Natural Gas. So,</p> <p>16 yeah, they've acquired other --</p> <p>17 MR. JOHNSON:</p> <p>18 Q. So an investor in this company would be</p> <p>19 investing on the basis of an understanding</p> <p>20 that this is a company that has a history of</p> <p>21 pursuing opportunistic acquisitions, and</p> <p>22 perhaps they'll do some more of them, right?</p> <p>23 MS. MCSHANE:</p> <p>24 A. Sure. Investors may look at AGL Resources as</p> <p>25 a company that's going to diversify its gas</p>	<p>1 operates high deliverability natural gas</p> <p>2 storage facility in Louisiana, and then they</p> <p>3 go on to say, "Golden Triangle Storage is</p> <p>4 building a high deliverability natural gas</p> <p>5 storage facility in Texas. The project</p> <p>6 initially will consist of two underground salt</p> <p>7 dome storage caverns that will hold</p> <p>8 approximately 17 BCF total capacity, and</p> <p>9 approximately 12 BCF working gas capacity". So</p> <p>10 this would be on the non-regulated side, I</p> <p>11 take it?</p> <p>12 MS. MCSHANE:</p> <p>13 A. It would be non-regulated. The business</p> <p>14 itself would probably be subject to a fee</p> <p>15 based or contract based business.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. At page 46 of that Tab 3, under the MD & A,</p> <p>18 the last paragraph there, they refer to, "Due</p> <p>19 to the rising commodity price environment, and</p> <p>20 the widening of transportation basis spread</p> <p>21 during the first six months of 2008, Sequent</p> <p>22 recorded 70 million dollars in losses on the</p> <p>23 financial instruments it used to hedge its</p> <p>24 storage and transportation positions". I take</p> <p>25 it Sequent would be the unregulated part of</p>

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<p>1 this business as well?</p> <p>2 MS. MCSHANE:</p> <p>3 A. Yes, it is.</p> <p>4 MR. JOHNSON:</p> <p>5 Q. That concludes the binders, Ms. McShane. Thank</p> <p>6 you. Ms. McShane, we've gone through these</p> <p>7 companies over the past number of hours, and</p> <p>8 we've seen that these companies have risks,</p> <p>9 such as associated with construction of</p> <p>10 nuclear facilities, potential cost overruns,</p> <p>11 some being subject to competition, others</p> <p>12 being subject to disallowances of even things</p> <p>13 like fuel costs. We've seen companies with</p> <p>14 extensive non-regulated portfolios, extensive</p> <p>15 generation capability, in some cases markedly</p> <p>16 less regulatory support than would be the norm</p> <p>17 in this jurisdiction, and we've also seen</p> <p>18 fairly dramatic political chaos in the State</p> <p>19 of Florida, so much so that Moody's came in</p> <p>20 and made a specific comment on it, and I put</p> <p>21 to you, Ms. McShane, that Newfoundland Power</p> <p>22 doesn't seem to have any of these risks, do</p> <p>23 they?</p> <p>24 MS. MCSHANE:</p> <p>25 A. All these companies are different. I mean,</p>	<p>1 sample of companies as being relatively</p> <p>2 comparable in risk to an average risk Canadian</p> <p>3 utility, which this Board has agreed that</p> <p>4 Newfoundland Power is.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. How many Canadian utilities are rated by value</p> <p>7 line?</p> <p>8 MS. MCSHANE:</p> <p>9 A. Two.</p> <p>10 MR. JOHNSON:</p> <p>11 Q. Which ones are they?</p> <p>12 MS. MCSHANE:</p> <p>13 A. TransCanada and Enbridge.</p> <p>14 MR. JOHNSON:</p> <p>15 Q. And how are they rated by value line?</p> <p>16 MS. MCSHANE:</p> <p>17 A. I believe one is two, and one is three,</p> <p>18 actually.</p> <p>19 MR. JOHNSON:</p> <p>20 Q. And two meaning?</p> <p>21 MS. MCSHANE:</p> <p>22 A. On a scale of one to five, with one being the</p> <p>23 most stable.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. Yeah.</p>
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<p>1 they all have different characteristics, some</p> <p>2 are the same, some are different. I</p> <p>3 understand that, you know, you might look at</p> <p>4 an individual company and its got some</p> <p>5 different characteristics from Newfoundland</p> <p>6 Power. At the end of the day, I think, you</p> <p>7 know, what you have to do is to look at this</p> <p>8 in the context of the overall investor</p> <p>9 perception of these companies, and if you look</p> <p>10 at Schedule 15 of my evidence, you know, we're</p> <p>11 talking about utilities that are at the very</p> <p>12 top of the safety ranking. Of all companies,</p> <p>13 they've got similar safety rankings to</p> <p>14 Canadian utilities that are covered by value</p> <p>15 line, which provides these safety rankings.</p> <p>16 They have similar betas to the relative risk</p> <p>17 adjustments that I have estimated for a</p> <p>18 typical Canadian utility, they have the same</p> <p>19 business risk profile, they've got higher debt</p> <p>20 ratings by Moody's than Newfoundland Power and</p> <p>21 other Canadian utilities, they have similar S</p> <p>22 & P debt rating to -- I know that Newfoundland</p> <p>23 Power no longer has an S & P debt rating, but</p> <p>24 most Canadian utilities do, and so on balance,</p> <p>25 I would say that the investor would view this</p>	<p>1 MS. MCSHANE:</p> <p>2 A. And five meaning the least stable.</p> <p>3 MR. JOHNSON:</p> <p>4 Q. So two would be -- is there a description on</p> <p>5 two?</p> <p>6 MS. MCSHANE:</p> <p>7 A. Yeah, it has to do with the financial strength</p> <p>8 and the price persistence.</p> <p>9 MR. JOHNSON:</p> <p>10 Q. So you say one is more stable?</p> <p>11 MS. MCSHANE:</p> <p>12 A. Yes.</p> <p>13 MR. JOHNSON:</p> <p>14 Q. And five is --</p> <p>15 MS. MCSHANE:</p> <p>16 A. The least stable.</p> <p>17 MR. JOHNSON:</p> <p>18 Q. Yeah, and two, what's the descriptive word on</p> <p>19 it? You say it has to do with something, but</p> <p>20 is there a descriptive word on it?</p> <p>21 MS. MCSHANE:</p> <p>22 A. It's the financial -- sorry, safety is a</p> <p>23 combination of price persistence and financial</p> <p>24 strength of the company.</p> <p>25 MR. JOHNSON:</p>

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<p>1 Q. Now, Ms. McShane, I mean, it seems -- it's</p> <p>2 fine for you to make the S & P. We've already</p> <p>3 discussed that, you know, S & P doesn't even</p> <p>4 have a relationship with Newfoundland Power</p> <p>5 any more, and we've seen that Moody's, which</p> <p>6 does have a relationship with Newfoundland</p> <p>7 Power, specifically says that, you know, they</p> <p>8 would put only US T & D into the low business</p> <p>9 risk category that Newfoundland Power would be</p> <p>10 in, correct?</p> <p>11 MS. MCSHANE:</p> <p>12 A. I don't think we agreed to that. We agreed</p> <p>13 that they said that they viewed generally -- I</p> <p>14 believe their words would be interpreted as</p> <p>15 "generally they would view vertically</p> <p>16 integrated utilities as higher risk than T & D</p> <p>17 companies.</p> <p>18 MR. JOHNSON:</p> <p>19 Q. We're not going to go there again. We have a</p> <p>20 different view on that, but it seemed to me,</p> <p>21 in all honestly, Ms. McShane, that as you go</p> <p>22 through each and every one of your companies,</p> <p>23 I don't see a single one of them that would</p> <p>24 have all of the regulatory protections, for</p> <p>25 instance, that Newfoundland Power has. I</p>	<p>1 to make ad hoc applications to set up accounts</p> <p>2 when it needs to, and when they do so, they</p> <p>3 appear right before these people, not some</p> <p>4 Administrative Law Judge. Now, Ms. McShane,</p> <p>5 where is the business risk for the investor in</p> <p>6 Newfoundland Power.</p> <p>7 MS. MCSHANE:</p> <p>8 A. Well, I mean, just because the utility has not</p> <p>9 experienced a risk doesn't mean that the risks</p> <p>10 aren't there. I grant you that this company</p> <p>11 has been relatively stable and they've got a</p> <p>12 good supportive regulatory environment, but</p> <p>13 there are still long term risks to the company</p> <p>14 and when you try to figure out what the cost</p> <p>15 to capital is for a company or utility, you</p> <p>16 need to look at proxy companies, and I noted</p> <p>17 that these companies aren't an identical risk</p> <p>18 to Newfoundland Power, but they are the</p> <p>19 closest proxies, in addition to the Canadian</p> <p>20 companies that I've looked at, that are</p> <p>21 available. I mean, this is the process we all</p> <p>22 go through to try to figure out what the</p> <p>23 estimate of a cost to capital for a utility</p> <p>24 is. Newfoundland Power is not publicly</p> <p>25 traded.</p>
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<p>1 mean, let's just -- it's like an alphabet of</p> <p>2 what Newfoundland Power has. They have the</p> <p>3 demand management incentive account, they have</p> <p>4 the energy supply cost variance account, they</p> <p>5 have the weather normalization reserve, the</p> <p>6 RSA. They have a component in the RSA that</p> <p>7 picks up municipal tax adjustments. They have</p> <p>8 proposed and it's been agreed that they're</p> <p>9 going to have a PEVDA. PEVDA is one of the</p> <p>10 notes in your columns for deferral mechanisms</p> <p>11 and CA-NP-18 is trackers for pension and OPEBS</p> <p>12 expenses. So you obviously consider those</p> <p>13 things?</p> <p>14 MS. MCSHANE:</p> <p>15 A. Yes.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. In your analysis. We have the most -- we are</p> <p>18 in a country that is recognized by Moody's as</p> <p>19 the most regulatory supportive on earth, along</p> <p>20 with a short list of others. We have Moody's</p> <p>21 saying that they put this regulator as one of</p> <p>22 the more supportive in Canada. We have pre-</p> <p>23 approval of capital budgets, we have no</p> <p>24 history of disallowances, we have no fines,</p> <p>25 and we have an ability for Newfoundland Power</p>	<p>1 MR. JOHNSON:</p> <p>2 Q. Ms. McShane, these companies that are</p> <p>3 mentioned in Schedule 15 of your evidence, in</p> <p>4 what context have you been using these 15</p> <p>5 companies in your testimony as you travel from</p> <p>6 jurisdiction to jurisdiction?</p> <p>7 MS. MCSHANE:</p> <p>8 A. As proxies for benchmark Canadian utility.</p> <p>9 MR. JOHNSON:</p> <p>10 Q. And do you use them in the United States?</p> <p>11 MS. MCSHANE:</p> <p>12 A. It depends on who I'm testifying for, and if</p> <p>13 I'm testifying for a vertically integrated</p> <p>14 utility which is triple B rated, then I would</p> <p>15 pick a sample of companies that would be of</p> <p>16 comparable risk to the company that I'm</p> <p>17 testifying for.</p> <p>18 MR. JOHNSON:</p> <p>19 Q. Yes, you do some vertically integrated US</p> <p>20 utility, I agree with you, you would. Now</p> <p>21 regarding S & P, Ms. McShane, you're aware</p> <p>22 from your experience here in this province</p> <p>23 that S & P had a ring fencing issue. Are you</p> <p>24 aware of that?</p> <p>25 MS. MCSHANE:</p>

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<p>1 A. Yes.</p> <p>2 MR. JOHNSON:</p> <p>3 Q. Just explain what the concern was by S & P?</p> <p>4 (10:15 a.m.)</p> <p>5 MS. MCSHANE:</p> <p>6 A. S & P was concerned that if a holding company</p> <p>7 could essentially rate the earnings of a</p> <p>8 subsidiary, that it could impair the credit</p> <p>9 quality of the operating subsidiary. So it</p> <p>10 decided that unless there was good ring</p> <p>11 fencing in place, that it wouldn't rate the</p> <p>12 operating subsidiary higher than the parent</p> <p>13 company.</p> <p>14 MR. JOHNSON:</p> <p>15 Q. So they could basically strip the subsidiary</p> <p>16 of cash or make the -- the parent, rather,</p> <p>17 could have the subsidiary borrow all sorts of</p> <p>18 monies which then the subsidiary would pay</p> <p>19 over to the parent, and the subsidiary's bond</p> <p>20 holders could be left holding the bag. Would</p> <p>21 that be the concern?</p> <p>22 MS. MCSHANE:</p> <p>23 A. I think that was partly their concern, yes,</p> <p>24 that if there weren't those -- if there</p> <p>25 weren't plans in place or regulatory</p>	<p>1 similar event happened, where the subsidiaries</p> <p>2 bond holders were left holding the bag?</p> <p>3 MS. MCSHANE:</p> <p>4 A. No, but I would never have considered Enron to</p> <p>5 be a utility company for purposes of</p> <p>6 estimating the cost to capital for a utility.</p> <p>7 MR. JOHNSON:</p> <p>8 Q. No, but they held -- they were an owner of</p> <p>9 regulated utilities, weren't they?</p> <p>10 MS. MCSHANE:</p> <p>11 A. Sure, but, I mean, it's a single case.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. But a celebrated case?</p> <p>14 MS. MCSHANE:</p> <p>15 A. Yes, it was a very celebrated case, but I</p> <p>16 don't know that that necessarily has anything</p> <p>17 to do with, you know, how one would view the</p> <p>18 risk of an AGL Resources, or a Florida Power</p> <p>19 and Light.</p> <p>20 MR. JOHNSON:</p> <p>21 Q. But it would be more in the conscious of a US</p> <p>22 investor, though, than a Canadian investor,</p> <p>23 wouldn't it?</p> <p>24 MS. MCSHANE:</p> <p>25 A. I guess I -- I mean, I don't see that one</p>
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<p>1 constraints in place to prevent that, then</p> <p>2 that was a concern of theirs.</p> <p>3 MR. JOHNSON:</p> <p>4 Q. And I take it that that happened in the United</p> <p>5 States, these UHC's or utility holding</p> <p>6 companies did just that in the United States,</p> <p>7 didn't they?</p> <p>8 MS. MCSHANE:</p> <p>9 A. There may have been one or two occasions that</p> <p>10 that happened, but it's not been something</p> <p>11 that's been widespread.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. Would Enron have been an example of it?</p> <p>14 MS. MCSHANE:</p> <p>15 A. That would have been "the" example, I believe,</p> <p>16 and even there not all of Enron's subs were in</p> <p>17 that situation. So you've got Portland</p> <p>18 General Electric, for example, which was a</p> <p>19 utility subsidiary of Enron, which was ring</p> <p>20 fenced and which always maintained its</p> <p>21 investment grade credit rating throughout the</p> <p>22 whole Enron debacle.</p> <p>23 MR. JOHNSON:</p> <p>24 Q. And the -- there was some in terms of -- do</p> <p>25 you know of any experience in Canada where a</p>	<p>1 situation like that impacts the way you would</p> <p>2 view the risk of these kinds of companies that</p> <p>3 have a clear history of regulated operations,</p> <p>4 not involved in the kinds of businesses that</p> <p>5 Enron was.</p> <p>6 MR. JOHNSON:</p> <p>7 Q. But, Ms. McShane, I guess it's a big enough</p> <p>8 risk in the minds of S & P, that they still</p> <p>9 won't rate a subsidiary any higher than the</p> <p>10 parent unless there's legislative ring fencing</p> <p>11 or other regulatory ring fencing around the</p> <p>12 subsidiary, isn't that correct?</p> <p>13 MS. MCSHANE:</p> <p>14 A. I mean, I think it's a concern from their</p> <p>15 perspective that --</p> <p>16 MR. JOHNSON:</p> <p>17 Q. But that's correct what I just said, wasn't</p> <p>18 it?</p> <p>19 MS. MCSHANE:</p> <p>20 A. That it's a concern that they won't --</p> <p>21 MR. JOHNSON:</p> <p>22 Q. Yeah.</p> <p>23 MS. MCSHANE:</p> <p>24 A. Yes, they won't, and Moody's looks at ring</p> <p>25 fencing as well.</p>

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1 MR. JOHNSON:
2 Q. Now, Ms. McShane, if we could turn then to
3 another topic, and that is the risk free rate.
4 Ms. McShane, in your introduction yesterday,
5 you indicated that with respect to your equity
6 risk premium test, all three are based on a
7 forecast long term Canada bond yield of 4 1/4
8 percent, that's the risk free rate?
9 MS. MCSHANE:
10 A. It is.
11 MR. JOHNSON:
12 Q. And I believe Dr. Booth uses 4.50 percent as
13 his risk free rate for the test year forecast?
14 MS. MCSHANE:
15 A. I believe that's right.
16 MR. JOHNSON:
17 Q. Okay, and I take it from your introduction
18 yesterday that you really don't take issue
19 with Dr. Booth on that point?
20 MS. MCSHANE:
21 A. No, I wouldn't take issue with that.
22 MR. JOHNSON:
23 Q. Now at page 42 of your pre-filed evidence is
24 where you address the risk free rate, and you
25 also refer in this paragraph that starts at

1 Q. What's that relevance?
2 MS. MCSHANE:
3 A. The relevance is to my estimation of the
4 market risk premium.
5 MR. JOHNSON:
6 Q. All right. Now you recall my asking you
7 yesterday, Ms. McShane, about the returns that
8 Newfoundland Power had sought in previous GRAS
9 as compared to your recommendations?
10 MS. MCSHANE:
11 A. I remember that, yes.
12 MR. JOHNSON:
13 Q. Okay, and for that purpose, could I draw your
14 attention to Consent #14. We won't go there
15 right away, but you'll have it handy, and I
16 think you were accepting yesterday, subject to
17 check a few things, I had indicated to you
18 that in 2007 that they had asked for 10 1/4
19 percent, and you said that you'd accept that
20 subject to check, it seems a little bit low.
21 Have you checked it?
22 MS. MCSHANE:
23 A. No, sorry, I didn't.
24 MR. JOHNSON:
25 Q. I checked it again, and it is so that way.

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1 line 1040 to a gradual upward trend toward the
2 forecast yield expected to prevail over the
3 longer term of approximately 5 1/4 percent,
4 which is noted there, and I'm just curious,
5 what's the relevance of the forecast of 5 1/4
6 percent?
7 MS. MCSHANE:
8 A. The relevance, in part, is to -- what one can
9 reasonably expect the market risk premium to
10 look like over the longer term.
11 MR. JOHNSON:
12 Q. Okay, but just to be clear, that's not what
13 you're saying it should be for the test year?
14 MS. MCSHANE:
15 A. No.
16 MR. JOHNSON:
17 Q. Okay. Does it have any relevance to your
18 recommendations to the Board?
19 MS. MCSHANE:
20 A. Yes.
21 MR. JOHNSON:
22 Q. In terms of your number?
23 MS. MCSHANE:
24 A. Yes.
25 MR. JOHNSON:

1 Then I also yesterday said that your
2 recommendation in 2007, your May evidence was
3 10 1/4 to 10 1/2. Is that accurate?
4 MS. MCSHANE:
5 A. I didn't check, but I wouldn't -- I'm happy to
6 accept that still, subject to check.
7 MR. JOHNSON:
8 Q. And in May of 2007, your evidence was built on
9 a risk free rate of 4.75 to 5 percent, and
10 that shows up in the table of recommendations
11 in Consent #14?
12 MS. MCSHANE:
13 A. Sorry, what is Consent #14?
14 MR. JOHNSON:
15 Q. I'm sorry.
16 KELLY, Q.C.:
17 MR. JOHNSON:
18 Q. Perhaps the witness could be provided that.
19 MR. JOHNSON:
20 Q. Yeah.
21 MS. MCSHANE:
22 A. Sorry, did you ask me a question that I didn't
23 answer yet?
24 MR. JOHNSON:
25 Q. Yeah. In May of '07 when you filed your pre-

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1 filed evidence, your risk free rate at page 3,
 2 just for the record in your report, was 4. 75
 3 to 5 percent?
 4 MS. MCSHANE:
 5 A. Yes.
 6 MR. JOHNSON:
 7 Q. So you see what I've done with your
 8 recommendations. I have your '02
 9 recommendations which is for the GRA that led
 10 to PU 19. Then I have 2007, then I have 2009,
 11 okay.
 12 MS. MCSHANE:
 13 A. I see those.
 14 MR. JOHNSON:
 15 Q. Okay, and then -- so when we spoke yesterday
 16 of what Newfoundland Power sought in 2003, and
 17 just for the record and clarification of the
 18 Commissioners, this does not include what they
 19 sought, this just includes the witness'
 20 recommendation and her risk free rate, but
 21 when we spoke of PU 19, 2003, we saw that the
 22 Board's decision showed that they had proposed
 23 10.75 percent in 2003, correct?
 24 MS. MCSHANE:
 25 A. That's what you said to me and you showed me

1 in this proceeding, the '02 report which is
 2 filed, and at page three, if you could go to
 3 it --
 4 KELLY, Q.C.:
 5 Q. Which document?
 6 MR. JOHNSON:
 7 Q. That would be one of the information items, I
 8 think.
 9 KELLY, Q.C.:
 10 Q. Consent 3.
 11 MS. GLYNN:
 12 Q. That's Consent #3.
 13 MR. JOHNSON:
 14 Q. Consent 3. Yes, page 3 of 67.
 15 MS. MCSHANE:
 16 A. I see that, yes.
 17 MR. JOHNSON:
 18 Q. Yeah, that would be line 7 and 8, your
 19 recommendation was 11 1/2 percent to 12
 20 percent?
 21 MS. MCSHANE:
 22 A. Right.
 23 MR. JOHNSON:
 24 Q. Whereas yesterday we thought it was 11 1/2 to
 25 11 3/4, okay.

