

Page 1	Page 3
<p>1 (9:07 a.m.)</p> <p>2 CHAIRMAN:</p> <p>3 Q. What's the date? The date, it is the 7th?</p> <p>4 Is it? Okay, good morning. I think Mr.</p> <p>5 Johnson, if there's no preliminary matters,</p> <p>6 Mr. Johnson, I understand you are finished?</p> <p>7 JOHNSON, Q.C.:</p> <p>8 Q. I'm concluded, thank you, yes.</p> <p>9 CHAIRMAN:</p> <p>10 Q. So I'm over to Madam Greene I believe, or we</p> <p>11 are.</p> <p>12 MR. JAMES COYNE (PREVIOUSLY SWORN) CROSS-EXAMINATION</p> <p>13 BY MAUREEN GREENE, Q.C.:</p> <p>14 GREENE, Q.C.:</p> <p>15 Q. Yes, thank you, Mr. Chair. Good morning,</p> <p>16 Commissioners; good morning, Mr. Coyne.</p> <p>17 MR. COYNE:</p> <p>18 A. Good morning.</p> <p>19 GREENE, Q.C.:</p> <p>20 Q. I'd like to begin by talking about the</p> <p>21 process that you followed to come up with</p> <p>22 your recommendation with respect to the</p> <p>23 return on the equity for Newfoundland Power.</p> <p>24 And I understand from your evidence that one</p> <p>25 of the very first steps that you did was to</p>	<p>1 that there are three appropriate proxy</p> <p>2 groups, is that correct?</p> <p>3 MR. COYNE:</p> <p>4 A. Yes, three to provide perspective in cost of</p> <p>5 capital analysis. In the U.S. we typically</p> <p>6 use just a U.S. proxy group because you are</p> <p>7 able to do so and provide an appropriate</p> <p>8 sample. When we do the work in Canada, we</p> <p>9 like to use both the U.S. proxy group that's</p> <p>10 most representative and a Canadian group</p> <p>11 that comes as close as we can get, given the</p> <p>12 limitations on the capital, those that are</p> <p>13 publically traded in Canada that are</p> <p>14 regulated utility companies. And then for</p> <p>15 the first time here I presented what I'm</p> <p>16 characterizing as a North American proxy</p> <p>17 group because with all the work that we've</p> <p>18 done in Canada it appears to me that there's</p> <p>19 greater acceptance of using U.S. data, but</p> <p>20 there's also a desire to see it integrated</p> <p>21 so that it is as Canadian as possible so</p> <p>22 that we don't run the risk of setting a</p> <p>23 return that's not a perfectly grounded in</p> <p>24 the province and/or the country that we're</p> <p>25 attempting to set that cost of capital. So</p>
Page 2	Page 4
<p>1 select the appropriate proxy groups, is that</p> <p>2 correct?</p> <p>3 MR. COYNE:</p> <p>4 A. Yes.</p> <p>5 GREENE, Q.C.:</p> <p>6 Q. And can you explain why that was the first</p> <p>7 step in your process and the significance of</p> <p>8 it?</p> <p>9 MR. COYNE:</p> <p>10 A. When you're establishing cost of capital,</p> <p>11 this all starts with the fair return</p> <p>12 standard, and there are three elements to</p> <p>13 the fair return standard, the first of which</p> <p>14 is that the return should be comparable to</p> <p>15 that that one could earn the like risk</p> <p>16 securities. So that really grounds our</p> <p>17 analysis around trying to find those that</p> <p>18 are like risk, and so we wouldn't want to</p> <p>19 use the universe of utilities or the</p> <p>20 universe of all stocks for that matter. So</p> <p>21 the idea is to narrow it down to those that</p> <p>22 look most like the target company for</p> <p>23 purposes of the cost of capital analysis.</p> <p>24 GREENE, Q.C.:</p> <p>25 Q. And in particular case you have determined</p>	<p>1 here I've introduce the two companies that</p> <p>2 would pass the screens that I've used for</p> <p>3 the U.S. firms and combine them for the</p> <p>4 third. Of the three, the one that put the</p> <p>5 weight on is the North American proxy group</p> <p>6 for that reason.</p> <p>7 GREENE, Q.C.:</p> <p>8 Q. Okay. And I'd like to, just to refresh</p> <p>9 everyone's memory, turn to the actual</p> <p>10 composition of the group. If we could go to</p> <p>11 your report on capital—or on the recommended</p> <p>12 ROE at page 16? So here, Mr. Coyne, in</p> <p>13 Figure 5 we see the four Canadian companies.</p> <p>14 And there were only four that passed your</p> <p>15 screening criteria to determine the Canadian</p> <p>16 proxy group, is that correct?</p> <p>17 MR. COYNE:</p> <p>18 A. Yes.</p> <p>19 GREENE, Q.C.:</p> <p>20 Q. Okay. And if we could go to page 17, Figure</p> <p>21 6? And here again using the screening</p> <p>22 criteria that you used, we see the seven</p> <p>23 American companies that you considered to be</p> <p>24 comparable to Newfoundland Power, is that</p> <p>25 correct?</p>

Page 5	Page 7
<p>1 MR. COYNE:</p> <p>2 A. Yes.</p> <p>3 GREENE, Q.C.:</p> <p>4 Q. And if we scroll down a bit to Figure 7, we</p> <p>5 see the same seven U.S. companies, plus only</p> <p>6 two of the Canadian companies, is that</p> <p>7 correct?</p> <p>8 MR. COYNE:</p> <p>9 A. That's right.</p> <p>10 GREENE, Q.C.:</p> <p>11 Q. And why do the Canadian group reduce from</p> <p>12 four to two?</p> <p>13 MR. COYNE:</p> <p>14 A. I excluded Valener and Enbridge because they</p> <p>15 have substantial operations that are beyond</p> <p>16 those of regulated electric and/or gas</p> <p>17 utilities, and I felt as though they would</p> <p>18 be the least like Newfoundland Power for the</p> <p>19 purposes of this analysis.</p> <p>20 GREENE, Q.C.:</p> <p>21 Q. And you've already explained this morning</p> <p>22 that the purpose of doing that is to get a</p> <p>23 group that is as comparable as possible to</p> <p>24 Newfoundland Power, is that correct?</p> <p>25 MR. COYNE:</p>	<p>1 I wanted ones that like Newfoundland Power</p> <p>2 that were primarily in the business of</p> <p>3 regulated electric—the regulated electric</p> <p>4 business. And so in that sense they were</p> <p>5 comparable. They're low risk in the sense</p> <p>6 that they have strong investment credit</p> <p>7 ratings. So I would say of comparable risk</p> <p>8 was my desire from a first screening</p> <p>9 standpoint; not so much low or high per se,</p> <p>10 but the fact is that they are almost wholly</p> <p>11 regulated electric utilities. That makes</p> <p>12 them relatively low-risk companies.</p> <p>13 GREENE, Q.C.:</p> <p>14 Q. Right.</p> <p>15 MR. COYNE:</p> <p>16 A. Certainly from an investor perspective.</p> <p>17 GREENE, Q.C.:</p> <p>18 Q. Okay, thank you. That clarified that.</p> <p>19 MR. COYNE:</p> <p>20 A. Um-hm.</p> <p>21 GREENE, Q.C.:</p> <p>22 Q. I understand from your earlier testimony on</p> <p>23 what you've said this morning that it is</p> <p>24 important to get the comparable group to</p> <p>25 ensure that the recommendation with respect</p>
Page 6	Page 8
<p>1 A. That's correct, yes.</p> <p>2 GREENE, Q.C.:</p> <p>3 Q. There was a discussion with Mr. Johnson on</p> <p>4 April 4th with respect to your selection of</p> <p>5 the companies in the proxy group, and I can</p> <p>6 take you to the transcript if necessary.</p> <p>7 The discussion was whether you had selected</p> <p>8 a low-risk group of utility companies for</p> <p>9 the proxy group, and there was a discussion</p> <p>10 around whether they were low risk or not.</p> <p>11 And I wanted to clarify your position with</p> <p>12 respect that. In your selection of the</p> <p>13 proxy companies or the companies in each of</p> <p>14 the proxy groups were you looking for</p> <p>15 companies that you considered to be low-risk</p> <p>16 electric utilities?</p> <p>17 MR. COYNE:</p> <p>18 A. Not low risk per se. I was looking for</p> <p>19 those that high concentrations of electric—I</p> <p>20 was looking primarily for those that were</p> <p>21 primarily in the electric, regulated</p> <p>22 electric utility business. So in that sense</p> <p>23 you could define them as low risk compared</p> <p>24 to holding companies that have non-regulated</p> <p>25 subsidiaries and things of that nature, but</p>	<p>1 to the ROE then can be considered to be</p> <p>2 comparable or to be appropriate rather. And</p> <p>3 I'd like to bring you to the transcript from</p> <p>4 April 4 on page 219.</p> <p>5 MR. COYNE:</p> <p>6 A. Um-hm.</p> <p>7 (9:15 a.m.)</p> <p>8 GREENE, Q.C.:</p> <p>9 Q. Lines 8 to 25. And here, just to put it in</p> <p>10 context while you're reading it, there was a</p> <p>11 discussion around whether if you had used a</p> <p>12 different proxy group, your recommendation</p> <p>13 would have changed. So I'll give you a</p> <p>14 moment, page 219, lines 8 to 25, and then</p> <p>15 over to page 220, lines 1 to 13.</p> <p>16 MR. COYNE:</p> <p>17 A. Yeah.</p> <p>18 GREENE, Q.C.:</p> <p>19 Q. Okay.</p> <p>20 MR. COYNE:</p> <p>21 A. Yes.</p> <p>22 GREENE, Q.C.:</p> <p>23 Q. And I want—I found difficulty in</p> <p>24 understanding—I understood the importance of</p> <p>25 the proxy group and why you needed to ensure</p>

<p style="text-align: right;">Page 9</p> <p>1 the return is appropriate, but then based on</p> <p>2 the discussion that you had Mr. Johnson and</p> <p>3 based on that transcript, your</p> <p>4 recommendation wouldn't have changed even if</p> <p>5 you had used all the companies, 30-odd</p> <p>6 companies that you used for FERC. The</p> <p>7 recommendation would have come out to be the</p> <p>8 same? So my question is if—why, instead of</p> <p>9 going through the agony of coming up with</p> <p>10 the appropriate proxy group, why don't you</p> <p>11 just use all of the utilities in the 20—the</p> <p>12 30 that FERC uses, the much broader group?</p> <p>13 MR. COYNE:</p> <p>14 A. Right, right. Yes, okay. Good question.</p> <p>15 The—I don't know at all for certainty, and</p> <p>16 I hope I didn't convey that, that it would</p> <p>17 have been same, but when we look at these</p> <p>18 very broad samples of electric utilities, I</p> <p>19 don't know that it would have varied</p> <p>20 considerably, because this is a—I believe</p> <p>21 this is a fairly representative—when we do</p> <p>22 the FERC work, we also screen on credit</p> <p>23 ratings, and we have high credit companies,</p> <p>24 we have those that are classified by Value</p> <p>25 Line as electric utilities. So two of those</p>	<p style="text-align: right;">Page 11</p> <p>1 were to try to do that for 30 or so</p> <p>2 companies, it would be—there would be a much</p> <p>3 higher degree of effort, but I don't think</p> <p>4 it would provide any greater clarification</p> <p>5 or benefit in terms of setting the allowed</p> <p>6 return.</p> <p>7 GREENE, Q.C.:</p> <p>8 Q. Okay. Even –</p> <p>9 MR. COYNE:</p> <p>10 A. The nature of the risk analysis that we do</p> <p>11 here is much more detailed than for example</p> <p>12 we typically present in the U.S. because</p> <p>13 it's generally considered that when you</p> <p>14 screen on the--the types of screens that</p> <p>15 we've done here, that that's sufficient for</p> <p>16 cost of capital analysis. But we go to an</p> <p>17 extra level of risk analysis here because</p> <p>18 there is more concern about just how</p> <p>19 comparable—it started off with the concern</p> <p>20 about just how comparable the regulatory</p> <p>21 treatment is for these companies. That's</p> <p>22 why we do it at this detailed level,</p> <p>23 specifically for Canadian regulators.</p> <p>24 GREENE, Q.C.:</p> <p>25 Q. Now in your response that I took you</p>
<p style="text-align: right;">Page 10</p> <p>1 screens are already there, but when we</p> <p>2 narrow it down further, we can make sure</p> <p>3 that we have those that are heavily</p> <p>4 concentrated in the electric. We have some</p> <p>5 that are a combination gas and electric</p> <p>6 utilities. Those can make it through the</p> <p>7 FERC screen if they're still classified as</p> <p>8 an electric utility even though some of them</p> <p>9 are almost as much as a gas company as they</p> <p>10 are an electric company. So by doing it</p> <p>11 this way we can refine the analysis, and as</p> <p>12 a practical matter when we do risk analysis</p> <p>13 as we do here, we like to do that risk</p> <p>14 analysis at the operating company level.</p> <p>15 And when I'm doing it 7 companies, I think</p> <p>16 we have 17 operating subsidiaries that we're</p> <p>17 looking at, and we can do detailed risk</p> <p>18 analysis all the way down to the regulatory</p> <p>19 treatment that they have in their various</p> <p>20 jurisdictions, we can look at the various</p> <p>21 operating characteristics and things of that</p> <p>22 nature. So it allows us to do a much more</p> <p>23 fine-tuned analysis about how the risk of</p> <p>24 the target company compares to those we're</p> <p>25 using for the proxy company analysis. If we</p>	<p style="text-align: right;">Page 12</p> <p>1 through, you did say there would be no</p> <p>2 material difference. It would be</p> <p>3 essentially the same even if you had used</p> <p>4 all of those companies without doing that</p> <p>5 detailed analysis. Is that your position?</p> <p>6 MR. COYNE:</p> <p>7 A. That there would be no material difference?</p> <p>8 GREENE, Q.C.:</p> <p>9 Q. In the recommended ROE.</p> <p>10 MR. COYNE:</p> <p>11 A. Well, I mean, I go by the numbers. You</p> <p>12 know, so if the numbers came out</p> <p>13 differently, I would have to consider that,</p> <p>14 but the thing here is that the numbers are</p> <p>15 based on a much tighter band of companies</p> <p>16 that look more like Newfoundland Power. So</p> <p>17 if I did it on a broader group of companies,</p> <p>18 then I think I would have to say within that</p> <p>19 very broad group where does this company</p> <p>20 exist from a risk perspective? Here we've</p> <p>21 narrowed it down to something that's much</p> <p>22 more fine-tuned.</p> <p>23 GREENE, Q.C.:</p> <p>24 Q. Okay. Moving off the proxy group, once you</p> <p>25 have determined the appropriate proxy group,</p>

Page 13	Page 15
<p>1 then in this particular case I understand</p> <p>2 you've used three different methodologies to</p> <p>3 determine the appropriate ROE for each of</p> <p>4 the proxy groups. Is that correct?</p> <p>5 MR. COYNE:</p> <p>6 A. Yes.</p> <p>7 GREENE, Q.C.:</p> <p>8 Q. And I'd like to talk a little bit about each</p> <p>9 of the methodologies, and perhaps if we</p> <p>10 could go to page 3 of your report?</p> <p>11 MR. COYNE:</p> <p>12 A. Um-hm.</p> <p>13 GREENE, Q.C.:</p> <p>14 Q. Where Figure 1, nicely summarizes each—the</p> <p>15 result for each of the methodologies. Okay.</p> <p>16 So as I understand your evidence, Mr. Coyne,</p> <p>17 you did use CAPM, the constant growth DCF</p> <p>18 and the multistage DCF methodology for each</p> <p>19 of the three proxy groups, and then you</p> <p>20 averaged the results for each of those three</p> <p>21 methodologies for each of the proxy groups?</p> <p>22 MR. COYNE:</p> <p>23 A. Yes.</p> <p>24 GREENE, Q.C.:</p> <p>25 Q. Okay. I wanted to talk first about CAPM. I</p>	<p>1 regarding those judgments. And I don't</p> <p>2 think that's the best position to put a</p> <p>3 regulatory body in, is to have to determine</p> <p>4 the judgment of expert A versus expert B</p> <p>5 when they can rely on something that I</p> <p>6 consider more objective, and I think many</p> <p>7 regulators do, and that is the more direct</p> <p>8 market information you get in order to use</p> <p>9 the DCF model. So that's why I prefer it,</p> <p>10 especially in current capital market</p> <p>11 conditions.</p> <p>12 GREENE, Q.C.:</p> <p>13 Q. What is the primary method used in American</p> <p>14 jurisdictions to determine the ROE?</p> <p>15 MR. COYNE:</p> <p>16 A. Most jurisdictions would put heavier weight</p> <p>17 on the DCF model and many look at the CAPM</p> <p>18 or what's called a bond-yield-plus-risk-</p> <p>19 premium estimate as being a corroborating</p> <p>20 method to see how it looks, vis-à-vis the</p> <p>21 DCF results.</p> <p>22 GREENE, Q.C.:</p> <p>23 Q. Okay.</p> <p>24 MR. COYNE:</p> <p>25 A. Some jurisdictions use the DCF exclusively.</p>
Page 14	Page 16
<p>1 understand that you're not a fan of CAPM?</p> <p>2 MR. COYNE:</p> <p>3 A. I think CAPM is a very useful tool, and I</p> <p>4 think in all jurisdictions where I present</p> <p>5 cost of capital analysis with the exception</p> <p>6 of FERC, I present CAPM along with DCF. The</p> <p>7 problem that we're running into with CAPM is</p> <p>8 it has three inputs, and as we've seen just</p> <p>9 by the questioning over the past three days,</p> <p>10 those inputs could be subject to</p> <p>11 considerable controversy and differences of</p> <p>12 opinion between experts. And that's one</p> <p>13 issue. And the second issue is that with</p> <p>14 capital market conditions the way they are,</p> <p>15 it's affected the risk free rate</p> <p>16 significantly. I think Dr. Booth and I</p> <p>17 would certainly agree to that. And as a</p> <p>18 result of that, you end up overlaying a lot</p> <p>19 of judgment one way or the other with a CAPM</p> <p>20 low (phonetic). Even Dr. Booth does this</p> <p>21 with his analysis in order to get reasonable</p> <p>22 results. And what I dislike about that is</p> <p>23 that whenever you're using judgment as</p> <p>24 opposed to capital market information, you</p> <p>25 can get wide differences of opinion</p>	<p>1 The FERC is one of those.</p> <p>2 GREENE, Q.C.:</p> <p>3 Q. Okay. Now you have just –</p> <p>4 MR. COYNE:</p> <p>5 A. And I should say I'm not aware of any</p> <p>6 jurisdiction that uses the CAPM exclusively</p> <p>7 in the U.S., yeah.</p> <p>8 GREENE, Q.C.:</p> <p>9 Q. You have outlined your concerns with respect</p> <p>10 to CAPM in the current market conditions,</p> <p>11 and you also did that in your report on page</p> <p>12 34. In order to address what your concerns</p> <p>13 are because of the current market</p> <p>14 conditions, I understand that you have made</p> <p>15 adjustments, and if we could go to page 35</p> <p>16 of your report, please? And there, at the</p> <p>17 top of the page in lines 1 to 5, you outline</p> <p>18 that you have attempted to address your</p> <p>19 concerns, that you've also outlined this</p> <p>20 morning by using forward-looking inputs</p> <p>21 including a forecasted Canadian risk-free</p> <p>22 rate, a market risk premium that combines</p> <p>23 both Canadian and U.S. market inputs,</p> <p>24 including historic and forward-looking</p> <p>25 estimates, and you have also adjusted the</p>

Page 17	Page 19
<p>1 beta coefficient for the proxy companies. I 2 wonder now if we go to PUB-NP-064. So Mr. 3 Coyne, those were the three adjustments you 4 have stated that you made to what I will 5 call the pure CAPM, and the adjustments were 6 made to reflect the current market 7 conditions. Is that correct? 8 MR. COYNE: 9 A. Yes. In the case of the first two, the 10 adjusted beta coefficients are standard. 11 GREENE, Q.C.: 12 Q. Yes. 13 MR. COYNE: 14 A. So they're not anything that I've adjusted 15 to try to reflect current market conditions. 16 They're just those that we estimate with the 17 standard—well, we pull with the standard 18 adjustment mechanism to them. 19 GREENE, Q.C.: 20 Q. Yes. 21 MR. COYNE: 22 A. But I haven't adjusted them per se. 23 GREENE, Q.C.: 24 Q. Okay. You've anticipated one of my 25 questions I was -</p>	<p>1 time? One year? Two years? Three years? 2 MR. COYNE: 3 A. That looks like that was a spot bond yield 4 as of 8/29. 5 GREENE, Q.C.: 6 Q. Yes. And your current recommendation is 7 that a three-year forecast of the risk-free 8 rate be in effect during—that being the 9 period of time you anticipate the rates from 10 this application being in effect, is that 11 correct? 12 MR. COYNE: 13 A. Yes, two reasons. That and also that 14 investors take a forward-looking view from a 15 cost of capital analysis perspective. So 16 you capture both the forward-looking view in 17 markets, what would they expect a normalized 18 equilibrium risk-free rate to look at, in 19 addition to the fact that rates are expected 20 to be in over that period of time. 21 GREENE, Q.C.: 22 Q. Okay. 23 MR. COYNE: 24 A. Yeah. 25 GREENE, Q.C.:</p>
Page 18	Page 20
<p>1 MR. COYNE: 2 A. Okay. 3 GREENE, Q.C.: 4 Q. If we could go through the response, and if 5 you look at the question, the question was, 6 "Please confirm that the adjustments to the 7 CAPM model referred to are reflected in the 8 9 percent that you have recommended and 9 state what the unadjusted CAPM would be." 10 So here we're trying to get, similar to what 11 the Board had done in its previous decision, 12 what would be CAPM and what adjustments 13 should be made to adjust or reflect for the 14 abnormally-low Canada bond rates and for the 15 current market conditions? So here, if we 16 could just go through, you have acknowledged 17 that if you used the risk-free rate instead 18 of your adjusted risk-free rate, that would 19 reduce it to 2.24, is that correct? 20 MR. COYNE: 21 A. Yes, as of August 29, yes. 22 GREENE, Q.C.: 23 Q. Right, as of that date. Now your adjustment 24 is that instead of using that, and what was— 25 that was the forecast for what period of</p>	<p>1 Q. And we've already talked about your next one 2 that you had said was an adjustment, the 3 Bloomberg beta .64, but that is not an 4 adjustment to reflect the market conditions. 5 It's just a standard adjustment the way you 6 do it, is that correct? 7 MR. COYNE: 8 A. Well, it's a standard adjustment the way 9 Bloomberg does it. 10 GREENE, Q.C.: 11 Q. Adjustment. 12 MR. COYNE: 13 A. Yes. 14 GREENE, Q.C.: 15 Q. And that you would accept for the purposes 16 of suggestion what the beta is? 17 MR. COYNE: 18 A. Yes. 19 GREENE, Q.C.: 20 Q. Okay. Now the market risk premium you have 21 indicated here is 6.3 percent and instead of 22 your 7.6 that you recommend in your opinion. 23 And the difference being you're not using 24 forward-looking estimates. That's one 25 difference. Is that correct?</p>

Page 21

1 MR. COYNE:
 2 A. I'm sorry?
 3 GREENE, Q.C.:
 4 Q. The market risk premium you have here –
 5 MR. COYNE:
 6 A. Yes.
 7 GREENE, Q.C.:
 8 Q. - is 6.3 percent. In your opinion you have
 9 recommended that market risk premium is 7.6
 10 percent which includes not only the historic
 11 market risk premium, but a forward-looking
 12 market risk –
 13 MR. COYNE:
 14 A. Yes.
 15 GREENE, Q.C.:
 16 Q. Okay.
 17 MR. COYNE:
 18 A. Yes.
 19 GREENE, Q.C.:
 20 Q. So that is the difference there with the
 21 traditional way that has been accepted of
 22 doing the market risk premium, it's looking
 23 more at the historic and forward-looking?
 24 Is that –
 25 MR. COYNE:

Page 22

1 A. That's right. You know that was the way it
 2 was done for years. And when capital
 3 markets were more of an equilibrium state,
 4 then you had—if you had average bond yields,
 5 it reflected the history over which that
 6 historic market risk premium was calculated,
 7 then that was an appropriate relationship.
 8 But we now know that's clearly not the case,
 9 so as a result of that, the market—the
 10 market risk premium does vary. It varies
 11 with time, and it varies with capital market
 12 conditions, and importantly it varies with
 13 the level of the risk-free rate. So you're
 14 missing out on that -
 15 GREENE, Q.C.:
 16 Q. Yes.
 17 MR. COYNE:
 18 A. - is why we're trying to capture that with a
 19 forward-marketing—we do it two ways. We
 20 look at the forward implied market risk
 21 premium doing the DCF analysis, and we also
 22 did it using the regression analysis that
 23 looks at the historic relationship between
 24 market risk premiums and government bond
 25 yields.

Page 23

1 (9:30 a.m.)
 2 GREENE, Q.C.:
 3 Q. Okay. So when you add on the floatation
 4 costs, it comes up to 6.8 percent. Without
 5 the floatation costs we are about 6.3
 6 percent. So the adjustment that you're
 7 making for the current market conditions
 8 between—I'll call it a normal CAPM.
 9 MR. COYNE:
 10 A. Yeah.
 11 GREENE, Q.C.:
 12 Q. Not taking into account the market. And
 13 your recommendation of 9 percent, and so is
 14 the difference between your 9 and your 6.3,
 15 that is what you're saying is the
 16 appropriate adjustment to make to reflect
 17 the current market conditions?
 18 MR. COYNE:
 19 A. But with one exception, that both--the nine
 20 would include floatation costs.
 21 GREENE, Q.C.:
 22 Q. True, okay.
 23 MR. COYNE:
 24 A. And the 6.8 would.
 25 GREENE, Q.C.:

Page 24

1 Q. Okay.
 2 MR. COYNE:
 3 A. So the difference would be the 6.8 to the 9.
 4 GREENE, Q.C.:
 5 Q. Okay. So 220 basis points?
 6 MR. COYNE:
 7 A. Yes.
 8 GREENE, Q.C.:
 9 Q. Okay.
 10 MR. COYNE:
 11 A. That's the effective—the affect of those
 12 adjustments, yes.
 13 GREENE, Q.C.:
 14 Q. Okay. Now Dr. Booth in his opinion has also
 15 made adjustments to CAPM as he has
 16 determined it, and we will go through that
 17 with Dr. Booth. And his adjustment turns
 18 out to be about 175 basis points, a 50
 19 percent of the credit spread and then the,
 20 what I'm calling the operation-twist
 21 adjustment for a total of about 175 basis
 22 points?
 23 MR. COYNE:
 24 A. That's right.
 25 GREENE, Q.C.:

Page 25	Page 27
<p>1 Q. Okay.</p> <p>2 MR. COYNE:</p> <p>3 A. But the difference is of course that in</p> <p>4 addition to that he's using a different</p> <p>5 beta.</p> <p>6 GREENE, Q.C.:</p> <p>7 Q. Yes.</p> <p>8 MR. COYNE:</p> <p>9 A. He's using his adjustments to that, and he's</p> <p>10 using a different market risk premium.</p> <p>11 GREENE, Q.C.:</p> <p>12 Q. Right.</p> <p>13 MR. COYNE:</p> <p>14 A. But that's the affect of this explicit</p> <p>15 adjustments, yes.</p> <p>16 GREENE, Q.C.:</p> <p>17 Q. Okay, and you have stated, and I believe</p> <p>18 your opinion is that that is understated?</p> <p>19 Is that correct?</p> <p>20 MR. COYNE:</p> <p>21 A. Yes.</p> <p>22 GREENE, Q.C.:</p> <p>23 Q. Okay.</p> <p>24 MR. COYNE:</p> <p>25 A. Yeah. He's also used—well, okay, and those</p>	<p>1 Q. - whether analyst forecasts are biased or</p> <p>2 not. I'd like to go—well, I don't think we</p> <p>3 need to go there, but you did recall with</p> <p>4 Mr. Johnson that the Board in the last—its</p> <p>5 last order expressed concern with respect to</p> <p>6 the use of analysts particularly with</p> <p>7 respect to the constant growth model, would</p> <p>8 you agree?</p> <p>9 MR. COYNE:</p> <p>10 A. Yes.</p> <p>11 GREENE, Q.C.:</p> <p>12 Q. Okay.</p> <p>13 MR. COYNE:</p> <p>14 A. Yeah.</p> <p>15 GREENE, Q.C.:</p> <p>16 Q. So the constant growth model was</p> <p>17 specifically rejected by the Board in last</p> <p>18 previous order, is that correct?</p> <p>19 MR. COYNE:</p> <p>20 A. I know that the Board only—perhaps we're</p> <p>21 saying the same thing, but I believe that</p> <p>22 the Board only gave weight to the multi-</p> <p>23 stage and it mentioned also the sustainable</p> <p>24 growth rate model of Kathleen McShane.</p> <p>25 GREENE, Q.C.:</p>
Page 26	Page 28
<p>1 adjustments are on top of the current risk-</p> <p>2 free rate. So I guess that's where he's—his</p> <p>3 operation-twist and credit-spread</p> <p>4 adjustments amount to the 175 that you</p> <p>5 mentioned.</p> <p>6 GREENE, Q.C.:</p> <p>7 Q. Yes, okay. The other method, if we could go</p> <p>8 back to Figure 1 on page 3, please, the</p> <p>9 second method that you used to determine the</p> <p>10 ROE is a constant growth DCF. Is that</p> <p>11 correct?</p> <p>12 MR. COYNE:</p> <p>13 A. Yes.</p> <p>14 GREENE, Q.C.:</p> <p>15 Q. Okay. And that is one of the methods that</p> <p>16 is included in your determination of the</p> <p>17 average at the bottom? Is that correct?</p> <p>18 MR. COYNE:</p> <p>19 A. It is.</p> <p>20 GREENE, Q.C.:</p> <p>21 Q. Okay. Both use analyst forecasts, and we've</p> <p>22 already had a lot of discussion about the –</p> <p>23 MR. COYNE:</p> <p>24 A. Um-hm.</p> <p>25 GREENE, Q.C.:</p>	<p>1 Q. Yes.</p> <p>2 MR. COYNE:</p> <p>3 A. So maybe that gets to the same place.</p> <p>4 GREENE, Q.C.:</p> <p>5 Q. Okay.</p> <p>6 MR. COYNE:</p> <p>7 A. I don't recall if they explicitly said they</p> <p>8 rejected it or not, but -</p> <p>9 GREENE, Q.C.:</p> <p>10 Q. Well, they said they would only give some</p> <p>11 weight to the multi-stage DCF because of the</p> <p>12 use of--I can take you to the quote. Okay.</p> <p>13 MR. COYNE:</p> <p>14 A. I accept that.</p> <p>15 GREENE, Q.C.:</p> <p>16 Q. Okay, so -</p> <p>17 MR. COYNE:</p> <p>18 A. Yes, and that's—and I read that carefully,</p> <p>19 and that's one of the reasons why I included</p> <p>20 the multi-stage DCF in the analysis.</p> <p>21 GREENE, Q.C.:</p> <p>22 Q. But you still included the constant growth</p> <p>23 as well?</p> <p>24 MR. COYNE:</p> <p>25 A. I did. It's a standard approach to</p>

Page 29	Page 31
<p>1 estimating the DCF. It's a rarity to</p> <p>2 present it without presented both the</p> <p>3 constant growth version as the baseline.</p> <p>4 And if anything, it shows you the difference</p> <p>5 between moderating those assumptions.</p> <p>6 GREENE, Q.C.:</p> <p>7 Q. Okay.</p> <p>8 MR. COYNE:</p> <p>9 A. So you would typically not present it only</p> <p>10 without presenting the constant growth.</p> <p>11 GREENE, Q.C.:</p> <p>12 Q. Okay. And the multi-stage forecast, and I'm</p> <p>13 not going to go through each of these</p> <p>14 methods because you have gone through them</p> <p>15 with Mr. Johnson, also use analyst</p> <p>16 forecasts, but for different periods and</p> <p>17 with the theory being that the—one way of</p> <p>18 expressing it that the biases reduces the</p> <p>19 shorter period with the different rates. So</p> <p>20 of the ten years what you have used, so the</p> <p>21 likelihood of biases being less than in the</p> <p>22 Constant Growth model, if there is any bias,</p> <p>23 if there is, so it is moderated. Is that</p> <p>24 correct?</p> <p>25 MR. COYNE:</p>	<p>1 that would say "ah-ha." There is—we can—you</p> <p>2 can't turn to a change in the market or any</p> <p>3 other factor to show that there has been a</p> <p>4 change which demonstrates conclusively</p> <p>5 there's no bias. I read your answers to</p> <p>6 both and in fact your evidence during the</p> <p>7 hearing that the concern is not well</p> <p>8 grounded? And you have explained why you</p> <p>9 believe there's no basis for the concern.</p> <p>10 And I'm trying to determine if there's</p> <p>11 anything new that the Board could look to to</p> <p>12 say that since 2013 there—we are now totally</p> <p>13 satisfied there's no influence of bias from</p> <p>14 the analyst forecast?</p> <p>15 MR. COYNE:</p> <p>16 A. Yeah, I'm not sure that I can do that, and</p> <p>17 I'm not sure that things have changed</p> <p>18 materially between 2013 and today in the</p> <p>19 regard. I think what I hope would—the Board</p> <p>20 would consider is that utilities are</p> <p>21 different than Apple and Google and other</p> <p>22 companies that have volatile earnings.</p> <p>23 These are companies that are by and large</p> <p>24 very predictable. If there's one thing that</p> <p>25 we've learned through some of the exhibits</p>
Page 30	Page 32
<p>1 A. Yes, and there's that, and also there's the—</p> <p>2 there is a belief that over time that these</p> <p>3 utilities that are tied so closely the</p> <p>4 economy are going to move with the economy</p> <p>5 over time.</p> <p>6 GREENE, Q.C.:</p> <p>7 Q. Okay. During the Request for Information</p> <p>8 process you were asked what has changed</p> <p>9 since 2013 to lay the Board's concerns that</p> <p>10 they had expressed with respect to the use</p> <p>11 of analyst forecasts. Could we go, please,</p> <p>12 to PUB-MP-056?</p> <p>13 MR. COYNE:</p> <p>14 A. And did you say 056?</p> <p>15 GREENE, Q.C.:</p> <p>16 Q. Yes, yes. And you've also had some</p> <p>17 discussion in this hearing with Mr. Johnson</p> <p>18 as to why the Board should not be concerned</p> <p>19 that analyst—that there is in fact analyst</p> <p>20 bias that influences the results. I just</p> <p>21 wanted you to confirm as I understood this</p> <p>22 answer and a similar one in PUB-MP-092 which</p> <p>23 I don't think we need to go to, is that</p> <p>24 there's nothing new—nothing has changed</p> <p>25 since 2013 when the Board issued its order</p>	<p>1 presented by Mr. Johnson is that</p> <p>2 Newfoundland Power, as are other utilities,</p> <p>3 are pretty predictable companies. Their</p> <p>4 earnings are based on a return on equity</p> <p>5 applied to rate base, and neither of those</p> <p>6 things are very volatile. So it doesn't</p> <p>7 take a rocket science for an analyst to sit</p> <p>8 down with their model and predict what</p> <p>9 earnings are going to be for these types of</p> <p>10 utilities. And they typically project</p> <p>11 earnings growth based on what's happening</p> <p>12 with rate base, and those projects are known</p> <p>13 well in advance. So they have a lot of</p> <p>14 transparency into utilities, and I think any</p> <p>15 analyst worth their salt can figure out that</p> <p>16 business model pretty readily. So I</p> <p>17 understand the general concern and--around</p> <p>18 that, but if that is the general concern, it</p> <p>19 should certainly be diminished for companies</p> <p>20 like utilities that operate in a very</p> <p>21 transparent way and have a pretty simple and</p> <p>22 straightforward business model compared to</p> <p>23 these more complex entities that are</p> <p>24 involved in multiple businesses and multiple</p> <p>25 geographies and countries doing business in</p>

<p style="text-align: right;">Page 33</p> <p>1 China and things of that nature. Those are 2 going to present a lot of earning surprises 3 and where analysts typically stumble, I 4 think all would agree, most is with earning 5 surprises. They're not able to project, and 6 I think very few people were able to project 7 exactly what's going to happen with the 8 Chine economy for example, and the impact 9 that that was going to have on world oil 10 prices as a result and other factors. So 11 those are factors that impact the broader 12 economy and broader companies more so than 13 they do directly a regulated utility. So as 14 a result of that, if there is a concern for 15 optimist bias, it should be less, whatever 16 it is, when it comes to utility companies. 17 And then, if that concern that still exists, 18 then I hope that's even further moderated by 19 using the multi-stage approach where we'll 20 accept what they say for five years. We 21 think they can figure that out, and after 22 that we'll all agree that they can probably 23 grow somewhere along the pace of the overall 24 economy. This is what FERC has now accepted 25 as we talked about for their methodology for</p>	<p style="text-align: right;">Page 35</p> <p>1 because you have used the American data for 2 your U.S. electric utilities and your North 3 American electric group without any 4 adjustment? 5 MR. COYNE: 6 A. That's right. Two points on that. One is 7 the BCUC has since reversed that position, 8 so they now no longer make an explicit 9 adjustment for U.S. data versus Canadian 10 data, and secondly, as we talked about, 11 there is a difference in the underlying risk 12 free rate between the U.S. and Canada, and 13 the temptation might be to look at that and 14 say that's a basis for adjustment, and I 15 think that was probably some of the thinking 16 behind the BCUC at the time, but as we 17 showed, that's only – if you're looking at 18 that as an indication of the cost of capital 19 for utility company, you need to look at 20 what the credit risk spreads are on top of 21 that, and as we showed, if you do that, it's 22 only an 11 basis point differential right 23 now between the cost of "A" rated utility 24 debt in the U.S. versus Canada. In that 25 sense, I feel as though we have it</p>
<p style="text-align: right;">Page 34</p> <p>1 all electric transmission companies, oil 2 pipelines and gas pipelines, and I think 3 it's a reasonable approach. 4 GREENE, Q.C.: 5 Q. Another concern expressed by the Board in 6 its last Order is with respect to using 7 American data without any adjustment, and 8 it's very clear your position is that the 9 American and Canadian markets are fully 10 integrated, and I wanted to bring you first 11 to the Board Order – Mr. Johnson hasn't done 12 this yet, but if we could go to Board Order 13 #13 from 2013. 14 MR. COYNE: 15 A. And which page, please. 16 GREENE, Q.C.: 17 Q. Page 31, lines 1 to 11. I won't bother to 18 read it out, but you can see that the Board 19 has accepted that there should be an 20 adjustment when considering U.S. data to 21 reflect differences between the 22 marketplaces, and in that particular case 23 the Board found an adjustment of 50 to 100 24 basis points was appropriate. Your opinion 25 is that no adjustment is required, I assume,</p>	<p style="text-align: right;">Page 36</p> <p>1 addressed, so there's no need to make an 2 explicit adjustment, or I suppose if one 3 wanted to, one could look at 11 basis points 4 and say I think that should be the 5 adjustment, but I think that's fine tuning 6 more than one really can. I think the 7 second piece of data one could take in 8 response to Mr. Johnson, as you recall, we 9 reran the CAPM numbers using just U.S. data 10 for all the proxy groups, and when we did 11 so, that brought down our average for the 12 North American proxies across all methods to 13 9.5 percent. So that didn't cause any 14 change in the recommendation on that basis. 15 The bottom line is, no, I don't think it's 16 necessary to make an adjustment for U.S. 17 data versus Canadian data, and if one wanted 18 to use Canadian data only, one could look at 19 the Canadian regulated utilities, but you 20 can see there the average is much higher at 21 10.7 percent. So I don't think that's a 22 better result, and I don't think that's more 23 indicative of the fair return for 24 Newfoundland Power. I think it's lower. I 25 think it's the 9.5 percent that we</p>

