Page 1	Page 3
1 JANUARY 14, 2013	the United States?
2 (9:05 a.m.)	2 MS. MCSHANE:
3 CHAIRMAN:	3 A. I have.
4 Q. Good morning everybody. I think we got a	4 KELLY, Q.C.:
5 change in the lineup this morning. I'm sorry,	5 Q. In relation to cost of capital matters?
6 I don't even know -	6 MS. MCSHANE:
7 KELLY, Q.C.:	7 A. That's correct.
8 Q. It's Newfoundland Power's witness, Mr.	8 KELLY, Q.C.:
9 Chairman, Ms. Kathleen McShane.	9 Q. And you've testified before this Board on a
10 CHAIRMAN:	number of previous occasions?
11 Q. Yes, of course, yeah.	11 MS. MCSHANE:
12 KELLY, Q.C.:	12 A. Yes, I have.
Q. We have the first cost of capital witness this	13 KELLY, Q.C.:
morning, and then Ms. Perry will be back on to	Q. Do you adopt your report, the Opinion on
complete her testimony tomorrow.	15 Capital Structure and Return on Equity for
16 CHAIRMAN:	Newfoundland Power contained in Volume 3 as
Q. Yes. Okay, well, we had quite a bit of storm,	your evidence in this proceeding?
so tell Mr. Ludlow that I think the employees	18 MS. MCSHANE:
of Newfoundland Power provided better than	19 A. I do.
20 generally good service.	20 KELLY, Q.C.:
21 KELLY, Q.C.:	21 Q. Are there any changes which you wish to make
22 Q. Thank you.	to the report or any of the appendices at this
23 CHAIRMAN:	time?
24 Q. Pass that on, will you?	24 MS. MCSHANE:
25 KELLY, Q.C.:	25 A. No, there are not.
Page 2	Page 4
1 Q. Thank you, Mr. Chairman, I will indeed. Our	1 KELLY, Q.C.:
2 employees worked very diligently to get power	2 Q. Ms. McShane, I'd like to discuss with you
3 back up as quickly as possible. Thank you	3 three basic areas. The first is capital
4 very much. The witness is ready to be sworn,	4 structure, the second, return on equity, and
5 Mr. Chairman.	5 the third, the automatic adjustment formula.
6 MS. KATHLEEN MCSHANE (SWORN) EXAMINATION BY KELLY, Q.C.:	6 So if we start with capital structure, would
7 KELLY, Q.C.:	you provide the Board with a brief explanation
8 Q. Good morning, Ms. McShane.	8 of your recommendations and conclusions with
9 MS. MCSHANE:	9 respect to Newfoundland Power's capital
10 A. Good morning.	10 structure?
11 KELLY, Q.C.:	11 MS. MCSHANE:
12 Q. You're the President of Foster Associates	12 A. Certainly. I have concluded that the 45
13 Inc.?	percent common equity ratio that Newfoundland
14 MS. MCSHANE:	Power has maintained and is proposing to
15 A. I am.	maintain remains reasonable, based on
16 KELLY, Q.C.:	considerations that's there been no material
17 Q. And if we go to page one of your report at	change in business risk since the Board last
lines 5 through 12, your qualifications are	
	reviewed the capital structure, and there's
19 summarized there?	reviewed the capital structure, and there's been no evidence filed in this proceeding by
19 summarized there? 20 MS. MCSHANE:	reviewed the capital structure, and there's been no evidence filed in this proceeding by any part to suggest otherwise. I note that
19 summarized there?	reviewed the capital structure, and there's been no evidence filed in this proceeding by any part to suggest otherwise. I note that since August, 2009, when Moody's issued a new
19 summarized there? 20 MS. MCSHANE: 21 A. They are. 22 KELLY, Q.C.:	reviewed the capital structure, and there's been no evidence filed in this proceeding by any part to suggest otherwise. I note that since August, 2009, when Moody's issued a new debt rating methodology and has tightened its
19 summarized there? 20 MS. MCSHANE: 21 A. They are. 22 KELLY, Q.C.: 23 Q. And are set in more detail in Appendix G. We	reviewed the capital structure, and there's been no evidence filed in this proceeding by any part to suggest otherwise. I note that since August, 2009, when Moody's issued a new debt rating methodology and has tightened its capital structure guidelines, and Newfoundland
19 summarized there? 20 MS. MCSHANE: 21 A. They are. 22 KELLY, Q.C.:	reviewed the capital structure, and there's been no evidence filed in this proceeding by any part to suggest otherwise. I note that since August, 2009, when Moody's issued a new debt rating methodology and has tightened its

	Page 5
1	percent common equity ratio, Moody's has noted
2	that Newfoundland Power's credit matrix are
3	somewhat weaker than its similarly rated BAA1
4	peers in North America. I also note that a
5	review of the trend in allowed capital
6	structures by other regulators in Canada over
7	the past several years shows that the capital
8	structures have been either maintained at
9	current levels or increased.
10	KELLY, Q.C.:

Q. Okay. Can I get you to comment briefly on the 11 proposals of Mr. McDonald and Dr. Booth with 12 respect to Newfoundland Power's capital 13 structure? 14

15 MS. MCSHANE:

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16 A. Well, with respect to Mr. McDonald, his evidence effectively is similar to mine. He 17 supports the 45 percent common equity ratio 18 and notes some of the same considerations that 19 I did. With respect to Dr. Booth, he's 20 recommending that the Board reduce the common 21 22 equity ratio of Newfoundland Power to 40 percent from 45 percent. With respect to that 23 recommendation, I would note the following; 24 under the Moody's rating methodology which 25

1 KELLY, O.C.:

Q. Okay. Let's go next to the return on equity. If we go to page 104 and look at Table 30, 3 let's start by having you explain your 4 recommendations with respect to return on 5 equity for the Board?

7 MS. MCSHANE:

A. My recommended return on equity for Newfoundland Power is 10.5 percent, and the 9 10 recommended ROE is for both 2013 and 2014. The 10.5 percent ROE is based on application 11 of multiple market-based tests, and these 12 include three different equity risk premium 13 tests, and several models of the discounted 14 cashflow test that I have applied to both 15 16 Canadian and US utilities. The test results themselves are summarized on page 104, as Mr. 17 Kelly pointed us to in Table 30. These tests 18 before any adjustment for financing 19 flexibility together indicate a cost of equity 20 of 9.5 percent. My final recommendation of 21 10.5 percent incorporates an allowance for 22 financing flexibility of 1 percentage point. 23 This is .5 percent higher than what I 24 recommended in 2009, and .5 percent higher 25

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assigns ratings to nine different factors, if the Board would reduce the common equity ratio to 40 percent, the rating on the capital structure factor itself which is currently BAA, would drop to non-investment grade. The reduction in the common equity ratio would also weaken other credit matrix, which as I noted just a minute ago, are already somewhat weaker than Newfoundland Power's similarly rated peers. As regards the qualitative factors to which Moody's gives weight in coming up with its debt ratings, there are two, both related to the regulatory environment, and in my opinion, if the Board would reduce the common equity ratio from 45 to 40 percent, Moody's would in all likelihood reevaluate its conclusion that Newfoundland Power operates in a supportive regulatory environment, and if Moody's were to reduce Newfoundland Power's rating on one of the regulatory environment or regulatory risk factors. I think that there is a very high likelihood that Newfoundland Power would be downgraded. 25 (9:15 a.m.)

Page 8

than what the Board adopted. The higher allowance for financing flexibility is intended to recognize that the Board has in previous decisions decided that it will not give weight to the comparable earnings test, but only to test derived from equity capital market data. In that case there needs, in my view, to be an explicit recognition that the market data in which these market-based test, the equity risk premium, and discounted cashflow test, are based, reflect market value capital structures. In the market value common equity ratios of the companies that are selected to determine or estimate the cost of equity for Newfoundland Power are thicker or incorporate less financial risk than the regulated capital structure to which the market derived cost of equity is applied under the original cost rate based rate of return model that's used in this province and in North America. So I think that the allowance for financing flexibility needs to recognize this disparity as well as allow for recovery of flotation costs. If, however, the Board were to decide that it was appropriate to use

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	Pa	ge 9	Page 11
1	comparable earnings in conjunction with the		note in respect to the discounted cashflow
2	market based tests, then I think that it's	2	test that we have in the last couple of years,
3	reasonable to limit the financing flexibility	3	I think, seen other regulators in Canada tend
4	adjustment for the market based test 250 basis	4	to give more weight to discounted cashflow
5	points, and in that context if we give weight	5	than they had in earlier proceedings.
6	to comparable earnings, which in isolation		LY, Q.C.:
7	supports a return of 11 to 12 percent,		Okay. Now in order to use the discounted
8	incorporate that with the marked based test	8	cashflow model, you have to have a sample of
9	and a minimum financing flexibility adjustment	9	utilities to use it. Can I get you to explain
10	of 50 basis points, the fair return for	10	the difficulties with Canadian sample and then
11	Newfoundland Power would still be	11	what changes you've made in response to the
12	approximately 10.5 percent.	12	Board's comments in its last rate order with
1	KELLY, Q.C.:	13	respect to the selection of a sample of US
14	Q. Okay. Now you indicated in your comments a few	14	utilities?
15	moments ago, and demonstrated in your report		MCSHANE:
16	that you used multiple tests to come up with		With respect to some general comments, I would
17	your cost of capital. Can I get you to	17	say that in order - the fair return standard
18	elaborate on that and explain to the Board why	18	requires that we consider returns that are
19	you use multiple tests?	19	available to comparable risk enterprises. In
	MS. MCSHANE:	20	that respect, I don't think you can avoid
$\begin{vmatrix} 20 \\ 21 \end{vmatrix}$	A. In my view, no single test is strong or	21	selecting samples of similar risk to the
22	sufficient enough to ensure that the fair	22	utility whose return is being set. In Canada,
23	return standard is met. Different tests have	23	we have a particularly difficult problem
24	different perspectives, different tests have	24	because there are only six companies that
25	different strengths and weaknesses, different	25	effectively have regulated operations and are
-	-		
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1	tests have more or less reliability under	1	publicly traded, and this is a very
2	different capital market and economic	2	heterogenous group, both in terms of the size
3	conditions. This last consideration, in my	3	of the companies and in terms of the makeup of
4	view, is particularly germane at this point in	4	their operations, regulated and unregulated.
5	time, given the relatively or abnormally low	5	The US public utility equity market is a much
6	level of long term Canada Bond yields. Under		broader and deeper universe of companies from
7	current market conditions the application of	7	which one can select a sample of comparable
8	the capital asset pricing model becomes	8	risk companies. I think it's also important
9	particularly problematic. The model itself	9	to recognize that when one selects companies
10	provides no guidance as to how to reconcile	10	that are to be of similar risk, you're never
11	the abnormally low level of long term Canada		going to find companies that are equivalent in
12	Bond yields, which is the proxy for the risk	12	risk on every element, every factor. What
13	free rate with estimates of the market risk	13	you're looking for are companies that overall
14	premium, which have typically been expressed		can be determined to be of similar total risk,
15	in the nature of a long term average level.	15	business risk, regulatory risk, and financial
16	As a result, much more judgment is required	16	risk, and in regard to that last point, it is
17	under current market conditions in the	17	not sufficient to say that the utilities are
18	application of that model, and I think less	18	not of the same business risk or regulatory
19	confidence can be placed in the accuracy of	19	risk to determine that they are not of similar
20	the results. In those conditions, it is	20	overall risk. Lower or higher business risk
21	particularly important to look to multiple	21	can be offset by a lower or higher equity
22	tests and particularly important to look to	22	ratio. That proposition is widely accepted and
23	tests such as the discounted cashflow test,	23	it, in fact, is at the heart of what the
24	which are not benchmarked or anchored to the		Alberta Utilities Commission does when it sets
25	long term Canada Bond yield. I would also	25	the cost of capital for Alberta utilities. It

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1	looks at the different business risks of the	1	market data itself, I am comfortable that
2	utilities that it regulates and sets the	2	these are companies that would be viewed as
3	capital structures for these sectors and	3	reasonably comparable total risk to
4	individual companies based on its view of how	4	Newfoundland Power.
5	those utilities compare in terms of business	5 KI	ELLY, Q.C.:
6	risk. So that at the end of the day you have	6	Q. Okay. Can I get you next to comment briefly
7	a group of utilities that the Alberta	7	on the ROE recommendations of Mr. McDonald and
8	Utilities Commission believes are comparable	8	Dr. Booth?
9	total risk, so that it can apply the same	9 M	S. MCSHANE:
10	return to all those utilities. With respect	10	A. With respect to Mr. McDonald, I guess I would
11	to the sample of US utilities that I've	11	say that when I looked at his testimony, I saw
12	selected, those utilities have higher common	12	that there are what I considered to be a
13	equity ratios than Newfoundland Power. So	13	fairly large number of commonalities between
14	even if one were to say that they have	14	our testimony. For example, he and I both
15	somewhat higher business risk, they have lower	15	consider that Newfoundland Power is an average
16	financial risk. Also I would point out that	16	risk utility at its existing capital
17	as among the experts in this proceeding, of	17	structure. Our return recommendations are
18	whom there are four, all of them have been	18	both premised on that conclusion. He and I
19	able to select and use to some extent samples	19	agree that cost of equity methods aren't
20	of US utilities. With respect to the specific	20	perfect, that they are more or less reliable
21	steps that I took to address the Board's	21	depending on the capital market conditions,
22	concern from the 2009 decision, I did tighten	22	and that it's important to use multiple tests.
23	up the selection criteria somewhat to limit	23	I think we both agree that Canadian capital
24	the selection of US companies only to those	24	markets are challenged at this time. We agree
25	which had Moody's and S & P ratings of BAA1 in	25	that it is possible to construct and rely on a
	Page 14		Page
1	S & P's framework, BBB+ or better, and I also	1	sample of US utilities for the discounted
I .		1 _	1.01

put a cap on the amount of unregulated 2 3 operations that any utility in the sample could have. Further, I have set out in an 4 5 extensive Appendix B, and maybe we could just take a look at Appendix B for a second. I'm 6 7 not going to go through Appendix B, obviously, 8 but I wanted to just - if we go to Appendix 9 Page B2, and on Page B2 there's a chart for AGL Resources, and there's one for each of the 10 11 companies in the sample, and what I've done 12 there is to look at and assess the different 13 characteristics, business characteristics, and regulatory risk characteristics of each of the 14 15 companies, and you can see if you look at AGL Resources, there are the number of customers, 16 17 operating revenues by type of customer class, what kind of test year is being used, what the 18 19 allowed returns on equity and the equity ratios are, what deferral mechanisms and other 20 21 types of regulatory protective mechanisms are 22 available, and as well as looking at what the 23 assessment of the regulatory risk environment

cashflow test. We both give significant weight to discounted cashflow, although we use somewhat different samples and the timing of our estimates is somewhat different, and even the inputs for estimating the investor's expected growth are somewhat different, our base DCF estimates are pretty similar. I think we also agree that it's appropriate to use a test based on historical utility market returns and risk premiums. I think the major area where we part ways is with respect to the capital asset pricing model. Mr. McDonald essentially applies the model by combining this long term average market risk premium that I talked about earlier with what are effectively still abnormally low forecast bond yields. In other words, he really doesn't make any adjustment to address the disconnect between or among the inputs to the model. He appears to recognize that the capital asset pricing model result is not commensurate with a fair return, but he still gives the test result as applied equal weight to his other tests, and in my view, that approach

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by the different debt rating agencies is.

Based on that assessment, as well as the

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	Page 17		Page 19
1	underestimates the fair return for	1 KELL	Y, Q.C.:
2	Newfoundland Power. With respect to Dr.	2 Q.	I'm sure Mr. Johnson will have a few questions
3	Booth, his recommendation is effectively based	3	for you. Thank you, Ms. McShane.
4	solely on the application of the capital asset	4 MS. K	CATHLEEN MCSHANE - EXAMINATION BY MR. JOHNSON:
5	pricing model. I don't intend to repeat all	5 MR. J	OHNSON:
6	of the issues that I consider that the capital	6 Q.	Ms. McShane, good morning.
7	asset pricing model faces, but I would point	7 MS. N	MCSHANE:
8	the Board for future reference to pages 51 to	8 A.	Good morning.
9	54 of my testimony where I lay out what I	9 MR. J	OHNSON:
10	believe the important concerns with the	10 Q.	I always enjoyed kicking off a week at 9
11	capital asset pricing model are. Just as a	11	o'clock to talk about some mathematics and
12	general comment, I would also note that Dr.	12	numbers and stuff like that, but, anyway,
13	Booth's recommended return of 7.5 percent if	13	we'll give it a shot. I'll bring you to page
14	it were to be accepted, would be the lowest	14	104 of your report, and you referred to this
15	return that's been adopted for an investor	15	table already, and I just want to confirm the
16	owned utility in North America.	16	weighting. Obviously, you've indicated already
17	KELLY, Q.C.:	17	the tests that you have applied and they are
18	Q. Okay. The third point that I'd like to have	18	set out in Table 30, and we see the risk
19	you discuss is the automatic adjustment	19	adjusted equity market gave 8.9 percent, the
20	formula. You've recommended discontinuance of	20	discounted cashflow method gave significantly
21	the automatic adjustment formula at this time.	21	higher at 9.5, and the historic utility gave
22	Can I get you to explain why for the Board?	22	much higher again at 10.25. Now as I
23	MS. MCSHANE:	23	understand it, you took the averages of those
24	A. I think the reliability of any formula is	24	three, which I would calculate to be 9. 55
25	dependent perhaps obviously on the formula's	25	percent. Would you take that, subject to
	Page 18		Page 20
1	ability to produce a fair return, and that is	1	check?
2	in turn dependent on the predictability and	2 MS. I	MCSHANE:
3	stability of the relationship between the ROE	3 A.	Sorry, I averaged three?
4	and the variables that are used to adjust the	4 MR.	JOHNSON:
5	ROE. Since the financial crisis, there really	5 Q.	You averaged the three risk premium tests to
6	has been very little relationship between long	6	come to 9.55 percent. Let's put it this way,
7	term Canada Bond yields, which is the typical	7	Ms. McShane, you gave each of your risk
8	variable to which ROE has been anchored in	8	premium tests equal weight?
9	earlier formulas, and the same is true of the	9 MS. I	MCSHANE:
10	relationship between the utility ROE and		Yes.
11	utility bond yield. I don't believe that		JOHNSON:
12	there is any particular efficiency gain from	12 Q.	And then you also gave the discounted cashflow
13	adopting a formula at this juncture that would	13	test, which yielded 9.4 percent equal weight?
14	offset the potential for that formula to mis-		MCSHANE:
15	specify a fair return.	15 A.	Yes.
1	(9:30 a.m.)		JOHNSON:
1	KELLY, Q.C.:		And you ended up - if you took the average of
18	Q. Is there anything else you'd like to add on	18	your risk premium tests, it comes to 9.55
1	any of these points that we've talked about or	19	percent. You add that to your discounted
19		100	cashflow test and divide by two.
19 20	have we pretty much covered it at this stage?	20	
19 20 21	MS. MCSHANE:	21 MS. I	MCSHANE:
19 20 21 22	MS. MCSHANE: A. I think we've pretty much covered it, and I	21 MS. I 22 A.	MCSHANE: That would come to 9.5.
19 20 21 22 23	MS. MCSHANE: A. I think we've pretty much covered it, and I think I'm probably going to have an	21 MS. I 22 A. 23 MR.	MCSHANE: That would come to 9.5. JOHNSON:
19 20 21 22	MS. MCSHANE: A. I think we've pretty much covered it, and I	21 MS. I 22 A. 23 MR.	MCSHANE: That would come to 9.5.

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	Page 21	Page 23
1 percent to get you up to the 10.5	percent that 1	1 A. Correct.
2 you're recommending, right?	2	2 MR. JOHNSON:
3 MS. MCSHANE:	3	3 Q. So you feel that alternate methodology backs
4 A. Correct.	4	4 up your 10.5 percent?
5 MR. JOHNSON:	5	5 MS. MCSHANE:
6 Q. So in other words, to state the o	bvious, if 6	6 A. Correct.
7 the Board was to accept everyth	ing that you 7	7 MR. JOHNSON:
8 have to say in Table 30, but they		8 Q. Okay, and Ms. McShane, I take it that you
9 financing flexibility shouldn't rea	I	9 would agree with me that your comparable
from 2009 from .50 to 1 percent,	•	
get from your recommendation is	-	
12 MS. MCSHANE:	12	* *
13 A. If the Board were to consider tha		
point adjustment was appropriate		14 MS. MCSHANE:
percent, then the number would be		
16 MR. JOHNSON:	-	16 MR. JOHNSON:
17 Q. Right, and you speak about the		
	•	
report at page 104, you speak alternative approach and that or		· · · · · · · · · · · · · · · · · · ·
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giving weight to the comparable		20 MS. MCSHANE:
21 approach, correct?	21	•
22 MS. MCSHANE:	22	3
23 A. That's right.		23 MR. JOHNSON:
24 MR. JOHNSON:	24	
25 Q. And under that alternate approach	n, your report 25	25 MS. MCSHANE:
	Page 22	Page 24
		- 1.8- = 1
1 states that a fair return on equity	based on 1	1 A. I think that's right.
states that a fair return on equity the comparable earnings test alor		-
1		1 A. I think that's right. 2 MR. JOHNSON:
2 the comparable earnings test alor	ne is between 2 3	1 A. I think that's right.2 MR. JOHNSON:
the comparable earnings test alor 11 to 12 percent, correct?	ne is between 2 3 4	 A. I think that's right. MR. JOHNSON: Q. And you've put it forward several times?
the comparable earnings test alor 11 to 12 percent, correct? 4 MS. MCSHANE:	ne is between 2 3 4 5	 A. I think that's right. MR. JOHNSON: Q. And you've put it forward several times? MS. MCSHANE:
the comparable earnings test alor 11 to 12 percent, correct? 4 MS. MCSHANE: 5 A. Yes.	ne is between 2 3 4 5	 A. I think that's right. MR. JOHNSON: Q. And you've put it forward several times? MS. MCSHANE: A. I have. MR. JOHNSON:
the comparable earnings test alor 11 to 12 percent, correct? MS. MCSHANE: A. Yes. MR. JOHNSON:	ne is between 2 3 4 5 6	 A. I think that's right. MR. JOHNSON: Q. And you've put it forward several times? MS. MCSHANE: A. I have. MR. JOHNSON: Q. And you've put it several times before in your
the comparable earnings test alor 11 to 12 percent, correct? 4 MS. MCSHANE: 5 A. Yes. 6 MR. JOHNSON: 7 Q. So 11.5 percent?	ne is between 2 3 4 5 6 7	 A. I think that's right. MR. JOHNSON: Q. And you've put it forward several times? MS. MCSHANE: A. I have. MR. JOHNSON: Q. And you've put it several times before in your testimony before regulators across the
the comparable earnings test alor 11 to 12 percent, correct? MS. MCSHANE: A. Yes. MR. JOHNSON: Q. So 11.5 percent? MS. MCSHANE:	ne is between 2 3 4 5 6 7 8 9	 A. I think that's right. MR. JOHNSON: Q. And you've put it forward several times? MS. MCSHANE: A. I have. MR. JOHNSON: Q. And you've put it several times before in your testimony before regulators across the
the comparable earnings test alor 11 to 12 percent, correct? MS. MCSHANE: A. Yes. MR. JOHNSON: Q. So 11.5 percent? MS. MCSHANE: A. Fair.	2 3 4 5 6 7 8 9 10	1 A. I think that's right. 2 MR. JOHNSON: 3 Q. And you've put it forward several times? 4 MS. MCSHANE: 5 A. I have. 6 MR. JOHNSON: 7 Q. And you've put it several times before in your testimony before regulators across the country? 10 MS. MCSHANE:
the comparable earnings test alor 11 to 12 percent, correct? MS. MCSHANE: A. Yes. MR. JOHNSON: Q. So 11.5 percent? MS. MCSHANE: A. Fair. MR. JOHNSON:	ne is between 2 3 4 5 6 7 8 9 10 weighting 11	1 A. I think that's right. 2 MR. JOHNSON: 3 Q. And you've put it forward several times? 4 MS. MCSHANE: 5 A. I have. 6 MR. JOHNSON: 7 Q. And you've put it several times before in your testimony before regulators across the country? 10 MS. MCSHANE:
the comparable earnings test alor 11 to 12 percent, correct? MS. MCSHANE: A. Yes. MR. JOHNSON: Q. So 11.5 percent? MS. MCSHANE: A. Fair. MR. JOHNSON: Q. Right, and then in terms of the	ne is between 2 3 4 5 6 7 8 9 10 weighting 11 r, you giv \$\frac{3}{3}\$	1 A. I think that's right. 2 MR. JOHNSON: 3 Q. And you've put it forward several times? 4 MS. MCSHANE: 5 A. I have. 6 MR. JOHNSON: 7 Q. And you've put it several times before in your testimony before regulators across the country? 10 MS. MCSHANE: 11 A. I have. 12 MR. JOHNSON:
the comparable earnings test alor 11 to 12 percent, correct? MS. MCSHANE: A. Yes. MR. JOHNSON: Q. So 11.5 percent? MS. MCSHANE: A. Fair. MR. JOHNSON: Q. Right, and then in terms of the under that alternate methodology	ne is between 2 3 4 5 6 7 8 9 10 weighting 11 r, you giv \$\frac{3}{3}\$	1 A. I think that's right. 2 MR. JOHNSON: 3 Q. And you've put it forward several times? 4 MS. MCSHANE: 5 A. I have. 6 MR. JOHNSON: 7 Q. And you've put it several times before in your 8 testimony before regulators across the 9 country? 10 MS. MCSHANE: 11 A. I have. 12 MR. JOHNSON: 13 Q. And you can confirm that there's not been -
the comparable earnings test alor 11 to 12 percent, correct? MS. MCSHANE: A. Yes. MR. JOHNSON: Q. So 11.5 percent? MS. MCSHANE: A. Fair. MR. JOHNSON: Q. Right, and then in terms of the under that alternate methodology percent weight to the test up in T	12 a special s	1 A. I think that's right. 2 MR. JOHNSON: 3 Q. And you've put it forward several times? 4 MS. MCSHANE: 5 A. I have. 6 MR. JOHNSON: 7 Q. And you've put it several times before in your testimony before regulators across the country? 10 MS. MCSHANE: 11 A. I have. 12 MR. JOHNSON: 13 Q. And you can confirm that there's not been it's not been generally accepted in the whole
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1 that time being whether there needed to be a	1 MS. MCSHANE:
2 market to book adjustment to the results. I	2 A. I would say there are some that do and some
addressed that issue in 2009, and in 2009,	3 that don't.
4 they decided to give it some small weight.	4 MR. JOHNSON:
5 MR. JOHNSON:	5 Q. Okay. Ms. McShane, we provided a cross-
6 Q. Yes, so -	6 examination aid to you where we tried to
7 MS. MCSHANE:	7 provide a summary of your recommendations.
8 A. Without the market to book adjustment.	8 Basically, a table showing your
9 MR. JOHNSON:	9 recommendations in 2009 versus your
10 Q. So other than that solitary example, there is	recommendations for the 2013/2014 test year.
no regulatory precedent for accepting or	11 MS. GLYNN:
putting weight on comparable earnings test in	12 Q. We'll mark that as Information Item #3.
13 Canada?	13 MR. JOHNSON:
14 MS. MCSHANE:	Q. That would have been Item #1 on our letter of
15 A. There haven't been any decisions in, I'd say	January 10th, to Ms. Cheryl Blundon. Ms.
the last fifteen years, other than the BCUC	McShane, I take it you have it in front of
decision that have given it weight.	17 you?
18 MR. JOHNSON:	18 MS. MCSHANE:
19 Q. Pardon me?	19 A. I do.
20 MS. MCSHANE:	20 MR. JOHNSON:
21 A. There have not been any decisions, at least in	21 Q. And just to explain, in this illustration
the last fifteen years, other than the BCUC	essentially what we did is took - made a
decision that have given it weight.	summary of your recommendations from the last
24 MR. JOHNSON:	two - this rate case and the last one, and the
25 Q. And Dr. Vander Weide is going to give	column entitled "McShane 2010", we extracted
Page 26	
testimony. I understand he's testified 400	that from the reasons of the Board's decisions
times, poor fellow, and he does not provide	2 at page 14, and I believe, in fact, that the
3 comparable earnings test. So it's not	Board took that from Newfoundland Power's own
4 accepted in the United States either, is it?	4 submissions in written argument. The
5 MS. MCSHANE:	5 2013/2014 column, that's our summary of your
6 A. I wouldn't say that it's not accepted in the	6 recommendation to the Board in this case.
7 United States. It's less widely used than the	7 Have you had a chance to look at this chart
8 discounted cashflow test. Some people use it,	8 and see whether we have accurately depicted
9 some people don't.	9 2013/2014?
10 MR. JOHNSON:	10 MS. MCSHANE:
11 Q. Most wouldn't?	11 A. I think that's correct, yes.
12 MS. MCSHANE:	12 MR. JOHNSON:
13 A. Most who? Are you talking about -	13 Q. Okay, and Ms. McShane, I guess as you can see,
14 MR. JOHNSON:	the first thing that we are noting is the
15 Q. Most experts wouldn't use it?	first thing that jumps out at me to being very
16 MS. MCSHANE:	obvious is the financing flexibility change
17 A. I'm not sure that I would say most.	that's gone from 50 basis points all the way
18 MR. JOHNSON:	up to 1 full percentage point, and, I mean, as
19 Q. Pardon me?	you indicated to Mr. Kelly, you recognize that
20 MS. MCSHANE:	20 last time you proposed .5, and you recognize
21 A. I'm not sure I would say most. I know of a	that in PU 43, this Board approved .5. When
number of experts who use it.	did you first start arguing for 1 percent?
23 MR. JOHNSON:	23 MS. MCSHANE:
24 Q. Okay, but we'll agree predominantly experts	24 A. In cases where I've not used the comparable
don't use it in the United States?	earnings test as an input into my recommended
	1 , 1