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1 the decision, and I have no reason to question
 2 it.
 3 MR. JOHNSON:
 4 Q. Okay, and do you recall yesterday that when we
 5 went to that Board decision, the Board had you
 6 down at page 47 as recommending 11 1/2 ~~to~~
 7 3/4. That was from yesterday. Do you recall
 8 that we went, Ms. McShane, yesterday to the
 9 actual extract of the Board's decision in PU
 10 19, where they showed --
 11 MS. MCSHANE:
 12 A. Yes.
 13 MR. JOHNSON:
 14 Q. Mr. Moran --
 15 MS. MCSHANE:
 16 A. Yes, sir.
 17 MR. JOHNSON:
 18 Q. Remember that?
 19 MS. MCSHANE:
 20 A. Yes. So the line here on Consent 14 that says
 21 11 1/2 to 12, how does that relate to the 11
 22 1/2 to 11.75?
 23 MR. JOHNSON:
 24 Q. Well, actually, this is where I was going,
 25 because I checked your report which is filed

1 MS. MCSHANE:
 2 A. It is possible that it was updated from this
 3 report, and that's why the decision reflects a
 4 somewhat different number.
 5 MR. JOHNSON:
 6 Q. Yes, indeed, and again in this decision at
 7 page 44 that we have before us now, we see
 8 your risk free rate at line 21.
 9 MS. GLYNN:
 10 Q. Do you want the decision or continue in the
 11 pre-filed evidence?
 12 CHAIRMAN:
 13 Q. You said decision. You mean report?
 14 MR. JOHNSON:
 15 Q. Her report, I'm sorry, terribly sorry.
 16 MS. GLYNN:
 17 Q. Okay, yeah, so the same report that we just
 18 had up there?
 19 MR. JOHNSON:
 20 Q. Yes, I'm sorry.
 21 MR. HAYES:
 22 Q. What page was that?
 23 MR. JOHNSON:
 24 Q. Page 44, line 21, that's where you used a 6
 25 percent risk free rate in that evidence,

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<p>1 correct?</p> <p>2 MS. MCSHANE:</p> <p>3 A. Yes.</p> <p>4 MR. JOHNSON:</p> <p>5 Q. And that's borne out in the table under the</p> <p>6 risk free rate for 2002, just to confirm that</p> <p>7 we're being accurate there. Okay, now if you</p> <p>8 look at your sheet, Ms. McShane, of Consent</p> <p>9 #14 sheet. I just want to go down a few</p> <p>10 things with you. You'll note under the risk</p> <p>11 free rate column that in 2002, you had the</p> <p>12 risk free rate at 6 percent, and to -- by the</p> <p>13 time we got to 2007, your estimate of the risk</p> <p>14 free rate had dropped for that case to 4.75 to</p> <p>15 5. So a drop in the risk free rate of 100 to</p> <p>16 125 basis points, correct?</p> <p>17 MS. MCSHANE:</p> <p>18 A. Yes.</p> <p>19 MR. JOHNSON:</p> <p>20 Q. And your recommended ROE also dropped from</p> <p>21 what it had been in 2002 to 2007, and it also</p> <p>22 had dropped by 125 to 150 basis points, right?</p> <p>23 MS. MCSHANE:</p> <p>24 A. It had.</p> <p>25 (10:30 a.m.)</p>	<p>1 between the recommended ROE and the long term</p> <p>2 Canada forecast at the time was that amount,</p> <p>3 but those numbers in each of those two cases</p> <p>4 are not based solely on an equity risk premium</p> <p>5 test. They're based on a number of tests, and</p> <p>6 so if you're looking at 2007, which, of</p> <p>7 course, the evidence would have been prepared</p> <p>8 prior to May, 2007, we were in a period at</p> <p>9 that time of relatively low cost of capital,</p> <p>10 very stable markets. This recommendation would</p> <p>11 have been based, in part, on the discounted</p> <p>12 cash flow test, and those numbers at the time</p> <p>13 were likely to have been considerably lower</p> <p>14 than they had been in 2002 and what they would</p> <p>15 be today.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. Well, Ms. McShane, it's fine to look at it</p> <p>18 that way, but what I see is that from -- we</p> <p>19 had a significant drop from '02 to '07 in the</p> <p>20 long Canada, and then from 2007 to 2009, we've</p> <p>21 had a very much smaller drop, but then look</p> <p>22 what happens to your risk premium in 2009?</p> <p>23 MS. MCSHANE:</p> <p>24 A. I guess, my point is the cost of equity is not</p> <p>25 just the risk premium approach, and it's not</p>
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<p>1 MR. JOHNSON:</p> <p>2 Q. And now the way our AAF operates is that as</p> <p>3 the long bond yield decreases, the risk</p> <p>4 premium increases by 20 percent of that</p> <p>5 decrease, right?</p> <p>6 MS. MCSHANE:</p> <p>7 A. That's the way it works, yes.</p> <p>8 MR. JOHNSON:</p> <p>9 Q. So if you take a drop, and let's say you take</p> <p>10 a drop for math purposes of 150 basis points</p> <p>11 in the risk free rate, you take 20 percent of</p> <p>12 that 150 basis points, which would be then</p> <p>13 added to the risk premium, so you'd have a 30</p> <p>14 basis point addition to the risk premium,</p> <p>15 right?</p> <p>16 MS. MCSHANE:</p> <p>17 A. Right, under that formula, yes.</p> <p>18 MR. JOHNSON:</p> <p>19 Q. Under that formula, okay, but we see from</p> <p>20 Consent #14 that the risk premium actually</p> <p>21 came down from 2002 to 2007, because it had</p> <p>22 been 5.50 to 6, and by 2007, it was at 5.50,</p> <p>23 right?</p> <p>24 MS. MCSHANE:</p> <p>25 A. Yes. I mean, that's true that the difference</p>	<p>1 only based on what happens to the long term</p> <p>2 Canada bond yield. That's one factor, but</p> <p>3 it's certainly not the only factor. You have</p> <p>4 to look at the conditions in the market at the</p> <p>5 time you do our cost of equity test, all of</p> <p>6 them.</p> <p>7 MR. JOHNSON:</p> <p>8 Q. Okay. Well, yesterday you talked about an</p> <p>9 adjustment that you had made to your</p> <p>10 recommendation, right, an adjustment -- when</p> <p>11 Mr. Kelly was asking you about, Ms. McShane,</p> <p>12 do you wish to make any adjustments, and you</p> <p>13 said you did.</p> <p>14 MS. MCSHANE:</p> <p>15 A. Oh, sorry, yes, in my update, yes.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. In your update, right?</p> <p>18 MS. MCSHANE:</p> <p>19 A. Yes.</p> <p>20 MR. JOHNSON:</p> <p>21 Q. And what was that adjustment?</p> <p>22 MS. MCSHANE:</p> <p>23 A. There was an adjustment for the change in the</p> <p>24 spreads between A rated bond yields and the</p> <p>25 long term Canada bond yield.</p>

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<p>1 MR. JOHNSON:</p> <p>2 Q. Okay, and that information has to do with the</p> <p>3 second version of your DCF-based equity risk</p> <p>4 premium test, right?</p> <p>5 MS. MCSHANE:</p> <p>6 A. Yes, it does.</p> <p>7 MR. JOHNSON:</p> <p>8 Q. And as you know, that's the one that's based</p> <p>9 on the long term Canada bond yields and the A</p> <p>10 rated utility spreads, that's the test we're</p> <p>11 talking about. So as I understand it, at the</p> <p>12 end of March spreads between yields on a</p> <p>13 sample of A rated Canadian utility bonds, and</p> <p>14 the 30 year Government of Canada Bond, was</p> <p>15 about 345 basis points?</p> <p>16 MS. MCSHANE:</p> <p>17 A. I think that's right, yeah.</p> <p>18 MR. JOHNSON:</p> <p>19 Q. And at the time you prepared your evidence,</p> <p>20 you believed the spread would be 225 to 250</p> <p>21 basis points?</p> <p>22 MS. MCSHANE:</p> <p>23 A. I thought it would drop, yes, because the 345</p> <p>24 was very high.</p> <p>25 MR. JOHNSON:</p>	<p>1 having?</p> <p>2 MS. MCSHANE:</p> <p>3 A. Yes, it does.</p> <p>4 MR. JOHNSON:</p> <p>5 Q. Okay, and just walk us through how we can</p> <p>6 understand Equation 2 in the context of this</p> <p>7 particular equity risk premium test?</p> <p>8 MS. MCSHANE:</p> <p>9 A. What this is saying is that the equity risk</p> <p>10 premium is equal to effectively a constant, in</p> <p>11 this case 4.97, less 42 percent of the 30 year</p> <p>12 Government Bond yield, plus 1.23 times the</p> <p>13 spread between utility bond yields and the</p> <p>14 Government Bond yield.</p> <p>15 MR. JOHNSON:</p> <p>16 Q. Okay, let's just stop here for a second.</p> <p>17 Where does the 4.97 number fall out of?</p> <p>18 MS. MCSHANE:</p> <p>19 A. Where does it fall out of?</p> <p>20 MR. JOHNSON:</p> <p>21 Q. Yeah, where do we get it?</p> <p>22 MS. MCSHANE:</p> <p>23 A. It falls out of, if you do an analysis of -- a</p> <p>24 regression analysis of the relationship</p> <p>25 between equity risk premiums that have been</p>
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<p>1 Q. And again that was assuming a risk free rate</p> <p>2 of 4 1/4?</p> <p>3 MS. MCSHANE:</p> <p>4 A. Correct.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. But spreads have gotten smaller now to what</p> <p>7 you anticipated? They're now down to about</p> <p>8 170 basis points?</p> <p>9 MS. MCSHANE:</p> <p>10 A. That's right.</p> <p>11 MR. JOHNSON:</p> <p>12 Q. Okay, and could you just then turn to your</p> <p>13 Schedule 12 in your evidence, Ms. McShane.</p> <p>14 MS. MCSHANE:</p> <p>15 A. I have that.</p> <p>16 MR. JOHNSON:</p> <p>17 Q. And page 2 of 2.</p> <p>18 MS. MCSHANE:</p> <p>19 A. I have that.</p> <p>20 MR. JOHNSON:</p> <p>21 Q. I think that the Equation 2 --</p> <p>22 MS. MCSHANE:</p> <p>23 A. Yes.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. Would relate to this discussion that we're</p>	<p>1 constructed monthly using a discounted cash</p> <p>2 flow approach, less the corresponding long</p> <p>3 term Government Bond yield. You regress that</p> <p>4 against the corresponding 30 year Government</p> <p>5 Bond yield and the spread between utility bond</p> <p>6 yields and the Government Bond yield each</p> <p>7 month, and you get this relationship.</p> <p>8 MR. JOHNSON:</p> <p>9 Q. Okay. So in the parenthesis where it says</p> <p>10 "spread", that number used to be -- when you</p> <p>11 filed your report, that number was what?</p> <p>12 MS. MCSHANE:</p> <p>13 A. 225 to 250 basis points.</p> <p>14 MR. JOHNSON:</p> <p>15 Q. Okay, so you took an average between those two</p> <p>16 and then multiplied it by the 1.23?</p> <p>17 MS. MCSHANE:</p> <p>18 A. I did.</p> <p>19 MR. JOHNSON:</p> <p>20 Q. Okay, and so when you did that, what equity</p> <p>21 risk premium did you come up with?</p> <p>22 MS. MCSHANE:</p> <p>23 A. 6.1.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. And that's what we see at the bottom there?</p>

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<p>1 MS. MCSHANE: 2 A. Right. 3 MR. JOHNSON: 4 Q. Okay, and then if -- because the spread has 5 fallen to 170, you would multiply the 123 by 6 170 now? 7 MS. MCSHANE: 8 A. I did. That's what I did in the update. 9 MR. JOHNSON: 10 Q. In the update, and that number which used to 11 be 6.1 is now? 12 MS. MCSHANE: 13 A. 5.3. 14 MR. JOHNSON: 15 Q. As the equity risk premium? 16 MS. MCSHANE: 17 A. Right. 18 MR. JOHNSON: 19 Q. Yes. Now let's say that the spread hadn't 20 improved and, in fact, had gotten worse, had 21 gotten larger, so as opposed to it being 225 22 to 250, let's say it had gone up to 350 basis 23 points, okay, Ms. McShane -- 24 MS. MCSHANE: 25 A. Yes.</p>	<p>1 MS. MCSHANE: 2 A. How do I get the number on here? Oh, I've got 3 to push the "on" button, okay. 4 MR. JOHNSON: 5 Q. Well, Mr. Kelly, let her do it, and she can do 6 it subject to check, and if there is a change, 7 she can let us know. 8 MS. MCSHANE: 9 A. Sorry, what was the spread you wanted me to 10 use? 11 MR. JOHNSON: 12 Q. Let's say that the spread had gone up to 350 13 basis points by the time of this hearing. 14 MS. MCSHANE: 15 A. I think it's 7.5, if I did it correctly. 16 MR. JOHNSON: 17 Q. 7.33? 18 MS. MCSHANE: 19 A. Okay, well -- 20 MR. JOHNSON: 21 Q. Would that be -- 22 MS. MCSHANE: 23 A. That's fine. 24 MR. JOHNSON: 25 Q. No, no, I'm sorry -- what did you think it</p>
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<p>1 MR. JOHNSON: 2 Q. What would the equity risk premium then be 3 under this approach? 4 MS. MCSHANE: 5 A. I don't know. I don't have my calculator and 6 I haven't done that calculation. I was told 7 never to bring a calculator into the hearing. 8 MR. JOHNSON: 9 Q. Okay, I've got a calculator here. Could you 10 do that for us? 11 MS. MCSHANE: 12 A. Yes, sure. 13 KELLY, Q.C.: 14 Q. If the consumer advocate wants the witness to 15 do that math, that's a matter that can be 16 provided in an undertaking. If he's got the 17 answer already worked out, it can be given 18 subject to check. 19 MR. JOHNSON: 20 Q. I think it's pretty straightforward, though. 21 MS. MCSHANE: 22 A. That's assuming I can use this calculator, 23 yeah. 24 MR. JOHNSON: 25 Q. If I can, I'm sure you can.</p>	<p>1 was? 2 MS. MCSHANE: 3 A. I said 7.485. 4 MR. JOHNSON: 5 Q. Okay, 7.485, subject to check, okay. In that 6 instance, could you let us know, and I don't 7 expect you to be able to do that now, but 8 could you let us know what your recommended 9 ROE for Newfoundland Power would be under your 10 way of assigning weights in that instance? 11 Let us know, in other words, Ms. McShane, how 12 it would change the recommendation that you 13 had in your evidence as filed to what it would 14 be if the bond spread had, in fact, gone up? 15 MS. MCSHANE: 16 A. So if it had gone up from 6.1 to -- that one 17 test had gone up from 6.1 to 7? 18 MR. JOHNSON: 19 Q. To 7 whatever. 20 MS. MCSHANE: 21 A. Okay, I can let you know that. 22 MR. JOHNSON: 23 Q. Okay. Well, Ms. McShane, as we know, the 24 effect of the narrowing of the bond spread 25 would have brought the equity risk premium</p>

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<p>1 down to 5.3 percent under this test, but what</p> <p>2 effect did it have on your overall ROE</p> <p>3 recommendation for Newfoundland Power?</p> <p>4 MS. MCSHANE:</p> <p>5 A. None, because it was only -- it changed the</p> <p>6 overall recommendation, or the overall</p> <p>7 estimate by 5 basis points. So, I mean, if</p> <p>8 you look at the change that we're talking</p> <p>9 about here, the example you gave me, it would</p> <p>10 have approximately the same effect in the</p> <p>11 other direction. So it shouldn't change the</p> <p>12 recommendation there either. I mean, this is</p> <p>13 just one way of looking at what the change in</p> <p>14 the cost of equity would have been, and in the</p> <p>15 situation you gave me, I mean, these are quite</p> <p>16 extreme market conditions.</p> <p>17 (10:45 a.m.)</p> <p>18 MR. JOHNSON:</p> <p>19 Q. Ms. McShane, the reason that it has basically</p> <p>20 no impact upon your recommendation is because</p> <p>21 that's the weighting you give to it in your --</p> <p>22 MS. MCSHANE:</p> <p>23 A. Right.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. Okay, and -- but at the end of the day, it's</p>	<p>1 A. In this -- yeah, I mean, I think that's fair</p> <p>2 to say that it's not that sensitive to the</p> <p>3 spreads and it's sensitive to the changes in</p> <p>4 the DCF cost, which are -- you know, have a</p> <p>5 tendency to follow the spreads. So</p> <p>6 independently, I would agree with you that</p> <p>7 it's not specifically very sensitive to that</p> <p>8 one factor, but the recommendation is</p> <p>9 sensitive to overall changes in the cost of</p> <p>10 equity.</p> <p>11 MR. JOHNSON:</p> <p>12 Q. Ms. McShane, in your report at page 13, you</p> <p>13 have a Figure 2 of the Montreal Exchange</p> <p>14 Implied Volatility Index.</p> <p>15 MS. MCSHANE:</p> <p>16 A. Yes.</p> <p>17 MR. JOHNSON:</p> <p>18 Q. And I understand your report to say that the</p> <p>19 volatility index averaged over 40 in the first</p> <p>20 quarter of 2009, you say?</p> <p>21 MS. MCSHANE:</p> <p>22 A. I did.</p> <p>23 MR. JOHNSON:</p> <p>24 Q. And what level is it now, Ms. McShane?</p> <p>25 MS. MCSHANE:</p>
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<p>1 your ROE recommendation that we're concerned</p> <p>2 about, though, isn't it?</p> <p>3 MS. MCSHANE:</p> <p>4 A. Yes.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. And it just occurs to me that given what we've</p> <p>7 heard about, you know, what these spreads</p> <p>8 would indicate, Ms. Perry talked about the</p> <p>9 concern of the spread in her evidence, and it</p> <p>10 just occurs to me, Ms. McShane, that the</p> <p>11 spreads between the risk free rate and these A</p> <p>12 bonds doesn't seem to have a lot to do with</p> <p>13 your recommendations?</p> <p>14 MS. MCSHANE:</p> <p>15 A. It has something to do with it, but the cost</p> <p>16 of capital or cost of equity that I estimated</p> <p>17 is based on a number of tests, only one of</p> <p>18 which involves the consideration of the</p> <p>19 utility spreads.</p> <p>20 MR. JOHNSON:</p> <p>21 Q. Would it be fair to say that your overall</p> <p>22 opinion is rather insensitive to the spreads,</p> <p>23 once you size it up, once you wash it through</p> <p>24 your weighting scheme?</p> <p>25 MS. MCSHANE:</p>	<p>1 A. About 22.</p> <p>2 MR. JOHNSON:</p> <p>3 Q. About 22. Had it been lower than 22 in recent</p> <p>4 times?</p> <p>5 MS. MCSHANE:</p> <p>6 A. It averaged 15. As you can see on lines 319 to</p> <p>7 320, it was in the range of 8 to 24 during</p> <p>8 much of 2002 to 2007, averaging --</p> <p>9 MR. JOHNSON:</p> <p>10 Q. I'm sorry, Ms. McShane, I missed -- that's not</p> <p>11 what I was getting at.</p> <p>12 MS. MCSHANE:</p> <p>13 A. Oh, sorry.</p> <p>14 MR. JOHNSON:</p> <p>15 Q. Had it been lower than 22 since you filed your</p> <p>16 evidence?</p> <p>17 MS. MCSHANE:</p> <p>18 A. Oh, I haven't looked. It may have been, yes.</p> <p>19 I haven't looked at each individual number.</p> <p>20 MR. JOHNSON:</p> <p>21 Q. Weren't you asked about this in the recent</p> <p>22 Terasen Gas matter?</p> <p>23 MS. MCSHANE:</p> <p>24 A. You mean in cross-examination?</p> <p>25 MR. JOHNSON:</p>

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<p>1 Q. Yes.</p> <p>2 MS. MCSHANE:</p> <p>3 A. Could have been.</p> <p>4 MR. JOHNSON:</p> <p>5 Q. Would you take, subject to check, that you</p> <p>6 confirmed that it was 18 at the time of your</p> <p>7 testimony?</p> <p>8 MS. MCSHANE:</p> <p>9 A. I would agree that it could have been there,</p> <p>10 yes. I don't recall the specific number that</p> <p>11 was prevailing at the time I testified.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. Fair enough. You testified the 30th of</p> <p>14 September?</p> <p>15 MS. MCSHANE:</p> <p>16 A. I did.</p> <p>17 MR. JOHNSON:</p> <p>18 Q. Okay. As regards the risk premium, Ms.</p> <p>19 McShane, your report at page 47 --</p> <p>20 MS. MCSHANE:</p> <p>21 A. Yes, I have that.</p> <p>22 MR. JOHNSON:</p> <p>23 Q. It speaks of the historic risk premiums as</p> <p>24 compared to Canada and United States, and I</p> <p>25 guess historically we've always had a lower</p>	<p>1 expected, is that -- would that --</p> <p>2 MS. MCSHANE:</p> <p>3 A. There are different risk premiums that would</p> <p>4 be expected to be observed historically.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. Yes.</p> <p>7 MS. MCSHANE:</p> <p>8 A. And, sure, there would be some expectation</p> <p>9 going forward that they would be different</p> <p>10 based on different risks in different</p> <p>11 countries.</p> <p>12 MR. JOHNSON:</p> <p>13 Q. Yes, and in terms of the United States</p> <p>14 experience, that has been from '47 to '08, one</p> <p>15 of the most robust in the world, is that</p> <p>16 right?</p> <p>17 MS. MCSHANE:</p> <p>18 A. It was a relatively robust economy, yes.</p> <p>19 MR. JOHNSON:</p> <p>20 Q. Now you say in your evidence that the</p> <p>21 indicated equity market risk premium, using</p> <p>22 your risk adjusted equity market risk premium</p> <p>23 test, is approximately 6 3/4 percent?</p> <p>24 MS. MCSHANE:</p> <p>25 A. Yes.</p>
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<p>1 risk premium on average, I take it, than the</p> <p>2 Americans?</p> <p>3 MS. MCSHANE:</p> <p>4 A. You have.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. And I note in Schedule 8 to your evidence, I</p> <p>7 don't think there's a need to go there, but</p> <p>8 you refer to Ibbotson Associates. They</p> <p>9 publish risk premium data on the United States</p> <p>10 and other countries, do they not?</p> <p>11 MS. MCSHANE:</p> <p>12 A. They do.</p> <p>13 MR. JOHNSON:</p> <p>14 Q. And do they not publish risk premium studies</p> <p>15 on a whole host of different countries?</p> <p>16 MS. MCSHANE:</p> <p>17 A. I believe so.</p> <p>18 MR. JOHNSON:</p> <p>19 Q. Like, you know, England, Canada, et cetera, et</p> <p>20 cetera?</p> <p>21 MS. MCSHANE:</p> <p>22 A. Yes.</p> <p>23 MR. JOHNSON:</p> <p>24 Q. And so it's recognized from country to country</p> <p>25 there are different risk premiums to be</p>	<p>1 MR. JOHNSON:</p> <p>2 Q. You say that at page 50, right?</p> <p>3 MS. MCSHANE:</p> <p>4 A. I do.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. And, Ms. McShane, Dr. Booth provides in his</p> <p>7 evidence at page 48 and 49, information</p> <p>8 pertaining to what others were saying at the</p> <p>9 height of the financial crisis about the</p> <p>10 market risk premium. You're familiar with his</p> <p>11 reference to a finance -- a survey of finance</p> <p>12 professors?</p> <p>13 MS. MCSHANE:</p> <p>14 A. I'm familiar with his survey of finance</p> <p>15 professors. I'm not sure that's what they</p> <p>16 were saying at the height of the financial</p> <p>17 crisis.</p> <p>18 MR. JOHNSON:</p> <p>19 Q. Okay, I understand that this -- let me just</p> <p>20 get the hard copy. I'm referring to line 15</p> <p>21 of Dr. Booth's Report, on page 48. That's</p> <p>22 where he said -- yeah, "at the height of the</p> <p>23 financial crisis, Professor Fernandez surveyed</p> <p>24 finance professors around the world to find</p> <p>25 out what they use for their market risk</p>