Page 37	Page 39
<p>1 recommended.</p> <p>2 GREENE, Q.C.:</p> <p>3 Q. And, of course, in order to make that</p> <p>4 comparison, you accept your adjusted CAPM</p> <p>5 and you accept your constant growth for the</p> <p>6 Canadian utilities, because that's how you</p> <p>7 come up with your 10.7, which is higher than</p> <p>8 the 9.5?</p> <p>9 MR. COYNE:</p> <p>10 A. That's correct, yes.</p> <p>11 GREENE, Q.C.:</p> <p>12 Q. I'll come back to that –</p> <p>13 MR. COYNE:</p> <p>14 A. And as I've talked about, I put even greater</p> <p>15 weight on the multi-stage, and you can see</p> <p>16 that that's 10.3 percent for the Canadian</p> <p>17 utilities, but I don't think that's a better</p> <p>18 result to use for these purposes because I</p> <p>19 don't think those companies are as much like</p> <p>20 Newfoundland Power as is the North American</p> <p>21 proxy group.</p> <p>22 GREENE, Q.C.:</p> <p>23 Q. If you'll go back to Figure 1, please, on</p> <p>24 page 3, because it's a very good summary of</p> <p>25 your opinion in numerical format, you will</p>	<p>1 MR. COYNE:</p> <p>2 A. If it were to the Canadian CAPM, yes, but I</p> <p>3 would really have concern about the proxy</p> <p>4 companies that we're using for those</p> <p>5 purposes and the aforementioned discussion</p> <p>6 around the challenges of all the inputs to</p> <p>7 the CAPM right now. The concern I have for</p> <p>8 the Board with the CAPM in a nutshell is</p> <p>9 that it puts the Board in a difficult</p> <p>10 position that they were in last time of</p> <p>11 having to look at evidence from different</p> <p>12 experts and deciding what it thinks the risk</p> <p>13 free rate should be, what it thinks beta</p> <p>14 should be, and what it thinks the market</p> <p>15 equity risk premium should be, and I think</p> <p>16 that's a difficult position to put a Board</p> <p>17 in, and that's why I believe that many more</p> <p>18 regulators put stock in the DCF because it</p> <p>19 takes them out of the business of trying to</p> <p>20 second guess these important capital market</p> <p>21 inputs, and it gives them a much more, I</p> <p>22 believe, objective model to be able to</p> <p>23 utilize.</p> <p>24 (9:45 a.m.)</p> <p>25 GREENE, Q.C.:</p>
Page 38	Page 40
<p>1 recall that the Board in its last decision</p> <p>2 had said that, "It will continue to give</p> <p>3 primary weight to the results of CAPM", is</p> <p>4 that correct?</p> <p>5 MR. COYNE:</p> <p>6 A. Yes.</p> <p>7 GREENE, Q.C.:</p> <p>8 Q. As I understand how you did your</p> <p>9 methodology, you would be giving primary</p> <p>10 weight to the DCF method, is that correct?</p> <p>11 MR. COYNE:</p> <p>12 A. Yes.</p> <p>13 GREENE, Q.C.:</p> <p>14 Q. In the lines below your table, you are</p> <p>15 saying that your recommendation, if you look</p> <p>16 at 13, your recommendation is just below the</p> <p>17 average of 9.7, which is now 9.5 if you use</p> <p>18 the data Mr. Johnson has with respect to</p> <p>19 using the Canadian risk free rate for the</p> <p>20 U.S. utilities, the North American group, so</p> <p>21 you're saying that, "It's supported by all</p> <p>22 of the methods except Canadian CAPM". So if</p> <p>23 primary weighting is to be given to the</p> <p>24 CAPM, your recommendation would be lower, of</p> <p>25 course?</p>	<p>1 Q. With respect to the multi-stage DCF being</p> <p>2 objective, there are still significant</p> <p>3 inputs that go into the DCF where judgment</p> <p>4 is required with respect to the selection of</p> <p>5 the inputs, isn't it?</p> <p>6 MR. COYNE:</p> <p>7 A. Yes, but they're not – the thing is none of</p> <p>8 those – yes, we've selected those inputs,</p> <p>9 but the dividend yield in the stock price</p> <p>10 data is coming from the market, so there's</p> <p>11 no adjustments to those, those are just what</p> <p>12 they are, and the thing is if I show up here</p> <p>13 in two years, I'll still be using that</p> <p>14 methodology with those inputs. That's not</p> <p>15 going to change. So there are judgmental</p> <p>16 factors that are going to move that around.</p> <p>17 There are some commissions in the U.S., for</p> <p>18 example, that adopt a DCF model if they're</p> <p>19 looking to replicate what was done in Canada</p> <p>20 by way of a formula. The Pennsylvania</p> <p>21 Commission, which allows companies to put</p> <p>22 new infrastructure investments into rate</p> <p>23 base between rate cases, they've adopted a</p> <p>24 program where the company can file a five</p> <p>25 year rate plan and with that five year rate</p>

Page 41	Page 43
<p>1 plan it can earn a return on those</p> <p>2 investments as they proceed. So they can</p> <p>3 stay out of rate cases, but still earn on</p> <p>4 the investments, and they've put in place a</p> <p>5 DCF model that the Commission calculates and</p> <p>6 every quarter it's updated by the staff, and</p> <p>7 it's mechanical, you don't have to second</p> <p>8 guess what I need to do with beta or MRP or</p> <p>9 the risk free rate. So it's objective, it's</p> <p>10 capital market information that I would</p> <p>11 compute the same way. It takes a lot of</p> <p>12 these debates off the table, which I think</p> <p>13 is a much better position in a board staff</p> <p>14 then. That's why, especially in current</p> <p>15 capital market conditions, I think it's a</p> <p>16 much more pragmatic approach for a</p> <p>17 regulatory body.</p> <p>18 GREENE, Q.C.:</p> <p>19 Q. And obviously that's not widely accepted</p> <p>20 because we still have rate hearings,</p> <p>21 especially in Canada where there's still a</p> <p>22 lot of debate, so even with what the right</p> <p>23 method is or using DCF, it's not as simple</p> <p>24 as saying two and two is four, is it?</p> <p>25 There's still judgment to be used with</p>	<p>1 A. Yes. Well, riskier than the group in total</p> <p>2 with respect to business risk.</p> <p>3 GREENE, Q.C.:</p> <p>4 Q. But you would have looked at it with respect</p> <p>5 to each of the individuals in the group, I</p> <p>6 assume?</p> <p>7 MR. COYNE:</p> <p>8 A. We did, right, we boiled it down to the</p> <p>9 various pieces that we looked at there,</p> <p>10 their operating, the volume risk, the</p> <p>11 regulatory protection that they had, things</p> <p>12 of that nature.</p> <p>13 GREENE, Q.C.:</p> <p>14 Q. So would you disagree that your opinion</p> <p>15 would lead us to conclude that Newfoundland</p> <p>16 Power is riskier than Emera?</p> <p>17 MR. COYNE:</p> <p>18 A. I think based on its size and the economic</p> <p>19 prospects and the role that Muskrat Falls</p> <p>20 will play for the company on a going forward</p> <p>21 basis, I would say it is riskier than –</p> <p>22 well, Nova Scotia Power in this case, yes.</p> <p>23 GREENE, Q.C.:</p> <p>24 Q. In reviewing the risk for each of these</p> <p>25 companies in your proxy groups, you used six</p>
Page 42	Page 44
<p>1 respect to the inputs even using DCF?</p> <p>2 MR. COYNE:</p> <p>3 A. It does create some occupational security</p> <p>4 for people in my business or Dr. Booth's,</p> <p>5 but I would argue that I think a lot of the</p> <p>6 contention is because of the inputs to the</p> <p>7 CAPM model are so subject to judgment, and</p> <p>8 that doesn't have to be the case if you go</p> <p>9 to a more objective model.</p> <p>10 GREENE, Q.C.:</p> <p>11 Q. Turning now to the capital structure, I</p> <p>12 understand from your report and your</p> <p>13 evidence to date that you have determined</p> <p>14 that Newfoundland Power has higher business</p> <p>15 risk than the Canadian proxy group, but</p> <p>16 comparable financial risk, is that correct?</p> <p>17 MR. COYNE:</p> <p>18 A. Yes.</p> <p>19 GREENE, Q.C.:</p> <p>20 Q. Okay, so if we were to look back at the four</p> <p>21 companies in the Canadian proxy group, your</p> <p>22 conclusion is that Newfoundland Power is</p> <p>23 riskier than Emera with respect to business</p> <p>24 risk?</p> <p>25 MR. COYNE:</p>	<p>1 factors, and I just wanted you to – they are</p> <p>2 listed on page 18 of your Appendix "A", your</p> <p>3 report on capital structure, is that</p> <p>4 correct, being power supply, risk, and</p> <p>5 prices, the macro-economics, and demographic</p> <p>6 conditions. Perhaps if we go to page 18 of</p> <p>7 Appendix "A", these are the six factors that</p> <p>8 you examined each of the proxy groups for,</p> <p>9 is that correct?</p> <p>10 MR. COYNE:</p> <p>11 A. Yes.</p> <p>12 GREENE, Q.C.:</p> <p>13 Q. Okay. In your evidence, you have drawn a</p> <p>14 conclusion that Newfoundland Power's</p> <p>15 business risk has increased since the last</p> <p>16 GRA, is that correct?</p> <p>17 MR. COYNE:</p> <p>18 A. Yes.</p> <p>19 GREENE, Q.C.:</p> <p>20 Q. If that risk had not increased, if it had</p> <p>21 remained the same as the last time, would</p> <p>22 your opinion – what would your opinion have</p> <p>23 been with respect to Newfoundland Power's</p> <p>24 business risk compared to the Canadian proxy</p> <p>25 group?</p>

Page 45	Page 47
<p>1 MR. COYNE:</p> <p>2 A. I didn't evaluate it that way. I think the</p> <p>3 risks that either have emerged or that are</p> <p>4 on the horizon for the company have moved it</p> <p>5 towards the edge of that risk envelope, so</p> <p>6 it would have brought it back to be more</p> <p>7 like an average risk Canadian utility, and I</p> <p>8 think – I say that because of the sum total</p> <p>9 of its financial metrics and its operating</p> <p>10 characteristics, in addition to its equity</p> <p>11 ratio that I think compensates for some of</p> <p>12 the characteristics that make it riskier</p> <p>13 than its Canadian peers. So on balance, I</p> <p>14 think that would have brought it back to –</p> <p>15 it would have certainly lowered the risk</p> <p>16 without these new risk factors being</p> <p>17 primarily the economy and the role that</p> <p>18 Muskrat Falls is playing.</p> <p>19 GREENE, Q.C.:</p> <p>20 Q. Okay. So you're comfortable – would you</p> <p>21 agree that – I believe you would agree that</p> <p>22 they were an average risk at the time of the</p> <p>23 last hearing?</p> <p>24 MR. COYNE:</p> <p>25 A. Yes.</p>	<p>1 MR. COYNE:</p> <p>2 A. Primarily, yes.</p> <p>3 GREENE, Q.C.:</p> <p>4 Q. So the economic outlook, we've talked a bit</p> <p>5 about that, and we understand what the</p> <p>6 uncertainty is that you're referring to for</p> <p>7 the economic outlook. My question is if</p> <p>8 that was the only risk that had changed, how</p> <p>9 would that have influenced your opinion if</p> <p>10 there was no Muskrat on the horizon?</p> <p>11 MR. COYNE:</p> <p>12 A. Well, the company is a very small one by</p> <p>13 virtue of the utility landscape. It's</p> <p>14 certainly one of the smaller ones in the</p> <p>15 proxy analysis companies. So that would be</p> <p>16 a factor, but I think it's the economy and</p> <p>17 Muskrat falls together that caused me to</p> <p>18 conclude that its above average risk. If it</p> <p>19 were not for Muskrat Falls is your question?</p> <p>20 I guess, I would say – I don't want to parse</p> <p>21 words with you, that's probably not even</p> <p>22 helping your question, but moderately higher</p> <p>23 because that's a pretty significant</p> <p>24 difference in the economic outlook in this</p> <p>25 province versus others, but I think it's</p>
Page 46	Page 48
<p>1 GREENE, Q.C.:</p> <p>2 Q. So what's driving your opinion are the</p> <p>3 changes you have determined to have occurred</p> <p>4 since 2013?</p> <p>5 MR. COYNE:</p> <p>6 A. Yes, and I have to say, but I didn't do a</p> <p>7 detailed analysis of what its risk was in</p> <p>8 2013, but my general sense of that is, yes.</p> <p>9 GREENE, Q.C.:</p> <p>10 Q. Okay, and, of course, in the past the Board</p> <p>11 has found Newfoundland Power to be an</p> <p>12 average risk utility, is that correct?</p> <p>13 MR. COYNE:</p> <p>14 A. Yes, I understand.</p> <p>15 GREENE, Q.C.:</p> <p>16 Q. And again Newfoundland Power has put forward</p> <p>17 the position in previous rate cases that it</p> <p>18 is an average risk utility, is that correct?</p> <p>19 MR. COYNE:</p> <p>20 A. Yes.</p> <p>21 GREENE, Q.C.:</p> <p>22 Q. Okay, so what's driving the change in the</p> <p>23 position is the changes being the economic</p> <p>24 outlook and the risk associated with Muskrat</p> <p>25 Falls, is that correct?</p>	<p>1 something that would be noted by an</p> <p>2 investor. When we work with investors that</p> <p>3 are looking at utility companies, one of the</p> <p>4 things that they look at very closely and we</p> <p>5 look at for them is what's the macro-</p> <p>6 economic outlook, and there's a reason why</p> <p>7 they want to look at companies that are in</p> <p>8 more rapidly growing areas because they feel</p> <p>9 like that represents opportunity for growth</p> <p>10 and earnings over time. So when we work</p> <p>11 with investors and they're looking at</p> <p>12 utilities that are in slow growing or no</p> <p>13 growing service areas, they consider that a</p> <p>14 negative factor, and that means they are</p> <p>15 less interested in those types of</p> <p>16 investments which drives up their required</p> <p>17 return on them.</p> <p>18 GREENE, Q.C.:</p> <p>19 Q. I know you have read some of the transcripts</p> <p>20 from before, the previous testimony. Are</p> <p>21 you familiar with the impact in the early</p> <p>22 90s of the cod moratorium?</p> <p>23 MR. COYNE:</p> <p>24 A. Generally, yes.</p> <p>25 GREENE, Q.C.:</p>

<p style="text-align: right;">Page 49</p> <p>1 Q. So you are aware that Newfoundland's 2 economic outlook at that time was also 3 negative, given the structural changes in 4 the fishing industry?</p> <p>5 MR. COYNE:</p> <p>6 A. Yes, I understand there was a significant 7 impact on the economy.</p> <p>8 GREENE, Q.C.:</p> <p>9 Q. What weight would investors consider the 10 historic performance of Newfoundland Power 11 when the economic outlook was also negative 12 and the cost recovery mechanisms that 13 Newfoundland Power has in place here in this 14 jurisdiction?</p> <p>15 MR. COYNE:</p> <p>16 A. So what would their outlook have been during 17 that period of time?</p> <p>18 GREENE, Q.C.:</p> <p>19 Q. No, the fact that we went through a historic 20 period where there was an economic outlook 21 that was negative, did not affect 22 Newfoundland Power's performance or credit 23 rating, would that be something investors 24 would take into account in assessing the 25 risk?</p>	<p style="text-align: right;">Page 51</p> <p>1 an investor would look at is that it's not 2 just a near term blip, you know, the long 3 term economic outlook over the next decade 4 and longer is for a pretty flat economy in 5 the province, and that is not a positive 6 attribute from a risk standpoint.</p> <p>7 GREENE, Q.C.:</p> <p>8 Q. And how would they take into account the 9 supply cost recovery mechanisms Newfoundland 10 Power has in place including, for example, 11 there is a disallowance for bad debt that it 12 gets included in Newfoundland Power's 13 revenue requirement that gets recovered from 14 the paying customers?</p> <p>15 MR. COYNE:</p> <p>16 A. Right, that's typical to have bad debt 17 recovery allowance for utilities, so I don't 18 think they would look at that as a 19 mitigating factor for the significant 20 increase in supply cost. Bad debt would be 21 the tip of the iceberg. You know, the more 22 fundamental issues associated with 23 increasing power supply costs are how do 24 consumers adjust; do they consume less 25 electricity, do they decide that they're</p>
<p style="text-align: right;">Page 50</p> <p>1 MR. COYNE:</p> <p>2 A. I think –</p> <p>3 GREENE, Q.C.:</p> <p>4 Q. Now, the current -</p> <p>5 MR. COYNE:</p> <p>6 A. That was a long time ago, so I'm not sure 7 how much stock investors would take in that 8 piece of history because our economies are 9 very different ones these days than they 10 were then. I think labour is more mobile 11 these days, and I think that's one of the 12 things we're seeing in this province. It 13 used to be that economies dealt with their 14 blows as they came along, but these days we 15 see capital is more mobile and labour is 16 more mobile, so if times are bad in the oil 17 industry, for example here, you may lose 18 that labour and it may not come back; you 19 may lose that capital and it may go to other 20 places. So the adjustments to economic 21 disruption are different today than they 22 were then, so I'm not sure how much stock an 23 investor would take in the fact that the 24 company was able to navigate the difficult 25 waters of the cod moratorium. What I think</p>	<p style="text-align: right;">Page 52</p> <p>1 going to consume more alternative fuels, or 2 do they decide if they're a business that 3 they're going to relocate elsewhere where 4 they have a more favourable cost supply 5 profile. So you get all those adjustments 6 and some of those happen in the near term 7 and some over the longer run, but as we 8 talked about yesterday or was it the day 9 before, I'm not aware of any company right 10 now, any electric company, that's looking at 11 such a dramatic increase in supply cost over 12 such a foreseeable short period of time.</p> <p>13 GREENE, Q.C.:</p> <p>14 Q. Okay, so we've -</p> <p>15 MR. COYNE:</p> <p>16 A. The only one that comes close, as I 17 mentioned, is OPG, but OPG is absorbed into 18 the broader Ontario market with a project of 19 that size.</p> <p>20 GREENE, Q.C.:</p> <p>21 Q. So now we've gone from the economic outlook, 22 which gets exacerbated when we look at the 23 increasing supply cost is what I take from -</p> <p>24 MR. COYNE:</p> <p>25 A. Those are the two key factors that we see</p>

<p style="text-align: right;">Page 53</p> <p>1 and it's distinguishing, yes.</p> <p>2 GREENE, Q.C.:</p> <p>3 Q. So let's turn to Muskrat Falls because it is</p> <p>4 significant in your opinion, and your</p> <p>5 opinion being that it's a significant</p> <p>6 contribution to why Newfoundland Power is</p> <p>7 now above average business risk. I really</p> <p>8 want to discuss with you and try to get some</p> <p>9 clarity around what the risk is, as you</p> <p>10 perceive it, and you did have some</p> <p>11 discussion with Mr. Johnson yesterday and</p> <p>12 it's at the transcript of yesterday, page</p> <p>13 185, and it begins at line 19. It goes over</p> <p>14 to page 186 as well. I just wanted to</p> <p>15 refresh your memory, and then I'm going to</p> <p>16 tell you what I took from that to see if I'm</p> <p>17 on the same page as you are.</p> <p>18 MR. COYNE:</p> <p>19 A. Yes.</p> <p>20 GREENE, Q.C.:</p> <p>21 Q. One concern with respect to how significant</p> <p>22 the risk is for this GRA is the timing, and</p> <p>23 I believe you have acknowledged that how the</p> <p>24 Muskrat Falls costs will be determined and</p> <p>25 passed on to rate payers is most likely</p>	<p style="text-align: right;">Page 55</p> <p>1 see a 50 percent increase in power supply</p> <p>2 costs, I think they'll be concerned with</p> <p>3 that, and credit rating agencies are looking</p> <p>4 at it in terms of the credit rating for the</p> <p>5 company, and what it could mean in terms of</p> <p>6 its long term ability to fully recover its</p> <p>7 cost. That's why I think it's in this</p> <p>8 horizon, even though the megawatt hours are</p> <p>9 principally going to be probably in the next</p> <p>10 GRA.</p> <p>11 (10:00 a.m.)</p> <p>12 GREENE, Q.C.:</p> <p>13 Q. I guess, that's what I wanted to talk to you</p> <p>14 about, what is in this near term horizon. So</p> <p>15 let's go back. We have a concern about the</p> <p>16 cost of Muskrat Falls?</p> <p>17 MR. COYNE:</p> <p>18 A. Yes.</p> <p>19 GREENE, Q.C.:</p> <p>20 Q. Because of the significance and how it</p> <p>21 relates to the current investment of both</p> <p>22 utilities in Newfoundland, so we know it's a</p> <p>23 significant cost that's going to be added to</p> <p>24 be recovered from customers. We don't know</p> <p>25 how much, is that correct?</p>
<p style="text-align: right;">Page 54</p> <p>1 beyond the horizon for this current rate</p> <p>2 case, is that correct?</p> <p>3 MR. COYNE:</p> <p>4 A. The only understanding I have is that its</p> <p>5 last schedule date for in-service was 2018,</p> <p>6 would be the last likely date that rates</p> <p>7 would be in effect in this GRA.</p> <p>8 GREENE, Q.C.:</p> <p>9 Q. Okay.</p> <p>10 MR. COYNE:</p> <p>11 A. But I also understand, as you mentioned,</p> <p>12 there could be some slippage in that date</p> <p>13 which wouldn't be surprising, given the</p> <p>14 large scale of the project. So it could be</p> <p>15 that the actual power doesn't flow until</p> <p>16 after this GRA, but the risk is there, you</p> <p>17 know. The credit rating agencies are already</p> <p>18 writing about it, so an investor would</p> <p>19 certainly be aware of it, and a consumer</p> <p>20 would be aware of it as well. So there's no</p> <p>21 reason to believe that the risk will not</p> <p>22 materialize the very date that the power</p> <p>23 starts to flow. Consumers will start making</p> <p>24 adjustments at least on the margin</p> <p>25 beforehand. If they think they're going to</p>	<p style="text-align: right;">Page 56</p> <p>1 MR. COYNE:</p> <p>2 A. Not precisely. We know that it's estimated</p> <p>3 by Nalcor as being over 50 percent, but we</p> <p>4 don't know precisely. My guess is, though,</p> <p>5 with these projects, it's probably not going</p> <p>6 to go down, but there could be tools that</p> <p>7 the Board has to use that would help to</p> <p>8 mitigate that cost increase over time,</p> <p>9 stretching it out over time, but I certainly</p> <p>10 agree that the precise number is not known</p> <p>11 yet.</p> <p>12 GREENE, Q.C.:</p> <p>13 Q. So we know it's big, but we don't know how</p> <p>14 big at this point?</p> <p>15 MR. COYNE:</p> <p>16 A. Right, and not knowing how big is an</p> <p>17 uncertainty in and of itself.</p> <p>18 GREENE, Q.C.:</p> <p>19 Q. And then we don't know when customers are</p> <p>20 going to have to start paying for it. As</p> <p>21 you have indicated, it's supposed to be in</p> <p>22 service in 2018, but let's assume that it's</p> <p>23 not going to be, which right now seems to be</p> <p>24 a fairly realistic assumption that the</p> <p>25 earliest might be 2019, so that would be</p>

Page 57	Page 59
<p>1 beyond – so let’s assume for this discussion</p> <p>2 it will be beyond the time frame that rates</p> <p>3 from this GRA is in effect. When investors</p> <p>4 look at it and when you’re looking at it to</p> <p>5 determine the risk, it is not the risk of</p> <p>6 actually starting to recover the cost that’s</p> <p>7 a near term risk, is it?</p> <p>8 MR. COYNE:</p> <p>9 A. No, it’s the long term outlook for the</p> <p>10 company. You know, utility investors</p> <p>11 typically take a long term outlook. These</p> <p>12 are buy and hold type stocks, so when they</p> <p>13 make an investment in a utility, they’re</p> <p>14 typically looking at a longer term horizon</p> <p>15 because you can with these companies. You</p> <p>16 know what the projects are, you know what</p> <p>17 the cost profiles are going to be. People</p> <p>18 know a lot about energy markets these days,</p> <p>19 investors know a lot about energy markets,</p> <p>20 so they’re looking at fuel costs. If</p> <p>21 they’re looking at a company that’s gas</p> <p>22 fuelled and gas prices are coming down,</p> <p>23 they’re going to see that as a positive in</p> <p>24 terms of economic growth in the service area</p> <p>25 for an electric utility that’s primarily</p>	<p>1 more practically speaking, what happens when</p> <p>2 a utility runs into a situation like that,</p> <p>3 is that the mechanisms are in place with the</p> <p>4 existing RSA mechanism for it to pass</p> <p>5 through in its power supply cost, but it</p> <p>6 does a couple of things. One is it creates</p> <p>7 – there are demand elasticities associated</p> <p>8 with it, so consumers will find a way to</p> <p>9 consume other fuels, which means that</p> <p>10 between rate cases if your demand is</p> <p>11 shrinking and your customer count is held</p> <p>12 flat, you typically have a harder time</p> <p>13 recovering your allowed rate of return. So</p> <p>14 you get attrition in your earnings as a</p> <p>15 result of that when you’re facing those</p> <p>16 types of cost pressures.</p> <p>17 GREENE, Q.C.:</p> <p>18 Q. So that -</p> <p>19 MR. COYNE:</p> <p>20 A. But I would not see this Board walking away</p> <p>21 from its regulatory compact.</p> <p>22 GREENE, Q.C.:</p> <p>23 Q. Which is that the utility must recover its</p> <p>24 prudently incurred cost, plus an appropriate</p> <p>25 return?</p>
Page 58	Page 60
<p>1 relying on natural gas, for example, given</p> <p>2 all that’s going on with Marcellus and</p> <p>3 Shell. So these are all things - if you look</p> <p>4 at an investment, an analyst report, just as</p> <p>5 we looked at the Moody’s report, they’re</p> <p>6 already factoring it into their analysis.</p> <p>7 So those do sway investor opinions even now,</p> <p>8 even before this impact has happened because</p> <p>9 you can anticipate what the impacts are</p> <p>10 going to be. Capital markets are pretty</p> <p>11 efficient in that regard and they get</p> <p>12 factored into stock prices today for events</p> <p>13 that are going to happen tomorrow.</p> <p>14 GREENE, Q.C.:</p> <p>15 Q. And based on what you had said yesterday, my</p> <p>16 understanding is that what the concern is,</p> <p>17 what the risk is, it’s not that the cost</p> <p>18 will be recovered given the supply cost</p> <p>19 recovery mechanisms that are in place, and</p> <p>20 the additional regulatory tools that you</p> <p>21 just referred to that are available to the</p> <p>22 Board, so it’s not a risk of recovery of</p> <p>23 cost, is it?</p> <p>24 MR. COYNE:</p> <p>25 A. Moody’s characterizes it that way. I think,</p>	<p>1 MR. COYNE:</p> <p>2 A. Yes. So it’s on the margin, it makes it harder</p> <p>3 for a company that’s struggling under high</p> <p>4 power supply cost to keep its customer demand</p> <p>5 growth – customer consumption demand growth</p> <p>6 growing. It will have an impact on those, and</p> <p>7 on the margin, that puts pressure on earnings.</p> <p>8 GREENE, Q.C.:</p> <p>9 Q. You used that phrase yesterday, so when you</p> <p>10 say “on the margin”, it’s not the risk of</p> <p>11 recovery of the cost, you’re really saying</p> <p>12 because it puts more pressure, it may affect</p> <p>13 Newfoundland Power’s growth in revenue, and</p> <p>14 it will impact possibly what its net income</p> <p>15 would be?</p> <p>16 MR. COYNE:</p> <p>17 A. Yes, both those things.</p> <p>18 GREENE, Q.C.:</p> <p>19 Q. So if we come back, that’s the real risk</p> <p>20 with Muskrat because even when you referred</p> <p>21 to the reliability risk, it’s not the fact</p> <p>22 that the lines may come down and</p> <p>23 Newfoundland Power may have to go do</p> <p>24 additional repair work, it’s the cost</p> <p>25 associated with it if there is a reliability</p>

Page 61	Page 63
<p>1 issue, is that correct?</p> <p>2 MR. COYNE:</p> <p>3 A. Absolutely right, it's all about the cost.</p> <p>4 GREENE, Q.C.:</p> <p>5 Q. And again I gather you, in your discussion</p> <p>6 with Mr. Johnson yesterday, you did agree</p> <p>7 that there is more uncertainty about</p> <p>8 reliability than there might be on the</p> <p>9 timing for Muskrat, we don't know what</p> <p>10 impact there will be, is that correct?</p> <p>11 MR. COYNE:</p> <p>12 A. That is correct. I understand it's under</p> <p>13 study by the Board, and even though it's</p> <p>14 under study by the Board, I think it's a</p> <p>15 practical matter that'll take years of</p> <p>16 experience to see how the line operates in</p> <p>17 various types of weather and storm</p> <p>18 conditions, and whether or not outages are</p> <p>19 an issue or not.</p> <p>20 GREENE, Q.C.:</p> <p>21 Q. So in terms of your assessment of the</p> <p>22 business risk, it goes back again to</p> <p>23 reliability, affects cost, the cost could</p> <p>24 affect pressure on Newfoundland Power's</p> <p>25 customers, and its growth in its earnings,</p>	<p>1 MR. COYNE:</p> <p>2 A. Not at this point in time, no.</p> <p>3 GREENE, Q.C.:</p> <p>4 Q. So we know – I have a clear understanding of</p> <p>5 what you see the risk as, based on your oral</p> <p>6 evidence yesterday and today. My question</p> <p>7 is how do you assess the materiality of</p> <p>8 that? You say the risk has increased. The</p> <p>9 risk is the increased pressure for</p> <p>10 Newfoundland Power's revenue, the risk is</p> <p>11 not that it won't recover its prudently</p> <p>12 incurred cost. How do you assess how</p> <p>13 material that is?</p> <p>14 MR. COYNE:</p> <p>15 A. Well, it's hard, because we're doing a</p> <p>16 comparative analysis between a group of</p> <p>17 utilities and it's directional. So the</p> <p>18 directional nature of these risks don't lend</p> <p>19 themselves to quantification, so I can't say</p> <p>20 that one is a five and the other is a four</p> <p>21 per se. So we ask the question, are they an</p> <p>22 average risk utility, and the answer is, no,</p> <p>23 these are significant factors that place</p> <p>24 them at a distinct disadvantage vis-à-vis</p> <p>25 their Canadian and U.S. peers, because they</p>
Page 62	Page 64
<p>1 its revenues, net income, not on its ability</p> <p>2 to actually recover its cost, is that -</p> <p>3 MR. COYNE:</p> <p>4 A. Yeah, in order for it to not recover its</p> <p>5 cost, it would have to get into a pretty</p> <p>6 dire circumstance, a so-called "death</p> <p>7 spiral" where its customers are leaving its</p> <p>8 system, they're installing backup</p> <p>9 generation, they're saying the heck with</p> <p>10 these power prices, I'm going to put in my</p> <p>11 own solar and wind facilities, and these</p> <p>12 days we have micro-grids that are being – in</p> <p>13 New York State, they're being encouraged by</p> <p>14 the regulator there in a program called "New</p> <p>15 York REV", to actually take groups of</p> <p>16 customers and take them off the system. So</p> <p>17 if you had regulatory policy changes like</p> <p>18 that, that are a response to Muskrat Falls</p> <p>19 to take large blocks of customers off the</p> <p>20 system, then I think you have a bigger</p> <p>21 problem.</p> <p>22 GREENE, Q.C.:</p> <p>23 Q. But that's not what you're concerned about</p> <p>24 at this point, that did not influence your</p> <p>25 risk assessment?</p>	<p>1 aren't looking at a 50 plus percent increase</p> <p>2 in power supply cost in the weakest economy</p> <p>3 in Canada, and one of the weakest in North</p> <p>4 America. Those are two pretty significant</p> <p>5 factors. So the regulatory protections are</p> <p>6 in place. This board has a good reputation</p> <p>7 as being a fair board over time as a</p> <p>8 regulator, so there's no reason to believe</p> <p>9 that the board is not going to attempt to</p> <p>10 work with the company during this period of</p> <p>11 time as it has in the past, but if you</p> <p>12 compare it to the universe utilities, it's</p> <p>13 like taking a group of students, you know,</p> <p>14 they're not all going to be average, some</p> <p>15 are going to be A+ students, and some are</p> <p>16 not, and if you look at that group of</p> <p>17 students and you say one clearly has</p> <p>18 characteristics that doesn't look like the</p> <p>19 other, you would say that's not an average</p> <p>20 student. So on that basis, you would</p> <p>21 distinguish it from its Canadian and U.S.</p> <p>22 peers, but I didn't look at it to the point</p> <p>23 where I made any adjustment to the</p> <p>24 recommended ROE. I'm just saying that this</p> <p>25 is a risk factor for the company that puts</p>

Page 65	Page 67
<p>1 it to the upper edge of the risk spectrum, 2 vis-à-vis average, but I didn't say it's 3 beyond the point where this proxy group is 4 no longer relevant. We still use the proxy 5 group, and it's the average results from the 6 proxy group that we're using to determine 7 the allowed ROE, so I didn't make any 8 adjustment. I'm just saying from a 9 qualitative perspective, if you were to ask 10 is it the middle of the road, or the low end 11 of the risk spectrum, or the high end, you 12 would say on that basis it's beyond average. 13 So I didn't attempt to say that it's right 14 at the very edge here, just beyond average. 15 I could make that determination based on 16 this data and analysis, but it's 17 qualitative, and risk inevitably is, but 18 investors would have to look at it the same 19 way.</p> <p>20 GREENE, Q.C.: 21 Q. And in your report, you described it as 22 "somewhat above average", which ties into 23 what you just said?</p> <p>24 MR. COYNE: 25 A. Yes.</p>	<p>1 GREENE, Q.C.: 2 Q. When you look at both of them together, how 3 would you describe Newfoundland Power? The 4 way I would have said, one is above average, 5 one is average, so overall it makes them an 6 above average risk utility overall?</p> <p>7 MR. COYNE: 8 A. Well, I would come back to "somewhat". You 9 add those two together, the operating or 10 business risk is higher, the financial risk 11 is the same, and that's why I think 12 "somewhat" is probably a good word to use in 13 that regard. It's the business risk that 14 takes them off centre.</p> <p>15 GREENE, Q.C.: 16 Q. And you said yesterday, and you just 17 repeated it this morning, that your 18 assessment of this risk did not affect your 19 recommendation on the ROE?</p> <p>20 MR. COYNE: 21 A. It did. It told me that I certainly didn't 22 need to make any – well, it did, in the 23 sense that it told me that these proxy group 24 results are reasonable, if not conservative, 25 for a company that's at the higher end of</p>
Page 66	Page 68
<p>1 GREENE, Q.C.: 2 Q. It's not some – again, I guess, you would 3 agree that it is a matter of opinion how 4 that risk would get assessed and whether, in 5 fact, other people would agree that it was 6 above average risk?</p> <p>7 MR. COYNE: 8 A. Yes, but again Moody's certainly points it 9 out as well, so it's not just our conclusion 10 in that regard.</p> <p>11 GREENE, Q.C.: 12 Q. But at this point in time, Moody's has not 13 in any way changed the credit rating for 14 Newfoundland Power or taken any action as a 15 result of that?</p> <p>16 MR. COYNE: 17 A. No, it just indicates that they're watching 18 it.</p> <p>19 GREENE, Q.C.: 20 Q. Right. You've said that Newfoundland Power 21 is above average business risk compared to 22 the proxy group, and comparable financial 23 risk?</p> <p>24 MR. COYNE: 25 A. Yes.</p>	<p>1 the risk spectrum. If it were very 2 different, then we might say you should make 3 an adjustment to those ROE results to 4 account for the fact that it has a very 5 different risk profile, but I didn't take it 6 to the point that it was that different 7 enough to warrant that. In fact, I don't 8 like to do that because if I were to give 9 you my judgment that it's higher than 10 average risk and that is 25 basis points, 11 that becomes a very difficult number to 12 defend on a qualitative basis. I would 13 rather let the proxy group do the talking 14 and say it is reasonably represented by that 15 proxy group, and I would say, yes, it's a 16 little bit above average, or somewhat above 17 average, but it tells me that the proxy 18 group at least is representative, if not 19 conservatively so, of how an investor would 20 look at that company.</p> <p>21 GREENE, Q.C.: 22 Q. Did it influence your recommendation with 23 respect to the capital structure?</p> <p>24 MR. COYNE: 25 A. Well, I took it into account because that</p>

