

| | |
|--|---|
| Page 1 | Page 3 |
| <p>1 CHAIR: 2 Q. Good morning everyone. No preliminary 3 matters, Ms. Gynn? 4 MS. GLYNN: 5 Q. We do have two preliminary matters, Mr. 6 Chair. Newfoundland Power did file a 7 response to Undertaking 6. We just had some 8 discussion that that undertaking will be 9 revised to also include the bar graph of 10 Figure 1 and update that. And we do have-- 11 Figure 1 in the rebuttal evidence of Mr. 12 Coyne, yes, and we do have a second 13 preliminary matter that Ms. Greene would 14 like to request another undertaking. 15 GREENE, KC: 16 Q. Good morning, Mr. Chair, Commissioners. We 17 had discussed this earlier in the week with 18 counsel for Newfoundland Power, but we would 19 like to place the undertaking on the record. 20 What we would like Newfoundland Power to 21 file is the history of the Hay points for 22 each executive position at Newfoundland 23 Power, starting with the Hay point as 24 reflected in the Hay Report dated March 18th, 25 2016 that was filed in the 2016 General Rate</p> | <p>1 Booth. 2 DR. BOOTH: 3 A. I apologize to members of the panel simply 4 because I was trying to get through these 5 last few slides to get a break in my 6 presentation and I understand it was a bit 7 confusing. So I was talking about the state 8 of economy and there's a whole bunch of 9 measures that we look at for the state of 10 the economy. One is what we call credit 11 spreads, the difference between the A bond 12 yield and the Government of Canada bond 13 yield, when we get into recession or a fear 14 of recession, people dump risky securities 15 and they buy Government of Canada 16 securities, and as a result, that spread 17 increases. So if you look at the spreads, 18 you can see the 1980's crash, you can see 19 the severe crisis in the 1990s when Triple- 20 Bs particularly were very high. You can see 21 the Asian crisis of 1997, you can see the 22 2002 tec rec, you can see the serious 23 problems during the US financial crisis and 24 you can see the impact of COVID. So this is 25 a measure that we look at and right now the</p> |
| Page 2 | Page 4 |
| <p>1 Application. The historical record should 2 show the change in points from each position 3 from the date of that report to present, 4 explaining the reasons and the rationale for 5 the change. As well, the history should 6 show the salary range for each executive 7 position that shows a salary range in effect 8 at the time for each change in Hay points. 9 So that is the undertaking. 10 MR. O'BRIEN: 11 Q. That's accepted, we'll do it. 12 MS. GLYNN: 13 Q. And that will be Undertaking No. 7. 14 CHAIR: 15 Q. So we're ready to go? 16 MS. GLYNN: 17 Q. We are ready to proceed. 18 CHAIR: 19 Q. Okay, back to you, Mr. Coffey. 20 COFFEY, KC: 21 Q. Members of the Board, I gather now technical 22 arrangements have been made and Dr. Booth 23 has control of the slides, so he'll be able 24 to flick through them okay. We're back, you 25 had long-term credit spreads, go ahead, Dr.</p> | <p>1 credit spreads are higher than they were in 2 the '90s, but they are consistent with where 3 they've been for the last ten years, no 4 indication of any serious problem accessing 5 the A bond market, which is the market which 6 most utilities access in Canada. 7 The Bank of Canada also surveys loan 8 offices to say, well what are you doing in 9 terms of lending, are you adjusting the term 10 of your loan or the fees you charge because 11 of a crisis, and this is the Bank of Canada 12 survey and senior loan officers in Canada. 13 And again you can see the financial crisis 14 when you go into recession, loan officers 15 get nervous and they increase fees and they 16 reduce the term of the loan, exactly the 17 same as in the bond market. Right now, we 18 have a little bit, at the end of last year 19 where loan officers were increasing charges 20 a little bit, but nothing untowards and 21 nothing significantly different from 2016. 22 We also look at equity market indicators, 23 the volatility index. We actually have 24 securities that allows us to work out what 25 volatility the equity market is implying.</p> |

Page 5

1 In the long-run, the equity market has
 2 annual volatility of about 20 percent.
 3 Right now, equity markets have low
 4 volatility and that goes tan and tandem with
 5 the strong equity markets we've had for the
 6 last several years. And again, you can see
 7 the spike in volatility during the COVID and
 8 the spike in volatility during the US
 9 financial crisis. And during those periods,
 10 risk premiums go up because the volatility
 11 goes up, fear goes up. In fact, the
 12 volatility index is often called the fear
 13 index.
 14 And finally, now they are indicators,
 15 the Kansas City Federal Reserve Bank puts
 16 together a financial stress index called the
 17 Kansas City Financial Stress Index and this
 18 became popular about 20 years ago to try and
 19 encapsulate all of these market measures
 20 into one measure that we can look at. So
 21 this is the Kansas City Financial Stress
 22 Index. When the number is below zero, it
 23 indicates the overall easy financial market
 24 conditions, the banks are in good shapes,
 25 they're lending, credit spreads are normal,

Page 6

1 volatility is normal and again, we can see
 2 the impact of early 2000s, the tech rec
 3 Internet bubble, the US financial crisis,
 4 COVID, those are where those spikes come in.
 5 Right now, it's not at all unusual, it's
 6 indicating relatively easy financial
 7 conditions. So that's just to look at these
 8 measures to indicate what is the state of
 9 the capital markets because the legal
 10 standard in Canada is to look at the state
 11 of the money or the capital markets. You
 12 can't just change the rate of return without
 13 thinking about what's going on.
 14 Now in terms of the estimates, 2008-
 15 sorry, 2016 Mr. Kelly said I was the
 16 principle proponent of the Capital Asset
 17 Pricing Model and I said you put too much
 18 faith in me, that's not correct. But it is
 19 correct that the capital asset pricing model
 20 is the premium model in academic finance
 21 mainly because it captures two of the three
 22 principle factors in valuation which is the
 23 time valued money, current cashflows are
 24 more valuable than cashflows in 20 years
 25 time and that's represented by the risk-free

Page 7

1 rate and the risk premium. Investors don't
 2 like risk. They prefer a certain cashflow
 3 in a year's time than a roulette wheel on
 4 certain cashflow. So those are the two
 5 basic measures captured by the CAPM.
 6 The third one is the tax value of
 7 money. In Canada you prefer dividends to
 8 interest because dividends are favourably
 9 taxed at the individual level.
 10 (9:15 a.m.)
 11 So when I talk to my students, I
 12 always tell them never forget the three iron
 13 rules of finance: time valued money, risk
 14 valued money, tax valued money. And the
 15 CAPM captures two of those. Primary
 16 reliance by the National Energy Board in
 17 2008, RH1 2008, prime realized by the Regie
 18 and in answers to information requests, I
 19 gave the--this Board in 2009 the decision
 20 was entirely a cap asset pricing model
 21 decision. The New Brunswick board in their
 22 decision, the Liberty, the former Enbridge
 23 gas New Brunswick was entirely a capital
 24 asset pricing model decision. There's no
 25 question that it's the premium model.