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<p>1 premium". That's the table that we're talking</p> <p>2 about, and if you'd look at the table, Ms.</p> <p>3 McShane, you'll see in the United States there</p> <p>4 were 487 finance professors surveyed, and</p> <p>5 their average risk premium in the United</p> <p>6 States would be 6.3 percent, right?</p> <p>7 MS. MCSHANE:</p> <p>8 A. I see that.</p> <p>9 MR. JOHNSON:</p> <p>10 Q. Their median would be 6 percent?</p> <p>11 MS. MCSHANE:</p> <p>12 A. I see that.</p> <p>13 MR. JOHNSON:</p> <p>14 Q. And the other things there are self-</p> <p>15 explanatory, that's fine. In Canada, there</p> <p>16 was 29 finance professors surveyed. You see</p> <p>17 what they put as the average?</p> <p>18 MS. MCSHANE:</p> <p>19 A. I see that.</p> <p>20 MR. JOHNSON:</p> <p>21 Q. 5.4 percent. The median was 5.1 percent,</p> <p>22 right?</p> <p>23 MS. MCSHANE:</p> <p>24 A. Yes.</p> <p>25 MR. JOHNSON:</p>	<p>1 MS. MCSHANE:</p> <p>2 A. With the margin of error.</p> <p>3 MR. JOHNSON:</p> <p>4 Q. And I take it that you would be -- just going</p> <p>5 back to the chart on the previous page, you</p> <p>6 see the median guy in the United States, he</p> <p>7 would be at 6 percent, right?</p> <p>8 MS. MCSHANE:</p> <p>9 A. That's what the chart says.</p> <p>10 MR. JOHNSON:</p> <p>11 Q. You'd be 75 basis points above him, and I take</p> <p>12 it, you would be 165 basis points higher than</p> <p>13 the middle guy in the median in Canada?</p> <p>14 MS. MCSHANE:</p> <p>15 A. I'm higher than the professors who were</p> <p>16 surveyed, who -- you know, if you look at the</p> <p>17 entire surveys, a lot of them say they take</p> <p>18 their numbers out of books or articles. I</p> <p>19 mean, it's not like they're doing their own</p> <p>20 research as to what risk premium is, and what</p> <p>21 I've tried to do in my testimony is develop an</p> <p>22 estimate of the risk premium based on the data</p> <p>23 and, you know, looking at what the underlying</p> <p>24 relationships are.</p> <p>25 MR. JOHNSON:</p>
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<p>1 Q. And so if you'll just go to the next page,</p> <p>2 what Dr. Booth did was he graphically</p> <p>3 represented the 29 finance professor's</p> <p>4 responses, right?</p> <p>5 MS. MCSHANE:</p> <p>6 A. He did.</p> <p>7 MR. JOHNSON:</p> <p>8 Q. And in terms -- you would be, I take it -- you</p> <p>9 see those three bubbles on the second line</p> <p>10 from the top?</p> <p>11 MS. MCSHANE:</p> <p>12 A. Yeah, I see those.</p> <p>13 MR. JOHNSON:</p> <p>14 Q. You would be handy to those people in your</p> <p>15 equity risk premium?</p> <p>16 MS. MCSHANE:</p> <p>17 A. Based on this survey, I would be at the upper</p> <p>18 end of the range.</p> <p>19 MR. JOHNSON:</p> <p>20 Q. Yes. Where would Dr. Booth be in terms of what</p> <p>21 he's saying the equity risk premium would be?</p> <p>22 MS. MCSHANE:</p> <p>23 A. Sort of in the middle.</p> <p>24 MR. JOHNSON:</p> <p>25 Q. Yeah.</p>	<p>1 Q. Now, Ms. McShane, in your arriving at your</p> <p>2 risk premium, I take it you also have to</p> <p>3 adjust beta, would that be right? No, I'm</p> <p>4 sorry, you would apply your adjusted beta to</p> <p>5 your risk premium?</p> <p>6 MS. MCSHANE:</p> <p>7 A. I do.</p> <p>8 MR. JOHNSON:</p> <p>9 Q. Yeah, and the adjustment -- so you take your</p> <p>10 risk premium of 6.75 percent, right?</p> <p>11 MS. MCSHANE:</p> <p>12 A. Market risk premium.</p> <p>13 MR. JOHNSON:</p> <p>14 Q. The market risk premium.</p> <p>15 MS. MCSHANE:</p> <p>16 A. Right.</p> <p>17 MR. JOHNSON:</p> <p>18 Q. And then you multiply it by point what?</p> <p>19 MS. MCSHANE:</p> <p>20 A. .65 to .7.</p> <p>21 MR. JOHNSON:</p> <p>22 Q. .65 to .70?</p> <p>23 MS. MCSHANE:</p> <p>24 A. Correct.</p> <p>25 MR. JOHNSON:</p>

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1 Q. So what does that .65 to .70 mean in the real
2 world? What is that number trying to
3 represent?

4 MS. MCSHANE:

5 A. It's trying to represent what percentage of
6 the market risk premium utility investors
7 reasonably expect to earn.

8 MR. JOHNSON:

9 Q. And that has to do -- how is that a measurer
10 or an indicator of what they expect to earn
11 over the risk free rate?

12 MS. MCSHANE:

13 A. I don't understand what you mean, how is that
14 a measure.

15 MR. JOHNSON:

16 Q. What insight does the .65 to .70, or for that
17 matter, whatever fraction of the risk premium,
18 what insight does that give us into what the
19 average investor in utility would expect to
20 earn?

21 MS. MCSHANE:

22 A. It gives us an estimate of the expected return
23 on equity. I mean, you look at the market
24 risk premium, a relative risk adjustment to
25 that, add the risk free rate, add adjustment

1 A. It's based -- yes, effectively, if you view it
2 in terms of beta, yes, it's conceptually a raw
3 beta adjusted.

4 MR. JOHNSON:

5 Q. Okay, the raw beta that you arrived at for the
6 purpose of your analysis was what?

7 (11:00 a.m.)

8 MS. MCSHANE:

9 A. I don't really have a raw beta per se. I
10 mean, I develop the relative risk adjustment
11 based on a number of factors, including raw
12 beta, but if you look at the evidence as far
13 as where the actual raw betas are produced,
14 you can see some of them sitting at Tab 8 on
15 page 54. So those would be the recent raw
16 betas observed, co-variability of stock prices
17 of Canadian utilities, but the median being
18 .47.

19 MR. JOHNSON:

20 Q. Okay, and so would that be the number that you
21 worked off, the .47?

22 MS. MCSHANE:

23 A. That would be one of the numbers I worked off
24 of.

25 MR. JOHNSON:

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1 for financing flexibility, and you have an
2 estimate of the cost of equity.

3 MR. JOHNSON:

4 Q. Okay, but what I'm getting at is if a utility,
5 you say, for Newfoundland Power is .65 to .70,
6 they would only expect 65 to 70 percent of the
7 overall risk premium?

8 MS. MCSHANE:

9 A. Oh, right, yes, I'm sorry.

10 MR. JOHNSON:

11 Q. And I didn't think about putting those terms
12 to you. So they would expect 100 percent of a
13 risk premium from what sort of companies?

14 MS. MCSHANE:

15 A. The average risk company.

16 MR. JOHNSON:

17 Q. So whatever is found in the market?

18 MS. MCSHANE:

19 A. Sure, but it's also -- I mean, it's a
20 diversified portfolio of companies.

21 MR. JOHNSON:

22 Q. Okay. Now to get to .65 to .70, that beta
23 number doesn't just fall out, it has to be
24 adjusted to get to .65 to .70?

25 MS. MCSHANE:

1 Q. Were there numbers lower than that that you
2 worked off of?

3 MS. MCSHANE:

4 A. They have been numbers that are lower than
5 that, yes.

6 MR. JOHNSON:

7 Q. For the purpose of this case?

8 MS. MCSHANE:

9 A. There are -- if you look at Schedule 11, page
10 3 of 3, which basically gives you a history of
11 betas for regulated Canadian utilities, I
12 mean, all of the numbers you could view as
13 being in some sense relevant to the
14 consideration of what the relative risk
15 adjustment is. The ones that are in Table 8
16 happen to be the most recent ones, and they
17 were there, in part, to show what the
18 relationship was between raw beta and what a
19 large firm which produces betas showed at the
20 same time what the adjusted betas were.

21 MR. JOHNSON:

22 Q. And just to get this clarified, the term
23 "raw", is that a term of art or --

24 MS. MCSHANE:

25 A. Probably not. It's probably a McShane term.

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<p>1 MR. JOHNSON:</p> <p>2 Q. Okay.</p> <p>3 MS. MCSHANE:</p> <p>4 A. All it really means is that it is the observed</p> <p>5 regression coefficient obtained by regressing</p> <p>6 the change in stock price for the utilities</p> <p>7 against the change in stock price for the</p> <p>8 composite index.</p> <p>9 MR. JOHNSON:</p> <p>10 Q. Just one more question before the break. The</p> <p>11 use of adjusted betas, Ms. McShane, I think</p> <p>12 your reply to CA-NP-16H, where we asked for</p> <p>13 you to provide citations to any and all</p> <p>14 Canadian regulatory decisions that have</p> <p>15 approved the use of adjusted betas by</p> <p>16 squashing them with 1.0 as indicated on page</p> <p>17 54. That's the reply there that we can read</p> <p>18 it, that you're not aware of any Canadian</p> <p>19 decisions which have specifically relied on</p> <p>20 the adjustment methodology?</p> <p>21 MS. MCSHANE:</p> <p>22 A. No, I'm not.</p> <p>23 MR. JOHNSON:</p> <p>24 Q. Okay. Ms. McShane, those are my questions for</p> <p>25 now. I think I might have one or two after</p>	<p>1 questions are going to be limited to the</p> <p>2 Automatic Adjustment Formula, and as I read</p> <p>3 your report, there are two principal comments</p> <p>4 that you've made about the use of the</p> <p>5 Automatic Adjustment Formula, and the first</p> <p>6 one that I wanted to ask you about is your</p> <p>7 conclusion that it would be inappropriate to</p> <p>8 use the Automatic Adjustment Formula, given</p> <p>9 the current economic conditions, and if I</p> <p>10 understand correctly, that's based in large</p> <p>11 part on the fact that the Automatic Adjustment</p> <p>12 Formula, if applied in 2010, would result in a</p> <p>13 decrease in the return on equity for</p> <p>14 Newfoundland Power at a time when the cost of</p> <p>15 equity is actually rising in the market. Have</p> <p>16 I got that right?</p> <p>17 MS. MCSHANE:</p> <p>18 A. Well, I think that that's largely true, that</p> <p>19 what we've seen is the Automatic Adjustment</p> <p>20 Formula producing numbers that are</p> <p>21 inconsistent with the relative trends in the</p> <p>22 cost of equity and the yield on long term</p> <p>23 Canada bonds. Also I would add to that that</p> <p>24 the formula as constructed overstates the</p> <p>25 relationship between long term Canada bonds</p>
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<p>1 the break.</p> <p>2 (11:05 a.m.)</p> <p>3 CHAIRMAN:</p> <p>4 MR. JOHNSON:</p> <p>5 Q. Okay, we'll take a break then, 30 minutes.</p> <p>6 (RECESS)</p> <p>7 (11:35 a.m.)</p> <p>8 CHAIRMAN:</p> <p>9 Q. Back to you, Mr. Johnson. I think that's</p> <p>10 correct, is it?</p> <p>11 MR. JOHNSON:</p> <p>12 Q. Mr. Chairman, I have no further questions for</p> <p>13 Ms. McShane.</p> <p>14 CHAIRMAN:</p> <p>15 Q. All right, then I thin it's Mr. Simmons.</p> <p>16 MR. SIMMONS:</p> <p>17 Q. Thank you, Mr. Chairman.</p> <p>18 MS. KATHLEEN MCSHANE - CROSS-EXAMINATION BY MR. SIMMONS:</p> <p>19 MR. SIMMONS:</p> <p>20 Q. Ms. McShane, I won't be very long with you.</p> <p>21 I'm not going to ask you any questions</p> <p>22 concerning your recommendations on the return</p> <p>23 on equity for 2010. You've covered that</p> <p>24 thoroughly in your report, and Mr. Johnson has</p> <p>25 been thoroughly over it with you. My</p>	<p>1 and the cost of equity. So both of those</p> <p>2 situations together suggest that the formula</p> <p>3 probably should be suspended for the time</p> <p>4 being, set a cost equity today, and then</p> <p>5 perhaps go back in the future and look at what</p> <p>6 an appropriate formula might be, if it's</p> <p>7 determined that regulatory efficiency supports</p> <p>8 putting a formula back in place.</p> <p>9 MR. SIMMONS:</p> <p>10 Q. Uh-hm. So the two issues you've identified</p> <p>11 then are that you view the formula has being</p> <p>12 too sensitive to changes in the Long Canada</p> <p>13 Bond yield, so that it moves rates more than</p> <p>14 is necessary to account for changes in the</p> <p>15 equity markets?</p> <p>16 MS. MCSHANE:</p> <p>17 A. Correct.</p> <p>18 MR. SIMMONS:</p> <p>19 Q. And that's -- if I'm correct, that's kind of a</p> <p>20 longer term criticism, that's something you've</p> <p>21 been saying about the formula before there was</p> <p>22 the current market conditions that have</p> <p>23 affected returns on equity?</p> <p>24 MS. MCSHANE:</p> <p>25 A. True, I have said that before, and the more</p>

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<p>1 evidence that we have, with hindsight, shows</p> <p>2 that to be true. I think that's also</p> <p>3 consistent with what Mr. Cicchetti said in his</p> <p>4 responses to RFIs, that his analysis shows a</p> <p>5 much less or lower sensitivity between Long</p> <p>6 Term Government Bond yields and the utility</p> <p>7 cost of equity, and as you suggested also, the</p> <p>8 fact that we've observed the formula producing</p> <p>9 values that are inconsistent with the relative</p> <p>10 trends in cost of equity and yield.</p> <p>11 MR. SIMMONS:</p> <p>12 Q. And when you say "inconsistent with the</p> <p>13 relative trends of cost of equity", I</p> <p>14 understood you before to say that the rates</p> <p>15 set using the Automatic Adjustment Formula</p> <p>16 would actually move in the opposite direction</p> <p>17 to those trends?</p> <p>18 MS. MCSHANE:</p> <p>19 A. Correct.</p> <p>20 MR. SIMMONS:</p> <p>21 Q. And that is a new effect that's been observed</p> <p>22 under the market conditions in the last year</p> <p>23 and a half or so, is it, compared to the</p> <p>24 operation of the formula prior to that?</p> <p>25 MS. MCSHANE:</p>	<p>1 the criticism of the way it operates then</p> <p>2 would be this sensitivity issue, and I'm going</p> <p>3 to suggest that that's something that would be</p> <p>4 addressed by looking at the formula itself and</p> <p>5 whether changes needed to be made to it,</p> <p>6 rather than suspending its operation?</p> <p>7 MS. MCSHANE:</p> <p>8 A. Agreed.</p> <p>9 MR. SIMMONS:</p> <p>10 Q. Is that fair?</p> <p>11 MS. MCSHANE:</p> <p>12 A. Well, yes, and if you're talking about</p> <p>13 generally suspending the use of a formula at</p> <p>14 all, then that would be, you know, based on</p> <p>15 market conditions, and with respect to the</p> <p>16 specific formula, that would be more based on</p> <p>17 the underlying assumptions as to the</p> <p>18 relationships between the cost of equity and</p> <p>19 the variable that currently underpins it being</p> <p>20 a long term Canada bond yield.</p> <p>21 MR. SIMMONS:</p> <p>22 Q. Okay. Now on the question of the sensitivity</p> <p>23 of the formula, I'm relatively new to this</p> <p>24 process, and my understanding of the way it</p> <p>25 works may be oversimplified, but am I correct</p>
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<p>1 A. I think it was highlighted as a result of</p> <p>2 those conditions. If you went back, there may</p> <p>3 have been other situations in which the same</p> <p>4 phenomenon was observed, but not to the</p> <p>5 extent.</p> <p>6 MR. SIMMONS:</p> <p>7 Q. But not to the extent where it would have the</p> <p>8 same effect on a company as you're arguing</p> <p>9 that the effect would be now?</p> <p>10 MS. MCSHANE:</p> <p>11 A. Correct.</p> <p>12 MR. SIMMONS:</p> <p>13 Q. Okay, so when we talk about suspending the</p> <p>14 Automatic Adjustment Formula, the primary</p> <p>15 reason for arguing for suspension now is that</p> <p>16 it is taking rates of return in the opposite</p> <p>17 direction from what you say the market is</p> <p>18 suggesting they should be going as opposed to</p> <p>19 the sensitivity issue?</p> <p>20 MS. MCSHANE:</p> <p>21 A. I think that's fair to say that that would be</p> <p>22 the reason for suspending it.</p> <p>23 MR. SIMMONS:</p> <p>24 Q. Right. If we didn't have the problem with the</p> <p>25 formula taking rates in the wrong direction,</p>	<p>1 that it is the use of the .8 factor in the</p> <p>2 formula that determines the sensitivity of the</p> <p>3 rate change compared to the change in the long</p> <p>4 term Canada bond rate?</p> <p>5 MS. MCSHANE:</p> <p>6 A. Yes.</p> <p>7 MR. SIMMONS:</p> <p>8 Q. Okay. And there's no other feature of the</p> <p>9 formula that affects that sensitivity issue?</p> <p>10 MS. MCSHANE:</p> <p>11 A. I'm not quite sure what you're getting at.</p> <p>12 MR. SIMMONS:</p> <p>13 Q. So if you wanted to make the formula more</p> <p>14 sensitive or less sensitive, I guess -- well,</p> <p>15 if you wanted to have the formula changed so</p> <p>16 that it better tracked the actual market</p> <p>17 effect on the company as opposed to the way</p> <p>18 you've seen it work in the past, it is that .8</p> <p>19 factor that would have to be changed, is it?</p> <p>20 MS. MCSHANE:</p> <p>21 A. Yes, and you might also consider replacing the</p> <p>22 long term Canada bond yield with, say, a</p> <p>23 corporate bond yield which would perhaps</p> <p>24 better capture changes in the utility cost of</p> <p>25 equity than the long term Canada bond yield,</p>