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return. So it would have been since 2009.	1 would that be advisable?
2 MR. JOHNSON:	2 MS. MCSHANE:
3 Q. Since?	3 A. I'm not sure what you're asking me.
4 MS. MCSHANE:	4 MR. JOHNSON:
5 A. 2009.	5 Q. Well, you've indicated that your new approach
6 MR. JOHNSON:	or your alternative approach is to now we'll
7 Q. Since 2009, and you tied that to your not	7 give 25 percent weighting to comparable
8 putting reliance on comparable earnings?	8 earnings, okay, and 75 percent weight to the
9 MS. MCSHANE:	9 test that you've described in Table 30, and
10 A. Correct.	you say now when we do that, I'm content
11 MR. JOHNSON:	actually to go from 1 percent to 50 basis
12 Q. Okay, and for instance, you recall that you	points?
argued for 1 percent allowance for financing	13 MS. MCSHANE:
14 flexibility before the Alberta Utilities Commission Consult Cost of Conital Hagring in	14 A. I mean, that was the approach that I'd taken
Commission Generic Cost of Capital Hearing in	in the past, so that the two types of tests
16 2011, correct?	basically establish a range. One based on -
17 MS. MCSHANE:	the bottom end of the range based on the
18 A. Correct.	market based test, and the upper end of the
19 MR. JOHNSON:	range based on the returns on book value that
20 Q. And they didn't go with that, did they?	are achievable by companies of reasonably
21 MS. MCSHANE:	comparable risk to a utility.
22 A. I don't believe the adopted that, no.	22 MR. JOHNSON:
23 MR. JOHNSON:	23 Q. But back before the 2009 case here in
Q. And they would have adopted 50 basis points,	Newfoundland, at that point you advocated use
25 right?	of the comparable earnings?
Page 3	Page 32
1 MS. MCSHANE:	1 MS. MCSHANE:
2 A. I believe that's correct, yes.	2 A. I did.
3 MR. JOHNSON:	3 MR. JOHNSON:
4 Q. That's right, and I take it your evidence is	4 Q. And that was part of your 11 percent overall
5 that in that case you had jettisoned	5 recommended return on equity, right?
6 comparable earnings?	6 MS. MCSHANE:
7 MS. MCSHANE:	7 A. In 2000 and -
8 A. I had done the same type of approach as here	8 MR. JOHNSON:
9 with the - this approach with just market	9 Q. 2009 case.
based test, and the alternative with	10 MS. MCSHANE:
comparable earnings, I believe.	11 A. Yes, it was.
12 MR. JOHNSON:	12 MR. JOHNSON:
13 Q. And even under your alternative approach	13 Q. And so - there you recommended 50 basis points
whereby you put 25 percent weighting on	and you're saying if you're putting any weight
	on it at all, you can go back to 50;
why would you need to - you've indicated under	
your alternate approach you'd put 25 percent	17 MS. MCSHANE:
weight on comparable earnings, but you'd be	18 A. I wouldn't quite say it that way, but if the
satisfied under that scenario of using a 50	Board is willing to give significant weight to
20 basis point financing flexibility?	comparable earnings, then I think it's
21 MS. MCSHANE:	reasonable to only apply a relatively small
22 A. Right.	financing flexibility adjustment to the market
23 MR. JOHNSON:	based test.
23 MR. JOHNSON: 24 Q. And I don't understand the ratio. What's the 25 relationship when you do it that way? Why	 based test. MR. JOHNSON: Q. Otherwise, your number really just gets too

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big, is that the concern?	1	wouldn't say that the overall requirement
2 MS. MCSHANE:	2	itself has changed, no.
3 A. No, I just think that that's a reasonable	3	MR. JOHNSON:
4 balance between those different types of	f 4	Q. No, okay. Now, Ms. McShane, just back to your
5 tests.	5	summary of recommendations, that was the first
6 (9:45 a.m.)	6	thing that sort of jumped out at me. The
7 MR. JOHNSON:	7	second thing that jumped out at me is
8 Q. What's the rationale, though?	8	obviously the overall recommendation, which
9 MS. MCSHANE:	9	was 11 percent now - I'm sorry, 11 percent in
10 A. The rationale is -	10	2010, and it's 10.5 percent now, that's even
11 MR. JOHNSON:	11	if we took your advice on the 1 percent
12 Q. It's easy to say this gives you a balance, but	t 12	financing flexibility. So I'm saying, well, I
what's the thought behind it?	13	guess cost of equity has gone down for
14 MS. MCSHANE:	14	Newfoundland Power, and I guess that would be
15 A. The thought behind the difference in the two	o - 15	your professional judgment as well, correct?
16 MR. JOHNSON:	16	MS. MCSHANE:
17 Q. You said giving 50 basis points if you're	17	A. I would say that the cost of equity for a
going to put some weight on comparable	ole 18	utility today is probably somewhat lower than
earnings provides a bit of balance. What are	re 19	it was in late 2009.
20 you talking about?	20	MR. JOHNSON:
21 MS. MCSHANE:	21	Q. And in terms of somewhat lower, could you put
22 A. Well, the idea with - one of the ideas with	. 22	an indication of what somewhat lower would
comparable earnings is that a utility should	1 23	mean to you?
be allowed to earn a return on its book value	e 24	MS. MCSHANE:
25 that's commensurate with returns on book v	value 25	A. My recommendation is 50 basis points lower
P	Page 34	Page 36
that are achievable by similar risk entities,	1	a to we are a care and
and in that context there is the premise that	2	is the difference, in my view.
3 utilities values or market to book ratios,	3	MR. JOHNSON:
4 should not be constrained to book value. S	So 4	Q. And could it be greater than 50 percent basis
5 essentially there is a level of financing	5	lower?
6 flexibility, if you will, already built into	6	MS. MCSHANE:
7 the comparable earnings test, so you don't	t 7	A. It really would depend on at what point in
8 need to include it twice, if you will, in the	8	time you were measuring it, but I would say,
9 market based test and in the comparable - w	vhen 9	no, and based on the application of the
it's to some extent captured by the compara	able 10	various tests that are used, it's no more than
earnings test.	11	that.
12 MR. JOHNSON:	12	MR. JOHNSON:
13 Q. Does financing flexibility have a demonstra	able 13	Q. No more than 50?
14 cost?	14	MS. MCSHANE:
15 MS. MCSHANE:	15	A. I wouldn't say, so, no.
16 A. Does it have a demonstrable cost?	16	MR. JOHNSON:
17 MR. JOHNSON:	17	1 4
18 Q. Like, for instance, if someone were to ask,		
has financing flexibility gone up over the	19	·
last few years, can you say, yes, it's gone	20	· · · · · · · · · · · · · · · · · · ·
up, yeah?	21	, , ,
22 MS. MCSHANE:	22	* *
23 A. Well, there are various elements to it. One	23	1
of the elements is flotation costs	24	,
specifically; no, that hasn't gone up. I	25	MS. MCSHANE:

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January 14, 2013 Page 37 A. I think so, yes. 1 MR. JOHNSON: 2 MR. JOHNSON: Q. An average risk company, okay. So in the last case, as you're aware, this Board looked at Q. And just to be clear on that now, that market 3 3 risk premium, that would basically be saying your 11 percent return on recommendation and 4 4 ordered 200 basis points less than that, and that any company that's out there in the 5 5 market, never mind utilities, any company, you're saying that the cost of equity for 6 6 that's what the average risk company could Newfoundland Power has declined since your 7 7 expect to return or expect to earn over and 8 8 opinion in the 2010 GRA, right? above a risk free rate? That's what we're 9 9 MS. MCSHANE: 10 talking about, the premium over the risk free A. My estimates are lower than they were. 10 rate? 11 11 MR. JOHNSON: 12 MS. MCSHANE: 12 Q. Yes, and your estimates are lower than they A. That's what that is, yes. were because the cost of equity is declined, 13 13 14 MR. JOHNSON: 14 obviously? Q. Okay, and you're saying that notwithstanding 15 MS. MCSHANE: 15 16 the cost of capital has gone down, the cost of 16 A. Well, I agreed with you that based on my assessment, it looks like the cost of equity equity has gone down for Newfoundland Power, 17 17 that the market risk premium is actually is about 50 basis points lower than when I did 18 18 elevated from 6.75 percent in 2010 to 8 those estimates in 2009. 19 19 percent now for 2013 and 2014, right? 20 20 MR. JOHNSON: 21 MS. MCSHANE: 21 Q. Right, and, in fact, there was a lot of 22 A. Yes, there is evidence that the market cost of 22 regulatory activity in 2009. These cases seem to go in cycles, do they not? 2009 was a busy 23 equity is higher today than it was in late 23 year, and there's more proceedings in Alberta, 24 24 BC, etc., more recently, is that right? 25 MR. JOHNSON: 25 Page 38 Q. Okay. So that would mean that you're saying 1 MS. MCSHANE: 1 2 that the expected cost of equity for an A. Yes, there have been - there were a number of average risk firm, never mind utilities, is cases in 2009, and there have been several 3 3 around 11.5 percent? since that time. 4 4 5 MS. MCSHANE: 5 MR. JOHNSON: A. Based on the capital asset pricing, yes, it Q. And, for instance, in Alberta, that Board had 6 6 7 would be. 7 a generic cost of capital hearing in 2009, and I believe you participated in that hearing, 8 MR. JOHNSON: 8 Q. Okay. You mentioned that's the capital asset did you not? 9 9 risk model, but that's not that model, all 10 MS. MCSHANE: 10 11 you're doing there is adding your risk free 11 A. I participated, yes. rate to the market risk premium and coming up 12 MR. JOHNSON: 12 with 11.5 percent, correct? 13 13 Q. And as a matter of fact, that Board in 2009, they issued a decision around late of 2009, 14 MS. MCSHANE: 14 A. That would be essentially a capital asset around November month, wasn't it? 15 15 pricing model with a Beta of 1. 16 MS. MCSHANE: 16 17 MR. JOHNSON: 17 A. I think that's right. O. With a Beta of 1? 18 18 MR. JOHNSON: 19 MS. MCSHANE: Q. And they ordered 9 percent? A. Yes. 20 20 MS. MCSHANE: 21 MR. JOHNSON: A. I believe that's right. Q. So any company out there? 22 MR. JOHNSON:

23

24

25

Q. And they've since - they've revisited that now

hearing, right?

because the had a 2011 cost of capital generic

an average risk company.

A. Well, it would be for a company with a Beta 1,

23 MS. MCSHANE:

24

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1 MS. MCSHANE:	1 Q. And they were seeking 10.6 percent on a bit
2 A. They did.	thicker common equity of 40 percent as opposed
3 MR. JOHNSON:	3 to 38 percent, right?
4 Q. And they reduced it to what, 8.75, is that	4 MS. MCSHANE:
5 correct?	5 A. Yes.
6 MS. MCSHANE:	6 MR. JOHNSON:
7 A. They did, yes.	7 Q. And then ATCO Gas, they were seeking the
8 MR. JOHNSON:	8 highest, they were seeking 11 percent on 40
9 Q. Now in 2009, you indicated you had some	9 percent common equity, right?
involvement before the Alberta regulator, and	10 MS. MCSHANE:
11 I'd like to bring you to the Alberta	11 A. Yes.
Regulator's case or decision from 2009, and	12 MR. JOHNSON:
particularly page 15 of that decision.	13 Q. And in terms - did you support these
14 MS. GLYNN:	recommendations that these ATCO companies were
15 Q. We'll enter that as Information Item #4.	making to the Board before Alberta in 2009?
16 MR. JOHNSON:	16 MS. MCSHANE:
17 Q. Now Ms. McShane, as I understand it, in	17 A. Do you mean did I do the cost of equity
Alberta, they set what's called a generic ROE,	18 estimates?
and you talked about that a little bit in	19 MR. JOHNSON:
direct with Mr. Kelly in terms of the approach	20 Q. No, I'm asking you did you support the
in Alberta, correct?	recommendations that ATCO was making?
22 MS. MCSHANE:	22 MS. MCSHANE:
23 A. Yes.	23 A. Indirectly.
24 MR. JOHNSON:	24 MR. JOHNSON:
25 Q. And at Table 3 of this decision, it gives the	25 Q. Yes, and your role before the 2009 AUC was
Page 42	Page 44
1 utility's proposed ROE and equity ratios	what, Ms. McShane?
before the Alberta Board, right, and I	2 MS. MCSHANE:
3 understand that you were there - your client	3 A. My role was to determine whether or not the
4 was the ATCO Group, is that correct?	4 individual ATCO Utilities were more or less
5 MS. MCSHANE:	5 risky on a business risk basis than sort of
6 A. Yes.	6 benchmark and to determine whether any
7 MR. JOHNSON:	7 adjustments to the benchmark ROE were required
8 Q. And so ATCO Electric TFO, that's ATCO's	8 based on the relative riskiness of the
9 transmission company, correct?	9 individual ATCO Utilities.
10 MS. MCSHANE:	10 MR. JOHNSON:
	10 MR. JOHNSON:
11 A. Yes.	11 Q. So you were the relative risk person for ATCO?
12 MR. JOHNSON:	
12 MR. JOHNSON: 13 Q. And they were seeking 10.5 percent on 38	11 Q. So you were the relative risk person for ATCO? 12 MS. MCSHANE: 13 A. I think that's probably a good way of saying
12 MR. JOHNSON: 13 Q. And they were seeking 10.5 percent on 38 14 percent equity before the Alberta Board,	11 Q. So you were the relative risk person for ATCO? 12 MS. MCSHANE:
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12 MR. JOHNSON: 13 Q. And they were seeking 10.5 percent on 38 14 percent equity before the Alberta Board, 15 correct? 16 MS. MCSHANE: 17 A. Yes. 18 MR. JOHNSON: 19 Q. And then under the bolded line, Electric and	11 Q. So you were the relative risk person for ATCO? 12 MS. MCSHANE: 13 A. I think that's probably a good way of saying 14 it. 15 MR. JOHNSON: 16 Q. Okay. And I guess it just seems to me that 17 Electric TFO, that being the transmission 18 utility, that would have viewed themselves and 19 you would have viewed them as well, as
12 MR. JOHNSON: 13 Q. And they were seeking 10.5 percent on 38 14 percent equity before the Alberta Board, 15 correct? 16 MS. MCSHANE: 17 A. Yes. 18 MR. JOHNSON: 19 Q. And then under the bolded line, Electric and 20 Gas distribution, we have ATCO Electric DISCO,	11 Q. So you were the relative risk person for ATCO? 12 MS. MCSHANE: 13 A. I think that's probably a good way of saying 14 it. 15 MR. JOHNSON: 16 Q. Okay. And I guess it just seems to me that 17 Electric TFO, that being the transmission 18 utility, that would have viewed themselves and 19 you would have viewed them as well, as 20 relatively less risk than the distribution
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12 MR. JOHNSON: 13 Q. And they were seeking 10.5 percent on 38 14 percent equity before the Alberta Board, 15 correct? 16 MS. MCSHANE: 17 A. Yes. 18 MR. JOHNSON: 19 Q. And then under the bolded line, Electric and 20 Gas distribution, we have ATCO Electric DISCO, 21 and that would have been the poles and wires 22 company in Alberta?	11 Q. So you were the relative risk person for ATCO? 12 MS. MCSHANE: 13 A. I think that's probably a good way of saying 14 it. 15 MR. JOHNSON: 16 Q. Okay. And I guess it just seems to me that 17 Electric TFO, that being the transmission 18 utility, that would have viewed themselves and 19 you would have viewed them as well, as 20 relatively less risk than the distribution 21 company and the gas company, correct? 22 MS. MCSHANE:

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a half on 38 percent equity. And I take it	1 MR. JOHNSON:
2 you would have concurred that above them	in 2 Q. And just to confirm, you supported their
3 terms of risk would have been electric	3 recommended request or proposed ROE for those,
4 distribution, right?	for each of those entities, correct?
5 MS. MCSHANE:	5 MS. MCSHANE:
6 A. Yes.	6 A. I did. I mean, I did not go into the
7 MR. JOHNSON:	7 specifics of the estimates that were made for
8 Q. At 10.6, and highest of those three sectors,	the sample companies. What I did was to
9 you would put gas, ATCO Gas, who were see	king 9 determine whether or not the individual ATCO
10 11 percent, right, on 40 percent common	companies were of similar risk to the samples
11 equity?	of companies that the rate I'll call them
12 MS. MCSHANE:	the ROE witness or expert was using.
13 A. Yeah. I would have thought that the ATCO G	Gas 13 MR. JOHNSON:
was somewhat riskier than the ATCO Electric	c, 14 Q. But am I missing you? You were I thought
15 DISCO.	that you were opining on or giving your view
16 MR. JOHNSON:	as well on the relative risk differences
17 Q. Okay. And so would it be fair to say that	between the ATCO companies, were you not?
they obviously, between ATCO Gas and	18 (10:00 a.m.)
distribution, they saw certainly a 40 percent	19 MS. MCSHANE:
20 basis point differential in terms of the	20 A. No, I don't think that that's really what I
overall recommendation as being warranted	d, 21 was doing. I mean, I was determining what the
22 correct?	relative riskiness of the ATCO company was
23 MS. MCSHANE:	versus the sample of companies that the ROE
24 A. Based on the samples that were used and th	ne 24 person was using.
capital structures of the companies in the	25 MR. JOHNSON:
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1 sample. I'm not sure that -	1 Q. Did you file a report in the AUC matter?
2 MR. JOHNSON:	2 MS. MCSHANE:
3 Q. Well, when I look at ATCO Gas and I look a	at 3 A. I did.
4 ATCO Distribution, Electric DISCO, I see 40	4 MR. JOHNSON:
5 percent common equity. So both of them w	ere 5 Q. Would you undertake to file a copy of that
on the same page when it comes to comm	•
7 equity, but I see a 40 basis point difference	7 MS. MCSHANE:
8 between ATCO Gas wanting 11 percent and D	DISCO 8 A. Certainly.
o wenting 10.6	0 MD IOUNCON.

wanting 10.6.

10 MS. MCSHANE:

- 11 A. Yeah, and I think that had as much to do with
- the particular results of the samples that 12
- 13 were used than anything. I mean, there was a
- 14 sample selected for ATCO Electric DISCO as I
- recall that was an electric sample and there 15
- 16 was a sample of utilities selected for ATCO
- 17 Gas that was gas utilities.
- 18 MR. JOHNSON:
- Q. But just to be clear, you certainly accept 19
- that there is a risk difference, lowest to 20
- 21 highest, amongst first transmission being
- 22 lowest, electric distribution being next and
- gas being next? 23
- 24 MS. MCSHANE:
- A. True. No, I agree with that, yes.

- 9 MR. JOHNSON:
- Q. Ms. McShane, and I understand that you have 10 11
 - similarly testified recently and provided
- evidence regarding electrical or utility 12
- 13 sectors, whether they be gas, transmission or
- electric distribution. Would that be correct? 14
- 15 MS. MCSHANE:
- 16 A. Yes, in the BC generic proceeding, one of the
- 17 minimum filing requirements of the BCUC was
- 18 risk ranking for sectors that -- utility
 - sectors that it had specified it wanted to
- 20 look at.