Page 8

1 Academically, this is a survey, Mr. Coyne
 2 takes exception of this because he says well
 3 it's primarily for capital budgeting.
 4 Absolutely, that is why we calculate
 5 discount rates in order to evaluate
 6 investments, whether they're security market
 7 investments or whether they're cashflows
 8 within a project. The fundamental of all of
 9 this is what does the investor want which is
 10 what the discount rate is. CAPM
 11 overwhelmingly the most important.
 12 Second one, Arithmetic average
 13 historical estimates, which is what I also
 14 look at. Multi-Beta CAPM, that is what
 15 academics love, it's way more sophisticated
 16 when than a CAPM, only one expert in Canada
 17 has attempted that, Dr. Chretien before the
 18 Regie and I said at the time it converts
 19 litigation over one or two values to
 20 litigation over about eight values because
 21 there's multiple betas which means there's
 22 multiple areas of dispute. So that, as far
 23 as I'm aware, has not been used in Canada,
 24 apart from Professor Chretien's. Divid
 25 (phonetic) the discount model, way down in

| | |
|--|--|
| <p style="text-align: right;">Page 9</p> <p>1 terms of importance by major CFOs. Investor 2 expectations, what do people want. And the 3 only way you get those investor expectations 4 is by asking them, doing a survey. And then 5 regulatory decisions, so if you believe in 6 multiple uses of sources of information, 7 these are the major sources of information 8 that people can look at when they make 9 estimates on the fair rate of return. And I 10 also provide a Canadian article, so in terms 11 of the average historical rates of return, 12 this is the average rates going back to 13 1926. I actually also provide the Canadian 14 evidence going back to 1922, but most of the 15 US evidence is based from 1926 because it's 16 based upon data put together by a couple of 17 Chicago professors and then taken over by 18 Duff and Phelps and now used by Kroll. No 19 question the risk premium is higher in the 20 United States than it is in Canada. Why? 21 Because the US is the great winner in the 22 global capital markets and as a result, the 23 experienced equity returns in the US, 24 particular the S&P 500, exceed the equity 25 returns almost anywhere else. On the other</p> | <p style="text-align: right;">Page 11</p> <p>1 talk about, and it doesn't work and they 2 torture the model to try and make it work 3 because they believe in models. There was a 4 discussion yesterday about judgment, finance 5 models, I argue and have been saying for 6 years, they're a restraint on judgment. 7 They are not a substitute for judgment. You 8 put the estimates into an equation and it 9 constrains what you can do so that you can't 10 produce outlandish estimates. But nobody in 11 finance, except in a certain area of the 12 derivative market, is slavishly attached to 13 models. If I was slavishly attached to the 14 empirical estimates in Canada, I'd be using 15 a market risk premium under 5 percent. I 16 don't do that. If I was slavishly looking 17 in the United States using the US data, I'd 18 be using a market risk premium of 6.6 19 percent. I don't do that. You look at 20 other things. As the survey, as the work on 21 the capital asset pricing model indicated, 22 it was the best model indicates, you look at 23 expectations. This is what Fernandez does, 24 he surveys well over a thousand people in 25 the United States and they report back. Now</p> |
| <p style="text-align: right;">Page 10</p> <p>1 hand, Canada has traditionally had problems 2 accessing debt and bond yields in Canada 3 have been higher up until the government 4 sold its financial problems when in the 5 Liberal government, in the early 1990s when 6 they slashed government spending by 20 7 percent across the boarder, we moved into 8 surplus since then. 9 Our interest rates have been 10 significantly lower than those in the United 11 States, so I don't take the historic data. 12 I look at the historic data and I tell my 13 students, well first of all I tell my 14 students, engineers are a real problem and I 15 don't know whether any members of the Board 16 are engineers, but engineers believe models, 17 their models tell you what to do with a 18 house and the house doesn't fall down. They 19 tell you what to do with a bridge and with 20 luck, the bridge doesn't fall down. They 21 tell you want to do with a damn and 22 hopefully the damn works, but that's what 23 engineers do. They believe in models and 24 then they come to a finance class and they 25 take the dividend discount model, which I</p> | <p style="text-align: right;">Page 12</p> <p>1 this is survey work. There are biases in 2 survey work, but he's been doing this for 3 the last ten years and consistently. The 4 market risk premium is between 5 and 6 5 percent. This is what professionals say and 6 these are people that, they get this, 7 they're professionals, they're either people 8 working in investments banks, they're 9 working in corporate finance in a finance 10 function, they're professors of finance and 11 this is what they say. Of course, there are 12 extremes, somebody answers this response and 13 they give a ridiculous number, but we look 14 at the median, the middle number, and that's 15 5.56 percent, something like that. 16 We then look at people who are 17 actually professionals in this area selling 18 their service and Mr. Coyne says it uses the 19 Duff and Phelps, so now the Kroll data. He 20 doesn't say what the Kroll estimate of the 21 market risk premium is. This was at a time 22 in my testimony where Kroll used 5.5 percent 23 over an adjusted risk-free rate of 3.5 24 percent. That's exactly what I do and I 25 would have to confess an interest, I author</p> |

| | |
|--|---|
| <p style="text-align: right;">Page 13</p> <p>1 their Canadian analysis for their cost of 2 capital navigator publication. That was 3 just recently, last week they lowered the 4 market risk premium to 5 percent. So that's 5 people whose business is to make estimates 6 and sell these estimates to corporations. 7 Aswath Damodoran is a profession at NYU. 8 He's a very good instructor. NYU, a lot of 9 their students end up on Wall Street, it's 10 literally right on Wall Street. This is his 11 estimate of the market risk premium. I 12 could disagree with the technical issues 13 about how he do write that estimate and the 14 risk premium over what sort of bond, but his 15 market risk premium has been about, guess, 16 what, 5.5 percent. 5.5 percent Damodoran, 5 17 percent Kroll, 5.5 to 6 percent by the 18 responses to surveys, 5 to 6.5 historic 19 evidence, that's approximately where the 20 market risk premium is. And I have 21 differences with Mr. Coyne about how to 22 calculate a market risk premium. I'm not 23 going to go into it here, but I hope Ms. 24 Greene, if she's listening, will ask me a 25 question about it because that's a technical</p> | <p style="text-align: right;">Page 15</p> <p>1 US expected rate of return has gone up. 2 Their expectation of the bond return has 3 gone up, and these are people, just to 4 emphasize, these are people who advise major 5 institutions on what they're doing with 6 their money. 7 Black Rock, the worlds biggest manager 8 of money, I always have trouble 9 understanding what they're doing and I think 10 I made a mistake here because I put in there 11 stuff for Canada, but they don't have the 12 Canadian equity market, they just have the 13 US equity market. The middle point of their 14 estimate is that dot to dot value in the 15 middle, very low expected returns on bonds 16 because people expect bond yields to go up 17 and as the bond yields go up, bond returns 18 go down. So that's Black Rock. JP Morgan, 19 Jamie Dimon, the CEO of JP Morgan is the 20 sort of rockstar of financial offices, he's 21 frequently consulted by the US government. 22 When he announced his retirement plans, the 23 price of JP Morgan stock went down, he's 24 that important in the capital markets. He 25 didn't prepare this, but his staff prepared</p> |
| <p style="text-align: right;">Page 14</p> <p>1 issue. 2 Other investor expectations, this is 3 required, what do people want and who 4 provides the expectations, who provides the 5 advice? Investment bankers do. TD, this 6 was the report just before COVID and there's 7 a new one that I provided in answer to an 8 information request, market risk premium of 9 5 to 6 percent by TD. Why do they do this? 10 Because they give advice to pension plans, 11 basically. What assumptions do you have to 12 use in your pension plan to determine 13 whether contribution rates go up and whether 14 the pension is funded. So that's TD, that's 15 not me, that's TD. AQR, they're a group set 16 up in Chicago, Lower Chicago and 17 Northwestern PHDs, these are their real 18 return, medium term expectations, not long- 19 term expectations. I've looked at AQR for a 20 long time. They're pioneers in the use of a 21 lot of areas in finance. 22 Equity return has gone down '24 versus 23 2023. The bond return has gone up. Is this 24 unanimous? No. Bank of New York, Mellon, 25 major custodian bank, their estimate of the</p> | <p style="text-align: right;">Page 16</p> <p>1 this. Expectations of the capital market 2 returns in the United States, straight DCF 3 with a few twists. Basically dividend 4 yield, plus the US growth rate in GDP with 5 some tweaks in terms of where are we in the 6 business cycle in terms of profit margins. 7 How does this translate into a per share 8 value? But basically we're looking at 7 9 percent plus, 8 percent, for the equity 10 market. And as it gets more difficult to 11 look at individual utilities, I've looked 12 more at what constrains are judgment which 13 is the overall expectation for the capital 14 market. Does Newfoundland Power accept 15 this? The answer is that they do. They 16 have a defined benefit pension plan. In 17 answer to an information request, I asked 18 them to tell us what assumptions does 19 Newfoundland Power use in their pension plan 20 in terms of the equity rate of return and 21 they reported 3 percent for bonds, 7.1 22 percent for equities, 4.1 percent risk 23 premium and then they immediately, I think 24 immediately, I don't know exactly the 25 timespan, but they asked Mercer, their</p> |