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<p>1 the risk free rate itself.</p> <p>2 MR. SIMMONS:</p> <p>3 Q. Okay. So that would be substituting a</p> <p>4 different measure for the determination of</p> <p>5 what's the risk free rate?</p> <p>6 MS. MCSHANE:</p> <p>7 A. No, that would be -- not saying that the</p> <p>8 corporate bond yield would be an alternative</p> <p>9 risk free rate, but rather that it would be an</p> <p>10 alternative variable that could be used to</p> <p>11 better track the change in the cost of equity.</p> <p>12 MR. SIMMONS:</p> <p>13 Q. Right. Now referring to .8 factor, in your</p> <p>14 report you have done some analysis, I think,</p> <p>15 of the sensitivity. Have you -- are you in an</p> <p>16 position right now to express any view on what</p> <p>17 you think would be a more appropriate variable</p> <p>18 for use in the longer term in an Automatic</p> <p>19 Adjustment Formula?</p> <p>20 (11:45 a.m.)</p> <p>21 MS. MCSHANE:</p> <p>22 A. I would say something more on the order of .5.</p> <p>23 MR. SIMMONS:</p> <p>24 Q. Okay.</p> <p>25 MS. MCSHANE:</p>	<p>1 there. Are you saying that if you change the</p> <p>2 way the formula operates so that years after a</p> <p>3 test year it will change the rates by</p> <p>4 different amounts than the current formula</p> <p>5 does, that you would then have to change the</p> <p>6 return on equity that you set in the test</p> <p>7 year?</p> <p>8 MS. MCSHANE:</p> <p>9 A. No, no, maybe I'm not being clear, obviously.</p> <p>10 What I'm saying is that -- let's put it in the</p> <p>11 context of what this Board has done, and I</p> <p>12 apologize, I don't recall exactly the ROE that</p> <p>13 was initially set back when the Board first</p> <p>14 adopted the formula, but let's for discussion</p> <p>15 sake say it was 11 percent ROE. Let's just</p> <p>16 say also that at the time the underlying long</p> <p>17 term Canada bond yield was 7. I think that's</p> <p>18 probably wrong, but it'll serve for discussion</p> <p>19 purposes. If the formula, which has operated</p> <p>20 since 1998, has indicated that the ROE should</p> <p>21 decline by .8 percent of the change in long</p> <p>22 Canada, so that in 2008 the long term Canada</p> <p>23 bond yield was 4.6, and the ROE was 8.95, the</p> <p>24 decline we've seen over the ten year period</p> <p>25 has reflected a .8 sensitivity factor. If you</p>
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<p>1 A. Having said that, I should add to that that,</p> <p>2 of course, if you alter the sensitivity based</p> <p>3 on the empirical analysis, then you'd also</p> <p>4 have to simultaneously recognize that you</p> <p>5 can't simply set the same rate of return on</p> <p>6 equity that you had in place before because</p> <p>7 that rate of return on equity would already</p> <p>8 have taken into account a higher sensitivity</p> <p>9 than is observed, if you understand what I'm</p> <p>10 saying. So if you -- say, you started ten</p> <p>11 years ago and you set the ROE at 11 percent,</p> <p>12 and you set a formula at the same time which</p> <p>13 had this .8 sensitivity, obviously now if long</p> <p>14 term Canada bond yields are lower than they</p> <p>15 were ten years ago, you've already lowered the</p> <p>16 ROE by 80 percent of the change in the long</p> <p>17 term Canada bond yield. So it wouldn't make</p> <p>18 logical sense to say, okay, well, we'll keep</p> <p>19 the ROE where it is, but we'll change the</p> <p>20 sensitivity factor to .5. You would have to</p> <p>21 recognize that effectively you've overstated</p> <p>22 the decline in the cost of equity through the</p> <p>23 operation of the formula to date.</p> <p>24 MR. SIMMONS:</p> <p>25 Q. Okay, well, I'm not sure I follow completely</p>	<p>1 agree that the sensitivity factor should be</p> <p>2 .5, it would be unreasonable, in my opinion,</p> <p>3 to say, well, then we'll set the ROE again at</p> <p>4 8.95, but at the same time adopt a sensitivity</p> <p>5 factor of .5, because what you've done in the</p> <p>6 past is over reflect the relationship. I</p> <p>7 mean, you have to basically re-establish the</p> <p>8 ROE consistent with the underlying assumptions</p> <p>9 of the formula.</p> <p>10 MR. SIMMONS:</p> <p>11 Q. Isn't the effect, though, of having a general</p> <p>12 rate application and set a new test year to</p> <p>13 reset the ROE for that test year independently</p> <p>14 of the changes that have been made under the</p> <p>15 Automatic Adjustment Formula before that?</p> <p>16 MS. MCSHANE:</p> <p>17 A. That's true. I mean, that's absolutely right.</p> <p>18 I mean, I'm not saying that you would just</p> <p>19 automatically go back and say, oh, it's 11</p> <p>20 percent in 1998, and if we'd done the .5 from</p> <p>21 that timeframe, it would be "x", so we'll set</p> <p>22 it at "x". I'm not suggesting that at all. I</p> <p>23 do agree with your suggestion that what the</p> <p>24 Board needs to do is to re-look at what the</p> <p>25 ROE should be today based on the facts today.</p>

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<p>1 MR. SIMMONS:</p> <p>2 Q. Right. So if the ROE is set for 2010 based</p> <p>3 upon the evidence that you present, and the</p> <p>4 other experts present, and the discretion the</p> <p>5 Board brings to it, that's done independently</p> <p>6 of either the operation of the Automatic</p> <p>7 Adjustment Formula in the past, or what the</p> <p>8 Automatic Adjustment Formula will do in the</p> <p>9 future, right?</p> <p>10 MS. MCSHANE:</p> <p>11 A. It would --</p> <p>12 MR. SIMMONS:</p> <p>13 Q. It is?</p> <p>14 MS. MCSHANE:</p> <p>15 A. It would be independent of what its done in</p> <p>16 the past.</p> <p>17 MR. SIMMONS:</p> <p>18 Q. Right, and it does not take into account</p> <p>19 either the effect of the Automatic Adjustment</p> <p>20 Formula on future rates, assuming that it will</p> <p>21 be used in the next year or the year after to</p> <p>22 set rates into the future, is that correct</p> <p>23 also?</p> <p>24 MS. MCSHANE:</p> <p>25 A. Well, I guess the two are -- the formula, if</p>	<p>1 if it's .5, than it would if it's .8?</p> <p>2 MS. MCSHANE:</p> <p>3 A. Correct.</p> <p>4 MR. SIMMONS:</p> <p>5 Q. Right, which would, to a certain extent,</p> <p>6 insulate the utility from the effects of the</p> <p>7 long Canada bond rate dropping on that</p> <p>8 formula? In other words, they maintain their</p> <p>9 rates at a higher level as the long Canada</p> <p>10 bond yield drops if the factor is .5 than they</p> <p>11 would if it was .8?</p> <p>12 MS. MCSHANE:</p> <p>13 A. True. The reason I hesitated was when you used</p> <p>14 the term "it would insulate them from the</p> <p>15 changes in the long term Canada bond yield".</p> <p>16 Yes, it would the returns on equity more</p> <p>17 stable and more consistent with what the</p> <p>18 trends and the cost of equity are.</p> <p>19 MR. SIMMONS:</p> <p>20 Q. And conversely, if rates were rising, if the</p> <p>21 factor is .8, the return on equity -- if long</p> <p>22 term Canada bond yields are rising, the return</p> <p>23 on equity will rise faster if the factor is .8</p> <p>24 than if it's a lower number, .5 or .3?</p> <p>25 MS. MCSHANE:</p>
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<p>1 there were one adopted, is in large part</p> <p>2 independent of the rebasing, if you will, of</p> <p>3 the ROE, but presumably, to some extent, the</p> <p>4 formula that's adopted would recognize what</p> <p>5 the relationship between the cost of equity</p> <p>6 and whatever variable you would choose to use</p> <p>7 as the adjustment is.</p> <p>8 MR. SIMMONS:</p> <p>9 Q. My understanding of the concept of the</p> <p>10 Automatic Adjustment Formula is it's meant to</p> <p>11 be an automatic mechanism to approximate as</p> <p>12 close as people can predict to what the change</p> <p>13 in the return on rate base, and, therefore,</p> <p>14 return on equity would be as if there was a</p> <p>15 rate application and all the evidence were</p> <p>16 considered?</p> <p>17 MS. MCSHANE:</p> <p>18 A. Correct.</p> <p>19 MR. SIMMONS:</p> <p>20 Q. Okay, and that -- take the .8 factor that's</p> <p>21 used in it. If that were .3 or .5, or</p> <p>22 whatever it is, that -- changing it from .8 to</p> <p>23 a smaller number would have the effect that if</p> <p>24 long Canada bond yields are dropping, the</p> <p>25 return on rate base would drop at a lower rate</p>	<p>1 A. Yes, it would.</p> <p>2 MR. SIMMONS:</p> <p>3 Q. So in that scenario, the lower factor works</p> <p>4 more to the benefit of the rate payer than the</p> <p>5 higher factor would?</p> <p>6 MS. MCSHANE:</p> <p>7 A. Yes.</p> <p>8 MR. SIMMONS:</p> <p>9 Q. By keeping the growth in rates lower?</p> <p>10 MS. MCSHANE:</p> <p>11 A. I guess, effectively that's true. Again, I</p> <p>12 mean, I view it as putting in a factor that</p> <p>13 reflects the observed relationship, but, yes,</p> <p>14 the effect of rising interest rates would be</p> <p>15 that the rate payers would see a lesser</p> <p>16 increase in the cost of equity, return on</p> <p>17 equity.</p> <p>18 MR. SIMMONS:</p> <p>19 Q. So in either case, the Automatic Adjustment</p> <p>20 Formula is meant to be an approximation, to</p> <p>21 some extent, to try and approximate what the</p> <p>22 effect of those changes in the rates are, and</p> <p>23 in order to balance any, I guess, variances</p> <p>24 between what the Automatic Adjustment Formula</p> <p>25 determines rates to be, and what would be</p>

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<p>1 determined if you had a rate case each year, 2 it would seem to me to be important that you 3 would want to maintain that factor 4 consistently over a period of time so that in 5 periods of declining long Canada bond yields, 6 the effects of that would be balanced against 7 the effects in periods of rising long Canada 8 bond yields. In other words, you don't want 9 to change the factor in your Automatic 10 Adjustment Formula too often?</p> <p>11 MS. MCSHANE: 12 A. Oh, I would agree with that. I mean, you want 13 it to be symmetric, and at the same time you 14 want it to be as accurate as possible.</p> <p>15 MR. SIMMONS: 16 Q. Right, symmetric, that's the right word. Now 17 on this particular rate case, there's no 18 application here to actually change the 19 Automatic Adjustment Formula. The request is 20 to suspend it. If in the future the Board 21 needed to look at studying what changes might 22 be useful to make to the Automatic Adjustment 23 Formula, do you have any views on how that 24 should be done, how that process should be 25 undertaken to put the Board in a position to</p>	<p>1 Adjustment Formula.</p> <p>2 MR. SIMMONS: 3 Q. Now we're still in this period of uncertainty 4 in the markets that's been prevailing for the 5 last year and a half or so. Do you have any 6 views on whether this is the right time to 7 actually be looking at changes in the 8 Automatic Adjustment Formula, or whether it 9 would be better to wait until you see what 10 finally happens with the markets once they 11 subside and some equilibrium develops again?</p> <p>12 MS. MCSHANE: 13 A. Well, of course, we don't know when that will 14 be, but I would say that there is no great 15 rush to adopt a formula immediately. I mean, 16 I think you could, you know, wait at least a 17 year to see how conditions in the market 18 develop, and then look at whether there is a 19 good replacement formula. I know that in the 20 case of Terasen Gas, which has recently gone 21 through a cost to capital proceeding, and they 22 recommended to their regulator that they 23 suspend the use of the formula for now and 24 told their regulator that they would come back 25 with a proposal for a formula in the future,</p>
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<p>1 make as informed as decision as possible if 2 there were to be changes made to the formula?</p> <p>3 MS. MCSHANE: 4 A. It's not a question I've given a lot of 5 thought to, but I would point to an example of 6 a situation in which this very circumstances 7 occurred. The California Public Utilities 8 Commission used to conduct an annual cost to 9 capital review for all the utilities in its 10 jurisdiction, and I think they got tired of 11 that, so they decided that they would adopt an 12 Automatic Adjustment Formula, and essentially 13 what they did was they adopted -- they had 14 their regular proceeding where they adopted 15 the cost to capital for a particular test 16 year, and then they had a separate shorter 17 proceeding where they looked specifically at 18 recommendations for the Automatic Adjustment 19 Formula. I think you could do that where you 20 set the cost to capital today for Newfoundland 21 Power for 2010, and perhaps it would work for 22 2011 and 2012, but if the Board decided that 23 it wanted to or it was efficient to adopt a 24 formula again, then it could have a short 25 proceeding dealing only with the Automatic</p>	<p>1 hopefully in time, I believe, for 2011, and 2 that they were taking note of what was going 3 on in front of our regulatory boards, such as 4 the Alberta Utilities Commission, the Ontario 5 Energy Board, Quebec, and thought that as a 6 result potentially of those proceedings that 7 there might be some additional information 8 that they could bring to bear for the future 9 development of an appropriate formula. So I 10 think there are these other proceedings going 11 on and there may well be some indication of 12 what might be a reasonable replacement 13 formula.</p> <p>14 (12:00 p.m.)</p> <p>15 MR. SIMMONS: 16 Q. Thank you, Ms. McShane. Mr. Chair, I've got a 17 note that the transcription missed the first 18 portion of my examination of Ms. McShane. I 19 don't know what we want to do about that, if 20 the panel are satisfied with what you heard 21 and our own notes, or if it's necessary to go 22 back over any of the first couple of 23 questions.</p> <p>24 CHAIRMAN: 25 Q. I don't think.</p>

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<p>1 MR. SIMMONS:</p> <p>2 Q. No, okay. Thank you, Ms. McShane, I don't have</p> <p>3 anything further for you.</p> <p>4 CHAIRMAN:</p> <p>5 Q. Do you have anything by way of --</p> <p>6 KELLY, Q.C.:</p> <p>7 Q. I have a couple of questions arising, if I</p> <p>8 might, Mr. Chairman.</p> <p>9 MS. KATHLEEN MCSHANE - RE-EXAMINATION BY KELLY, Q.C.:</p> <p>10 KELLY, Q.C.:</p> <p>11 Q. Ms. McShane, we spent a lot of time looking at</p> <p>12 some US utilities and you've explained in your</p> <p>13 answers for Mr. Johnson that what we're really</p> <p>14 looking at is relative comparables from an</p> <p>15 investment point of view for an equity</p> <p>16 investor. Can I -- just to follow along a</p> <p>17 little bit with that, Mr. Johnson asked you a</p> <p>18 number of questions about Standard & Poors,</p> <p>19 and Moody's, and we have now undertaken to</p> <p>20 fulfil that. Do you have that document?</p> <p>21 MS. MCSHANE:</p> <p>22 A. Yes, I do.</p> <p>23 KELLY, Q.C.:</p> <p>24 Q. Okay. Mr. Chairman, I don't know whether</p> <p>25 that's on the screen or not. There we go. Now</p>	<p>1 are operating subsidiaries of US utilities.</p> <p>2 None of these are independently -- none are</p> <p>3 these are traded companies. So we wouldn't be</p> <p>4 able to use any of these specific companies in</p> <p>5 a cost of equity analysis because they don't</p> <p>6 have their own equity market data. Some of</p> <p>7 them might appear in a sample of companies</p> <p>8 that you would use as a proxy because they're</p> <p>9 part of one of the publicly traded companies.</p> <p>10 So Orange & Rockland Utilities, for example,</p> <p>11 is a part of Con Edison, which was one of the</p> <p>12 companies that I used in my sample. Central</p> <p>13 Maine Power actually is now a subsidiary of a</p> <p>14 spanish company, Iberdrola, so they're not</p> <p>15 really one you would consider putting in a</p> <p>16 cost of equity proxy group. Connecticut Light</p> <p>17 and Power is a subsidiary of North East</p> <p>18 Utilities. PPL Electric Utilities is a</p> <p>19 subsidiary of PPL Corporation, and those would</p> <p>20 be companies you might consider for a</p> <p>21 comparable proxy group. I did not include</p> <p>22 them in my proxy groups because the parent</p> <p>23 company has investment characteristics which I</p> <p>24 would consider to be of higher risk than</p> <p>25 Newfoundland Power.</p>
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<p>1 there are a group of utilities beginning with</p> <p>2 Atlantic City Electric, Central Maine Power,</p> <p>3 Connecticut Light and Power, Fortis Alberta,</p> <p>4 Orange & Rockland Utilities, and PPL Electric</p> <p>5 Utilities Corporation. Can you just tell the</p> <p>6 Board how many of those are US utilities?</p> <p>7 MS. MCSHANE:</p> <p>8 A. Five of the six.</p> <p>9 KELLY, Q.C.:</p> <p>10 Q. Fortis Alberta is the only Canadian utility in</p> <p>11 that list?</p> <p>12 MS. MCSHANE:</p> <p>13 A. That's correct.</p> <p>14 KELLY, Q.C.:</p> <p>15 Q. Okay, and just explain for the Board, like,</p> <p>16 what's the relationship of these particular</p> <p>17 companies to the US utilities, for example,</p> <p>18 that you've used in your analysis, and the</p> <p>19 ones that Mr. Johnson took you through? For</p> <p>20 example, we heard Orange & Rockland related to</p> <p>21 Consolidated Edison. Can you just explain that</p> <p>22 relationship for these to the Board?</p> <p>23 MS. MCSHANE:</p> <p>24 A. Each of these utilities which Moody's has</p> <p>25 determined comparable to Newfoundland Power</p>	<p>1 KELLY, Q.C.:</p> <p>2 Q. Thank you, Ms. McShane. One other area I just</p> <p>3 want to follow up on. Mr. Johnson prepared a</p> <p>4 table which was Consent 14, and you explained</p> <p>5 as you went along that your ROE recommendation</p> <p>6 contained on that table, the recommendations</p> <p>7 over time, were based on a number of tests, as</p> <p>8 you had explained earlier. Then he had you do</p> <p>9 some calculations with respect to one</p> <p>10 particular test, and, Mike, can you put</p> <p>11 Consent 2 up on the screen, and this is the</p> <p>12 update that you filed to your evidence. If I</p> <p>13 take you down to the bottom of that, Ms.</p> <p>14 McShane, you explained that the weighting that</p> <p>15 this particular version of an equity risk</p> <p>16 premium test has had on your analysis, and</p> <p>17 first of all, can you just explain that to the</p> <p>18 Board, and my follow on question just to give</p> <p>19 it to you all the one time is has that</p> <p>20 weighting stayed the same over time as we've</p> <p>21 looked at from 2002 to 2009?</p> <p>22 MS. MCSHANE:</p> <p>23 A. In terms of the first part of your question, I</p> <p>24 have a number of tests, three equity risk</p> <p>25 premium tests and discounted cash flow tests,</p>

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<p>1 three different models, and comparable</p> <p>2 earnings. Among the risk premium tests is one</p> <p>3 that basically has two versions, of which the</p> <p>4 version that's referred to in the update is</p> <p>5 one of those two. So based on the various</p> <p>6 weights that I've given to the test, the</p> <p>7 change as reflected in the update, makes a</p> <p>8 very small difference in the cost of equity</p> <p>9 estimate. The weight that I've given to that</p> <p>10 test, as with the weights that I've given to</p> <p>11 all of the other tests, has not changed since</p> <p>12 2002.</p> <p>13 KELLY, Q.C.</p> <p>14 Q. And could you just confirm for the Board that</p> <p>15 this is the test that Mr. Johnson asked you to</p> <p>16 do the calculations in relation to?</p> <p>17 MS. MCSHANE:</p> <p>18 A. That's exactly right, it is that test.</p> <p>19 KELLY, Q.C.</p> <p>20 Q. Thank you. Thank you, Mr. Chairman. Those</p> <p>21 are my questions.</p> <p>22 CHAIRMAN:</p> <p>23 Q. I just had one question arising out of it. If</p> <p>24 two utilities, you know, with different sizes</p> <p>25 and revenue streams, et cetera, et cetera, had</p>	<p>1 to interpret the risk themselves, and you may</p> <p>2 well see a company that has an A rating have a</p> <p>3 cost of debt that's, you know, 25 basis points</p> <p>4 lower or higher than another utility with the</p> <p>5 same bond rating. So it's a--the bond rating</p> <p>6 is sort of one measure, but not the only</p> <p>7 measure.</p> <p>8 CHAIRMAN:</p> <p>9 Q. So I don't know whether you answered me. Is</p> <p>10 it yes or no? I have no idea. It's</p> <p>11 complicated. So from the--but it is an</p> <p>12 indication from the perspective of somebody</p> <p>13 who's going to buy bonds?</p> <p>14 MS. MCSHANE:</p> <p>15 A. Yes, it is, for sure.</p> <p>16 CHAIRMAN:</p> <p>17 Q. Okay. Now, just take me from that then, what</p> <p>18 does it say? What does that rating for these</p> <p>19 two companies say to an equity investor? You</p> <p>20 said it's an indicator, but there are others.</p> <p>21 MS. MCSHANE:</p> <p>22 A. It would be one of -</p> <p>23 CHAIRMAN:</p> <p>24 Q. Just flesh that out for me now.</p> <p>25 MS. MCSHANE:</p>
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<p>1 the same bond rating, does that tell a bond</p> <p>2 investor that he can be indifferent with</p> <p>3 respect to which one he could invest in or</p> <p>4 should invest in? What does it say?</p> <p>5 MS. MCSHANE:</p> <p>6 A. It says that, from a bond investor's</p> <p>7 perspective, that there is a relatively</p> <p>8 similar probability that the utility will not</p> <p>9 default on its obligations. When a bond rater</p> <p>10 looks at a company, they're going to look at</p> <p>11 the business risk and they're going to look at</p> <p>12 the financial risk. So the bond rating</p> <p>13 reflects a composite of the bond rater's view</p> <p>14 as to the combination of those risks. To some</p> <p>15 extent, the bond rater's views will be</p> <p>16 different from the equity investor's view,</p> <p>17 since the equity investor is the residual</p> <p>18 recipient of the cash flows. So the bond</p> <p>19 rating is not a determinative measure of the</p> <p>20 relative risk to an equity investor. It's one</p> <p>21 indicator. There may be differences between</p> <p>22 how the debt rating agencies look at the risk</p> <p>23 and how the actual bond investors view the</p> <p>24 risk. So you may well see utilities that have</p> <p>25 the same bond rating, but the market is going</p>	<p>1 A. Okay. So the bond rating would be one</p> <p>2 indication. Other indications would be if you</p> <p>3 looked at the Betas of the firm, so are they</p> <p>4 relatively similar from an equity--that would</p> <p>5 be one thing that an equity investor would</p> <p>6 look at. They would look at the price to</p> <p>7 earnings ratios of the company. Are investors</p> <p>8 willing to pay more for a given stream of</p> <p>9 earnings? So if you had two companies with</p> <p>10 utilities with very different price earnings</p> <p>11 ratios within the same industry, the company</p> <p>12 with the lower price earnings ratio or a lower</p> <p>13 market to book ratio might be viewed as</p> <p>14 riskier than a company with a higher PE ratio</p> <p>15 or a higher market to book ratio.</p> <p>16 CHAIRMAN:</p> <p>17 Q. And none of those factors will be taken into</p> <p>18 account by the bond rater?</p> <p>19 MS. MCSHANE:</p> <p>20 A. The equity -</p> <p>21 CHAIRMAN:</p> <p>22 Q. In the initial exercise to determine the -</p> <p>23 MS. MCSHANE:</p> <p>24 A. No, they would not be focused on those equity</p> <p>25 market indicators. They would be focused</p>