Page 69	Page 71
<p>1 accounts for the comparable financial risk, 2 so it is the capital structure that enables 3 the company with its risk profile to be 4 comparable to its Canadian peers, and I 5 think given its business risk combined, the 6 capital structure added up with its credit 7 metrics in the business risk make it only 8 somewhat above average.</p> <p>9 GREENE, Q.C.: 10 Q. So I take from that answer, it did influence 11 your recommendation on maintaining the 45 12 percent common equity?</p> <p>13 MR. COYNE: 14 A. Yes, very much, yeah, explicitly.</p> <p>15 GREENE, Q.C.: 16 Q. If Newfoundland Power were average the last 17 time, what should I take from that with 18 respect to its equity structure? It's been 19 45 percent for a long time now, which is the 20 highest for any private investor run utility 21 in Canada, and rate payers pay for that 22 through the revenue requirement. Would I 23 take from that, that because they're now 24 above average risk, that 45 percent is 25 required, but it may not have been before?</p>	<p>1 if it's representative and appropriate for 2 the company on a going forward basis. I 3 understand that Canadian – I'm probably 4 giving you a longer answer than you want, 5 and I apologize, but I understand it is 6 typically the case that Canadian regulators 7 put in capital ratios and they leave them, 8 and the same is true for U.S. regulators. 9 They tend to put them in and leave them, and 10 then they tend to adjust returns with the 11 ROE that move with capital markets. I 12 understand the track record of stability 13 with this Commission in that regard, and I 14 think it has been a good regulatory 15 practice.</p> <p>16 GREENE, Q.C.: 17 Q. Coming back to your assessment that 18 Newfoundland Power is above average business 19 risk, and you have acknowledged that this is 20 the first time that either a consultant for 21 Newfoundland Power or Newfoundland Power has 22 taken the position that it is an above 23 average risk Canadian utility, we view that 24 as somewhat significant. In your 25 discussions with Mr. Johnson, you did</p>
Page 70	Page 72
<p>1 (10:15 a.m.) 2 MR. COYNE: 3 A. I'd say even more so now. It is at the 4 higher end of its Canadian peers, but its 5 5 percent below its U.S. peers, and that's 6 true even for the pure T & D companies that 7 we looked at. So it has a – given its risk 8 profile, vis-à-vis those companies, I think 9 it's appropriate to have it at the higher 10 end of the Canadian competitors or 11 comparators, but I worry about still being 5 12 percent below its U.S. peers. There's a 13 history in Canada of Canadian regulators 14 allowing lower capital equity ratios than 15 the U.S. peers, so I take that into account. 16 That's why I'm not recommending a 5 percent 17 increase to look like the U.S. proxy 18 companies, but I think you have to 19 acknowledge that gap. So that's why I 20 recommended 45 stay in place. I think it 21 serves as a counter-balance to these other 22 risk factors. I would suggest to the Board 23 that over time, as these risk factors play 24 out, as we've talked about, it's something 25 that should continue to be examined to see</p>	<p>1 respond to a question as to who you have met 2 with with Newfoundland Power, and I was 3 struck by the fact that given that the first 4 time Newfoundland Power is saying its above 5 average business risk, you had not met with 6 the Chief Financial Officer, or the Chief 7 Operating Officer, the Vice-President of 8 Operations. Is that typical of your 9 practice when looking at a risk, that you 10 didn't do that?</p> <p>11 MR. COYNE: 12 A. It varies, and it was – we typically rely on 13 a lot of written information, which we did, 14 so we pulled the reports, the various 15 filings, we looked at past rate decisions, 16 and also the issues before the Board in 17 terms of its examination of Muskrat Falls 18 and things of that nature, so we rely on a 19 lot of data and a lot of information first 20 and read all that, and then we ask questions 21 about it, and we use the regulatory team at 22 the company to answer questions that we had, 23 that might be on that, so they served as a 24 conduit for us to be able to gather the 25 information we need, which is typical. There</p>

Page 73	Page 75
<p>1 are times that companies will insist you</p> <p>2 have to talk to our gas supply guy, and you</p> <p>3 have to really talk to our transmission guy</p> <p>4 to really understand what's going on there,</p> <p>5 and if we have questions, we'll do that, but</p> <p>6 we felt as though we were able to get the</p> <p>7 information that we needed in that case</p> <p>8 here.</p> <p>9 GREENE, Q.C.:</p> <p>10 Q. And that would be your normal practice?</p> <p>11 MR. COYNE:</p> <p>12 A. The normal practice would be to take the</p> <p>13 written information and do the analysis on</p> <p>14 that basis, and work with regulatory teams</p> <p>15 to get information from the company that we</p> <p>16 would not have access to otherwise. The</p> <p>17 normal practice is not to interview</p> <p>18 operating personnel, but there are times</p> <p>19 that companies will insist on it, that you</p> <p>20 just have to meet with so and so, and so and</p> <p>21 so, in order to understand a certain aspect</p> <p>22 of the company that they think we really</p> <p>23 need to get, and we have people that work in</p> <p>24 gas supply, we have people that work in</p> <p>25 electric power markets, that are specialists</p>	<p>1 Newfoundland Power's capital structure</p> <p>2 between 45 and 40, and that the evidence of</p> <p>3 Ms. Perry was that there would not be a</p> <p>4 significant impact on its credit metrics for</p> <p>5 all of Table 1, for all of Table 2, which</p> <p>6 these are the metrics that credit rating</p> <p>7 agencies review, and that when we came to</p> <p>8 Table 3, there had been some indication that</p> <p>9 while the credit rating agency would like to</p> <p>10 see that within the range of 15 to 17</p> <p>11 percent and at the higher end of that range,</p> <p>12 so that she said the credit metrics would</p> <p>13 not be impacted until we probably hit around</p> <p>14 16.5 percent in her opinion, and if you go</p> <p>15 to the next page, it does show – here it is</p> <p>16 highlighted to show you that the green would</p> <p>17 indicate no problem with the interest</p> <p>18 coverage test under the first mortgage,</p> <p>19 trust deed, yellow, may be caution, and red,</p> <p>20 you would violate the requirement, but what</p> <p>21 it does demonstrate is that there could be</p> <p>22 changes in Newfoundland Power's capital</p> <p>23 structure down to 40 percent at certain ROEs</p> <p>24 that would not impact the credit metrics or</p> <p>25 the first mortgage trust deed. I wanted you</p>
Page 74	Page 76
<p>1 in these very areas, and sometimes if we</p> <p>2 have to do a mind meld around that issue,</p> <p>3 we'll do that so that we can digest it</p> <p>4 appropriately.</p> <p>5 GREENE, Q.C.:</p> <p>6 Q. Now the last area that I wanted to talk to</p> <p>7 you about was with respect to a document</p> <p>8 that was filed as Undertaking #4, which is –</p> <p>9 I'll wait until we can get it up. This is</p> <p>10 where Newfoundland Power responded to a</p> <p>11 request that show what the credit metrics</p> <p>12 for Newfoundland Power would be at different</p> <p>13 ROEs and at different capital structures.</p> <p>14 Have you had the opportunity or have you see</p> <p>15 this exhibit?</p> <p>16 MR. COYNE:</p> <p>17 A. I glanced at it. I think I – yes, I glanced</p> <p>18 at it.</p> <p>19 GREENE, Q.C.:</p> <p>20 Q. Okay, so it does show what the impact on</p> <p>21 Newfoundland Power's credit metrics would be</p> <p>22 and on its interest coverage test required</p> <p>23 by the first mortgage bonds. My question</p> <p>24 is, subject to check, will you agree, this</p> <p>25 document shows that you could change</p>	<p>1 to comment on that. Yes, credit metrics is</p> <p>2 not the only thing that needs to be</p> <p>3 considered, but if Newfoundland Power's</p> <p>4 capital structure can be reduced without</p> <p>5 impairing its credit metrics, or its credit</p> <p>6 rating, what does that tell us?</p> <p>7 MR. COYNE:</p> <p>8 A. Well, I certainly would have no reason to</p> <p>9 question the company's analysis on these</p> <p>10 issues. It tells us that they have some</p> <p>11 margin within their projected – I'm</p> <p>12 wondering what period of time this is. Is</p> <p>13 this current or does it have any time</p> <p>14 dimension to it? Can we just look at the</p> <p>15 top of it -</p> <p>16 GREENE, Q.C.:</p> <p>17 Q. Can you go back, please?</p> <p>18 MR. COYNE:</p> <p>19 A. It looks like it's for 2017?</p> <p>20 GREENE, Q.C.:</p> <p>21 Q. Yes, that was – which was the first full</p> <p>22 year for this particular application that</p> <p>23 rates would be in effect.</p> <p>24 MR. COYNE:</p> <p>25 A. Well, it suggested under whatever its</p>

Page 77	Page 79
<p>1 operating assumptions are for 2017, that it</p> <p>2 has some wiggle room before it would get up</p> <p>3 against a specific downgrade based on this</p> <p>4 metric.</p> <p>5 GREENE, Q.C.:</p> <p>6 Q. Could you go back, please, to the first</p> <p>7 page? Those are the credit metrics the</p> <p>8 credit rating agencies review, and as</p> <p>9 indicated, there's no yellow on that page,</p> <p>10 although there was a concern expressed, a</p> <p>11 possible concern once we hit 16.5 percent,</p> <p>12 the metric shown in Table 2. So to me, that</p> <p>13 indicates there is the opportunity to look</p> <p>14 at the capital structure without a negative</p> <p>15 impact on the financial integrity aspect for</p> <p>16 Newfoundland Power, that aspect of the ROE</p> <p>17 test. Would you agree?</p> <p>18 MR. COYNE:</p> <p>19 A. Do I agree that –</p> <p>20 GREENE, Q.C.:</p> <p>21 Q. The metrics demonstrate that there could be</p> <p>22 a change in Newfoundland Power's capital</p> <p>23 structure that would not negatively impact</p> <p>24 the financial integrity, which is one of the</p> <p>25 three things we need to be concerned about</p>	<p>1 typically like to be right on the margin in</p> <p>2 terms of these credit metrics for those</p> <p>3 reasons, and regulators don't typically like</p> <p>4 to have them there either because the</p> <p>5 consequences, as we looked at, the</p> <p>6 difference in cost between a BBB and an A</p> <p>7 rated bond rating in Canada is significant,</p> <p>8 and also the market for BBB debt in Canada</p> <p>9 is much more limited compared to the A rated</p> <p>10 market. So it's not a precipice, you want</p> <p>11 to be mindful of it, I agree with the</p> <p>12 analysis that the company has presented</p> <p>13 here, but you don't want to get so close to</p> <p>14 the edge that you're not providing yourself</p> <p>15 any cushion in case things don't work out</p> <p>16 exactly as you think it will, vis-à-vis your</p> <p>17 business plan. It also – I think any</p> <p>18 reduction in the equity ratio certainly</p> <p>19 sends a negative message to debt investors</p> <p>20 and, of course, to equity investors at a</p> <p>21 time when, as we've discussed, if it's a</p> <p>22 higher risk utility than its Canadian peer</p> <p>23 and a higher risk from a business risk</p> <p>24 standpoint, it certainly isn't an optimal</p> <p>25 time to be thinking about reducing the</p>
Page 78	Page 80
<p>1 when looking at the appropriate ROE? For</p> <p>2 example, if you go up to the first – if we</p> <p>3 just look at the 9.5 percent, which is your</p> <p>4 recommendation, we can see 40 percent</p> <p>5 capital structure, they're still quite happy</p> <p>6 – I shouldn't say "happy". They wouldn't be</p> <p>7 happy, but in terms of the credit metrics,</p> <p>8 the credit rating agencies might be quite</p> <p>9 happy.</p> <p>10 MR. COYNE:</p> <p>11 A. Well, I think what this shows is that there</p> <p>12 is some flexibility in these metrics at</p> <p>13 various capital structures, and even at</p> <p>14 lower capital structures, within the band of</p> <p>15 these projected allowed returns. I assume</p> <p>16 that's based on – you know, when you tend to</p> <p>17 get in trouble with credit metrics, it's not</p> <p>18 when its business as usual. I mean, you can</p> <p>19 get in trouble when it's business as usual.</p> <p>20 If you dip below those margins, that's when</p> <p>21 you get negative surprises, and that's what</p> <p>22 happened during the last financial crisis is</p> <p>23 those that were too close to the margin</p> <p>24 found that life was challenging in terms of</p> <p>25 raising capital. So utilities don't</p>	<p>1 equity ratio.</p> <p>2 GREENE, Q.C.:</p> <p>3 Q. And with respect to that, I assume that the</p> <p>4 bigger the change, the more concern there</p> <p>5 would be, but with a smaller change, for</p> <p>6 example, going from 45 to 43, if they were</p> <p>7 still well within the credit metrics that</p> <p>8 Moody's looks to for its credit ratings,</p> <p>9 there would be less concern?</p> <p>10 MR. COYNE:</p> <p>11 A. Less is better when it comes to risk, but it</p> <p>12 does signal a shift in policy from the Board</p> <p>13 that's been in place for over two decades,</p> <p>14 so I think agencies would ask what's the new</p> <p>15 policy, where are we going here with this</p> <p>16 company. It's been remarkably stable in</p> <p>17 that regard for a very long period of time.</p> <p>18 GREENE, Q.C.:</p> <p>19 Q. Thank you, Mr. Coyne. That concludes all of</p> <p>20 my questions.</p> <p>21 MR. COYNE:</p> <p>22 A. My pleasure.</p> <p>23 CHAIRMAN:</p> <p>24 Q. We're up here now, are we? Oh, Ian, I'm</p> <p>25 sorry, Mr. Kelly, do you have any -</p>

<p style="text-align: right;">Page 81</p> <p>1 KELLY Q.C.:</p> <p>2 Q. No questions, Mr. Chairman.</p> <p>3 CHAIRMAN:</p> <p>4 Q. Okay, now back to us. I just got a couple</p> <p>5 of points to ask you about. With reference</p> <p>6 to you used the term “moderate” to describe</p> <p>7 economic conditions now. I think that’s the</p> <p>8 term you used. So what’s your scale, like,</p> <p>9 what else is on that scale besides moderate?</p> <p>10 MR. COYNE:</p> <p>11 A. When it comes to macroeconomic conditions?</p> <p>12 Was that the comment?</p> <p>13 CHAIRMAN:</p> <p>14 Q. Yeah, yeah.</p> <p>15 MR. COYNE:</p> <p>16 A. In terms of the province specifically or the</p> <p>17 broader -</p> <p>18 CHAIRMAN:</p> <p>19 Q. No, the world economy. I’m trying to</p> <p>20 understand – you started off with the world</p> <p>21 economy, and then did a U.S. economy, and a</p> <p>22 Canadian, then we’re going to Newfoundland,</p> <p>23 and then we finally hit Newfoundland Power.</p> <p>24 So, it’s a big world.</p> <p>25 MR. COYNE:</p>	<p style="text-align: right;">Page 83</p> <p>1 and then on top of that you have these</p> <p>2 tremendous cycles that we’re seeing in</p> <p>3 commodity prices in oil and gas specifically</p> <p>4 in this case. But for all resources, for</p> <p>5 copper, minerals, et cetera, it’s having a</p> <p>6 tremendous impact on companies, lumber</p> <p>7 companies, mining companies that are</p> <p>8 dependent. So, I think that the global</p> <p>9 economy certainly is more evidently</p> <p>10 integrated right now. Global financial</p> <p>11 markets are integrated right now, but by and</p> <p>12 large it all seems to be moving along with</p> <p>13 moderate economic growth as long as some big</p> <p>14 factor in that puzzle doesn’t fall out of</p> <p>15 place. We’ve already seen China do that,</p> <p>16 but they now seem to be resuming at least</p> <p>17 moderate growth and therefore, we have</p> <p>18 moderate global growth as a result of that.</p> <p>19 But I think it’s one that is subject to</p> <p>20 disruption more than it ever has been in the</p> <p>21 past. And we can see that we have these</p> <p>22 global disruptions that filter all the way</p> <p>23 down to local economies, that’s here in the</p> <p>24 province as a result.</p> <p>25 CHAIRMAN:</p>
<p style="text-align: right;">Page 82</p> <p>1 A. The big world. It seems to be more complex</p> <p>2 all the time from a global economic</p> <p>3 integration standpoint. I think the world</p> <p>4 was probably surprised by just how co-</p> <p>5 dependent it had become on trade with our</p> <p>6 Asian trading partners in China</p> <p>7 specifically. Because China had been on a</p> <p>8 growth path it had been on for some period</p> <p>9 of time. Global markets really weren’t use</p> <p>10 to downward adjustments, even though we’ve</p> <p>11 had prior disruptions in Asian economies.</p> <p>12 So, I think it’s been a bit of wakeup call</p> <p>13 for to realize to how linked world economies</p> <p>14 are and world currencies are. So, that</p> <p>15 overlay has created more uncertainty because</p> <p>16 here you have the government of China making</p> <p>17 decisions that affect the Chinese economy</p> <p>18 and the government of China is difficult to</p> <p>19 predict. It’s subject to significant policy</p> <p>20 changes over time. So as a result of that</p> <p>21 you have this new source of great</p> <p>22 uncertainty in terms of what the government</p> <p>23 will do to affect their economy and how that</p> <p>24 then flows through what’s going on in Europe</p> <p>25 and North America. So there’s that factor</p>	<p style="text-align: right;">Page 84</p> <p>1 Q. So, you see like the Chinese economy</p> <p>2 starting to sort itself out, do you?</p> <p>3 MR. COYNE:</p> <p>4 A. Yes, they’re chugging along. I think they</p> <p>5 found new equilibrium in that economy, maybe</p> <p>6 a more sustainable growth rate and they’ve</p> <p>7 relaxed their currency policy around that a</p> <p>8 little bit so they’re better integrated.</p> <p>9 Their currency is now exposed to foreign</p> <p>10 currency pressures. So, I think the</p> <p>11 government of China is a little bit more</p> <p>12 realistic these days about the world role</p> <p>13 that it plays, but they’re also somewhat</p> <p>14 unpredictable.</p> <p>15 CHAIRMAN:</p> <p>16 Q. You don’t see it as a, someone described it</p> <p>17 as a potemkin economy; it’s totally false.</p> <p>18 There’s nothing behind it but debt. You</p> <p>19 don’t see that?</p> <p>20 MR. COYNE:</p> <p>21 A. Well, I’m not sure -</p> <p>22 (10:30 a.m.)</p> <p>23 CHAIRMAN:</p> <p>24 Q. The Red Ponzi, you never heard that –</p> <p>25 MR. COYNE:</p>

Page 85	Page 87
<p>1 A. The Red Ponzi, the source of –</p> <p>2 CHAIRMAN:</p> <p>3 Q. I have read some very respectable</p> <p>4 economists, well at least as far as I'm</p> <p>5 concerned and I'm no expert, I'm just</p> <p>6 curious, who described the Chinese economy</p> <p>7 as a gigantic Ponzi scheme.</p> <p>8 MR. COYNE:</p> <p>9 A. Where everybody is lending to each other,</p> <p>10 yes.</p> <p>11 CHAIRMAN:</p> <p>12 Q. Well, that's one of the problems with most</p> <p>13 economies where everyone is trying to live</p> <p>14 off everybody else nobody is producing much</p> <p>15 of any value. But I mean to look at the</p> <p>16 figures for the Chinese economy, I don't see</p> <p>17 how you can—the Shanghai Index is down 45</p> <p>18 percent since last June.</p> <p>19 MR. COYNE:</p> <p>20 A. I had a son that was teaching there and I</p> <p>21 went to visit him a year and a half ago. I</p> <p>22 had been there two decades ago and I just</p> <p>23 could not believe –</p> <p>24 CHAIRMAN:</p> <p>25 Q. Boy, you're aging gracefully.</p>	<p>1 Q. So, you wouldn't agree to the analysis of</p> <p>2 someone like Peter Shift or David Stockman</p> <p>3 or guys like that. You'd say this whole</p> <p>4 thing is house of cards that seems to</p> <p>5 question if not when, not if, but when it</p> <p>6 will collapse?</p> <p>7 MR. COYNE:</p> <p>8 A. I would like to offer perspective on that,</p> <p>9 but I don't understand the debt layers of</p> <p>10 the Chinese economy to give you anything</p> <p>11 that would be worthy.</p> <p>12 CHAIRMAN:</p> <p>13 Q. Okay. You mentioned 5 percent GDP growth,</p> <p>14 but I read that for every growth of GDP</p> <p>15 growth in the world economy there's an</p> <p>16 addition of \$5.00 worth of debt. So, that</p> <p>17 GDP growth just seems to me it's not based</p> <p>18 on anything substantial. Again, it's an</p> <p>19 example of the house of cards, I mean, the</p> <p>20 huge amount of debt that's sloshing around</p> <p>21 the world, is that a threat as far as you're</p> <p>22 concerned or –</p> <p>23 MR. COYNE:</p> <p>24 A. Well, I think there was de-leveraging after</p> <p>25 the financial crisis. We certainly saw it</p>
Page 86	Page 88
<p>1 MR. COYNE:</p> <p>2 A. Thank you. And I could not believe how much</p> <p>3 had changed and it's one of those things</p> <p>4 like you get off the plane here and you have</p> <p>5 an impression right away of what this</p> <p>6 economy feels like. You get off the plane</p> <p>7 in Beijing and you have an impression of</p> <p>8 what that economy feels like. And these are</p> <p>9 just voracious consumers. And I guess the</p> <p>10 piece of faith I have in the Chinese economy</p> <p>11 is that desire for goods and services in</p> <p>12 that economy is very robust. So, I think if</p> <p>13 the government doesn't mess I up, I have</p> <p>14 faith that the Chinese economy is going to</p> <p>15 continue to be a global engine for some</p> <p>16 period of time. But that's a big if in</p> <p>17 terms of those government policies. But the</p> <p>18 citizens in China have somewhat of a greater</p> <p>19 voice in all that, but the primary voice is</p> <p>20 expressed in terms of what they consume and</p> <p>21 that's real impact on our collective global</p> <p>22 economy. I guess I have faith in that</p> <p>23 consumerism lasting for as long as we'll be</p> <p>24 watching it.</p> <p>25 CHAIRMAN:</p>	<p>1 at the corporate level and we've also seen</p> <p>2 it at the consumer level as well. In many</p> <p>3 economies there was a wakeup call that less</p> <p>4 that was a good thing. That's not to say</p> <p>5 that we're not economies that don't still</p> <p>6 thrive on debt, but I think we have more</p> <p>7 collectively at risk to maintaining healthy</p> <p>8 balance sheets.</p> <p>9 CHAIRMAN:</p> <p>10 Q. But world debt is not less than it was in</p> <p>11 2008.</p> <p>12 MR. COYNE:</p> <p>13 A. Yeah, I don't know. My guess is that it is</p> <p>14 growing. We've had economic growth since</p> <p>15 then and so in aggregate, I suspect, it is</p> <p>16 larger.</p> <p>17 CHAIRMAN:</p> <p>18 Q. Okay. And the U.S. unemployment rate, you</p> <p>19 mentioned that was about 5 percent.</p> <p>20 MR. COYNE:</p> <p>21 A. Heading towards 5, the last number I saw was</p> <p>22 something like 5.7 percent.</p> <p>23 CHAIRMAN:</p> <p>24 Q. But have you looked at U.S. participation</p> <p>25 rates? I mean, I have read that if you</p>

Page 89	Page 91
<p>1 normalized the participation rate in 1950</p> <p>2 for the U.S., you'd have an unemployment</p> <p>3 rate in the U.S. today of about 20 percent.</p> <p>4 MR. COYNE:</p> <p>5 A. Yeah, I don't recall that it's as high as</p> <p>6 20, but I know it is certainly higher than</p> <p>7 the face value, the 5.7, I think where it</p> <p>8 stands now. The last number I recall –</p> <p>9 CHAIRMAN:</p> <p>10 Q. So, don't you think that number is very</p> <p>11 suspect?</p> <p>12 MR. COYNE:</p> <p>13 A. Well, like all numbers, you need to</p> <p>14 understand what it is. Those desiring to be</p> <p>15 in the workplace who aren't employed, but</p> <p>16 yeah, I think you need to look at that. You</p> <p>17 could also look at it as fair capacity in</p> <p>18 the economy as well. Because one of the</p> <p>19 things you can run into is the inability to</p> <p>20 put enough people to work and continue to</p> <p>21 grow the economy, if your population isn't</p> <p>22 growing fast enough for the jobs that you</p> <p>23 have. And then you get inflationary</p> <p>24 pressure. So, it can service as a buffer</p> <p>25 for wages. If there are people that are on</p>	<p>1 MR. COYNE:</p> <p>2 A. Yes, you can buy exchange traded funds on</p> <p>3 the Toronto Stock Exchange that have U.S.</p> <p>4 securities in them or you can buy directly</p> <p>5 on the New York Stock Exchange if you have</p> <p>6 a broker that can do so for you.</p> <p>7 CHAIRMAN:</p> <p>8 Q. So, if I wanted to look at, you know, making</p> <p>9 an investment or, sorry, trying to determine</p> <p>10 what would be the universe that I would</p> <p>11 start with in trying to understand</p> <p>12 Newfoundland Power, wouldn't I start with</p> <p>13 the TSE, would that be my universe?</p> <p>14 MR. COYNE:</p> <p>15 A. I suspect you would start there, yes.</p> <p>16 CHAIRMAN:</p> <p>17 Q. How many stocks—do you know how many stocks</p> <p>18 are traded on the TSE?</p> <p>19 MR. COYNE:</p> <p>20 A. I have it in one of our appendices because</p> <p>21 we do the –</p> <p>22 CHAIRMAN:</p> <p>23 Q. I'm going to ask—Dr. Booth may know.</p> <p>24 MR. COYNE:</p> <p>25 A. He may know.</p>
Page 90	Page 92
<p>1 the sidelines that say, alright, I'll come</p> <p>2 back, the economy is good enough for me to</p> <p>3 come to back, for those who have been</p> <p>4 working part time or under employed. So, it</p> <p>5 serves as an inflationary buffer in that</p> <p>6 way. Wages go up and as a result of that,</p> <p>7 you have those that are under employed and</p> <p>8 come back into the work force, but I don't</p> <p>9 see that as being a constraint on economic</p> <p>10 growth. If anything, I think it's a</p> <p>11 reserve.</p> <p>12 CHAIRMAN:</p> <p>13 Q. But again adjusted for inflation wages, have</p> <p>14 not grown, have they?</p> <p>15 MR. COYNE:</p> <p>16 A. They have just begun to turn around over the</p> <p>17 last year or so.</p> <p>18 CHAIRMAN:</p> <p>19 Q. Now with respect to the integration of the</p> <p>20 U.S. economy and Canadian economy, you're</p> <p>21 saying that there's a great degree of</p> <p>22 integration. So, if I'm a Canadian investor</p> <p>23 and I want to buy a stock in the TSE, I'm</p> <p>24 capturing the fact that, if I want to, I can</p> <p>25 also buy into the U.S. market.</p>	<p>1 CHAIRMAN:</p> <p>2 Q. So, I guess what you're saying is that</p> <p>3 you're cautiously optimistic about the</p> <p>4 future for the next, worldwide, for the next</p> <p>5 24 – 36 months. That's what you're telling</p> <p>6 me.</p> <p>7 MR. COYNE:</p> <p>8 A. I am because I think on average, even though</p> <p>9 oil prices have been a big disruption, it</p> <p>10 lowers the costs for all businesses,</p> <p>11 inflationary pressures are still pretty low.</p> <p>12 And again, the role that China has played, I</p> <p>13 think at least for the near term, they're in</p> <p>14 a more sustainable growth rate. So, I don't</p> <p>15 see them as being the disruption.</p> <p>16 CHAIRMAN:</p> <p>17 Q. So, you see Chinese growth rates as</p> <p>18 sustainable?</p> <p>19 MR. COYNE:</p> <p>20 A. At a lower level than they were, you know,</p> <p>21 no longer double digits, but maybe in the 8</p> <p>22 to 9 percent range which is still pretty</p> <p>23 robust.</p> <p>24 CHAIRMAN:</p> <p>25 Q. Eight to nine percent?</p>

<p style="text-align: right;">Page 93</p> <p>1 MR. COYNE:</p> <p>2 A. Yes.</p> <p>3 CHAIRMAN:</p> <p>4 Q. In China, okay. Do you look at indexes? I</p> <p>5 mean on of the ones I've discovered that is</p> <p>6 most interesting, some call it the Baltic</p> <p>7 Dry Index, do you know that one?</p> <p>8 MR. COYNE:</p> <p>9 A. I don't believe I do. Is it a stock traded</p> <p>10 index?</p> <p>11 CHAIRMAN:</p> <p>12 Q. No, it's an indication of, I guess, prices</p> <p>13 for commodities and shipping prices.</p> <p>14 MR. COYNE:</p> <p>15 A. What's it called again?</p> <p>16 CHAIRMAN:</p> <p>17 Q. Baltic Dry Index. It's generally considered</p> <p>18 to be probably the most indicative, if you</p> <p>19 could pick one and the Baltic Dry Index has</p> <p>20 been on the go since 1985. It's now at its</p> <p>21 historic low; it's never been lower. So,</p> <p>22 it's very pessimistic for world economic out</p> <p>23 -</p> <p>24 MR. COYNE:</p> <p>25 A. Oh, it's a shipping index.</p>	<p style="text-align: right;">Page 95</p> <p>1 window.</p> <p>2 CHAIRMAN:</p> <p>3 Q. Yes, I mean, if you think you're isolated,</p> <p>4 just go down to the harbour here and you'll</p> <p>5 see Maersk; they're everywhere.</p> <p>6 MR. COYNE:</p> <p>7 A. I've bene fascinated by watching that</p> <p>8 process.</p> <p>9 CHAIRMAN:</p> <p>10 Q. The president of Maersk has reported that</p> <p>11 severe deterioration in earnings and yet you</p> <p>12 think that—your take on it is that things</p> <p>13 are going to improve.</p> <p>14 MR. COYNE:</p> <p>15 A. I use a different index and as I call it, my</p> <p>16 tractor trailer index and I see how many I'm</p> <p>17 surrounded by on the highway when I go from</p> <p>18 point A to point B and I don't think I've</p> <p>19 ever seen more. So, that's certainly a</p> <p>20 casual observation.</p> <p>21 CHAIRMAN:</p> <p>22 Q. Well, we got pick-up trucks in Newfoundland</p> <p>23 that are 60,000 bucks, you know, always</p> <p>24 amazes me. I don't understand.</p> <p>25 MR. COYNE:</p>
<p style="text-align: right;">Page 94</p> <p>1 CHAIRMAN:</p> <p>2 Q. Shipping index.</p> <p>3 MR. COYNE:</p> <p>4 A. I see, yes.</p> <p>5 CHAIRMAN:</p> <p>6 Q. So, you don't know that one?</p> <p>7 MR. COYNE:</p> <p>8 A. I do not focus on that index, no. But I</p> <p>9 recall hearing that there was a fair amount</p> <p>10 of spare shipping capacity out there.</p> <p>11 CHAIRMAN:</p> <p>12 Q. To get worse because China is still intent</p> <p>13 on constructing these very large container</p> <p>14 ships even though the market is totally</p> <p>15 flooded.</p> <p>16 MR. COYNE:</p> <p>17 A. It's a very cyclical industry where the</p> <p>18 industry overbuilds. They build a lot of</p> <p>19 spare capacity, prices collapse -</p> <p>20 CHAIRMAN:</p> <p>21 Q. The president of Maersk announced last week</p> <p>22 that deterioration in their earnings, Maersk</p> <p>23 containers. They're everywhere.</p> <p>24 MR. COYNE:</p> <p>25 A. I've been looking at them every day out the</p>	<p style="text-align: right;">Page 96</p> <p>1 A. But again, I think that—and there are people</p> <p>2 that study the global economy certainly more</p> <p>3 than I do, but the broad indicators are that</p> <p>4 we're going to muddle through this one with</p> <p>5 some sort of moderate growth.</p> <p>6 CHAIRMAN:</p> <p>7 Q. And where do you see interest rates going?</p> <p>8 I mean what's Janet Yellen going to do with</p> <p>9 interest rates?</p> <p>10 MR. COYNE:</p> <p>11 A. Well, I think she's smart enough to not</p> <p>12 jeopardize and economy that's not growing in</p> <p>13 leaps and bounds and she's under a lot of</p> <p>14 pressure to—I think probably political</p> <p>15 pressure during the election season, we're</p> <p>16 all watching with great entertainment and</p> <p>17 dismay—to hold the line on interest rates at</p> <p>18 least until we navigate through this</p> <p>19 election season, but as the economy</p> <p>20 continues to grow, she's going to be keeping</p> <p>21 a close eye on inflation. And if we do see</p> <p>22 wage growth that starts to exceed targets</p> <p>23 and inflationary growth that exceed targets,</p> <p>24 then I think she'll ratchet it up a quarter</p> <p>25 at a time. That's what the markets is</p>

Page 97	Page 99
<p>1 expecting, but probably nothing more this</p> <p>2 year.</p> <p>3 CHAIRMAN:</p> <p>4 Q. And you don't think that's going to pose any</p> <p>5 threat to the mountain of debt that's out</p> <p>6 there?</p> <p>7 MR. COYNE:</p> <p>8 A. No, but you know, the short term rates, no.</p> <p>9 I think the greater risk that we do have</p> <p>10 inflationary pressures that all of a sudden</p> <p>11 ratchet up debt costs significantly and that</p> <p>12 would have a big impact on consumers and it</p> <p>13 would have a very negative impact on the</p> <p>14 economy and businesses.</p> <p>15 CHAIRMAN:</p> <p>16 Q. Okay, I guess that's—is that it now?</p> <p>17 MR. COYNE:</p> <p>18 A. I certainly –</p> <p>19 CHAIRMAN:</p> <p>20 Q. Do you want to take a break now and change</p> <p>21 the scene?</p> <p>22 MS. GLYNNE:</p> <p>23 Q. We'll just take a short break we would like</p> <p>24 to get Mr. Booth's direct in today. So, ten</p> <p>25 minutes?</p>	<p>1 DR. BOOTH:</p> <p>2 A. That's correct.</p> <p>3 JOHNSON, Q.C.:</p> <p>4 Q. Dr. Booth, would you please provide the</p> <p>5 Board with a brief background as to your own</p> <p>6 background and experience and</p> <p>7 qualifications?</p> <p>8 DR. BOOTH:</p> <p>9 A. I'm a professor of finance at the University</p> <p>10 of Toronto where I hold the CIT Chair in</p> <p>11 Structured Finance and I've been at the</p> <p>12 University of Toronto since 1978. Before</p> <p>13 that I got my undergraduate at London School</p> <p>14 of Economics and I did graduate work in the</p> <p>15 United States where I gained three graduate</p> <p>16 degrees where I used to teach. Since coming</p> <p>17 to Canada, I've also won the Ernst & Young</p> <p>18 Financial Post Leader in Management</p> <p>19 Education Award. I was the chair of the</p> <p>20 finance department for basically 21 years.</p> <p>21 This past year I've been president of the</p> <p>22 Mid-West Finance Association, which is an</p> <p>23 American Regional Finance Association</p> <p>24 ascended in Chicago and I've written a</p> <p>25 variety of articles and three textbooks,</p>
Page 98	Page 100
<p>1 CHAIRMAN:</p> <p>2 Q. Sure.</p> <p>3 (RECESS – 10:44 A.M.)</p> <p>4 (10:58 a.m.)</p> <p>5 CHAIRMAN:</p> <p>6 Q. So I think, Mr. Johnson, we're over to you</p> <p>7 and your witness.</p> <p>8 JOHNSON, Q.C.:</p> <p>9 Q. Yes, Mr. Chairman, Commissioners, on the</p> <p>10 stand is Dr. Lawrence Booth who is my first</p> <p>11 witness.</p> <p>12 DR. LAWRENCE D. BOOTH (SWORN) EXAMINATION-IN-CHIEF BY</p> <p>13 THOMAS JOHNSON, Q.C.:</p> <p>14 JOHNSON, Q.C.:</p> <p>15 Q. Dr. Booth, will you confirm that you have</p> <p>16 provided expert evidence and will testify in</p> <p>17 relation to Newfoundland Power's fair return</p> <p>18 and capital structure?</p> <p>19 DR. BOOTH:</p> <p>20 A. Yes.</p> <p>21 JOHNSON, Q.C.:</p> <p>22 Q. And Dr. Booth, you have in March—in February</p> <p>23 and in March prepared written evidence being</p> <p>24 your main evidence and surrebuttal evidence,</p> <p>25 is that correct?</p>	<p>1 including one textbook which was an</p> <p>2 Americanization of our Canadian textbook,</p> <p>3 only Americans would not accept</p> <p>4 Americanizations of other textbooks, so we</p> <p>5 had to title it as a corporate finance book</p> <p>6 and hide the fact that it was a Canadian</p> <p>7 book, but that book came out two years ago,</p> <p>8 and I've taught a variety of courses, I've</p> <p>9 introduced about four different courses and</p> <p>10 ran the investment banking program at U of T</p> <p>11 for a number of years. So I've had</p> <p>12 extensive teaching experience in all levels,</p> <p>13 from undergraduate to MBA, to Masters in</p> <p>14 Finance, to Executive MBA and Doctoral</p> <p>15 program. So I'd just as a backdrop to that</p> <p>16 indicate that I'm extremely knowledgeable</p> <p>17 about what is standard in a finance textbook</p> <p>18 and what is in a standard finance course,</p> <p>19 both in the United States and in Canada.</p> <p>20 You can't write a textbook for the U.S.</p> <p>21 market without knowing what is standard and</p> <p>22 taught at U.S. universities. And I'll say</p> <p>23 here that when we Americanized our Canadian</p> <p>24 book, we had to dumb it down and that's</p> <p>25 because the market in the United States,</p>