- 21 MR. JOHNSON:
- Q. So the BCUC, they go about it in a generic 22
- fashion and to them it was important to know 23
- 24 how this different sectors added up in terms 25
 - of risk and where they were relative to each

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1 other?	1 evidence?
2 MS. MCSHANE:	2 MS. MCSHANE:
3 A. They do it in a generic fashion. They	3 A. I believe so.
4 obviously allow returns for various utilities	4 MR. JOHNSON:
5 and what they do is they determine well,	5 Q. Yes. And could we turn you to your cost of
6 they have in the past, at least, determined an	6 capital testimony for the Fortis BC utilities
7 ROE that they believe is applicable to what	7 dated August 2012? I'm looking at page 45 in
8 they call the benchmark BC utility and in this	8 particular.
9 proceeding in 2012, they were looking at a	9 MS. GLYNN:
somewhat broader, I guess, set of issues and	10 Q. Sorry, Mr. Johnson, we'll mark that as
they did want to consider how the different	11 Information Item No. 5
sectors ranked.	12 MR. JOHNSON:
13 MR. JOHNSON:	13 Q. Okay. Page 45, Ms. McShane.
Q. And not only did they want to consider it, but	14 MS. MCSHANE:
they have a minimum filing requirement that	15 A. I have that.
mandates that what be filed regarding the	16 MR. JOHNSON:
sector rankings, Ms. McShane?	17 Q. Okay. And in this report, this is dated
18 MS. MCSHANE:	August, but you've just testified as to this
19 A. I have no idea.	in December, you've set out the sector
20 MR. JOHNSON:	20 rankings, lowest to highest business risk and
21 Q. Well, didn't you provide testimony in BC that	21 the rationale, and you put electricity
satisfied British Columbia's minimum filing	transmission at the lowest, correct?
23 requirement as regards -	23 MS. MCSHANE:
24 MS. MCSHANE:	24 A. Generically, yes.
25 A. Oh, that was something that was specific to	25 MR. JOHNSON:
Page 50	Page 52
Page 50	
that proceeding. It's not like a minimum	1 Q. Generically, yeah. And in a nutshell, why
that proceeding. It's not like a minimum filing requirement that's required in every	Q. Generically, yeah. And in a nutshell, why would you put them at the lowest?
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1	uses for natural gas than for electricity.	1	under that sector?
2	"The heating load is generally a significant	2	MS. MCSHANE:
3	portion of throughput for which there are	3	A. Well, there are a couple of other transmission
4	substitutes including solutions that are more	4	utilities in Alberta, but those are the major
5	technologically and economically feasible than	5	ones.
6	were available historically. Throughput is	6	MR. JOHNSON:
7	generally more weather sensitive than for	7	Q. What are the other couple in Alberta?
8	electricity distribution utilities.	8	MS. MCSHANE:
9	Industrial processes that use natural gas can	9	A. ENMAR Transmission. EPCOR Transmission.
10	frequently switch to other sources of energy."	10	MR. JOHNSON:
11	And number five is "heating load oriented	11	Q. And in terms of examples of electric
12	utilities more exposure to declining	12	distribution, you would include Fortis
13	throughput due to factors such as smaller and	13	Alberta?
14	more efficient energy efficient homes and more	14	MS. MCSHANE:
15	energy efficient equipment than electricity	15	A. Yes.
16	distributors. Six, with some exceptions,	16	MR. JOHNSON:
17	example ATCO Gas, gas distributors retain	17	Q. Toronto Hydro?
18	responsibility for acquiring a gas supply	18	MS. MCSHANE:
19	portfolio. Gas purchases are subject to	19	A. Yes.
20	prudence review." And you go on in seven	20	MR. JOHNSON:
21	saying "as sellers and transporters of fossil	21	Q. Hydro Ottawa?
22	fuel may have more exposure than electricity	22	MS. MCSHANE:
23	distributors, particularly where electricity	23	A. Yes.
24	is produced by green energy sources, to	24	MR. JOHNSON:
25	impacts of environmental policies and	25	Q. Newfoundland Power?
	Page	54	Page 56
1	regulations directed at reducing emissions and		MS. MCSHANE:
2	favouring clean and renewable energies." And	2	
3	then at the highest, you would put vertically	3	
4	integrated electric utilities, and then you		MR. JOHNSON:
5	provide the reasons why you would put them in	5	
6	that pecking order, right?	6	
1	IS. MCSHANE:	7	
8	A. Yes.		MS. MCSHANE:
	IR. JOHNSON:	9	
10	Q. So let's try to put some names to some of	10	
11	these sector categories. Ms. McShane, for	11	
12	electric transmission, would you include in		MR. JOHNSON:
13	there companies like Hydro 1?	13	
1	IS. MCSHANE:	14	
15	A. They are electricity transmission, yes.	15	
1	IR. JOHNSON:		MS. MCSHANE:
17	Q. And Alta Link?	17	
1	IS. MCSHANE:		MR. JOHNSON:
19	A. Yes.	19	
1	IR. JOHNSON:	20	
21	Q. ATCO Transmission?	21	• •
	IS. MCSHANE:	22	•
23	A. Yes.		MS. MCSHANE:
	IR. JOHNSON:	24	
~ 1 1 1 1			•
25	Q. Any more that you can name that would fit	25	them as a transmission and distribution

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1 utility.	1 Q. Okay. And you put under that category ATCO
2 MR. JOHNSON:	2 Gas?
3 Q. And fundamentally, you assess them as being a	3 MS. MCSHANE:
The state of the s	4 A. That's a gas distribution utility, yes.
	5 MR. JOHNSON:
6 MS. MCSHANE:	6 Q. Union Gas?
7 A. I would say they're closer to a pure	7 MS. MCSHANE:
8 transmission and distribution utility than	8 A. Yes.
9 they are to a vertically integrated utility	9 MR. JOHNSON:
10 like Nova Scotia Power.	10 Q. Enbridge Gas?
11 MR. JOHNSON:	11 MS. MCSHANE:
Q. Maritime Electric, that would be electric	12 A. Yes.
distribution?	13 MR. JOHNSON:
14 MS. MCSHANE:	14 Q. Gas Metro?
15 A. It's again, I mean, it's got some	15 MS. MCSHANE:
generation, but it's more distribution than	16 A. That's a distribution utility, yes.
vertically integrated.	17 MR. JOHNSON:
18 MR. JOHNSON:	18 Q. Any further gas distribution companies that
19 Q. Yeah. And again, I understand that when you	19 fall under the rubric?
testified in BC, you also put that under the	20 MS. MCSHANE:
21 electric distribution group.	21 A. There are other gas distribution utilities.
22 MS. MCSHANE:	22 I'm not sure -
23 A. I don't remember that, but so if you have -	23 MR. JOHNSON:
24 MR. JOHNSON:	24 Q. That's a fair number. In terms of vertically
25 Q. Okay. We can work that out.	25 integrated, again, they would be higher
Page 58	Page 60
Page 58	Page 60 1 according to your higher business risk.
	1 according to your higher business risk.
1 MS. MCSHANE:	according to your higher business risk.
1 MS. MCSHANE: 2 A. Okay. 3 MR. JOHNSON:	 according to your higher business risk. Vertically integrated, Nova Scotia Power?
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	Page 61		Page 63
1	Inc., you would put Nova Scotia Power at	1	allowed to earn on equity of up to 40 percent.
2	higher business risk?	2	MR. JOHNSON:
3	MS. MCSHANE:	3	Q. Pardon me?
4	A. Yes, I would.	4	MS. MCSHANE:
5	MR. JOHNSON:	5	A. It's allowed to earn a return on an equity
6	Q. Yeah. And so they would be the riskiest in	6	
7	the country, would they, in terms of business	7	MR. JOHNSON:
8	risk?	8	Q. And they just settled on an ROE in Nova
9	MS. MCSHANE:	9	
10	A. The riskiest in the country?	10	MS. MCSHANE:
	MR. JOHNSON:	11	A. I am, yes.
12	Q. Because if they're in the highest sector.		MR. JOHNSON:
	MS. MCSHANE:	13	
14	A. Well, I think I'd like to make the point that	14	•
15	if you come back to pages 43 to 44 of this		MS. MCSHANE:
16	testimony where I put a fair number of caveats	16	
17	on this discussion and particularly at line		MR. JOHNSON:
18	1106 and onward on page 44 where I said	18	
19	specifically that "the rankings provided below	19	
20	from lowest business risk to highest business	20	
21	risk are intended to be generic based on	21	
22	fundamental characteristics that are generally	22	•
23	common to utilities in each category. They	23	
24	should not be interpreted to mean, for	24	
25	example, that every utility categorized as an		(10:15 a.m.)
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$\frac{1}{2}$	electric distribution utility is of lower		MS. MCSHANE:
2	business risk than every gas distribution	2	
3	utility or that every gas distribution utility	3	
4	is of lower business risk than every		MR. JOHNSON:
5	vertically integrated utility." So the		Q. Okay. And just to confirm now, you're here
6	specific answer to your question is no, I	6	•
7	wouldn't consider Nova Scotia Power the	7	1 37
8	highest risk utility in Canada and I would	8	1 1 1
9	still think that Pacific Northern Gas, for	9	
10	example, which is a gas distribution utility	10	1 , 3
11	is a higher risk utility or has been a higher	11	, I
12	risk utility than Nova Scotia Power.	12	
	MR. JOHNSON:	13	1
13		14	equity in its capital structure and so you
13 14	Q. As between Nova Scotia Power and Fortis BC		
13 14 15	Inc., you would put Nova Scotia Power at	15	must have suggested that they get a higher
13 14 15 16	Inc., you would put Nova Scotia Power at higher business risk?	16	must have suggested that they get a higher return on equity because of their lower common
13 14 15 16 17	Inc., you would put Nova Scotia Power at higher business risk? MS. MCSHANE:	16 17	must have suggested that they get a higher return on equity because of their lower common equity structure, right?
13 14 15 16 17 18	Inc., you would put Nova Scotia Power at higher business risk? MS. MCSHANE: A. I would.	16 17 18	must have suggested that they get a higher return on equity because of their lower common equity structure, right? MS. MCSHANE:
13 14 15 16 17 18 19	Inc., you would put Nova Scotia Power at higher business risk? MS. MCSHANE: A. I would. MR. JOHNSON:	16 17 18 19	must have suggested that they get a higher return on equity because of their lower common equity structure, right? MS. MCSHANE: A. No, I didn't.
13 14 15 16 17 18 19 20	Inc., you would put Nova Scotia Power at higher business risk? MS. MCSHANE: A. I would. MR. JOHNSON: Q. And are you aware what Nova Scotia Power's	16 17 18 19 20	must have suggested that they get a higher return on equity because of their lower common equity structure, right? MS. MCSHANE: A. No, I didn't. MR. JOHNSON:
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1 MR. JOHNSON:	1 view the relative overall risk of a
2 Q. Yeah. And why is it that FEI, which would	2 Newfoundland Power versus an FEI.
fall into a sector which would be considered	3 MR. JOHNSON:
4 to have, generally speaking, subject to	4 Q. In terms of FEI, so they've had 40 percent
5 caveats or whatever, less business risk, why	5 common equity in their capital structure for
6 would that company be given 10 and a half	6 how long?
7 percent and Newfoundland Power investor be	7 MS. MCSHANE:
given 10 and a half percent on higher common	8 A. Three years.
9 equity?	9 MR. JOHNSON:
10 MS. MCSHANE:	10 Q. So just three years. What were they at before
11 A. Well, if you look at how FEI and Newfoundland	11 that?
Power are valuated by the debt rating	12 MS. MCSHANE:
agencies. At 40 percent common equity, FEI	13 A. 35.
has higher debt ratings than Newfoundland	14 MR. JOHNSON:
Power. So from an overall risk perspective,	15 Q. So they were ten basis points away from where
at least from the debt rating agencies'	16 Newfoundland Power was, and even at -
perspective, at 40 percent equity, FEI is an	17 MS. MCSHANE:
average risk utility. With 45 percent equity,	18 A. Sorry, they were what?
19 Newfoundland Power is a weaker credit.	19 MR. JOHNSON:
20 MR. JOHNSON:	20 Q. Ten percent, I'm sorry.
21 Q. But Ms. McShane, you're here giving	21 MS. MCSHANE:
professional evidence, opinion evidence about	22 A. Oh, ten percentage points.
23 the cost of equity of Newfoundland Power,	23 MR. JOHNSON:
24 right?	24 Q. Yes. And in terms of the financial risk, you
25 MS. MCSHANE:	spoke in your opening about differences in
Page 60	6 Page 68
1 A. I am.	financial risk between firms, FEI would have
2 MR. JOHNSON:	2 less financial risk than Newfoundland Power, I
3 Q. And I thought the record was replete I	3 take it?
4 can't go there now off my fingertips, but the	4 MS. MCSHANE:
5 record is pretty full to the extent that	5 A. No, I don't believe it has less financial risk
6 credit rating reports and bond rating reports	6 than Newfoundland Power. In terms of common
7 are not necessarily or never mind	7 equity ratio and credit metrics, it doesn't.
8 necessarily, they're not indicative of what	8 It has better credit ratings. It's a much
9 the return should be for an equity investor.	9 bigger utility.
You haven't departed from that judgment?	10 MR. JOHNSON:
11 MS. MCSHANE:	11 Q. Right.
12 A. When you say they're not indicative of the	12 MS. MCSHANE:
they don't tell you what the return is, no.	13 A. So, I mean, to some extent investors do take
14 MR. JOHNSON:	into account utility size.
15 Q. Yeah. I mean, so the bond rating, it doesn't	15 MR. JOHNSON:
give an indicator to the Board of what the	16 Q. Ms. McShane, can I ask you, as between a
common equity return should be for the utility	17 company that has 45 percent common equity in
18 on review?	its capital structure and a company that has
19 MS. MCSHANE:	19 40 percent common equity in its capital
20 A. No, the bond rating doesn't tell the Board	20 structure, would it not be accepted by
what the common equity return should be, but	yourself that the company with 45 has less
you can one thing that the bond rating does	financial risk than the company with 40
do is give you an assessment, at least an	23 percent?
independent assessment, of how at least	24 MS. MCSHANE:

A. Well, if you're comparing the same company

from a debt rating perspective, how investors

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Paş	e 69 Page	e 71
1 with itself, then yes, but when you're	1 MS. MCSHANE:	
2 comparing a Newfoundland Power with an FEI, I	2 A. And their credit metrics.	
3 think you need to look at all of the factors,	3 MR. JOHNSON:	
4 including the fact that Newfoundland Power is	4 Q. Their capital but their capital structure	
5 a much smaller utility than FEI.	5 would be their percentage of common equity?	
6 MR. JOHNSON:	6 MS. MCSHANE:	
7 Q. Well, Ms. McShane, let's put it this way, I	7 A. Correct.	
8 thought part of your thesis, for instance, in	8 MR. JOHNSON:	
9 using your US comparables is that and	9 Q. Because your reports and Dr. Vander Weide's, I	
10 correct me where I'm wrong in terms of	believe, says "oh, you got to really pay	
premise, but that the business risks and the	attention now because these US parents have	
12 utility the business risk, regulatory risks	higher common equity, so less financial risk."	
of your sample and Newfoundland Power, in your	So you throw it all together and they're more	
books, they're approximately the same. Would	or all less equal than Newfoundland Power.	
15 that be about right?	Would that be about right?	
16 MS. MCSHANE:	16 MS. MCSHANE:	
17 A. The what, please?	17 A. That's the end result, yes, that they have	
18 MR. JOHNSON:	lower financial risk and so they have similar	
19 Q. They'd be approximately the same?	debt ratings to Newfoundland Power.	
20 MS. MCSHANE:	20 MR. JOHNSON:	
21 A. No, I need the first part of the sentence.	21 Q. So if that applies between these US companies	
22 MR. JOHNSON:	and Newfoundland Power, why can't we conclude	
23 Q. In terms of your US utility sample, your 13 or	that Newfoundland Power has less financial	
24 14 companies, that your premise is that their	risk than say FEI because of the differences	
25 US companies, your US companies, business risk	in corporate structure?	
Paş	e 70 Page	e 72
and regulatory risk is sort of on a par with	1 MS. MCSHANE:	
Newfoundland Power's, that's basically your		
2 Newfoundland Power's, that's basically your	2 A. Sorry, I don't understand "because of the	
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Page 7	73	Page 75
1 -	1	that common equity?
2 MR. HAYES:	2	MS. MCSHANE:
3 Q. Okay. We do have it.	3	A. They are.
4 MR. JOHNSON:	4	MR. JOHNSON:
5 Q. Okay. And it's page 22 and this is the	5	Q. Yeah. And you would put them obviously in the
6 Interim Management Discussion and Analysis of	f 6	same sector as Newfoundland Power in terms of
7 Fortis Inc. for the three and nine months	7	T&D?
8 ended September 30, 2012 and the document is	8	MS. MCSHANE:
9 dated November 1st, 2012, and I'm referring to	9	A. They're in the same basically in the same
10 page 22.	10	sector, different characteristics, different
11 MS. MCSHANE:	11	size. Fortis Alberta is a much bigger utility
12 A. I have that.	12	than Newfoundland Power, operates in a much
13 MR. JOHNSON:	13	more growth oriented province, doesn't have
Q. Okay. Now Ms. McShane, in terms of under	14	any generation.
regulatory highlights, and I'm sorry, under	15	MR. JOHNSON:
that nature of regulation, Fortis lists each	16	Q. No generation. And in terms of Maritime
of its regulated utilities. FEI is the one we	17	Electric, they're 40 percent and their 2012
were talking about and FEVI, what's that? Are	18	allowed return is a 9.75 percent. Then we
19 you familiar with that one?	19	have the Fortis Ontario, some of those
20 MS. MCSHANE:	20	Canadian Niagra Power that falls under Fortis
21 A. Yes, that's Fortis Energy Vancouver Island.	21	Ontario, they're eight percent, is it?
22 MR. JOHNSON:		MS. MCSHANE:
23 Q. What are they?	23	A. I'm not familiar with them. I mean, I know
24 MS. MCSHANE:	24	that they've that the way it works in
25 A. They are a natural gas distribution utility	25	Ontario is they have multiple year performance
, ,		1 1 1
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Page '		Page 76
that serves Vancouver Island.	1	based regulation plans and under those plans,
that serves Vancouver Island.MR. JOHNSON:	1 2	based regulation plans and under those plans, the ROE doesn't change until the utility
 that serves Vancouver Island. MR. JOHNSON: Q. Okay. And F-E-W-I? 	1 2 3	based regulation plans and under those plans, the ROE doesn't change until the utility rebases its rates. 8.01 looks like an ROE
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Do 77	T
Page 77	Page 79
1 MS. MCSHANE:	1 Q. Yeah.
2 A. It figures into whether or not it should have	2 MS. MCSHANE:
a 45 versus 40 percent capital structure,	3 A. It's about a three billion dollar rate base.
4 common equity ratio.	4 MR. JOHNSON:
5 MR. JOHNSON:	5 Q. Okay. But they have risks that Newfoundland
6 Q. So to the total difference between the 40	6 Power don't have, I would take it you'd agree
7 and 45 is justified by the relative size	7 with that?
8 difference in Newfoundland Power? Is that	8 MS. MCSHANE:
9 what you're saying?	9 A. They have their own risks, yes, that are not
10 MS. MCSHANE:	the same as Newfoundland Power's risks.
11 A. I would say in large part it would the	11 MR. JOHNSON:
difference is justified and it's also	12 Q. And in your evidence before the BC proceeding,
justified by the fact that even at 45 percent	you talked about the primary categories of
common equity, Newfoundland Power still has	utility business risk, correct? You remember
lower debt ratings than FEI.	that?
16 MR. JOHNSON:	16 (10:30 a.m.)
17 Q. And what's the debt ratings of FEI?	17 MS. MCSHANE:
18 MS. MCSHANE:	18 A. I do.
	19 MR. JOHNSON:
1	
here. I can double check here so we know for	21 MS. MCSHANE:
sure. The ratings are set out on Schedule4	22 A. I do.
and shows that Fortis BC Energy Inc.'s debt	23 MR. JOHNSON:
ratings which are listed under the Gas	Q. You do. And the primary categories of utility
25 Distributors Group are A1 for senior secured	business risk are set out in your report from
Page 78	Page 80
and A3 for senior unsecured.	1 page 39 to 41?
2 MR. JOHNSON:	
	2 MS. MCSHANE:
3 Q. And who provides those?	2 MS. MCSHANE: 3 A. They are.
3 Q. And who provides those?	3 A. They are.
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 Q. And who provides those? MS. MCSHANE: A. Sorry, did I say that correctly? A3 for senior unsecured. A1 for senior secured from Moody's. MR. JOHNSON: Q. And that compares to Newfoundland Power's as how? MS. MCSHANE: A. Newfoundland Power's first mortgage bonds which are which would be - MR. JOHNSON: Q. Secured. MS. MCSHANE: A analogous to the secured are A2 and it's issue a rating which would be analogous to the unsecured debt rating would be AA1. MR. JOHNSON: Q. Now in terms of the business risks of FEI, for instance, how big a utility is FEI? 	3 A. They are. 4 MR. JOHNSON: 5 Q. And the first risk that you talk about is 6 market demand risk. "Market demand risk 7 relate to the size of the market for the 8 utility services and the ability of the 9 utility to capture market share" and you 10 indicate it reflects the demographics of a 11 service area, diversity of economy, economic 12 growth potential, geography, weather, et 13 cetera. 14 MR. KIRBY: 15 Q. I'm not sure we're all with you on the same 16 page, Mr. Johnson. 17 MR. JOHNSON: 18 Q. Oh, I'm sorry. We're at the BCUC evidence. 19 The BCUC that we had up previously. 20 MS. GLYNN: 21 Q. I think it's Information Item No. 5. 22 MR. JOHNSON:

 $\boldsymbol{Multi\text{-}Page}^{\text{TM}}$ **January 14, 2013** Page 81 Page 83 risk, operating risk, political risk, Q. I see over on page 50, for instance -1 2 regulatory risk, and those are the categories 2 MS. MCSHANE: that would apply equally to Newfoundland A. Right. 3 3 Power, I take it? 4 MR. JOHNSON: 4 5 MS. MCSHANE: 5 Q. - at line 1280, it talks about -- first of A. They're generic categories of business risk all, this is just provincial now, "although BC 6 6 that apply to all utilities. is the second largest natural gas producing 7 7 8 MR. JOHNSON: 8 province in the country, natural gas has just under 50 percent share of the residential Q. Yeah. And then you expand a bit more over on 9 9 page 49 and the pages that follow on the 10 market compared to over 60 percent in Ontario, 10 different categories or the different which produces relatively little gas" and then 11 11 it goes on "market share of natural gas in the 12 categories of utility business risk. So you 12 talk about market demand and competitive risk residential sector in Alberta is over 80 13 13 percent." So first of all, relative to gas 14 in FEI's case. Ms. McShane, I understand that 14 there's significant risk, as outlined in your distributors in other, Alberta and Ontario, 15 15 16 report, in your view, based by FEI, for 16 there's more competition for other fuel sources or power sources in BC first of all, instance, when it comes to market and demand 17 17 18 risk and competitive risk. 18 right? 19 MS. MCSHANE: 19 MS. MCSHANE: A. They do face material competitive risk vis-a-A. There's more competition in BC than in Alberta 20 20 vis electricity in BC. 21 21 for natural gas. 22 MR. JOHNSON: 22 MR. JOHNSON: Q. And when you say material, could you put that 23 Q. And in terms of the share of the customers in 23 in some sort of context for us, quantify it? BC for FEI, that has been going down, has it 24 24 25 MS. MCSHANE: 25 not? Page 82 Page 84

A. No. 1

2 MR. JOHNSON:

Q. They compete with electricity for heating?

4 MS. MCSHANE:

A. For heating and for -

6 MR. JOHNSON:

Q. Cooking?

8 MS. MCSHANE:

A. Cooking, yes.

10 MR. JOHNSON:

Q. Right. 11

12 MS. MCSHANE:

A. And for water heating. 13

14 MR. JOHNSON:

Q. Right. And in their service territory, what 15 percentage of the market do they have, in 16

17 terms of customers versus electricity?

18 MS. MCSHANE:

A. I don't see the overall market share numbers. 19

20 I see the -

21 MR. JOHNSON:

Q. I see over at page -22

23 MS. MCSHANE:

A. - residential sector. 24

25 MR. JOHNSON:

1 MS. MCSHANE:

A. In the residential market, that's true.

3 MR. JOHNSON:

Q. Yes. And what's the reason it's been going

5 down?