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<p>1 simply on those cash flows or the outlook for</p> <p>2 the cash flow.</p> <p>3 CHAIRMAN:</p> <p>4 Q. After the bonds are -</p> <p>5 MS. MCSHANE:</p> <p>6 A. Exactly.</p> <p>7 CHAIRMAN:</p> <p>8 Q. Okay, okay, thank you. All right. I guess</p> <p>9 we're back to you, are we, sir? I think, are</p> <p>10 we finished with -</p> <p>11 KELLY, Q.C.</p> <p>12 Q. Yes, Ms. McShane can step down and -</p> <p>13 CHAIRMAN:</p> <p>14 Q. Yes, thank you very much.</p> <p>15 KELLY, Q.C.</p> <p>16 Q. The next witness, Mr. Chairman, will be the</p> <p>17 Consumer Advocate's witness, Dr. Booth.</p> <p>18 CHAIRMAN:</p> <p>19 Q. Okay.</p> <p>20 KELLY, Q.C.</p> <p>21 Q. While they're all here for the cost of capital</p> <p>22 testimony.</p> <p>23 CHAIRMAN:</p> <p>24 Q. Oh, okay. Yes, sure, yeah, all right.</p> <p>25 MR. JOHNSON:</p>	<p>1 Q. And you also answered request for information</p> <p>2 requests and sir, do you accept the evidence</p> <p>3 and your RFI answers as your testimony in this</p> <p>4 proceeding?</p> <p>5 DR. BOOTH:</p> <p>6 A. I do.</p> <p>7 MR. JOHNSON:</p> <p>8 Q. Dr. Booth, would you, please, provide your</p> <p>9 background experience and qualifications, sir?</p> <p>10 DR. BOOTH:</p> <p>11 A. I'm a professor of finance at the Rotman</p> <p>12 School of Management at the University of</p> <p>13 Toronto where I hold the CIT chair in</p> <p>14 structured finance, and I've testified before</p> <p>15 a variety of public utility boards across</p> <p>16 Canada, including the National Energy Board,</p> <p>17 the CRTC and most of the public utility</p> <p>18 boards, and this is the first time I've</p> <p>19 appeared before this Board, but I was here for</p> <p>20 a CRTC hearing for Newfoundland Telephone many</p> <p>21 years ago.</p> <p>22 MR. JOHNSON:</p> <p>23 Q. And sir, do you have any corrections or update</p> <p>24 that you wish to make to your testimony?</p> <p>25 DR. BOOTH:</p>
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<p>1 Q. Just for clarification, what we've done, I</p> <p>2 mean, he is my big guy, in terms of a witness,</p> <p>3 in terms of the cost of capital, so what we've</p> <p>4 done, Mr. Chairman, is we've put together a</p> <p>5 package of his exhibits, the ones that he'll</p> <p>6 refer to in his introductory remarks, so that</p> <p>7 there's a flow to what he has to tell the</p> <p>8 Board, without jumping all over the place,</p> <p>9 like by binders.</p> <p>10 MS. GLYNN:</p> <p>11 Q. We're going to mark that as Exhibit LB-1.</p> <p>12 CHAIRMAN:</p> <p>13 Q. So you're ready, sir?</p> <p>14 DR. BOOTH:</p> <p>15 A. I am, indeed.</p> <p>16 DR. LAWRENCE BOOTH, SWORN, EXAMINATION-IN-CHIEF BY MR.</p> <p>17 THOMAS JOHNSON</p> <p>18 MR. JOHNSON:</p> <p>19 Q. Dr. Laurence D. Booth, sir, you have filed</p> <p>20 pre-filed testimony in this matter and your</p> <p>21 pre-filed testimony is dated August 2009. Is</p> <p>22 that correct?</p> <p>23 DR. BOOTH:</p> <p>24 A. It is.</p> <p>25 MR. JOHNSON:</p>	<p>1 A. No updates. There's a number of minor</p> <p>2 typographical errors, but they're not material</p> <p>3 to my recommendations.</p> <p>4 MR. JOHNSON:</p> <p>5 Q. Dr. Booth, can you briefly describe the</p> <p>6 economic and financial market conditions</p> <p>7 against which your report was prepared?</p> <p>8 DR. BOOTH:</p> <p>9 A. I can. Am I going to see my overheads on the</p> <p>10 screen? Okay, across Canada -</p> <p>11 (12:15 p.m.)</p> <p>12 MR. JOHNSON:</p> <p>13 Q. Right now, for the record, we're looking at a</p> <p>14 graph on page nine of Dr. Booth's pre-filed</p> <p>15 testimony.</p> <p>16 DR. BOOTH:</p> <p>17 A. Across Canada, we've had a number of hearings</p> <p>18 this year. Ms. McShane's mentioned some of</p> <p>19 them, but the Alberta Utilities Commission had</p> <p>20 a hearing in June. The Ontario Energy Board</p> <p>21 has had a technical conference. The BC</p> <p>22 Utilities Commission has had a hearing just</p> <p>23 over a month ago, and the Regie in Quebec had</p> <p>24 a hearing about two months ago, and the cause</p> <p>25 of these was primarily the overall conditions</p>

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<p>1 in the capital market over the last year.</p> <p>2 What has to be remembered is that there are</p> <p>3 regular flows to the economy, the business</p> <p>4 cycle, and this business cycle generated</p> <p>5 predictable events and predictable impacts on</p> <p>6 credit spreads, on long Canada bond yields, on</p> <p>7 changes that have existed since the first</p> <p>8 adjustment mechanisms were put in place in</p> <p>9 1993.</p> <p>10 So what I've got here is a graph of the</p> <p>11 overnight rate, which is the most direct</p> <p>12 evidence of this regular cyclical fluctuations</p> <p>13 in the economy, because the overnight rate is</p> <p>14 a bank account of the policy rate. It</p> <p>15 basically tells the financial markets whether</p> <p>16 the Bank of Canada is trying to stimulate the</p> <p>17 economy or whether it's trying to slow down</p> <p>18 the economy. So right now, as we can see,</p> <p>19 we've got an overnight rate of 25 basis points</p> <p>20 which the Bank has committed to keeping until</p> <p>21 at least the second quarter of 2010, because</p> <p>22 we've had a very serious slow down in the</p> <p>23 economy over the last three quarters. We're</p> <p>24 pulling out of that now, but we're in a</p> <p>25 recovery mode, and we can look at that and we</p>	<p>1 spreads which is just the interest rates on</p> <p>2 default risky instruments versus default free</p> <p>3 instruments issued by the Government of</p> <p>4 Canada, and this is essentially what we've</p> <p>5 been living through for the last two and a</p> <p>6 half years. Up until the middle of 2007, we</p> <p>7 were basically immune from events in the</p> <p>8 United States, but there was already a</p> <p>9 slowdown and problems in the US capital</p> <p>10 markets due to a couple of failures of big</p> <p>11 hedge funds in the United States linked to</p> <p>12 Bearsteans and the crisis sort of started</p> <p>13 percolating into Canada August 2007 when</p> <p>14 basically the acid back commercial paper</p> <p>15 market froze due to links, relatively small</p> <p>16 links, six or seven percent of acid back paper</p> <p>17 was linked in some way to US subprime debt,</p> <p>18 and you can see the significant jump in these</p> <p>19 spreads. So that indicates that as far back</p> <p>20 as 2007, investors were looking at short term</p> <p>21 instruments, commercial paper and instruments</p> <p>22 issued by the bank, which is what this BA</p> <p>23 spread indicates, and saying well, look,</p> <p>24 there's credit fears here. We're reluctant to</p> <p>25 lend to big corporations and even the Canadian</p>
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<p>1 can see that there's been periods like this</p> <p>2 before in the financial markets. So we can go</p> <p>3 back to 2001, 2002 when the ROE was last</p> <p>4 litigated here, which again was similarly just</p> <p>5 after the stock market crash at the internet</p> <p>6 bubble and we can go back to the mid '90s and</p> <p>7 the early '90s when we had a very serious</p> <p>8 recession in Canada due to the adjustments of</p> <p>9 the free trade with the United States, as well</p> <p>10 as a cyclical downturn.</p> <p>11 So one of the important things that I've</p> <p>12 been telling all the boards across Canada,</p> <p>13 it's very important to separate out</p> <p>14 predictable business cycle impacts on the</p> <p>15 financial markets and the fair rate of return</p> <p>16 from unpredictable events. So the overnight</p> <p>17 rate basically tells us that we have to pay</p> <p>18 attention to the business cycle.</p> <p>19 Now the second overhead -</p> <p>20 MR. JOHNSON:</p> <p>21 Q. As you refer to them, Dr. Booth, could you</p> <p>22 identify them for the record?</p> <p>23 DR. BOOTH:</p> <p>24 A. Okay. This is page 13 and this is the graph</p> <p>25 of the money market spreads. We look at</p>	<p>1 banks on their normal terms, because we're</p> <p>2 worried about the credit situation flowing in</p> <p>3 from the United States.</p> <p>4 Then the second sort of bump up there is</p> <p>5 March 2008 when Bearsteans was in very, very</p> <p>6 serious trouble, was bailed out by basically</p> <p>7 the Fed Reserve guaranteeing some debt so that</p> <p>8 JP Mobil could acquire them and that sort of</p> <p>9 subsided until a big jump, which was September</p> <p>10 14th, 2008 when the US Government decided that</p> <p>11 it couldn't bail out yet another US investment</p> <p>12 bank and allowed Lehman Brothers to fail, and</p> <p>13 that's really what turned what I would</p> <p>14 generally regard as a normal business cycle</p> <p>15 downturn into the most severe credit crisis</p> <p>16 we've had in 70 years, because once Lehman</p> <p>17 failed, Lehman was so interconnected with</p> <p>18 banks all the way around the world that there</p> <p>19 was a domino effect and finance minister--the</p> <p>20 French Finance Minister said this is grave</p> <p>21 error. Most commentators at the time said</p> <p>22 this is a grave error because it basically</p> <p>23 dominoed throughout the US financial system</p> <p>24 causing huge spreads for the banks in the</p> <p>25 sense that investors suddenly decided, "well,</p>

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<p>1 if Lehman Brothers can fail, Bearstearns 2 basically failed, which other bank is going to 3 fail?" because they're all connected, and over 4 one weekend AIG was basically taken under US 5 government control. Merrill Lynch looked at 6 Lehman Brothers and said their financial 7 statements are no different from ours, and 8 they sold themselves to Bank of America and 9 over the next couple of weeks, Wachovia was 10 bought out, Washington Mutual was bought out 11 and the financial markets suddenly realized 12 that the whole of the US financial system was 13 in a very serious state of meltdown and 14 literally they had no idea which bank would 15 subsequently fail in the United States, and 16 that's cause the credit crisis, the first leg 17 of this serious recession that we've come in, 18 well, we've come through, because once the 19 banks can't raise money and people are afraid 20 of lending to the banks, the banks basically 21 have to preserve capital, have to try and stop 22 becoming the next Lehman Brothers and as a 23 result, they've restricted the growth of 24 credit and we've seen a credit crunch. We've 25 seen high spreads and we've seen the second</p>	<p>1 the next banks to fail. 2 Washington Mutual, in particular, failed 3 in a matter of two or three days when they 4 lost about 16 to 18 billion dollars in 5 deposits. Every other bank in the world 6 looked at that and said we need to sure up our 7 capital. We need to get as much ready 8 reserves as possible, otherwise we could get 9 into serious trouble. 10 So that's why when you look at what's 11 happened in the bond market, and this is 12 Schedule 11 and 12, we can see two things. 13 First of all, as I mentioned, there is a 14 normal cyclical behaviour in terms of spreads 15 on default risky bonds and profitable or the 16 stage of the economy. So this graph may look 17 like it's going all over the place, but 18 basically all that it shows is the ROE which 19 is on the right-hand side indicates the 20 overall level of corporate profitability in 21 Canada. That comes from a Statistics Canada 22 series that tracks everything in Canada and 23 the triple B spread basically indicates the 24 riskiness of investing in the lowest grade 25 investment grade debt in Canada.</p>
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<p>1 effect, which is once the credit crunch hit 2 the US markets and percolated around the 3 world, we got the real economy being affected 4 as people stopped spending money, people 5 started worrying about their jobs, firms 6 retrenched and we started seeing the very 7 serious impact in the fourth quarter of 2008 8 and the first and second quarter of this year 9 as we went into a serious recession. 10 So that's basically the background to 11 everything that's been happening that's 12 precipitated or what I would regard as 13 precipitating these hearings right the way 14 across Canada into the fair rate of return. 15 It's essentially events coming from the United 16 States because of the failure of the US 17 financial system. It's percolated into Canada 18 because essentially the bond market in 19 particular is a market where people hold 20 inventories of bonds in order to meet demands 21 from investors to buy and sell and US banks 22 sold off large amounts of securities in the 23 fall of 2008 because they had to raise 24 significant amounts of capital in a hurry 25 because they were afraid that they would be</p>	<p>1 So essentially, when you go into 2 recession, profitability drops, spreads widen. 3 So we can see that most dramatically in the 4 early 90s where in 1992 profitability dropped 5 dramatically and spreads went over 300 basis 6 points for that year, and then as you come out 7 of the recession, profitability recovers. 8 Investors get a little bit more happy with 9 holding default risky debt and spreads come 10 down. So that's the normal cyclical pattern 11 we would expect, given what's happened in the 12 economy, that we would see high spreads in the 13 bond market. 14 What's unusual--if we turn our heads 15 around, what's unusual this time around is 16 that we can see all of these patterns in the 17 spreads. So these just come from Scotia 18 Capital, which maintains most of the bond 19 indexes used by the Bank of Canada. They used 20 to be in the Bank of Canada review. And we 21 can see the BBB spread which is the most 22 volatile because that reflects the lowest 23 investment grade in Canada. The A and the AA 24 spread. There's no AAA companies worth any 25 note in Canada any more, so effectively the</p>

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<p>1 Canadian banks, for example, are AA. So</p> <p>2 generally, they're not as sensitive to the</p> <p>3 business cycle. The dramatic thing that we</p> <p>4 can note during this crisis is not just the</p> <p>5 huge increase in spreads last fall, but the</p> <p>6 fact that if you look at them, the AA and the</p> <p>7 A spreads went up as well, and that's</p> <p>8 symptomatic of the fact that not only was it</p> <p>9 severe financial crisis, but essentially the</p> <p>10 banks were selling all sorts of financial</p> <p>11 securities because the liquidity concerns</p> <p>12 primarily stemming from the United States and</p> <p>13 they were essentially selling anything to</p> <p>14 raise cash. So the dramatic effect, I think,</p> <p>15 that affects the utilities is that generally</p> <p>16 in Canada they're rated A. So unlike normal</p> <p>17 recession that we've experienced before where</p> <p>18 the A spreads went up a little bit and the BBB</p> <p>19 spreads went up a lot, over the last year,</p> <p>20 we're seeing this very significant increase in</p> <p>21 A spreads that haven't been experienced over</p> <p>22 this 20 year period when Scotia Capital has</p> <p>23 this data.</p> <p>24 So I can quite understand why the</p> <p>25 utilities would look at this and say well, our</p>	<p>1 happened three to six, nine months ago, and</p> <p>2 the markets are getting back to normal.</p> <p>3 MR. JOHNSON:</p> <p>4 Q. Okay, and Dr. Booth, what is your view of the</p> <p>5 upcoming test year?</p> <p>6 DR. BOOTH:</p> <p>7 A. The important point is that, as I've said,</p> <p>8 there's a normal cycle to the economy and</p> <p>9 third quarter of this year will show that</p> <p>10 we're no longer in recession. There's been</p> <p>11 some moderate growth and this is the Bank of</p> <p>12 Canada prediction from July of this year, and</p> <p>13 the Bank of Canada just reconfirmed most of</p> <p>14 these things, in terms of the overnight rate</p> <p>15 yesterday, but I don't have their updates for</p> <p>16 the economic forecast, but you can see that</p> <p>17 they're forecasting that real GDP quarter over</p> <p>18 quarter will be positive for third quarter</p> <p>19 this year. Fourth quarter, three percent</p> <p>20 growth, and then 2010, we're seeing more</p> <p>21 significant growth and into 2011, which is</p> <p>22 what we would expect.</p> <p>23 Now in this context, it's important to</p> <p>24 recognize that in 1991, the Bank of Canada and</p> <p>25 the Federal Government came to an agreement in</p>
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<p>1 spreads have gone rocketing high. This is</p> <p>2 something that's of concern. But the</p> <p>3 important thing to recognize is that this was</p> <p>4 happening because of very specific financial</p> <p>5 problems coming out of the US banking system</p> <p>6 and whenever you mess with the banking system</p> <p>7 and the banking system's in fear of meltdown,</p> <p>8 it affects everything in the economy, and the</p> <p>9 important thing to note now is not just the</p> <p>10 credit spreads on the bank acceptances and</p> <p>11 commercial paper are back to normal levels,</p> <p>12 but the spreads in the corporate bond market</p> <p>13 are getting down to where we would expect</p> <p>14 them, given the severity of this recession.</p> <p>15 They're still marginally high. In my</p> <p>16 judgment, they're still 15-20 basis points</p> <p>17 higher than I would expect, given the state of</p> <p>18 economy, but they're not ridiculously high,</p> <p>19 compared to where they were three to six</p> <p>20 months ago.</p> <p>21 So that's what precipitating, in my</p> <p>22 judgment, a review of the ROE mechanisms and</p> <p>23 the fair rate of return across Canada and the</p> <p>24 important thing is that by and large, this is-</p> <p>25 -the horse has bolted. This is something that</p>	<p>1 terms of inflation forecasting. We are one of</p> <p>2 very few countries in the world that targeted</p> <p>3 a two percent rate of inflation at a band of</p> <p>4 one to three percent and the Government has</p> <p>5 stuck to that objective, renewing it on a</p> <p>6 five-year basis, and the Bank now has</p> <p>7 considerable credibility with the capital</p> <p>8 markets in terms of the future rate of</p> <p>9 inflation in Canada, and the Bank is now</p> <p>10 predicting that current rate of inflation is</p> <p>11 basically right at the bottom, if not outside</p> <p>12 of its range, but it's forecasting inflation</p> <p>13 in Canada will pick up by 2011, back to its</p> <p>14 target level.</p> <p>15 The long Canada rate will pick up.</p> <p>16 There's absolutely no question. The long</p> <p>17 Canada rate is basically a function of the</p> <p>18 forecast rate of inflation and a normal sort</p> <p>19 of premium over the inflation rate and then it</p> <p>20 varies with the business cycle. So as long as</p> <p>21 the Bank of Canada sticks to its one to three</p> <p>22 percent range and the Government continues to</p> <p>23 back that as its long run inflation target, we</p> <p>24 can expect the long Canada rate to fluctuate</p> <p>25 between three and a half and, say, five and a</p>

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<p>1 half or six percent over the business cycle, 2 but it's not going to go wildly outside of 3 those ranges, unless something seismic happens 4 to the Canadian economy and the Canadian 5 capital markets, and we're now in a situation 6 where what I would say as to situation of 7 risk, we know where we're going. We're out of 8 recession. We're in recovery and the bank and 9 forecasters are forecasting the Canadian 10 economy will be back on a growth path in a 11 serious way in 2010.</p> <p>12 France, Germany, got out of recession 13 second quarter of this year. The world 14 economy is recovering. We've seen a 15 significant increase in commodity prices and 16 we've seen a significant strengthening in the 17 value of the Canadian dollar. All of these 18 are symptoms of a strengthening world economy 19 and a strengthened demand for Canada, and at 20 the moment, the Canadian economy is relatively 21 sound. Most of the drop off has been caused 22 by exports, primarily to the United States, 23 and as the US stimulus gets under way, we 24 expect the Canadian economy to get back to a 25 growth pattern.</p>	<p>1 It's still what I would refer to as early in 2 the business cycle. When people talk about 3 financial conditions, I constantly hear people 4 say, wait for normal conditions. They're no 5 such thing as normal conditions. There may be 6 average conditions, but when people talk about 7 normal conditions, they normally mean a strong 8 economy, low inflation, top of the business 9 cycle. That's no more normal than is a 10 recession. We have recessions. We have 11 booms. We have these normal cyclical 12 fluctuations, and what we have now is a normal 13 recovery from a recession. So I would regard 14 that as normal, and I would regard good 15 conditions as being just as normal as bad 16 conditions. That's the way the business cycle 17 works.</p> <p>18 MR. JOHNSON: 19 Q. Thank you. Turning then, Dr. Booth, we've 20 just addressed for the record the Bank of 21 Canada's forecast on page 21 of your pre-filed 22 testimony. How do you estimate the fear of 23 return on equity, Dr. Booth?</p> <p>24 DR. BOOTH: 25 A. Well, on page 33, I report the results of a</p>
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<p>1 So we're back to a situation now of what 2 I tend to refer to as a situation of risk, not 3 a situation of uncertainty. Economists make a 4 distinction between the two because the 5 situation of uncertainty is where you can't 6 assign probabilities. You literally don't 7 know what's going to happen, and back in the 8 fall, that's where we were. We simply had no 9 idea what was going to happen. When you start 10 seeing Citibank down at 97 cents and having to 11 borrow 65 billion dollars from the US 12 Government, and you start seeing AIG, the 13 biggest insurance company in the world with 14 180--160 billion dollars infusion from the US 15 Government, these are absolutely stunning 16 events in the capital markets and these are 17 not things that normally happen. So back in 18 the fall, we literally didn't know what was 19 going to happen. Now that the US is fixing 20 its financial system, we're back to a normal 21 stage in the business cycle with a recovery. 22 So people can now work out what's the risk, 23 what can we do, and the financial markets are 24 now functioning as we would expect them to. 25 So the test year is one of recovery.</p>	<p>1 survey of major chief financial officers and 2 that survey was done by a couple of prominent 3 academics from Duke University, published in a 4 major academic journal, and why it's important 5 is simply - 6 (12:30 p.m.) 7 MR. JOHNSON: 8 Q. Just if you could just slow down until it gets 9 there, Dr. Booth.</p> <p>10 DR. BOOTH: 11 A. I'm watching.</p> <p>12 MR. JOHNSON: 13 Q. I skipped over one that you had already 14 addressed, which was your Schedule 3 on 15 interest rates and inflation.</p> <p>16 DR. BOOTH: 17 A. I'll get back to that one. Okay, so a little 18 bit further up, it's the previous one at the 19 top of the page. Ms. McShane mentioned that 20 her estimates are based upon a variety of 21 estimation techniques, but the important thing 22 is to use the right estimation techniques and 23 the fact is right now, 70 percent of CFOs in 24 the United States, chief financial officers 25 major corporations, use the capital asset</p>