Page 101	Page 103
<p>1 particularly the university level and the</p> <p>2 college level, is a lower level than the</p> <p>3 Canadian market, so we actually had to—our</p> <p>4 American collaborator had to take a lot of</p> <p>5 things out of our Canadian textbook. So the</p> <p>6 basic level of undergraduate education in</p> <p>7 Canada is actually higher than in the United</p> <p>8 States.</p> <p>9 JOHNSON, Q.C.:</p> <p>10 Q. Dr. Booth, in addition to that summary, I</p> <p>11 take it you will confirm that the</p> <p>12 Commissioners will also find your full CV at</p> <p>13 Appendix A to your February report, is that</p> <p>14 correct?</p> <p>15 DR. BOOTH:</p> <p>16 A. That's correct.</p> <p>17 JOHNSON, Q.C.:</p> <p>18 Q. Dr. Booth, do you have any corrections or</p> <p>19 updates that you wish to make to your</p> <p>20 written testimony?</p> <p>21 DR. BOOTH:</p> <p>22 A. I'm sure there's some typos in there, I keep</p> <p>23 finding "form" instead of "from", that crops</p> <p>24 up all over the place, but apart from typos,</p> <p>25 there's nothing I picked up that I think is</p>	<p>1 was here in the height of the Euro crisis, I</p> <p>2 was saying that the most important thing in</p> <p>3 actually get your money back which was the</p> <p>4 big problem with the Euro crisis and the</p> <p>5 problem with the Portugal Island, Greece and</p> <p>6 Spain, the fact that people couldn't get</p> <p>7 their money back. So that's the long-run</p> <p>8 risk, can we get our money back as well as</p> <p>9 get a reasonable rate of return? So that's</p> <p>10 the business risk issue and I'll talk about</p> <p>11 capital markets because that has some</p> <p>12 implication for the capital structure but</p> <p>13 mainly capital market conditions affect the</p> <p>14 fair rate of return, so in terms of business</p> <p>15 risk where the rubber meets the road is can</p> <p>16 the utility earn its allowed ROE? So as</p> <p>17 long as the ROE is set to be fair, the</p> <p>18 ability of the utility to earn its ROE</p> <p>19 reflects the sum impact of everything that a</p> <p>20 utility is subject to, short-run business</p> <p>21 risks, financial risks and here we talk</p> <p>22 about financial risk as financial leverage,</p> <p>23 it magnifies business risk or we'll say</p> <p>24 financial risk is layered on top of the</p> <p>25 business risk of any firm, particularly for</p>
Page 102	Page 104
<p>1 material.</p> <p>2 JOHNSON, Q.C.:</p> <p>3 Q. Dr. Booth, will you confirm that you solely</p> <p>4 prepared the evidence that you have filed in</p> <p>5 this proceeding and that you adopt your</p> <p>6 evidence as filed in this proceeding,</p> <p>7 including all answers to Requests for</p> <p>8 Information directed to you, by either</p> <p>9 Newfoundland Power or the Board staff?</p> <p>10 DR. BOOTH:</p> <p>11 A. I do, everything was prepared by me; nothing</p> <p>12 was prepared under my direction.</p> <p>13 JOHNSON, Q.C.:</p> <p>14 Q. Dr. Booth, the first substantive question of</p> <p>15 the day to you, how would you judge the</p> <p>16 business risk of Newfoundland Power?</p> <p>17 DR. BOOTH:</p> <p>18 A. The business risk is extremely important and</p> <p>19 as I think I've said before this Board,</p> <p>20 because I said before all boards, there's</p> <p>21 two components. There's the return on</p> <p>22 capital which is the short-run risk, what's</p> <p>23 the rate of return that we can earn, and</p> <p>24 then there's return of capital which I'm</p> <p>25 almost certain that three years ago when I</p>	<p>1 a utility. So what we see here is the sum</p> <p>2 total, the impact of business risk,</p> <p>3 financial risk, regulatory risk, everything</p> <p>4 that affects the utility. Now it's</p> <p>5 absolutely true that good management can</p> <p>6 meliorate risks, but that's the job of good</p> <p>7 management and that applies to any company.</p> <p>8 What we observed with Newfoundland Power is</p> <p>9 a consistent ability to earn its allowed</p> <p>10 ROE. I asked them what causes any</p> <p>11 substantial deviations and the major factor</p> <p>12 for the significant under earning in the</p> <p>13 '90s and then the over earning in early</p> <p>14 2000s was Canada Revenue Agency, basically a</p> <p>15 tax reassessment which I don't regard as</p> <p>16 fundamental to the business risk of the</p> <p>17 firm. So apart from the CRA, involvement</p> <p>18 with the CRA, I think there was another</p> <p>19 issue in the early '90s when there was a</p> <p>20 severe sleet storm that affected earnings,</p> <p>21 but apart from that, there was absolutely no</p> <p>22 evidence whatsoever of the inability of</p> <p>23 Newfoundland Power to earn its allowed</p> <p>24 return on equity. So for all intents and</p> <p>25 purposes, the shareholders have not actually</p>

Page 105	Page 107
<p>1 experienced any business financial or 2 regulatory risk over the last 25 years, and 3 this is actually common to all Canadian 4 regulated utilities. The vast bulk of the 5 risk that shareholders are subject to is not 6 business risk, it's not financial risk, it's 7 not regulated risk, it's market risk. It's 8 how does the market evaluate our investment 9 in that company. So there's nothing unusual 10 about this. I get exactly the same results 11 when I ask FortisEnergy BC what's been their 12 experience or the experience of ATCO Gas or 13 ATCO Pipelines or Enbridge Gas or Uni Gas or 14 Gaz Metro, it's absolutely common throughout 15 Canadian utilities that the degree of 16 regulatory protection means that they're 17 very, very limited in terms of downside 18 risk. Very rarely do they not earn their 19 allowed ROE. They consistently over earn, 20 so that's the other side to this. I did 21 notice in questions put towards the chief 22 financial officer, she pointed out that 23 FortisAlberta over earns more. The reason 24 for that is simply that FortisAlberta is on 25 PBR, some performance based regulation, so</p>	<p>1 competitive gas is in Canada, so obviously 2 not relevant for Newfoundland Power from 3 that point of view. It is relevant in terms 4 of one of the major competitive fuels which 5 the Canadian Gas Association put propane and 6 heating oil, this is at the end of 2014 7 dollar costs per year for a typical consumer 8 and electricity is generally competitive 9 with alternative fuels right across Canada, 10 which is why we do see extensive electricity 11 use for space heating in Quebec and in many 12 parts of Canada. How does this compare to 13 Newfoundland Power? I discovered that one 14 of the interesting features in Manitoba is 15 they have an Act that basically says since 16 2014 an independent order that has to put 17 together the cost of basic utility services 18 right across Canada, so the Manitoba PUB can 19 compare their costs relative to every other 20 province in Canada, and that includes 21 insurance costs, as well as water costs, 22 electricity costs and everything else. 23 That's in my testimony. What I put in here 24 I thought was a little bit more informative 25 because they cover more jurisdictions. It's</p>
Page 106	Page 108
<p>1 unfortunately we get for many utilities and 2 the only way we can actually get their cost 3 down, is to put them on PBR so they generate 4 cost savings and as a result, those are 5 shared within the—between the ratepayers and 6 within the utility. But you can't really 7 compare short-run PBR earnings which tend to 8 be an attempt to get the cost down to lowest 9 minimum cost, with a consistent cost of 10 service utility earning its allowed ROE. So 11 that just indicates the supportive nature of 12 Canadian regulation. Long-run, this is 13 really the risk that utilities in Canada 14 will face, the same as anywhere else. The 15 Board cannot protect a utility when its 16 underlined demand disappears and we saw that 17 with the TransCanada Mainline where there 18 was a major hearing in 2011. We've seen it 19 with Pacific Northern Gas, a small pipeline 20 gas distributor in north-west BC and this 21 comes down to how competitive is the 22 commodity that the utility distributes to 23 its customers. This is some information I 24 got from the Canadian Gas Association, it's 25 mainly in the context of how incredibly</p>	<p>1 from Hydro Quebec and they basically say, 2 well if somebody used a thousand kilowatt 3 hours a month, what's the relative cost of 4 electricity in Montreal versus elsewhere? 5 Montreal is the lowest in Canada, huge 6 hydro, cheap hydro power. Winnipeg is 7 second, huge hydro power; Vancouver is 8 third, huge hydro power. So those three 9 jurisdictions have incredibly cheap 10 electricity cost. Then we get into other 11 jurisdictions and we see St. John's there, 12 \$161.00, it's more expensive than the 13 jurisdictions with cheap hydro power, but 14 it's not out of line with other sort of mid- 15 level cost jurisdictions, and then you get 16 up to Toronto and believe me, you don't want 17 Toronto power costs and Moncton and Houston 18 and then we've got New York which is off the 19 map. But that's just to give you an idea of 20 how expensive our power costs in St. John's, 21 Newfoundland relative to elsewhere because 22 that is certainly an issue that has popped 23 up. How does this really affect it? When 24 people replace one fuel source with another, 25 they have to think about what the cost is</p>

Page 109	Page 111
<p>1 and NP indicated 10 to 25,000 conversions 2 from electricity to other fuels. In the 3 1990s they also indicated that oil, heating 4 oil was 40 percent cheaper than electricity 5 but only 3.7 percent of their customers 6 switched from electricity to space heating, 7 and incidentally, that had absolutely no 8 impact on the ability of NP to earn its 9 allowed ROE. So I'm mindful of the 10 possibility of Muskrat Falls, but in the 11 context of what has happened in the past and 12 in the context of other fuel costs, that may 13 not be material. The critical fact to 14 consider there and this is, I follow the 15 policy of the Ontario Energy Board, is if 16 it's not within the test year, it's not 17 something the OEB considers. Basically the 18 OEB has said explicitly they will consider 19 things outside the test year when they 20 actually come up to be considered and they 21 will deal with that when that happens. So 22 as part of my testimony and I've actually 23 said that for many, many years, here I've 24 got a quote that I've put before the 25 National Energy Board in 2004, that was when</p>	<p>1 witnesses coming in and saying the utility 2 is exposed to this risk, the utility is 3 exposed to this risk and yet when this risk, 4 if it ever materializes, which rarely ever 5 materializes, but if it materializes the 6 Canadian regulatory bargain or compact or 7 whatever, it comes before a hearing and 8 invariably what happens is a compromise is 9 worked out or special deferral account, so 10 there's some ways the regulators seek to do 11 the reasonable thing which is pass the cost 12 on to ratepayers and they make policy 13 changes to ensure that a utility continues 14 to have an opportunity to earn its fair rate 15 of return. So am I concerned about Muskrat 16 Falls? I think I've read enough and I saw 17 enough to realize that there may be 18 problems. I was involved in the Maritime 19 Link hearing, three years ago and that's to 20 bring the electricity through Nova Scotia, 21 so I'm certainly aware of the problems there 22 and I'm aware that there may be electricity 23 price shock, but I'm also very much aware 24 that if there is a significant price shock, 25 then this Board and the Provincial</p>
Page 110	Page 112
<p>1 problems with the TransCanada Mainline first 2 surfaced and I said if problems—actually now 3 this was McKenzie Valley hearing, that was a 4 new pipeline, and I said if pipelines 5 occurred and firms bring these problems to 6 the regulator and frequently compromises are 7 worked out. This is part of the regulatory 8 bargain and only regulated firms have this 9 capability. For example, if a competitive 10 firm suffers a supply shock, then the 11 stockholders are directly affected, but in 12 contrast, a regulated firm can have losses 13 put in a deferral account and allocated to 14 future customers or apply to the regulator 15 for other means to protecting the 16 stockholders from loss; consequently, it's 17 unreasonable to expect no action on the part 18 of the regulator to the increased risk after 19 Year 11 in the above example. And in that 20 case, I was just looking at all of the cash 21 flows from the McKenzie Valley Pipeline and 22 I arbitrarily decided that Year 11 was the 23 distinction between short-run and long-run, 24 but when we look at that, the problem is 25 simply that utilities--constantly I hear</p>	<p>1 Government would not sit idly by and let the 2 utility be severely damaged. So I just 3 don't think that that is a significant risk 4 and it's certainly not a risk within the 5 test year. 6 So in summary, I see no change in the 7 business risk of Newfoundland Power. It 8 remains a typical low risk Canadian utility. 9 As primarily transmission and distribution, 10 no significant generation. A little bit of 11 generation from years ago, hydro plants, but 12 I don't regard that as being significant. 13 The only transmission and distribution 14 utilities in Canada where we've got rates of 15 return allowed by the regulators in recent 16 years, Alberta, 8.3 percent ROE and that was 17 on 36 percent for transmission, 38 percent 18 for distribution, common equity; Quebec, 8.2 19 percent ROE on 30 percent transmission, 35 20 percent for distribution and that actually 21 is my common recommendation, 30 percent 22 common equity ratio for transmission, 35 23 percent for distribution. So those are the 24 benchmarks, they are the benchmarks for 25 Canadian transmission and distribution</p>

Page 113	Page 115
<p>1 utilities. They're the benchmarks set by</p> <p>2 other reputable regulators in Canada that</p> <p>3 have satisfied the fair return standard. So</p> <p>4 I regard that as a benchmark in terms of</p> <p>5 what is fair and reasonable.</p> <p>6 (11:15 a.m.)</p> <p>7 JOHNSON, Q.C.:</p> <p>8 Q. Dr. Booth, can you discuss your capital</p> <p>9 structure recommendations?</p> <p>10 DR. BOOTH:</p> <p>11 A. Apart from those regulatory standards one of</p> <p>12 the issues that I think sitting in the</p> <p>13 hearing room for the last three years I've</p> <p>14 heard over and over again, is we have to</p> <p>15 distinguish between the operating companies</p> <p>16 and the holding companies. We don't have</p> <p>17 market data on the operating companies, I</p> <p>18 wish we did, but they've all disappeared and</p> <p>19 as I've said to every regulator, they have</p> <p>20 to ask why they all disappeared. They're</p> <p>21 all now part of conglomerates, part of</p> <p>22 holding companies for good reason. When we</p> <p>23 look at that, it means that all we've got</p> <p>24 are the holding companies to look at and one</p> <p>25 of the holding companies that we look at is</p>	<p>1 market? There is preferred share market.</p> <p>2 Is it a fluid deep market the way that the</p> <p>3 debt market is and the equity market is?</p> <p>4 No, it isn't. It's an episodic market, it's</p> <p>5 a market that periodically opens and closes.</p> <p>6 It's a market with a lot of hybrid features</p> <p>7 for different types of preferred shares, but</p> <p>8 Fortis has issued public preference shares,</p> <p>9 600 million in 2014, 250 million in 2013 and</p> <p>10 I noted in my 2012 testimony that they just</p> <p>11 had a 200 million dollar preferred share</p> <p>12 issue. Fortis is a frequent issuer of</p> <p>13 preferred shares in the Canadian market.</p> <p>14 The other thing I draw your attention to is</p> <p>15 return on average book equity. Fortis</p> <p>16 earned 5.4 percent in 2014, 8.1 percent in</p> <p>17 2013, these are their numbers and we went</p> <p>18 through the Standard and Poors' numbers for</p> <p>19 Fortis, it's barely earned, 7.5, 8 percent</p> <p>20 for the last five years. So we've got</p> <p>21 objective evidence of a company earning in</p> <p>22 the range of 7.5 percent with 35 percent</p> <p>23 common equity and you think, well, obviously</p> <p>24 it's not financeable, 7.5 percent ROE, 35</p> <p>25 percent common equity and yet exactly the</p>
Page 114	Page 116
<p>1 Fortis. Mr. Coyne looked at Fortis out in</p> <p>2 BC as part of his sample and Fortis owns</p> <p>3 FortisEnergy, FortisBC Energy, FEI, and yet</p> <p>4 he didn't include it in the sample before</p> <p>5 this Board, even though it also owns</p> <p>6 Newfoundland Power, but it's obviously</p> <p>7 interesting to see how the parent company</p> <p>8 finances and what it regards as reasonable</p> <p>9 and what financial metrics fall out from its</p> <p>10 financing and what its bond rating is, and</p> <p>11 it is absolutely clear Fortis targets a 45</p> <p>12 percent equity ratio. Of that 45 percent,</p> <p>13 34, 35 percent is common equity, 9—it</p> <p>14 doesn't say that it's 10 percent is</p> <p>15 preferred but the residual 10 percent,</p> <p>16 preferred shares. So there's no question</p> <p>17 that Fortis finances its subsidiaries with</p> <p>18 35 percent common equity, so we look at that</p> <p>19 and we say, well if Fortis finances</p> <p>20 Newfoundland Power with 35 percent equity</p> <p>21 and yet Newfoundland Power is saying it</p> <p>22 needs 45 percent common equity, the</p> <p>23 objective measure is that Newfoundland</p> <p>24 Power, its owner, finances it with 35</p> <p>25 percent equity. Is there a preferred share</p>	<p>1 opposite, Fortis has what they describe—and</p> <p>2 these are their words, not my words, strong</p> <p>3 credit ratings and DBRS A low, S&P A-.</p> <p>4 Newfoundland Power is rated A by DBRS, so if</p> <p>5 Fortis regards the parent of Newfoundland</p> <p>6 Power regards its rating as strong, we're</p> <p>7 left with the obvious conclusion that the</p> <p>8 bond rating for Newfoundland Power is very</p> <p>9 strong because it is stronger than the issue</p> <p>10 of its parent. Why is that? Well there are</p> <p>11 a number of issues. Holding companies, we</p> <p>12 call them Hold Cos rely upon the cash</p> <p>13 distributed from its operating subsidiaries</p> <p>14 to finance their own debt. So holding</p> <p>15 companies, all else constant, they are</p> <p>16 always regarded as riskier than operating</p> <p>17 companies because they're one layer, one</p> <p>18 level removed from the operating company and</p> <p>19 the cash that really drives everything. So</p> <p>20 this is called structural subordination,</p> <p>21 it's something that Moody's, Standard and</p> <p>22 Poors and all the rating agencies draw their</p> <p>23 attention to. All else constant, we would</p> <p>24 expect Fortis on exactly the same credit</p> <p>25 ratings, exactly the same financial metrics</p>

Page 117	Page 119
<p>1 as Newfoundland Power that had weaker credit 2 ratings, but in fact a much weaker financial 3 metrics, it still has what it regards as a 4 very strong credit rating. So when we look 5 at that, it could be because Fortis has some 6 subsidiaries that are off market, in terms 7 of their financial metrics. This again is 8 Fortis information. I like to rely upon 9 information from the company because it's 10 their data and their data is 45 percent 11 equity for Newfoundland Power, 12 FortisAlberta, 40 percent; FortisBC Energy, 13 the gas company and FortisBC Electric, the 14 electric company together, 38.5 percent is 15 the gas company, 40 percent is the electric 16 company, and then it's got U.S. companies 17 and we know very well the U.S. companies 18 generally have to have more common equity 19 and a higher ROE in order to get inferior 20 bond rates to the Canadian utilities and 21 that's been established many, many times 22 over the last 15 years. In terms of ROE, 23 Newfoundland Power, 8.8 percent; 24 FortisAlberta, 50 basis points less at 8.3 25 percent; FortisEnergy BC, 8.75 percent and</p>	<p>1 and as far as I can see, there are very, 2 very few rating changes by DBRS for Canadian 3 utilities. It follows what it calls the 4 stable rating criteria which is that it 5 doesn't change its rating short term in 6 response to economic conditions because 7 economic conditions wax and wanes, we go 8 through the sessions, we go through booms, 9 bond holders realize this because they're 10 holding 30, 40, 50 year debt and the rating 11 agencies realize this. So when we look at 12 this, I put a lot of faith on DBRS. S&P 13 came in about 12 years ago and bought the 14 Canadian bond rating service. Moody's 15 started coming into Canada about 10 years 16 ago, that generally only rates Canadian 17 firms that issue debt in the U.S. because 18 its major market is the U.S., unless the 19 company seeks a rating. But when we look at 20 this, we've got Newfoundland Power and it's 21 Moody's rating, A2 and there's no subsidiary 22 of Fortis that has a higher rather than 23 Newfoundland Power. Central Hudson has A2, 24 and here these are Fortis' view of the 25 ratings of its subsidiaries and these are</p>
Page 118	Page 120
<p>1 there was a hearing, as we know before the 2 BCUC just a month ago into the BC utilities. 3 And then the electric company, 9.15 percent 4 and here it has to be pointed out that 5 FortisBC Electric has about 60 percent 6 internal generation. When I last appeared 7 before the BCUC on that, they asked me 8 what's the big risk of FortisBC Electric and 9 I said, well the big risk is they've got a 10 gap in their power and they go and hire some 11 nuclear engineers and over the break, they 12 come back and said we have no intention of 13 hiring nuclear engineers, but when you look 14 at this generation, it's the risk element 15 and it depends how it's handled by the 16 utility, but FortisBC Electric, it has a 17 power gap, it buys from BC Hydro now, but at 18 the time that was a significant risk, how it 19 was going to meet its—generate its 20 electricity needs. In terms of credit 21 ratings, we have these three different 22 ratings, all I'd say here, DBRS is a 23 Canadian rating agency, it has rated 24 Newfoundland Power and all the Canadian 25 utilities for the last 25 years, at least,</p>	<p>1 the ratings that they used to access the 2 capital markets and the A2 rating for 3 Newfoundland Power is what we call its issue 4 rating. It's the rating on its issues of 5 securities, which are first mortgage bonds. 6 When we look at DBRS ratings, Newfoundland 7 Power has been rated A and as far as I can 8 tell, it's rated A all the way back until 9 the early '90s when at one point it was 10 rated A high, but again, it's unambiguously, 11 no utility has a higher rating in the Fortis 12 family than DBRS. It doesn't have a S&P 13 rating. Generally, I look upon DBRS as 14 close as to S&P. Moody's tends to be lower. 15 The only qualification for that is S&P has 16 this criteria that it will not right a 17 subsidiary higher than its parent unless 18 it's ring fenced. In the case of 19 Newfoundland Power, we know it's pretty much 20 ring fenced and I would hazard a guess that 21 its ratings would be similar its DBRS 22 ratings. So what can we say about this? NP 23 low business risk, I don't think there is 24 any question about that and that's nothing 25 unusual. That's exactly the same across all</p>

Page 121	Page 123
<p>1 the utilities in Canada. In fact, trying to 2 make a difference in the business risk of 3 Canadian utilities after you take into 4 account regulation, is like splitting hairs. 5 They all earn their ROE on a regular basis. 6 Comparators, Alberta and Quebec, those are 7 the obvious comparators in terms of recent 8 decisions. And Fortis, you have to look at 9 the parent because the parent basically 10 accesses its capital market on the strength 11 of its operating subsidiaries business risk 12 and other companies within Fortis. I regard 13 NP's 45 percent common equity ratio as being 14 generous. I said that three years ago. I 15 think even in 2009 I probably said it. At 16 that point I said don't change it because we 17 were so close to the financial crisis I 18 didn't see that it was something that was 19 prudent at that point in time. I 20 recommended three years ago that a five 21 percent common equity replaced with 22 preferred shares. At this point in time, 23 I'm actually a little bit milder than I was 24 three years ago and milder in the sense that 25 I recognize that there may be something</p>	<p>1 here is really not what it's done in the 2 United States, it's not what's done in other 3 Canadian jurisdictions, it's not what is 4 done by its parent, is what do you really 5 think if this firm was acting competitively 6 what in fact it would finance with. And in 7 my judgment, even a 40 percent common equity 8 ratio is not aggressive, but I would suggest 9 that in three years' time if there's 10 significant problems as a result of Muskrat 11 Falls, then at that point the Board can look 12 at its regulatory tool kit and seriously 13 think about a more efficient capital 14 structure for Newfoundland Power. Until 15 that happens, I would like to see the Board 16 lay down a marker, that it revisited its 17 decisions in the early '90s. The 18 appropriate common equity ratio should be 19 between 40 and 45 percent and the Board is 20 deeming 5 percent preferred shares until 21 anything around Muskrat Falls, the 22 uncertainty becomes clarified. Deeming is 23 absolutely common in Canada, well I wouldn't 24 say it's actually common, it's the policy of 25 the Regie that it deems preferred shares for</p>
Page 122	Page 124
<p>1 happening in Muskrat Falls that will cause 2 problems for the Board in the next test 3 year, so I'm basically recommending the five 4 percent preferred shares be deemed for the 5 next—until the next rate hearing until the 6 situation with power costs becomes clearer 7 in the next rate hearing, and if there is a 8 significant shock to power costs, then this 9 Board is faced with significant increasing 10 rates passed on to Newfoundland ratepayers, 11 then I fully expect this Board to look at 12 its regulatory tool kit and think about how 13 can we ameliorate this? One of the things 14 in its tool kit is that it can look at the 15 capital structure and answer the basic 16 question which is what is a tax efficient 17 capital structure for Newfoundland Power and 18 what would it be financing with if it were a 19 competitive firm? Here I like to remind 20 boards that their basic responsibility is 21 they're regulating these utilities because 22 they're monopolists and yet they regulate 23 them hopefully such that we get the 24 parameters they would get if they were a 25 competitive firm. So the critical question</p>	<p>1 Gaz Metro. Gaz Metro has 38.5 percent 2 common shares and it deems a 7.5 percent 3 common share layer. What this means is the 4 preferred shares do not add any, regulate 5 any risk as far as the common share holder 6 is concerned because they're just deemed, 7 they don't actually exist in a real sense, 8 but they lower the overall cost of capital 9 down to what would be an efficient cost, a 10 more efficient cost of capital. 11 JOHNSON, Q.C.: 12 Q. Dr. Booth, next I'd like for you to turn to 13 what the situation was in 2012. 14 (11:30 a.m.) 15 DR. BOOTH: 16 A. I was struck by some of the comments that 17 Mr. Coyne, a lot of the comments of Mr. 18 Coyne, but one in particular about how 19 similar he regards the situation that's in 20 the United States and in Canada. Nothing 21 could be further from the truth. So what 22 struck me, as Mr. Kelly had kindly provided 23 me with my 2012 testimony, so I went back 24 and looked at my 2012 testimony and this was 25 a chart that DBRS produced at that time</p>

Page 125	Page 127
<p>1 which was in my 2012 testimony. And at that 2 time, Canada had fully recovered from the 3 recession. We fully recovered all of the 4 jobs lost during the recession by 2010, let 5 alone 2012; whereas the United States was in 6 desperate straits in 2012. So this is just 7 a reminder that Canada and the United States 8 have not experienced the same economic 9 history over the last six years. For the 10 best of my recollection, it was not Canada 11 that plunged the global economy into crisis 12 as a result of the sub mortgage, sub prime 13 mortgage crisis and the bankruptcy of that 14 banking system. That was the United States. 15 The second time in 80 years the United 16 States has thrown the global economy into 17 depression. It was not Canada. And in 18 2010, we had completely recovered and in 19 2012, we had some other experiences that 20 I'll talk about, but I've been 21 characterizing the situation since 2012 as 22 waiting for Godot. Canada recovered and 23 would be waiting for everybody else in the 24 world to recover, not just the Americans but 25 the European community and the UK. Now</p>	<p>1 monetary policy, just acts with the Fed 2 buying treasury bills and manipulating the 3 short-term interest rate. The U.S. has had 4 to engage in a massive bond buying program. 5 Conservatively at the end of 2014, there was 6 three and a half trillion dollars' worth of 7 securities that the Fed had taken off the 8 U.S. capital market. Now it's not three and 9 a half billion, it's three and a half 10 trillion dollars' worth of securities. If 11 those securities had been in the U.S. 12 capital market, the extra supply would have 13 pushed down prices and pushed up interest 14 rates. The Feds stepped in to buy those 15 securities to increase bond prices in the 16 U.S. and to lower interest rates. That's 17 the deliberate aim of the Fed. That was 18 what I was talking about in 2012 and I 19 actually looked in my summary again from 20 2012 and I thought, wow, I wouldn't change 21 anything that I said three years ago. As I 22 said, waiting for Godot. My executive 23 summary at that time, the actions of the 24 U.S. Federal Reserve in implementing 25 "Operation Twist" and its commitment to</p>
Page 126	Page 128
<p>1 we've got some other problems, but it's like 2 Canada, five, six years ago, there was no 3 real problems in either the Canadian 4 financial system or the Canadian economy, 5 but we are a small open economy and we're 6 buffered by events around the rest of the 7 world. The big events, the elephant in the 8 room is bond buying. I call this "Operation 9 Twist" because the objective of the bond 10 buying further in the United States was 11 twisting the yield curve to bring down long- 12 term bond yields in order to allow people to 13 refinance their mortgages, given the 14 desperate straits of the housing market in 15 the United States. This is from the Federal 16 Reserve Bank of Chicago—sorry, Cleveland, it 17 shows the size of the U.S. Fed's balance 18 sheet and what the Fed basically does is 19 really simple, all they do is they buy bonds 20 and they give people cash and what this 21 graph shows you is the known normal security 22 holdings of the Fed. The Fed does not 23 normally buy long-term treasury securities, 24 it does not normally buy mortgage bank 25 securities, it buys treasury bills, no</p>	<p>1 keeping the federal funds right at 0 to 0.25 2 percent until the end of 2014, brought down 3 global interest rates. This has let to a 4 precipitous drop in long Canada bond yields, 5 so corporate spreads of the government bond 6 yields remain high at 180 basis points. So 7 that's a little bit lower than where they 8 are now, which is about 190 basis points. 9 This is mainly due to unusually low 10 government bond yields, since all the 11 standard stress indicators show normal 12 capital market conditions. "Furthermore, 13 Canadian utilities have started to issue 40 14 and in some cases 50 year bonds at extremely 15 low interest rates." I wouldn't change a 16 word of that compared to 2012. We are still 17 in a situation where we have abnormally low 18 bond yields. We're still in a situation 19 where Canadian utilities can issue very long 20 term debt at incredibly low interest rates. 21 So that was what I said in 2012. I also, at 22 that point, stated the opinions of then 23 Governor of the Bank of Canada, Mark Carney 24 and I reported on statements that he made. 25 Reuters reported Governor Mark Carney as</p>

Page 129	Page 131
<p>1 saying we're in a very different place in a 2 major crisis economy such as the UK and the 3 crisis economy is obviously included the 4 U.S. and the Europe zone countries. Our 5 economy is always back and forth capacity, 6 the labour market has been growing, we're 7 growing above or we had been growing above 8 trend. The extent to which we continue to 9 grow above trend, we may withdraw some of 10 the monetary stimulus. This is 2012. We 11 had already seen the Bank of Canada push up 12 interest rates twice in 2010 and in 2012, 13 the Governor of the Bank of Canada is 14 saying, well, we might withdraw some more 15 stimulus, push up interest rates again. And 16 this is a critical thing that I said at the 17 time, when we have a financial system that's 18 firing on all cylinders and so we will have 19 to adjust, we will adjust if it's 20 appropriate. Now I emphasise those words 21 "firing on all cylinders" because at that 22 time the credit spreads, the spreads between 23 low rated bonds and long-term Canada bonds, 24 we're 180 basis points. They're a little 25 bit higher now, 190 basis points, but the</p>	<p>1 actually seeing the U.S. default on some of 2 its obligations. That is not a similar 3 situation to Canada. There's actually no 4 comparison between what went on in the 5 United States and what's been happening in 6 Canada. It goes without saying that a 7 financial system firing on all cylinders 8 while it describes Canada is not an accurate 9 statement of conditions in the United 10 States. What's the impact of this? We are 11 a small open economy. The total Canadian 12 government bond markets is about 660 billion 13 dollars. It only takes a tiny shift in the 14 portfolio allocation by China, by Japan, by 15 major countries to have an impact on the 16 Canadian bond market and this is a Bank of 17 Canada graphic that just shows that the 18 Canadian bond market is now about 30 percent 19 owned by, mainly sovereign reserve funds 20 where the China and Japan put their foreign 21 exchange reserves. So 30 percent sounds 22 like a lot, but it's only 150, 200 billion 23 dollars. Compared to the amount of capital 24 in the world, it's tiny, but it's had a 25 significant impact on the Canadian bond</p>
Page 130	Page 132
<p>1 financial system when we add 180 basis 2 points credit spread, the Governor of the 3 Bank of Canada said "we are firing on all 4 cylinders". There were no problems 5 whatsoever in the Canadian capital market in 6 2012. Reuters went on to report Governor 7 Carney as saying that the country's 8 relatively strong economic fundamentals 9 helped push the Canadian dollar to parity 10 with the U.S. dollar on Friday for the first 11 time since May and a currency value 12 reflected a safe haven premium. As Governor 13 Carney said, there are relatively few places 14 in the advanced world that investors can put 15 their money with a degree of certainty that 16 something catastrophic is not going to 17 happen. Canada was then rated AAA is still 18 rated AAA. The United States has got a S&P 19 bond rating of AA high and you probably 20 remember in 2011, the U.S. lost its AAA 21 rating because of wrangling in Congress. 22 They could not get their act together to 23 reduce the value of the deficit and there 24 was even talk at that time of Republicans 25 voting not to increase the debt limit and</p>	<p>1 market. 2 JOHNSON, Q.C.: 3 Q. Dr. Booth, what, if you could please 4 describe what's happened since 2012? 5 DR. BOOTH: 6 A. Well, waiting for Godot, we're still 7 waiting. We're still waiting for the 8 Americans. The Americans have actually 9 picked up the speed. In terms of a ranking 10 of global economies around the world, we 11 recovered in 2010. The U.K. stopped its 12 bond purchase program in 2012. The U.S. 13 actually stopped in 2014, but in 2012 we 14 were waiting for the rest of the world. In 15 the intervening three years, there has been 16 a slow down in China and here I just correct 17 Mr. Coyne, the target for growth in China 18 was 7.5 percent by the Chinese government. 19 They've just lowered that to 6.5 percent and 20 what's happening in China is they're 21 changing from an industrial investment led 22 economy to try to move to a consumer led 23 economy. An industrial led economy, until a 24 few years ago, they were adding the 25 electrical capacity of the U.K. every year</p>

Page 133	Page 135
<p>1 in China. Huge demand for copper, huge 2 demand for steel. Now they're moving 3 towards or trying to move towards a consumer 4 led economy, which has lowered the demand 5 for commodities, and has led to actually 6 outright dumping of Chinese steel in the 7 U.K. and in Europe, where there are 8 currently issues before Parliament to stop 9 the dumping of steel in the European 10 community, and particularly the U.K., but in 11 2012 we were at an overnight rate of 1 12 percent, and we waited, and waited, and 13 waited, and then China has caught up with us 14 in weak commodity prices, and starting in 15 2015, Stephen Poloz, the Governor of the 16 Bank of Canada, surprised the capital 17 markets with two cuts in the overnight rate. 18 So we've now got an overnight rate of half a 19 percent, which is basically similar to the 20 United States. How significant is this? 21 China is incredibly significant to the 22 Canadian economy. Commodity prices were 23 obviously significant. This is just the Bank 24 of Canada's commodity price index going back 25 from the starting date, just to show that</p>	<p>1 Montreal complained about the 24-hour sound 2 byte that was so – we get so much news, that 3 we tend to focus on certain events, and we 4 ignore the underlying things that are going 5 on. We are very much attuned to what's 6 happening in the regional sector. So when 7 we look at the red line in oil and gas 8 related, 3.1 percent decline in economic 9 activity, that's mainly Alberta, 10 Saskatchewan, but obviously also hits 11 Newfoundland. The non-resource sector, the 12 non-energy sector, this is the mining sector 13 has also been hit because copper and zinc 14 prices are being affected. They're down 1.6 15 percent, but they are only 17 percent of the 16 economy; 83 percent of the economy is 17 chugging along at 1.4 percent growth. So we 18 had this two-speed, and, in fact, house 19 prices in Ontario went up 16.9 percent, 20 single family detached houses went up 16.9 21 percent last year. Why; because the Canadian 22 dollar has dropped and because people are 23 still coming to central Canada, and central 24 Canada the manufacturing industry is 25 sensitive to exchange rates. So actually</p>
Page 134	Page 136
<p>1 when China basically opened up to 2 international trade in the early 2000s, we 3 see this dramatic run up in commodity 4 prices, drop during the financial crisis, 5 they rebounded, and then starting in late 6 2014 we've seen this weakness in commodity 7 prices, and Canada, obviously, is commodity 8 price sensitive due to the nature of our 9 economy. How does this affect what goes on? 10 The other signature that I always look at is 11 capacity utilization. If we look at 2012, 12 we were sort of on this upper trajectory and 13 Mark Carney was predicting that we would use 14 up all the capacity within the next year or 15 18 months. That hasn't happened, we've 16 basically been in this "Waiting for Godot" 17 situation for the last few years, and we 18 started to see a little bit of a pickup as 19 the U.S. economy started to grow again, and 20 in a little bit of weakness, basically we 21 had a technical recession in the first half 22 of 2015 mainly due to the commodity impact 23 in Alberta. We do have a two-speed economy. 24 This again is a Bank of Canada graphic. I 25 think it was Bill Downe of the Bank of</p>	<p>1 this is a good time for Ontario and it's a 2 good time for Quebec. It's not a good time, 3 obviously, for western Canada and it's not a 4 good time for Newfoundland, but we do have a 5 reversion to an economy of more like five or 6 ten years ago. 7 JOHNSON, Q.C.: 8 Q. Dr. Booth, my next question would be how 9 would you assess presently the capital 10 markets? 11 DR. BOOTH: 12 A. The key in all of this is interest rates, 13 and the elephant in the room is the impact 14 of bond buying on Government bond rates. As 15 I said when I was here in 2012, we were 16 expecting interest rates to increase 17 dramatically. In 2011, there was an RBC 18 forecast projecting absolute back to 19 normality, 4.5, 5 percent long Canada rates 20 within a short period of time. Quantitative 21 easing, bond buying in the U.S. stopped all 22 of that, and we can see, however, in looking 23 at 2013/2014, we were all looking, when does 24 the U.S. end its bond buying, when do we end 25 up this massive buying of Government bonds</p>

Page 137	Page 139
<p>1 that keeps the prices up and interest rates 2 down. The U.S. announced a roadmap to get 3 out of quantitative easing, interest rates 4 popped up, and then, unfortunately, the U.S. 5 is no longer the only capital market in the 6 world. The European community and Japan have 7 got huge capital markets. The Bank of Japan 8 initiated this bond buying program. It's 9 now buying 55 billion dollars' worth of 10 Government securities every month. By 2017, 11 the will own 50 percent of the Japanese bond 12 market. The European Central Bank, the ECB, 13 is now buying 80 billion dollars a month, 14 and they only kicked off their bond buying 15 program about two years ago. To put things 16 in perspective, French and Government bonds 17 have not negative interest rates out to five 18 years. This is not normal. We are not in a 19 situation where Government interest rates 20 are, by any stretch of the imagination, 21 normal. So even though, as I said, Canada 22 was back to normal in 2010, the U.K. 2012, 23 the U.S. ended its bond buying program in 24 2014, I don't know when Europe is going to 25 get its act together, and Japan has embarked</p>	<p>1 money. Absolutely no question that spreads 2 have remained stable and above normal for 3 the last six years in Canada. We can see 4 this, the pink line, that's the "A" spreads. 5 It's been around about 150 to 180/200 basis 6 points at least since about 2010. Is that 7 because of high risk aversion or some 8 problems in the capital markets in Canada; 9 no, it's because long Canada bond yields are 10 so low, and that was the situation that I 11 spoke to in 2012, it's the situation that 12 Mark Carney addressed. There has been a 13 slight pickup in credit spreads over the 14 last six months, and that is due to the 15 slowdown in the economy and the weakened 16 equity markets, but that has picked up in 17 the normal credit spread adjustment that I 18 recommend. When we look at the U.S. versus 19 Canada, these are "A" spreads. I look to 20 use publicly available data. This is the 21 American data, it's Merrill Lynch "A" credit 22 spread. 23 (11:45 a.m.) 24 It's from the Federal Reserve Bank of St. 25 Louis that maintains FRED, the Federal</p>
Page 138	Page 140
<p>1 on this – they're even thinking of 2 increasing their bond buying program, but 3 when they actually get their capital markets 4 back to normal is anybody's guess. 5 Predicting what's going to happen in 6 interest rates right now is not a question 7 of predicting economic fundamentals; it's a 8 question of predicting the actions of 9 Central bankers. When we look at interest 10 rates, this is RBC's forecast. First quarter 11 2016, I draw your attention to two things; 12 interest rates in Canada, the 30 year bond 13 yield 2.25, 30 year in the U.S. 3.3. Is it 14 unusual that U.S. interest rates are 60, 50, 15 100 basis points higher than Canada; no, 16 it's been that way for the last four years 17 and it's forecast to be that way for at 18 least the next two years. So we have to 19 grapple with the problem that Canadian 20 interest rates are significantly lower than 21 those in the United States, and it's an 22 impact in terms of the global capital 23 markets. Long term spreads, utilities often 24 like to look at the spreads as an indicator 25 rather than the absolute cost of borrowing</p>	<p>1 Reserve Economic Databank. So this is free 2 data to download and academics love getting 3 free data. The "A" spread is the Scotia 4 Capital, "A" spread of their "A" rated bonds 5 of Government of Canada bonds. The striking 6 thing when we look at that is not just how 7 much severe was the U.S. financial crisis, 8 but the fact that "A" spreads in Canada have 9 been higher than those in the United States 10 since 2010. There was that little hiatus in 11 2011 when we seriously were thinking the 12 U.S. is going to default on its debt for 13 voluntary reasons, simply for political 14 gain, and as a result spreads in the U.S. 15 popped up. Apart from that, "A" spreads 16 have been persistently 50 basis points or so 17 lower in the United States than in Canada, 18 not because of risk aversion. If that was 19 risk aversion, it wouldn't have lasted for 20 five years when the Canadian economy has 21 been performing so well, and particularly 22 when Mark Carney was saying that we were 23 firing on all four cylinders. What other 24 indicators are there? Canadian financial 25 stress, Canadian financial conditions index,</p>