8

11

19

6 MS. MCSHANE:

A. Well, there are a number of factors. There's 7

been the relative price of natural gas, the

volatility of natural gas prices, and 9

government energy policy which is supportive 10

of green energy sources which natural gas in

BC has not been viewed as such. 12

13 MR. JOHNSON:

14 Q. And in terms, how does multi-residential

buildings fit into the issues of market share 15

in British Columbia for FEI? 16

17 MS. MCSHANE:

A. There is a shift toward multi-family dwellings 18

away from single family homes. Multi-family

dwellings tend to be smaller, so they use less 20

of whatever energy source than the larger 21

single family homes, and because -22

23 MR. JOHNSON:

Q. Not only -- go ahead, sorry. 24

25 MS. MCSHANE:

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Page 8.	Page 87
1 A because it's easier to install electric	1 MR. JOHNSON:
2 equipment in multi-family homes, there's been	2 Q. This is a big concern in FEI's territory?
a tendency to use electricity rather than	3 MS. MCSHANE:
4 natural gas.	4 A. Yes. There is an energy policy that has
5 MR. JOHNSON:	5 discouraged the use of fossil fuels.
6 Q. Right. And as I understand it, the bottom of	6 MR. JOHNSON:
page 49, line 1263, "FEI's capture rate in new	7 Q. And legislation passed in that province as
8 multi-unit dwellings has been and continues to	8 well is referred to at the bottom of page 52?
9 be materially lower than in single family	9 MS. MCSHANE:
housing, approximately 30 percent versus 70	10 A. Correct.
percent." So that, I take it, means that in	11 MR. JOHNSON:
single family houses, they had about 70, but	12 Q. And that's the legislation that discourages
in the new multis, they're getting about 30?	the use of fossil fuels?
14 MS. MCSHANE:	14 MS. MCSHANE:
15 A. That's right.	15 A. Yes, and the one that's listed at the bottom
16 MR. JOHNSON:	are new legislation that was passed since the
Q. And the market is moving heavily towards	last time the cost of capital was considered
multis?	18 in BC.
19 MS. MCSHANE:	19 MR. JOHNSON:
20 A. In?	20 Q. And the Greenhouse Gas Reduction Clean Energy
21 MR. JOHNSON:	21 Regulation that put an extra charge on natural
Q. In their service area?	gas, I take it?
23 MS. MCSHANE:	23 MS. MCSHANE:
24 A. In their service territory, yes.	24 A. I don't think so. The extra charge on natural
25 MR. JOHNSON:	gas was before 2012. There was a carbon tax
Page 8	
1 Q. Yeah. And in addition to that, over on page	that was applied earlier than that and I think
2 50, at 1271, it talks about per customer usage	it reached its maximum level in 2012, but the
rates continue to fall as well.	regulation was before that.
4 MS. MCSHANE:	4 MR. JOHNSON:
5 A. Right, and that is partly a function of -	5 Q. Yes, but the regulation is before that, but
6 MR. JOHNSON:	the amount of the extra cost or premium, I
7 Q. Of the shift?	don't know if I'm putting it properly, has
8 MS. MCSHANE:	8 escalated since the legislation was passed
9 A the shift.	9 from I think 50 cents a unit up to \$1.50 per
10 MR. JOHNSON:	10 unit.
11 Q. Right, okay. And then in BC, there is mention	11 MS. MCSHANE:
at page 52 of competitor pressures. This is	12 A. Yeah, the additional cost per gigajoule,
at line 1315. "Competitive pressures on	called the carbon tax, in 2012 was \$1.50.
natural gas in BC that stem from the abundance	14 MR. JOHNSON:
of low cost hydro resources and the evolving	15 Q. And then over on supply risk at page 53,
housing competition are amplified by energy	there's concerns over there about supply risk.
policies. Designed to fight climate change,	In a nutshell, what are those, Ms. McShane?
provincial energy policies and associated	18 MS. MCSHANE:
regulations promote reduced and more efficient	19 A. I don't know that there's a huge concern over
20 energy use, discourage the use of fossil fuels	20 supply risk. It says at the top of page 54
21 and promote development of use of clean	the supply risk, which was already low, is
22 energy." So this is a big concern in the	somewhat lower than in 2009.
23 market as well?	23 MR. JOHNSON:
24 MG MGGHANE	24 0 A 1 (1 1 1

25

Q. And then we have operating risk and "FEI's operating risk relate to factors that can

24 MS. MCSHANE:

A. Where?

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Ja	nuar;	y 14, 2013 Mult
		Page 89
1		cause outages or leaks on the distribution
2		system, third party damages, accidental and
3		intentional equipment failure, severe weather
4		and natural disasters which could result in
5		material service disruptions or environmental
6		liability." Where would the environmental
7		liability come into play?
8	MS. N	MCSHANE:
9	A.	The environmental liability would come into
10		play if -
11	MR. J	OHNSON:
12	Q.	Natural gas leaks?
13	MS. N	MCSHANE:
14	A.	- if there were leaks that damaged the
15		environment.
16	MR. J	OHNSON:
17	Q.	And you indicate "in contrast, the utilities
18		that operate systems in more benign geographic
19		regions, FEI operates facilities in remote and
20		rugged terrain which are subject to damage
21		from a variety of natural events, example
22		avalanches, landslides, forest fires." So in
23		terms of the remote and rugged terrain, where
24		are we talking about?
25	MS. N	ICSHANE:
		Page 90
1	A.	Obviously not downtown Vancouver.
2	MR. J	OHNSON:
3	Q.	So in rural areas of British Columbia, up in
4		the country?

5 MS. MCSHANE: A. Yeah. 7 MR. JOHNSON: Q. Up in the back country. 9 MS. MCSHANE: A. It covers, you know, a significant part of the 10 11 province. 12 MR. JOHNSON:

Q. Yeah, okay. And there's mention of political 13 risk. This has to do with legislation, 14 policies and decisions, which we've already 15 touched on. And then finally, we have 16 17 regulatory risks. In a nutshell, what are those for FEI? 18 19 MS. MCSHANE: A. The regulatory risks?

21 MR. JOHNSON:

Q. Yes. 22

23 MS. MCSHANE:

24 A. You can describe the regulatory risk generally as the risk that the regulatory environment 25

will change so that there's a higher risk of not recovering utilities cost.

3 MR. JOHNSON:

7

Q. And in particular, your report points out that a principal change that has occurred -- and 5 I'm reading it from page 55, line 1425, that 6

"the principal change that has occurred since

8 the '09 application relates to increased

regulatory lag and uncertainty that stem largely from the changing environment, 10

particularly for natural gas. More of its 11

activities are subject to regulatory 12

oversight, entailing more frequent, protracted 13

and contentious proceedings." So it's your 14

evidence that FEI regulatory risk has gone up 15

from 2009 levels? 16

17 MS. MCSHANE:

18 A. Well, you can see what the conclusion was. It 19 says on balance, it's no lower and is some ways higher than in 2009. 20

21 MR. JOHNSON:

22 Q. So in terms of comparing the regulatory risk which is, as some have put it, generally 23 supportive in Newfoundland Power's instance, 24 how would you compare the two risks, between 25

FEI regulatory risk and Newfoundland Power? 1

2 MS. MCSHANE:

A. I would say that on balance the regulatory environment is supportive in both provinces.

5 I mean, if you look at the ratings on

regulatory support from Moody's, they're the 6 7 same for Newfoundland Power and for FEI.

8 (10:45 a.m.)

4

9 MR. JOHNSON:

Q. And I think DBRS actually uses the words in 10 11 relation to Newfoundland Power market share that they have market dominance on the island 12 13 of Newfoundland. Would you agree with that characterization? 14

15 MS. MCSHANE:

A. I mean, they have -- they're the only 16 distribution utility on the island. 17

18 MR. JOHNSON:

Q. Makes them pretty dominant.

20 MS. MCSHANE:

21 A. Well, most electric distribution utilities are 22 dominant in their service area and for the main, you know, basic services that they 23 24 provide and can't be provided by anybody else. 25 MR. JOHNSON:

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	Page 93		Page 95
1 Q. And that would be on	e of the reasons why you	1	gas distribution has more business risk than
2 would rank them as h	aving less business risk	2	electric distribution. But specifically, is
3 generally than gas dis	stribution?	3	FEI more or less risky than Newfoundland
4 MS. MCSHANE:		4	Power, in terms of business risk?
5 A. As a generic proposit	ion, that's true.	5	MS. MCSHANE:
6 MR. JOHNSON:		6	A. I would say if you put aside the issue of
7 Q. Yes. Ms. McShane,	in spite of these risks	7	size, where FEI is a much larger utility, FEI
8 that are outlined for	FEI recently in your	8	is of somewhat higher fundamental business
9 report and I'm lookin	g at business risk of FEI	9	risk than Newfoundland Power. On the other
relative to 2009 at pa	ge 56, you say "despite 1	10	hand, Newfoundland Power does have issues with
the shale gas boom an	nd lower commodity prices 1	11	being a small utility operating in a province
of natural gas, the pri	ncipal trends in FEI's	12	that's you know, has relatively low growth
business risk that wer	re identified in the 2009	13	prospects, has worse demographic prospects
14 application have pers	sisted. The level of	14	than other provinces. So fundamentally, I
business risk in the as	ggregate to which FEI is	15	guess, I would say FEI is of somewhat higher
16 exposed is at least as	high as when it was	16	business risk, but Newfoundland Power does
last assessed in 2009	and consequently, in the	17	have its own issues which to me warrant it
18 context of the trend in	n business risk, FEI has	18	having the common equity ratio that it
deemed 40 percent co	ommon equity ratio remains 1	19	proposes, including its relatively small size.
20 at the lower end of a	reasonable range." But 2	20	MR. JOHNSON:
21 you didn't recommen	d that they get a higher,	21	Q. So just to be clearer on this, taking
22 obviously, common e	equity ratio in the case of 2	22	Newfoundland Power as it is, small size,
23 FEI?	2	23	market dominance, regulatory supportiveness,
24 MS. MCSHANE:	2	24	all of those things, on a business risk basis,
25 A. I did not recommend	and the company did not 2	25	would FEI have less risk or more risk than
	Page 94		Page 96
1 request a higher com	_	1	N 6 11 15 6
2 MR. JOHNSON:	- '	2	MS. MCSHANE:
3 Q. Mr. Chairman, I won	der it is about 10 to 11	3	A. FEI has more risk with the size issue aside.
4 if we could have a	little break and then	4	I think that they're relatively similar if you
5 I'll just gather myself	a Bit.	5	
6 CHAIRMAN:		6	MR. JOHNSON:
7 Q. Sure. We're back ag	ain at say 20 after? Is	7	Q. Ms. McShane, if you could turn up the overview
8 that we agreed for	a half hour break at	8	again of the summary of your recommendations,
9 11:00, so 20 after we	shall reconvene.	9	that was the Cross-Ex aide that we referred to
10 (BREAK - 10:47 a.m.) 1	10	earlier.
11 (RESUME - 11:24 a.r.	n.)	11	KELLY, Q.C.:
12 MR. JOHNSON:	1	12	Q. The recommendations?
13 Q. Ms. McShane want	t me to proceed, Chairman?	13	MS. GLYNN:
14 CHAIRMAN:	1	14	Q. Information Item No. 3
15 Q. Oh yes, I'm sorry. So	are, absolutely.	15	MR. JOHNSON:
16 MR. JOHNSON:	1	16	Q. Info No. 3. Just to circle back for a second
17 Q. Ms. McShane, just to	finish off the discussion 1	17	and then we're going to talk about the market
we're having, Ms. Mo	cShane, we have obviously 1	18	risk premium in more particulars, but as we've
19 discussed before the	break the specific 1	19	noted, your overall recommendation has come
20 business risks of FI	EI relative to the	20	down 50 basis points from 11 to 10.5 percent
21 categories of busine	ss risk that you've 2	21	for Newfoundland Power and certainly if we
22 outlined and my ques	tion would be: how would 2	22	took out the larger floatation and compared
you judge Newfound	land Power's business risks 2	23	like to like from last time, we'd go from 11
24 relative or business	risk relative to FEI?	24	percent to 10 percent in terms of the
25 You have stated, as y	ou know, that generically 2	25	floatation allowance being the like to like

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	Page 9°	Page 99
1	and Ms. McShane, what I do notice is that the	1 down?
2	market the overall expected market return,	2 MS. MCSHANE:
3	which would be the risk free rate in 2010 plus	3 A. I don't think that there's necessarily any
4	the market risk premium, if we added the 425	4 inconsistency. Not all cost of capital move
5	and the 6.75, we'd come to about 11 percent	5 exactly together all the time.
6	and then if we go over to the 2013- 2014	6 MR. JOHNSON:
7	column, we see a 3.5 risk free on an 8 percent	7 Q. And in terms of the October 2009 column, that
8	risk premium, so 11 and a half percent. So	8 was the date of the actual hearing when you
9	whilst the cost of equity is falling for	9 were in testifying?
10	Newfoundland Power, it's evidently going up	10 MS. MCSHANE:
11	for the market and just like to have an	11 A. Yes.
12	explanation for why that would be the case.	12 MR. JOHNSON:
13 M	IS. MCSHANE:	13 Q. July 2012 column, that's when you were
14	A. Well, it's partly a function of the	preparing this particular testimony?
15	application of different tests and the	15 MS. MCSHANE:
16	different test results, but with respect to	16 A. Yes.
17	the return for the market, as you pointed out	17 MR. JOHNSON:
18	these estimates, I mean I think if you look at	18 Q. And would you be able to provide by
19	page sorry, I'm back in my BC testimony.	undertaking an update to date of the column,
20	If you look at page 47 of the testimony and	so that we could have January of 2013?
21	Table 8 where there's a comparison of the	21 MS. MCSHANE:
22	conditions affecting the overall market in mid	22 A. I should be able to do that, yes.
23	2012 when I prepared this evidence versus	23 MR. JOHNSON:
24	October 2009, you can see that if I look at	Q. That TSX figure, I take it, would have gone up
25	the bottom three lines of the table where	a fair bit since July of 2012?
	Page 98	Page 100
1	there is a estimate of the forward earnings	1 MS. MCSHANE:
2	yield on the S&P 60 and what this is intended	2 A. The TSX -
3	to show, these last three lines, is to show	3 MR. JOHNSON:
4	what the trend, general trend in the cost of	4 Q. Price index.
5	equity in the market has been since that time	5 MS. MCSHANE:
6	and it indicates that, you know, based on the	6 A the composite?
7	forward earnings yield that the cost of equity	7 MR. JOHNSON:
8	for the market was higher and because Canada	8 Q. Yes.
9	Bond Yields were lower, there's a higher	9 MS. MCSHANE:
10	market risk premium today or in mid-2012 when	10 A. I think it's right now, it's around 12,500.
11	this was done than there was the last time we	11 MR. JOHNSON:
12	were here before the Board.	12 Q. And in terms of your present overall market
13	As regard the utility specifically, I	return estimate of 11 and a half percent,
14	mean, there are other tests that are used to	which falls out of your report, I'd like to
15	estimate the cost of equity, not just this	put some context around that estimate and
16	test. So overall, using the discounted cash	seeing you have been comparing October '09 to
17	flow test, for example, that indicates that	17 2012 in Table 8, I'd like to just bring you to
18	test indicates a lower utility cost of equity	the Board's decision, just for ease of
19	today than in 2009.	reference, at page 22 of the Board's decision
20 (1	11:30 a.m.)	and Order in P.U. 43 (2009), in particular
21 M	IR. JOHNSON:	21 page 22.
22	Q. So there would be nothing consistent, in your	22 KELLY, Q.C.:
23	view, with what a regular company, an average	23 Q. Apparently it's not on the electronic version,
24	company could expect its cost of capital going	24 Mr. Chairman.
25	up but the utility's cost of capital coming	25 MS. GLYNN:

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O. We could locate it on the website.

2 KELLY, O.C.:

Q. We're not connected on this system.

4 MS. GLYNN:

Q. Okay. 5

6 MR. JOHNSON:

Q. Well, I can -- I think we can get by without a

8 big delay on it. At page 22 of the Board's

decision, they had set out a table, because 9

Dr. Booth had commented on the Mercer Report

in the last case and the Board set out Table 1 11

12 which gave the long term expected returns by

asset class as estimated by Mercer. 13

14 KELLY, Q.C.:

10

Q. I will give my copy to the witness so she has 15

it in front of her. 16

17 MR. JOHNSON:

18 Q. Now Ms. McShane -- Jackie, it's not going to

come up on this anyway, is it? 19

20 MS. GLYNN:

21 Q. No.

22 MR. HAYES:

23 Q. Should be able to get it in a couple of

24

Q. Okay.

25 MR. JOHNSON:

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2 MS. GLYNN: Q. P.U. 43 (2009).

4 MR. JOHNSON:

Q. Yes.

1

6 MS. GLYNN:

Q. If you just click on Reasons for Decision.

8 MR. JOHNSON:

9 Q. Table 1 and it shows what Mercer had been

10 saying in relation to the long term expected

11 returns. Now I know these are not arithmetic

12 returns. These are geometric returns. But it

says Canadian equity is eight and a half. US 13

14 equity is eight and a half. Fixed income, 15 that would be basically bonds at 4.4 percent.

Now Ms. McShane, as you're no doubt aware, we 16

17 don't look at the arith -- the geometric

18 returns. We look at arithmetic. And my

19 understanding, Dr. Booth tells me that we add

20 half the variance of the annual rate of return

21 to arrive at the expected arithmetic rate of

return. You're familiar with that type of

23 adjustment?

24 MS. MCSHANE:

25 A. I am.

22

1 MR. JOHNSON:

Q. And Dr. Booth advises me that for equities in

the current context, we'd add about two 3

percent to get to the arithmetic return.

5 Would you accept that type of adjustment in

the context of an 8.5 percent geometric 6

return? 7 8 MS. MCSHANE:

4

13

24

1

2

14

20

22

A. I think that's fair.

10 MR. JOHNSON:

11 Q. Okay. And so in 2009, the expectation -- this

12 would be for the entire market now -- would be

about 10.5 percent on an arithmetic return

basis in both Canada and United States 14

15 equities, okay. Do you accept that?

16 MS. MCSHANE:

A. Well, that's what Mercer is indicating. 17

18 MR. JOHNSON:

19 Q. That's what Mercer says. And the fixed income

of 4.4 percent, so if we were looking at 20

trying to derive a premium, just to get a 21

22 sense of a premium at that time, would we say

23 10.5 percent less the 4.4 and come up with

what the premium would be?

25 MS. MCSHANE:

Page 104 A. No, because fixed income would include more

than just -

3 MR. JOHNSON:

Q. More than just long Canada's?

5 MS. MCSHANE:

A. Right. 6

7 MR. JOHNSON:

Q. Right. So it would be perhaps a little more 8

than six basis points for long Canada's? 9

10 MS. MCSHANE:

A. I don't know what the six basis points is.

12 MR. JOHNSON:

Q. That would be the spread between the 13

arithmetic 10.5 and the 4.4, because you're

saying long Canada's would be a little less 15

than 4.4. Would that be right? 16

17 MS. MCSHANE:

A. Well, I don't know what the fixed income 18

breakdown is that they're assuming, so I don't 19

-- I can't really tell you what adjustment

21 you'd need to make until I knew what the

portfolio of fixed income security means.

23 MR. JOHNSON:

Q. Okay. For present purposes, let's just stick 24 25

to equities then, and we have 10 and a half

	duly 11, 2015		 8-	1,210,101,110,101,0111
	Page 10:	5		Page 107
1	percent, and I take it that's sort of a long	1		that in footnote 3 that the arithmetic
2	term expected return, like a 10-year type of	2		rates of return were provided by the company's
3	analysis. Is that what Mercers usually	3		actuaries, Mercer Canada Limited. So that
4	provides?	4		would be the full arithmetic return of 9.9,
5 1	MS. MCSHANE:	5		according to at least Mercer, and that
6	A. I don't know what the Mercer numbers represent	6		assessment would obviously be somewhat less
1 7	here.	1 7		than what you would put forward at 11 and a
8 1	MR. JOHNSON:	8		half percent, would it not?
9	Q. Okay.			MCSHANE:
	KELLY, Q.C.:	10		It is less, yes.
111	Q. I'm not sure it's really fair to ask this			OHNSON:
12	witness to interpret information from another	12		Yeah, and have you seen anything more recent
13	report which she doesn't have the report.	13		from Mercer in terms of what the arithmetic
	MR. JOHNSON:	14		return would be on a go-forward basis in any
15	Q. Well, we're merely looking at a table that's	15		regulatory proceedings?
16	in the Board's decision and I could go to			MCSHANE:
17	another reference.	17		I'm sure I saw something in the BC proceeding,
1	KELLY, Q.C.:	18		but it was confidential and I don't remember
19	Q. But the questions go to what are the	19		what the specifics of it were.
20	underlying assets within that make up that			OHNSON:
21	portfolio. That's the concern. Asking this	21	Q.	So you had to sign a confidentiality agreement
22	witness to speculate on what is in that	22		in relation to that?
23	portfolio is not terribly helpful, I wouldn't	23	MS. N	MCSHANE:
24	think, Mr. Chairman.	24	A.	I must have, because I was asked some
125 6	CHAIRMAN:	25		questions in camera about it.
123	CHAINMAN.	123		questions in camera acout it.
25		-		
	Page 10	5		Page 108
1	Page 100 Q. Your concern is that she's been asked to	5 1	MR. JO	Page 108 OHNSON:
1 2	Page 10e Q. Your concern is that she's been asked to interpret information provided by another	5 1 2	MR. JO	Page 108 OHNSON: And who commissioned the report?
1 2 3	Q. Your concern is that she's been asked to interpret information provided by another source.	5 1 2 3	MR. JO Q. MS. M	Page 108 OHNSON: And who commissioned the report? CCSHANE:
1 2 3 4 1	Page 100 Q. Your concern is that she's been asked to interpret information provided by another source. KELLY, Q.C.:	5 1 2 3 4	MR. JO Q. MS. M	Page 108 CHANCHANE: Excuse me?
1 2 3 4 1 5	Page 100 Q. Your concern is that she's been asked to interpret information provided by another source. KELLY, Q.C.: Q. Without the makeup of the portfolio that makes	5 1 2 3 4 5	MR. JO Q. MS. M A. MR. JO	Page 108 CHNSON: And who commissioned the report? CICSHANE: Excuse me? CHNSON:
1 2 3 4 1 5 6	Page 100 Q. Your concern is that she's been asked to interpret information provided by another source. KELLY, Q.C.: Q. Without the makeup of the portfolio that makes up that data.	5 1 2 3 4 5 6	MR. JO Q. MS. M A. MR. JO Q.	Page 108 OHNSON: And who commissioned the report? ICSHANE: Excuse me? OHNSON: Do you know who commissioned the report or who
1 2 3 4 1 5 6 7 0	Page 100 Q. Your concern is that she's been asked to interpret information provided by another source. KELLY, Q.C.: Q. Without the makeup of the portfolio that makes up that data. CHAIRMAN:	5 1 2 3 4 5 6 7	MR. JO Q. MS. M A. MR. JO Q.	Page 108 CHANCHANE: Excuse me? CHANCHANE: Do you know who commissioned the report or who got the report from Mercers?
1 2 3 4 1 5 6 7 8	Page 10c Q. Your concern is that she's been asked to interpret information provided by another source. KELLY, Q.C.: Q. Without the makeup of the portfolio that makes up that data. CHAIRMAN: Q. Without the context, yeah.	5 1 2 3 4 5 6 7 8	MR. JO Q. MS. M A. MR. JO Q. (11:4)	Page 108 CHNSON: And who commissioned the report? CCSHANE: Excuse me? CHNSON: Do you know who commissioned the report or who got the report from Mercers? 5 a.m.)
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1 2 3 4 1 5 6 7 0 8 9 1 10	Page 100 Q. Your concern is that she's been asked to interpret information provided by another source. KELLY, Q.C.: Q. Without the makeup of the portfolio that makes up that data. CHAIRMAN: Q. Without the context, yeah. KELLY, Q.C.: Q. That's the concern I have.	5 1 2 3 4 5 6 7 8 9	MR. JO Q. MS. M A. MR. JO Q. (11:4. MS. M A.	Page 108 CHANCH CHANCE: Excuse me? CHANCH CHANCE: Do you know who commissioned the report or who got the report from Mercers? 5 a.m.) CCSHANE: Well, it was filed my recollection is it
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Page 109 confidentiality agreement in relation to that Q. Well, as I recall, you thought I was spending 1 1 2 document? 2 a lot of time trolling around US data at one point. But Mr. Chairman, here's the point 3 MS. MCSHANE: 3 A. I can, yes. from my perspective, if this witness is not 4 under a confidentiality in relation to a 5 MR. JOHNSON: 5 Q. Okay, and just document that bears upon an assessment of 6 7 KELLY, O.C.: equity returns over a period of time, a 7 8 Q. I don't know where this goes, Mr. Chairman, 8 document that a brother or sister regulator is because as the witness has already explained, going to be taking on board in terms of its 9 9 10 apparently that's an in-camera hearing before 10 determining of fair return on equity for cost of capital in British Columbia, if there is no the BC Public Utilities Board. It's not 11 11 impediment to the witness providing it, why 12 information that Newfoundland Power has. It's 12 information that was conducted in a wouldn't she -- why wouldn't we provide it and 13 13 then it'll probably go to weight as to what we 14 privileged, confidential hearing in camera 14 before the British Columbia Utilities Board. do with it. 15 15 16 So I don't think it is appropriate to ask this 16 CHAIRMAN: witness questions in a public forum that go to 17 17 Q. But I thought I understood that the report that -- go to whatever was conducted. itself was presented in a privileged context 18 18 and cloaked in privilege. Is that correct? 19 Secondly, this report, I gather, has to 19 do with another utility and its pension 20 20 KELLY, Q.C.: assets. The information with respect to 21 21 Q. That's my understanding, and it was 22 Newfoundland Power's pension assets is already 22 proprietary information of Mercers. in the RFI response, which is before the 23 23 CHAIRMAN: Board. 24 Q. So it wouldn't be available to us, would it? 25 MR. JOHNSON: 25 KELLY, Q.C.: Page 110 Q. First of all, I don't know what Mr. Kelly's Q. Not-1 1 2 2 CHAIRMAN:

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basis for saying that it was particular to

FEI's pension assets were, as opposed to 3

something more generic. I think there is a -4

5 KELLY, Q.C.:

Q. Well, I-6

7 MR. JOHNSON:

Q. He must know something about it.

9 KELLY, Q.C.:

Q. I stand corrected. I don't know precisely 10 11 what -- whose pension assets it was. That was not the point I was trying to make. The point 12

I was trying to make is insofar as this 13

hearing is in relation to Newfoundland Power, 14

15 382, whatever the number is, gives you the

information with respect to those assets 16

17 within Newfoundland Power's pension plan.