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<p>1 pricing model. It's overwhelmingly the most 2 popular method for estimating fair rates of 3 return. 30 percent of them use average 4 historical returns and I'll talk about that, 5 because I use those to estimate the market 6 risk premium, so that's important as well, to 7 benchmark everything, and same sort of number, 8 30 percent or so use a multi-beta CAPM, and 9 that's essentially what I do where I use a 10 two-factor pricing model as well. So looking 11 at capital asset pricing model using two risk 12 factors, using long run average historical 13 rates of return, which is what I do in my 14 testimony, is exactly standard in terms of 15 what chief financial officers do in estimating 16 fair rates of return.</p> <p>17 Down at the bottom, given a discount 18 model, that's, as Ms. McShane indicated, 19 hasn't been accepted in Canada explicitly for 20 at least the last ten years, is down at about 21 ten percent. There are real problems in using 22 DCF or dividend discount models. I use them 23 as a reasonable risk check, but they're no 24 longer mainly used by chief financial officers 25 in the United States. Investor expectations,</p>	<p>1 asset pricing model. When you're making long- 2 lived investments, you need long-lived 3 estimates of the fair rate of return which is 4 why regulatory boards base them on the long 5 Canada bond yield, not on treasury bills. 6 Right now, if I based an estimate on the CAPM 7 using the treasury bill yield of 25 basis 8 points, it would be incredibly difficult to 9 get much above three or four or five percent, 10 which would dramatically under estimate the 11 fair rate of return. So there's no question 12 that the empirical results of testing the 13 capital asset pricing model using treasury 14 bill yields or using the actual beta 15 coefficients have caused some problems, but 16 that's not the way that I use it, the way that 17 regulatory boards in Canada use it or anybody 18 that I'm aware of uses it actually to estimate 19 fair rates of return. So it's a bit of a red 20 herring to say that there is empirical 21 problems with estimating the parameters in the 22 capital asset pricing model.</p> <p>23 When we look at the actual parameters, as 24 Ms. McShane and I have noted, I use 4.5 25 percent as the forecast on the long Canada</p>
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<p>1 down at ten percent. That's another variation 2 used in discounted cash flow models, but again 3 it's way down there in terms of usefulness. 4 Regulator decisions, obviously that reflects 5 the minority of regulated companies in the US.</p> <p>6 Now Ms. McShane and other witnesses 7 constantly point out that there are empirical 8 problems in historic estimates to the capital 9 asset pricing model, and that's represented on 10 the bottom of this page. When they first 11 tested the capital asset pricing model, they 12 used treasury bills with a risk free rate and 13 they used the risk coefficients, the relative 14 risk adjustment betas, whatever they were. 15 Whatever they estimated, they just plugged in 16 and they estimated how the rates of return 17 compared to expected, and they got this 18 result, the empirical capital asset pricing 19 model, that if you use the treasury bill yield 20 as a risk free rate and use the actual beta 21 coefficient, there tends to be some 22 predictable under and over estimation.</p> <p>23 That's not the way I use the capital 24 asset pricing model. As far as I'm aware, 25 that's not the way anybody uses the capital</p>	<p>1 yield over the next year. The best estimates 2 I've got from the Royal Bank and from others 3 is that the yield would be about 4.75 by the 4 end of the year. Ms. McShane's testimony was 5 a little bit earlier than mine, so I don't 6 regard the differences in the risk free rate 7 as being material. For the test year, the 8 estimate of the fair rate of return is 4.25, 9 4.5, something in that range. That's not a 10 big area of concern.</p> <p>11 MR. JOHNSON: 12 Q. Dr. Booth, I take it now are you addressing 13 your Schedule 1 from Appendix F? 14 DR. BOOTH: 15 A. I'm now talking--I was about to talk about the 16 market risk premium. 17 MR. JOHNSON: 18 Q. Okay, sorry. 19 DR. BOOTH: 20 A. I have a standard phrase that if students are 21 asleep or lawyers are asleep whilst I'm 22 testifying, and I ask a question. The first 23 rule in finance is the time value of money and 24 that's the basis of the capital asset pricing 25 model, the risk free rate, and the second rule</p>

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<p>1 in finance, if they look puzzled, is the risk 2 value of money, and the third rule in finance 3 is the tax value of money. If you can 4 understand those three, you can understand 5 just about vast bulk of finance. So the 6 capital asset pricing model captures the risk 7 free rate. When we look at the market risk 8 premium, we look back over very, very long 9 periods of time to get an estimate of what is 10 the trade off between risk and return in the 11 capital markets. So these are my estimates 12 and I estimate them different ways. I use 13 simple arithmetic averages, looking at the 14 rate of return each year and then just 15 averaging it over the time period. I look at 16 compound rates of return, which is what's down 17 as GM, the geometric mean return, and RLS is 18 just a statistical technique to estimate the 19 annual rate of return.</p> <p>20 When you look at this over long periods 21 of time, the average in Canada is about four 22 and a half percent. The average in the US is 23 5.6 percent. This is what the data tells us. 24 After that, it's judgment in terms of how do 25 we interpret that data and how do we make</p>	<p>1 Canada, but Pablo Fernandes surveyed finance 2 professors, January, February of this year, 3 right in the middle of the financial crisis, 4 and these were their estimates. These were 5 the estimates of people that teach finance, 6 that read the literature, that have some 7 judgment about what the market risk premium 8 is, and their judgment is as informed about 9 this as the judgment of anybody that's going 10 to be looking at the historic data. Some of 11 them are a little bit wacky. If you read some 12 of the answers, yeah, they've got some that 13 you look at there and say, "well, why on earth 14 did he say that?" But then ordinary investors 15 do exactly the same thing. Investment banks 16 and others do exactly the same thing. So 17 obviously whenever you look at a sample, 18 you're going to get some people whose judgment 19 you look at and say "how on earth did they 20 come up with those views?"</p> <p>21 The critical number is the median, the 22 middle guy. The middle guy in the US thinks 23 the market risk premium is six percent. The 24 middle guy in Canada thinks that it's 5.1 25 percent. The middle guy in Europe thinks it's</p>
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<p>1 adjustments in terms of a going forward market 2 risk premium, but historic evidence in Canada 3 and the US is between four and a half and 5.6 4 percent. Ms. McShane's estimates are 5 essentially exactly the same, because we used 6 exactly the same data. So at the bottom, 7 let's see, on page 47, Table 6 of Ms. 8 McShane's testimony, she has 4.6 percent for 9 Canada, 5.6 percent for the United States. So 10 there's no dispute between Ms. McShane and I 11 on what the historic earned risk premium is 12 between equities and bonds in the US and 13 Canada. The question is going forward, what's 14 the difference.</p> <p>15 Now this is where I introduced the 16 evidence from--or the survey by Fernandes, 17 which is on page 48 to 49 of my testimony. 18 Page 48 and 49. So here I refer to market 19 risk premium estimates as judgment constrained 20 by the facts. You can look at the judgment 21 and you can say, well those facts are wrong. 22 Going forward, it's going to be different, and 23 this is the judgment of 884 finance professors 24 around the world. So this is not--I'm 25 actually in there. I'm one of the 29 for</p>	<p>1 five percent. The middle guy in the UK thinks 2 it's five percent. I think it's five percent. 3 So one important fact is that my estimate of 4 the market risk premium is not a high ball, 5 it's not a low ball. It's basically right in 6 the middle of the pack.</p> <p>7 If we then look at the next page, 49 to 8 see where we stand, this is what counsel put 9 to Ms. McShane earlier on today. We look at 10 where does the cluster appear. What are the 11 most typical estimates of the market risk 12 premium? And my observation of all of those 13 estimates is five and six percent is the most 14 typical number coming out of Canada for the 15 market risk premium. So I think if members of 16 this Board just randomly pick up a telephone 17 can call a professor of finance in Canada and 18 say "hey, what's the market risk premium?" 19 almost certainly they'll be told five percent 20 or six percent, because that's what they're 21 basically telling Fernandes. There's a couple 22 down there at two percent and three percent, 23 and there's a couple up there at seven percent 24 and eight percent, but overwhelmingly, the 25 professional judgment of professors of finance</p>

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<p>1 in Canada is the market risk premium is five 2 or six percent. So I think that's judgment 3 that's constrained by the historic evidence, 4 by their experience in teaching and cases and 5 looking at the research in the market risk 6 premium. 7 So Ms. McShane has a higher estimate. So 8 she uses 6.75 percent. How does she come up 9 with that estimate? She looks at the low run 10 equity market return of 11 to 12 percent and 11 this has come down since her 2002 testimony 12 quite significantly because the equity markets 13 haven't been that well over the last ten 14 years, and this equity return, I have no 15 problems with this, this is exactly the same 16 sort of data that's in my Table 1, Appendix F. 17 Schedule 1, Appendix F. 18 The disagreement between us is that she 19 takes these low run equity returns and 20 subtracts her long run long-term Canada yield 21 of 5.25 percent and that long run long-term 22 Canada yield comes from her estimate over the 23 full business cycle and it comes from the 24 consensus economics estimate for 2011 to 2018 25 or 19, I believe. But it's a long-run</p>	<p>1 It's high relative to what the typical people 2 in the US and Canada, professors of finance, 3 think that it is and I mean, it's high because 4 there's a mismatch in the underlying inflation 5 assumptions that reflected in historic 6 experience versus the going-forward 7 experience. So that's our disagreement in 8 terms of the market risk premium. 9 In terms of betas, the relative risk 10 adjustment. On schedule 14 of my testimony, 11 I've got a variety of ways of estimating 12 betas. This I will highlight simply because 13 it's the subindex of the Toronto Stock 14 Exchange utility index. Sometimes people look 15 at this and they say "well, these are 16 unstable. How can we place any reliance on 17 that?" And my answer to that is you don't 18 look at statistics without understanding what 19 generated those statistics because these are 20 just estimates of the relative movement of 21 utilities against a general market over the 22 pervious five-year period, and you have to 23 just go back and say "well, what happened over 24 that pervious five-year period?" and you can 25 look at this and there's no doubt that the</p>
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<p>1 estimate, and I have no problems with that. I 2 think the long Canada bonds yield will go back 3 to five, five and a half percent over the next 4 few years. As the economy recovers, it will 5 go to that sort of level. 6 (12:45 p.m) 7 What I do sort of doubt is the difference 8 between those as a reasonable estimate of the 9 market risk premium, and I doubt that simply 10 because the current long-term Canada yield and 11 the forecast are based upon the commitment of 12 the Bank of Canada to maintain a one to three 13 percent inflation rate, and that's the 14 inflation forecast that's embedded in those 15 long run Canada yields of 5.25 percent that 16 Ms. McShane uses. Whereas the inflation 17 experience from 2004 to 2008 is significantly 18 higher than that. So the inflationary 19 experience over that period has been closer to 20 three to four percent and that inflationary 21 experience gets fed into the overall equity 22 returns in the market because equity is 23 reflecting on the real resources in the 24 economy. So I think her estimate of the 25 market risk premium at 6.75 percent is high.</p>	<p>1 betas dropped starting in '99 and they dropped 2 through to 2003, 2004, basically a five-year 3 period. What happened in that five-year 4 period? Well, the answer to that is 5 relatively simple. Nortel and the internet 6 bubble. Nortel at one time comprised about 35 7 percent of the Toronto market and as Nortel 8 took the Canadian market up, utility shares 9 didn't change very much, and when Nortel took 10 the Canadian market down, utility shares 11 didn't change very much. So the beta 12 coefficients went down. 13 As that cyclical phenomenon attached to 14 Nortel dropped out of the estimation period, 15 beta started reverting to their normal level. 16 So we can see that they were increasing, right 17 the way up until last year, and then last 18 year, they started going down again. Why? 19 Because utility shares are sort of convertible 20 bonds. They got a very high dividend 21 component, which means that when the stock 22 market crashes, they've got that support from 23 the dividend, from the income. So that when 24 the market goes up, they tend to move with the 25 market and they have positive betas and when</p>

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<p>1 the market crashes, they don't crash, so as a 2 result their estimated betas during that 3 period become very low and that's exactly what 4 we're experiencing now. When we go through it 5 and get the 2009 data, we're going to end up 6 getting lower estimates for the betas for 7 utilities reflecting the fact that they're low 8 risk stocks. So you have to look at the data 9 and not just sort of say well, I don't like 10 those statistics. You have to understand 11 where those statistics come from, and they're 12 just reflecting what actually happened in the 13 capital market over those periods.</p> <p>14 I also, just to backdrop in terms of 15 price performance over the last year, I 16 tracked the price performance on pages 43 to 17 45, and this is not rocket science. This is 18 just going to yahoo.com, plugging in what's 19 happened to the TSX index, where the GFP TSE 20 is, the Toronto Stock Exchange composite 21 index, plugging in the prices for most of the 22 big six Canadian utilities and just graphing 23 the price performance. So if these were as 24 risky as the market as a whole, you'd expect 25 them to behave like the market. What's pretty</p>	<p>1 look at the estimate of a fair rate of return, 2 I take four and a half percent for the long 3 Canada bond yield for next year, which I think 4 is reasonable. I take five percent for the 5 market risk premium, which is totally typical 6 of the median finance professor in Canada. I 7 use a beta of .5, which is marginally high 8 given the recent experience, reflecting the 9 fact that I hope we don't have two similar 10 financial crisis like we've had over the last 11 ten years, the internet bubble and the banking 12 crisis in the United States. Hopefully that's 13 not going to happen again. And I come up with 14 an estimate of seven percent. I then add 50 15 basis points for financial flexibility and 16 I've started adding a margin for error, 17 because when I look at my colleagues in 18 Canada, it's either five percent or six 19 percent for the market risk premium. I could 20 be off by one percent of the market risk 21 premium, so I take that one percent, multiply 22 it by .5, the beta coefficient and say well, I 23 could be off by 50 basis points, and I split 24 the difference and add 25 basis points to my 25 estimate.</p>
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<p>1 obvious from looking at these price charts is 2 Emera, for example, when the stock market 3 collapsed 40 percent, Emera was down 15 4 percent possibly in March 2009 and the same 5 thing with Fortis. Fortis barely never 6 dropped more than 20 percent when the market 7 was off 40 percent, and we could look 8 throughout all of the utilities and we can see 9 what comes through very, very clearly is 10 they're simply not as volatile as the market 11 as a whole. They just don't drop with the 12 market. They don't increase with the market, 13 which is what we call defensive stocks or low 14 risk stocks. So there's absolutely no 15 question that the price behaviour of utility 16 holding companies in Canada has demonstrated, 17 yet again, that they're low risk. They're low 18 beta stocks. They're defensive stock. So I 19 have no problem looking at that. There are 20 always problems with individual beta estimates 21 because of unique things that are happening to 22 firms, but overall what comes through clear as 23 a bell is the low risk nature of utility 24 stocks, the overall market risk premium, five 25 percent, possibly six percent. So when you</p>	<p>1 So my estimate is 7.75 percent at the 2 moment, which is marginally lower than the 3 adjustment mechanism used by this Board of 4 Commissioners.</p> <p>5 MR. JOHNSON:</p> <p>6 Q. And speaking of the adjustment mechanism, Dr. 7 Booth, can you briefly describe how these 8 adjustment mechanisms work?</p> <p>9 DR. BOOTH:</p> <p>10 A. Yes, they adjust by 75 to 80 percent of the 11 change in the long-Canada bond yield, or 12 conversely the risk premium changes by 20 to 13 25 percent of the change in the long-Canada 14 bond yield. So as interest rates come down, 15 the risk premium automatically goes up to take 16 into account the fact that equities do not 17 change lock stock with the long-Canada bond 18 yield, as a result of the market risk premium 19 and the risk premium attached to utilities 20 increases when long-Canada bond yields go 21 down. The reason for the lack of a hundred 22 percent adjustment and there was one 23 commission, a B.C. utilities commission that 24 used a hundred percent adjustment. The reason 25 for the fact that it is not a hundred percent</p>

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<p>1 is that when the adjustment mechanisms were 2 introduced in Canada in 1993 and 1994, we were 3 in a very, very serious situation in Canada. 4 The Federal government had a huge deficit. A 5 deficit was running at 9 and a half percent of 6 GDP. We had significant inflation of 6 7 percent, we had a tax burden that was growing 8 significantly, causing problems in terms of 9 productivity, in terms of problems of crowding 10 other investors out of the capital markets. 11 We had a very bad situation in Canada and the 12 result was the long-Canada bond yield was 13 significantly higher than it was in the United 14 States and was causing real problems with the 15 Federal deficit. This was why the government 16 of Canada introduced inflation targeting in 17 1991. It's also why the government introduced 18 a real return bond because the real return 19 bond is indexed to inflation, so basically the 20 government said, the Federal government said 21 we'll take the risk of inflation. You buy the 22 real return bond and if you don't believe us 23 and inflation is higher than we're planning it 24 to be, we take that risk through the higher 25 value in the debt that we owe. So the</p>	<p>1 major reason being the fact that the long- 2 Canada bond yield may be default risky, but 3 it's not a risk free investment, it does have 4 interest rate risk and investors are exposed 5 to purchasing power risk. Those are very 6 significant risks in the early 90s; the equity 7 market is not subject to those risks. So we 8 would expect as the long-Canada bond yield has 9 come down, as inflation has come down and the 10 risk of government financing has come down, 11 that the market risk premium would increase 12 and as a result, the utility risk premium has 13 increased. And that's exactly what the 14 adjustment mechanism has done. In fact, 15 they've done a remarkably good job at tracking 16 the change in the overall rate of return. 17 MR. JOHNSON: 18 Q. So you support the continued use of the ROE 19 adjustment mechanism, do you Dr. Booth? 20 DR. BOOTH: 21 A. Yes, I do. There's two things to look at. 22 One, is the overall trend and if you look at 23 the yield on the real return bond in Schedule 24 18 to my testimony, you'll see that when these 25 adjustment mechanisms were introduced in the</p>
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<p>1 government took that commitment, the 2 government moved to inflation targeting. The 3 government subsequently dramatically cut 4 program spending and by 1997, the Federal 5 deficit moved into balance. Overall in 6 government we moved into balance and for the 7 last ten years, until this year, we basically 8 had a surplus in the payments of government in 9 aggregate and as a result, a significant 10 amount of risk has gone out of the long-Canada 11 bond yield and that's allowed the long-Canada 12 bond yield to drop for two reasons. First of 13 all, capital markets have now convinced the 14 Bank of Canada to stay with its one to three 15 percent inflation target, where it wasn't in 16 the early 90s. And secondly, the risk of 17 increasing government borrowing and crowding 18 out private investment is gone, which has 19 allowed the real interest to drop. These are 20 bond market risks that have not affected the 21 equity market, so I supported the adjustment 22 mechanism before the BCUC in 1993 and the 23 National Energy Board. I recommended a .8 24 adjustment. I also recommended that before 25 the Manitoba PUB and that was accepted. The</p>	<p>1 early 90s, '93, '94 BCUC, NEB and then the 2 Manitoba PUB, the real return on the long- 3 Canada bond was four and a half percent, so 4 this is the return on the real return bond. 5 Since then, as it's got its financing under 6 control, the risk has dissipated and long- 7 Canada bond yields for the real return bond 8 have dropped down to the two percent level. 9 So there's been about a two and a half percent 10 drop in the real interest rate on the real 11 return bond and all else constant, that would 12 mean that the risk premium, the market risk 13 premium would have gone up by that amount and 14 if the Beta is .5 as I estimate, the utilities 15 fair rate of return, the risk premium, would 16 have gone up by 125 basis points. By 17 happenstance that is exactly what's happened 18 as a result of the NEB's formula that a 19 utility risk premium has gone up by about 125 20 basis points since 1994. So I think that the 21 direction of the trend, as a result of the ROE 22 Adjustment Formula, has been absolutely 23 correct over the last fifteen years. That 24 does not mean to say that it's correct in a 25 mechanical way on an annual basis, so I've</p>

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<p>1 never said that it's absolutely correct. No</p> <p>2 mechanical forecast can be absolutely correct,</p> <p>3 it's going to over and under predict slightly</p> <p>4 over the business cycle and that's why I have</p> <p>5 no objection to supporting the continuation of</p> <p>6 the ROE Adjustment Formula, even though it's</p> <p>7 40 or 50 basis points higher than what I think</p> <p>8 is a fair ROE. I think as far as people are</p> <p>9 concerned it's marginally higher, but if it</p> <p>10 does away with repetitive ROE testimony and</p> <p>11 clears the slate for regulators to do other</p> <p>12 things, then I think overall that's a good</p> <p>13 bargain for all concerned. So I think overall</p> <p>14 the direction of the ROE formula has been</p> <p>15 absolutely correct, but it doesn't mean to say</p> <p>16 that it's absolutely correct on a year-to-year</p> <p>17 basis, given changes in the capital markets.</p> <p>18 MR. JOHNSON:</p> <p>19 Q. Dr. Booth, what would you have recommended to</p> <p>20 the Board in the middle of the financial</p> <p>21 crisis last year when the A spreads were at</p> <p>22 the record highs that you've described?</p> <p>23 DR. BOOTH:</p> <p>24 A. Freeze everything. The Ontario Energy Board</p> <p>25 in, I think it was January, issued a letter</p>	<p>1 in the U.S. financial are working their way</p> <p>2 out.</p> <p>3 MR. JOHNSON:</p> <p>4 Q. Dr. Booth, we are now not quite a year from</p> <p>5 the end of the financial market meltdown. If</p> <p>6 we had frozen everything a year ago, what is</p> <p>7 different about the market conditions now?</p> <p>8 DR. BOOTH:</p> <p>9 A. Now we're back into the situation where we</p> <p>10 know where we're going. Six months ago, a</p> <p>11 year ago, as I indicated we were in a</p> <p>12 situation of uncertainty where people really</p> <p>13 didn't know whether the U.S. was going to</p> <p>14 allow its financial system to fail and no</p> <p>15 functioning modern economy can exist when</p> <p>16 firms like or banks like Bank America and City</p> <p>17 Group and Wachovia and Washington Mutual and</p> <p>18 these are not little institutions, these are</p> <p>19 the biggest financial institutions in the</p> <p>20 United States when there's a fear that they</p> <p>21 will fail. So given all of that uncertainty</p> <p>22 surrounding the banking system in the United</p> <p>23 States, the capital markets were under</p> <p>24 incredibly intense situation, uncertainty,</p> <p>25 nobody really knew what was going to happen.</p>
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<p>1 saying that the spread between the ROE and the</p> <p>2 corporate bond yield was incredibly narrow. I</p> <p>3 was asked by a variety of intervenors to sort</p> <p>4 of brief them on the background on exactly</p> <p>5 what was happening and they asked me then what</p> <p>6 should we do, and I said recommend to the</p> <p>7 Board to freeze everything for a year because</p> <p>8 there's so much uncertainty in the capital</p> <p>9 markets making any decisions based upon</p> <p>10 changing the ROE formula or anything would be</p> <p>11 counterproductive. We have to wait to see</p> <p>12 whether the uncertainty in the capital markets</p> <p>13 shake out and whether we get back to normal or</p> <p>14 whether the U.S. financial system is just</p> <p>15 going to continue in a tail spin. So that was</p> <p>16 my recommendation to people that were</p> <p>17 intervening in the Ontario Energy Board and</p> <p>18 that would have been my recommendation at any</p> <p>19 time between September last year and basically</p> <p>20 March when the stock market hit its low. But</p> <p>21 I think since March, we've been out of the</p> <p>22 situation of uncertainty. The U.S. banks were</p> <p>23 stress tested and the U.S. bank, one of the--</p> <p>24 the U.S. government won't allow any of the</p> <p>25 U.S. major banks to fail now and its problems</p>	<p>1 That is not what we got at the moment. We are</p> <p>2 back to a situation where we're recovering</p> <p>3 from a normal cyclical recession. We're back</p> <p>4 to a situation where the A spreads are close</p> <p>5 to where they would be at this stage in the</p> <p>6 business cycle. The Toronto Stock Exchange is</p> <p>7 now bouncing around eleven and a half</p> <p>8 thousand, we're below the peak of eighteen</p> <p>9 months ago, but we're just coming out of</p> <p>10 recession, you expect the stock market to be</p> <p>11 off a little bit. The exchange rate dropped a</p> <p>12 couple of cents yesterday, but we're now up to</p> <p>13 95 cents again, so overall we're in a</p> <p>14 situation, as I said, a situation of risk</p> <p>15 where we know where we've been, we've been</p> <p>16 here before, this is a recovery from a</p> <p>17 recession, we're going to get stronger. Next</p> <p>18 year it's going to be better and 2011 is going</p> <p>19 to be better than 2010. This is no different</p> <p>20 in any substantial way from the situation in</p> <p>21 the early 90s or the early 2000s when we</p> <p>22 similarly had recession, very high spreads in</p> <p>23 A bond yields and we had similar source of</p> <p>24 conditions in the capital markets. So as I've</p> <p>25 said to other people, my son would say "been</p>