Page 141	Page 143
<p>1 we can see again the financial crisis, but</p> <p>2 we've had loose conditions well into 2015.</p> <p>3 The Bank of Canada now stresses the results</p> <p>4 from its Senior Loan Officers Survey. Again</p> <p>5 we see the tightening during the financial</p> <p>6 crisis, loose conditions up until very</p> <p>7 recently, a tiny little above normal,</p> <p>8 indicating mainly, I would suggest, problems</p> <p>9 in loan offices looking at firms exposed to</p> <p>10 the oil and gas sector, but no indication</p> <p>11 whatsoever of credit concerns. So what we</p> <p>12 have are unreasonably low long term Canada</p> <p>13 yields, no signs of unusual stress in the</p> <p>14 financial system, slight pickup in credit</p> <p>15 spreads about 15 basis points, loan</p> <p>16 conditions around normal, level of interest</p> <p>17 rates very low, and this is where I'd like</p> <p>18 to stress utilities or nobody borrows</p> <p>19 spreads. If you went to the bank to renew</p> <p>20 your mortgage and they said, well, don't</p> <p>21 worry about what the rate is, it's only 50</p> <p>22 basis points over the five year rate, then</p> <p>23 you say, well, excuse me, what is the five</p> <p>24 year rate, what am I actually borrowing my</p> <p>25 money at. What matters is the absolute</p>	<p>1 time value of money, the risk free rate, the</p> <p>2 market risk, which is the market risk</p> <p>3 premium times the beta, the relative risk</p> <p>4 coefficient. So the board has accepted</p> <p>5 this. Every board in Canada has accepted</p> <p>6 this. The big problem at the moment is the</p> <p>7 risk free rate, and there's absolutely no</p> <p>8 shying around the fact that it's incredibly</p> <p>9 difficult to think what is the proper risk</p> <p>10 free rate to use in a risk premium model. I</p> <p>11 told the Board three years ago that interest</p> <p>12 rates at that time were not the sort of</p> <p>13 interest rates that investors use when they</p> <p>14 work out an equity cost. I continue to hold</p> <p>15 that and I've noted that since then, more</p> <p>16 and more people have been using what they</p> <p>17 call a normalized risk free rate. Duff &</p> <p>18 Phelps reference a normalized risk free</p> <p>19 rate. The AON Hewitt talked about a normal</p> <p>20 risk free rate for the long Canada bond</p> <p>21 yield, and normal is about 3.8, 4, 4.2</p> <p>22 percent. It is not the rate we've got at</p> <p>23 the moment. It's what we tend to think of as</p> <p>24 what we should have or what is normal, a</p> <p>25 normalized rate, but other than that, the</p>
Page 142	Page 144
<p>1 borrowing cost of the utility. Spreads, you</p> <p>2 don't borrow spreads. So this is the</p> <p>3 utility and the non-utility "A's". I like</p> <p>4 to look at this because we have a long</p> <p>5 experience in Canada that during times of</p> <p>6 financial crisis, utility debt does not</p> <p>7 experience the flight to quality and the</p> <p>8 problems of non-utility debt. We don't see</p> <p>9 that over the last two or three years</p> <p>10 because we haven't had a significant flight</p> <p>11 to quality or any significant problems. We</p> <p>12 have interest rates now for "A" rated</p> <p>13 utility debt that's about 20/25 basis points</p> <p>14 less than what I was using in 2012.</p> <p>15 JOHNSON, Q.C.:</p> <p>16 Q. Dr. Booth, would you please present to the</p> <p>17 Board your risk premium perspective?</p> <p>18 DR. BOOTH:</p> <p>19 A. This board, like most boards in Canada, put</p> <p>20 primary interest on risk premium models.</p> <p>21 That's at the heart of the automatic</p> <p>22 adjustment models that almost every board in</p> <p>23 Canada use, so Canada has been a CAPM or a</p> <p>24 risk premium jurisdiction for the last 20</p> <p>25 years. The risk premium just looks at the</p>	<p>1 rest of it is absolutely standard. The CAPM</p> <p>2 is still overwhelmingly the most popular</p> <p>3 model in finance because it captures the</p> <p>4 three basic principles; time valued money,</p> <p>5 risk valued money, tax valued money. Other</p> <p>6 models, the second most popular model apart</p> <p>7 from looking at actual rates of return is</p> <p>8 multi-beta, or this survey referred to it as</p> <p>9 "multi-beta CAPM" or "multi-factor models",</p> <p>10 and I included in my testimony this time the</p> <p>11 most common multi-factor model just to</p> <p>12 illustrate what, in fact, people look at as</p> <p>13 the competitor to the CAPM. They don't look</p> <p>14 at the dividend discount model, or the</p> <p>15 discounted cash flow model, as a competitor.</p> <p>16 The reason being that it's only appropriate</p> <p>17 for a subset of firms. It's not something</p> <p>18 you can use for all firms because the</p> <p>19 assumptions of the model aren't satisfied,</p> <p>20 whereas multi-beta CAPM or CAPM multi-factor</p> <p>21 models are appropriate for all firms. So</p> <p>22 what have we got? I like to do my own</p> <p>23 historic estimate, and my Appendix "B" says</p> <p>24 5 to 6 percent, I'm comfortable with that,</p> <p>25 even though the actual historic evidence in</p>

Page 145	Page 147
<p>1 Canada is lower than that. There are 2 structural changes in the markets that tend 3 me to believe that 5 or 6 percent is 4 reasonable. Fernandez surveys thousands of 5 people, and as I've said to this Board in 6 2009 and 2012, you can take my opinion, you 7 can take Ms. McShane's opinion, or you can 8 take the opinion of thousands of people 9 responding to surveys, and I don't think 10 it's possible to discount all of that survey 11 response. U.S., the evidence, the median, 12 5.3 percent; Canada 6 percent. That's 13 interesting because up until a couple of 14 years ago the U.S. market risk premium was 15 higher than Canada. The reason is that the 16 risk premium is applied to the risk free 17 rate, and the risk free rate is lower in 18 Canada. The long Canada bond yield is lower. 19 The overall capital market return, the 20 expected return on the equity market, U.S. 21 median 8 percent, Spain 7.8, Germany 6.4, 22 France 7 percent, U.K. 7.1, Italy 6.7, 23 Canada 8 percent. You go through all of 24 them, it's incredibly difficult to get out 25 of a 6 to 8 percent range when you start</p>	<p>1 return to an arithmetic return. You look 2 down, 8.3, 9.3, 7.1, 7.6, 8 – the reporter 3 will get all of this, but it's difficult to 4 see high numbers. It's looking at the 5 overall equity market, 7, 8 percent. Duff & 6 Phelps, just as I was putting my surrebuttal 7 together, in my inbox, I got this note from 8 Duff & Phelps. I talked to Roger Grabowski 9 about ten years ago because he wanted to 10 know where I got my data from – they've got 11 a business now of estimating the cost of 12 capital. Duff & Phelps, using its own data, 13 is recommending 5.5 percent market risk 14 premium in the United States, over 15 interestingly a 4 percent long term U.S. 16 normalized yield. That's incredibly similar 17 to what I'm recommending. I don't know how 18 many external reports I can get, but, I 19 mean, Duff & Phelps, AON Hewitt, TD 20 Economics, thousands of people responding to 21 surveys, as well as my own evidence, 22 indicates 5 to 6 percent for the market risk 23 premium over some form of normalized risk 24 free rate. How do we adjust this to the 25 risk of a utility? I heard Mr. Coyne, I</p>
Page 146	Page 148
<p>1 talking to market participants about what 2 they think a reasonable expected return on 3 the overall equity market is, and as the 4 Alberta Utility Commission has mentioned, 5 and several utility commissions have 6 mentioned, utilities are less risky; as a 7 result, they should get less than the 8 overall equity market. So 8 percent for the 9 equity market, I've been trying to bring in 10 as many objective external estimates as 11 possible. TD Economics, this is the same 12 one I put to the Board three years ago, they 13 said 2 percent for cash, 3 percent for 14 bonds, 7 percent for equities. Those are 15 compound ten year returns, you have to bump 16 them up a little bit to get arithmetic 17 returns, so they understate the equity 18 market return, 8.5 percent looks more 19 reasonable. This is old, so let's look at 20 some more recent data. AON Hewitt, this was 21 January of this year, AON Hewitt is a major 22 provider of data to capital markets for 23 funds doing asset allocation, where they 24 expect to put their money, and this is again 25 – they do the conversion from a compound</p>	<p>1 started counting how many times he said 2 standard, standard to adjust to market. It 3 is not standard and it is not a standard 4 thing in a basic finance textbook. At least 5 it's not in ours. That was work done by 6 Marshall Blume in 1970, updated in 1975. 7 After that, there's been a huge mushroom of 8 industry to get better betas. Barr 9 Rosenberg of University of California set up 10 a consortium firm called BARRA to come up 11 with better betas, and this is actually the 12 foundation for a lot of the factor models, 13 but before the AUC 2009, the AUC said, "The 14 Commission is persuaded by the empirical 15 analysis of Drs. Kryzanowski and Roberts". 16 Note, I'm saying, they said, "Kryzanowski 17 and Roberts", they did not say me, I'm not 18 the only one saying you shouldn't adjust 19 towards 1, this is sort of standard stuff. 20 "The commission is persuaded by the 21 empirical evidence of Drs. Kryzanowski and 22 Roberts that there is insufficient evidence 23 to support the use of adjusted betas for 24 Canadian utilities if the purpose of the 25 adjustment is to adjust the betas towards 1.</p>

Page 149	Page 151
<p>1 Therefore, betas should not be adjusted 2 towards 1. Therefore, the Commission 3 rejects Mr. Coyne's beta results as 4 unreasonably high because he adjusted beta 5 estimates on the assumption that they would 6 revert to 1. In other words, his analysis 7 assumes that in time utilities would be as 8 risky as the market as a whole". I don't 9 think there's anybody in the world who 10 believes that Newfoundland Power will 11 eventually be as risky as the overall stock 12 market. Having said that, statistical betas 13 are a statistical estimate. I've said to 14 this Board and I've said to every other 15 board, betas estimate what happened during 16 that time period, and I use a bit of Zen 17 philosophy, "If a tree falls in the forest 18 and there's no one there to witness it, does 19 it make any noise". This is the problem 20 with statistical estimates; if nothing 21 happened during the period, you don't 22 estimate it. If something dramatic happens 23 in the period, you estimate it. So, when we 24 look at the actual betas of Canadian 25 Utilities we see this huge U shape when we</p>	<p>1 other way of looking at this is to look at 2 index betas because we have a utility index. 3 Great advantage of looking at the index 4 because we have all this M&A activity. One 5 utility buys up another utility, but they're 6 still in the index. 7 So we look at this we know there's two 8 things; first of all, we get the same U 9 shape which is obvious. The second thing is 10 I estimated the beta with and without the 11 impact of interest rate changes. Utilities 12 are high dividends yielding stocks. They 13 are defensive stocks. What happens is that 14 when the market collapses utility stocks 15 trade on a high dividend yields. And when 16 the economy gets stronger, they trade on 17 their earnings and less on their bond like 18 characteristics. So, interest sensitivity 19 of utility stocks is incredibly important. 20 And you can see the green line is their 21 interest sensitivity, it goes up and down 22 with their betas; only opposite. Because 23 when the betas of utility stocks are low, 24 it's generally because the market is 25 collapsing and is generally because interest</p>
Page 150	Page 152
<p>1 look at the pattern of the betas going back 2 the last 15/20 years. We see this huge U 3 shape in the middle; why is that? Well, any 4 Canadian will tell you what happened in the 5 2000s; Nortel, JDS Uniphase, internet 6 bubble. They took the Canadian market up and 7 they took the Canadian market down. Did you 8 utility shares go up? No. Did they go down? 9 No. So, the estimated beta coefficient, the 10 extent to which utility share moves with the 11 markets went to very low points. As soon as 12 that five year period passed out of the 13 estimation window, betas for utilities 14 reverted to the normal sort of range. So, 15 statistical estimates cannot be used without 16 judgment. 17 I tell every board that the statistics 18 constrains judgment, but you have to 19 understand what goes on. If you want 20 someone to count a bunch a numbers, go and 21 hire a statistician. If you want somebody 22 to tell you what the numbers mean or what 23 happened in the economy to generate those 24 numbers, go and talk to a professor of 25 Economics or a professor of Finance. The</p>	<p>1 rates have come down. And as a result, 2 investors buys defensive utility stocks. 3 This is not just my opinion. 4 (12:00 p.m.) 5 Maureen Howe, used to be the best 6 senior utility analyst at RBC and I love 7 this group because it says exactly what I 8 just said. Like convertible bonds when 9 interest rates are low as they currently 10 are, the companies trade on their bond 11 value. Which is you look at utilities and 12 say, well, they've got a nice fat dividend 13 yield, I'm going to buy them just like I'm 14 going to buy a bond when things are bad. 15 And are supported by tax efficient dividend 16 yields and that's the third message in 17 finance, the impact of taxes. When the ten 18 year GIC yield rises above 66 ½ percent, the 19 Canadian companies trade on the basis of 20 their underlying earnings and P/Es. 21 So, when you look at utility stocks, 22 you have to take into account if the betas 23 are low, why are they low? At the moment 24 they're a little bit low because they're 25 trading based upon their interest rates,</p>

Page 153	Page 155
<p>1 their bond like characteristics. How do</p> <p>2 those compare with the U.S.? This is</p> <p>3 exactly the same data, standard estimates of</p> <p>4 betas over the preceding five years of</p> <p>5 monthly returns. Going back December '94,</p> <p>6 so that's data going back to January 1990,</p> <p>7 so that's 25 years, sorry 24 years' worth of</p> <p>8 capital market history. We see the same U</p> <p>9 shape in the United States because they had</p> <p>10 exactly the same problems, only less severe</p> <p>11 than we are. The striking thing is how much</p> <p>12 higher are the electric stocks, the betas</p> <p>13 for electric stocks in the United States?</p> <p>14 For the last 15 years the beta</p> <p>15 estimates which means the last 20 years of</p> <p>16 data indicates significantly higher beta</p> <p>17 coefficients for electric stocks in the</p> <p>18 United States. So, there's actually no</p> <p>19 question in my mind the U.S. investors look—</p> <p>20 the U.S. gas companies as being lower risk</p> <p>21 than U.S. electric companies because nearly</p> <p>22 all of the electric companies in the U.S do</p> <p>23 have generation and they're viewed as</p> <p>24 inherently riskier. I wouldn't go in</p> <p>25 through a lot comparisons of A against B. I</p>	<p>1 .19, .25; average in the U.S., .34, .5, .38,</p> <p>2 .51. The bets for these utility stocks and</p> <p>3 these are the latest ones are all higher</p> <p>4 than they are in Canada.</p> <p>5 So, I look at the fair ROE, long term</p> <p>6 Canada yield for the 2016 test year 2.81</p> <p>7 percent, market risk premium 5 - 6 percent;</p> <p>8 beta, .45 - .55; issue costs; credit spread</p> <p>9 adjustment that I introduced three years</p> <p>10 ago, currently 190 basis points, that adds</p> <p>11 50 percent of that; 45 basis points, 6 - 7</p> <p>12 percent. It's incredibly difficult to get</p> <p>13 above 6 - 7 percent for using the capital</p> <p>14 asset pricing model. When we look at U.S.</p> <p>15 utilities I do a DCF for the U.S. utilities.</p> <p>16 I look at the growth estimates. I put</p> <p>17 something in that is not normally put in</p> <p>18 which is the past five year growth rates for</p> <p>19 these U.S. utilities which is the first</p> <p>20 column, Vectren, 10.44; WGL, -17.1;</p> <p>21 Piedmont, 3.37; Northwest, -18.3; New</p> <p>22 Jersey, 7.1; Laclede, -5.6; ATMOS, 14.6;</p> <p>23 Southwest Gas, -13.7. Huge volatility in</p> <p>24 the past five years of earnings growth for</p> <p>25 these stable U.S. utilities and they're</p>
Page 154	Page 156
<p>1 would at what the capital market tells us</p> <p>2 and the capital market tells us that</p> <p>3 electric companies in the U.S. are riskier.</p> <p>4 Can versus U.S., Mr. Coyne kept saying</p> <p>5 standard, standard, standard.</p> <p>6 Well, any members of the Commission or</p> <p>7 any member in this audience can go to the</p> <p>8 Globe and Mail and they can—the Globe and</p> <p>9 Mail's website and they can get the beta for</p> <p>10 Canadian Utilities; they're not adjusted.</p> <p>11 They can go to Financial Post; they're not</p> <p>12 adjusted. They can go to Yahoo; they're not</p> <p>13 adjusted. They can go to Google and they're</p> <p>14 not adjusted. I use RBC because I'm an RBC</p> <p>15 client and I can get them off their website</p> <p>16 easily. So, I've got my estimates as of the</p> <p>17 end of 2014. All of these estimates are</p> <p>18 different because they use different</p> <p>19 estimation periods. I use the academic</p> <p>20 standard five years of monthly data. Some</p> <p>21 of the other ones use weekly data; some of</p> <p>22 them use three years' worth of data.</p> <p>23 Because what we're trying to do is just</p> <p>24 estimate the future risk. But when we look</p> <p>25 at these, the average in Canada, .25, .53,</p>	<p>1 pretty much the same for the electrics,</p> <p>2 although not quite the big negative ones.</p> <p>3 If you accept those estimates for the</p> <p>4 growth rates going forward from the analysts</p> <p>5 and I've got down the analysts here from</p> <p>6 where I got the data, we're basically</p> <p>7 relying upon here, estimates of growth. You</p> <p>8 can plug them all in and you get 8 ½ to 8.9</p> <p>9 percent for the fair Rate of Return. Is</p> <p>10 that reasonable? Academics accept that</p> <p>11 analysts are optimistic, most of the</p> <p>12 research shows that they're optimistic. Not</p> <p>13 because of anything fraudulent, but because</p> <p>14 they're human. They tend to look at these</p> <p>15 things in a rosey light and they get</p> <p>16 information from the company, they tend to</p> <p>17 be optimistic. Is the growth rate</p> <p>18 sustainable? Growth has to come for a</p> <p>19 utility from increases in the rate base and</p> <p>20 the rate of return they own on that rate</p> <p>21 base. So that depends upon their retention</p> <p>22 rate, how much of their earnings are plowed</p> <p>23 back into the company, and the rate of</p> <p>24 return they own on those earnings. Taken</p> <p>25 that sustainable growth rate, you end up</p>

Page 157	Page 159
<p>1 with 3.43 to 3.77 for the gas; 2.7 to 2.4 2 for the electrics; not to dissimilar from 3 Oliver Wyman long run growth forecast for 4 U.S. utilities. So that would indicate fair 5 return of 6.8, 6.6, 6.2 something like that. 6 How optimistic are analysts? I put 7 information towards the Board three years 8 ago from that article from Mackenzie 9 reported in the newspaper, literally as I 10 was putting this together RBC gave me their 11 playbook. They circulate it quarterly and 12 they had a similar graph to Mackenzie. And 13 in addition they had this graph, predicted 14 v. actual earnings growth for the U.S. 2011 15 predicted 11 percent earnings growth; actual 16 6 percent. Predicted 10 percent, 2012; 17 actual 7 percent. Predicted 2013, 10 18 percent; actual, 7 percent. Predicted 2014, 19 9 percent; actual 7 percent. There's 20 absolutely no question, analysts are 21 optimistic. If we were dealing with pure 22 play, regulated utilities, I would agree 23 with Mr. Coyne, the range of optimism for 24 the analysts is relatively small. We're not 25 doing that. We're dealing with utility</p>	<p>1 that and say well, we don't expect that to 2 continue. Those are abnormally low rates of 3 return, and they're below the line. 4 Similarly, when we get very high return on 5 equity, I think that was Southwest Gas, 17 6 percent, investors look at that and say 7 well, I don't think that's going to 8 continue. That was just a ridiculously high 9 rate of return. There is a basic 10 relationship; the higher the return on 11 equity; the higher the market to book ratio. 12 If you believe that the market to book ratio 13 should be around 1.1 for regulated utility, 14 Ms. McShane testified to that effect for 15 many year before this Board and before most 16 boards in Canada. If you plug 1.15, you end 17 up with a 7.15 percent ROE. So, I have no 18 doubt whatsoever that the actual rates of 19 return earned by these utility holding 20 companies are regarded as very good as far 21 as the investors are concerned. So, overall 22 my recommendation, risk premium, DCF, I put 23 a lot more weight on DCF than I did, say, 24 five years ago. I tend to look for the DCF 25 more at the overall capital market than I do</p>
Page 158	Page 160
<p>1 holding companies and if we look at the data 2 for utility holding companies, we see a huge 3 variability in their rates of return. And 4 periodically we see significant losses. So, 5 we're looking at utility holding companies 6 for implications for regulated utility and 7 I'm under, no doubt whatsoever, that the DCF 8 estimates are optimistic. I need somebody 9 to prove to me that they're not optimistic 10 when all the evidence seems to indicate that 11 they are. 12 Finally, I looked at these U.S. 13 companies and I did a simple regression 14 analysis of their return on equity against 15 the market to book ratio. I don't think 16 anyone would doubt the proposition that more 17 is better; higher return on equity makes 18 people happy, and they're willing to pay 19 more for the stock. Market to book ratios 20 go up. So, I ran a regression of their 21 return on equity against the market to book 22 ratio, that's the pink blocks. If the 23 rates, actual return on equities are very 24 low, as they are for those first two 25 observations, investors are going to look at</p>	<p>1 for individual companies. For individual 2 companies, the constant growth rate model is 3 hazardous in using it for individual 4 companies. You have to sort of take into 5 account the optimism of the analysts and you 6 have to work out a growth rate that is 7 sustainable. Once you do that, you end up 8 with results that are consistent with what 9 we would expect. 10 JOHNSON, Q.C.: 11 Q. Does that conclude your perspective for the 12 Board today, Dr. Booth? 13 DR. BOOTH: 14 A. It does and I'm very sorry for going over 15 the 12:00. 16 CHAIRMAN: 17 Q. When is Godot going to arrive? 18 DR. BOOTH: 19 A. I wish I knew. I think the person who ask 20 that is the person running the ECB, the guy 21 running the Bank of Japan and the guy 22 running FED. And honestly, I was asked 23 before the BCUC the similar question, 24 "there's a lot of judgment this time, Mr. 25 Booth"? And I said yes, we can't get away</p>

Page 161

1 from that. We're basically looking at what
2 the central banks are doing.

3 GREENE, Q.C.:

4 Q. Excuse me, Mr. Chairman, for the record we
5 have to mark the presentation slides, so it
6 will be Information Item No. 20.

7 CHAIRMAN:

8 Q. So, we're adjourned until tomorrow morning
9 at 9:00.

10 GREENE, Q.C.:

11 Q. yes, I just wanted to make sure that that
12 was noted for the record.

13 CHAIRMAN:

14 Q. Okay.

15 Upon conclusion at 12:15 p.m.

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Page 162

CERTIFICATE

I, Judy Moss, do hereby certify that the foregoing is a true and correct transcript of a hearing in the matter of a General Rate Application by Newfoundland Power Inc. to establish customer electricity rates for 2016 and 2017 heard on the 7th day of April, 2016 at the Public Utilities Commission office, St. John's, Newfoundland and Labrador and was transcribed by me to the best of my ability by means of a sound apparatus.

Dated at St. John's, NL this
7th day of April, 2016

Judy Moss
Discoveries Unlimited Inc.

A				
A+ - 64:15 A2 - 119:21, 119:23, 120:2 AA - 130:19 AAA - 130:17, 130:18, 130:20 Ab - 91:6 Ability - 55:6, 62:1, 103:18, 104:9, 109:8 Able - 3:7, 33:5, 33:6, 39:22, 50:24, 72:24, 73:6 Abnormally - 18:14, 128:17, 159:2 Above - 47:18, 53:7, 65:22, 66:6, 66:21, 67:4, 67:6, 68:16, 69:8, 69:24, 71:18, 71:22, 72:4, 110:19, 129:7, 129:9, 139:2, 141:7, 152:18, 155:13 Absolute - 136:18, 138:25, 141:25 Absorbed - 52:17 Academic - 154:19 Academics - 140:2, 156:10 Accept - 20:15, 28:14, 33:20, 37:4, 37:5, 100:3, 156:3, 156:10 Acceptance - 3:19 Accepted - 21:21, 33:24, 34:19, 41:19, 143:4, 143:5 Access - 73:16, 120:1 Accesses - 121:10 Account - 23:12, 49:24, 51:8, 68:4, 68:25, 70:15, 110:13, 111:9, 121:4, 152:22, 160:5 Accounts - 69:1 Accurate - 131:8 Acknowledge - 70:19 Acknowledged - 18:16, 53:23, 71:19 Across - 36:12, 107:9, 107:18, 120:25 Act - 107:15, 130:22, 137:25 Acting - 123:5	Action - 66:14, 110:17 Actions - 127:23, 138:8 Activity - 135:9, 151:4 Acts - 127:1 Actual - 4:9, 54:15, 144:7, 144:25, 149:24, 157:14, 157:15, 157:17, 157:18, 157:19, 158:23, 159:18 Add - 23:3, 67:9, 124:4, 130:1 Added - 55:23, 69:6 Adding - 132:24 Addition - 19:19, 25:4, 45:10, 87:16, 101:10, 157:13 Address - 16:12, 16:18 Addressed - 36:1, 139:12 Adds - 155:10 Adjourned - 161:8 Adjust - 18:13, 51:24, 71:10, 129:19, 147:24, 148:2, 148:18, 148:25 Adjusted - 16:25, 17:10, 17:14, 17:22, 18:18, 37:4, 90:13, 148:23, 149:1, 149:4, 154:10, 154:12, 154:13, 154:14 Adjustment - 17:18, 18:23, 20:2, 20:4, 20:5, 20:8, 20:11, 23:6, 23:16, 24:17, 24:21, 34:7, 34:20, 34:23, 34:25, 35:4, 35:9, 35:14, 36:2, 36:5, 36:16, 64:23, 65:8, 68:3, 139:17, 142:22, 148:25, 155:9 Adjustments - 16:15, 17:3, 17:5, 18:6, 18:12, 24:12, 24:15, 25:9, 25:15, 26:1, 26:4, 40:11, 50:20, 52:5, 54:24, 82:10 Adopt - 40:18, 102:5 Adopted - 40:23	Advance - 32:13 Advanced - 130:14 Advantage - 151:3 Affect - 24:11, 25:14, 49:21, 60:12, 61:24, 67:18, 82:17, 82:23, 103:13, 108:23, 134:9 Affected - 14:15, 104:20, 110:11, 135:14 Affects - 61:23, 104:4 Aforementioned - 39:5 Against - 77:3, 153:25, 158:14, 158:21 Agencies - 54:17, 55:3, 75:7, 77:8, 78:8, 80:14, 116:22, 119:11 Agency - 75:9, 104:14, 118:23 Aggregate - 88:15 Aggressive - 123:8 Aging - 85:25 Agony - 9:9 Agree - 14:17, 27:8, 33:4, 33:22, 45:21, 56:10, 61:6, 66:3, 66:5, 74:24, 77:17, 77:19, 79:11, 87:1, 157:22 Ah - 31:1 Aim - 127:17 Alberta - 112:16, 121:6, 134:23, 135:9, 146:4 Allocated - 110:13 Allocation - 131:14, 146:23 Allow - 126:12 Allowance - 51:17 Allowed - 11:5, 59:13, 65:7, 78:15, 103:16, 104:9, 104:23, 105:19, 106:10, 109:9, 112:15 Allowing - 70:14 Allows - 10:22, 40:21 Alone - 125:5 Alright - 90:1 Alternative - 52:1, 107:9 Amazes - 95:24 Ameliorate - 122:13	America - 64:4, 82:25 American - 3:16, 4:5, 4:23, 15:13, 34:7, 34:9, 35:1, 35:3, 36:12, 37:20, 38:20, 99:23, 101:4, 139:21 Americanization - 100:2 Americanizations - 100:4 Americanized - 100:23 Americans - 100:3, 125:24, 132:8 Amount - 26:4, 87:20, 94:9, 131:23 Analysis - 2:17, 2:23, 3:5, 5:19, 10:11, 10:12, 10:14, 10:18, 10:23, 10:25, 11:10, 11:16, 11:17, 12:5, 14:5, 14:21, 19:15, 22:21, 22:22, 28:20, 46:7, 47:15, 58:6, 63:16, 65:16, 73:13, 76:9, 79:12, 87:1, 148:15, 149:6, 158:14 Analyst - 26:21, 27:1, 29:15, 30:11, 30:19, 31:14, 32:7, 32:15, 58:4, 152:6 Analysts - 27:6, 33:3, 156:4, 156:5, 156:11, 157:6, 157:20, 157:24, 160:5 And/Or - 3:24, 5:16 Announced - 94:21, 137:2 Anticipate - 19:9, 58:9 Anticipated - 17:24 Anybody's - 138:4 Anywhere - 106:14 AON - 143:19, 146:20, 146:21, 147:19 Apologize - 71:5 Appeared - 118:6 Appears - 3:18 Appendices - 91:20 Appendix - 44:2, 44:7, 101:13, 144:23 Apple - 31:21 Application -	19:10, 76:22 Applied - 32:5, 145:16 Applies - 104:7 Apply - 110:14 Approach - 28:25, 33:19, 34:3, 41:16 Appropriate - 2:1, 3:1, 3:7, 8:2, 9:1, 9:10, 12:25, 13:3, 22:7, 23:16, 34:24, 59:24, 70:9, 71:1, 78:1, 123:18, 129:20, 144:16, 144:21 Appropriately - 74:4 April - 6:4, 8:4 Arbitrarily - 110:22 Area - 57:24, 74:6 Areas - 48:8, 48:13, 74:1 Aren't - 64:1, 89:15, 144:19 Argue - 42:5 Arithmetic - 146:16, 147:1 Arrive - 160:17 Article - 157:8 Articles - 99:25 A's - 142:3 Ascended - 99:24 Asian - 82:6, 82:11 Aspect - 73:21, 77:15, 77:16 Assess - 63:7, 63:12, 136:9 Assessed - 66:4 Assessing - 49:24 Assessment - 61:21, 62:25, 67:18, 71:17 Asset - 146:23, 155:14 Associated - 46:24, 51:22, 59:7, 60:25 Association - 99:22, 99:23, 106:24, 107:5 Assumption - 56:24, 149:5 Assumptions - 29:5, 77:1, 144:19 ATCO - 105:12, 105:13 ATMOS - 155:22 Attempt - 64:9, 65:13, 106:8 Attempted - 16:18 Attempting - 3:25

Attention - 115:14, 116:23, 138:11
Attribute - 51:6
Attrition - 59:14
Attuned - 135:5
AUC - 148:13
Audience - 154:7
August - 18:21
Automatic - 142:21
Available - 58:21, 139:20
Average - 22:4, 26:17, 36:11, 36:20, 38:17, 45:7, 45:22, 46:12, 46:18, 47:18, 53:7, 63:22, 64:14, 64:19, 65:2, 65:5, 65:12, 65:14, 65:22, 66:6, 66:21, 67:4, 67:5, 67:6, 68:10, 68:16, 68:17, 69:8, 69:16, 69:24, 71:18, 71:23, 72:5, 92:8, 115:15, 154:25, 155:1
Averaged - 13:20
Aversion - 139:7, 140:18, 140:19
Award - 99:19
Aware - 16:5, 49:1, 52:9, 54:19, 54:20, 111:21, 111:22, 111:23

B

Back - 26:8, 37:12, 37:23, 42:20, 45:6, 45:14, 50:18, 55:15, 60:19, 61:22, 67:8, 71:17, 76:17, 77:6, 81:4, 90:2, 90:3, 90:8, 103:3, 103:7, 103:8, 118:12, 120:8, 124:23, 129:5, 133:24, 136:18, 137:22, 138:4, 150:1, 153:5, 153:6, 156:23
Backdrop - 100:15
Background - 99:5, 99:6
Backup - 62:8
Balance - 45:13, 70:21, 88:8, 126:17
Baltic - 93:6, 93:17, 93:19
Band - 12:15, 78:14

Bank - 126:16, 126:24, 128:23, 129:11, 129:13, 130:3, 131:16, 133:16, 133:23, 134:24, 134:25, 137:7, 137:12, 139:24, 141:3, 141:19, 160:21
Bankers - 138:9
Banking - 100:10, 125:14
Bankruptcy - 125:13
Banks - 161:2
Barely - 115:19
Bargain - 110:8, 111:6
Barr - 148:8
BARRA - 148:10
Base - 32:5, 32:12, 40:23, 156:19, 156:21
Based - 9:1, 9:3, 12:15, 32:4, 32:11, 43:18, 58:15, 63:5, 65:15, 77:3, 78:16, 87:17, 105:25, 152:25
Baseline - 29:3
Basic - 101:6, 107:17, 122:15, 122:20, 144:4, 148:4, 159:9
Basis - 24:5, 24:18, 24:21, 31:9, 34:24, 35:14, 35:22, 36:3, 36:14, 43:21, 64:20, 65:12, 68:10, 68:12, 71:2, 73:14, 117:24, 121:5, 128:6, 128:8, 129:24, 129:25, 130:1, 138:15, 139:5, 140:16, 141:15, 141:22, 142:13, 152:19, 155:10, 155:11
BBB - 79:6, 79:8
BC - 105:11, 106:20, 114:2, 117:25, 118:2, 118:17
BCUC - 35:7, 35:16, 118:2, 118:7, 160:23
Become - 82:5
Becomes - 68:11, 122:6, 123:22
Beforehand -

54:25
Begins - 53:13
Begun - 90:16
Behind - 35:16, 84:18
Beijing - 86:7
Belief - 30:2
Believes - 149:10
Below - 38:14, 38:16, 70:5, 70:12, 78:20, 159:3
Benchmark - 113:4
Benchmarks - 112:24, 113:1
Bene - 95:7
Benefit - 11:5
Beta - 17:1, 17:10, 20:3, 20:16, 25:5, 39:13, 41:8, 143:3, 144:8, 144:9, 144:20, 149:3, 149:4, 150:9, 151:10, 153:14, 153:16, 154:9, 155:8
Betas - 148:8, 148:11, 148:23, 148:25, 149:1, 149:12, 149:15, 149:24, 150:1, 150:13, 151:2, 151:22, 151:23, 152:22, 153:4, 153:12
Bets - 155:2
Bias - 29:22, 30:20, 31:5, 31:13, 33:15
Biased - 27:1
Biases - 29:18, 29:21
Big - 56:13, 56:14, 56:16, 81:24, 82:1, 83:13, 86:16, 92:9, 97:12, 103:4, 118:8, 118:9, 126:7, 143:6, 156:2
Bill - 134:25
Billion - 127:9, 131:12, 131:22, 137:9, 137:13
Bills - 126:25, 127:2
Bit - 5:4, 13:8, 47:4, 68:16, 82:12, 84:8, 84:11, 107:24, 112:10, 121:23, 128:7, 129:25, 134:18, 134:20, 146:16, 149:16, 152:24
Blip - 51:2

Blocks - 62:19, 158:22
Bloomberg - 20:3, 20:9
Blows - 50:14
Blume - 148:6
Boards - 102:20, 122:20, 142:19, 159:16
Board's - 30:9
Body - 15:3, 41:17
Boiled - 43:8
Bond - 15:18, 18:14, 19:3, 22:4, 22:24, 79:7, 114:10, 116:8, 117:20, 119:9, 119:14, 126:8, 126:9, 126:12, 127:4, 127:15, 128:4, 128:5, 128:10, 128:18, 130:19, 131:12, 131:16, 131:18, 131:25, 132:12, 136:14, 136:21, 136:24, 137:8, 137:11, 137:14, 137:23, 138:2, 138:12, 139:9, 143:20, 145:18, 151:17, 152:10, 152:14, 153:1
Bonds - 74:23, 120:5, 126:19, 128:14, 129:23, 136:25, 137:16, 140:4, 140:5, 146:14, 152:8
Book - 100:5, 100:7, 100:24, 115:15, 158:15, 158:19, 158:21, 159:11, 159:12
Booms - 119:8
Booth - 14:16, 14:20, 24:14, 24:17, 91:23, 98:10, 98:12, 98:15, 98:19, 98:22, 99:1, 99:4, 99:8, 101:10, 101:15, 101:18, 101:21, 102:3, 102:10, 102:14, 102:17, 113:8, 113:10, 124:12, 124:15, 132:3, 132:5, 136:8, 136:11, 142:16, 142:18, 160:12,

160:13, 160:18, 160:25
Booth's - 42:4, 97:24
Borrow - 142:2
Borrowing - 138:25, 141:24, 142:1
Borrows - 141:18
Both - 3:9, 16:23, 19:16, 23:19, 26:21, 29:2, 31:6, 55:21, 60:17, 67:2, 100:19
Bother - 34:17
Bottom - 26:17, 36:15
Bought - 119:13
Bounds - 96:13
Boy - 85:25
Break - 97:20, 97:23, 118:11
Brief - 99:5
Broad - 9:18, 12:19, 96:3
Broader - 9:12, 12:17, 33:11, 33:12, 52:18, 81:17
Broker - 91:6
Brought - 36:11, 45:6, 45:14, 128:2
Bubble - 150:6
Bucks - 95:23
Buffer - 89:24, 90:5
Buffered - 126:6
Build - 94:18
Bulk - 105:4
Bump - 146:15
Bunch - 150:20
Business - 6:22, 7:2, 7:4, 32:16, 32:22, 32:25, 39:19, 42:4, 42:14, 42:23, 43:2, 44:15, 44:24, 52:2, 53:7, 61:22, 66:21, 67:10, 67:13, 69:5, 69:7, 71:18, 72:5, 78:18, 78:19, 79:17, 79:23, 102:16, 102:18, 103:10, 103:14, 103:20, 103:23, 103:25, 104:2, 104:16, 105:1, 105:6, 112:7, 120:23, 121:2, 121:11, 147:11
Businesses - 32:24, 92:10, 97:14
Buy - 57:12, 90:23,