Page 17

1 consultant, to convert these long run
 2 returns to a one year return, which is what
 3 we tend to use when we calculate risk
 4 premiums, and that increases the equity
 5 return from 7.1 to 8.63. That’s exactly the
 6 adjustment that I made in the report to the
 7 TD Bank returns. It’s a standard adjustment
 8 to convert a long-run rate of return to a
 9 short-run rate of return, a one-year rate of
 10 return.
 11 So, now, Newfoundland Power, their
 12 actually is exactly the same as where I am.
 13 No difference whatsoever. In fact, I’ve
 14 done a lot of work for some of the biggest
 15 pension plans in Canada and they have to
 16 work out exactly the same problem, what do
 17 the markets expert for the rate of return,
 18 for our pension plan and the flip of that is
 19 what does the corporation have to think
 20 about in terms of return for this cost of
 21 capital. They’re two sides of the same
 22 coin. The supply and the demand for the
 23 debt.
 24 Relative risk beta, Mr. Coyne uses
 25 current values and in fact, one RFI asked me

Page 18

1 why don’t I use current values? That’s
 2 because current values are not current
 3 values. They’re simply the most recent
 4 estimates generally over the past five year
 5 period. The last five-year period has been
 6 COVID, a massive Central Bank intervention.
 7 That’s a valued estimate if we think there’s
 8 going to be another COVID and another
 9 massive Central Bank intervention in the
 10 future. I don’t think we’re anticipating
 11 another COVID 19 over the test years. This
 12 also became a major issue in the early 2000s
 13 and if you look at those numbers, the green
 14 line is a sensitivity of utility stocks to
 15 interest rates, what I call gamma, and I
 16 hate to say it, but we use alpha for the
 17 intercept, beta for the first coefficient,
 18 gamma for the third, delta for the fourth,
 19 epsilon for the—we use Greek letters and
 20 that’s the standard thing in statistics. So
 21 the gamma or the sensitivity of utilities
 22 talks of interest rates is very significant.
 23 At times utility stocks of Canada have been
 24 almost equivalent to the Long Canada Bond
 25 because we’ve had huge volatility of the

Page 19

1 Long Canada Bond in the ‘70s and the ‘80s,
 2 and there was a suggestion that we need to
 3 adjust betas for this risk. So I got two
 4 estimates for the beta then, the direct
 5 estimate for beta which is what I’ve got
 6 down as beta 2, and then the other one is
 7 the beta after we strip out the impact of
 8 interest rate chances, to all intents and
 9 purposes they are exactly the same. But in
 10 the early 2000s, we had negative betas and I
 11 noticed a reference to Jonathan Lesser in
 12 the BCUC where he said he adjusted betas. I
 13 adjust betas, I adjusted betas in the 2000
 14 because the reason for that and there may be
 15 some people in this room who got a memory as
 16 long as mine, a particular Canadian company
 17 called Nortel, Nortel and JDS Uniphase, at
 18 one point made up about 35 percent of the
 19 Toronto Stock Exchange by market value and
 20 we were crazy and basically buying Internet
 21 stocks during the Internet bubble in the
 22 early 2000s. They pushed out the Canadian
 23 Stock Market and guess what, utilities
 24 stocks were not affected by the Internet
 25 bubble, so the recorded statistical estimate

Page 20

1 of the beta during that period was in fact
 2 zero and negative. Was that expected to go
 3 forward? No. Nortel, as we know went
 4 bankrupt as soon as it dropped out of the
 5 estimation window to estimate betas.
 6 Utility betas reverted back to where they
 7 were. So I adjusted betas during that
 8 period. There’s no question that you need
 9 judgment to interpret beta coefficients.
 10 Any statistic measures what’s happened
 11 during that period.
 12 (9:30 a.m.)
 13 There’s an old bit of Zen philosophy,
 14 if a tree in the forest falls down, does it
 15 make any noise if there’s no one there to
 16 hear it? Well, if nothing happens, you
 17 can’t measure it and if something peculiar
 18 happens, we measure it, but when we look at
 19 interpreting that going forward, I didn’t
 20 think we would end up with another internet
 21 bubble, it was a fad, the capital markets
 22 sometimes go off on these faddish things,
 23 and I adjusted my betas during the 2000—
 24 everybody did. I do not slavishly adopt any
 25 statistic. A statistic just represents what