This hearing is about Newfoundland Power. We 18

19 spent a lot of time this morning trolling

around about other utilities' operating 20

characteristics, et cetera. I'm not sure 21 22 frankly where all that gets us, but there

comes a point where we have to focus on what 23

relates to Newfoundland Power. 24

25 MR. JOHNSON:

3 Q. I mean, the report, if it's privileged, obviously it's confidential presented in an 4

in-camera proceeding, it's not available for

NL Power Inc. 2013 GRA

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us in substance, so I don't know what -6

7 MR. JOHNSON:

5

Q. I think that's the very issue, I think, Mr. 8

Chairman. The issue is if Ms. McShane is not 9

impeded, by virtue of having signed a 10 11 confidentiality agreement, to provide the

document, then it would be for this Board to 12

13 determine whether it needs to do something in

camera or confidential or whatever, which 14

you'd have to assess. But I'm at the 15

threshold question as to whether this witness 16 17

is impeded from providing the document by way of having signed a confidentiality. 18

19 KELLY, Q.C.:

Q. My friend provided the undertaking that Dr. 20 21 Booth signed and that document indicated that

22 it was imposed as a condition of an order of

the British Columbia Utilities Commission. So 23

24 it appears, from what -- we have no direct 25

knowledge, but it appears from what the

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- Consumer Advocate has provided to us, that 1 2 this is: a. proprietary information belonging
- to Mercers and I gather some other entity; b. 3
- imposed as a condition by the British Columbia 4
- Utilities Commission; and c., as Ms. McShane 5
- has indicated, conducted in a closed hearing. 6
- So we -7
- 8 MR. JOHNSON:
- Q. The only difficulty with Mr. Kelly is he's 9
- under the supposition that Ms. McShane has in 10
- fact signed such a confidentiality and -11
- 12 CHAIRMAN:
- Q. Dr. Booth has, hasn't he? Did you say that? 13
- 14 MR. JOHNSON:
- Q. He has. He has, but Ms. McShane was an 15
- 16 advisor of FEI, the very people who
- commissioned the report, and she doesn't know 17
- whether she signed one. And all I've asked 18
- 19 her is to determine whether she has in fact
- signed one, and then we'll have to do what we 20
- 21 do.
- 22 CHAIRMAN:
- 23 Q. I mean, is it not very difficult for you to
- find out whether you in fact have signed this? 24
- 25 MS. MCSHANE:

- A. That's true. It wouldn't be very difficult to 1
- find out. 2
- 3 CHAIRMAN:
- Q. So let's just pass on and we'll find out and -
- 5 KELLY, Q.C.:
- Q. I just want to make it clear, whether the 6
- 7 witness has in fact signed an undertaking or
- not does not solve the other problems 8
- associated with the production of that report 9
- in this forum. 10
- 11 CHAIRMAN:
- 12 Q. Okay.
- 13 KELLY, Q.C.:
- 14 Q. And just -
- 15 CHAIRMAN:
- Q. Yeah, that's -- yeah, okay.
- 17 MR. JOHNSON:
- Q. Now in relation then, let's go to another 18 cross aide, having to do with TD Economics. 19
- That one's publicly available, so we can look 20
- at that one, dated November 13, 2012. 21
- 22 CHAIRMAN:
- Q. Just to go back quickly. If it's a privileged 23
- document, then a copy is not publicly 24
- available anyway. 25

1 KELLY, O.C.:

4

- Q. Exactly. It's apparently -- from what I
- understand, largely from information provided 3
 - by my friend, it is proprietary information to
- Mercers and some other entity. It's not even 5
- information that Newfoundland Power, the 6
- applicant before this Board, has. 7
- 8 CHAIRMAN:
- Q. Okay. Lawyers.
- 10 MR. JOHNSON:
- O. Can't live with them. Can't live with them. 11
- 12 MR. HAYES:
- Q. Mr. Johnson, is that the correct document on
- 14 the screen?
- 15 MR. JOHNSON:
- Q. No, November 13th, 2012.
- 17 MS. GLYNN:
- 18 O. And this will be marked as Information Item
- 19 No. 7.
- 20 MR. JOHNSON:
- Q. This document is a fairly recent observation 21
- from TD Economics and I'd like to refer you 22
- specifically, Ms. McShane, to page three and 23
 - particular Table 1. And this document, this
- box again gives the expected returns by asset 25
- Page 114

24

2

class over bonds and equities and at the 1

- bottom, it says "the returns are expressed as
- geometric annual averages over the next ten 3
- years" and you observe what they're saying 4
- about equities in the United States and 5
- Canada, the geometric return, right, seven 6
- 7 percent.
- 8 MS. MCSHANE:
- A. That's the US S&P 500.
- 10 MR. JOHNSON:
- O. That would be the whole of the market?
- 12 MS. MCSHANE:
- A. The S&P 500 would, which is the largest
- companies in the US. 14
- 15 MR. JOHNSON:
- Q. Right, and then other developed countries, 16
- including Canada, they're saying seven percent 17
- for their equities as well? 18
- 19 MS. MCSHANE:
- A. That's what their estimate is for ten years.
- 21 MR. JOHNSON:
 - Q. Yes, and that would be about nine percent, if
- we converted it to an arithmetic basis? 23
- 24 MS. MCSHANE:
- 25 A. That would be their estimate based on an

	Page 117	Page 119
1		and we'll come to some of the tests in your
2	2 MR. JOHNSON:	2 evidence, et cetera, but you know where Dr.
3	Q. Right. And you accept the arithmetic	Booth is in terms of what he's saying the
4		4 market risk premium is?
5	they're a total of 3.75 percent, including	5 MS. MCSHANE:
6		6 A. I do.
7		7 MR. JOHNSON:
8	would imply, could you give us a sense of what	8 Q. What is he saying it is?
9		9 MS. MCSHANE:
10	if we're talking about arithmetic equity	10 A. Well, it's not as simple as a number. His
11	returns of about nine percent?	market risk premium is in the range of five to
12	2 MS. MCSHANE:	six before he makes other adjustments, which
13	A. Well, you would need to do some adjustment to	would result in a higher market risk premium
14	the bonds for arithmetic averages, I guess,	than the base five to six percent.
15	and again, it's not too clear what the 3.75,	15 MR. JOHNSON:
16	what the breakdown is, but I mean, I suppose	Q. You're familiar with the Fernandez survey that
17	you could look at it being, you know,	Dr. Booth refers to in his evidence?
18	approximately nine minus 3.75.	18 MS. MCSHANE:
19	MR. JOHNSON:	19 A. I am.
20	Q. So that would be 5.25?	20 MR. JOHNSON:
21	MS. MCSHANE:	Q. And if I could turn you to Dr. Booth's report,
22	A. That would be, you know, what they're looking	particularly Appendix B at page 11?
23	at in terms of next ten years.	23 MS. MCSHANE:
24	4 MR. JOHNSON:	24 A. Talking about Table 2?
25	Q. And this, again just putting it all in	
	Q. And this, again just putting it all in	25 MR. JOHNSON:
F	Page 118	25 MR. JOHNSON: Page 120
1	Page 118	
	Page 118 perspective, in terms of these risk premiums	Page 120
1	Page 118 perspective, in terms of these risk premiums or the going forward, and so if they if we	Page 120 1 Q. This is a report that is actually referenced
1 2	Page 118 perspective, in terms of these risk premiums or the going forward, and so if they if we just look at that and say we'll take that on	Page 120 1 Q. This is a report that is actually referenced 2 or the Fernandez survey is actually referenced
1 2 3	Page 118 perspective, in terms of these risk premiums or the going forward, and so if they if we just look at that and say we'll take that on board and say that's about five and a quarter,	Page 120 1 Q. This is a report that is actually referenced 2 or the Fernandez survey is actually referenced 3 in the Board's decision from last time, and at
1 2 3 4	Page 118 perspective, in terms of these risk premiums or the going forward, and so if they if we just look at that and say we'll take that on board and say that's about five and a quarter, that is a fair bit lower than your market risk	Page 120 1 Q. This is a report that is actually referenced 2 or the Fernandez survey is actually referenced 3 in the Board's decision from last time, and at 4 that time, before the Board there was just
1 2 3 4 5	Page 118 perspective, in terms of these risk premiums or the going forward, and so if they if we just look at that and say we'll take that on board and say that's about five and a quarter, that is a fair bit lower than your market risk premium that we're talking about of eight	Page 120 1 Q. This is a report that is actually referenced 2 or the Fernandez survey is actually referenced 3 in the Board's decision from last time, and at 4 that time, before the Board there was just 5 evidence of what the market risk premium was
1 2 3 4 5	Page 118 perspective, in terms of these risk premiums or the going forward, and so if they if we just look at that and say we'll take that on board and say that's about five and a quarter, that is a fair bit lower than your market risk premium that we're talking about of eight percent, right, because your market risk	Page 120 1 Q. This is a report that is actually referenced 2 or the Fernandez survey is actually referenced 3 in the Board's decision from last time, and at 4 that time, before the Board there was just 5 evidence of what the market risk premium was 6 used in 2008 and at that time, the survey was
1 2 3 4 5 6	Page 118 perspective, in terms of these risk premiums or the going forward, and so if they if we just look at that and say we'll take that on board and say that's about five and a quarter, that is a fair bit lower than your market risk premium that we're talking about of eight percent, right, because your market risk premium has actually gone up from the last	Page 120 1 Q. This is a report that is actually referenced 2 or the Fernandez survey is actually referenced 3 in the Board's decision from last time, and at 4 that time, before the Board there was just 5 evidence of what the market risk premium was 6 used in 2008 and at that time, the survey was 7 884 finance professors. Do you recall that?
1 2 3 4 5 6 7 8	Page 118 perspective, in terms of these risk premiums or the going forward, and so if they if we just look at that and say we'll take that on board and say that's about five and a quarter, that is a fair bit lower than your market risk premium that we're talking about of eight percent, right, because your market risk premium has actually gone up from the last hearing and now it's up around eight percent.	Page 120 1 Q. This is a report that is actually referenced 2 or the Fernandez survey is actually referenced 3 in the Board's decision from last time, and at 4 that time, before the Board there was just 5 evidence of what the market risk premium was 6 used in 2008 and at that time, the survey was 7 884 finance professors. Do you recall that? 8 MS. MCSHANE:
11 22 33 44 55 66 77 88 99	Page 118 perspective, in terms of these risk premiums or the going forward, and so if they if we just look at that and say we'll take that on board and say that's about five and a quarter, that is a fair bit lower than your market risk premium that we're talking about of eight percent, right, because your market risk premium has actually gone up from the last hearing and now it's up around eight percent. Whereas if we look at TD, they're saying if	Page 120 1 Q. This is a report that is actually referenced 2 or the Fernandez survey is actually referenced 3 in the Board's decision from last time, and at 4 that time, before the Board there was just 5 evidence of what the market risk premium was 6 used in 2008 and at that time, the survey was 7 884 finance professors. Do you recall that? 8 MS. MCSHANE: 9 A. No, not specifically, but I'll take that
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25

Q. And you're aware that it's been extended to

include financial analysts and companies as

NL Power Inc. 2013 GRA

Q. Okay. Well, if you're up at eight percent,

24 MR. JOHNSON:

Jai	1uary 14, 2015 N	Iuiu-Pa	ge NL Power Inc. 2015 GRA
	Page	121	Page 123
1	well as professors of finance?	1 1	MS. MCSHANE:
2	MS. MCSHANE:	2	A. I see that it's lower in 2012 than it was in
3	A. Yes.	3	2008.
4	(12:00 p.m.)	4 1	MR. JOHNSON:
5	MR. JOHNSON:	5	Q. And it's lower in 2012. At 2012, it's five
6	Q. And he goes on to say, at page 12, that this	6	and a half and it's lower than 2009. It's
7	Fernandez survey was answered by 7192	7	lower than 2010 and it's slightly lower than
8	respondents out of about 21 and a half	8	2011, correct?
9	thousand e-mails sent out, and he notes only	9 1	MS. MCSHANE:
10	47 said the CAPM was not very useful, but then	10	A. Yes, that's what the numbers show.
11	he notes that of the 2,223 US responses, the	11 1	MR. JOHNSON:
12	average market risk premium estimate was five	12	Q. So this extensive survey not only shows that
13	and a half percent and the median was 5.4	13	your market risk premium is high, but it shows
14	percent, and he reports that for Canada, the	14	that you are going in the opposite direction
15	results were reversed with a median market	15	because in 2010, your market risk premium was
16	risk premium of five and a half percent and an	16	6.75 percent. These guys and gals are coming
17	average of 5.4 percent. He notes that the	17	down and you're going up. Do you find that at
18	maximum estimate of the market risk premium by	18	all striking?
19	the 94 Canadian respondents was ten and a	19 1	MS. MCSHANE:
20	half. That's the maximum. The minimum, 3.4.	20	A. Well, I understand that it's different and I
21	But he notes 75 percent were at six or less,	21	explain in my testimony why I believe that
22	Ms. McShane, and in terms of that, I mean, you	22	based on the analysis I've done that the
23	would be substantially higher at eight percent	23	equity risk premium is higher at lower bond
24	than the median in the United States, the	24	yield than it is at higher bond yields.
25	median in Canada, the average in the United	25 1	MR. JOHNSON:
	Page	122	Page 124
1	States, the average in Canada, by a big	1	Q. So your evidence is that it's directionally
2	margin.	2	gone up?
3	MS. MCSHANE:	3 1	MS. MCSHANE:
4	A. I agree that my estimated risk premium is	4	A. Yes.
5	higher than these surveys indicate.	5 1	MR. JOHNSON:
	MR. JOHNSON:	6	Q. Let's talk about 2009. The financial markets
7	Q. And he goes on to say that "Fernandez surveys		in 2009, Ms. McShane, what were they like?
8	have discovered that professors of finance		MS. MCSHANE:
9	have traditionally been high in their market	9	A. Well, it depends on when you're talking about
10	risk premium estimates, which was in part due		in 2009. 2009 conditions changed considerably
11	to their use of historic estimates. This is	11	over the course of that year.
12	still true in the United States where the		MR. JOHNSON:
13	average market risk premium estimate of professors of finance was 5.6 percent versus	13	Q. When were they the worst?
14	five percent for analysts and 5.5 percent for		MS. MCSHANE:
15 16	companies. However, in Canada this is no	15	A. Probably March. MR. JOHNSON:
	longer true as professors of finance are at		Q. And was it all fixed up by April?
17 18	5.4 percent, the same as companies, while	17	MS. MCSHANE:
19	analysts are at 5.9." And this is	19	A. No, wasn't it's not all fixed up now.
20	interesting, at line 12, "Professor Fernandez		MR. JOHNSON:
21	reports the trend over time and the estimate	20 1	Q. But they and so -
22	of the market risk premium for the United		MS. MCSHANE:
23	States where are the most responses as	23	A. But by the time the hearing took place, there
24	follows:" and do you see how it trends over	24	had been considerable improvement in market
25	time Mc McChane?	25	anditions

25

conditions.

time, Ms. McShane?

1 MR. JOHNSON:

O. And the GRA of Newfoundland Power was filed

- May 10th, 2009. Would you take that? 3
- 4 MS. MCSHANE:
- A. Yes. 5
- 6 MR. JOHNSON:
- Q. And you filed your report in May of 2009,
- 8 right?
- 9 MS. MCSHANE:
- A. I did, and addressed at the hearing the 10
- changes in the capital market conditions that 11
- had occurred since the evidence was filed. 12
- 13 MR. JOHNSON:
- 14 Q. Yes, and as I recall, the slight change that
- made a difference to one of your tests that 15
- 16 had no bearing or impact upon your return on
- equity for Newfoundland Power for 2010, 17
- 18 correct?
- 19 MS. MCSHANE:
- A. I don't believe that I changed the 20 recommendation, no. I think you're right. 21
- 22 MR. JOHNSON:
- Q. That's right. And in point of fact, your 23
- written evidence that was filed May 10th, 24
- obviously you didn't start work on that, you 25

Page 126

- know, the week before. You had been at that -1
- 2 MS. MCSHANE:
- A. You don't think so? No, that's true. I mean, 3
- I had spent a while doing that. I mean, made 4
- sure that by the time it was filed we had the 5
- most recent data that was reasonably available 6
- 7 in time to have it filed.
- 8 MR. JOHNSON:
- 9 Q. Your report, you were working on your report
- through April month and you were probably at 10
- 11 your report in March month?
- 12 MS. MCSHANE:
- A. True. 13
- 14 MR. JOHNSON:
- Q. Yeah. And March of 2009, I mean, that had to 15
- be the lowest part of the equity market. I 16
- mean, that's when she really troughed out. Is 17
- that right? 18
- 19 MS. MCSHANE:
- A. I think it was March 9th, if I recall 20
- 21 correctly, that the market hit its trough.
- 22 MR. JOHNSON:
- Q. Yeah. And so, would you agree with me that 23
- the bulk of your testimony was in fact written 24
- when either the markets were at their lowest 25

Page 125

- or in the immediate aftermath of them having
- 2 been the lowest?
- 3 MS. MCSHANE:
- A. They would have -- it would have been prepared 4
- around the time of the worst part of the 5
- crisis. 6
- 7 MR. JOHNSON:
- 8 Q. And you're familiar with the concept of the
- yield on the TSX composite?
- 10 MS. MCSHANE:
- A. Yes, I am. 11
- 12 MR. JOHNSON:
 - Q. And would you accept, subject to check, that
- your report, at page 129, in your last -- in 14
- the last GRA report, you said that the yield 15
- 16 on the TSX was about 4.2 percent?
- 17 MS. MCSHANE:
- A. I would take that, subject to check, yes.
- 19 MR. JOHNSON:
- Q. At page 129. And are you aware what the yield 20
- on the TSX composite index is now? 21
- 22 MS. MCSHANE:
- 23 A. Not specifically today, no. I knew what it
 - was in July.
- 25 MR. JOHNSON:

24

2

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Page 127

- Q. Would you accept, subject to check, that as of 1
 - January 11th, 2013, that the yield on the TSX
- composite index is three percent? 3
- 4 MS. MCSHANE:
- A. That sounds about right, yes.
- 6 MR. JOHNSON:
- 7 Q. And directionally, what does that say to you
- that it's gone down from the 4.2 percent? 8
- 9 MS. MCSHANE:
- A. Well, all other things equal, it would be a 10
- 11 reduction in the cost of equity. I mean, you
- have to look at how that relates to growth 12
- expectations, but all other things equal, it 13
- would be considered a declining trend in the 14
- cost of capital from that point in time. 15
- 16 MR. JOHNSON:
- 17 Q. And would you accept that at the time of your
- report in 2009 that at page 139 of your 18
- report, that you stated that the volatility 19
- index had averaged over 40 in the first 20
- quarter of 2009? You recall referring to the 21
- 22 volatility index?
- 23 MS. MCSHANE:
- A. I don't recall specifically, but I'm familiar 24
- 25 with that level.

Multi-Page TM **January 14, 2013** Page 129 Page 131 1 MR. JOHNSON: 1 MS. MCSHANE: O. Pardon me? A. Yes. 3 MR. JOHNSON: 3 MS. MCSHANE: A. I'm familiar with that level of volatility at Q. Were financial experts, were they thinking that things were going to be improving over 5 that point in time. 5 6 MR. JOHNSON: 2010, 2011, 2012 relative to where they'd 6 been? Q. Right. And would you accept, again subject to 7 7 check, that as of January 11th, 2013, that the 8 8 MS. MCSHANE: volatility index is down to 13? A. Yes. 10 MS. MCSHANE: 10 MR. JOHNSON: 11 A. I haven't looked at it in the last couple of 11 Q. And the interest rate outlook was looking up, 12 days, but I know the volatility has been lower interest rates were expected to increase? 12 in the last little while than it was when I 13 MS. MCSHANE: 13 prepared this evidence. 14 14 A. Yes. 15 MR. JOHNSON: 15 MR. JOHNSON: Q. Have you -- you've referred to the volatility Q. And recovery was expected? 16 index in your reports. 17 MS. MCSHANE: 17 A. Yes, I mean this is all set out basically I 18 MS. MCSHANE: 18 A. I do, yes, on page 41. 19 think in my testimony where I go through what basically happened since the time of the 20 MR. JOHNSON: 20 Q. Page 41, and sometimes I think you refer to it hearing in 2009. 21 21 22 as the fear index. 22 MR. JOHNSON: 23 23 MS. MCSHANE: Q. And your report indicates, I think, that the Board should pay attention to what has A. I think -- I'm not sure I referred to it here 24 24 happened between 2009 and the date of this 25 as that, but that's -25 Page 130 Page 132 1 MR. JOHNSON: hearing, correct? 1 Q. And when we say fear, F-E-A-R. 2 MS. MCSHANE: 3 MS. MCSHANE: A. Well I think what I was trying to do was to 3 give the Board an appreciate of, you know how A. Yes, fear. 4

5 MR. JOHNSON:

Q. So what does it indicate, MS. McShane, if as 6

7 we've indicated to you the VICS (phonetic) has

dropped, you know, to that level, what does 8

that tell you about volatility in the market? 9

10 MS. MCSHANE:

11 A. It means today, compared to say March, 2009,

that investors expect less volatility. 12

13 MR. JOHNSON:

14 O. And as of the date of--as of the late fall of

2009, were financial thinkers thinking there 15

was going to be a pick up over 2010, 2011, 16

17 2012, at that point in time?

18 MS. MCSHANE:

A. Sorry? What point are we talking about? 19

20 MR. JOHNSON:

Q. As of around the time of the hearing, we're -

22 MS. MCSHANE:

A. Okay, so October, late October.

24 MR. JOHNSON:

Q. October, November. 25

5 much change there's been, ups and downs, since

it last looked at the cost of capital in 2009. 6

7 MR. JOHNSON:

Q. And I've just pointed to you to things that 8

have changed favourable since 2009, haven't I? 9

11 A. Since they have improved, since March 2009 for

12 sure.

17

22

13 MR. JOHNSON:

14 Q. And since the time of your report, for sure.

15 MS. MCSHANE:

A. Well, of course, I mean the report was, as you 16

say, focused on a period prior to when it was

filed, but of course, when the hearing 18

occurred, I mean the Board did have the 19

benefit of what had been going on in the 20

market from March or since before March, 21

actually, but from the worse of financial

crisis to the latter part of 2009. 23

24 MR. JOHNSON:

25 Q. Yeah. If I could turn you to documentation or

January 14, 2013 Multi		lti-P	age TM	NL Power Inc. 2013 GRA
	Page 13			Page 135
1		1		terms of economic conditions, yes, there is
2	MS. GLYNN:	2)	some relevance in it.
3	Q. That would be entered as Information Item No.	3	CHAI	RMAN:
4		4	Q.	It has some indicative value, but it has no
5	KELLY, Q.C.:	5		fundamental value because the author is not
6		6	j	here to be cross-examined. That's what you're
7	request is coming up that none of the authors	7	,	basically saying.
8		8	KELL	Y, Q.C.:
9		9	Q.	Exactly, and you can't drill down to what
10	hearing and so, while I'm not objecting to the	10)	forms the more important components of them
11	cross-examination, the underlying data and	11		trying to extrapolate out market portfolios,
12	conclusions in relation to these reports I	12	ļ.	risk premiums, et cetera, and Mr. Chairman you
13	take it are never going to be proven in this	13	;	obviously have the point.
14	hearing, so I'm not sure where this advances	14	CHAI	RMAN:
15	the boat at the end of the day, so to speak.	15	Q.	Because I wanted to introduce one
16	I simply make that observation while the	16	<i>.</i>	(unintelligible) because I thought it was
17	because if the report is not proven, we have	17	1	interesting. Anyway, no, no, well I take your
18	no basis to judge what the content of that is	18	}	point, but I guess we can, I mean do you want
19	and how that particular witness came to that	19)	to allow as broad a possible discussion on
20	particular conclusion. For example, we have	20)	these issues as we can and I mean, the Board
21	the TD one where my friend went from	21		in its deliberations will attach, I would
22	adjustments from geometric to arithmetic, then	22	ļ.	hope, appropriate significance to any of the
23	looked at the portfolio, it's not even the	23	;	information that's put intoI guess not
24	Long Canada Bond portfolio, so there's a whole	24	ļ	evidence, is it, in this case, that's put into
25	bunch of information which is not provided in	25	i	the record.
	Page 134			Page 136
1	the report.	1	(12:1	5 p.m.)
2	CHAIRMAN:	2	KELL	Y, Q.C.:
3	Q. Yes.	3	Q.	Well, exactly, it's not evidence on the cost
4	KELLY, Q.C.:	4	ļ	of capital for the utility. At the end of the
5	Q. And I simply observe there is limited utility	5	j	day the Board has to decide based upon the
6	in this process simply in terms of these	6	j	evidence that it has heard from the witnesses
7	reports, simply because I take it these	7	'	and the reports that are filed.
8	witnesses are not coming to explain to the	8	CHAI	RMAN:
9	Board how they went about reaching their	9	Q.	Yes.
10	conclusions.	10	KELL	Y, Q.C.:
11	CHAIRMAN:	11	Q.	So it's a cautionary notice that you can't
12	Q. Uh-hm.	12	!	simply extrapolate something from a report
13	MR. JOHNSON:	13	;	which is not proven and use that. Yes, it
14	Q. Well the Conference Board of Canada is not	14	ļ	tells you something about general economic
15		15	i	conditions, but you can read the newspaper and
16		16	j	get that. Anyway, I -
17	2	17	CHAII	
18	•	18		You can't read the newspaper.
19	close its mind to what financial institutions	19	MS. G	LYNN:

21

23

25

filed.