90:25, 91:2, 91:4,
126:19, 126:23,
126:24, 127:14,
152:13, 152:14
Buying - 126:8,
126:10, 127:2,
127:4, 136:14,
136:21, 136:24,
136:25, 137:8,
137:9, 137:13,
137:14, 137:23,
138:2
Buys - 118:17,
126:25, 151:5,
152:2
Byte - 135:2

C

Calculated - 22:6
Calculates - 41:5
California - 148:9
Call - 17:5, 23:8,
82:12, 88:3, 93:6,
95:15, 116:12,
120:3, 126:8,
143:17
Called - 15:18,
62:6, 62:14, 93:15,
116:20, 148:10
Calling - 24:20
Calls - 119:3
Canada's - 133:24
Cane - 119:13
Can't - 31:2, 63:19,
100:20, 106:6,
160:25
Capability - 110:9
Capacity - 89:17,
94:10, 94:19,
129:5, 132:25,
134:11, 134:14
CAPM - 13:17,
13:25, 14:1, 14:3,
14:6, 14:7, 14:19,
15:17, 16:6, 16:10,
17:5, 18:7, 18:9,
18:12, 23:8, 24:15,
36:9, 37:4, 38:3,
38:22, 38:24, 39:2,
39:7, 39:8, 42:7,
142:23, 144:1,
144:9, 144:13,
144:20
Capture - 19:16,
22:18
Captures - 144:3
Capturing - 90:24
Cards - 87:4, 87:19
Carefully - 28:18
Carney - 128:23,
128:25, 130:7,

130:13, 134:13,
139:12, 140:22
Case - 2:25, 13:1,
17:9, 22:8, 34:22,
42:8, 43:22, 54:2,
71:6, 73:7, 79:15,
83:4, 110:20,
120:18
Cases - 40:23,
41:3, 46:17, 59:10,
128:14
Cash - 110:20,
116:12, 116:19,
126:20, 144:15,
146:13
Casual - 95:20
Catastrophic -
130:16
Caught - 133:13
Cause - 36:13,
122:1
Caused - 47:17
Causes - 104:10
Caution - 75:19
Cautiously - 92:3
Central - 119:23,
135:23, 137:12,
138:9, 161:2
Centre - 67:14
Certain - 73:21,
75:23, 102:25,
135:3
Certainly - 7:16,
14:17, 32:19,
45:15, 47:14,
54:19, 56:9, 66:8,
67:21, 76:8, 79:18,
79:24, 83:9, 87:25,
89:6, 95:19, 96:2,
97:18, 108:22,
111:21, 112:4
Certainty - 9:15,
130:15
Cetera - 83:5
CHAIMRAN - 87:12
Chair - 1:15, 99:10,
99:19
CHAIRMAN - 1:2,
1:9, 80:23, 81:2,
81:3, 81:13, 81:18,
83:25, 84:15,
84:23, 85:2, 85:11,
85:24, 88:9, 88:17,
88:23, 89:9, 90:12,
90:18, 91:7, 91:16,
91:22, 92:1, 92:16,
92:24, 93:3, 93:11,
93:16, 94:1, 94:5,
94:11, 94:20, 95:2,
95:9, 95:21, 96:6,
97:3, 97:15, 97:19,

98:1, 98:5, 98:9,
160:16, 161:4,
161:7, 161:13
Challenges - 39:6
Challenging -
78:24
Change - 31:2,
31:4, 36:14, 40:15,
46:22, 74:25,
77:22, 80:4, 80:5,
97:20, 112:6, 119:5,
121:16, 127:20,
128:15
Changed - 8:13,
9:4, 30:8, 30:24,
31:17, 47:8, 66:13,
86:3
Changes - 46:3,
46:23, 49:3, 62:17,
75:22, 82:20,
111:13, 119:2,
145:2, 151:11
Changing - 132:21
Characteristics -
10:21, 45:10,
45:12, 64:18,
151:18, 153:1
Characterizes -
58:25
Characterizing -
3:16, 125:21
Chart - 124:25
Cheap - 108:6,
108:9, 108:13
Cheaper - 109:4
Check - 74:24
CHIAMAN - 86:25
Chicago - 99:24,
126:16
Chief - 72:6, 98:12,
105:21
China - 33:1, 82:6,
82:7, 82:16, 82:18,
83:15, 84:11, 86:18,
92:12, 93:4, 94:12,
131:14, 131:20,
132:16, 132:17,
132:20, 133:1,
133:13, 133:21,
134:1
Chine - 33:8
Chinese - 82:17,
84:1, 85:6, 85:16,
86:10, 86:14,
87:10, 92:17,
132:18, 133:6
Chugging - 84:4,
135:17
Circulate - 157:11
Circumstance -
62:6

CIT - 99:10
Citizens - 86:18
Clarification - 11:4
Clarified - 7:18,
123:22
Clarify - 6:11
Clarity - 53:9
Classified - 9:24,
10:7
Clearer - 122:6
Cleveland - 126:16
Close - 3:11, 52:16,
78:23, 79:13,
96:21, 120:14,
121:17
Closely - 30:3,
48:4
Closes - 115:5
Co - 82:4
Cod - 48:22, 50:25
Coefficient - 17:1,
143:4, 150:9
Coefficients -
17:10, 153:17
Collaborator -
101:4
Collapse - 87:6,
94:19
Collapses - 151:14
Collapsing -
151:25
Collective - 86:21
Collectively - 88:7
College - 101:2
Column - 155:20
Combination -
10:5
Combine - 4:3
Combined - 69:5
Combines - 16:22
Come - 1:21, 9:7,
37:7, 37:12, 50:18,
60:19, 60:22, 67:8,
90:1, 90:3, 90:8,
109:20, 118:12,
148:10, 152:1,
156:18
Comes - 3:11,
23:4, 33:16, 52:16,
80:11, 81:11,
106:21, 111:7
Comfortable -
45:20, 144:24
Coming - 9:9,
40:10, 57:22,
71:17, 99:16, 111:1,
119:15, 135:23
Comment - 76:1,
81:12
Comments -
124:16, 124:17

Commission -
40:21, 41:5, 71:13,
146:4, 148:14,
148:20, 149:2,
154:6
Commissioners -
1:16, 98:9, 101:12
Commissions -
40:17, 146:5
Commitment -
127:25
Commodities -
93:13, 133:5
Commodity - 83:3,
106:22, 133:14,
133:22, 133:24,
134:3, 134:6,
134:7, 134:22
Common - 69:12,
105:3, 105:14,
112:18, 112:21,
112:22, 114:13,
114:18, 114:22,
115:23, 115:25,
117:18, 121:13,
121:21, 123:7,
123:18, 123:23,
123:24, 124:2,
124:3, 124:5,
144:11
Community -
125:25, 133:10,
137:6
Compact - 59:21,
111:6
Company - 2:22,
10:9, 10:10, 10:14,
10:24, 10:25,
12:19, 35:19,
40:24, 43:20, 45:4,
47:12, 50:24, 52:9,
52:10, 55:5, 57:10,
57:21, 60:3, 64:10,
64:25, 67:25,
68:20, 69:3, 71:2,
72:22, 73:15,
73:22, 79:12,
80:16, 104:7,
105:9, 114:7,
115:21, 116:18,
117:9, 117:13,
117:14, 117:15,
117:16, 118:3,
119:19, 156:16,
156:23
Company's - 76:9
Comparable -
2:14, 4:24, 5:23,
7:5, 7:7, 7:24, 8:2,
11:19, 11:20, 42:16,
66:22, 69:1, 69:4

Comparative - 63:16 Comparators - 70:11, 121:6, 121:7 Compare - 64:12, 106:7, 107:12, 107:19, 153:2 Compared - 6:23, 32:22, 44:24, 66:21, 79:9, 128:16, 131:23 Compares - 10:24 Comparison - 37:4, 131:4 Comparisons - 153:25 Compensates - 45:11 Competitive - 106:21, 107:1, 107:4, 107:8, 110:9, 122:19, 122:25 Competitively - 123:5 Competitor - 144:13, 144:15 Competitors - 70:10 Complained - 135:1 Completely - 125:18 Complex - 32:23, 82:1 Components - 102:21 Composition - 4:10 Compound - 146:15, 146:25 Compromise - 111:8 Compromises - 110:6 Compute - 41:11 Concentrated - 10:4 Concentrations - 6:19 Concern - 11:18, 11:19, 27:5, 31:7, 31:9, 32:17, 32:18, 33:14, 33:17, 34:5, 39:3, 39:7, 53:21, 55:15, 58:16, 77:10, 77:11, 80:4, 80:9 Concerned - 30:18, 55:2, 62:23, 77:25, 85:5, 87:22, 111:15, 124:6,	159:21 Concerns - 16:9, 16:12, 16:19, 30:9, 141:11 Conclude - 43:15, 47:18, 160:11 Concluded - 1:8 Concludes - 80:19 Conclusion - 42:22, 44:14, 66:9, 116:7, 161:15 Conclusively - 31:4 Conditions - 14:14, 15:11, 16:10, 16:14, 17:7, 17:15, 18:15, 20:4, 22:12, 23:7, 23:17, 41:15, 44:6, 61:18, 81:7, 81:11, 103:13, 119:6, 119:7, 128:12, 131:9, 140:25, 141:2, 141:6, 141:16 Conduit - 72:24 Confirm - 18:6, 30:21, 98:15, 101:11, 102:3 Conglomerates - 113:21 Congress - 130:21 Consequences - 79:5 Consequently - 110:16 Conservative - 67:24 Conservatively - 68:19, 127:5 Consider - 12:13, 15:6, 31:20, 48:13, 49:9, 109:14, 109:18 Considerable - 14:11 Considerably - 9:20 Considered - 4:23, 6:15, 8:1, 11:13, 76:3, 93:17, 109:20 Considering - 34:20 Considers - 109:17 Consistent - 104:9, 106:9, 160:8 Consistently - 105:19 Consortium - 148:10 Constant - 13:17, 26:10, 27:7, 27:16,	28:22, 29:3, 29:10, 29:22, 37:5, 116:15, 116:23, 160:2 Constantly - 110:25 Constrains - 150:18 Constraint - 90:9 Constructing - 94:13 Consultant - 71:20 Consume - 51:24, 52:1, 59:9, 86:20 Consumer - 54:19, 88:2, 107:7, 132:22, 133:3 Consumerism - 86:23 Consumers - 51:24, 54:23, 59:8, 86:9, 97:12 Consumption - 60:5 Container - 94:13 Containers - 94:23 Contention - 42:6 Context - 8:10, 106:25, 109:11, 109:12 Continue - 38:2, 70:25, 86:15, 89:20, 129:8, 143:14, 159:2, 159:8 Continues - 96:20, 111:13 Contrast - 110:12 Contribution - 53:6 Controversy - 14:11 Conversion - 146:25 Conversions - 109:1 Convertible - 152:8 Convey - 9:16 Copper - 83:5, 133:1, 135:13 Corporate - 88:1, 100:5, 128:5 Corrections - 101:18 Corroborating - 15:19 Cos - 116:12 Costs - 23:4, 23:5, 23:20, 51:23, 53:24, 55:2, 57:20, 92:10, 97:11, 107:7, 107:19, 107:21,	107:22, 108:17, 108:20, 109:12, 122:6, 122:8, 155:8 Couldn't - 103:6 Count - 59:11, 150:20 Counter - 70:21 Counting - 148:1 Countries - 32:25, 129:4, 131:15 Country - 3:24 Country's - 130:7 Couple - 59:6, 81:4, 145:13 Course - 25:3, 37:3, 38:25, 46:10, 79:20, 100:18 Courses - 100:8, 100:9 Cover - 107:25 Coverage - 74:22, 75:18 Coyne's - 149:3 CRA - 104:17, 104:18 Create - 42:3 Created - 82:15 Creates - 59:6 Credit - 7:6, 9:22, 9:23, 24:19, 26:3, 35:20, 49:22, 54:17, 55:3, 55:4, 66:13, 69:6, 74:11, 74:21, 75:4, 75:6, 75:9, 75:12, 75:24, 76:1, 76:5, 77:7, 77:8, 78:7, 78:8, 78:17, 79:2, 80:7, 80:8, 116:3, 116:24, 117:1, 117:4, 118:20, 129:22, 130:2, 139:13, 139:17, 139:21, 141:11, 141:14, 155:8 Crisis - 78:22, 87:25, 103:1, 103:4, 121:17, 125:11, 125:13, 129:2, 129:3, 134:4, 140:7, 141:1, 141:6, 142:6 Criteria - 4:15, 4:22, 119:4, 120:16 Critical - 109:13, 122:25, 129:16 Crops - 101:23 CROSS - 1:12 Curious - 85:6 Currencies - 82:14 Currency - 84:7,	84:9, 84:10, 130:11 Current - 15:10, 16:10, 16:13, 17:6, 17:15, 18:15, 19:6, 23:7, 23:17, 26:1, 41:14, 50:4, 54:1, 55:21, 76:13 Currently - 133:8, 152:9, 155:10 Curve - 126:11 Cushion - 79:15 Customer - 59:11, 60:4, 60:5 Customers - 51:14, 55:24, 56:19, 61:25, 62:7, 62:16, 62:19, 106:23, 109:5, 110:14 Cuts - 133:17 CV - 101:12 Cycles - 83:2 Cyclical - 94:17 Cylinders - 129:18, 129:21, 130:4, 131:7, 140:23
D				
Damaged - 112:2 Data - 3:19, 34:7, 34:20, 35:1, 35:9, 35:10, 36:7, 36:9, 36:17, 36:18, 38:18, 40:10, 65:16, 72:19, 113:17, 117:10, 139:20, 139:21, 140:2, 140:3, 146:20, 146:22, 147:10, 147:12, 153:3, 153:6, 153:16, 154:20, 154:21, 154:22, 156:6, 158:1 Databank - 140:1 Date - 1:3, 18:23, 42:13, 54:5, 54:6, 54:12, 54:22, 133:25 David - 87:2 Day - 52:8, 94:25, 102:15 Days - 14:9, 50:9, 50:11, 50:14, 57:18, 62:12, 84:12 DBRS - 116:3, 116:4, 118:22, 119:2, 119:12, 120:6, 120:12, 120:13, 120:21, 124:25				

DCF - 13:17, 13:18, 14:6, 15:9, 15:17, 15:21, 15:25, 22:21, 26:10, 28:11, 28:20, 29:1, 38:10, 39:18, 40:1, 40:3, 40:18, 41:5, 41:23, 42:1, 155:15, 158:7, 159:22, 159:23, 159:24

De - 87:24

Deal - 109:21

Dealing - 157:21, 157:25

Dealt - 50:13

Death - 62:6

Debate - 41:22

Debates - 41:12

Debt - 35:24, 51:11, 51:16, 51:20, 79:8, 79:19, 84:18, 87:9, 87:16, 87:20, 88:6, 88:10, 97:5, 97:11, 115:3, 116:14, 119:10, 119:17, 128:20, 130:25, 140:12, 142:6, 142:8, 142:13

Decade - 51:3

Decades - 80:13, 85:22

December - 153:5

Decide - 51:25, 52:2

Decided - 110:22

Deciding - 39:12

Decision - 18:11, 38:1

Decisions - 72:15, 82:17, 121:8, 123:17

Decline - 135:8

Deed - 75:19, 75:25

Deemed - 122:4, 124:6

Deeming - 123:20, 123:22

Deems - 123:25, 124:2

Deep - 115:2

Default - 131:1, 140:12

Defend - 68:12

Defensive - 151:13, 152:2

Deferral - 110:13, 111:9

Deficit - 130:23

Define - 6:23

Degree - 11:3, 90:21, 105:15, 130:15

Degrees - 99:16

Deliberate - 127:17

Demand - 59:7, 59:10, 60:4, 60:5, 106:16, 133:1, 133:2, 133:4

Demographic - 44:5

Demonstrate - 75:21, 77:21

Demonstrates - 31:4

Department - 99:20

Dependent - 82:5, 83:8

Depression - 125:17

Describe - 67:3, 81:6, 116:1, 132:4

Described - 65:21, 84:16, 85:6

Describes - 131:8

Desiring - 89:14

Desperate - 125:6, 126:14

Detached - 135:20

Detailed - 10:17, 11:11, 11:22, 12:5, 46:7

Deterioration - 94:22, 95:11

Determination - 26:16, 65:15

Determine - 4:15, 13:3, 15:3, 15:14, 26:9, 31:10, 57:5, 65:6, 91:9

Determined - 2:25, 12:25, 24:16, 42:13, 46:3, 53:24

Deviations - 104:11

Didn't - 9:16, 36:13, 45:2, 46:6, 64:22, 65:2, 65:7, 65:13, 67:21, 68:5, 72:10, 114:4, 121:18

Difference - 12:2, 12:7, 20:23, 20:25, 21:20, 23:14, 24:3, 25:3, 29:4, 35:11, 47:24, 79:6, 121:2

Differences - 14:11, 14:25, 34:21

Different - 8:12, 13:2, 25:4, 25:10, 29:16, 29:19, 31:21, 39:11, 50:9, 50:21, 68:2, 68:5, 68:6, 74:12, 74:13, 95:15, 100:9, 115:7, 118:21, 129:1, 154:18

Differential - 35:22

Differently - 12:13

Difficult - 39:9, 39:16, 50:24, 68:11, 82:18, 143:9, 145:24, 147:3, 155:12

Difficulty - 8:23

Digest - 74:3

Digits - 92:21

Dimension - 76:14

Diminished - 32:19

Dip - 78:20

Dire - 62:6

Directed - 102:8

Direction - 102:12

Directional - 63:17, 63:18

Directly - 33:13, 91:4, 110:11

Disadvantage - 63:24

Disagree - 43:14

Disallowance - 51:11

Disappeared - 113:18, 113:20

Disappears - 106:16

Discount - 144:14, 145:10

Discounted - 144:15

Discovered - 93:5, 107:13

Discussions - 71:25

Dislike - 14:22

Dismay - 96:17

Disruption - 50:21, 83:20, 92:9, 92:15

Disruptions - 82:11, 83:22

Dissimilar - 157:2

Distinct - 63:24

Distinction - 110:23

Distinguish - 64:21, 113:15

Distinguishing - 53:1

Distributed - 116:13

Distributes - 106:22

Distribution - 112:9, 112:13, 112:18, 112:20, 112:23, 112:25

Distributor - 106:20

Dividend - 40:9, 144:14, 151:15, 152:12, 152:15

Dividends - 151:12

Doctoral - 100:14

Document - 74:7, 74:25

Doesn't - 32:6, 42:8, 54:15, 64:18, 83:14, 86:13, 114:14, 119:5, 120:12

Dollar - 107:7, 115:11, 130:9, 130:10, 135:22

Dollars - 131:13, 131:23, 137:13

Dollars' - 127:6, 127:10, 137:9

Double - 92:21

Doubt - 158:7, 158:16, 159:18

Downe - 134:25

Downgrade - 77:3

Download - 140:2

Downside - 105:17

Downward - 82:10

Dr - 14:16, 14:20, 24:14, 24:17, 42:4, 91:23, 98:10, 98:12, 98:15, 98:19, 98:22, 99:1, 99:4, 99:8, 101:10, 101:15, 101:18, 101:21, 102:3, 102:10, 102:14, 102:17, 113:8, 113:10, 124:12, 124:15, 132:3, 132:5, 136:8, 136:11, 142:16, 142:18, 160:12, 160:13, 160:18

Dramatic - 52:11, 134:3, 149:22

Dramatically - 136:17

Draw - 115:14, 116:22, 138:11

Drawn - 44:13

Drives - 48:16, 116:19

Driving - 46:2, 46:22

Drop - 128:4, 134:4

Dropped - 135:22

Drs - 148:15, 148:21

Dry - 93:7, 93:17, 93:19

Due - 128:9, 134:8, 134:22, 139:14

Duff - 143:17, 147:5, 147:8, 147:12, 147:19

Dumb - 100:24

Dumping - 133:6, 133:9

E

Each - 6:13, 13:3, 13:8, 13:14, 13:15, 13:18, 13:20, 13:21, 29:13, 43:5, 43:24, 44:8, 85:9

Earlier - 7:22

Earliest - 56:25

Early - 48:21, 104:13, 104:19, 120:9, 123:17, 134:2

Earn - 2:15, 41:1, 41:3, 102:23, 103:16, 103:18, 104:9, 104:23, 105:18, 105:19, 109:8, 111:14, 121:5

Earned - 115:16, 115:19, 159:19

Earning - 33:2, 33:4, 104:12, 104:13, 106:10, 115:21

Earnings - 31:22, 32:4, 32:9, 32:11, 48:10, 59:14, 60:7, 61:25, 94:22, 95:11, 104:20, 106:7, 151:17, 152:20, 155:24, 156:22, 156:24, 157:14, 157:15

Earns - 105:23

Easily - 154:16

Easing - 136:21, 137:3

ECB - 137:12, 160:20

Economic - 43:18, 46:23, 47:4, 47:7, 47:24, 48:6, 49:2, 49:11, 49:20, 50:20, 51:3, 52:21, 57:24, 81:7, 82:2, 83:13,

<p>88:14, 90:9, 93:22, 119:6, 119:7, 125:8, 130:8, 135:8, 138:7, 140:1</p> <p>Economics - 44:5, 99:14, 146:11, 147:20, 150:25</p> <p>Economies - 50:8, 50:13, 82:11, 82:13, 83:23, 85:13, 88:3, 88:5, 132:10</p> <p>Economists - 85:4</p> <p>Edge - 45:5, 65:1, 65:14, 79:14</p> <p>Education - 99:19, 101:6</p> <p>Effect - 19:8, 19:10, 54:7, 57:3, 76:23, 159:14</p> <p>Effective - 24:11</p> <p>Efficient - 58:11, 122:16, 123:13, 124:9, 124:10, 152:15</p> <p>Effort - 11:3</p> <p>Eight - 92:25</p> <p>Elasticities - 59:7</p> <p>Election - 96:15, 96:19</p> <p>Electric - 5:16, 6:16, 6:19, 6:21, 6:22, 7:3, 7:11, 9:18, 9:25, 10:4, 10:5, 10:8, 10:10, 34:1, 35:2, 35:3, 52:10, 57:25, 73:25, 117:13, 117:14, 117:15, 118:3, 118:5, 118:8, 118:16, 153:12, 153:13, 153:17, 153:21, 153:22, 154:3</p> <p>Electrical - 132:25</p> <p>Electricity - 51:25, 107:8, 107:10, 107:22, 108:4, 108:10, 109:2, 109:4, 109:6, 111:20, 111:22, 118:20</p> <p>Electrics - 156:1, 157:2</p> <p>Element - 118:14</p> <p>Elements - 2:12</p> <p>Elephant - 126:7, 136:13</p> <p>Elsewhere - 52:3, 108:4, 108:21</p> <p>Embarked - 137:25</p> <p>Emera - 42:23,</p>	<p>43:16</p> <p>Emerged - 45:3</p> <p>Emphasise - 129:20</p> <p>Empirical - 148:14, 148:21</p> <p>Employed - 89:15, 90:4, 90:7</p> <p>Enables - 69:2</p> <p>Enbridge - 5:14, 105:13</p> <p>Encouraged - 62:13</p> <p>Energy - 57:18, 57:19, 109:15, 109:25, 114:3, 117:12, 135:12</p> <p>Engage - 127:4</p> <p>Engine - 86:15</p> <p>Engineers - 118:11, 118:13</p> <p>Ensure - 7:25, 8:25, 111:13</p> <p>Entertainment - 96:16</p> <p>Entities - 32:23</p> <p>Envelope - 45:5</p> <p>Episodic - 115:4</p> <p>Equilibrium - 19:18, 22:3, 84:5</p> <p>Equities - 146:14, 158:23</p> <p>Equity - 1:23, 32:4, 39:15, 45:10, 69:12, 69:18, 70:14, 79:18, 79:20, 80:1, 104:24, 112:18, 112:22, 114:12, 114:13, 114:18, 114:20, 114:22, 114:25, 115:3, 115:15, 115:23, 115:25, 117:11, 117:18, 121:13, 121:21, 123:7, 123:18, 139:16, 143:14, 145:20, 146:3, 146:8, 146:9, 146:17, 147:5, 158:14, 158:17, 158:21, 159:5, 159:11</p> <p>Ernst - 99:17</p> <p>Essentially - 12:3</p> <p>Established - 117:21</p> <p>Establishing - 2:10</p> <p>Estimate - 15:19, 17:16, 144:23, 149:13, 149:15,</p>	<p>149:22, 149:23, 154:24</p> <p>Estimated - 56:2, 150:9, 151:10</p> <p>Estimates - 16:25, 20:24, 146:10, 149:5, 149:20, 150:15, 153:3, 153:15, 154:16, 154:17, 155:16, 156:3, 156:7, 158:8</p> <p>Estimating - 29:1, 147:11</p> <p>Estimation - 150:13, 154:19</p> <p>Et - 83:5</p> <p>Euro - 103:1, 103:4</p> <p>Europe - 82:24, 129:4, 133:7, 137:24</p> <p>European - 125:25, 133:9, 137:6, 137:12</p> <p>Evaluate - 45:2, 105:8</p> <p>Events - 58:12, 126:6, 126:7, 135:3</p> <p>Eventually - 149:11</p> <p>Everybody - 85:9, 85:14, 125:23</p> <p>Everyone - 85:13</p> <p>Everyone's - 4:9</p> <p>Everything - 102:11, 103:19, 104:3, 107:22, 116:19</p> <p>Everywhere - 94:23, 95:5</p> <p>Evidence - 1:24, 13:16, 31:6, 39:11, 42:13, 44:13, 63:6, 75:2, 98:16, 98:23, 98:24, 102:4, 102:6, 104:22, 115:21, 144:25, 145:11, 147:21, 148:21, 148:22, 158:10</p> <p>Evidently - 83:9</p> <p>Exacerbated - 52:22</p> <p>EXAMINATION - 1:12, 72:17, 98:12</p> <p>Examined - 44:8, 70:25</p> <p>Example - 11:11, 33:8, 40:18, 50:17, 51:10, 58:1, 78:2, 80:6, 87:19, 110:9, 110:19</p>	<p>Exceed - 96:22, 96:23</p> <p>Except - 38:22</p> <p>Exception - 14:5, 23:19</p> <p>Exchange - 91:2, 91:3, 91:5, 131:21, 135:25</p> <p>Excluded - 5:14</p> <p>Exclusively - 15:25, 16:6</p> <p>Executive - 100:14, 127:22</p> <p>Exhibit - 74:15</p> <p>Exhibits - 31:25</p> <p>Exists - 33:17</p> <p>Expect - 19:17, 110:17, 116:24, 122:11, 146:24, 159:1, 160:9</p> <p>Expected - 19:19, 145:20, 146:2</p> <p>Expecting - 97:1, 136:16</p> <p>Expensive - 108:12, 108:20</p> <p>Experience - 61:16, 99:6, 100:12, 105:12, 142:5, 142:7</p> <p>Experienced - 105:1, 125:8</p> <p>Experiences - 125:19</p> <p>Expert - 15:4, 85:5, 98:16</p> <p>Experts - 14:12, 39:12</p> <p>Explain - 2:6</p> <p>Explained - 5:21, 31:8</p> <p>Explicit - 25:14, 35:8, 36:2</p> <p>Explicitly - 28:7, 69:14, 109:18</p> <p>Exposed - 84:9, 111:2, 111:3, 141:9</p> <p>Expressed - 27:5, 30:10, 34:5, 77:10, 86:20</p> <p>Expressing - 29:18</p> <p>Extensive - 100:12, 107:10</p> <p>Extent - 129:8, 150:10</p> <p>External - 146:10, 147:18</p> <p>Extra - 11:17, 127:12</p> <p>Eye - 96:21</p>	<p>F</p> <p>Face - 89:7, 106:14</p> <p>Faced - 122:9</p> <p>Facilities - 62:11</p> <p>Facing - 59:15</p> <p>Factored - 58:12</p> <p>Factoring - 58:6</p> <p>Factors - 33:10, 33:11, 40:16, 44:1, 44:7, 45:16, 52:25, 63:23, 64:5, 70:22, 70:23</p> <p>Fair - 2:11, 2:13, 36:23, 64:7, 89:17, 94:9, 98:17, 103:14, 103:17, 111:14, 113:3, 113:5, 155:5, 156:9, 157:4</p> <p>Fairly - 9:21, 56:24</p> <p>Faith - 86:10, 86:14, 86:22, 119:12</p> <p>Fall - 83:14, 114:9</p> <p>Falls - 43:19, 45:18, 46:25, 47:17, 47:19, 53:3, 53:24, 55:16, 62:18, 72:17, 109:10, 111:16, 122:1, 123:11, 123:21, 149:17</p> <p>False - 84:17</p> <p>Family - 120:12, 135:20</p> <p>Fan - 14:1</p> <p>Far - 85:4, 87:21, 119:1, 120:7, 124:5, 159:20</p> <p>Fascinated - 95:7</p> <p>Fast - 89:22</p> <p>Fat - 152:12</p> <p>Favourable - 52:4</p> <p>Features - 107:14, 115:6</p> <p>February - 98:22, 101:13</p> <p>Fed - 126:18, 126:22, 127:1, 127:7, 127:17, 160:22</p> <p>Federal - 126:15, 127:24, 128:1, 139:24, 139:25</p> <p>Feds - 127:14</p> <p>Fed's - 126:17</p> <p>Feel - 35:25, 48:8</p> <p>Feels - 86:6, 86:8</p> <p>FEI - 114:3</p> <p>Felt - 5:17, 73:6</p> <p>Fenced - 120:18,</p>
--	---	--	---	---

<p>120:20 FERC - 9:6, 9:12, 9:22, 10:7, 14:6, 16:1, 33:24 Fernandez - 145:4 Figure - 4:13, 4:20, 5:4, 13:14, 26:8, 32:15, 33:21, 37:23 Figures - 85:16 File - 40:24 Filed - 74:8, 102:4, 102:6 Filings - 72:15 Filter - 83:22 Finally - 81:23, 158:12 Finance - 99:9, 99:11, 99:20, 99:22, 99:23, 100:5, 100:14, 100:17, 100:18, 116:14, 123:6, 144:3, 148:4, 150:25, 152:17 Financeable - 115:24 Finances - 114:8, 114:17, 114:19, 114:24 Financial - 42:16, 45:9, 66:22, 67:10, 69:1, 72:6, 77:15, 77:24, 78:22, 83:10, 87:25, 99:18, 103:21, 103:22, 103:24, 104:3, 105:1, 105:6, 105:22, 114:9, 116:25, 117:2, 117:7, 121:17, 126:4, 129:17, 130:1, 131:7, 134:4, 140:7, 140:24, 140:25, 141:1, 141:5, 141:14, 142:6, 154:11 Financing - 114:10, 122:18 Find - 2:17, 59:8, 101:12 Finding - 101:23 Fine - 10:23, 12:22, 36:5 Firing - 129:18, 129:21, 130:3, 131:7, 140:23 Firm - 103:25, 104:17, 110:10, 110:12, 122:19, 122:25, 123:5,</p>	<p>148:10 Firms - 4:3, 110:5, 110:8, 119:17, 141:9, 144:17, 144:18, 144:21 First - 1:25, 2:6, 2:13, 3:15, 7:8, 13:25, 17:9, 34:10, 71:20, 72:3, 72:19, 74:23, 75:18, 75:25, 76:21, 77:6, 78:2, 98:10, 102:14, 110:1, 120:5, 130:10, 134:21, 138:10, 151:8, 155:19, 158:24 Fishing - 49:4 Five - 33:20, 40:24, 40:25, 63:20, 115:20, 121:20, 122:3, 126:2, 136:5, 137:17, 140:20, 141:22, 141:23, 150:12, 153:4, 154:20, 155:18, 155:24, 159:24 Flat - 51:4, 59:12 Flexibility - 78:12 Flight - 142:7, 142:10 Floation - 23:3, 23:5, 23:20 Flooded - 94:15 Flow - 54:15, 54:23, 144:15 Flows - 82:24, 110:21 Fluid - 115:2 Focus - 94:8, 135:3 Follow - 109:14 Followed - 1:21 Follows - 119:3 Force - 90:8 Forecast - 18:25, 19:7, 29:12, 31:14, 136:18, 138:10, 138:17, 157:3 Forecasted - 16:21 Forecasts - 26:21, 27:1, 29:16, 30:11 Foreign - 84:9, 131:20 Foreseeable - 52:12 Forest - 149:17 Form - 101:23, 147:23 Format - 37:25 Formula - 40:20</p>	<p>Forth - 129:5 Fortis - 114:1, 114:2, 114:11, 114:17, 114:19, 115:8, 115:12, 115:15, 115:19, 116:1, 116:5, 116:24, 117:5, 117:8, 119:22, 120:11, 121:8, 121:12 Fortis' - 119:24 FortisAlberta - 105:23, 105:24, 117:12, 117:24 Fortisbc - 114:3, 117:12, 117:13, 118:5, 118:8, 118:16 Fortisenergy - 105:11, 114:3, 117:25 Forward - 16:20, 16:24, 19:14, 19:16, 20:24, 21:11, 21:23, 22:19, 22:20, 43:20, 46:16, 71:2, 156:4 Found - 8:23, 34:23, 46:11, 78:24, 84:5 Foundation - 148:12 Four - 4:13, 4:14, 5:12, 41:24, 42:20, 63:20, 100:9, 138:16, 140:23 Frame - 57:2 France - 145:22 Fraudulent - 156:13 FRED - 139:25 Free - 14:15, 16:21, 18:17, 18:18, 19:7, 19:18, 22:13, 26:2, 35:12, 38:19, 39:13, 41:9, 140:1, 140:3, 143:1, 143:7, 143:10, 143:17, 143:18, 143:20, 145:16, 145:17, 147:24 French - 137:16 Frequent - 115:12 Frequently - 110:6 Friday - 130:10 Fuel - 57:20, 108:24, 109:12 Fuelled - 57:22 Fuels - 52:1, 59:9, 107:4, 107:9, 109:2</p>	<p>Full - 76:21, 101:12 Fully - 34:9, 55:6, 122:11, 125:2, 125:3 Fundamental - 51:22, 104:16 Fundamentals - 130:8, 138:7 Funds - 91:2, 128:1, 131:19, 146:23 Further - 10:2, 33:18, 124:21, 126:10 Furthermore - 128:12 Future - 92:4, 110:14, 154:24</p> <div style="border: 1px solid black; text-align: center; padding: 2px;">G</div> <p>Gain - 140:14 Gained - 99:15 Gap - 70:19, 118:10, 118:17 Gas - 5:16, 10:5, 10:9, 34:2, 57:21, 57:22, 58:1, 73:2, 73:24, 83:3, 105:12, 105:13, 106:19, 106:20, 106:24, 107:1, 107:5, 117:13, 117:15, 135:7, 141:10, 153:20, 155:23, 157:1, 159:5 Gave - 27:22, 157:10 Gaz - 105:14, 124:1 GDP - 87:13, 87:14, 87:17 General - 32:17, 32:18, 46:8 Generally - 11:13, 48:24, 93:17, 107:8, 117:18, 119:16, 120:13, 151:24, 151:25 Generate - 106:3, 118:19, 150:23 Generation - 62:9, 112:10, 112:11, 118:6, 118:14, 153:23 Generous - 121:14 Geographies - 32:25 Germany - 145:21 Gets - 28:3, 51:12, 51:13, 52:22, 151:16</p>	<p>GIC - 152:18 Gigantic - 85:7 Give - 8:13, 28:10, 38:2, 68:8, 87:10, 108:19, 126:20 Given - 3:11, 38:23, 49:3, 54:13, 58:1, 58:18, 69:5, 70:7, 72:3, 126:13 Gives - 39:21 Glanced - 74:17 Global - 82:2, 82:9, 83:8, 83:10, 83:18, 83:22, 86:15, 86:21, 96:2, 125:11, 125:16, 128:3, 132:10, 138:22 Globe - 154:8 GLYNNE - 97:22 Go - 4:10, 4:20, 11:16, 12:11, 13:10, 16:15, 17:2, 18:4, 18:16, 24:16, 26:7, 27:2, 27:3, 29:13, 30:11, 30:23, 34:12, 37:23, 40:3, 42:8, 44:6, 50:19, 55:15, 56:6, 60:23, 75:14, 76:17, 77:6, 78:2, 90:6, 93:20, 95:4, 95:17, 118:10, 119:7, 119:8, 145:23, 150:8, 150:20, 150:24, 153:24, 154:7, 154:11, 154:12, 154:13, 158:20 Godot - 125:22, 127:22, 132:6, 134:16, 160:17 Gone - 29:14, 52:21 Good - 1:4, 1:15, 1:16, 1:18, 9:14, 37:24, 64:6, 67:12, 71:14, 88:4, 90:2, 104:5, 104:6, 113:22, 136:1, 136:2, 136:4, 159:20 Goods - 86:11 Google - 31:21, 154:13 Got - 81:4, 95:22, 99:13, 106:24, 108:18, 109:24, 112:14, 113:23, 115:20, 117:16, 118:9, 119:20, 126:1, 130:18, 133:18, 137:7,</p>
--	---	--	--	--

143:22, 144:22,
147:7, 147:10,
152:12, 154:16,
156:5, 156:6
Government -
22:24, 82:16,
82:18, 82:22, 84:11,
86:13, 86:17, 112:1,
128:5, 128:10,
131:12, 132:18,
136:14, 136:25,
137:10, 137:16,
137:19, 140:5
Governor - 128:23,
128:25, 129:13,
130:2, 130:6,
130:12, 133:15
GRA - 44:16,
53:22, 54:7, 54:16,
55:10, 57:3
Grabowski - 147:8
Gracefully - 85:25
Graduate - 99:14,
99:15
Graph - 126:21,
157:12, 157:13
Graphic - 131:17,
134:24
Grapple - 138:19
Greater - 3:19,
11:4, 37:14, 86:18,
97:9
Greece - 103:5
Green - 75:16,
151:20
Grids - 62:12
Grounded - 3:23,
31:8
Grounds - 2:16
Group - 3:6, 3:9,
3:10, 3:17, 4:5,
4:10, 4:16, 5:11,
5:23, 6:5, 6:8, 6:9,
7:24, 8:12, 8:25,
9:10, 9:12, 12:17,
12:19, 12:24,
12:25, 35:3, 37:21,
38:20, 42:15,
42:21, 43:1, 43:5,
44:25, 63:16,
64:13, 64:16, 65:3,
65:5, 65:6, 66:22,
67:23, 68:13,
68:15, 68:18, 152:7
Groups - 2:1, 3:2,
6:14, 13:4, 13:19,
13:21, 36:10,
43:25, 44:8, 62:15
Grow - 33:23,
89:21, 96:20,
129:9, 134:19