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<p>1 there, done that, got the T-shirt", so that's</p> <p>2 the situation of risk. We know where we are,</p> <p>3 we know where we're going, we're no longer in</p> <p>4 a situation where we simply don't know what's</p> <p>5 happening.</p> <p>6 (1:00 p.m.)</p> <p>7 MR. JOHNSON:</p> <p>8 Q. Dr. Booth, we're coming towards the end, but</p> <p>9 as you know we've spend some time talking</p> <p>10 about U.S. utilities, can U.S. utility ROEs be</p> <p>11 compared to Canadian without adjustment?</p> <p>12 DR. BOOTH:</p> <p>13 A. I taught international finance for 15 years at</p> <p>14 the University of Toronto. The first basic</p> <p>15 rule in international finance is you cannot</p> <p>16 take interest rates or fair rate of returns</p> <p>17 for one market and of one country and apply</p> <p>18 them to another without making serious</p> <p>19 adjustments to those. There's been a lot of</p> <p>20 discussion about integration of capital</p> <p>21 markets. Integrated capital markets simply</p> <p>22 mean to say that there's arbiters between</p> <p>23 different securities and foreign exchange</p> <p>24 rates adjust to take into account differences</p> <p>25 in inflation and differences in interest</p>	<p>1 prosecutions for insider trading, so the</p> <p>2 philosophy, the regulation is part of the</p> <p>3 story but the most critical story is</p> <p>4 implementation, what actually gets done. And</p> <p>5 what's important in Canada is from my</p> <p>6 experience regulators protect the utility,</p> <p>7 they have frequent rate hearings, if there's</p> <p>8 any risks that come up, they come before the</p> <p>9 regulatory body and things get worked out.</p> <p>10 That's the Canadian way, things get worked out</p> <p>11 and very, very rarely is a utility hurt.</p> <p>12 That's not what happens in the United States.</p> <p>13 They have infrequent rate hearings and it's a</p> <p>14 more litigious environment, which means people</p> <p>15 get hurt. And I was struck this morning when</p> <p>16 Mr. Johnson was taking us through all of these</p> <p>17 U.S. utilities and the fact that they do get</p> <p>18 hurt. Regulators in the United States have</p> <p>19 just got a different philosophy in terms of</p> <p>20 regulation than regulators in Canada. And</p> <p>21 that's confirmed by the discussion in Moody's</p> <p>22 and it's confirmed by the fact that I look at</p> <p>23 the earned rate of return of Canadian</p> <p>24 companies relative to the allowed. I've never</p> <p>25 seen any Canadian utility hurt in Canada for</p>
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<p>1 rates. So the very, very basic level,</p> <p>2 accepting evidence from the United States into</p> <p>3 Canadian jurisdiction violates everything that</p> <p>4 I've been teaching in international finance</p> <p>5 for the last fifteen years. You have to make</p> <p>6 adjustments. In terms of looking at U.S</p> <p>7 utilities, I would basically point out three</p> <p>8 things. First of all, U.S. utilities are not</p> <p>9 regulated on the same basis as Canadian</p> <p>10 utilities. They may have the same technology,</p> <p>11 the same underlying pipes and wires. They may</p> <p>12 even have the same regulatory requirement for</p> <p>13 fair rate of return and the same overall</p> <p>14 historic cost of regulation, but what's</p> <p>15 absolutely critical in regulating utilities is</p> <p>16 not the overall philosophy of regulations, but</p> <p>17 how it's implemented. And I'll give an</p> <p>18 analogy here, just about every country in the</p> <p>19 world has insider trading regulations. That's</p> <p>20 the legal documentation. If you just look to</p> <p>21 the law, you'd say insider trading is illegal</p> <p>22 just about everywhere. The next question is,</p> <p>23 oh yes, how many times have people actually</p> <p>24 been prosecuted for insider trading and you</p> <p>25 discover there that there are very few</p>	<p>1 the last 20 years. The only utility that</p> <p>2 suffered any problems was Specific Northern</p> <p>3 Gas and the regulator, the BCUC, had fallen</p> <p>4 over backwards to protect PNG, but there's not</p> <p>5 much you can do when you lose 70 percent of</p> <p>6 your load. But the fact is the regulators in</p> <p>7 Canada are incredibly protective towards the</p> <p>8 utilities to make sure that they don't get</p> <p>9 harmed and to minimize the fluctuations in the</p> <p>10 allowed ROE, which is why Canadian utilities</p> <p>11 invariably out perform and over on their</p> <p>12 allowed ROE. And that's not what happens in</p> <p>13 the United States. So that's one situation in</p> <p>14 terms of the first rule, which is how do we</p> <p>15 regulate utilities.</p> <p>16 The second one is what I call event risk.</p> <p>17 The fact is in the United States they</p> <p>18 periodically have major blow ups and part of</p> <p>19 this is because the regulator's responsibility</p> <p>20 is towards protecting the consumer, removing</p> <p>21 monopoly power on the part of regulated</p> <p>22 utilities. They do not seem to be so</p> <p>23 concerned about the actions of bond holders.</p> <p>24 And it is absolutely certain or absolutely</p> <p>25 clear that Standard and Poors suffered</p>

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<p>1 problems in the early 2000s when a number of 2 U.S. telecoms got involved in the Internet 3 bubble and the result was regulated telephone 4 utilities in the United States saw their bonds 5 downgraded significantly from AA down to below 6 investment grade in some sense, and the State 7 Utility Commission did nothing to protect 8 them. Their concern was for the provision of 9 service, not for the protection of bond 10 holders. That was also evident in ENRON. 11 ENRON is a classic case because it's not every 12 day that a holding company raises its 13 regulated pipelines subsidiaries to one and a 14 half billion dollars. I mean, that's a huge 15 amount of money to take out of your regulated 16 utilities and S&P noted that, they expected 17 FERC to come up with rules to ring fence 18 pipelines in the United States and FERC fell 19 down. As far as S&P is concerned, they didn't 20 put in place the right sort of protection for 21 bond holders in the United States. Those are 22 what I would refer to as event risk. If 23 you're running a holding company and you're 24 investing in the debt of that holding company 25 or the debt of that operating subsidiary,</p>	<p>1 years. The fundamental structural deficit is 2 only about 20 billion dollars, relative to 3 just about every other major country, Canada's 4 finances are in an incredibly good situation. 5 The U.S. is not in the same situation. They 6 now have a deficit running 13 percent of GDP 7 and whether or not that's increased as a 8 result of health care costs, we don't know. 9 But the U.S. has got significant debt 10 problems. They're going to have to raise 11 taxes, they're going to have to sort out their 12 deficit problems and you would expect rates of 13 return opportunity costs in the U.S. capital 14 market now to be greater than they are in the 15 Canada, which is pretty much largely where 16 they are. Currently long-Canada rates are 17 marginally lower than those in the United 18 States. Prime is at least one percent lower 19 than those in the United States. So 20 benchmarking against the United States, given 21 all of the sacrifices and the achievements 22 that we've got in Canada, to me just doesn't 23 make any sense. The U.S. may be used as a 24 comparable to look for signals, but you have 25 to make adjustments. Taking information from</p>
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<p>1 you're always worried that some sort of 2 acquisition or sale is going to make that debt 3 significantly riskier, and that's why S&P 4 requires ring fencing on the part of a 5 subsidiary in the United States; otherwise, 6 they can't get a rating better than the parent 7 corporation. So we have to remember Specific 8 Gas and Electric, we have to remember ENRON, 9 we have to remember these events in the United 10 States because these are what U.S. investors 11 think of as utilities and it's in their minds 12 that this has happened before and it can 13 happen again. The final instance is the big 14 macro picture. There's absolutely no question 15 that going back 15 years ago when the ROE 16 formulas were put in place, a little riskier 17 in Canada than the United States, higher 18 inflation, bigger budget deficits, the 19 Canadian dollar that went down to 62, 63 20 cents. We've solved all those problems. 21 We've got our tax burden down, we've got the 22 rate of inflation down, the Canadian dollar is 23 up. The government's got a little bit of a 24 deficit at the moment, but most of that will 25 be self correcting over the next three to four</p>	<p>1 the U.S. without adjustments just, as far as 2 I'm concerned, just doesn't make any sense. 3 MR. JOHNSON: 4 Q. Just two final questions. One would be, Dr. 5 Booth, would you comment on the assertion that 6 as the cost of borrowing increases, there 7 should be a commensurate increase in return on 8 equity? 9 DR. BOOTH: 10 A. First of all when I look at equity reports, it 11 is very, very rare to see an equity analyst 12 analyze a company and then refer to the bond 13 yield--sorry, refer to the bond rating. In 14 fact, I was looking at Bank of Montreal's 15 analysis of Fortis this summer and they've got 16 a buy recommendation of Fortis and I didn't 17 see anywhere where they referenced the bond 18 rating. Generally the equity markets do not 19 look seriously at bond ratings. The estimated 20 equity rates return may be affected by some of 21 the factors in bond ratings and the bond 22 yield, but the equity markets march to 23 different drummers. They're different 24 institutional purchasers, they look at 25 different facts. What happened in last fall</p>

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<p>1 and in the spring was a serious sell off in 2 the bond market, serious liquidity problems in 3 the bond market, but you get the exact 4 opposite in the equity market. There's been 5 more liquidity, more trading in the equity 6 market over the last year than there has been 7 ever before. We've had record amounts of 8 trading because equity markets strive on 9 uncertainty because it basically generates 10 trades; where the bond market wilts under 11 uncertainty because it's an institutional 12 market with only relatively few people 13 involved in the bond market relative to the 14 equity market. So certainly is some 15 relationship between two, but there's so many 16 things going on in the bond market, it's no 17 easy analogy between what's happening in the 18 bond market and what's happening in the equity 19 market. Even if we do look at bond spreads, 20 the problem is they're not like interest 21 rates. Bond spreads average out over the 22 business cycle, so if you start taking some 23 estimates based upon bond spreads, you get 24 into the problems that Ms. McShane was in this 25 morning that you have significant changes in</p>	<p>1 utility that's already earning a fair rate of 2 return, that 60 to 70 percent premium is a 3 non-earning asset. You're basically throwing 4 60 to 70 cents on the dollar away just to get 5 a dollar earned in the allowed rate of return. 6 So I would not base regulation on market to 7 book ratios, but I think you could look at 8 market to book ratios and they can basically 9 confirm the general direction of whether the 10 ROE is fair or not and that's similar to the 11 decision of the Alberta Utilities Commission 12 and the BC Utilities Commission, both of which 13 took comfort in the size of the market to book 14 ratios as indicative of whether or not their 15 allowed ROEs were fair or not. And as long as 16 you see market to book ratios significantly 17 above one--and I mean by this, 1.5, 1.6, 1.7, 18 there's comfort in the fact that allowed ROEs 19 are not unfair. That's the market signal that 20 people are willing to pay premiums to buy 21 these assets that are already earning the 22 allowed rate of return, so I take comfort in 23 that in indicating that the allowed rate of 24 return by this jurisdiction and every 25 jurisdiction in Canada, I fail to see how</p>
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<p>1 the bond spreads, it changes the fair rate of 2 return. If you feed those into the allowed 3 rate of return, you're generating a large 4 amount of uncertainty in allowed rate of 5 return, which basically evens out over the 6 business cycle. And I see no advantage in 7 doing that. 8 MR. JOHNSON: 9 Q. Finally what is your overall assessment and 10 what is the basic Litmus test that you think 11 the Board could look to to assess the fairness 12 of the allowed ROE? 13 DR. BOOTH: 14 A. Pierre Trudeau once referred to the smell 15 test, that basically you look at something and 16 say, well, I could look at all of the evidence 17 but does it make sense? The Litmus test that 18 I use in terms of a fair rate of return is 19 what's the value of regulated assets? When I 20 see regulated assets earning an allowed rate 21 of return being sold from one holding company 22 to another at a 60/70 percent premium to their 23 book value, I know the fair rate of return is 24 more than fair, because when you paid 60 to 70 25 percent more for the equity in a regulated</p>	<p>1 anyone could really say that they're unfair 2 and unreasonable. 3 MR. JOHNSON: 4 Q. Thank you, Dr. Booth. 5 CHAIRMAN: 6 Q. Mr. Kelly, I think it's your turn. 7 KELLY, Q.C.: 8 Q. Thank you, Mr. Chairman. Good afternoon, Dr. 9 Booth. 10 DR. BOOTH: 11 A. Good afternoon. 12 KELLY, Q.C.: 13 Q. Dr. Booth, I'd like to start with a couple of 14 basic principles just to be sure we're on the 15 same page. What the Board has got to do in 16 this hearing is to look at the return on 17 equity to determine prospectively for the 2010 18 test year what the fair return is for 19 Newfoundland Power; in other words, it's a 20 prospective or forward looking determination, 21 do we agree on that much? 22 DR. BOOTH: 23 A. That's right, that's why we look at the test 24 year. 25 KELLY, Q.C.:</p>

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<p>1 Q. Not simply looking back at historical data, 2 it's a question of looking forward and trying 3 to determine what the future will be? 4 DR. BOOTH: 5 A. That's correct. We look at the past guide 6 judgment of what the future is likely to be, 7 but we're always looking at the test year. 8 KELLY, Q.C.: 9 Q. So that and the second point is the fair 10 return or the just and reasonable return is 11 the return commensurate with the return 12 expected by investors on investments of 13 similar risk? 14 DR. BOOTH: 15 A. Securities of similar risk, yes. 16 KELLY, Q.C.: 17 Q. Well, I'll take that. So we're looking for 18 that expected return on securities of similar 19 risk, agreed? 20 DR. BOOTH: 21 A. That's correct. 22 KELLY, Q.C.: 23 Q. Now as you said a minute ago and as you made a 24 number of points in both your pre-filed 25 testimony and your response to RFIs, your</p>	<p>1 Cicchetti has exercised his in the process of 2 trying to assist the Board. 3 DR. BOOTH: 4 A. That's correct. 5 KELLY, Q.C.: 6 Q. Now one of the areas that require judgment is 7 the methodology that is going to be employed 8 to try and figure out what this expected 9 return is going to be going forward. Will you 10 accept that? 11 DR. BOOTH: 12 A. Yes. 13 KELLY, Q.C.: 14 Q. Okay, and will you also accept that all of the 15 methodologies, whether we look at the capital 16 asset pricing model or the discounted cash 17 flow model, all of them have certain problems 18 or difficulties inherent in them? 19 (1:15 p.m.) 20 DR. BOOTH: 21 A. Every estimation has problems, some of them 22 are clearly methodologically superior, but 23 they all have estimation problems attached to 24 them, even if they're methodologically 25 inferior.</p>
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<p>1 testimony is about fair return, what's 2 expected, is largely a function of your 3 judgment, can we agree with that? 4 DR. BOOTH: 5 A. I would regard it as judgment constrained by 6 the facts, you have to look at the facts and 7 the facts, for example, the market risk 8 premium is less than my recommendation, the 9 facts are the betas coefficients are less than 10 my recommendation, so I would say that my 11 recommendation is higher than the facts, but 12 that's my recommendation. 13 KELLY, Q.C.: 14 Q. We'll come to some of those details in a 15 moment, my point simply is I think as you said 16 in response to one of the RFIs, it's not 17 simply a mathematical or statistical exercise 18 that you're engaged in, nor for that matter 19 Ms. McShane or Mr. Cicchetti. 20 DR. BOOTH: 21 A. That's correct, if you wanted statistics, then 22 you'll just hire a statistician. 23 KELLY, Q.C.: 24 Q. Right, so you've exercised your judgment and 25 Ms. McShane has exercised her judgment and Mr.</p>	<p>1 KELLY, Q.C.: 2 Q. Right and the capital asset pricing model 3 itself has known estimation problems 4 associated with it, agreed? 5 DR. BOOTH: 6 A. The test of the capital asset pricing model 7 30, 40 years ago indicated that there were 8 problems with it when it was used to estimate 9 30 day rates in return in the capital market. 10 KELLY, Q.C.: 11 Q. Could we bring up your evidence, page 50. 12 DR. BOOTH: 13 A. Yes. 14 KELLY, Q.C.: 15 Q. For example at line 20, you're talking about a 16 two factor model. First of all you have your 17 basic capital asset pricing model and then you 18 also develop this two-factor model which you 19 say partly adjusts for the known estimation 20 problems with CAPM? 21 DR. BOOTH: 22 A. That's correct. 23 KELLY, Q.C.: 24 Q. Right, and in fact your two-factor model, I 25 don't want to get into a whole lot of detail,</p>

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<p>1 that hasn't found a whole lot of support with</p> <p>2 regulators, BCUC, for example, didn't apply</p> <p>3 it.</p> <p>4 DR. BOOTH:</p> <p>5 A. The BCUC didn't apply it, the National Energy</p> <p>6 Board said they thought it was useful and</p> <p>7 reflected more the way that you value utility</p> <p>8 shares, but they said they'd like to see more</p> <p>9 evidence and it's difficult to find how much</p> <p>10 more evidence you can come up with, but -</p> <p>11 KELLY, Q.C.:</p> <p>12 Q. Right, I think in your testimony in the--</p> <p>13 recently in Terasen, you jokingly said you</p> <p>14 were a little hurt that they didn't like your</p> <p>15 two-factor model.</p> <p>16 DR. BOOTH:</p> <p>17 A. Well that's right, particularly when Ms.</p> <p>18 McShane does the same thing--I mean, she</p> <p>19 doesn't apply it as a model, but empirically</p> <p>20 the fact is utility shares react to interest</p> <p>21 rates and react to the stock market.</p> <p>22 KELLY, Q.C.:</p> <p>23 Q. Right, and what we're trying to do in all</p> <p>24 those models is trying to get handle, a</p> <p>25 judgment on what the future return is going to</p>	<p>1 line 5, it tends to underestimate returns for</p> <p>2 low risk, in other words, beta less than one</p> <p>3 stocks?</p> <p>4 DR. BOOTH:</p> <p>5 A. That's right, it tended to do that over the</p> <p>6 period that they estimated the CAPM, correct.</p> <p>7 KELLY, Q.C.:</p> <p>8 Q. Now there are other methodologies out there</p> <p>9 and one of them is the discounted cash flow</p> <p>10 methodology, correct?</p> <p>11 DR. BOOTH:</p> <p>12 A. That's correct.</p> <p>13 KELLY, Q.C.:</p> <p>14 Q. And let's just follow that line for a bit,</p> <p>15 that's kind of based on the proposition that</p> <p>16 the price of the stock equals the present</p> <p>17 value of the future expected cash flows being</p> <p>18 discounted down to reflect the risk and that</p> <p>19 discounted rate is essentially the rate of</p> <p>20 return we're talking about?</p> <p>21 DR. BOOTH:</p> <p>22 A. That is correct. The discounted cash flow</p> <p>23 model is an internal rate of return that sets</p> <p>24 the present value of the future frame of</p> <p>25 dividends equal to the current stock price.</p>
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<p>1 be, that's essentially what we're trying to</p> <p>2 grapple with.</p> <p>3 DR. BOOTH:</p> <p>4 A. Yes, that's correct.</p> <p>5 KELLY, Q.C.:</p> <p>6 Q. Now one of the biggest problems with the</p> <p>7 capital asset pricing model is that what the</p> <p>8 model really needs is the expected or future</p> <p>9 returns, as opposed to simply to realize past</p> <p>10 returns, that's kind of one of the biggest</p> <p>11 struggles in it, isn't it?</p> <p>12 DR. BOOTH:</p> <p>13 A. That's exactly right. Well what we use is the</p> <p>14 actual return on the basis of that is what was</p> <p>15 expected, plus a random error term, and if you</p> <p>16 do it enough times, the random error term</p> <p>17 reduces to zero.</p> <p>18 KELLY, Q.C.:</p> <p>19 Q. And we'll get into a little bit of it in a</p> <p>20 minute now. So that's the fundamental</p> <p>21 difficulty trying to get that handle on future</p> <p>22 returns and if I could take you just to page</p> <p>23 33 of your evidence for a moment and we had</p> <p>24 this up on the screen just a few minutes ago.</p> <p>25 I take you to lines 5 and 6, a the tail end of</p>	<p>1 KELLY, Q.C.:</p> <p>2 Q. Right, so you're looking at an expected stream</p> <p>3 of cash flows, so in that sense it's a more</p> <p>4 direct model based upon the investor</p> <p>5 expectations, instead of an indirect model.</p> <p>6 DR. BOOTH:</p> <p>7 A. Yeah, but you said exactly the same thing,</p> <p>8 they're expectations. The question is you</p> <p>9 need to an expected rate of return at test of</p> <p>10 CAPM, you need expected cash flows to come up</p> <p>11 with the DCF estimate, and not just that, with</p> <p>12 the DCF estimate, you need the expected cash</p> <p>13 flows over multiple time periods.</p> <p>14 KELLY, Q.C.:</p> <p>15 Q. But one way to go at it is to look at what</p> <p>16 investors expect and so, for example, just to</p> <p>17 take Mr. Cicchetti's example, he looks at</p> <p>18 Value Line expectations and works out a DCF</p> <p>19 model on that basis.</p> <p>20 DR. BOOTH:</p> <p>21 A. That's right. I mean, they're not investors,</p> <p>22 I mean Value Line is a private proprietary</p> <p>23 investment service.</p> <p>24 KELLY, Q.C.:</p> <p>25 Q. And the proxy for investors, though, in the</p>