| | |
|---|---|
| <p style="text-align: right;">Page 21</p> <p>1 happened during that time period. A 2 statistician can estimate that, I could get 3 an undergraduate to estimate betas and do a 4 whole bunch of the work that I do, but you 5 need an economist, somebody to understand 6 what was the economic environment that 7 generated that datapoint? And that's what I 8 had, I do not slavishly produce statistics 9 for the Board to use. I produce those 10 statistics to the Board can look at them, 11 but I would tell the Board what I think 12 happened to generate that statistic and 13 whether it's valued going forward. That's 14 the judgment, a professor of finance and 15 somebody that's being doing this for 38 16 years. I've lived through all of these 17 periods that came out with these estimates. 18 Betas in the US versus Canada. 19 Canada is a different market to the 20 United States. The betas for the gas 21 companies in the United States are quite 22 similar to what they are in Canada. For the 23 last 30 years betas for electric companies 24 in the United States have been significantly 25 higher than the Canadian companies in the</p> | <p style="text-align: right;">Page 23</p> <p>1 become incredibly risky. Just yesterday I 2 read a newspaper article, Michigan has gone 3 back again to try to get Enbridge's line 4 five oil pipeline under the Lake Michigan 5 basically taken out of service. There's a 6 lot of pressure on the pipelines. Does the 7 capital market recognize that? Yes, they 8 do. Ever since early 2000, Enbridge, Trans 9 Canada and Pembina, which is another huge 10 pipeline, their betas are way higher than 11 they are for the utility holding companies, 12 so I've taken them out of my sample because 13 they are bias, they are no longer rate of 14 return regulated utilities. To include them 15 in the sample, well basically put in Bell 16 Canada, BCE, because that used to be a rate 17 of return regulated company, but it's no 18 longer a rate or return regulated company, 19 it hasn't been for 20 years. So I take out 20 the pipes, I take out—I look at the 21 Americans, now I like to see Mr. Coyne in 22 the audience because I have to say he gets 23 me really annoyed, really annoyed. He says 24 things that are simply not true. And I say 25 that with great trepidation because I'm sure</p> |
| <p style="text-align: right;">Page 22</p> <p>1 utility index, to the tune of about Nord .2. 2 Nord .2 times the 6 percent market risk 3 premium means a different of 1.2 percent in 4 the allowed ROE. I haven't seen anything to 5 demonstrate that the betas of US utilities, 6 electric utilities can be used in Canada 7 without exercising judgment. What about the 8 Canadian sample? I've been cross-examined 9 because I used the words "forced to rely 10 upon or use American data". I would prefer 11 not to use American data, it's a different 12 country with different laws, different 13 regulations and different capital market 14 conditions. We're forced to look at the 15 United States. A lot of the Canadian 16 companies simply don't exist anymore and 17 some that do, that I relied on for many 18 years, Enbridge and Trans Canada in 19 particular, they were both rate of return 20 regulated companies, particularly Trans 21 Canada, until the TQM decision in 2008 that 22 took them off rate of return regulation and 23 basically put them on settlements and 24 they've been on settlements for the last 12 25 years. And as we know, the pipelines have</p> | <p style="text-align: right;">Page 24</p> <p>1 Mr. O'Brien is going to ask me questions. 2 He said, and it's only his rebuttal 3 testimony if somebody wants to maybe look at 4 that, he said Professor Booth is judgment, 5 judgment, judgment. My beta estimates are 6 not judgment. My beta estimates are the 7 statistical estimates without any exercise 8 of judgment. I present those to the Board 9 because they can look at them to see whether 10 they trend towards one or what the values 11 are, and I go out and get other beta 12 estimates that are in the capital market. 13 RBC, the Royal Bank of Canada, does not use 14 my beta estimates. They produce their own 15 beta estimates or they provide them to their 16 clients. Yahoo, they use Compustats, 17 Standard and Poor's, they're not my beta 18 estimates. CFRA, it's interesting to think 19 who they are. After the analyst scandal in 20 the early 2000s, they were required to put 21 money providing independent research reports 22 and CFRA is one of those independent 23 research reports. They're not my betas. 24 Reuters, I have influence over what Reuters 25 whatsoever, now their betas, I don't know</p> |

| | |
|--|--|
| <p style="text-align: right;">Page 25</p> <p>1 where they come from, but they're in the 2 capital market. So what I do is I provide 3 my beta estimates and I benchmark them 4 relative to Reuters, Thomson Reuters, one of 5 the biggest companies, RBC, biggest bank in 6 Canada, Yahoo, one of the major providers 7 with Standard and Poor's of data. CFRA, an 8 independent research firm. I've benchmarked 9 by betas against their betas and lo and 10 behold they're pretty similar. There are 11 differences because they used slightly 12 different techniques, and then finally I 13 started looking at the Global Mail. I read 14 the Global Mail is they claim to be Canada's 15 premier newspaper, they report on business. 16 They produce beta estimates. Now they have 17 beta estimates over three years, but they're 18 there, they're not my judgment. They are 19 the statistics, those are the numbers that 20 are in the capital market and I really get 21 annoyed with Mr. Coyne says, well it's 22 Booth's judgment. It's not my judgment. 23 These are what are in the capital market. 24 What about the US? Same organizations 25 estimate the betas for the US and these are</p> | <p style="text-align: right;">Page 27</p> <p>1 model. How do the current beta compare to 2 five years ago or three years ago and is it 3 adjusting in any way to its true value, 4 because you can calculate the true value 5 simply by setting beta T equal to beta T 6 minus 5 and then solve it. And if you do 7 that, which is what Marshall Blume did, you 8 get .33 for the Blume adjustment and a two- 9 thirds adjustment on the past value. That's 10 not controversial, in fact, it's a truism, 11 the overall beta has to be equal to one, 12 that's by construction of the capital asset 13 pricing model, it's the yardstick, it's the 14 market, and we rate securities relative to 15 the market. So if you use all of the 16 securities in the database and you come up 17 that its (unintelligible) beta is one, well, 18 honky dory, that's absolutely predictable, 19 that's by construction, it's a truism. Now 20 do utilities trend towards one, well Blume 21 was a statistical analysis, so if you told 22 me don't know anything about the company, 23 the beta is equal to Nord .2. I would say, 24 well I know the beta is equal to 1 for the 25 overall market, probably that's a</p> |
| <p style="text-align: right;">Page 26</p> <p>1 the current estimates for the betas for the 2 year of the United States and they're about 3 Nord.6 and there's no question they have 4 increased over the last couple of years, but 5 when we look at this, had they increased 6 over a long period of time? Well if you 7 look at the last little blip at the end of 8 that 2018 until now, they've increased, but 9 they're not as high as they were in 2007. 10 They tend to go up and down with the state 11 of the capital market. Beta adjustment, Mr. 12 Coyne is fond of saying that I'm the only 13 person that uses unadjusted betas and it's 14 standard to use adjusted betas. That is 15 absolutely, absolutely nonsense, that is 16 incorrect. What Marshall Blume did was he 17 estimated the beta in time period T and then 18 he looked at how does that compare with the 19 beta of 5 years earlier and four years and 20 three years, he used different time periods. 21 And you have to go back to long periods of 22 time to avoid using the same datapoint in 23 both of the estimates, so you have to make 24 sure that you don't use overlapping betas. 25 So this is what we call a partial adjustment</p> | <p style="text-align: right;">Page 28</p> <p>1 measurement error, it's a problem, so I 2 would adjust it towards 1 and that's all 3 that Blume does. So the question the Board 4 needs to ask is if they were told the beta 5 for a utility was Nord.5, do they say I know 6 nothing about that Nord.5, I know nothing 7 about the utility, I will adjust it towards 8 1? Well I certainly wouldn't because I've 9 been looking at utilities for the last 35, 10 38 years. I know they're low risk and I 11 would not be surprised in the beta was equal 12 to Nord.5 or Nord.4, so when you look at 13 this, you say well how do utility betas 14 adjust? Combola and Kahl, for a long time 15 was—the gold standard they actually looked 16 at US utilities and they said they don't 17 adjust towards 1, they adjust towards their 18 mean, which is what you might expect. If 19 you think the beta for a utility should be 20 Nord.5 and you come up with Nord.2, then you 21 say, well, I don't think it's equivalent to 22 the overall risk in the market, but I think 23 it's low, so I'll adjust it towards what I 24 expect it to be, around Nord.5. More 25 recently Michelfelder and Theodossiou, they</p> |