Growing - 48:8,
48:12, 48:13, 60:6,
88:14, 89:22,
96:12, 129:6, 129:7
Grown - 90:14
Growth - 13:17,
26:10, 27:7, 27:16,
27:24, 28:22, 29:3,
29:10, 29:22, 32:11,
37:5, 48:9, 57:24,
60:5, 60:13, 61:25,
82:8, 83:13, 83:17,
83:18, 84:6, 87:13,
87:14, 87:15,
87:17, 88:14,
90:10, 92:14,
92:17, 96:5, 96:22,
96:23, 132:17,
135:17, 155:16,
155:18, 155:24,
156:4, 156:7,
156:17, 156:18,
156:25, 157:3,
157:14, 157:15,
160:2, 160:6
Guess - 26:2,
39:20, 41:8, 47:20,
55:13, 56:4, 66:2,
86:9, 86:22, 88:13,
92:2, 93:12, 97:16,
120:20, 138:4
Guys - 87:3

H

Ha - 31:1
Hairs - 121:4
Half - 85:21, 127:6,
127:9, 133:18,
134:21
Handled - 118:15
Happening - 32:11,
122:1, 131:5,
132:20, 135:6
Happy - 78:5, 78:6,
78:7, 78:9, 158:18
Harbour - 95:4
Hard - 63:15
Harder - 59:12,
60:2
Hasn't - 34:11,
134:15
Haven - 130:12
Haven't - 17:22,
142:10
Hazard - 120:20
Hazardous - 160:3
Heading - 88:21
Healthy - 88:7
Hear - 110:25
Heard - 84:24,
113:14, 147:25

Hearing - 30:17,
31:7, 45:23, 94:9,
106:18, 110:3,
111:7, 111:19,
113:13, 118:1,
122:5, 122:7
Hearings - 41:20
Heart - 142:21
Heating - 107:6,
107:11, 109:3,
109:6
Heavier - 15:16
Heavily - 10:3
Heck - 62:9
Height - 103:1
Held - 59:11
Help - 56:7
Helped - 130:9
Helping - 47:22
He's - 25:4, 25:9,
25:25, 26:2
Hewitt - 143:19,
146:20, 146:21,
147:19
Hiatus - 140:10
Hide - 100:6
High - 6:19, 7:9,
9:23, 60:3, 65:11,
89:5, 120:10,
128:6, 130:19,
139:7, 147:4,
149:4, 151:12,
151:15, 159:4,
159:8
Higher - 11:3,
36:20, 37:7, 42:14,
47:22, 67:10,
67:25, 68:9, 70:4,
70:9, 75:11, 79:22,
79:23, 89:6, 101:7,
117:19, 119:22,
120:11, 120:17,
129:25, 138:15,
140:9, 145:15,
153:12, 153:16,
155:3, 158:17,
159:10, 159:11
Highest - 69:20
Highlighted -
75:16
Highway - 95:17
Hire - 118:10,
150:21
Hiring - 118:13
Historic - 16:24,
21:10, 21:23, 22:6,
22:23, 49:10,
49:19, 93:21,
144:23, 144:25
History - 22:5,
50:8, 70:13, 125:9,
153:8
Hit - 75:13, 77:11,
81:23, 135:13
Hits - 135:10
Hold - 57:12,
96:17, 99:10,
116:12, 143:14
Holder - 124:5
Holders - 119:9
Holding - 6:24,
113:16, 113:22,
113:24, 113:25,
116:11, 116:14,
119:10, 158:1,
158:2, 158:5,
159:19
Holdings - 126:22
Honestly - 160:22
Hope - 9:16, 31:19,
33:18
Hopefully - 122:23
Horizon - 45:4,
47:10, 54:1, 55:8,
55:14, 57:14
Hour - 135:1
Hours - 55:8, 108:3
House - 87:4,
87:19, 135:18
Houses - 135:20
Housing - 126:14
Houston - 108:17
Howe - 152:5
Hudson - 119:23
Huge - 87:20,
108:5, 108:7,
108:8, 133:1,
137:7, 148:7,
149:25, 150:2,
155:23, 158:2
Human - 156:14
Hybrid - 115:6
Hydro - 108:1,
108:6, 108:7,
108:8, 108:13,
112:11, 118:17

I

Ian - 80:24
Iceberg - 51:21
I'd - 1:20, 4:8, 8:3,
13:8, 27:2, 70:3,
100:15, 118:22,
124:12, 141:17
Idly - 112:1
I'll - 8:13, 23:8,
37:12, 40:13, 74:9,
90:1, 100:22,
103:10, 125:20
Illustrate - 144:12
I'm - 1:8, 1:10,
3:15, 10:15, 16:5,
21:2, 24:20, 29:12,
31:10, 31:16,
31:17, 50:6, 50:22,
52:9, 53:15, 53:16,
62:10, 64:24, 65:8,
70:16, 71:3, 76:11,
80:24, 81:19,
84:21, 85:4, 85:5,
90:22, 90:23,
91:23, 95:16, 99:9,
100:16, 101:22,
102:24, 109:9,
111:21, 111:22,
111:23, 121:23,
122:3, 144:24,
147:17, 148:16,
148:17, 152:13,
154:14, 158:7,
160:14
Imagination -
137:20
Impact - 33:8,
33:11, 48:21, 49:7,
58:8, 60:6, 60:14,
61:10, 74:20, 75:4,
75:24, 77:15,
77:23, 83:6, 86:21,
97:12, 97:13,
103:19, 104:2,
109:8, 131:10,
131:15, 131:25,
134:22, 136:13,
138:22, 151:11,
152:17
Impacted - 75:13
Impacts - 58:9
Impairing - 76:5
Implementing -
127:24
Implication -
103:12
Implications -
158:6
Implied - 22:20
Importance - 8:24
Important - 7:24,
39:20, 102:18,
103:2, 151:19
Importantly - 22:12
Impression - 86:5,
86:7
Improve - 95:13
Inability - 89:19,
104:22
Inbox - 147:7
Incidentally -
109:7
Income - 60:14,
62:1
Increase - 51:20,
52:11, 55:1, 56:8,

<p>64:1, 70:17, 127:15, 130:25, 136:16 Increased - 44:15, 44:20, 63:8, 63:9, 110:18 Increases - 156:19 Increasing - 51:23, 52:23, 122:9, 138:2 Incredibly - 106:25, 108:9, 128:20, 133:21, 143:8, 145:24, 147:16, 151:19, 155:12 Incurred - 59:24, 63:12 Index - 85:17, 93:7, 93:10, 93:17, 93:19, 93:25, 94:2, 94:8, 95:15, 95:16, 133:24, 140:25, 151:2, 151:3, 151:6 Indexes - 93:4 Indicated - 20:21, 56:21, 77:9, 109:1, 109:3 Indicating - 141:8 Indication - 35:18, 75:8, 93:12, 141:10 Indicative - 36:23, 93:18 Indicator - 138:24 Indicators - 96:3, 128:11, 140:24 Industrial - 132:21, 132:23 Industry - 49:4, 50:17, 94:17, 94:18, 135:24, 148:8 Inevitably - 65:17 Inferior - 117:19 Inflation - 90:13, 96:21 Inflationary - 89:23, 90:5, 92:11, 96:23, 97:10 Influence - 31:13, 62:24, 68:22, 69:10 Influenced - 47:9 Influences - 30:20 Informative - 107:24 Infrastructure - 40:22 Inherently - 153:24 Initiated - 137:8 Inputs - 14:8, 14:10, 16:20, 16:23, 39:6, 39:21,</p>	<p>40:3, 40:5, 40:8, 40:14, 42:1, 42:6 Insist - 73:1, 73:19 Installing - 62:8 Insufficient - 148:22 Insurance - 107:21 Integrated - 3:20, 34:10, 83:10, 83:11, 84:8 Integration - 82:3, 90:19, 90:22 Integrity - 77:15, 77:24 Intent - 94:12 Intention - 118:12 Intents - 104:24 Interest - 74:22, 75:17, 96:7, 96:9, 96:17, 127:3, 127:13, 127:16, 128:3, 128:15, 128:20, 129:12, 129:15, 136:12, 136:16, 137:1, 137:3, 137:17, 137:19, 138:6, 138:9, 138:12, 138:14, 138:20, 141:16, 142:12, 142:20, 143:11, 143:13, 151:11, 151:18, 151:21, 151:25, 152:9, 152:25 Interesting - 93:6, 107:14, 114:7, 145:13 Interestingly - 147:15 Internal - 118:6 International - 134:2 Internet - 150:5 Intervening - 132:15 Interview - 73:17 Introduce - 4:1 Introduced - 100:9, 155:9 Invariably - 111:8 Investment - 7:6, 55:21, 57:13, 58:4, 91:9, 100:10, 105:8, 132:21 Investments - 40:22, 41:2, 41:4, 48:16 Investor - 7:16, 48:2, 50:23, 51:1, 54:18, 58:7, 68:19,</p>	<p>69:20, 90:22 Investors - 19:14, 48:2, 48:11, 49:9, 49:23, 50:7, 57:3, 57:10, 57:19, 65:18, 79:19, 79:20, 130:14, 143:13, 152:2, 153:19, 158:25, 159:6, 159:21 Involvement - 104:17 Island - 103:5 Isn't - 40:5, 79:24, 89:21, 115:4 Isolated - 95:3 Issue - 14:13, 61:1, 61:19, 74:2, 103:10, 104:19, 108:22, 115:12, 116:9, 119:17, 120:3, 128:13, 128:19, 155:8 Issued - 30:25, 115:8 Issuer - 115:12 Issues - 51:22, 72:16, 76:10, 113:12, 116:11, 120:4, 133:8 Italy - 145:22 Item - 161:6 I've - 4:1, 4:2, 17:14, 37:14, 93:5, 94:25, 95:7, 95:18, 99:11, 99:17, 99:21, 99:24, 100:8, 100:11, 102:19, 109:22, 109:23, 109:24, 111:16, 113:13, 113:19, 125:20, 143:15, 145:5, 146:9, 149:13, 149:14, 154:16, 156:5</p>	<p>John's - 108:11, 108:20 Johnson - 1:5, 1:6, 1:7, 6:3, 9:2, 27:4, 29:15, 30:17, 32:1, 34:11, 36:8, 38:18, 53:11, 61:6, 71:25, 98:6, 98:8, 98:13, 98:14, 98:21, 99:3, 101:9, 101:17, 102:2, 102:13, 113:7, 124:11, 132:2, 136:7, 142:15, 160:10 Judge - 102:15 Judgment - 14:19, 14:23, 15:4, 40:3, 41:25, 42:7, 68:9, 123:7, 150:16, 150:18, 160:24 Judgmental - 40:15 Judgments - 15:1 June - 85:18 Jurisdiction - 16:6, 49:14, 142:24 Jurisdictions - 10:20, 14:4, 15:14, 15:16, 15:25, 107:25, 108:9, 108:11, 108:13, 108:15, 123:3</p>	<p>54:14, 62:19, 83:12, 94:13 Larger - 88:16 Lasted - 140:19 Lasting - 86:23 Late - 134:5 Latest - 155:3 Lawrence - 98:10, 98:12 Layer - 116:17, 124:3 Layered - 103:24 Layers - 87:9 Lead - 43:15 Leader - 99:18 Leaps - 96:13 Learned - 31:25 Leave - 71:7, 71:9 Leaving - 62:7 Led - 132:21, 132:22, 132:23, 133:4, 133:5 Left - 116:7 Lend - 63:18 Lending - 85:9 Let's - 53:3, 55:15, 56:22, 57:1, 146:19 Level - 10:14, 11:17, 11:22, 22:13, 88:1, 88:2, 92:20, 101:1, 101:2, 101:6, 108:15, 116:18, 141:16 Levels - 100:12 Leverage - 103:22 Leveraging - 87:24 Light - 156:15 Likelihood - 29:21 Limit - 130:25 Limitations - 3:12 Limited - 79:9, 105:17 Line - 9:25, 36:15, 53:13, 61:16, 96:17, 108:14, 135:7, 139:4, 151:20, 159:3 Lines - 8:9, 8:14, 8:15, 16:17, 34:17, 38:14, 60:22 Link - 111:19 Linked - 82:13 Listed - 44:2 Literally - 157:9 Loan - 141:4, 141:9, 141:15 Local - 83:23 London - 99:13 Long - 50:6, 51:2, 55:6, 57:9, 57:11, 69:19, 80:17,</p>
		<p>JAMES - 1:12 Janet - 96:8 January - 146:21, 153:6 Japan - 131:14, 131:20, 137:6, 137:7, 137:25, 160:21 Japanese - 137:11 JDS - 150:5 Jeopardize - 96:12 Jersey - 155:22 Job - 104:6 Jobs - 89:22, 125:4</p>	<p>K</p> <p>Kathleen - 27:24 Keeps - 137:1 Kelly - 80:25, 81:1, 124:22 Key - 52:25, 136:12 Kicked - 137:14 Kilowatt - 108:2 Kindly - 124:22 Kit - 122:12, 122:14, 123:12 Knowing - 56:16, 100:21 Knowledgeable - 100:16 Known - 32:12, 56:10, 126:21 Kryzanowski - 148:15, 148:16, 148:21</p>	
		<p>J</p>	<p>L</p> <p>Labour - 50:10, 50:15, 50:18, 129:6 Lacleda - 155:22 Landscape - 47:13 Large - 31:23,</p>	

83:13, 86:23, 103:7, 103:17, 106:12, 110:23, 126:11, 126:23, 128:4, 128:19, 129:23, 136:19, 138:23, 139:9, 141:12, 142:4, 143:20, 145:18, 147:15, 155:5, 157:3 Longer - 35:8, 51:4, 52:7, 57:14, 65:4, 71:4, 92:21, 137:5 Looked - 43:4, 43:9, 58:5, 70:7, 72:15, 79:5, 88:24, 114:1, 124:24, 127:19, 158:12 Looking - 6:14, 6:18, 6:20, 10:17, 16:20, 16:24, 19:14, 19:16, 20:24, 21:11, 21:22, 21:23, 35:17, 40:19, 48:3, 48:11, 52:10, 55:3, 57:4, 57:14, 57:20, 57:21, 64:1, 72:9, 78:1, 94:25, 110:20, 136:22, 136:23, 141:9, 144:7, 147:4, 151:1, 151:3, 158:5, 161:1 Loose - 141:2, 141:6 Lose - 50:17, 50:19 Loss - 110:16 Losses - 110:12, 158:4 Lost - 125:4, 130:20 Lot - 14:18, 26:22, 32:13, 33:2, 41:11, 41:22, 42:5, 57:18, 57:19, 72:13, 72:19, 94:18, 96:13, 101:4, 115:6, 119:12, 124:17, 131:22, 148:12, 153:25, 159:23, 160:24 Louis - 139:25 Love - 140:2, 152:6 Low - 6:8, 6:10, 6:15, 6:18, 6:23, 7:5, 7:9, 7:12, 14:20, 18:14, 65:10, 92:11, 93:21, 112:8, 116:3,	120:23, 128:9, 128:15, 128:17, 128:20, 129:23, 139:10, 141:12, 141:17, 150:11, 151:23, 152:9, 152:23, 152:24, 158:24, 159:2 Lower - 36:24, 38:24, 70:14, 78:14, 92:20, 93:21, 101:2, 120:14, 124:8, 127:16, 128:7, 138:20, 140:17, 145:1, 145:17, 145:18, 153:20 Lowered - 45:15, 132:19, 133:4 Lowers - 92:10 Lowest - 106:8, 108:5 Lumber - 83:6 Lynch - 139:21 <div style="border: 1px solid black; text-align: center; padding: 2px;">M</div> M&A - 151:4 Mackenzie - 157:8, 157:12 Macro - 44:5, 48:5 Macroeconomic - 81:11 Madam - 1:10 Maersk - 94:21, 94:22, 95:5, 95:10 Magnifies - 103:23 Mail - 154:8 Mail's - 154:9 Main - 98:24 Mainline - 106:17, 110:1 Mainly - 103:13, 106:25, 128:9, 131:19, 134:22, 135:9, 141:8 Maintaining - 69:11, 88:7 Maintains - 139:25 Major - 104:11, 106:18, 107:4, 119:18, 129:2, 131:15, 146:21 Make - 10:2, 10:6, 23:16, 35:8, 36:1, 36:16, 37:3, 45:12, 57:13, 65:7, 65:15, 67:22, 68:2, 69:7, 101:19, 111:12, 121:2, 149:19, 161:11 Making - 23:7,	54:23, 82:16, 91:8 Management - 99:18, 104:5, 104:7 Manipulating - 127:2 Manitoba - 107:14, 107:18 Manufacturing - 135:24 Many - 15:6, 15:17, 39:17, 88:2, 91:17, 95:16, 106:1, 107:11, 109:23, 117:21, 146:10, 147:18, 148:1, 159:15 Map - 108:19 Marcellus - 58:2 March - 98:22, 98:23 Margin - 54:24, 60:2, 60:7, 60:10, 76:11, 78:23, 79:1 Margins - 78:20 Maritime - 111:18 Mark - 128:23, 128:25, 134:13, 139:12, 140:22, 161:5 Marker - 123:16 Marketing - 22:19 Marketplaces - 34:22 Markets - 19:17, 22:3, 34:9, 57:18, 57:19, 58:10, 71:11, 73:25, 82:9, 83:11, 96:25, 103:11, 120:2, 131:12, 133:17, 136:10, 137:7, 138:3, 138:23, 139:8, 139:16, 145:2, 146:22, 150:11 Marshall - 148:6 Massive - 127:4, 136:25 Masters - 100:13 Material - 12:2, 12:7, 63:13, 102:1, 109:13 Materiality - 63:7 Materialize - 54:22 Materializes - 111:4, 111:5 Materially - 31:18 Matters - 1:5, 141:25 MAUREEN - 1:13, 152:5 MBA - 100:13,	100:14 Mckenzie - 110:3, 110:21 Mcshane - 27:24, 159:14 Mcshane's - 145:7 Means - 48:14, 59:9, 105:16, 110:15, 113:23, 124:3, 153:15 Measure - 114:23 Mechanical - 41:7 Mechanism - 17:18, 59:4 Mechanisms - 49:12, 51:9, 58:19, 59:3 Median - 145:11, 145:21 Meet - 73:20, 118:19 Meets - 103:15 Megawatt - 55:8 Meld - 74:2 Meliorate - 104:6 Member - 154:7 Members - 154:6 Memory - 4:9, 53:15 Merrill - 139:21 Mess - 86:13 Message - 79:19, 152:16 Met - 72:1, 72:5 Method - 15:13, 15:20, 26:7, 26:9, 38:10, 41:23 Methodologies - 13:2, 13:9, 13:15, 13:21 Methodology - 13:18, 33:25, 38:9, 40:14 Methods - 26:15, 29:14, 36:12, 38:22 Metric - 77:4, 77:12 Metrics - 45:9, 69:7, 74:11, 74:21, 75:4, 75:6, 75:12, 75:24, 76:1, 76:5, 77:7, 77:21, 78:7, 78:12, 78:17, 79:2, 80:7, 114:9, 116:25, 117:3, 117:7 Metro - 105:14, 124:1 Micro - 62:12 Milder - 121:23, 121:24 Million - 115:9, 115:11	Mindful - 79:11, 109:9 Minerals - 83:5 Minimum - 106:9 Mining - 83:7, 135:12 Missing - 22:14 Mitigate - 56:8 Mitigating - 51:19 Mobile - 50:10, 50:15, 50:16 Model - 15:9, 15:17, 18:7, 27:7, 27:16, 27:24, 29:22, 32:8, 32:16, 32:22, 39:22, 40:18, 41:5, 42:7, 42:9, 143:10, 144:3, 144:6, 144:11, 144:14, 144:15, 144:19, 155:14, 160:2 Models - 142:20, 142:22, 144:6, 144:9, 144:21, 148:12 Moderate - 81:6, 81:9, 83:13, 83:17, 83:18, 96:5 Moderated - 29:23, 33:18 Moderately - 47:22 Moderating - 29:5 Moncton - 108:17 Monetary - 127:1, 129:10 Money - 103:3, 103:7, 103:8, 130:15, 139:1, 141:25, 143:1, 144:4, 144:5, 146:24 Monopolists - 122:22 Month - 108:3, 118:2, 137:10, 137:13 Monthly - 153:5, 154:20 Months - 92:5, 134:15, 139:14 Montreal - 108:4, 108:5, 135:1 Moody's - 58:5, 58:25, 66:8, 66:12, 80:8, 116:21, 119:14, 119:21, 120:14 Moratorium - 48:22, 50:25 Morning - 1:4,
---	--	---	--	---

1:15, 1:16, 1:18,
5:21, 7:23, 16:20,
67:17, 161:8
Mortgage - 74:23,
75:18, 75:25,
120:5, 125:12,
125:13, 126:24,
141:20
Mortgages -
126:13
Mountain - 97:5
Move - 30:4, 40:16,
71:11, 132:22,
133:3
Moved - 45:4
Moves - 150:10
Moving - 12:24,
83:12, 133:2
MP - 30:12, 30:22
MRP - 41:8
Much - 7:9, 9:12,
10:9, 10:22, 11:2,
11:11, 12:15, 12:21,
36:20, 37:19,
39:21, 41:13,
41:16, 50:7, 50:22,
55:25, 69:14, 79:9,
85:14, 86:2, 111:23,
117:2, 120:19,
135:2, 135:5,
140:7, 153:11,
156:1, 156:22
Muddle - 96:4
Multi - 27:22,
28:11, 28:20, 29:12,
33:19, 37:15, 40:1,
144:8, 144:9,
144:11, 144:20
Multiple - 32:24
Multistage - 13:18
Mushroom - 148:7
Muskrat - 43:19,
45:18, 46:24,
47:10, 47:17,
47:19, 53:3, 53:24,
55:16, 60:20, 61:9,
62:18, 72:17,
109:10, 111:15,
122:1, 123:10,
123:21

N

Nalcor - 56:3
Narrow - 2:21, 10:2
Narrowed - 12:21
National - 109:25
Natural - 58:1
Navigate - 50:24,
96:18
Near - 51:2, 52:6,
55:14, 57:7, 92:13

Necessary - 6:6,
36:16
Needed - 8:25,
73:7
Neither - 32:5
Net - 60:14, 62:1
New - 30:24, 31:11,
40:22, 45:16,
62:13, 62:14,
80:14, 82:21, 84:5,
91:5, 108:18, 110:4,
155:21
Newfoundland's -
49:1
News - 135:2
Newspaper - 157:9
Nice - 152:12
Nicely - 13:14
Nine - 23:19, 92:25
Nobody - 85:14,
141:18
Noise - 149:19
Non - 6:24, 135:11,
135:12, 142:3,
142:8
Normal - 23:8,
73:10, 73:12,
73:17, 126:21,
128:11, 137:18,
137:21, 137:22,
138:4, 139:2,
139:17, 141:7,
141:16, 143:19,
143:21, 143:24,
150:14
Normality - 136:19
Normalized -
19:17, 89:1,
143:17, 143:18,
143:25, 147:16,
147:23
Normally - 126:23,
126:24, 155:17
Nortel - 150:5
North - 3:16, 4:5,
35:2, 36:12, 37:20,
38:20, 64:3, 82:25,
106:20
Northern - 106:19
Northwest - 155:21
Note - 147:7,
148:16
Noted - 48:1,
115:10, 143:15,
161:12
Notice - 105:21
Nova - 43:22,
111:20
NP - 17:2, 109:1,
109:8, 120:22
NP's - 121:13

Nuclear - 118:11,
118:13
Numbers - 12:11,
12:12, 12:14, 36:9,
89:13, 115:17,
115:18, 147:4,
150:20, 150:22,
150:24
Numerical - 37:25
Nutshell - 39:8

O

Objective - 15:6,
39:22, 40:2, 41:9,
42:9, 114:23,
115:21, 126:9,
146:10
Obligations -
131:2
Observation -
95:20
Observations -
158:25
Observed - 104:8
Occupational -
42:3
Occurred - 46:3,
110:5
Odd - 9:5
OEB - 109:17,
109:18
Offer - 87:8
Officer - 72:6, 72:7,
105:22
Officers - 141:4
Offices - 141:9
Often - 138:23
Oil - 33:9, 34:1,
50:16, 83:3, 92:9,
107:6, 109:3,
109:4, 135:7,
141:10
Old - 146:19
Oliver - 157:3
Ones - 7:1, 47:14,
50:9, 93:5, 154:21,
155:3, 156:2
Ontario - 52:18,
109:15, 135:19,
136:1
Open - 126:5,
131:11
Opened - 134:1
Opens - 115:5
Operate - 32:20
Operates - 61:16
Operating - 10:14,
10:16, 10:21,
43:10, 45:9, 67:9,
72:7, 73:18, 77:1,
113:15, 113:17,

116:13, 116:16,
116:18, 121:11
Operation - 24:20,
26:3, 126:8, 127:25
Operations - 5:15,
72:8
OPG - 52:17
Opinion - 14:12,
14:25, 20:22, 21:8,
24:14, 25:18,
34:24, 37:25,
43:14, 44:22, 46:2,
47:9, 53:4, 53:5,
66:3, 75:14, 145:6,
145:7, 145:8, 152:3
Opinions - 58:7,
128:22
Opposed - 14:24
Opposite - 116:1,
151:22
Optimal - 79:24
Optimism - 157:23,
160:5
Optimist - 33:15
Optimistic - 92:3,
156:11, 156:12,
156:17, 157:6,
157:21, 158:8,
158:9
Oral - 63:5
Order - 14:21,
15:8, 16:12, 27:5,
27:18, 30:25, 34:6,
34:11, 34:12, 37:3,
62:4, 73:21,
107:16, 117:19,
126:12
Otherwise - 73:16
Ours - 148:5
Outages - 61:18
Outline - 16:17
Outlined - 16:9,
16:19
Outlook - 46:24,
47:4, 47:7, 47:24,
48:6, 49:2, 49:11,
49:16, 49:20, 51:3,
52:21, 57:9, 57:11
Outright - 133:6
Overbuilds - 94:18
Overlay - 82:15
Overlaying - 14:18
Overnight -
133:11, 133:17,
133:18
Overwhelmingly -
144:2
Own - 62:11, 99:5,
116:14, 137:11,
144:22, 147:12,
147:21, 156:20,

156:24
Owned - 131:19
Owner - 114:24
Owns - 114:2,
114:5

P

P/Es - 152:20
Pace - 33:23
Pacific - 106:19
Parameters -
122:24
Parent - 114:7,
116:5, 116:10,
120:17, 121:9,
123:4
Parliament - 133:8
Parody - 130:9
Parse - 47:20
Participants -
146:1
Participation -
88:24, 89:1
Particularly - 27:6,
101:1, 103:25,
133:10, 140:21
Partners - 82:6
Parts - 107:12
Pass - 4:2, 59:4,
111:11
Passed - 4:14,
53:25, 122:10,
150:12
Past - 14:9, 46:10,
64:11, 72:15, 83:21,
99:21, 109:11,
155:18, 155:24
Path - 82:8
Pattern - 150:1
Pay - 69:21, 158:18
Payers - 53:25,
69:21
Paying - 51:14,
56:20
PBR - 105:25,
106:3, 106:7
Peer - 79:22
Peers - 45:13,
63:25, 64:22, 69:4,
70:4, 70:5, 70:12,
70:15
Pennsylvania -
40:20
People - 33:6,
42:4, 57:17, 66:5,
73:23, 73:24,
89:20, 89:25, 96:1,
103:6, 108:24,
126:12, 126:20,
135:22, 143:16,
144:12, 145:5,

<p>145:8, 147:20, 158:18</p> <p>Perceive - 53:10</p> <p>Perfectly - 3:23</p> <p>Performance - 49:10, 49:22, 105:25</p> <p>Performing - 140:21</p> <p>Perhaps - 13:9, 27:20, 44:6</p> <p>Period - 18:25, 19:9, 19:20, 29:19, 49:17, 49:20, 52:12, 64:10, 76:12, 80:17, 82:8, 86:16, 136:20, 149:16, 149:21, 149:23, 150:12</p> <p>Periodically - 115:5, 158:4</p> <p>Periods - 29:16, 154:19</p> <p>Perry - 75:3</p> <p>Persistently - 140:16</p> <p>Person - 160:19, 160:20</p> <p>Personnel - 73:18</p> <p>Perspective - 3:4, 7:16, 12:20, 19:15, 65:9, 87:8, 137:16, 142:17, 160:11</p> <p>Persuaded - 148:14, 148:20</p> <p>Pessimistic - 93:22</p> <p>Peter - 87:2</p> <p>Phelps - 143:18, 147:6, 147:8, 147:12, 147:19</p> <p>Philosophy - 149:17</p> <p>Phrase - 60:9</p> <p>Pick - 93:19, 95:22</p> <p>Picked - 101:25, 132:9, 139:16</p> <p>Pickup - 134:18, 139:13, 141:14</p> <p>Piece - 36:7, 50:8, 86:10</p> <p>Pieces - 43:9</p> <p>Piedmont - 155:21</p> <p>Pink - 139:4, 158:22</p> <p>Pipeline - 106:19, 110:4, 110:21</p> <p>Pipelines - 34:2, 105:13, 110:4</p> <p>Place - 28:3, 41:4, 49:13, 51:10,</p>	<p>58:19, 59:3, 63:23, 64:6, 70:20, 80:13, 83:15, 101:24, 129:1</p> <p>Places - 50:20, 130:13</p> <p>Plan - 40:25, 41:1, 79:17</p> <p>Plane - 86:4, 86:6</p> <p>Plants - 112:11</p> <p>Play - 43:20, 70:23, 157:22</p> <p>Playbook - 157:11</p> <p>Played - 92:12</p> <p>Playing - 45:18</p> <p>Plays - 84:13</p> <p>Pleasure - 80:22</p> <p>Plowed - 156:22</p> <p>Plug - 156:8, 159:16</p> <p>Plunged - 125:11</p> <p>Pointed - 105:22, 118:4</p> <p>Points - 24:5, 24:18, 24:22, 34:24, 35:6, 36:3, 66:8, 68:10, 81:5, 117:24, 128:6, 128:8, 129:24, 129:25, 130:2, 138:15, 139:6, 140:16, 141:15, 141:22, 142:13, 150:11, 155:10, 155:11</p> <p>Policies - 86:17</p> <p>Policy - 62:17, 80:12, 80:15, 82:19, 84:7, 109:15, 111:12, 123:24, 127:1</p> <p>Political - 96:14, 140:13</p> <p>Poloz - 133:15</p> <p>Ponzi - 84:24, 85:1, 85:7</p> <p>Poors - 116:22</p> <p>Poors' - 115:18</p> <p>Popped - 108:22, 137:4, 140:15</p> <p>Popular - 144:2, 144:6</p> <p>Population - 89:21</p> <p>Portfolio - 131:14</p> <p>Portugal - 103:5</p> <p>Pose - 97:4</p> <p>Position - 6:11, 12:5, 15:2, 34:8, 35:7, 39:10, 39:16, 41:13, 46:17, 46:23, 71:22</p>	<p>Positive - 51:5, 57:23</p> <p>Possibility - 109:10</p> <p>Post - 99:18, 154:11</p> <p>Potemkin - 84:17</p> <p>Power's - 44:14, 44:23, 49:22, 51:12, 60:13, 61:24, 63:10, 74:21, 75:1, 75:22, 76:3, 77:22, 98:17</p> <p>Practical - 10:12, 61:15</p> <p>Practically - 59:1</p> <p>Practice - 71:15, 72:9, 73:10, 73:12, 73:17</p> <p>Pragmatic - 41:16</p> <p>Preceding - 153:4</p> <p>Precipice - 79:10</p> <p>Precipitous - 128:4</p> <p>Precise - 56:10</p> <p>Precisely - 56:2, 56:4</p> <p>Predict - 32:8, 82:19</p> <p>Predictable - 31:24, 32:3</p> <p>Predicted - 157:13, 157:15, 157:16, 157:17, 157:18</p> <p>Predicting - 134:13, 138:5, 138:7, 138:8</p> <p>Prefer - 15:9</p> <p>Preference - 115:8</p> <p>Preferred - 114:15, 114:16, 114:25, 115:1, 115:7, 115:11, 115:13, 121:22, 122:4, 123:20, 123:25, 124:4</p> <p>Preliminary - 1:5</p> <p>Premium - 15:19, 16:22, 20:20, 21:4, 21:9, 21:11, 21:22, 22:6, 22:10, 22:21, 25:10, 39:15, 130:12, 142:17, 142:20, 142:24, 142:25, 143:3, 143:10, 145:14, 145:16, 147:14, 147:23, 155:7, 159:22</p> <p>Premiums - 22:24</p> <p>Prepared - 98:23, 102:4, 102:11,</p>	<p>102:12</p> <p>Present - 11:12, 14:4, 14:6, 29:2, 29:9, 33:2, 142:16</p> <p>Presentation - 161:5</p> <p>Presented - 3:15, 29:2, 32:1, 79:12</p> <p>Presenting - 29:10</p> <p>President - 72:7, 94:21, 95:10, 99:21</p> <p>Pressure - 60:7, 60:12, 61:24, 63:9, 89:24, 96:14, 96:15</p> <p>Pressures - 59:16, 84:10, 92:11, 97:10</p> <p>Previous - 18:11, 27:18, 46:17, 48:20</p> <p>PREVIOUSLY - 1:12</p> <p>Price - 40:9, 111:23, 111:24, 133:24, 134:8</p> <p>Prices - 33:10, 44:5, 57:22, 58:12, 62:10, 83:3, 92:9, 93:12, 93:13, 94:19, 127:13, 127:15, 133:14, 133:22, 134:4, 134:7, 135:14, 135:19, 137:1</p> <p>Pricing - 155:14</p> <p>Prime - 125:12</p> <p>Principally - 55:9</p> <p>Principles - 144:4</p> <p>Prior - 82:11</p> <p>Private - 69:20</p> <p>Problem - 14:7, 62:21, 75:17, 103:4, 103:5, 110:24, 138:19, 143:6, 149:19</p> <p>Problems - 85:12, 110:1, 110:2, 110:5, 111:18, 111:21, 122:2, 123:10, 126:1, 126:3, 130:4, 139:8, 141:8, 142:8, 142:11, 153:10</p> <p>Proceed - 41:2</p> <p>Produced - 124:25</p> <p>Producing - 85:14</p> <p>Professor - 99:9, 150:24, 150:25</p> <p>Profile - 52:5, 68:5, 69:3, 70:8</p> <p>Profiles - 57:17</p> <p>Program - 40:24, 62:14, 100:10,</p>	<p>100:15, 127:4, 132:12, 137:8, 137:15, 137:23, 138:2</p> <p>Project - 32:10, 33:5, 33:6, 52:18, 54:14</p> <p>Projected - 76:11, 78:15</p> <p>Projecting - 136:18</p> <p>Projects - 32:12, 56:5, 57:16</p> <p>Propane - 107:5</p> <p>Proper - 143:9</p> <p>Proposition - 158:16</p> <p>Prospects - 43:19</p> <p>Protect - 106:15</p> <p>Protecting - 110:15</p> <p>Protection - 43:11, 105:16</p> <p>Protections - 64:5</p> <p>Provide - 3:4, 3:7, 11:4, 99:4</p> <p>Provided - 98:16, 124:22</p> <p>Provider - 146:22</p> <p>Providing - 79:14</p> <p>Province - 3:24, 47:25, 50:12, 51:5, 81:16, 83:24, 107:20</p> <p>Provincial - 111:25</p> <p>Proxies - 36:12</p> <p>Proxy - 2:1, 3:1, 3:6, 3:9, 3:16, 4:5, 4:16, 6:5, 6:9, 6:13, 6:14, 8:12, 8:25, 9:10, 10:25, 12:24, 12:25, 13:4, 13:19, 13:21, 17:1, 36:10, 37:21, 39:3, 42:15, 42:21, 43:25, 44:8, 44:24, 47:15, 65:3, 65:4, 65:6, 66:22, 67:23, 68:13, 68:15, 68:17, 70:17</p> <p>Prudent - 121:19</p> <p>Prudently - 59:24, 63:11</p> <p>PUB - 17:2, 30:12, 30:22, 107:18</p> <p>Public - 115:8</p> <p>Publically - 3:13</p> <p>Publicly - 139:20</p> <p>Pull - 17:17</p> <p>Pulled - 72:14</p> <p>Purchase - 132:12</p> <p>Pure - 17:5, 70:6, 157:21</p> <p>Push - 129:11,</p>
---	--	--	--	---

129:15, 130:9
Pushed - 127:13
Puts - 39:9, 60:7,
 60:12, 64:25
Putting - 147:6,
 157:10
Puzzle - 83:14

Q

Qualification -
 120:15
Qualifications -
 99:7
Qualitative - 65:9,
 65:17, 68:12
Quality - 142:7,
 142:11
Quantification -
 63:19
Quantitative -
 136:20, 137:3
Quarter - 41:6,
 96:24, 138:10
Quarterly - 157:11
Quebec - 107:11,
 108:1, 112:18,
 121:6, 136:2
Questioning - 14:9
Quote - 28:12,
 109:24

R

Raising - 78:25
Ran - 100:10,
 158:20
Range - 75:10,
 75:11, 92:22,
 115:22, 145:25,
 150:14, 157:23
Ranking - 132:9
Rapidly - 48:8
Rarely - 105:18,
 111:4
Rarity - 29:1
Ratchet - 96:24,
 97:11
Rated - 35:23,
 79:7, 79:9, 116:4,
 118:23, 120:7,
 120:8, 120:10,
 129:23, 130:17,
 130:18, 140:4,
 142:12
Ratepayers -
 106:5, 111:12,
 122:10
Rather - 8:2, 68:13,
 119:22, 138:25
Rating - 49:23,
 54:17, 55:3, 55:4,