Q. There's no objection, it' -

Q. And this can be addressed during -

22 KELLY, Q.C.:

24 MS. GLYNN:

Q. There is no objection to the information being

are saying, whether it be Mercers or TD or

Q. No, and I want to make clear I didn't say it's

not relevant because in so far as we're

talking about financial markets generally, in

RBC, I mean, to say it's not relevant -

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22 KELLY, Q.C.:

Multi-Page TM **January 14, 2013** Page 137 Page 139 Q. If we could just turn to page 8. 1 KELLY, O.C.: Q. - the observation as to what use gets made of 2 MS. MCSHANE: A. Of the same -3 it. 3 4 CHAIRMAN: 4 MR. JOHNSON: 5 o. Yeah. No, no, we'll attach whatever 5 Q. Document. significance we deem to be appropriate to -6 MS. MCSHANE: 6 7 GREENE, O.C.: A. - witness. 8 Q. It's really a matter to go to the weight and 8 MR. JOHNSON: it's a matter of argument for submission. If O. And this is Central Bank Watch and we see at 9 Mr. Kelly is not objecting to this line of 10 the top, Bank of Canada. We have Canadian 10 cross, we're really taking time to get into real GDP growth and we see it into negative 11 11 argument which isn't necessary at this time. territory and the source for this is 12 12 13 CHAIRMAN: Statistics Canada and RBC Economics Research 13 and they're forecasting economic growth after Q. Carry on sir. 14 14 15 MR. JOHNSON: the trough of '09 in 2010 and continue on into 15 Q. Thank you, Mr. Chairman. In terms of the 16 2011. correct? 16 financial markets monthly, I think it's sort 17 MS. MCSHANE: 17 of illustrative of at least RBC's thinking at A. Yes. 18 19 the time because this is dated November, 2009, 19 MR. JOHNSON: just after the hearing portion concluded and Q. And Federal Reserve is similarly anticipating 20 20 if I could just turn you to the interest rate or forecasting U.S. real GDP growth in 2010, 21 21 22 outlook at the time, Ms. McShane, which they 22 2011. have at page 5. And for Canada, they were 23 23 MS. MCSHANE: forecasting and you refer to and consult with 24 A. Yes. materials like this in your normal practice, I 25 25 MR. JOHNSON: Page 138 Page 140 Q. And that would be from the Federal Reserve, would think, as a financial--cost of capital 1 1 expert, would you not? 2 would they be--would the Bank of Canada and 2 Federal Reserve be reliable resources, Ms. 3 3 MS. MCSHANE: McShane? A. I certainly read these kinds of reports, yes. 4 5 MR. JOHNSON: 5 MS. MCSHANE: Q. Yes, to inform yourself as to what others are A. Yes. 6 6 saying, correct? 7 MR. JOHNSON: 7 8 MS. MCSHANE: Q. Okay. A. Sure. 9 MS. MCSHANE: A. My report at page 33 refers to the October 10 MR. JOHNSON: 10 11 Q. Sure. and they were indicating an interest 11 2009 consensus economics, which indicated that rate outlook of the interest rate ticking economists generally anticipated positive real 12 12 upwards in the first quarter or second quarter 13 13 GDP growth by--fourth quarter of 2009 and two of 2010, again the third quarter of 2010 and percent--sorry, 2.6 percent real GDP growth in 14 14 onward into 2011, right? And the sort of same 2010. 15 15 line was being expected in the United States 16 MR. JOHNSON: 16 17 on their 30 year treasuries at that time. 17 Q. And so in late 2009, the Bank of Canada has

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19

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21 MS. MCSHANE:

18 MS. MCSHANE:

A. Right, and I think that's sort of consistent 19 with where the Board's decision was in 2009. 20 I mean, if you look at one underlie their 21

22 allowed rate of return, I recall that it was

based on a forecast Long Term Canada Bond 23

24 yield of four and a half percent.

25 MR. JOHNSON:

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Canada in recession from--so we're in

recession at the time of the hearing, would

A. I think that it had not been announced that

the recession was over, it was in early 2009

that the finance minister announced that there

were signs that the economy was improving. I

that be correct?

- don't recall off the top of my head what the 1
- specific date that the recession was called 2
- 3 over.
- 4 MR. JOHNSON:
- 5 Q. I'd like to talk about the next thing that has
- to do with your market risk premium and that 6
- is BETA, because it's one thing to say that 7
- 8 the market as a whole can expect a risk
- premium of eight percent, but then we talk 9
- 10 about BETA and the CAPM and if I could turn
- you to Dr. Booth's appendix C, Ms. McShane, 11
- 12 and particularly page 11, and you've read Dr.
- Booth's report, obviously. 13
- 14 MS. MCSHANE:
- A. I have. 15
- 16 MR. JOHNSON:
- Q. And as you can see on that page, on page 11, 17
- Dr. Booth has reported on the BETAs for 18
- 19 Enbridge, TransCanada, Canada Utilities,
- TRANSALTA, Emera, Fortis, et cetera, and he 20
- reported his own BETAs, he's in the third 21
- 22 column, RBC's BETAS, Google's BETAS, and I
- 23 guess Ms. McShane, in terms of his reporting
- of BETAs do you, is there much difference 24
- between yourself and Dr. Booth in terms of 25

 - what the BETAs are?
- 2 MS. MCSHANE:

1

- A. In terms of these regressions? No.
- 4 MR. JOHNSON:
- Q. No. So there's no dispute there on that and 5
- they would be rather similar to what your BETA 6
- 7 estimates are for Canadian utilities in your
- 8 Schedule 12, right?
- 9 MS. MCSHANE:
- A. Well, I guess if we could just sort of back 10
- 11 up. I mean, all these are, are regressions of
- changes in prices or changes in returns 12
- 13 against - for individual companies against the
- market. So the differences are going to stem 14
- from what period they're estimated over, what 15
- interval you choose, whether it's a monthly 16
- 17 price change, a weekly price change, and they
- may vary depending on what composite you use 18
- 19 as the measure of the market, if you're using
- the S & P TSX 300, or if you're using the 60 20
- or if you're using the I'm trying to think 21
- 22 of another, the EMC Canada Index, but they're
- all going to be basically the same value. The 23
- 24 question is what do they mean.
- 25 MR. JOHNSON:

Q. Right, and -

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- 2 MS. MCSHANE:
- A. And whether or not they really measure, you 3

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- know, the relative risk of a utility 4
- 5 fundamentally or not.
- 6 MR. JOHNSON:
 - Q. And so the debate is, I guess, what you do
- 8 with the Betas. So let us turn to your report
- for a moment at Schedule 12, which talks about 9
 - the Betas for regulated Canadian utilities,
- and I'm referring to Schedule 12, page 1 of 6. 11
- 12 MS. MCSHANE:
- A. I have that.
- 14 MR. JOHNSON:
- Q. Ms. McShane, the top part of Schedule 12 on 15
 - page 1 of 6, this has what's known as the raw
- monthly price betas, and what do you mean by 17
- "raw"? 18
- 19 MS. MCSHANE:
- A. Raw just means it's a simple regression. 20
- There's no adjustment made to it whatsoever. 21
- 22 MR. JOHNSON:
- Q. And so if we look at, say, 2008 for these five 23
- Canadian companies, we have an average or a 24
- mean beta of .25, and in 2009, it's .22, .23, 25

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.21, and Ms. McShane, if we go down below we

- see the adjusted betas. As I see it, when you
- adjust the betas, they increase in size. For 3
- instance, in -4
- 5 MS. MCSHANE:
- A. No, no, not unless they're under one. If 6
- 7 they're over one, they decrease in size.
- 8 MR. JOHNSON:
- Q. But you're putting these through a Blume 9
- adjustment, correct? 10
- 11 MS. MCSHANE:
- 12 A. That's what it's been termed shorthand-wise,
- 13 yes.
- 14 MR. JOHNSON:
- Q. And that's when you take betas, observed 15
- actual betas, and then you adjust those raw 16
- 17 betas towards one?
- 18 MS. MCSHANE:
- 19 A. Yes.
- 20 MR. JOHNSON:
- 21 Q. And a company with a beta of one is an average
- risk company? 22
- 23 MS. MCSHANE:
- A. Correct. 24
- 25 MR. JOHNSON:

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1	Q.	Okay. Now when companies like Google, RBC, and
2		Yahoo, and I understand Yahoo uses Standard
3		and Poors beta, they do not adjust them like
4		that, correct?
5	MS. M	CSHANE:
6	A.	They don't report them that way, but all
7		they're doing is reporting values.
8	MR. JO	DHNSON:
9	Q.	Okay, and if we could turn back to the year
10		2011, as an example, when you compare your .21
11		beta and you do the Blume adjustment, it
12		increases by up to .47 in the case, obviously,
13		right?
14	MS. M	CSHANE:
15	A.	In that particular instance, yes.
16	MR. JO	DHNSON:
17	Q.	And a the bottom footnote 1, that explains how
18		you go about doing that. So that's the Blume
19		adjustment that we're talking about where you
20		take the raw beta, multiple it by 67 percent,
21		add the market beta of 1, and times it by 33
22		percent, that's how you do it?
23	MS. M	CSHANE:
24	A.	Right.

Q. Beta never did well. So Canadian unadjusted betas are .21. You adjust them and you get 10 the .47. Let's look at your US utility betas 11 at Schedule 12, page 4 of 6. Again it's the 12 same concept, but this time now we're looking 13 14 directly at your chosen US sample, and these are up top the raw or observed betas. 15 16 MS. MCSHANE: A. This is - sorry, page 4 of 6? 17 18 MR. JOHNSON: Q. Page 4 of 6. 20 MS. MCSHANE: A. Okay. 22 (12:30 p.m.) 23 MR. JOHNSON: Q. Monthly beta for the sample of US utilities, 25 and they are - for 2011, for instance, they're 25 MR. JOHNSON: Page 148 Page 146 Q. Okay, and Dr. Booth cites in his report, and .43, and 2010, they're .44, and 2009, they're 1 we needn't go to it right now, but he cites a 2 .42, and then if you come down, you see that paper by - I believe they are finance when you adjust them using that Blume 3 professors, Gombala and Kahl, and they methodology, they go up to in the low .6's, 4

25

anybody else.

Q. Not a best seller.

A. Not a best seller.

2 MR. JOHNSON: O. Could be.

4 CHAIRMAN:

6 MS. MCSHANE:

8 MR. JOHNSON:

3

4 5 published a paper that I'm sure you're familiar with in finance management, correct? 6 7 MS. MCSHANE: A. Financial management. 9 MR. JOHNSON: Q. And they said that utility betas, they tend to 10 11 revert to their long run average levels, not to 1, and not to 1, which would be the beta of 12 13 the market as a whole. Are you familiar with

15 MS. MCSHANE:

that paper?

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A. I am. It was published a number of years ago 16 17 and it's the only one I'm aware of that's ever done any such analysis on utility betas. 18

19 MR. JOHNSON:

20 Q. It's a well known paper, no doubt.

21 MS. MCSHANE:

A. It's the only one that's ever been done on 22 utility betas. It's very well known to those 23 24 of us in the utility cost of capital business. It's doubtful that it's well that known to 25

right? 6 MS. MCSHANE: A. Yeah. 8 MR. JOHNSON: 9 Q. And so, Ms. McShane, I guess it's true that regardless of whether you adjust the betas or 10 11 not, US betas are simply higher than Canadian betas for utilities? I mean, we've gone from 12 13 .21 to .43, and even when you adjust the 14 Canadian's, you get to .4 odd, and if you adjust the American sample, you get to .62. 15 So that's the conclusion, isn't it? 16 17 MS. MCSHANE: A. No. I don't think that is the conclusion. I 18 think that that is the conclusion in those 19 very specific years, but if you look at the 20 data over the entire period that's there, 21 there's very little difference between the 22 betas of the US and Canadian utilities. 23 24 MR. JOHNSON:

Q. What explains the significantly higher betas

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over this last several years?		1 MR. JOHNSON:
2 2006, you know, they've been		2 Q. Page 4 of 6 of Schedule 12.
3 in 2007 - this is adjusted now	-	3 MR. JOHNSON:
4 .76, then down to .6, and rem	-	4 Q. Which company?
5 2008 and 2009. What explain		5 MS. MCSHANE:
6 MS. MCSHANE:		6 A. I'm looking at your 2011 - never mind the
7 A. I don't know specifically wha	nt factors have	7 company for a moment. I'm just looking at
8 been at play in that particular		8 your 2011 column.
9 mean, we are dealing with a se		9 MS. MCSHANE:
10 composite. I mean, you've		
diversified composite in the	-	11 MR. JOHNSON:
than you do in Canada, or		
composite is more character		
dominance of a couple of diffe	•	
it could have something to do	1	15 MS. MCSHANE:
16 how the composite or the p	· ·	
composite have behaved over	1	17 MR. JOHNSON:
18 MR. JOHNSON:	18	
19 Q. Ms. McShane, is it actually co		
20 beta estimate for each year is		
21 estimate over the five years?	· · · · · · · · · · · · · · · · · · ·	
22 works?		22 MS. MCSHANE:
23 MS. MCSHANE:	23	
24 A. I'm not sure what you mean b		24 MR. JOHNSON:
25 MR. JOHNSON:	25	
	Page 150	Page 152
1 Q. Is it five years of data?		in beta levels between Canada and the US
2 MS. MCSHANE:		2 utilities have lasted for about ten years, not
3 A. Five years of data, yes.		just the last few years - because you go back
4 MR. JOHNSON:		five years, '07 to '11, but that would
5 Q. Just explain to us now how the		incorporate data going back prior to '07,
6 we might forget it?		6 wouldn't it?
7 MS. MCSHANE:		7 MS. MCSHANE:
8 A. So you take five years of price		8 A. Sorry, ask me that question again, please?
9 excess returns or however years	-	9 MR. JOHNSON:
measure the change in the retu		
and you estimate the change in		
the composite, whichever on	1	
using the same approach an	•	3 MS. MCSHANE:
regression to see how closely	· ·	
the returns for the stock correl	•	15 MR. JOHNSON:
16 change in the returns on the co		
17 MR. JOHNSON:	17	
18 Q. And so let's use a real life ex		•
19 Let's take AGL - no, let's tak	-	· · · · · · · · · · · · · · · · · · ·
20 because that's the composite,	•	20 MS. MCSHANE:
is .43 of a beta. That's on an	_	_
basis. So what data is reflected		22 MR. JOHNSON:
year's data is reflected in that		
24 MS. MCSHANE:		24 MS. MCSHANE:
25 A. Sorry, which page are we on r		
7, I P N - 01 - 1		

Multi-Page TM **January 14, 2013** NL Power Inc. 2013 GRA Page 153 Page 155 correlates more closely with the average 1 MR. JOHNSON: O. So that would mean that that is reflective, 2 company? that .64 in 2007 is reflective for not only 3 3 MS. MCSHANE: 2007, but a prior five year period? A. It correlates more closely with the market. 4 5 MS. MCSHANE: 5 MR. JOHNSON: A. Well, it includes all the -Q. With the market? 7 MS. MCSHANE: 7 MR. JOHNSON: Q. It includes all of it. A. Yes, which is a portfolio of companies, and it depends on what you're measuring when you're 9 MS. MCSHANE: 9 A. Yeah, and so it may really be reflective of a 10 measuring the market. 10 couple of observations during that because 11 11 MR. JOHNSON: several observations can have a significant 12 Q. So it would have more market risk because it 12 impact on the result, but, yes, it covers a moves more closely with the market? 13 13 full five year period. 14 14 MS. MCSHANE: 15 MR. JOHNSON: A. Because beta is defined as, you know, the 15 Q. And so let's just bring this back now to 16 extent really, the extent to which a company 16 basics. If a stock - if Stock "A" has a stock price moves relative to the market. In 17 17 higher beta than Stock "B", what does that say principle, a stock that has a higher beta has 18 18 higher market risk. Capital market risk, that 19 about the risk of Stock "A" relative to the 19 risk of Stock "B"? 20 20 is. 21 MS. MCSHANE: 21 MR. JOHNSON: 22 A. In a particular period, it means that the 22 Q. So the next way that you went about company with the higher beta has correlated determining the risk premium was through the 23 23 more closely with the market than the company DCF based equity risk premium model, correct? 24 24 with the lower beta. 25 25 MS. MCSHANE: Page 154 Page 156 A. I did, yes. 1 MR. JOHNSON: Q. And so by correlated more with the market, you 2 MR. JOHNSON: mean it -Q. You used that one, and according to my 3 3 understanding is that using the DCF based 4 MS. MCSHANE: 4 A. It doesn't necessarily mean anything about the 5 equity risk premium test, you came up with a 5 risk premium of 6 percent, would that be relative riskiness of the company. It simply 6 6 right? That would be at page 93, I think, of 7 is a measure of the extent to which that 7 8 particular stock moved with the market over your report. 8 that period. 9 MS. MCSHANE: 9 A. Yeah, the summary of all of the tests, all of 10 CHAIRMAN: 10 11 Q. Can I just - so it doesn't mean that company 11 the various individual test results is on page "A" is riskier than company "B"? 89. Table 24. 12 12 13 MS. MCSHANE: 13 MR. JOHNSON: A. Not necessarily, no. I mean, I think it's Q. Well, I think it's very conveniently located 14 14 fair to say that when you're looking at that at Table 28 as well on page 93. 15 15 overtime that if you've got companies that are 16 MS. MCSHANE: 16 generally below 1, it's fair to conclude that 17 17 A. Okay, that's fine. That's just the one number they're as a group less risky than groups that - the Table 24 just shows - done in several 18 18 19 have betas over 1, but once you start getting different ways. 19 into, you know, is .21 a riskier stock than 20 20 MS. MCSHANE:

22 draw that conclusion. 23 MR. JOHNSON:

21

Q. But you can draw the conclusion, can you not,
 Ms. McShane, that the .41 group of companies

one that's .41, it becomes more difficult to

A. Done in several different ways, but in terms
of the utility risk premium, so far to recap,
by using the risk adjusted equity market which
is the beta analysis, we come up with a
utility risk premium of 5.4 percent, which

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	We sum that and we arrive at
	got to find out what the long
	ld is, which we deduct from
	quity, and we arrive at the
	um of 3.9. That's what we're
6 MR. JOHNSON: 6 looking at in the t	
7 Q. And then to be more specific because this is 7 MS. MCSHANE:	
8 the first real discussion of discounted 8 A. Yes.	
9 cashflow, you are deriving your equity risk 9 MR. JOHNSON:	
	now you arrive at the expected
	ow did you arrive at that?
growth of your sample of US electric and gas 12 MS. MCSHANE:	·
	yield is equal to the last
	of each month annualized,
<u> </u>	nonthly closing stock price,
	then increased by the
l ·	rate, the number that's in
	ially, to come up with the
yield was subtracted for each month for a 19 expected dividence	•
period since 1998, and the DCF costs 20 MR. JOHNSON:	
	t talks about then the analyst
·	wth forecast, and how did you
the sample with an estimate of growth based on 23 get those?	ž
investor - sorry, analyst forecast of growth, 24 MS. MCSHANE:	
	e that has the historical -
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1 methodology that combined the dividend yield 1 the history of the fo	orecasts made by analysts
	ompanies in the sample,
3 expectations that was comprised of both 3 monthly, going bac	ck, I think, until the 1970s.
4 analyst forecast of earnings growth, and in a 4 MR. JOHNSON:	
5 long term perpetual growth rate equal to the 5 Q. Okay, for the comp	panies in your sample?
6 expected return in the economy. So then I 6 MS. MCSHANE:	
7 looked at the risk premiums in each of those 7 A. Yes.	
8 monthly periods and estimated what the 8 MR. JOHNSON:	
9 relationship was between the DCF cost of 9 Q. And you've got a limit of the property of the	Moody's column as well, a
equity and the long term government bond yield 10 Moody's spread, an	nd that's the spread between
to figure out what the risk premium should be 11 a corporate long ter	rm "A" rated utility index
under current market circumstances, given 12 bond over the 30 years.	ear treasury?
where we expect long term Canada Bond yields 13 MS. MCSHANE:	
14 to be. 14 A. Right.	
15 MR. JOHNSON: 15 MR. JOHNSON:	
16 Q. Okay, you've gone ahead a few steps and I'm 16 Q. Why do you report	t the Moody's spread - because
	f your DCF tests later on?
turning you to Schedule 14, page 1 of 4. This 18 MS. MCSHANE:	
is DCF based equity risk premium study for 19 A. I use it in this DCF	based risk premium test.
20 sample of US utilities constant grown DCF 20 MR. JOHNSON:	
model, and so let's just follow, say, 1998, 21 Q. Okay. Now in term	ns of constant growth, when
	t", you mean constant,
have the year, 1998, we have an expected 23 perpetual?	
dividend yield of 5.1 percent, we have an 24 MS. MCSHANE:	
25 analyst forecast earnings per share growth 25 A. Yes, the premise is	s that the same growth rate

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will persist into perpetuity.	1	what this would indicate. However, the cost
2 MR. JOHNSON:	2	of equity is not based, or the return on
3 Q. So to use 1998 as an example, we	would 3	equity recommendation is not based solely on
4 consider that 4.3 growth forecast to go	o on in 4	this test. It's based on a number of tests and
5 perpetuity?	5	doesn't just reflect these estimates, specific
6 MS. MCSHANE:	6	estimates.
7 A. Right. This would be - in this case of	the 4.3	MR. JOHNSON:
8 percent would equal to actually an ave	erage of 8	Q. But certainly in terms of these companies
9 monthly numbers that were averaged	d for the 9	looked at in this context, we see the DCF cost
purpose of making this schedule loo	k a lot 10	of equity coming down?
smaller.	11 N	MS. MCSHANE:
12 (12:45 p.m.)	12	A. Yes, there's no doubt that the DCF cost of
13 MR. JOHNSON:	13	equity is showing a lower number today. I
14 Q. Okay. So, I guess, at each point in ti	me we	don't disagree with you.
can see the expected rate of return. S		MR. JOHNSON:
16 1998, it will be 9.4 percent?	16	Q. And not only -
17 MS. MCSHANE:	17 N	MS. MCSHANE:
18 A. On average.	18	A. The question is, you know, when you estimate
19 MR. JOHNSON:	19	the cost of equity, are you looking solely at
20 Q. And -	20	this test; no, of course not. You're looking
21 MS. MCSHANE:	21	at a number of tests, and your recommendation
22 A. Based on this methodology, yes.	22	is based on a number of tests. So you need to
23 MR. JOHNSON:	23	look at how your recommendation compares today
24 Q. Yes, and at each point in time we can		to where it was in 2009.
derived equity risk premium. So, for i		MR. JOHNSON:
25 derived equity risk premium. 50, for i	Page 162	Page 16
if we go to 2009, we see a - that's pro	-	Q. Could I ask you to turn up CA-NP-377. I'm
		looking at attachment, page 3 of 4. This was
		a question directed towards yourself, Ms.
4 and at a long treasury of 4.1 percent, a		McShane, regarding your DCF risk premiums and
5 have an equity risk premium derived	•	the question asked to provide the data
6 this method of 7 percent. Your last es		required to replicate the estimates for the
is through the second quarter of 2012		constant growth and three stage growth models
observed that we see a drop in the DC		presented in Table 23, and you did so. At
9 equity to 9.3 percent, which that wou		page 3 of 4, could I draw your attention to
drop of 180 basis points relative to 2		the period of February/March, 2009. Just to
11.1 percent, and at the same time we		explain to us what February and March of '09 -
drop in the long term treasury yield fr		these are the monthly observations, I take it,
percent in 2009 to 3 percent. So 110		is it?
points. So, Ms. McShane, I guess in t		MS. MCSHANE:
this data and in terms of looking at yo		A. Yes, they are.
and the time period of relevance to the		MR. JOHNSON:
being, say, the last GRA in 2009 to		Q. And from February and March of '09, the equity
present, I take it we can accept that v	while 18	risk premium was 8.35 in February, and 8.44
1 1 . 1 11 1 1	1 110	

20

22

24

25

correct?