| | |
|--|--|
| <p style="text-align: right;">Page 29</p> <p>1 did the Blume adjustment for utilities in 2 the United States. I'm not going to read 3 the whole quote, anyone can read that quite, 4 absolutely no evidence whatever, no matter 5 what time periods they used, the types of 6 betas they estimated, no statistical 7 evidence of any utility betas adjusting 8 towards 1. This is absolutely bulk 9 standard. There is no empirical evidence 10 whatsoever of utility betas moving towards 1 11 with a Blume adjustment. It assumes we know 12 absolutely nothing about the utility. 13 Now, Mr. Coyne says, well, Bloomberg 14 betas use adjustment towards 1. That's not 15 correct. Bloomberg is a data provider. The 16 betas you get from Bloomberg if you estimate 17 using their data depends upon the values you 18 put in, what you want to estimate. If you 19 want to estimate Blume adjusted beta, you 20 can estimate it. If you want to estimate 21 betas, what is called unadjusted betas, the 22 betas that I estimate, you can estimate 23 those as well. And in fact, on their 24 website you can do a quick check, just enter 25 Bloomberg betas and they will tell you</p> | <p style="text-align: right;">Page 31</p> <p>1 market is now an institutional market, 2 overall 60 percent of the equities are 3 traded by institutions. They would not rely 4 upon a one page crib sheet produced by Value 5 Line. That would be my judgment. They got 6 their money and the resources to do their 7 own analysis. And finally in terms of 8 betas, Bever Kettle and Scholes, 54 years 9 ago, said well suppose we got a company like 10 Newfoundland Power and we want to know what 11 its beta is, well they can't do that because 12 it's got no market data. So they basically 13 came up with what we call instrumental 14 variables, they used for the traded firms 15 they used some accounting variables and said 16 how can we predict the beta. This is their 17 best model. It says that overall the 18 constant is 1, which means, which is 19 obviously the overall market beta, so you 20 start out with 1 and then you say, well 21 let's look at this company, not a utility, a 22 company. If the dividend payout is high, 23 it's a high dividend paying firm, which is 24 what utilities are, you lower the beta by 25 .58 of its dividend payout. High dividend</p> |
| <p style="text-align: right;">Page 30</p> <p>1 exactly how they do their betas. On their 2 website they report Blume adjusted betas and 3 they report unadjusted betas. Saying that 4 Bloomberg betas are adjusted betas is 5 absolutely incorrect. I could just as well 6 have reported Bloomberg's unadjusted betas 7 and said these are Bloomberg betas. They're 8 not. They're my choice of using the data in 9 Bloomberg to come up with a beta. Value 10 Line, Value Line surveys all the American 11 stocks and they do have a one-age crib sheet 12 which includes adjusted betas because 13 they're looking at all the stocks in the 14 market. They haven't done any research on 15 utility stocks independently of their beta 16 adjustment. They used the Blume adjustment. 17 That is a paid subscription service that 18 primarily looks at US. As we heard from Mr. 19 Coyne yesterday, a lot of the Canadian 20 stocks, they don't have the betas. They're 21 basically the big Canadian stocks that are 22 traded on the NYC because they're of 23 interest to Americans. Is that used by 24 professional investors? Probably not, not 25 quite sure what they used, but the equity</p> | <p style="text-align: right;">Page 32</p> <p>1 stocks, lower betas. 2 (9:45 a.m.) 3 You look at growth, growth is risky 4 because you're basically valuing all of 5 those cashflows up into the future. If 6 you're adding growth, high growth firms are 7 riskier, you get higher betas and we're 8 hearing about the risk to Newfoundland Power 9 of a low growth, slow growing economy, that 10 is not a risk factor. It is a low risk 11 factor. It indicates low betas because 12 you're not worrying too much about future 13 growth. And finally, earnings variability. 14 We've seen, as I showed yesterday, the 15 relative to the utility holding companies in 16 the United States, Newfoundland Power meets 17 its allowed ROE and they got low variability 18 in its ROE. Low variability, low business 19 risk, low betas. All three of the values 20 that we use to estimate betas for non-traded 21 firms indicate that utilities have much 22 lower betas than average firms. And that's, 23 again, it's standard, so we would expect 24 Newfoundland Power to have, be a low risk 25 company. CAPM, I used 3.8 percent. Mr.</p> |

| | |
|--|---|
| <p style="text-align: right;">Page 33</p> <p>1 Coyne criticized me for judgment, that is my 2 judgment, 3.8 percent. I don't think that a 3 long Canada bond yield below 3.7, 3.8 4 percent satisfies the fair market value. 5 3.8 percent for taxable investor and I'd 6 hope all members of the panel are taxable 7 investors and I would expect them to be in 8 one of the biggest tax brackets in Canada. 9 If you're 50 percent, taxed for simple. 3.8 10 percent is 1.9 percent after tax. We have 2 11 percent inflation. Any taxable investor 12 buying bonds below 3.8 percent absolutely 13 guaranteed to lose money over time. That is 14 not consistent with bond yields being 15 determined by taxable investors in a free 16 open, fair, competitive market. So I used 17 3.8 percent. This Board accepted that way 18 back in, I think it was 2012. The BCUC 19 accepted that in their automatic adjustment 20 model. So that is my judgment. Anybody 21 that tells me that a taxable investor is 22 going to buy bonds at 2 percent, I'm telling 23 them they're losing money and that is 24 absolutely crazy. 25 Credit risk adjustment, I'll talk about</p> | <p style="text-align: right;">Page 35</p> <p>1 DCF, dividend yield plus growth, this was 2 invented by my late colleague, Professor 3 Myron Gordon, contrary to what Mr. Coyne has 4 said, when I started testifying, I used four 5 models to estimate a fair rate of return, 6 two of which were discounted cashflow, two 7 discounted cashflow, one of which was on a 8 sample of 6 Telcos because they're a rate of 9 return regulation, two for oil and gas and 10 energy utilities, one for risk premium over 11 preferred shares and one for the capital 12 asset pricing model. So 25 percent of my 13 testimony was based upon the capital asset 14 pricing model. That was right where, until 15 the Telcos got deregulated and that was 16 basically in the mid '90s, the early '90s. 17 So we couldn't use those, so half my 18 estimates went out the window. Not because 19 I wanted them to go out the window, but 20 because the data wasn't there anymore. Risk 21 (unintelligible) over preferreds, we used to 22 have more preferred shares in the capital 23 market and we used to have a couple of 24 companies create a preferred share indexes 25 and so I used them and I estimated a risk</p> |
| <p style="text-align: right;">Page 34</p> <p>1 that, but we started making that adjustment 2 when the automatic ROE formulas gave what we 3 regard as unsatisfactory results in 2009. 4 Utility risk premium, beta .5 to .6, market 5 risk premium, .55 to .6. That's what the 6 data tells us, it's my judgment as well. 7 That gives us the equity cost, the 8 discounted rate that investors use. The 9 only difference between that and the fair 10 allowed return is that we allow for issue 11 costs and expenses. An adjustment to the 12 ROE adds 50 basis points. Why? Because 13 that's what we've use for the last 10 years 14 and it's not been controversial, except in 15 Quebec where they say show me, prove me that 16 they're actually an expense attached to 17 issue costs that we can charge off to 18 investors. And I asked Newfoundland Power 19 and they said, well, they've actually never 20 incurred any costs, so it's a legal question 21 whether or not you can charge ratepayers an 22 extra 50 basis points for issued costs that 23 Newfoundland Power has not incurred. But I 24 always include 50 basis points. That's 25 where I get my fair ROE. Discount rates,</p> | <p style="text-align: right;">Page 36</p> <p>1 premium over for equities over an equivalent 2 taxed instrument, debt securities are not an 3 equivalent taxed instrument. Preferred 4 shares are, so we should be measuring risk 5 premiums for Newfoundland Power over 6 preferred shares, but we don't have the data 7 anymore. The Toronto Stock Exchange, they 8 stopped calculating the preferred share 9 index because it's absolutely true that 10 they're not as liquid as they used to be and 11 there's not as many in the capital market. 12 So three of my four methods went out in the 13 early '90s and we did go to risk premium 14 models, particularly with the ROE adjustment 15 models introduced by the National Energy 16 Board of the BCUC. Right the way up until 17 2009 and the enormous reduction in long-term 18 Canada bonds, particularly after the US 19 started buying bonds, seriously buying bonds 20 in 2011, and that knocked the risk value— 21 sorry, not the risk value, the time value, 22 the risk free rate, we started getting 23 measures for the risk free rate that gave us 24 bad results. So I would agree with Mr. 25 Coyne on this, that the risk premium model</p> |