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<p>1 circumstances?</p> <p>2 DR. BOOTH:</p> <p>3 A. That's right, but that's the problem, how good</p> <p>4 a proxy it is.</p> <p>5 KELLY, Q.C.:</p> <p>6 Q. As we just said a few minutes ago,</p> <p>7 difficulties with each of the methodologies.</p> <p>8 Now, can I take you over to your appendix C</p> <p>9 and you actually look at a DCF model, correct?</p> <p>10 DR. BOOTH:</p> <p>11 A. That's correct.</p> <p>12 KELLY, Q.C.:</p> <p>13 Q. But you don't take the DCF model to actually</p> <p>14 then incorporate investor's expectations and</p> <p>15 then calculate out a DCF calculation, would</p> <p>16 you agree with that much first?</p> <p>17 DR. BOOTH:</p> <p>18 A. That's correct.</p> <p>19 KELLY, Q.C.:</p> <p>20 Q. What you do is use it to kind of try and</p> <p>21 validate the market risk premium analysis is</p> <p>22 what you do?</p> <p>23 DR. BOOTH:</p> <p>24 A. That's true. I used to use, half my testimony</p> <p>25 used to be discounted cash flow up until the</p>	<p>1 A. That's right, "K" is just the investors</p> <p>2 required rate of return on the discount rate.</p> <p>3 KELLY, Q.C.:</p> <p>4 Q. Right, now let me take you briefly over to</p> <p>5 page 71.</p> <p>6 DR. BOOTH:</p> <p>7 A. Yes.</p> <p>8 KELLY, Q.C.:</p> <p>9 Q. Bear with me a second here, back to page 71 of</p> <p>10 your testimony, and this kind of picks up --</p> <p>11 wait until Mike gets it on the screen here for</p> <p>12 you. Here we go, at line 6, we've got the</p> <p>13 same formula to get the "K" factor, and</p> <p>14 beginning at line 8, you say, "My Appendix C</p> <p>15 presents data for all US utilities followed by</p> <p>16 Standard and Poor's, as well as the electric</p> <p>17 and gas utilities. This data is used to</p> <p>18 estimate a DCF required return", that is then</p> <p>19 subtracted, et cetera, as you go into the --</p> <p>20 so you use the Standard and Poor's data, and</p> <p>21 you use a sample of US utilities to do your</p> <p>22 DCF analysis, correct?</p> <p>23 DR. BOOTH:</p> <p>24 A. Well, I used the Standard and Poor's sample.</p> <p>25 I didn't create a sample from Standard and</p>
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<p>1 early 1990s and then we increasingly had a</p> <p>2 problem with discounted cash flow in Canada</p> <p>3 and I now use it where I can as a check to</p> <p>4 sort of indicate is it--are my basic estimates</p> <p>5 in the right ballpark.</p> <p>6 KELLY, Q.C.:</p> <p>7 Q. Let me at the bottom of page one, take you</p> <p>8 down to the last line there, beginning at line</p> <p>9 22, "I already use this DCF estimate as part</p> <p>10 of my risk premium estimates. However, we can</p> <p>11 take this a stage further and estimate the DCF</p> <p>12 required return on equity directly using the</p> <p>13 same procedure".</p> <p>14 DR. BOOTH:</p> <p>15 A. Yeah.</p> <p>16 KELLY, Q.C.:</p> <p>17 Q. Correct, and that's what we've talked about,</p> <p>18 for example, as Ms. McShane and Mr. Cicchetti</p> <p>19 have done?</p> <p>20 DR. BOOTH:</p> <p>21 A. That's right.</p> <p>22 KELLY, Q.C.:</p> <p>23 Q. And that becomes this "K" factor which in the</p> <p>24 middle of page two?</p> <p>25 DR. BOOTH:</p>	<p>1 Poor's. I just used the Standard and Poor's</p> <p>2 analyst handbook, and the utilities that they</p> <p>3 include in their analyst handbook.</p> <p>4 KELLY, Q.C.:</p> <p>5 Q. Right, and that's a sample of US utilities?</p> <p>6 DR. BOOTH:</p> <p>7 A. That's correct.</p> <p>8 KELLY, Q.C.:</p> <p>9 Q. Right, and if I take you back to Schedule "C",</p> <p>10 to page 6 of Schedule "C" --</p> <p>11 DR. BOOTH:</p> <p>12 A. Yes.</p> <p>13 KELLY, Q.C.:</p> <p>14 Q. And you'll see -- wait until we get it on the</p> <p>15 -- Appendix "C".</p> <p>16 MR. SIMMONS:</p> <p>17 Q. PDF, I think. I think it was distributed as a</p> <p>18 separate pdf.</p> <p>19 KELLY, Q.C.:</p> <p>20 Q. No, it's part of Dr. Booth's Report. It's</p> <p>21 where we were originally, Mike, Appendix "C".</p> <p>22 Not a table, just in the text. There we go.</p> <p>23 If we can go to page 6, Mike. Go down to the</p> <p>24 bottom of the page. So this is the US utility</p> <p>25 data that you're referring to, Dr. Booth?</p>

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<p>1 DR. BOOTH:</p> <p>2 A. That's correct.</p> <p>3 KELLY, Q.C.:</p> <p>4 Q. And that would be similar to the data that Ms.</p> <p>5 McShane has used and Mr. Cicchetti has used?</p> <p>6 DR. BOOTH:</p> <p>7 A. No, these tends to be big companies, so</p> <p>8 because they're big companies, they tend to</p> <p>9 have the holding companies, they tend to have</p> <p>10 holding companies with a variety of different</p> <p>11 operations, they involve more diversified</p> <p>12 operations. So I think in my Appendix "G", I</p> <p>13 actually go through and use these firms from</p> <p>14 the analyst's handbook, as well as using a</p> <p>15 sample of US firms that Ms. McShane uses, and</p> <p>16 a sample that Dr. Gilbert, another expert from</p> <p>17 the US, uses. So I look at those ones to</p> <p>18 assess the betas and the overall risk.</p> <p>19 KELLY, Q.C.:</p> <p>20 Q. Right, and what we're trying to do in the DCF</p> <p>21 analysis is to look for companies of</p> <p>22 comparability, comparable investment risk,</p> <p>23 correct?</p> <p>24 DR. BOOTH:</p> <p>25 A. Well, I'm looking to these US utilities to</p>	<p>1 sample.</p> <p>2 KELLY, Q.C.:</p> <p>3 Q. Okay, Mike, if you could just come over two</p> <p>4 more pages to page 17. Dr. Booth, this is</p> <p>5 your Schedule 5, and I'll just take you to the</p> <p>6 electric group at the top there.</p> <p>7 DR. BOOTH:</p> <p>8 A. Yes.</p> <p>9 KELLY, Q.C.:</p> <p>10 Q. And the "K" factor, which would be the</p> <p>11 required return, is a number of columns over</p> <p>12 there towards the right hand side, five back?</p> <p>13 DR. BOOTH:</p> <p>14 A. That's correct.</p> <p>15 KELLY, Q.C.:</p> <p>16 Q. And so if we went down to the bottom, for</p> <p>17 example, if we took the 2008 year, you come</p> <p>18 across, you get a return of 9.59, 9.6 percent,</p> <p>19 we'll call it, roughly?</p> <p>20 DR. BOOTH:</p> <p>21 A. Okay, yeah.</p> <p>22 KELLY, Q.C.:</p> <p>23 Q. Correct?</p> <p>24 DR. BOOTH:</p> <p>25 A. Yeah.</p>
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<p>1 see, well, what is the actual data, what's the</p> <p>2 rate of return that I could estimate for these</p> <p>3 utilities, and is it in the right ball park,</p> <p>4 because -- and I just sort of qualify that,</p> <p>5 comparable doesn't mean equivalent.</p> <p>6 Comparable just means to say you're looking at</p> <p>7 utilities, or you're looking at companies that</p> <p>8 you're sort of saying, well, I'm going to</p> <p>9 estimate their rate of return, and what</p> <p>10 information can I get from that. So you can</p> <p>11 estimate those rates of return, and you can</p> <p>12 say, well, look, they're riskier, so I'm going</p> <p>13 to subtract 50 or 100 basis points from them.</p> <p>14 KELLY, Q.C.:</p> <p>15 Q. Go over to Schedule 3, in Appendix "C", at</p> <p>16 page 15, Mike. Here we go. There on the left</p> <p>17 hand side, Dr. Booth, is the list of American</p> <p>18 utilities, including some of the ones that my</p> <p>19 friend, Mr. Johnson, went through with Ms.</p> <p>20 McShane; Duke Energy, FPL Group, Southern</p> <p>21 Company.</p> <p>22 DR. BOOTH:</p> <p>23 A. Yes, in my Appendix "G", I go through a look</p> <p>24 at the overlap between the S & P utilities,</p> <p>25 Ms. McShane's sample, and Dr. Gilbert's</p>	<p>1 KELLY, Q.C.:</p> <p>2 Q. Now that's not a "go forward" return, that's</p> <p>3 essentially an historic value you're looking</p> <p>4 at?</p> <p>5 DR. BOOTH:</p> <p>6 A. No.</p> <p>7 KELLY, Q.C.:</p> <p>8 Q. No?</p> <p>9 DR. BOOTH:</p> <p>10 A. The historical value is a return on equity,</p> <p>11 which was 11.94 percent.</p> <p>12 KELLY, Q.C.:</p> <p>13 Q. Right.</p> <p>14 DR. BOOTH:</p> <p>15 A. So the historic value is the ROE. What we've</p> <p>16 got is how do we come up with the forecast for</p> <p>17 growth, and growth has to come from the</p> <p>18 underlying operations of the firm. So similar</p> <p>19 to Ms. McShane in her 2002 testimony, I look</p> <p>20 at what we call the sustainable growth rate,</p> <p>21 which growth has to come from something</p> <p>22 organic through the firm's operations, and the</p> <p>23 most basic way that growth comes is by</p> <p>24 retaining money within the firm and earning</p> <p>25 some sort of rate of return on that, and the</p>

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<p>1 way in which we estimate that is the</p> <p>2 sustainable growth rate formula, which the</p> <p>3 growth rate is the amount that you retain, the</p> <p>4 more you retain, you grow more, and times the</p> <p>5 rate of return on equity, and the higher the</p> <p>6 rate of return, the more you grow. So this</p> <p>7 forecast growth rate is a combination of the</p> <p>8 retention rate "B" times the ROE. So it's a</p> <p>9 forecast growth rate based upon historic</p> <p>10 parameters. So it's based upon historic</p> <p>11 statistics, but it's not an historic estimate</p> <p>12 of growth, it's a forecast for the future</p> <p>13 growth.</p> <p>14 KELLY, Q.C.:</p> <p>15 Q. That's a great explanation, kind of makes my</p> <p>16 point.</p> <p>17 DR. BOOTH:</p> <p>18 A. I thought you were going to come to that.</p> <p>19 KELLY, Q.C.:</p> <p>20 Q. In other words, it's based upon historic, you</p> <p>21 got 11 percent ROE, and you're saying 9.6 on</p> <p>22 that if I look -- 9.59 looking forward in</p> <p>23 2008?</p> <p>24 DR. BOOTH:</p> <p>25 A. That's right.</p>	<p>1 a proxy for what a reasonable growth rate is</p> <p>2 going forward, judgment constrained by the</p> <p>3 facts.</p> <p>4 KELLY, Q.C.:</p> <p>5 Q. Okay. So in this particular analysis, you</p> <p>6 didn't do the investor forward looking return,</p> <p>7 but you did do this degree of analysis, and</p> <p>8 you did that based upon American data using</p> <p>9 the Standard and Poor's database, in effect?</p> <p>10 DR. BOOTH:</p> <p>11 A. Yeah, it's -- the big problem is more and more</p> <p>12 we were facing US witnesses in Canada. In</p> <p>13 fact, I can't remember -- well, sure, I can</p> <p>14 remember. Two years ago, I came across a</p> <p>15 Canadian witness before the Regie. Other than</p> <p>16 Dr. Chretien, who produced Fama-French</p> <p>17 multifactor asset pricing model that the Regie</p> <p>18 didn't put much weight on, apart from that</p> <p>19 just about every witness in Canada for the</p> <p>20 last five years presented by the utilities has</p> <p>21 been American, and they've been presenting</p> <p>22 American testimony. So you can't have a</p> <p>23 situation where testimony based upon American</p> <p>24 evidence is presented and goes uncontested.</p> <p>25 So as I think I mentioned throughout Terasen</p>
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<p>1 KELLY, Q.C.:</p> <p>2 Q. Right.</p> <p>3 DR. BOOTH:</p> <p>4 A. And that's the first one, URP, and then for</p> <p>5 URP 2 and URP 3, I say, well, look, the</p> <p>6 historic data suffers all of the volatility of</p> <p>7 actual earned rates of return, so let's look</p> <p>8 at something that's probably a little bit more</p> <p>9 stable and a little bit more predictable</p> <p>10 growth rate. So I look at the median retention</p> <p>11 rate rather than some of these utilities. If</p> <p>12 you look at 2002, you see apparent ratio of</p> <p>13 150 percent because that was the recession,</p> <p>14 some of these utilities like Duke had huge</p> <p>15 losses, and as a result their dividends</p> <p>16 weren't covered by their earnings, their</p> <p>17 payout was over 100 percent, their retention</p> <p>18 was negative. So if you just apply the</p> <p>19 mechanical formula, you'd end up with a</p> <p>20 negative growth rate and investors don't</p> <p>21 expect that. So in addition to the mechanical</p> <p>22 URP, I also looked at median growth rates</p> <p>23 times the ROE, and I also looked at median</p> <p>24 growth rates times a typical ROE for long US</p> <p>25 treasury yield, plus 4 percent, to try and get</p>	<p>1 Gas, I've been dragged screaming -- not</p> <p>2 screaming, but I've been dragged into looking</p> <p>3 at US testimony just to basically see what is</p> <p>4 this data that they're using, and how useful</p> <p>5 is it, and does it actually indicate what they</p> <p>6 say it indicates.</p> <p>7 KELLY, Q.C.:</p> <p>8 Q. I guess we can say despite your admonition of</p> <p>9 teaching for 15 years not to look at American</p> <p>10 material, you've gotten to the stage now that</p> <p>11 you, yourself, are using American material in</p> <p>12 your Appendix "C".</p> <p>13 DR. BOOTH:</p> <p>14 A. Yeah, that's a misstatement, that's a serious</p> <p>15 misstatement, because as I've said, you can't</p> <p>16 use it without making adjustments, and all I'm</p> <p>17 doing is looking at the US evidence here, and</p> <p>18 I'm not relying upon it, I'm not basing my</p> <p>19 estimates on it. I'm looking at it and</p> <p>20 saying, well, what are these estimates that</p> <p>21 come out of the US. If I was hired to go and</p> <p>22 do work in the US, what would I do if I</p> <p>23 applied a DCF model using standard DCF</p> <p>24 techniques, and the answer is the estimates</p> <p>25 are not much different from a significant</p>

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<p>1 amount of the estimates that Ms. McShane comes 2 up, and if I had to estimate betas for US 3 utilities, what would these US betas be. So 4 you can't allow US witnesses to come in and 5 provide uncontested US testimony when -- I'm 6 presenting Canadian testimony, somebody has to 7 come in and test the legitimacy of that 8 testimony, which is all I'm doing.</p> <p>9 KELLY, Q.C.: 10 Q. So at this first level, the judgment as to the 11 methodology, your evidence is based primarily 12 on the capital asset pricing model, which is a 13 form of equity risk premium test, correct?</p> <p>14 DR. BOOTH: 15 A. It is equity risk premium.</p> <p>16 KELLY, Q.C.: 17 Q. Exactly.</p> <p>18 DR. BOOTH: 19 A. And, in fact, I use different ways of -- I 20 mean, it's not directly capital asset pricing 21 model. It would be capital asset pricing 22 model if I used the actual beta coefficient, 23 and I don't do that. I use a variety of ways 24 of looking at the relative risk assessment for 25 the utilities.</p>	<p>1 but they all disappeared. So that technique 2 just went out the window, I couldn't do it.</p> <p>3 KELLY, Q.C.: 4 Q. So that methodology failed?</p> <p>5 DR. BOOTH: 6 A. Well, the methodology didn't fail. The absence 7 of data meant that it was impossible to do 8 anything with it.</p> <p>9 KELLY, Q.C.: 10 Q. Couldn't use it any more.</p> <p>11 DR. BOOTH: 12 A. If you bring back Maritime Tel, Newfoundland 13 Tel, and Bronco, and everything, then I'd be 14 able to do it again, but --</p> <p>15 KELLY, Q.C.: 16 Q. But they're all changes.</p> <p>17 DR. BOOTH: 18 A. Exactly, so we have to change with it.</p> <p>19 KELLY, Q.C.: 20 Q. And I understand you're now working on some 21 new model that you've yet to roll out, and I'm 22 certainly not going to ask about it, but these 23 are different models all trying to get at the 24 same issue, which is what's the investor's 25 expected return going forward?</p>
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<p>1 KELLY, Q.C.: 2 Q. And we have Mr. Cicchetti, who uses 3 essentially a DCF model with a bit of market 4 risk premium as well. Agree with that?</p> <p>5 DR. BOOTH: 6 A. With no Canadian data whatsoever, from what I 7 see.</p> <p>8 KELLY, Q.C.: 9 Q. He used the DCF methodology?</p> <p>10 DR. BOOTH: 11 A. True.</p> <p>12 KELLY, Q.C.: 13 Q. Okay, and we have Ms. McShane, who uses both 14 of those methodologies in several various 15 formats?</p> <p>16 DR. BOOTH: 17 A. That's correct, and as I indicated, I used to 18 use four techniques; two risk premium, one 19 based a variation on the capital asset pricing 20 model which I'm using now, and the other based 21 on preferred stock yields because the closest 22 thing to utility shares are actually preferred 23 shares because they've got the same tax 24 characteristics and everything else, and that 25 was based upon the local telephone companies,</p>	<p>1 DR. BOOTH: 2 A. That's right, that's where I basically say 3 that the good thing about the CAPM is you 4 can't be that wrong with a CAPM because it's 5 based it's based upon the time value of money 6 and it's based upon the risk value of money, 7 and we have 80 years of capital market history 8 in terms of the market risk premium.</p> <p>9 KELLY, Q.C.: 10 Q. Mr. Chairman, it's now twenty-five to two. I 11 expect to be an hour or so with Dr. Booth, 12 maybe a little bit longer in the morning, but 13 I'm pretty much on track, so we can break here 14 today if you wish.</p> <p>15 CHAIRMAN: 16 Q. Yes, thank you very much. 17 Upon concluding at 1:35 p.m.</p>

1 CERTIFICATE

2 We, the undersigned, hereby certify that the
3 foregoing is a true and correct transcript in the
4 matter of Newfoundland Power's 2010 General Rate
5 Application heard on the 21st day of October, A.D.,
6 2009 before Commissioners of the Public Utilities
7 Board, Prince Charles Building, St. John's,
8 Newfoundland and Labrador and was transcribed by me
9 to the best of my ability by means of a sound
10 apparatus.

11 Dated at St. John's, Newfoundland and Labrador
12 this 21st day of October, A.D., 2009.

13 Judy Moss

14 Gwen Halliday

NP's 2010 General Rate Application

<div>#-</div> <div>#14 [5] 67:14 68:11,13 73:9 74:20</div> <div>#17 [1] 36:13</div> <div>#18 [1] 47:15</div> <div>#2 [1] 36:11</div> <div>#3 [1] 71:12</div> <div>-&-</div> <div>& [21] 19:9 36:21,25 40:6 52:17 54:22,23 57:2,3,8 57:16 60:21,23 61:3,6 64:8 121:18 122:4,20 123:10 198:24</div> <div>-'</div> <div>'02 [3] 69:8 71:1 75:19</div> <div>'07 [3] 33:22 68:25 75:19</div> <div>'08 [4] 5:16 13:25 14:2 91:14</div> <div>'09 [2] 14:4 16:20</div> <div>'47 [1] 91:14</div> <div>'90s [2] 134:6,7</div> <div>'93 [1] 168:1</div> <div>'94 [1] 168:1</div> <div>'99 [1] 160:1</div> <div>---</div> <div>-the [1] 142:25</div> <div>-what [1] 18:5</div> <div>--</div> <div>.3 [2] 114:21 115:24</div> <div>.47 [2] 99:18,21</div> <div>.5 [12] 109:22 110:20 112:2,5,20 114:21 115:1 115:10,24 163:7,22 168:14</div> <div>.65 [6] 96:22 97:1,16 98:5 98:22,24</div> <div>.7 [1] 96:20</div> <div>.70 [6] 96:22 97:1,16 98:5 98:22,24</div> <div>.8 [13] 108:1,18 109:13 110:13 111:21,25 114:20 114:22 115:1,11,21,23 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