66:13, 75:6, 75:9,
 76:6, 77:8, 78:8,
 79:7, 114:10, 116:6,
 116:8, 116:22,
 117:4, 118:23,
 119:2, 119:4, 119:5,
 119:10, 119:14,
 119:19, 119:21,
 120:2, 120:4,
 120:11, 120:13,
 130:19, 130:21
Ratings - 7:7, 9:23,
 80:8, 116:3, 116:25,
 117:2, 118:21,
 118:22, 119:25,
 120:1, 120:6,
 120:21, 120:22
Ratio - 45:11,
 79:18, 80:1, 112:22,
 114:12, 121:13,
 123:8, 123:18,
 158:15, 158:22,
 159:11, 159:12
Ratios - 70:14,
 71:7, 158:19
RBC - 136:17,
 152:6, 154:14,
 157:10
RBC's - 138:10
Readily - 32:16
Realistic - 56:24,
 84:12
Realize - 82:13,
 111:17, 119:9,
 119:11
Reason - 4:6, 48:6,
 54:21, 64:8, 76:8,
 105:23, 113:22,
 144:16, 145:15
Reasonable -
 14:21, 34:3, 67:24,
 103:9, 111:11,
 113:5, 114:8, 145:4,
 146:2, 146:19,
 156:10
Reasonably -
 68:14
Reasons - 19:13,
 28:19, 79:3, 140:13
Reassessment -
 104:15
Rebounded -
 134:5
Recent - 112:15,
 121:7, 146:20
Recently - 141:7
Recession - 125:3,
 125:4, 134:21
Recognize -
 121:25
Recommend -

20:22, 139:18
Recommendation
 - 1:22, 7:25, 8:12,
 9:4, 9:7, 19:6,
 23:13, 36:14,
 38:15, 38:16,
 38:24, 67:19,
 68:22, 69:11, 78:4,
 112:21, 159:22
Recommendations - 113:9
Recommended -
 4:11, 12:9, 18:8,
 21:9, 37:1, 64:24,
 70:20, 121:20
Recommending -
 70:16, 122:3,
 147:13, 147:17
Recover - 55:6,
 57:6, 59:23, 62:2,
 62:4, 63:11, 125:24
Recovered - 51:13,
 55:24, 58:18,
 125:2, 125:3,
 125:18, 125:22,
 132:11
Recovering - 59:13
Recovery - 49:12,
 51:9, 51:17, 58:19,
 58:22, 60:11
Red - 75:19, 84:24,
 85:1, 135:7
Reduce - 5:11,
 18:19, 130:23
Reduced - 76:4
Reduces - 29:18
Reducing - 79:25
Reduction - 79:18
Referred - 18:7,
 58:21, 60:20, 144:8
Refinance - 126:13
Refine - 10:11
Reflect - 17:6,
 17:15, 18:13, 20:4,
 23:16, 34:21
Reflected - 18:7,
 22:5, 130:12
Reflects - 103:19
Regarded - 116:16,
 159:20
Regards - 114:8,
 116:5, 116:6, 117:3,
 124:19
Regie - 123:25
Regional - 99:23,
 135:6
Regression -
 22:22, 158:13,
 158:20
Regular - 121:5
Regulate - 122:22,

124:4
Regulated - 3:14,
 5:16, 6:21, 6:24,
 7:3, 7:11, 33:13,
 36:19, 105:4,
 105:7, 110:8,
 110:12, 157:22,
 158:6, 159:13
Regulating -
 122:21
Regulation -
 105:25, 106:12,
 121:4
Regulator - 62:14,
 64:8, 110:6, 110:14,
 110:18, 113:19
Regulators - 11:23,
 15:7, 39:18, 70:13,
 71:6, 71:8, 79:3,
 111:10, 112:15,
 113:2
Regulatory -
 10:18, 11:20, 15:3,
 41:17, 43:11, 58:20,
 59:21, 62:17, 64:5,
 71:14, 72:21,
 73:14, 104:3,
 105:2, 105:16,
 110:7, 111:6,
 113:11, 122:12,
 123:12
Rejected - 27:17,
 28:8
Rejects - 149:3
Relation - 98:17
Relationship -
 22:7, 22:23, 159:10
Relative - 107:19,
 108:3, 108:21,
 143:3
Relatively - 7:12,
 130:8, 130:13,
 157:24
Relaxed - 84:7
Reliability - 60:21,
 60:25, 61:8, 61:23
Relocate - 52:3
Rely - 15:5, 72:12,
 72:18, 116:12,
 117:8
Relying - 58:1,
 156:7
Remain - 128:6
Remained - 44:21,
 139:2
Remains - 112:8
Remarkably -
 80:16
Remind - 122:19
Reminder - 125:7
Removed - 116:18

Renew - 141:19
Repair - 60:24
Repeated - 67:17
Replace - 108:24
Replaced - 121:21
Replicate - 40:19
Report - 4:11,
 13:10, 16:11, 16:16,
 42:12, 44:3, 58:4,
 58:5, 65:21,
 101:13, 130:6
Reported - 95:10,
 128:24, 128:25,
 157:9
Reporter - 147:2
Reports - 72:14,
 147:18
Representative -
 3:10, 9:21, 68:18,
 71:1
Represented -
 68:14
Republicans -
 130:24
Reputable - 113:2
Reputation - 64:6
Request - 30:7,
 74:11
Requests - 102:7
Required - 34:25,
 40:4, 48:16, 69:25,
 74:22
Requirement -
 51:13, 69:22, 75:20
Reran - 36:9
Research - 156:12
Reserve - 90:11,
 126:16, 127:24,
 131:19, 139:24,
 140:1
Reserves - 131:21
Residual - 114:15
Resource - 135:11
Resources - 83:4
Respect - 1:22,
 6:4, 6:12, 7:25,
 16:9, 27:5, 27:7,
 30:10, 34:6, 38:18,
 40:1, 40:4, 42:1,
 42:23, 43:2, 43:4,
 44:23, 53:21,
 68:23, 69:18, 74:7,
 80:3, 90:19
Respectable - 85:3
Respond - 72:1
Responded - 74:10
Responding -
 145:9, 147:20
Response - 11:25,
 18:4, 36:8, 62:18,
 119:6, 145:11

Responsibility - 122:20 Result - 13:15, 14:18, 22:9, 33:10, 33:14, 36:22, 37:18, 59:15, 66:15, 82:20, 83:18, 83:24, 90:6, 106:4, 123:10, 125:12, 140:14, 146:7, 152:1 Results - 13:20, 14:22, 15:21, 30:20, 38:3, 65:5, 67:24, 68:3, 105:10, 141:3, 149:3, 160:8 Resuming - 83:16 Retention - 156:21 Return - 1:23, 2:11, 2:13, 2:14, 3:23, 9:1, 11:6, 32:4, 36:23, 41:1, 48:17, 59:13, 59:25, 98:17, 102:21, 102:23, 102:24, 103:9, 103:14, 104:24, 111:15, 112:15, 113:3, 115:15, 144:7, 145:19, 145:20, 146:2, 146:18, 147:1, 156:9, 156:20, 156:24, 157:5, 158:3, 158:14, 158:17, 158:21, 158:23, 159:3, 159:4, 159:9, 159:10, 159:19 Returns - 71:10, 78:15, 146:15, 146:17, 153:5 Reuters - 128:25, 130:6 REV - 62:15 Revenue - 51:13, 60:13, 63:10, 69:22, 104:14 Revenues - 62:1 Reversed - 35:7 Reversion - 136:5 Revert - 149:6 Reverted - 150:14 Reviewing - 43:24 Revisited - 123:16 Ridiculously - 159:8 Ring - 120:18, 120:20 Rises - 152:18	Riskier - 42:23, 43:1, 43:16, 43:21, 45:12, 116:16, 153:24, 154:3 Risks - 45:3, 63:18, 103:21, 104:6 Risky - 146:6, 149:8, 149:11 Road - 65:10, 103:15 Roadmap - 137:2 Roberts - 148:15, 148:17, 148:22 Robust - 86:12, 92:23 Rocket - 32:7 ROE - 4:12, 8:1, 12:9, 13:3, 15:14, 26:10, 64:24, 65:7, 67:19, 68:3, 71:11, 77:16, 78:1, 103:16, 103:17, 103:18, 104:10, 105:19, 106:10, 109:9, 112:16, 112:19, 115:24, 117:19, 117:22, 121:5, 155:5, 159:17 Roes - 74:13, 75:23 Roger - 147:8 Role - 43:19, 45:17, 84:12, 92:12 Room - 77:2, 113:13, 126:8, 136:13 Rosenberg - 148:9 Rosey - 156:15 RSA - 59:4 Rubber - 103:15 Run - 3:22, 52:7, 69:20, 89:19, 102:22, 103:7, 103:20, 106:7, 106:12, 110:23, 134:3, 157:3 Running - 14:7, 160:20, 160:21, 160:22 Runs - 59:2	S	Samples - 9:18 Saskatchewan - 135:10 Satisfied - 31:13, 113:3, 144:19 Savings - 106:4 Saw - 87:25, 88:21, 106:16, 111:16 Scale - 54:14, 81:8, 81:9 Scene - 97:21 Schedule - 54:5 Scheme - 85:7 School - 99:13 Science - 32:7 Scotia - 43:22, 111:20, 140:3 Screen - 9:22, 10:7, 11:14 Screening - 4:15, 4:21, 7:8 Screens - 4:2, 10:1, 11:14 Scroll - 5:4 Season - 96:15, 96:19 Second - 14:13, 26:9, 36:7, 39:20, 41:7, 108:7, 125:15, 144:6, 151:9 Secondly - 35:10 Sector - 135:6, 135:11, 135:12, 141:10 Securities - 2:16, 91:4, 120:5, 126:23, 126:25, 127:7, 127:10, 127:11, 127:15, 137:10 Security - 42:3, 126:21 Seeing - 50:12, 83:2, 131:1 Seek - 111:10 Seeks - 119:19 Seen - 14:8, 83:15, 88:1, 95:19, 106:18, 129:11, 134:6 Select - 2:1 Selected - 6:7, 40:8 Selection - 6:4, 6:12, 40:4 Sends - 79:19 Senior - 141:4, 152:6 Sensitive - 134:8, 135:25	Sensitivity - 151:18, 151:21 Seriously - 123:12, 140:11 Served - 72:23 Serves - 70:21, 90:5 Service - 48:13, 54:5, 56:22, 57:24, 89:24, 106:10, 119:14 Services - 86:11, 107:17 Sessions - 119:8 Set - 3:25, 103:17, 113:1, 148:9 Setting - 3:22, 11:5 Seven - 4:22, 5:5 Several - 146:5 Severe - 95:11, 104:20, 140:7, 153:10 Severely - 112:2 Shanghai - 85:17 Shape - 149:25, 150:3, 151:9, 153:9 Share - 114:25, 115:1, 115:11, 124:3, 124:5, 150:10 Shared - 106:5 Shareholders - 104:25, 105:5 Shares - 114:16, 115:7, 115:8, 115:13, 121:22, 122:4, 123:20, 123:25, 124:2, 124:4, 150:8 Sheet - 126:18 Sheets - 88:8 Shell - 58:3 She'll - 96:24 She's - 96:11, 96:13, 96:20 Shift - 80:12, 87:2, 131:13 Shipping - 93:13, 93:25, 94:2, 94:10 Ships - 94:14 Shock - 110:10, 111:23, 111:24, 122:8 Shorter - 29:19 Shouldn't - 78:6, 148:18 Show - 31:3, 40:12, 74:11, 74:20, 75:15, 75:16, 128:11, 133:25 Showed - 35:17,	35:21 Shown - 77:12 Shows - 29:4, 74:25, 78:11, 126:17, 126:21, 131:17, 156:12 Shrinking - 59:11 Shying - 143:8 Side - 105:20 Sidelines - 90:1 Signal - 80:12 Signature - 134:10 Significance - 2:7, 55:20 Significant - 40:2, 47:23, 49:6, 51:19, 53:4, 53:5, 53:21, 55:23, 63:23, 64:4, 71:24, 75:4, 79:7, 82:19, 104:12, 111:24, 112:3, 112:10, 112:12, 118:18, 122:8, 122:9, 123:10, 131:25, 133:20, 133:21, 133:23, 142:10, 142:11, 158:4 Significantly - 14:16, 97:11, 138:20, 153:16 Signs - 141:13 Similar - 18:10, 30:22, 120:21, 124:19, 131:2, 133:19, 147:16, 157:12, 160:23 Similarly - 159:4 Simple - 32:21, 41:23, 126:19, 158:13 Simply - 105:24, 110:25, 140:13 Single - 135:20 Sit - 32:7, 112:1 Sitting - 113:12 Situation - 59:2, 122:6, 124:13, 124:19, 125:21, 128:17, 128:18, 131:3, 134:17, 137:19, 139:10, 139:11 Six - 43:25, 44:7, 125:9, 126:2, 139:3, 139:14 Size - 43:18, 52:19, 126:17 Sleet - 104:20 Slides - 161:5 Slight - 139:13,
---	--	----------	---	---	--

<p>141:14 Slippage - 54:12 Sloshing - 87:20 Slow - 48:12, 132:16 Slowdown - 139:15 Small - 47:12, 106:19, 126:5, 131:11, 157:24 Smaller - 47:14, 80:5 Smart - 96:11 Solar - 62:11 Solely - 102:3 Somewhat - 65:22, 67:8, 67:12, 68:16, 69:8, 71:24, 84:13, 86:18 Son - 85:20 Sound - 135:1 Sounds - 131:21 Source - 82:21, 85:1, 108:24 Southwest - 155:23, 159:5 Sovereign - 131:19 Space - 107:11, 109:6 Spain - 103:6, 145:21 Spare - 94:10, 94:19 Special - 111:9 Specialists - 73:25 Specific - 77:3 Spectrum - 65:1, 65:11, 68:1 Speed - 132:9, 134:23, 135:18 Spiral - 62:7 Splitting - 121:4 Spot - 19:3 Spread - 24:19, 26:3, 130:2, 139:17, 139:22, 140:3, 140:4, 155:8 Spreads - 35:20, 128:5, 129:22, 138:23, 138:24, 139:1, 139:4, 139:13, 139:19, 140:8, 140:14, 140:15, 141:15, 141:19, 142:1, 142:2 St - 108:11, 108:20, 139:24 Stability - 71:12 Stable - 80:16, 119:4, 139:2,</p>	<p>155:25 Staff - 41:6, 41:13, 102:9 Stage - 27:23, 28:11, 28:20, 29:12, 33:19, 37:15, 40:1 Stand - 98:10 Standard - 2:12, 2:13, 17:10, 17:17, 20:5, 20:8, 28:25, 100:17, 100:18, 100:21, 113:3, 115:18, 116:21, 128:11, 144:1, 148:2, 148:3, 148:19, 153:3, 154:5, 154:20 Standards - 113:11 Standpoint - 7:9, 51:6, 79:24, 82:3 Stand - 89:8 Start - 54:23, 56:20, 91:11, 91:12, 91:15, 145:25 Started - 11:19, 81:20, 119:15, 128:13, 134:18, 134:19, 148:1 Starting - 57:6, 84:2, 133:14, 133:25, 134:5 Starts - 2:11, 54:23, 96:22 State - 18:9, 22:3, 62:13 Statement - 131:9 Statements - 128:24 Statistical - 149:12, 149:13, 149:20, 150:15 Statistician - 150:21 Statistics - 150:17 Stay - 41:3, 70:20 Steel - 133:2, 133:6, 133:9 Step - 2:7 Stephen - 133:15 Stepped - 127:14 Steps - 1:25 Stimulus - 129:10, 129:15 Stock - 39:18, 40:9, 50:7, 50:22, 58:12, 90:23, 91:3, 91:5, 93:9, 149:11, 158:19 Stockholders - 110:11, 110:16 Stockman - 87:2</p>	<p>Stocks - 2:20, 57:12, 91:17, 151:12, 151:13, 151:14, 151:19, 151:23, 152:2, 152:21, 153:12, 153:13, 153:17, 155:2 Stop - 133:8 Stopped - 132:11, 132:13, 136:21 Storm - 61:17, 104:20 Straightforward - 32:22 Straits - 125:6, 126:14 Strength - 121:10 Stress - 128:11, 140:25, 141:13, 141:18 Stresses - 141:3 Stretch - 137:20 Stretching - 56:9 Striking - 140:5, 153:11 Strong - 7:6, 116:2, 116:6, 116:9, 117:4, 130:8 Stronger - 116:9, 151:16 Struck - 72:3, 124:16, 124:22 Structural - 49:3, 116:20, 145:2 Structure - 42:11, 44:3, 68:23, 69:2, 69:6, 69:18, 75:1, 75:23, 76:4, 77:14, 77:23, 78:5, 98:18, 103:12, 113:9, 122:15, 122:17, 123:14 Structured - 99:11 Structures - 74:13, 78:13, 78:14 Struggling - 60:3 Student - 64:20 Students - 64:13, 64:15, 64:17 Study - 61:13, 61:14, 96:2 Stumble - 33:3 Sub - 125:12 Subordination - 116:20 Subset - 144:17 Subsidiaries - 6:25, 10:16, 114:17, 116:13, 117:6, 119:25, 121:11</p>	<p>Subsidiary - 119:21, 120:17 Substantial - 5:15, 87:18, 104:11 Substantive - 102:14 Sudden - 97:10 Suffers - 110:10 Sufficient - 11:15 Suggested - 76:25 Suggestion - 20:16 Sum - 45:8, 103:19, 104:1 Summarizes - 13:14 Summary - 37:24, 101:10, 112:6, 127:19, 127:23 Supply - 44:4, 51:9, 51:20, 51:23, 52:4, 52:11, 52:23, 55:1, 58:18, 59:5, 60:4, 64:2, 73:2, 73:24, 110:10, 127:12 Support - 148:23 Supported - 38:21, 152:15 Supportive - 106:11 Suppose - 36:2 Supposed - 56:21 Surfaced - 110:2 Surprised - 82:4, 133:16 Surprises - 33:2, 33:5, 78:21 Surprising - 54:13 Surrebuttal - 98:24, 147:6 Surrounded - 95:17 Survey - 141:4, 144:8, 145:10 Surveys - 145:4, 145:9, 147:21 Suspect - 88:15, 89:11, 91:15 Sustainable - 27:23, 84:6, 92:14, 92:18, 156:18, 156:25, 160:7 Sway - 58:7 Switched - 109:6 SWORN - 1:12, 98:12 System - 62:8, 62:16, 62:20, 125:14, 126:4, 129:17, 130:1, 131:7, 141:14</p>	<p>T</p> <p>Table - 38:14, 41:12, 75:5, 75:8, 77:12 Taking - 23:12, 64:13 Target - 2:22, 10:24, 132:17 Targets - 96:22, 96:23, 114:11 Taught - 100:8, 100:22 Tax - 104:15, 122:16, 144:5, 152:15 Taxes - 152:17 TD - 146:11, 147:19 Teach - 99:16 Teaching - 85:20, 100:12 Team - 72:21 Teams - 73:14 Technical - 134:21 Telling - 92:5 Tells - 68:17, 76:10, 154:1, 154:2 Temptation - 35:13 Ten - 29:20, 97:24, 136:6, 146:15, 147:9, 152:17 Term - 51:2, 51:3, 52:6, 55:6, 55:14, 57:7, 57:9, 57:11, 57:14, 81:6, 81:8, 92:13, 97:8, 119:5, 126:12, 126:23, 127:3, 128:20, 129:23, 138:23, 141:12, 147:15, 155:5 Terms - 11:5, 55:4, 55:5, 57:24, 61:21, 72:17, 78:7, 78:24, 79:2, 81:16, 82:22, 86:17, 86:20, 103:14, 105:17, 107:3, 113:4, 117:6, 117:22, 118:20, 121:7, 132:9, 138:22 Test - 74:22, 75:18, 77:17, 109:16, 109:19, 112:5, 122:2, 155:6 Testimony - 7:22, 48:20, 101:20, 107:23, 109:22, 115:10, 124:23, 124:24, 125:1, 144:10 Textbook - 100:1,</p>
---	--	--	--	--

<p>100:2, 100:17, 100:20, 101:5, 148:4 Textbooks - 99:25, 100:4 That'll - 61:15 Theory - 29:17 Therefore - 83:17, 149:1, 149:2 There's - 1:5, 3:18, 3:20, 30:1, 30:24, 31:5, 31:9, 31:10, 31:13, 31:24, 36:1, 40:10, 41:21, 41:25, 48:6, 54:20, 64:8, 70:12, 77:9, 82:25, 84:18, 87:15, 90:21, 101:22, 101:25, 102:20, 102:21, 102:24, 105:9, 111:10, 114:16, 119:21, 123:9, 131:3, 143:7, 148:7, 149:9, 149:18, 151:7, 153:18, 157:19, 160:24 They'll - 55:2 They've - 40:23, 41:4, 84:6, 113:18, 118:9, 132:19, 147:10, 152:12 Third - 4:4, 108:8, 152:16 THOMAS - 98:13 Thousand - 108:2 Thousands - 145:4, 145:8, 147:20 Threat - 87:21, 97:5 Three - 2:12, 3:1, 3:4, 4:4, 13:2, 13:19, 13:20, 14:8, 14:9, 17:3, 19:1, 19:7, 77:25, 99:15, 99:25, 102:25, 108:8, 111:19, 113:13, 118:21, 121:14, 121:20, 121:24, 123:9, 127:6, 127:8, 127:9, 127:21, 132:15, 142:9, 143:11, 144:4, 146:12, 154:22, 155:9, 157:7 Thrive - 88:6 Thrown - 125:16 Tied - 30:3</p>	<p>Ties - 65:22 Tightening - 141:5 Tighter - 12:15 Times - 50:16, 73:1, 73:18, 117:21, 142:5, 143:3, 148:1 Timing - 53:22, 61:9 Tiny - 131:13, 131:24, 141:7 Tip - 51:21 Title - 100:5 Today - 31:18, 50:21, 58:12, 63:6, 89:3, 97:24, 160:12 Tomorrow - 58:13, 161:8 Took - 11:25, 53:16, 68:25, 122:14, 150:6, 150:7 Tool - 14:3, 122:12, 123:12 Tools - 56:6, 58:20 Top - 16:17, 26:1, 35:20, 76:15, 83:1, 103:24 Toronto - 91:3, 99:10, 99:12, 108:16, 108:17 Total - 24:21, 43:1, 45:8, 104:2, 131:11 Towards - 45:5, 88:21, 105:21, 133:3, 148:19, 148:25, 149:2, 157:7 Track - 71:12 Tractor - 95:16 Trade - 82:5, 134:2, 151:15, 151:16, 152:10, 152:19 Traded - 3:13, 91:2, 91:18, 93:9 Trading - 82:6, 152:25 Traditional - 21:21 Trailer - 95:16 Trajectory - 134:12 Transcanada - 106:17, 110:1 Transcript - 6:6, 8:3, 9:3, 53:12 Transcripts - 48:19 Transmission - 34:1, 73:3, 112:9, 112:13, 112:17, 112:19, 112:22, 112:25 Transparency - 32:14</p>	<p>Transparent - 32:21 Treasury - 126:23, 126:25, 127:2 Treatment - 10:19, 11:21 Tree - 149:17 Tremendous - 83:2, 83:6 Trend - 129:8, 129:9 Trillion - 127:6, 127:10 Trouble - 78:17, 78:19 Trucks - 95:22 Trust - 75:19, 75:25 Truth - 124:21 TSE - 90:23, 91:13, 91:18 Tuned - 12:22 Tuning - 36:5 Turn - 4:9, 31:2, 53:3, 90:16, 124:12 Turned - 10:23 Turning - 42:11 Turns - 24:17 Twice - 129:12 Twist - 24:20, 26:3, 126:9, 127:25 Twisting - 126:11 Two - 4:1, 5:6, 5:12, 9:25, 17:9, 19:1, 19:13, 22:19, 35:6, 40:13, 41:24, 52:25, 64:4, 67:9, 80:13, 85:22, 100:7, 102:21, 133:17, 134:23, 135:18, 137:15, 138:11, 138:18, 142:9, 151:7, 158:24 Types - 11:14, 32:9, 48:15, 59:16, 61:17, 115:7 Typical - 51:16, 72:8, 72:25, 107:7, 112:8 Typically - 3:5, 11:12, 29:9, 32:10, 33:3, 57:11, 57:14, 59:12, 71:6, 72:12, 79:1, 79:3 Typos - 101:22, 101:24</p> <div>U</div> <p>UK - 125:25, 129:2 Unadjusted - 18:9</p>	<p>Unambiguously - 120:10 Uncertainty - 47:6, 56:17, 61:7, 82:15, 82:22, 123:22 Undergraduate - 99:13, 100:13, 101:6 Underlined - 106:16 Underlying - 35:11, 135:4, 152:20 Understate - 146:17 Understated - 25:18 Understood - 8:24, 30:21 Undertaking - 74:8 Unemployment - 88:18, 89:2 Unfortunately - 106:1, 137:4 Uni - 105:13 Uniphase - 150:5 United - 99:15, 100:19, 100:25, 101:7, 123:2, 124:20, 125:5, 125:7, 125:14, 125:15, 126:10, 126:15, 130:18, 131:5, 131:9, 133:20, 138:21, 140:9, 140:17, 147:14, 153:9, 153:13, 153:18 Universe - 2:19, 2:20, 64:12, 91:10, 91:13 Universities - 100:22 University - 99:9, 99:12, 101:1, 148:9 Unless - 119:18, 120:17 Unpredictable - 84:14 Unreasonable - 110:17 Unreasonably - 141:12, 149:4 Unusual - 105:9, 120:25, 138:14, 141:13 Unusually - 128:9 Updated - 41:6, 148:6 Updates - 101:19 Upper - 65:1, 134:12</p>	<p>Used - 4:2, 4:22, 8:11, 9:5, 9:6, 12:3, 13:2, 15:13, 18:17, 25:25, 26:9, 29:20, 35:1, 41:25, 43:25, 50:13, 60:9, 81:6, 81:8, 99:16, 108:2, 120:1, 150:15, 152:5 Uses - 9:12, 16:6 Using - 3:19, 4:21, 10:25, 14:23, 16:20, 18:24, 20:23, 22:22, 25:4, 25:9, 25:10, 33:19, 34:6, 36:9, 38:19, 39:4, 40:13, 41:23, 42:1, 65:6, 142:14, 143:16, 147:12, 155:13, 160:3 Utilization - 134:11 Utilize - 39:23</p> <div>V</div> <p>Valener - 5:14 Valley - 110:3, 110:21 Value - 9:24, 85:15, 89:7, 130:11, 130:23, 143:1, 152:11 Valued - 144:4, 144:5 Vancouver - 108:7 Variability - 158:3 Varied - 9:19 Varies - 22:10, 22:11, 22:12, 72:12 Variety - 99:25, 100:8 Vary - 22:10 Vast - 105:4 Vectren - 155:20 Veracious - 86:9 Version - 29:3 Versus - 15:4, 35:9, 35:24, 36:17, 47:25, 108:4, 139:18, 154:4 Vice - 72:7 View - 19:14, 19:16, 71:23, 107:3, 119:24 Viewed - 153:23 Violate - 75:20 Virtue - 47:13 Vis - 15:20, 63:24, 65:2, 70:8, 79:16 Visit - 85:21 Voice - 86:19 Volatile - 31:22,</p>
---	---	---	--	--

32:6
Volatility - 155:23
Volume - 43:10
Voluntary - 140:13
Voting - 130:25

W

Wage - 96:22
Wages - 89:25, 90:6, 90:13
Wait - 74:9
Waited - 133:12, 133:13
Waiting - 125:22, 125:23, 127:22, 132:6, 132:7, 132:14, 134:16
Wakeup - 82:12, 88:3
Walking - 59:20
Wanes - 119:7
Warrant - 68:7
Watching - 66:17, 86:24, 95:7, 96:16
Water - 107:21
Waters - 50:25
Wax - 119:7
Ways - 22:19, 111:10
Weak - 133:14
Weakened - 139:15
Weaker - 117:1, 117:2
Weakest - 64:2, 64:3
Weakness - 134:6, 134:20
Weather - 61:17
Website - 154:9, 154:15
Week - 94:21
Weekly - 154:21
Weight - 4:5, 15:16, 27:22, 28:11, 37:15, 38:3, 38:10, 49:9, 159:23
Weighting - 38:23
We'll - 33:19, 33:22, 73:5, 74:3, 86:23, 97:23, 103:23
We're - 3:24, 10:16, 10:24, 14:7, 18:10, 22:18, 27:20, 39:4, 50:12, 63:15, 65:6, 80:24, 81:22, 83:2, 88:5, 96:4, 96:15, 98:6, 116:6, 126:5, 128:18, 129:1, 129:6, 129:24,

132:6, 132:7, 154:23, 156:6, 157:24, 157:25, 158:5, 161:1, 161:8
Weren't - 82:9
West - 99:22, 106:20
Western - 136:3
We've - 3:17, 11:15, 12:20, 14:8, 20:1, 26:21, 31:25, 40:8, 47:4, 52:14, 52:21, 70:24, 79:21, 82:10, 83:15, 88:1, 88:14, 106:18, 108:18, 112:14, 113:23, 115:20, 119:20, 126:1, 133:18, 134:6, 134:15, 141:2, 143:22
WGL - 155:20
What's - 1:3, 15:18, 32:11, 33:7, 46:2, 46:22, 48:5, 73:4, 80:14, 81:8, 82:24, 93:15, 96:8, 102:22, 105:11, 108:3, 118:8, 123:2, 131:5, 131:10, 132:4, 132:20, 135:5, 138:5
Whatsoever - 104:22, 130:5, 141:11, 158:7, 159:18
Whereas - 125:5, 144:20
Whole - 87:3, 149:8
Holly - 7:10
Wide - 14:25
Widely - 41:19
Wiggle - 77:2
Will - 17:4, 24:16, 37:25, 38:2, 43:20, 53:24, 54:21, 54:23, 57:2, 58:18, 59:8, 60:6, 60:14, 61:10, 73:1, 73:19, 74:24, 79:16, 82:23, 87:6, 98:15, 98:16, 101:11, 101:12, 102:3, 106:14, 109:18, 109:21, 120:16, 122:1, 129:18, 129:19, 137:11, 147:3, 149:10, 150:4, 161:6
Willing - 158:18

Wind - 62:11
Window - 95:1, 150:13
Winnipeg - 108:6
Wish - 101:19, 113:18, 160:19
Withdraw - 129:9, 129:14
Witness - 98:7, 98:11, 149:18
Witnesses - 111:1
Won - 99:17
Won't - 34:17, 63:11
Word - 67:12, 128:16
Words - 47:21, 116:2, 129:20, 149:6
Work - 3:8, 3:17, 9:22, 48:2, 48:10, 60:24, 64:10, 73:14, 73:23, 73:24, 79:15, 89:20, 90:8, 99:14, 143:14, 148:5, 160:6
Worked - 110:7, 111:9
Working - 90:4
Workplace - 89:15
World - 33:9, 81:19, 81:20, 81:24, 82:1, 82:3, 82:13, 82:14, 84:12, 87:15, 87:21, 88:10, 93:22, 125:24, 126:7, 130:14, 131:24, 132:10, 132:14, 137:6, 149:9
Worldwide - 92:4
Worry - 70:11, 141:21
Worse - 94:12
Worth - 32:15, 87:16, 127:6, 127:10, 137:9, 153:7, 154:22
Worthy - 87:11
Wouldn't - 2:18, 9:4, 54:13, 78:6, 87:1, 91:12, 123:23, 127:20, 128:15, 140:19, 153:24
Wow - 127:20
Wrangling - 130:21
Write - 100:20
Writing - 54:18

Written - 72:13, 73:13, 98:23, 99:24, 101:20
Wyman - 157:3

Y

Yahoo - 154:12
Year - 19:1, 19:7, 40:25, 76:22, 85:21, 90:17, 97:2, 99:21, 107:7, 109:16, 109:19, 110:19, 110:22, 112:5, 119:10, 122:3, 128:14, 132:25, 134:14, 135:21, 138:12, 138:13, 141:22, 141:24, 146:15, 146:21, 150:12, 152:18, 155:6, 155:18, 159:15
Years' - 123:9, 153:7, 154:22
Yellen - 96:8
Yellow - 75:19, 77:9
Yesterday - 52:8, 53:11, 53:12, 58:15, 60:9, 61:6, 63:6, 67:16
Yield - 15:18, 19:3, 40:9, 126:11, 138:13, 143:21, 145:18, 147:16, 152:13, 152:18, 155:6
Yielding - 151:12
Yields - 22:4, 22:25, 126:12, 128:4, 128:6, 128:10, 128:18, 139:9, 141:13, 151:15, 152:16
York - 62:13, 62:15, 91:5, 108:18
You'd - 87:3, 89:2
You'll - 37:23, 95:4
Young - 99:17
You're - 2:10, 8:10, 14:1, 14:23, 20:23, 22:13, 23:6, 23:15, 35:17, 38:21, 45:20, 47:6, 57:4, 59:15, 60:11, 62:23, 79:14, 85:25, 87:21, 90:20, 92:2, 92:3, 92:5, 95:3
You've - 5:21, 7:23, 13:2, 16:19, 17:24, 30:16, 66:20

Z

Zen - 149:16
Zinc - 135:13
Zone - 129:4

,

'90s - 104:13, 104:19, 120:9, 123:17
'94 - 153:5

#

#13 - 34:13
#4 - 74:8

\$

\$161.00 - 108:12
\$5.00 - 87:16

0

0.25 - 128:1
056 - 30:12, 30:14
064 - 17:2
092 - 30:22

1

1.1 - 159:13
1.15 - 159:16
1.4 - 135:17
1.6 - 135:14
10 - 109:1, 114:14, 114:15, 119:15, 157:16, 157:17
10.3 - 37:16
10.44 - 155:20
10.7 - 36:21, 37:7
10:00 - 55:11
10:15 - 70:1
10:30 - 84:22
10:44 - 98:3
10:58 - 98:4
100 - 34:23, 138:15
11 - 34:17, 35:22, 36:3, 110:19, 110:22, 157:15
11:15 - 113:6
11:30 - 124:14
11:45 - 139:23
12 - 119:13
12:00 - 152:4, 160:15
12:15 - 161:15
13 - 8:15, 38:16
13.7 - 155:23
14.6 - 155:22
15 - 75:10, 117:22, 141:15, 153:14
15/20 - 150:2

<p>150 - 131:22, 139:5 16 - 4:12 16.5 - 75:14, 77:11 16.9 - 135:19, 135:20 17 - 4:20, 10:16, 75:10, 135:15, 159:5 17.1 - 155:20 175 - 24:18, 24:21, 26:4 18 - 44:2, 44:6, 134:15 18.3 - 155:21 180 - 128:6, 129:24, 130:1 180/200 - 139:5 185 - 53:13 186 - 53:14 19 - 53:13, 155:1 190 - 128:8, 129:25, 155:10 1950 - 89:1 1970 - 148:6 1975 - 148:6 1978 - 99:12 1985 - 93:20 1990 - 153:6 1990s - 109:3</p> <div>2</div> <p>2.24 - 18:19 2.25 - 138:13 2.4 - 157:1 2.7 - 157:1 2.81 - 155:6 20 - 9:11, 89:3, 89:6, 142:24, 153:15, 161:6 20/25 - 142:13 200 - 115:11, 131:22 2000s - 104:14, 134:2, 150:5 2004 - 109:25 2008 - 88:11 2009 - 121:15, 145:6, 148:13 2010 - 125:4, 125:18, 129:12, 132:11, 137:22, 139:6, 140:10 2011 - 106:18, 130:20, 136:17, 140:11, 157:14 2012 - 115:10, 124:13, 124:23, 124:24, 125:1, 125:5, 125:6, 125:19, 125:21, 127:18, 127:20,</p>	<p>128:16, 128:21, 129:10, 129:12, 130:6, 132:4, 132:12, 132:13, 133:11, 134:11, 136:15, 137:22, 139:11, 142:14, 145:6, 157:16 2013 - 30:9, 30:25, 31:12, 31:18, 34:13, 46:4, 46:8, 115:9, 115:17, 157:17 2013/2014 - 136:23 2014 - 107:6, 107:16, 115:9, 115:16, 127:5, 128:2, 132:13, 134:6, 137:24, 154:17, 157:18 2015 - 133:15, 134:22, 141:2 2016 - 138:11, 155:6 2017 - 76:19, 77:1, 137:10 2018 - 54:5, 56:22 2019 - 56:25 21 - 99:20 219 - 8:4, 8:14 220 - 8:15, 24:5 24 - 92:5, 135:1, 153:7 25 - 8:9, 8:14, 68:10, 105:2, 118:25, 153:7, 154:25, 155:1 25,000 - 109:1 250 - 115:9 29 - 18:21</p> <div>3</div> <p>3.1 - 135:8 3.3 - 138:13 3.37 - 155:21 3.43 - 157:1 3.7 - 109:5 3.77 - 157:1 3.8 - 143:21 30 - 9:5, 9:12, 11:1, 112:19, 112:21, 119:10, 131:18, 131:21, 138:12, 138:13 31 - 34:17 34 - 16:12, 114:13, 155:1 35 - 16:15, 112:19, 112:22, 114:13, 114:18, 114:20, 114:24, 115:22,</p>	<p>115:24 36 - 92:5, 112:17 38 - 112:17, 155:1 38.5 - 117:14, 124:1</p> <div>4</div> <p>4.2 - 143:21 4.5 - 136:19 40 - 75:2, 75:23, 78:4, 109:4, 117:12, 117:15, 119:10, 123:7, 123:19, 128:13 43 - 80:6 45 - 69:11, 69:19, 69:24, 70:20, 75:2, 80:6, 85:17, 114:11, 114:12, 114:22, 117:10, 121:13, 123:19, 155:8, 155:11 4th - 6:4</p> <div>5</div> <p>5.3 - 145:12 5.4 - 115:16 5.5 - 147:13 5.6 - 155:22 5.7 - 88:22, 89:7 50 - 24:18, 34:23, 55:1, 56:3, 64:1, 117:24, 119:10, 128:14, 137:11, 138:14, 140:16, 141:21, 155:11 51 - 155:2 53 - 154:25 55 - 137:9, 155:8</p> <div>6</div> <p>6.2 - 157:5 6.3 - 20:21, 21:8, 23:5, 23:14 6.4 - 145:21 6.5 - 132:19 6.6 - 157:5 6.7 - 145:22 6.8 - 23:4, 23:24, 24:3, 157:5 60 - 118:5, 138:14 60,000 - 95:23 600 - 115:9 64 - 20:3 66 - 152:18 660 - 131:12</p> <div>7</div> <p>7.1 - 145:22, 147:2, 155:22</p>	<p>7.15 - 159:17 7.5 - 115:19, 115:22, 115:24, 124:2, 132:18 7.6 - 20:22, 21:9, 147:2 7.8 - 145:21 7th - 1:3</p> <div>8</div> <p>8.1 - 115:16 8.2 - 112:18 8.3 - 112:16, 117:24, 147:2 8.5 - 146:18 8.75 - 117:25 8.8 - 117:23 8.9 - 156:8 8/29 - 19:4 80 - 125:15, 137:13 83 - 135:16</p> <div>9</div> <p>9.15 - 118:3 9.3 - 147:2 9.5 - 36:13, 36:25, 37:8, 38:17, 78:3 9.7 - 38:17 9:00 - 161:9 9:07 - 1:1 9:15 - 8:7 9:30 - 23:1 9:45 - 39:24 90s - 48:22</p>
--	--	---	--