| | |
|---|--|
| <p style="text-align: right;">Page 37</p> <p>1 started giving bad results if you 2 mechanically used it in after about 2011. 3 And I started putting in an appendix, an 4 analysis of DCF versus risk premium because 5 they should give exactly the same answers, 6 but at various points in time they've not 7 given the same answers because there's 8 estimation error attached to the future 9 growth in the DCF model and there's 10 estimation errors attached to estimated and 11 market risk premium. 12 What we do use in DCF, primarily we use 13 analyst growth forecasts. These are not 14 dividend. It's a dividend discount model, 15 not an earnings discount model. And the 16 problem is that earnings are way more 17 volatile than dividends, way more volatile. 18 This is evidence for the TXS going back to 19 1956. The compound growth rate of dividends 20 and earnings are basically the same. 21 There's a slight difference. Over long 22 periods of time, volatility irons out and 23 they're basically the same. The average 24 growth rate, the average one-year growth 25 rate for earnings, way more volatile because</p> | <p style="text-align: right;">Page 39</p> <p>1 domain. I quote The Economist. I quote 2 RBC. They're biased. And by biased I don't 3 mean they've got an in-built "let's do this. 4 Let's get the forecast up". It's what we 5 can an optimism bias. They're attached to 6 their utilities and they tend to get 7 overfond of the companies that they're 8 looking at. 9 DCF for US electric utilities, I use 10 the analysts' forecast and came up with a 11 forecast for about just under nine percent. 12 You add in 50 basis points, you got nine and 13 a half percent, if you believe those 14 forecasts. And I will admit Mr. Coyne's 15 correct. They do that in the United States. 16 But you have to ask how big is the biased 17 and that's when we get to looking at the 18 sustainable growth rate. 19 Growth has to come from somewhere. 20 This is not some manna coming out of the 21 thin air. It comes from firms retaining 22 earnings and investing it in the business 23 and earning a rate of return on those 24 earnings. That's what we call the retention 25 rate, B, times the rate of return they earn.</p> |
| <p style="text-align: right;">Page 38</p> <p>1 they tend to go up and down with a business 2 cycle. 3 So, if you rely upon short-term growth 4 forecasts coming from earnings, those 5 estimates are biased for long-run dividend 6 growth rates and that's just because 7 earnings are more volatile and they're more 8 volatile for individual companies than they 9 are for the overall stock market. 10 Analyst bias, I won't bore you with 11 this. I don't – these are sell-side 12 analysts. Their business is to sell 13 securities, which is why we call them sell- 14 side analysts. If they were unbiased, we 15 wouldn't have buy-side analysts. We do have 16 buy-side analysts. Practically every 17 pension fund insurance company has analysts, 18 buy-side analysts that evaluate the reports. 19 We know they're biased. I've never seen 20 anything that indicates that analysts 21 produce unbiased estimates. Their estimates 22 may be better than using a simple 23 extrapolation but that doesn't mean to say 24 that they're unbiased. They're clearly 25 biased and this is even in the public</p> | <p style="text-align: right;">Page 40</p> <p>1 B times R is the sustainable growth rate. 2 There is another minor term that's not 3 material, which we can talk about. But you 4 can reverse engineer that. Utilities pay 5 out large dividends. About two-thirds of 6 their earnings are paid out in dividends. 7 One-third are reinvested. So, if the growth 8 rate actually is five or six percent, and 9 I'll take six percent because the math's 10 easy, if six percent is the growth rate and 11 B is the retention rate of about a third, 12 then R has to be 18 percent. I think any 13 utility analyst that says over a long period 14 of time, for infinity, utilities are going 15 to earn 18 percent, is smoking something. 16 And that's why we use the sustainable growth 17 rate. It's a measure of testing the bias in 18 the analyst forecast for growth, and I've 19 got sustainable growth rates and they should 20 be the same as reasonable estimates, but 21 analyst growth rates are overestimated. 22 My DCF estimates, they're more varied. 23 I tend to look nowadays at a risk hierarchy. 24 We've got the money market rate. We got the 25 long Canada rate. We got the preferred</p> |

Page 41

1 rate. We got the overall rate in the
 2 capital market and where do we fit a utility
 3 in that risk hierarchy? Canadian equity
 4 markets, 8.1, 8.75 percent. I should add
 5 Mercer’s estimate for Newfoundland Power,
 6 which is slightly greater than 8.75, but
 7 it’s not materially different from anyone
 8 else’s. DCF equity market returns, they’re
 9 more volatile because they’re for the S&P
 10 500 and half their earnings come from
 11 outside the United States. Average Canada
 12 ROE, we know what typical Canadian firms
 13 earn. It’s under ten percent. Asset
 14 manager long run returns, what are the
 15 actual expectations of major investment
 16 banks advising their clients seven to nine
 17 percent. DCF equity cost US electric
 18 utilities, 6.8, 6.9 percent and that’s a
 19 sustainable growth. You need to add 50
 20 basis points for that to get it up. But
 21 that’s not any different from any of the
 22 other estimates. Well, I think the click is
 23 telling me my presentation is over.
 24 MR. O'BRIEN:
 25 Q. I don’t think it is, is it?

Page 42

1 DR. BOOTH:
 2 A. But it isn’t. It’s almost over, Mr.
 3 O’Brien.
 4 COFFEY, KC:
 5 Q. There it is. It’s on the screen.
 6 DR. BOOTH:
 7 A. Okay. Financing. There are some areas of
 8 testimony that I’m familiar with, but I
 9 don’t want to get bogged down by providing
 10 estimates simply because they can end up
 11 getting lots of RFIs and taking you down a
 12 rabbit hole. So, I rely upon the Alberta
 13 Utilities Commission for – because they spot
 14 check their estimates. They say, “we
 15 provide you with these financial parameters.
 16 Is it financeable? Can you maintain an A
 17 bond rating?” This is their table coming
 18 out of the 2023 report and notably, all the
 19 way at the bottom there is 45 percent common
 20 equity ratio, almost off the table. At the
 21 top is 30 percent.
 22 I recommended for years 35 percent is
 23 the common equity for a pure T&D utility.
 24 The AUC allows 37 percent, which is a little
 25 bit greater than my 35 percent. I’m not

Page 43

1 recommending that for Newfoundland Power. I
 2 know you’re not going to accept it. I
 3 recommended 40 percent. 45 percent, as I
 4 said, is almost off the table. So, can they
 5 finance? According to the Alberta Utilities
 6 Commission, they can finance. That supports
 7 an A bond rating. So, that’s not me.
 8 That’s not my judgment. That’s the Alberta
 9 Utilities Commission. Now, I’m sure Mr.
 10 O’Brien’s going to say, “well, this means a
 11 nine percent ROE. If we accept Dr. Booth’s
 12 7.7 percent, they can’t finance” or
 13 something like that. That’s not correct.
 14 I draw your attention to the tax rate.
 15 Alberta’s a low tax jurisdiction, 23 percent
 16 tax rate. Unfortunately, Newfoundland is a
 17 high tax jurisdiction. Newfoundland Power
 18 is predicting 30-35 percent tax rate. What
 19 matters is the pretax equity cost because
 20 equity return is after tax. So, to get the
 21 pretax equity cost, which is what we use in
 22 the earnings before interest and tax, in
 23 earnings before interest and tax, we
 24 basically take the allowed return of nine
 25 percent and divide by one minus the tax