21 MS. MCSHANE:

23 MR. JOHNSON:

19

the long treasury bond has dropped by

20 basis points, what has also dropped is the DCF

21 cost of equity for your US utilities - have

dropped by even more, by 180 basis points.

23 That's what we conclude from this.

24 MS. MCSHANE:

22

A. Based on this specific estimate, that would be 25

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under this methodology in March, would that be

A. That's what these estimates would show, yes.

Q. And if we go over to June of 2012, we're down

to 6.77 percent under this methodology as of

	Tige Tige Tige Tige Tige Tige Tige Tige
Page 165	Page 167
1 June?	than they were in 2009 on average.
2 MS. MCSHANE:	2 MR. JOHNSON:
3 A. Right.	3 Q. And if we look to periods immediately prior to
4 MR. JOHNSON:	4 the crisis - I mean, there was troubles
5 Q. Okay, so obviously a fairly significant drop	5 happening in August of 2007. I think you're
6 in the equity risk premium over that period of	6 probably familiar with that.
7 time?	7 MS. MCSHANE:
8 MS. MCSHANE:	8 A. That was sort of the -
9 A. Estimated on a monthly basis, yes.	9 MR. JOHNSON:
10 MR. JOHNSON:	10 Q. The beginning?
11 Q. And these equity risk premiums that are	11 MS. MCSHANE:
reported for February/March period of 2009,	12 A. The beginning of the crisis in August, 2007.
just prior to the hearing - prior to the	13 MR. JOHNSON:
14 filing of the Application, is there any period	Q. And specifically, just for the record, what
at all where the equity risk premium would	was happening in August of '07.
have been higher than during those months over	16 MS. MCSHANE:
this whole observation period?	17 A. I can't remember the specific events, but I
18 MS. MCSHANE:	know that, I mean, the sub-prime mortgage
19 A. Doubtful. I mean, that was the worst of the	problems started to really rear its head.
20 financial crisis.	20 CHAIRMAN:
21 MR. JOHNSON:	Q. Well, you had Bear Sterns, didn't you?
Q. And again you would have been working on your	22 MS. MCSHANE:
23 testimony in that late March, early April	23 A. Was that in August of 2007?
24 period, right?	24 CHAIRMAN:
25 MS. MCSHANE:	25 Q. I think.
Page 166	Page 168
1 A. Correct.	1 MS. MCSHANE:
2 MR. JOHNSON:	
	3 CHAIRMAN:
4 and we can note the same thing on Schedule 14,	4 Q. And you had Lehman Brothers.
5 actually, if we could go back there for a	5 MS. MCSHANE:
6 moment, page 1 of 4. Again we see the drop	6 A. Wasn't that in - that was in September, 2008.
7 off in the equity risk premium. It was at 2.7	7 CHAIRMAN:
8 in 2008, and again relative to 2008, it	8 Q. Was it?
9 dropped off in 2009 under this - I'm sorry, in	9 MS. MCSHANE:
10 2009, it was 7; 2010, 5.9; 2011, 509; and so	10 A. Yeah.
the second quarter of 2012, 6.3. So still	11 CHAIRMAN:
down, obviously, from where it had been in	Q. That's when they started - that's when Paulson
13 2009. The other thing about the Moody's	came up with -
spread, that has also come down since 2009,	14 MS. MCSHANE:
15 correct?	15 A. Yeah.
16 MS. MCSHANE:	16 CHAIRMAN:
17 A. Yes.	17 Q. A lot of funny money.
18 MR. JOHNSON:	18 MR. JOHNSON:
19 Q. And in terms of if we were looking at the	19 Q. Do you recall that there was Bear Stern hedge
spread in 2009, would you have characterized	funds got into difficulty in August of 2007?
21 that as significantly up over what we've seen	21 MS. MCSHANE:
since then?	22 A. Oh, is it, okay. That's right, yeah.
23 MS. MCSHANE:	23 MR. JOHNSON:
24 A. The spreads were considerably higher on	24 Q. And so let's go immediately prior to the
25 average - they were higher in 2008 on average	25 period, prior to 2007. Let's on this Schedule
12.) AVELASE - LILEV WEIG HISHEL III ZUUN UII AVELASE	

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look at 2005. What we see there is in 20	05 1	inverse relationship. Do you see that from
2 the Moody spread is about 1.1, not too far	off 2	your table - from your Schedule 14?
where it is today, and the DCF cost of equi	ty 3 MS	S. MCSHANE:
4 is at 8.8 percent. In 2006, DCF is at 9.2.	4	A. I mean, there is some inverse relationship
5 Again the spread is only 1.2 percent, an	id 5	after 2009. We do see the risk premium in 2012
6 2007, 9.2 on the DCF cost of equity. So i	n 6	being higher than the risk premium in 2010.
7 the crisis time then in 2008, the DCF cost of	of 7 MI	R. JOHNSON:
8 equity is 10 percent with these higher	8	Q. Now you apply some adjustments to your -
9 spreads, and it goes up in 2009 by a	9 (1	:00 p.m.)
percentage point and the spread actually c	omes 10 CF	HAIRMAN:
down a little bit. So there's no question th	at 11	Q. Mr. Johnson, we're at shortly after one, and I
around the time of the hearing when we	were 12	thought we'd agreed we would - I mean, if you
last before here, that was a troubled period	d 13	got another question that would finish off.
of time.	14 MI	R. JOHNSON:
15 MS. MCSHANE:	15	Q. No, Mr. Chairman.
16 A. Again, I mean, by the time we showed u		HAIRMAN:
the hearing there had been significant		Q. Okay, I think we'll take the fifteen minute
improvements since the earlier part of the		break now then.
year and these numbers are averages for		R. JOHNSON:
20 year.		Q. Thank you.
21 MR. JOHNSON:	21	(RECESS - 1:00 p.m.)
Q. What we do see, as I mentioned earlier,		(RESUME - 1:21 p.m.)
that we see the - as the long term treasur		R. JOHNSON:
yield has been coming down relative to 2		Q. Ms. McShane, continuing on, at page 84 of your
25 you know, 4.1, 4.2, 3.9, down to 3, we see	e the 25	report, at the top of that page, you state
·	Dogg 170	Da 172
1	Page 170	Page 172
1 equity risk premium also coming down ov	ver that	that for the sample of US utilities the
equity risk premium also coming down ov period, and Ms. McShane, we're not seei	ver that 1 ng an 2	that for the sample of US utilities the constant growth DCF based equity premium test
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	Page 173		Page 175
1	MR. JOHNSON:	1	fall below or fall, that the equity risk
2	Q. Okay, so you're not disagreeing with me that	2	premium goes up. There's an inverse
3	this document doesn't establish the	3	relationship, and we get that in the
4	proposition that when the long term treasury	4	historical utility context, for instance,
5	yield falls below 4, that the equity risk	5	right? That's - your report says that when
6	premium averages 6.7 or more?	6	the 30 year treasury falls below 4, we see at
7	MS. MCSHANE:	7	page 84, I think, of your report - as a
8	A. Well, in a sense it does. I mean, there's a	8	matter of fact, you have a table dedicated to
9	line on that schedule that shows the means for	9	it, Table 21, and in bold, government yield
10	long term treasury yields. The first line	10	below 4, utility equity risk premium, 6.7
11	says below 4 percent.	11	percent.
12	MR. JOHNSON:	12 MS. N	MCSHANE:
13	Q. Okay. Maybe it would assist if we could go	13 A.	Right, so this was the observed utility equity
14	back to CA-NP-377F. If you could go to page 3	14	risk premium at various long term government
15	of 4, and if you see down around November of	15	bond yields. This was sort of the - call this
16	2008, we see the 30 year treasury is down	16	the base data, and then the analysis of the
17	below 4, and then we see the risk premium is	17	actual relationship over time is conducted
18	at 7, '07, and we see then in December of '08	18	later, starting on page 85 under the
19	the risk premium - or the 30 year treasury is	19	relationships between equity risk premiums and
20	at 2.69, and the equity risk premium goes all	20	interest rates.
21	the way up to 8.30, and in January '09, the 30	21 MR. J	OHNSON:
22	year treasury is at 3.58, and the equity risk	22 Q.	Yes, but still and all your statement back at
23	premium was at 7.58, and then February/March	23	page 84, at line 2084, the data indicates that
24	of '09, in February, you had 3.71 on a 30 year	24	utility equity risk premium is higher at lower
25	treasury and the risk premium has jumped up to	25	levels of interest rates than it is at higher
	Page 174		Page 176
1	8.35, and 3.56 for the 30 year treasury in	1	levels of interest rates, i.e. there is an
2	March, with the equity risk premium going up	2	inverse relationship between long term
3	to 8.44, and so I take it those were the	3	government bond yields and utility equity risk
4	numbers that you were speaking of to establish	4	premium, and then in Table 21, you state that
5	the proposition that when bond yields where	5	when the government bond yield is below 4
6	the 30 year treasury falls below 4, that the	6	percent, the utility equity risk premium is
7	equity risk premium goes up above 6.7?	7	6.7 and when we see the government bond yield
1	MS. MCSHANE:	8	going up to 4 or 5, the utility equity risk
9	A. I'm going to take issue with the way you've	9	premium drops to 5.2, etc, etc.
10	stated that. I mean, all this says here on	10 MS. N	MCSHANE:
11	page 84 is the data show that the risk premium	11 A.	Yeah.
12	averaged 4.8 and long term government bond	12 MR. J	OHNSON:
13	yields were 6 or higher, and 6 and 7 when they	13 Q.	So that's a key point that you're trying to
14	were below 4. I mean, there's nothing that's	14	make.
15	intended in this paragraph that goes to what	15 MS. N	MCSHANE:
16	the equity risk premium should be at below 4	16 A.	What this data in Table 21 was attempting to
17	percent based on the whole pattern of the	17	show is just by taking simple averages, there
18	data. I mean, you need to actually look at the	18	is an indication that there's an inverse
19	entire regression analysis, not just these	19	relationship.
20	particular averages here to determine what the	20 MR. J	OHNSON:
21	data indicate the risk premium should be below	21 Q.	Right.
22	4 percent.		MCSHANE:
1	-	1	0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1

24

25

A. So having seen those simple averages, I went

on to determine with the full range of the

data what the relationship is.

Q. But, Ms. McShane, I understand that it is a

premise of your report that when bond yields

23 MR. JOHNSON:

24

25

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	Page 177	,	Page 179
1 MR.	JOHNSON:	1	government bond yield of 3.5 percent is 6.1,
2 Q	And part of that - how you could make the	2	6.2, 6.1, 6.1, not 6.7. So while there are
3	statement that when long term government bond	3	specific data points within that group of
4	yields went below 4 percent, you'd see risk	4	observations that show 6.7 percent at below 4,
5	premiums being 6.7 percent or higher, part of	5	when you do the full analysis and look at the
6	that was the experience that we saw in 377F at	6	entire pattern of the data, the equity risk
7	the very heart of the financial crisis in	7	premium that's indicated at 3.5 percent long
8	January, February, March of '09, when we saw	8	term Canada Bond yield and a spread of what I
9	in January an equity risk premium of 7.58, in	9	used here was 155 basis points, is around 6. 1
10	February of '09, 8.35, and March of '09 at	10	to 6.2, not 6.7.
11	8.44. I mean, you know, nearly off the chart		OHNSON:
12	and so, Ms. McShane, those numbers were taken		Ms. McShane, I'd like to ask you to provide an
13	into consideration by you in making the	13	undertaking that you provide the average risk
14	statement that there's an inverse	14	premium when treasury yields were below 4
15	relationship, first of all, right?	15	percent outside of the period from September
1	MCSHANE:	16	2008 to March of 2009. Would you be able to
1	Yes. However, this proposition that there's an	17	do that?
18	inverse relationship, I mean, I have found	18 (1:30	•
19	this to be the case well before the financial		MCSHANE:
20	crisis. So the conclusion that there's an		I can do that.
21	inverse relationship is not at all dependent		OHNSON:
22	on the specific numbers for the risk premium		Okay. I'd like to turn next to the historic
23	calculated at bond yields below 4 percent.	23	utility equity risk premium test, and as we
1	JOHNSON:	24	see from the outline in terms of the summary
25 Q	But in terms of - I guess, you'll concede	25	of your recommendations, this test provides
1	Page 178		Page 180
	we're not in the heart of a financial crisis	1	you with your highest risk premium and it
2	right now like we were back in February and	2	brings it up to 6.75 percent, correct?
3	March or anything like that of 2008 when those		MCSHANE: Sorry, when you say "it brings it up", it
4	huge risk premium numbers came out of the	4 A.	brings what up to 6.75 percent?
) 6 MC	data? MCSHANE:) 6 MD 1	OHNSON:
1	True.		The risk premium that you arrive at through
	JOHNSON:	8 Q.	the historical utility methodology is the
	. And since - maybe we'll have to go back there	9	highest one that your test produced?
10	to CA-NP-377. If we look at the times since	1	MCSHANE:
11	the big crisis in early '09, when the 30 year		It's the highest of the three equity risk
12	treasury fell below 4 percent, we see, in	12	premium test results, correct.
13	fact, do we not, Ms. McShane, the equity risk		OHNSON:
14	premiums had been below your 6.7 certainly,		Okay. Now as well that historic utility
15	6.2 in May of - in June of 2010, when the 30	15	equity risk premium test, that gets you up to
16	year treasury was at 3.9; 5.94 when the	16	about 10.25 percent for the return on equity?
17	treasury was at 3.98, etc.	17 MS. N	MCSHANE:
18 MS.	MCSHANE:		The result of that test is 10.25 percent.
19 A	That's true, and I would show you Table 24		OHNSON:
20	again where there is a summary of the results	20 Q.	So let me turn to page 90 of your report.
21	coming out of this test once the regression	21	Specifically, at line 2232 in your overview
22	analysis is done, and the indicated equity	22	section of the historic utility equity risk
23	risk premium looking at the full range of the	23	premium test. You say that the historic
24	data from back to 1998 suggest that the equity	24	experienced market returns for utilities

provide an additional perspective on a

risk premium with a forecast long term

25

Janu	ary 14, 2013 M	ulti-P	age	e TM	NL Power Inc. 2013 GRA
	Page 1	81			Page 183
1	reasonable expectation for the forward looking	1	[believe it takes out the capital appreciation,
2	utility equity risk premium. Similar to the	2			only the capital appreciation part of the
3	DCF based equity risk premium test, this test	3			return, and includes - I think it includes the
4	estimates the cost of equity for regulated	4			reinvestment return, but I'm not positive.
5	companies directly by reference to return data				OHNSON:
6	for regulated companies. Then as I understand	6			Okay, and so in terms of the bond total
7	it, the next sentence is where you basically	7			return, what is that meant to be?
8	give the premise. You say, "Reliance on				CSHANE:
9	achieved equity risk premiums for utility as	9			That's the return over time if the bond holder
10	an indicator of what investors expect for the	10			bought and sold bonds every year.
11	future is based on the proposition that over				oblight and sold conds every year.
12	the longer term investor's expectations and	12			Didn't hold them to maturity?
13	experience converse", and you say, "the more				CSHANE:
14	stable an industry, the more likely that this	14			Correct.
15	is likely to converge". So that's the				OHNSON:
16	underlying premise behind looking at these	16			Okay.
17	historic utility earned premiums, right?				CSHANE:
1	S. MCSHANE:	18			But not only didn't hold them to maturity, but
1	A. Returns.	19			-
1	R. JOHNSON:			R. JO	OHNSON:
1	Q. Earned returns, okay. Now let's look then at	21			Bought and sold them every year?
22	Table 26 to see what were the actual returns,				CSHANE:
23	and that's at page 91, and I take it, Ms.	23			Sold them every year.
24	McShane, that this is over a very lengthy				oHNSON:
25	period from 1956 to 2011 that this table is	25			Yes, did the very opposite of holding them to
	Page				Page 184
	based on?		ı		maturity, and as I understand it, this table
1	S. MCSHANE:	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$			would indicate that when we - that the utility
	A. For Canada, yes.	3			risk premium relative to the bond total
1	R. JOHNSON:	4			returns equals 4.2 percent for Canadian
1	Q. For Canada, and for what period for the United	5	•		utilities. So that was the premium that the
6	States, 1947 to 2011, right?	6			utility could expect to earn over that period?
	S. MCSHANE:				CSHANE:
1	A. That's right, yes.	8			That's the return -
1	R. JOHNSON:				PHNSON:
1	Q. Okay, now for Canadian utilities, we're	10			Oh, they earned actually over that period?
11	talking about utility equity returns of 12.1				CSHANE:
12	percent, right?	12			If you're measuring the return relative to the
	S. MCSHANE:	13			annual total bond return, yes, over that
1	A. Yes.	14			period, that's what they actually - that's the
1	R. JOHNSON:	15			actual equity risk premium.
1	Q. And bond total returns of 7.9 percent, bond				oHNSON:
17	income returns of 7.3 percent. What's a bond	17			Okay.
18	income return? Is that just a yield?				CSHANE:
	S. MCSHANE:	19			And if you measure it over the income return
1	A. Effectively, yes, it's the yield.	20			for Canada, it was 4.8 percent.
1	R. JOHNSON:				oHNSON:
1	Q. Why don't you call it the yield as opposed to	22			Yes, okay, and, well, either one you use,
23	bond income return?	23			Canada would be less than the American's, is
	S. MCSHANE:	24			that right?
1	A Pagausa the way it's calculated for the US I	25		C 1/1	COLLANIE.

25 MS. MCSHANE:

A. Because the way it's calculated for the US, I

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	Page 185	Page 187
1 A. Yes, because if you look at the column	_	experience converge, so would a Canadian, an
2 have the bond total returns and the b		investor in Canadian utilities, they would
3 income returns, it's because there were		expect a risk premium of 4.2 percent on,
4 interest rates in Canada than in the Ur		relative to the bond total return or 4. 8
5 States over this period of time, a situat	tion 5	percent relative to the bond income return,
6 that's no longer the case, but the utili		would they not?
7 equity returns themselves were higher	7	AS. MCSHANE:
8 Canada than in the United States.	8	Q. Well I think what you need to do is to read
9 MR. JOHNSON:	9	the rest of the section, starting with trends
10 Q. Could we look at this and say, well, Ca	anadian 10	in equity returns and bond returns, and what I
utilities are less risky than the America	an's 11	did here was to look at an analysis of the
utilities because the premium is not as	high?	underlying data to determine whether there had
13 MS. MCSHANE:	13	actually been a trend in the utility equity
14 A. Absolutely not. I just explained that	the 14	returns and if you look at lines 20260 and on,
reason for the difference is because of	f the 15	you can see that my analysis showed that when
difference in the bond returns. The ac	ctual 16	I looked at a trend in the utility equity
equity returns for the Canadian utilities	s are 17	returns for these different samples of
18 higher.	18	companies, I found that there has been no
19 MR. JOHNSON:	19	downward trend or secular downward trend in
20 Q. Only for that, could we make that conc	clusion? 20	the returns for the utilities and over time
21 MS. MCSHANE:	21	they remained in the range of 11 to 12
22 A. No.	22	percent, but at the same time we have seen a
23 MR. JOHNSON:	23	trend in bond yields. Now we're at very low
24 Q. Well how about if we looked at US el	lectric 24	bond yields, compared to the average over the
25 utilities, they seem to have a lower util	lity 25	period, so what I have taken from that
	Page 186	Page 188
risk premium relative to total returns, to	otal 1	analysis is that there is no reason to believe
2 bond returns and bond income returns,	than the 2	that this utility risk premium has been
3 US gas utilities, could we make a conc	lusion 3	constant over this period. Instead, I mean I
4 there that US electrics are less risky tha	n US 4	think it's fair to conclude that this inverse
5 gas?	5	relationship, as far as equity investors are
6 MS. MCSHANE:	6	concerned, would equally apply to this kind of
7 A. I don't think that you could draw t	hat 7	test as it would to the DCF base test. So
8 conclusion based on history, no.	8	that's what I've tried to do in Table 27 is
9 MR. JOHNSON:	9	towhich is on page 92, is to assess the
10 Q. Why couldn't you? I mean the risk p	remiums 10	relationship between the utility equity risk
is, you know, it is what it is.	11	premium atwith interest rates and determine
12 MS. MCSHANE:	12	what it would be at current levels of interest
13 A. That's right, that's exactly the point, it		rates and forecast levels of interest rates.
what it is. I mean there may be circums		1:45 p.m.)
that cause the actual returns to deviate	•	IR. JOHNSON:
you know, what you might expect or	-	Q. But the bottom line is that between pages 91
forward basis if the return in risk trade		at 91 we've got say a bond total return,
held perfectly, and it doesn't always		utility risk premium relative to the bond
19 perfectly.	19	total return for Canadian utilities of 4. 2
20 MR. JOHNSON:	20	percent, right?
21 Q. And about this premise that the achievement		MS. MCSHANE:
equity risk premiums for utilities is		A. That's right.
indicator of what investors expect for		MR. JOHNSON:
future being based on a proposition tha		Q. And when we flip over to Table 27, we don't

see 4.2 percent anymore, that's now 6. 7

the long term investors' expectations and

25

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1 percent after you do your analysis on the	1	paragraph 96. No, you're not in the 2011,
2 number. So you take the historic number and	2	you're in the 2009 decision. Section 3.5.1
you adjust it and you end up with a risk	3	and just for the record I will read what the
4 premium of not 4.2 percent, but 6.7 percent.	4	board had to say in Alberta. "In her
5 MS. MCSHANE:	5	evidence, Ms. McShane examined the historic
6 A. Right, so if you look at Table 27, then you	6	returns for utilities. According to Ms.
7 can see on the third line the starting point	7	McShane, the historical average utility return
8 is the historic achieved equity risk premium	8	in both Canada and the United States has
9 at the historic levels of bond income returns,	9	clustered in the 11 to 12 percent range. She
and then adjust it for the difference in bond	10	submitted that investors tend to base their
11 yields as forecast for the test period,	11	expectations on experienced returns and that
relative to the average over the historic	12	there was no long term upward or downward
13 period.	13	trend. She submitted that the utility returns
14 MR. JOHNSON:	14	had varied by approximately 50 percent of the
15 Q. So, Ms. McShane, you know, wouldn't the	15	change in Long Term Government Bond yields."
investor in Canadian utilities say look, over	16	The board went on in paragraph 97, "Ms.
the long run, you know, this is the premium	17	McShane also uses historical data on the
that was actually earned and, you know, that's	18	experience returns of utilities to provide an
19 how we view the forward looking prospects.	19	additional equity risk premium estimate
20 Would they be thinking in 6.7 when the actual	20	derived from the observed equity risk premiums
experience has been 4.2?	21	achieved by utilities. This resulted in an
22 MS. MCSHANE:	22	equity risk premium of 6.25 to 6.5 percent.
23 A. Well I think they would be looking at that	23	At Ms. McShane's forecast Canada Bond yield of
because they would also be looking at the fact	24	4.25 percent, the indicated utility cost of
that there has been no downward trend in the	25	equity was approximately 10.5 to 10.75 percent
Page	190	Page 192
1 utility equity returns over time, although we	1	or 11.5 to 11.75 percent after adding her
2 have seen a trend downward in bond returns.	2	recommended 1 percent for floatation."
3 So I think they would be as focused on the	3	Paragraph 98, "The UCA, which is an Intervenor
4 return component as they would on the risk	4	group, noted that Ms. McShane had provided
5 premium component.	5	evidence indicating that utility investors
6 MR. JOHNSON:	6	have made returns that are higher than the
7 Q. And have youyou've presented this type of	7	overall market and have stated that at best
8 analysis to other regulators, I take it?	8	this was evidence that regulators have over
9 MS. MCSHANE:	9	estimated the risk adjusted cost of equity and
10 A. Yes, I have.	10	thereby had provided a return that is too
11 MR. JOHNSON:	11	high." 99, "The commission agrees with UCA
12 Q. And you presented it before the Alberta	12	that part of the reason for historic, higher
regulator in the Generic Cost of Capital	13	historic returns may be that allowed returns
hearing in 2011?	14	have been above the actual ROE that investors
15 MS. MCSHANE:	15	expected and required for investments of
16 A. I believe that's the case.	16	comparable risk. The commission finds that
17 MR. JOHNSON:	17	the evidence on historic returns is
18 Q. Yeah, and could we turn to the Generic Cost o		inconclusive with respect to the return
19 Capital decision, 2011-474 which would be pa		investors expect on comparable investments."
of the cross aide materials.	20	So Ms. McShane, there is no material
21 MS. GLYNN:	21	difference from what you presented on behalf
22 Q. I think that would be entered as Information	22	of Newfoundland Power as regards to historic
23 Item No. 9.	23	utility premium before, in this case to what
24 MR. JOHNSON:	24	you provided to the Alberta case, right?
25 Q. I'm referring to page 18 or page 19, sorry,	25 MS.	MCSHANE:

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	Page 193	Page 1	95
1 A. It's a very similar analysis, correct.	1	average based on where interest rates are	
2 MR. JOHNSON:	2		
3 Q. And obviously they did not accept	that 3	MR. JOHNSON:	
4 evidence. Now I think this method,	1	Q. Right, and so when you used to do it the old	
5 historic utility risk premium method, th			
6 referred to by Dr. Vander Weide, I beli			
7 his report as the Ex Post method, right?			
8 MS. MCSHANE:	8		
9 A. I think this methodology is similar to	his,	MS. MCSHANE:	
10 yes.	10	A. Well you can see that in Table 26 the	
11 MR. JOHNSON:	11		
12 Q. Exactly, it's just referred by a differen	nt 12		
name. And now if we go to your repor	1	•	
at Table 26, page 91, as you indicated	-		
when I asked you what a bond income	1	•	
that is the bond yield, right?	16		
17 MS. MCSHANE:	17		
18 A. Pretty much, yes.	18		
19 MR. JOHNSON:	19	•	
20 Q. Pretty much. And Ms. McShane, this	is not 20	•	
21 always the way, you didn't do it like th			
the time, did you? This is a different.	1	•	
different approach. You used to just lo			
24 the actual utility equity return and then	1		
25 at the bond yield, you didn't look at the		•	
	Page 194	Page 1	96
1 total return?	1 4 1 1		. 70
2 DR. BOOTH:		MR. JOHNSON:	
3 Q. She did.	3		
4 MR. JOHNSON:	4		
5 Q. Oh you looked at the bond total return		other approach for Newfoundland Power?	
6 the bond income return, would that be a	1	6 MS. MCSHANE:	
7 MS. MCSHANE:	7		
8 A. I think in earlier years that was true.	8		
9 MR. JOHNSON:	9		
10 Q. So the result would be is that you, as on	pposed 10		
to going through, going through these		MR. JOHNSON:	
would just look at the bond yieldwe'd			
different number here than if you kept to	1		
methodology here today?		MS. MCSHANE:	
15 MS. MCSHANE:	15	A. For many years.	
16 A. There would be a different number und	der that 16	MR. JOHNSON:	
methodology. There are two parts to	this,	Q. For many years, and when did you pick up this	
mind you, one is looking at, you know,	1		
19 you look at the historic risk premium		MS. MCSHANE:	
relation to the total return verses the inc	1	A. I don't recall.	
return, I mean that's part of it, and then		MR. JOHNSON:	
other part of it is whether or not you ju	1		
23 accept the long term average achieved			
premium or you assess whether that	1		
nramium should be different than the le	1		

the Board, of your report, along with Schedule

25

premium should be different than the long term

Page 199

Page 197 10, if you could undertake to provide that as

2 an undertaking, your October 2002 report to

this Board for Newfoundland Power. 3

4 KELLY, Q.C.:

1

5

Q. If my friend has it, he can provide it to us

and we can file it if that's a utility. 6

7 MR. JOHNSON:

8 Q. Just as easy to do it by way of an

undertaking, I don't have it here, page 49 of 9

67 and together with Schedule 10. 10

11 MS. MCSHANE:

A. Okay, I can do that. 12

13 MR. JOHNSON:

14 Q. And as well my reading of your 2007 evidence

is that you were not doing this either, you 15

16 were doing it like you were doing it in

October, 2002, would you confirm that? 17

18 MS. MCSHANE:

19 A. I can, not right this minute I can't, but I

will undertake to do that. 20

21 MR. JOHNSON:

22 Q. And will you undertake in that regard to file

from your 2007 evidence for Newfoundland 23

Power, pages 47 to 48 and Schedules 15 and 16?

25 MS. MCSHANE:

24

8

Page 198

A. Sorry, pages 47 to 48 and Schedule?

2 MR. JOHNSON:

3 Q. 15 and 16 of your 2007 evidence, which would

be different than this. Now, Ms. McShane, in 4

5 terms of your direct DCF estimates, that

starts at page 93 and I'd like to bring you to 6

7 Table 29 on page 97. So this is the pure DCF

cost of equity analysis, nothing to do with

9 risk premium, just DCF straight on, right?

10 MS. MCSHANE:

11 A. Yes.

12 MR. JOHNSON:

Q. Okay, now we have gone through previously your 13

14 risk premium DCF base risk premium estimates

and when we look at Table 29, we see that your 15

constant growth DCF estimate is, for US 16

17 utilities, is 9.4 percent and we previously

noted back on Schedule 14 that your last DCF 18

19 estimate that you provided up to the second

20 quarter of 2012 was 9.30 percent, do you

21 recall that?

22 MS. MCSHANE:

23 A. Yes.

24 MR. JOHNSON:

Q. Okay, and this difference we are assuming is

1

5

7

10

simply because the estimates on Schedule 14

2 average over the first six months of 2012,

would that be correct? 3

4 MS. MCSHANE:

A. That could be part of it, I mean the DCF based

equity risk premium test uses one source of an 6

analyst's expected growth rates because I have

8 a single source that goes back historically

and if you look at Schedule 17, which is the 9

summary of the DCF cost of equity for the

individual US utilities based on analyst's 11

earning's growth forecast, you can see that 12

there are four different sources of forecast, 13

14 Bloomberg, Reuters, Value Line and Zacks, all

of which are averaged in column 8. So the 15

16 source of the investor growth expectation data

is different as between the two tests, as well 17

18 as there being a somewhat different timing in

19 the estimates.

20 (2:00 p.m.)

21 MR. JOHNSON:

22 Q. And just so I can understand this, in terms of

where we left off at Schedule 14 -23

24 MS. MCSHANE:

25 A. Right. So if we look at Schedule 14, page one

Page 200 of four, there's a number--well there are two 1

numbers here, there's the expected dividend

yield for 2012 which is through -3

4 MR. JOHNSON:

2

Q. Quarter 2.

6 MS. MCSHANE:

A. Quarter 2 and then there's the analyst EPS 7

growth forecast and that, as you say, gives 8

you a number of 93. So, you wanted to compare 9

that 93 to the 9.4 percent on Table 29. 10

11 MR. JOHNSON:

Q. Yes, and we were wondering is it because the 12

13 estimates only go up for the first six months.

14 MS. MCSHANE:

A. So if we look at Schedule 17, if you come 15

across the Mean Line, if you look at column 3, 16

17 you have the expected dividend yield 4.

percent, do you see that? 18

19 MR. JOHNSON:

o. Yes, I do. 20

21 MS. MCSHANE:

A. Now come across to column 8, you see the 5. 1 22

23 percent?

24 MR. JOHNSON:

Q. Right. 25

3

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Pag	ge 201		Page 203		
1 MS. MCSHANE:	1		growth rate would be 5.1 percent.		
2 A. And then the column next to that, that's 9.4	2 N	MS. M	ICSHANE:		
3 percent, okay?	3	A.	Correct.		
4 MR. JOHNSON:	4 N	MR. JO	OHNSON:		
5 Q. Right.	5	Q.	Okay, and of course we see ranges there like		
6 MS. MCSHANE:	6		ALLETTE, 6.3, there's others that are a bit		
7 A. So if we compare -	7		lower, WISCONSIN (Energy) is 6, soand in		
8 MR. JOHNSON:	8		terms of the people providing these forecasts,		
9 Q. So if you go down, if I just, not to	9		Bloomberg, Reuters, apart from Value Line, are		
interrupt, it might be on point, at the bottom	10		some of these analysts from what's referred to		
of that document where it says "Source,	11		as the cell side part of the market?		
Bloomberg", that takes in May, June and	l 12 M	MS. M	ICSHANE:		
13 August, 2012.	13	A.	Some of them would be, yes.		
14 MS. MCSHANE:	14 N	MR. JO	OHNSON:		
15 A. Right.	15	Q.	And, of course, there's been discussion in		
16 MR. JOHNSON:	16		regulatory hearings in other places about		
17 Q. And Yahoo, just explain is that bear on what	t I 17		optimism on the cell side for these analyst		
am asking?	18		projections, is that right?		
19 MS. MCSHANE:	19 N	MS. M	ICSHANE:		
20 A. What I was trying to explain was that, I mean	n, 20	A.	There has been discussion and there has been		
if you look at the dividend yield, right, the	21		rebuttal of that discussion, I guess is the		
4.3, I mean, that's identical to the number	22		best way to put it. I mean, there has been,		
that we saw in Schedule 14.	23		in my testimony, for example, there's a		
24 MR. JOHNSON:	24		section on addressing the reliability of		
25 Q. Right.	25		analyst's forecasts.		
Pag	ge 202		Page 204		
1 MS. MCSHANE:	1 N	MR. JO	OHNSON:		
2 A The difference is really in this average of	2	Ο	But suffice it for the moment to say that the		

A. The difference is really in this average of 3 the EPS estimate because the difference is 4 only 10 basis points, right.

5 MR. JOHNSON:

Q. Yeah. 6

7 MS. MCSHANE:

A. So what I am saying is the difference between 8

9 Schedule 14 and 17 is essentially the source

10 of the growth estimates, there's only one

11 source of growth estimates in Schedule 14 and

12 there's four sources of growth estimates in

13 Schedule 17.

14 MR. JOHNSON:

15 Q. Okay. And now when we look at these estimates

16 for constant growth, so at Schedule 17, Ms.

17 McShane, we see the expected dividend yield

18 and we see the analyst forecast long term

19 growth rates for your American utilities and

20 these, I take it, would be expected to go off

21 into perpetuity, these growth -

22 MS. MCSHANE:

23 A. That's the assumption underpinning this model.

24 MR. JOHNSON:

25 Q. Okay. And so the assumption, the average Q. But suffice it for the moment to say that the

3 area of disagreement between yourself and

Doctor Booth is that you do not judge them to 4

be optimistic or high.

6 MS. MCSHANE:

A. Correct.

8 MR. JOHNSON:

Q. Okay. And so then if we look at Table 29 9

again, we have--it's on page 97--we see that 10

11 the DCF cost of equity drops from 9.4 percent

12 to 9.1 percent when you employ the three stage

model. And as I understand it, the three 13

stage model, that's when you taper down growth 14

15 estimates or taper them to the long run growth

in United States gross domestic product. 16

17 MS. MCSHANE:

19

20

25

18 A. They are assumed to converge over time to the

long term growth in the economy, maybe up or

down, depending on how the analyst's growth

21 rate compares to the GDP forecast.

22 MR. JOHNSON:

23 Q. Okay. And in the three stage model, how long

24 are they in each stage? For instance, in

stage one, what's the period of that stage?

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1 MS. MCSHANE:		1	A.	Because these are based on forecast earnings
2 A. Five years.		2		over an extended period of time and forecast
3 MR. JOHNSON:		3		retention rates and I don't have that data for
4 Q. And then the second stage is a little less	4	4		Canada.
5 that the first stage in most of these cases, I		5 M	IR. JO	DHNSON:
6 take it, in terms of the growth estimates?		6	Q.	Okay. And we see that there's quite a
7 The second stage is five years, I take it,	,	7		difference between the constant growth of
8 too.		8		Canadian utilities, 11 percent, versus the
9 MS. MCSHANE:	9	9		three-stage model of 8.6 percent?
10 A. Yes, and so it's the average of the two. I	10	0 M	IS. M	CSHANE:
was looking at, if you look at Schedule 19,	1	1	A.	That's right.
you can see whether the first stage and the	13	2 M	IR. JO	OHNSON:
third stage or whether the first stage is	13	3	Q.	Okay. And I take it, as a truism, Ms.
higher or lower than the third stage.	14	4		McShane, that by merit of the fact that both
15 MR. JOHNSON:	13	5		for US and Canadian utilities, we see the
16 Q. And then -	10	6		three-stage model producing smaller numbers
17 MS. MCSHANE:	17	7		than the constant model, that this essentially
18 A. What I would say to you that if you look at	18	8		means that it is because the average analyst
the stage one numbers, the mean and the med	lian 19	9		growth rate for these utilities actually
of 5.1 and 5.3, I mean I've had different than	20	0.		exceeds the long run growth rate in GDP?
21 the stage three numbers which are 4.9.	2	1 M	IS. M	CSHANE:
22 MR. JOHNSON:	22	2	A.	That's correct.
23 Q. And stage three by that point we are assuming	g 23	3 M	IR. JO	DHNSON:
24 that there will be growth equal to the	24	4	Q.	Okay. So when I see, in Table 29, these
25 forecast GDP growth in the United States.	25	.5		estimates for the US utilities being for the
Page	e 206			Page 208
1 MS. MCSHANE:		1		DCF estimate being the highest for the short
2 A. Right.		2		run analyst growth forecast and the constant
3 MR. JOHNSON:	()	3		growth model and then dropping by 30 basis
4 Q. And if we go back to Table 29, you report on	1 4	4		points when you taper these to the long run
5 sustainable growth and that is 8.6 percent,	:	5		GDP growth and the three stage model and then
6 somewhat less even than the three stage mode		6		dropping by a further 50 basis points when you
7 and why would that be less? Or I should ask	. /	7		use the company's actual profitability data
8 you what's the sustainable growth concept?	1	8		for each company and you don't rely on analyst
9 MS. MCSHANE:	9	9		growth forecast at all, I'm wondering why
10 A. What is the concept?	10	0		wouldn't this Board consider this itself as
11 MR. JOHNSON:	11			Exhibit A as evidence that these analyst
12 Q. Yeah.	12			growth forecasts are optimistic?
13 MS. MCSHANE:				CSHANE:
14 A. The concept is that a company can only grow			A.	Well, I would take issue with what you've said
its earnings as fast as the return on equity	13			because the sustainable growth rate estimates
that it earns and the amount ofand a	10			are based on analyst forecasts. They are not
proportion of its earnings that it retains to	17			based on actual profitability of the company.
fund the growth, in addition to what it can	18			So I don't think you can draw the conclusion
add to its growth rate by funding externally.	19			that the sustainable growth and just
20 MR. JOHNSON:	20			because it happens to be, in this case, the
Q. And so this four, for instance, Canadian	2			lowest number, has anything to say about the
utilities is wellyou don't report on the	22			optimism of analyst growth rates. These are
Canadian utilities sustainable growth, what's	23	3		based on analyst forecast.

24 MR. JOHNSON:

25

Q. Well, we certainly know that the only reason

the reason for that?

25 MS. MCSHANE:

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that your three-stage model	ls produce lower	1 MS.	MCSHANE:
2 numbers than your constant	is because these	2 A	. Without any of the explanation around it, if
analysts are saying that there	e's going to be	3	there was any.
4 growth in excess of GDP for	these companies,	4 MR.	JOHNSON:
5 right?		5 Q	2. And you can file that if you feel it's
6 MS. MCSHANE:		6	important.
7 A. For the next five years, yes,	and -	7 MS.	MCSHANE:
8 MR. JOHNSON:		8 A	a. I don't know because I don't know what the
9 Q. But doesn't that go on in per	epetuity?	9	I would like to see if there was any actual
10 MS. MCSHANE:	1	0	discussion around it.
11 A. Well, that's the assumption	under the model,	1 (2:1	.5 p.m.)
but we don't know how lon			JOHNSON:
expect these growth rates to			Okay. We have no difficulty with doing that.
embedded in the prices ma	-		We'll undertake to do that. Regarding the
expectation that they expec	•		reference, analyst growth estimates, and the
rates to persist and it's not	-	6	question, the request at I, you are right,
model, the long term analysis			asks if the results that are reported in
those forecast are assumed t	_		answer to I above no, actually it's I.
best estimates of what they of			"Please provide a table of the average
20 long term for growth.	2		arithmetic and compound growth rates for
21 MR. JOHNSON:			dividend earnings and book value per share for
22 Q. Have you done any checks to			each utility in H above since 1990 and compare
23 utilities have actually growth			this with the same growth rate for US GDP and
rates that the analysts are ass			discuss in detail whether these utilities have
25 MS. MCSHANE:	2		grown their dividend earnings and book values
25 Mg. Medimine.			-
1 A I have looked at some of the	Page 210	1	Page 21 at the GDP growth rate over the 20 years."
1 A. I have looked at some of the	-	1	And if I could just take you to the next page,
2 rates, yes.		2	which actually sets out and several of
3 MR. JOHNSON:		3	·
Q. And I'd like to call up a cros		4	these companies are common to what we were
5 an RFI through the Alberta	<u> </u>	5	seeing in this proceeding, for instance,
6 provided some light on the t	•	6	Consolidated Edison, Northwest Natural Gas,
7 particular it would have been		7	Piedmont, Vectren, WGL are all part of your US
8 letter, okay, no, you're right		8	sample in this proceeding, right?
9 right there. Now Ms. McSh			MCSHANE:
this RFI from the Alberta 201			a. Con Ed, Northwest, Piedmont, Vectren, WGL,
capital proceeding?	1		yes, those are.
12 MS. GLYNN:			JOHNSON:
Q. Mr. Johnson, we'll enter that			Okay. And the arithmetic GDP growth is at 4.8
Item No. 10.	1		percent and on a compound basis, 4.7 percent?
15 MR. JOHNSON:			MCSHANE:
16 Q. You recognize this reply, Ma			a. Correct.
17 MS. MCSHANE:	1	7 MR.	JOHNSON:

owth is at 4.8 , 4.7 percent? 17 MS. MCSHANE: 17 MR. JOHNSON: A. I believe so. So this was a multi -18 18 Q. And when we look at dividends per share, and 19 MR. JOHNSON: dividends per share, that's what the growth 19 analysts are actually trying to forecast, Q. Multi-part. 20 21 MS. MCSHANE: 21 right, in the DCF model? A. - multi-part with the answer only to part of 22 MS. MCSHANE: I, L. A. In the DCF model, I mean, the idea is that in 23 24 MR. JOHNSON: 24 the model that the cash flows immediately come Q. Right. And -25 from dividends, but over the long term, all Page 209 - Page 212 Discoveries Unlimited Inc., Ph: (709)437-5028

20

22

23

25

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cash flows have to come from earnings.

2 MR. JOHNSON:

- Q. If we look at dividends per share, the sample 3 average of compound growth of dividends per 4
- share is just 2.7 percent of that whole -- for 5
- that whole group, and that, I take it, is 6
 - obviously significantly below compound GDP
- growth over that period of time, Ms. McShane? 8
- 9 MS. MCSHANE:
- A. It is. 10

7

- 11 MR. JOHNSON:
- Q. And so would this be evidence of optimism in 12
- forecast that these -- well, let's put it this 13
- way, this demonstrates, does it not, that US 14
- utilities, certain number of those who are in 15
- 16 your sample, have not met even compound GDP
- growth in terms of their dividends per share? 17
- 18 MS. MCSHANE:
- 19 A. The historic growth in dividends has been
- lower than GDP growth. I think that that's 20
- reasonable for that to be the case. I think 21
- 22 utilities tend to be fairly conservative as
- far as raising dividends because they want to 23
- make sure that they don't have to cut them. 24
- 25 MR. JOHNSON:

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- Q. But we -- I mean, we're talking a very lengthy 1 2 period here, 1990 to 2010.
- 3 MS. MCSHANE:
- A. We are, and we're talking about a period over
- 5 which we've seen a fairly steady decrease in
- allowed returns which has, during that period, 6
- 7 would have put a floor, if you will, on the
- ability to raise dividends. 8
- 9 MR. JOHNSON:
- Q. And we see from this, for instance, that the 10
- 11 average book value per share has run at
- compound growth at an average of 4.2 percent, 12
- again less than compound growth at 4.7, and 13
- the same can be said at earnings per share. 14
- 15 Ms. McShane, a lot of utilities are mature
- utilities. For instance, Newfoundland Power 16
- 17 is a mature utility?
- 18 MS. MCSHANE:
- A. Yes. 19
- 20 MR. JOHNSON:
- 21 Q. A lot of these utilities, I suppose, are
- mature utilities, are they not? 22
- 23 MS. MCSHANE:
- 24 A. Well, they all would be considered mature 25
 - utilities. I mean, they have mature markets.

1 MR. JOHNSON:

Q. And what would you make of a forecast that

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- says in perpetuity that they're going to outdo 3
 - GDP, which is reflected in the three-stage,
- because we see the number coming down, and 5
- when you put on the brakes of GDP, does the 6
- maturity of the company cause you to think, 7
- gee, these constant growth forecasts over GDP, 8
- they're a bit optimistic?
- 10 MS. MCSHANE:
- A. No, I don't think that that's true. I mean, 11
- 12 they're very close to the GDP growth rates.
- 13 MR. JOHNSON:
- Q. What are you forecasting for or were you 14
- assuming would be Canada's GDP growth rate for 15
- 16 the purposes of the DCF model, Ms. McShane?
- 17 MS. MCSHANE:
- A. It's on a schedule. I think it's 4.3 percent.
- 19 MR. JOHNSON:
- Q. 4.3 percent? 20
- 21 MS. MCSHANE:
- A. I believe so.
- 23 MR. JOHNSON:
- Q. Okay.
- 25 MS. MCSHANE:
 - Page 216
- A. That's on Schedule 21. 1
 - 2 MR. JOHNSON:
 - Q. And in 21, you've got obviously Canadian 3
 - Utilities Limited, Emera, Enbridge, Fortis, 4
 - and each of these forecasters or analysts,
 - they all have growth well above GDP growth at 6
 - 4.3 percent, don't they? 7
 - 8 MS. MCSHANE:

5

11

14

- A. They do, and all of these utilities have 9
- significant growth opportunities that underlie 10
 - the EPS forecast. For example, Enbridge Inc.,
- which has the highest long term EPS forecast, 12
- I mean, they have a number of major projects 13
 - that are driving analyst estimates of future
- earnings growth, which you can see in their 15
- relativity low dividend yield. So investors 16
- are willing to pay a relatively high price for 17
- assess to those growth opportunities. So you 18
 - have to make sure that you incorporate
- 19 relatively higher than normal growth 20
- opportunities into the DCF model if you're 21
- going to couple that with, you know, 22
- relatively low dividend yield, which reflects 23
- investors' expectations of high growth. 24
- 25 MR. JOHNSON:

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Q. Still in all, in the Enbridge example, the cost of equity is eight and a half percent as MS. MCSHANE: A. Under the well, that's the problem this three-stage model and the reason have, you know, more than one moded what the three-stage model essentially presumes that that higher growth embed the price is going to be cut off at a point time, and so you will sometimes get inconsistent results between a constant and a three-stage growth model. MR. JOHNSON: Q. Is there any evidence here to substant that historically Canadian growth for utilities has met or exceeded GDP? MS. MCSHANE: A. I have not looked at what the specific is. I mean, these are these number based on what the current opportunit growth for these companies are. For each of the cost of the problem is a substant that historically canadian growth for these companies are.	he DCF	OHNSON: I think we're at 2:30. I think was that as far as we were going to go, Mr. Chairman? RMAN: I think so. GLYNN: Yes, it is. RMAN: So you're - OHNSON: I will continue at the next available time. RMAN: I think that's 9:00 tomorrow morning. GLYNN: 9:00 tomorrow morning, but we are going to go back to Ms. Perry tomorrow morning and finish with the company evidence to make up for Friday past and Ms. McShane will be back on then on Wednesday morning.
22 TransCanada, which is looking to 23 significant new pipelines into the wes 24 of BC, for example. Enbridge Inc., 2 25 suggested before, has got significant	build t coast as I	Okay. We re adjourned until tomorrow at 9:00.
infrastructure investments that it's mand its president has openly told investments analysts that he expects to be able maintain ten percent earnings growth long period of time. Emera has considered investment opportunities. 7 MR. JOHNSON: 8 Q. But Ms. McShane, if we assume, a constant forecasts do in a perpetual respective for instance, that let's take Emera and percent and assume that was perpetual would be above GDP growth. I mean, to become a larger and larger and larger larger part of the Canadian econom utility sector would, after awhile, over the Canadian economy, wouldn't they assume constant growth like that? 18 MS. MCSHANE: 19 A. Well, in principle, yes, but again, I mit's fairly obvious that if you look at dividend yields on these Canadian ut that the prices are such that clear investors are expecting much higher gut these utilities than they are for the utilities.	to 3 a to 4 ma derable 5 Ap 6 at 7 Pu 8 La model, 9 my 16.5 dl. That 11 14 they would 12 Judy, the whelm y, if you 14 pu 15 pu 16 pu	CERTIFICATE I, Judy Moss, do hereby that the foregoing is rue and correct transcript of a hearing in the atter of Newfoundland Power Inc.'s General Rate oplication heard on the 14th day of January, 2013 the offices of the Board of Commissioners of blic Utilities, St. John's, Newfoundland and brador and was transcribed by me to the best of y ability by means of a sound apparatus. ated at St. John's, NL this th day of January, 2013 dy Moss scoveries Unlimited Inc.

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