Page 44

1 rate. So, that’s nine percent divided by
 2 .77 and you get a number, I think it’s 11.4
 3 percent. That’s the pretax cost in Alberta.
 4 (10:00 a.m.)
 5 I hate to tell you but 8.5 percent in
 6 Newfoundland, you have to divide not by .77.
 7 You have to divide by .7 or .69. And the
 8 pretax cost of equity in this province is
 9 about 12.4 percent, a lot higher than in
 10 Alberta. So, even at a lower allowed ROE,
 11 the financial metrics are better for
 12 Newfoundland Power than they are for the
 13 typical Alberta utility because we have to
 14 consider the equity is an after-tax cost and
 15 the ratepayers pay the pretax cost. So,
 16 that’s what I’ve got to say about
 17 financings.
 18 Final thing is the adjustment formula.
 19 I’m a great believer in ROE adjustment
 20 formulas. I was involved in the BCUC
 21 decision in 1994 that put the BCUC, the BC
 22 utilities on an adjustment formula with an
 23 adjustment of 100 percent to the change in
 24 the long Canada bond yield. I was in the
 25 NEB hearings that ended up with the RH-294

| | |
|--|---|
| <p style="text-align: right;">Page 45</p> <p>1 formula and I was in the hearing in 2001 2 when the NEB confirmed its ROE formula and 3 confirmed the use of risk premium models. 4 The NEB still publishes all of the data for 5 its formula because it's still used and I'll 6 say that again, it is still used. It's used 7 in contracts by -- that stipulated the ROE 8 will be determined by the NEB formula. So, 9 at the request of shippers and other 10 parties, the NEB publishes all that 11 information. 12 So, that first column has the forecast 13 long Canada bond yield. The second column 14 has the NEB formula ROE and the third column 15 has Booth 1. I actually had two ways of 16 adjusting it based upon when the ROE formula 17 was affirmed. I actually used 2001 because 18 that was when it was affirmed to be correct. 19 And then you can look at this and I've 20 brought your attention to 2008-2009. 21 I was in the TQM hearing at the time 22 that Lehman Brothers was let go. Markets 23 were in freefall. I actually had lunch with 24 the lawyer for TransCanada, as well as my 25 own lawyer. We were shocked at what was</p> | <p style="text-align: right;">Page 47</p> <p>1 after that, everybody retooled their 2 formulas and we retooled the formulas to 3 make sure that 2008-2009 wouldn't happen 4 again, and we added this credit spread 5 adjustment, 50 percent of the change in the 6 default spread from what was before the 7 financial crisis where it was typically one 8 percent. Now, it's never got back to one 9 percent, but we can talk about. But since 10 then, this Board, the Alberta board, the BC 11 Utilities Commission, the Regie, the Ontario 12 – everybody moved to a formula and adjusted 13 by having a credit spread. 14 Then a second leg happened. The second 15 leg was the US didn't recover from its 16 financial crisis, and I was here in 2009 and 17 2012. We were waiting on the United States. 18 We recovered. The US was still in desperate 19 straits and it caused the US to have massive 20 central bank intervention in 2011, at the 21 same time as the Euro crisis and the 22 problems with Greece and the PIGS, Portugal 23 and Italy, Spain and Greece. Euro was in 24 desperate straits. Massive central bank 25 intervention and you can see it in the bond</p> |
| <p style="text-align: right;">Page 46</p> <p>1 happening in the United States. The US 2 almost destroyed its whole banking system. 3 The number of banks that failed is 4 incredible, and the biggest bank in the 5 world at that time, Citibank, would have 6 failed with cataclysmic implications. So, 7 we were in dire straits and the NEB was 8 having a hearing right in the middle of the 9 worst financial meltdown since 1937 and we 10 had this anomalous result. Classic rush for 11 safety. Bond yields went down. Government 12 bond yields went down. Anything that was 13 perceived as risky was sold, including A 14 rated debt. 15 So, A rated debt and the credit spread 16 between A rated debt and Canadian bond 17 yields reached very, very high levels, about 18 180, 190 basis points, and that was even for 19 utility debt. And the utilities 20 legitimately said, "why should our ROE go 21 down when our borrowing costs have gone up?" 22 and that was a perfectly legitimate 23 question. So, the NEB decided we'll go with 24 settlements with shippers and the utilities 25 rather than have more – a new formula. But</p> | <p style="text-align: right;">Page 48</p> <p>1 yields. The forecast bond yield in the NEB 2 formula went from 4.55 percent in 2008 down 3 to 4.36, 4.3, it's actually 1723 (phonetic) 4 to – it went down and down and down and down 5 and we just started increasing and then 6 along came Covid and so, we were looking 7 pretty good in 2018 and then 2019 things 8 were beginning to recover and then the Bank 9 of Canada joined the bond buying program. 10 So, the problem with the Capital asset 11 pricing model, as I said, I do not believe 12 any of the long Canada bond yield since 2012 13 satisfy the fair return standard. They're 14 not fair market value and I used 3.8 percent 15 consistently through that period. So, when 16 Mr. Coyne says, "well, interest rates have 17 gone up since 2022", hunky dory, yes, great, 18 just means to say we're not as bad as they 19 were for the last 12 years, but they're 20 still not 3.8 percent. They still don't 21 satisfy fair market value. 22 So, do I recommend that you put 23 Newfoundland Power back on an automatic 24 adjustment mechanism? The Alberta Utility 25 Commission seem to reject all informed</p> |

| | |
|--|--|
| <p style="text-align: right;">Page 49</p> <p>1 judgment. Nobody wanted an automatic ROE 2 mechanism in Alberta and they just put one 3 in. Huge advantages. They worked for 15 4 years with the NEB formula. My judgment 5 would be that we're getting close to the 3.8 6 percent trigger. If you look at the 7 adjustment to credit spreads, you've got a 8 current NEB formula for 2024 of 8.18 9 percent. If you use 3.8 percent, you're up 10 to 8.44 which I think is getting back to 11 where we were before this dramatic shock to 12 the financial system. As I said, we're 13 still in a hangover from Covid. We're 14 actually still in a hangover from the US 15 financial crisis. We have to deal with 16 this.</p> <p>17 Do I recommend the Board put in an 18 automatic adjustment formula? To be honest, 19 I'm indifferent. If your decision is to 20 have three-year GRAs, the first two years of 21 that three-year period are done. So, we're 22 talking about putting in an automatic 23 adjustment formula for the third year. I 24 don't see great benefit from that. If you 25 want to reap economic efficiencies in</p> | <p style="text-align: right;">Page 51</p> <p>1 that. We are getting close. 2 The decision on automatic ROE formula 3 depends upon whether the Board makes a 4 decision for regulator efficiency and not 5 have ROE hearings and then rely upon NP to 6 come -- Newfoundland Power to come back and 7 say the results aren't satisfactory. And if 8 results aren't satisfactory, then they'll go 9 to you, come to the Consumer Advocate, 10 possibly come to me, and I don't think we're 11 unreasonable in looking at this. I've 12 suggested that the Board put in a trigger, 13 3.8 percent. If the long Canada rate 14 forecast in two years time exceeds 3.8 15 percent, then give NP 75 percent of the 16 increase in the long Canada rate. Don't 17 reduce it if it doesn't get above 3.8 18 percent.</p> <p>19 Am I optimistic in that? I read the 20 transcript with Mr. Kelly eight years ago. 21 I was extremely pessimistic about the 22 forecast for long Canada bond yields despite 23 the investment banks and the forecasters 24 saying they were going to increase. They 25 didn't increase. I said in three to five</p> |
| <p style="text-align: right;">Page 50</p> <p>1 regulating Newfoundland Power, you have to 2 say we're going to put in a formula and we 3 don't want to hear ROE testimony in three 4 years time or four years time or five years 5 time. It's indefinite, the way the NEB 6 formula was. Now, the NEB formula lasted 7 for 15 years, but TransCanada kept objecting 8 to it. Twice they objected to it and one of 9 them to appeal and they lost. So, even an 10 indefinite period still allows the utility 11 to say the results are unfair.</p> <p>12 And I'll remind the Board that in 2011, 13 when interest rates came down, Newfoundland 14 Power came to the Board. The Board came to 15 the Consumer Advocate. The Consumer 16 Advocate came to me and said, "is it 17 reasonable to suspend the ROE formula?" I 18 said yes, because long-term 19 Canada rates didn't satisfy what I regard as 20 fair market value. So, I don't think I'm 21 unreasonable. I agreed with Newfoundland 22 Power to suspend the ROE formula. I don't 23 think the Capital Asset Pricing model has 24 worked without the application of judgment 25 since 2009 and I agree with Mr. Coyne on</p> | <p style="text-align: right;">Page 52</p> <p>1 years time, I don't think they're going to 2 increase, and I said, specifically said, 3 I'll come back here and say give them 7.5 4 percent, the same as my current 5 recommendation. So, I was entirely correct 6 in 2016.</p> <p>7 Right now, the Bank of Canada has over 8 300 billion dollars worth of Government of 9 Canada bonds that it intends to sell. It's 10 only sold about a third of its stockpile of 11 Government of Canada bonds. If the Bank of 12 Canada dumps those bonds in the capital 13 market, absolutely no question, the price 14 will go down and the yield will go up. 15 Where the long Canada bond goes is entirely 16 dependent upon the unwinding of the Bank of 17 Canada's stockpile of bonds. Exactly the 18 same as it is in the United States where the 19 Feds got an even bigger stockpile of US 20 treasuries. So, for the last 15 years, the 21 markets have paid attention to every single 22 utterance of the central banks because it 23 dominates everything since the global 24 financial crisis.</p> <p>25 So, I have no objection to you putting</p> |

| | |
|--|--|
| <p style="text-align: right;">Page 53</p> <p>1 Newfoundland Power back on an automatic 2 adjustment formula. It's a question the 3 Board has to deal with that is the 4 regulatory efficiency worth it for one year 5 in the third of a test year, if it plans to 6 have a GRA for Newfoundland Power in three 7 years time. And that's not a thing that I 8 can answer. All I've done in my Appendix E 9 is lay out the history so it's got the 10 guidance and the understanding as to how we 11 got to this date and why the automatic ROE 12 adjustment models were suspended. 13 So, I recommend allowed ROE of 7.7 14 percent. Common equity ratio at 40 percent. 15 The Board can deem that in preferred shares, 16 and we've had this discussion eight years 17 ago. Is it legal to deem – rush the 18 preferred share market. NP used to have 19 preferred shares. This Board set the 20 allowed ROE at 40 to 45 percent and 21 sometimes – some how we've gone to the top 22 of that range. And as I said in my opening 23 remarks, I'd like to see the Board say, "we 24 reiterate our guidance for the fair common 25 equity ratios 40 to 45 percent for</p> | <p style="text-align: right;">Page 55</p> <p>1 this testimony is repetitive. If you look 2 at Mr. Coyne's testimony, it is repetitive. 3 His business risk analysis is the same. My 4 testimony is repetitive. The only thing 5 different about my testimony is I have to 6 play Whack-a-Mole. Utility witnesses 7 constantly bring up new things and I have to 8 write another appendix to deal with the new 9 risk and the new things that utility 10 witnesses brought up. So, I've written five 11 appendices now. I've got an appendix on 12 integration. I've got an appendix on the 13 after-tax weighted average cost of capital. 14 To be honest, I'm getting tired of doing 15 this. I'm 74. I've been testifying for 38 16 years. I've heard all of this over and over 17 and over again. And if I'm a little bit 18 testy with Mr. Coyne, it's because I'm a 19 little bit tired of hearing exactly the same 20 things year after year after year. 21 Before a hearing in Quebec last year, 22 the witness was a Brattle company witness. 23 She based her recommendations on three 24 models, all of which the Regis had 25 explicitly, absolutely explicitly rejected.</p> |
| <p style="text-align: right;">Page 54</p> <p>1 Newfoundland Power". 2 I can see nothing in Newfoundland 3 Power's history that indicates that it's any 4 riskier than any of the other T&D utilities 5 in Canada. I've heard their reference to 6 the obligation to serve which the Alberta 7 utilities no longer have. There's been no 8 change in their ability to earn their 9 allowed ROE. It wasn't material, not in 10 terms of the business risk of the utilities. 11 And here, I don't know whether you could 12 remove the obligation to serve in 13 Newfoundland. That's a legal question the 14 Board has to deal with. 15 My preference is a modified NEB 16 formula. I know every board wants to have 17 their own formula, but the NEB formula 18 worked for a long period of time and the 19 latest credit spread adjustment the Alberta 20 Utility Commission used was 1.58 percent. 21 That's now come down to about 1.35 percent. 22 Automatic ROE formula, I think they're 23 a huge savings. This Board had one before. 24 Almost every board in Canada had one before 25 and there's a reason for that. A lot of</p> | <p style="text-align: right;">Page 56</p> <p>1 And I said, "what on earth is this?" They 2 reject her model and then it doesn't matter. 3 Utility witnesses come back and they do the 4 same thing. And the three models they 5 rejected, one of them was beta adjustments. 6 One of them was a model called ATWACC and 7 the other one was a model call the empirical 8 capital asset pricing model. So, I am 9 afraid I am a little bit testy today and 10 yesterday, and I apologize to the Board for 11 that, but I'm done. 12 (10:15 p.m.) 13 CHAIRMAN: 14 Q. Thank you. 15 COFFEY, KC: 16 Q. Thank you very much, Mr. Chair. 17 CHAIRMAN: 18 Q. So, move over to Mr. O'Brien. 19 DR. LAURENCE BOOTH, CROSS-EXAMINATION BY MR. LIAM 20 O'BRIEN 21 MR. O'BRIEN: 22 Q. Thank you, Mr. Chair. I'll take you up on 23 your last comment, Dr. Booth, and make an 24 observation that you do appear testy 25 regarding your testimony in the last two</p> |

Page 57

1 days. Are you – your suggestion that Mr.
 2 Coyne is a liar, you suggested that today.
 3 DR. BOOTH:
 4 A. I think I did suggest it.
 5 MR. O'BRIEN:
 6 Q. You did. You did say that.
 7 DR. BOOTH:
 8 A. And -
 9 MR. O'BRIEN:
 10 Q. And -
 11 DR. BOOTH:
 12 A. Can I take you through his comments for the
 13 way –
 14 MR. O'BRIEN:
 15 Q. No.
 16 DR. BOOTH:
 17 A. - on his rebuttal?
 18 MR. O'BRIEN:
 19 Q. I'd like to finish my question.
 20 DR. BOOTH:
 21 A. Okay.
 22 MR. O'BRIEN:
 23 Q. Okay. So, you're suggesting that Mr. Coyne
 24 is a liar and your suggestion that utility
 25 witnesses essentially should bow down to

Page 58

1 your testimony. You have pay Whack-a-Mole –
 2 play Whack-a-Mole with everything they bring
 3 up in order to come to your testimony, to
 4 your way of thinking. Do you believe that's
 5 an objective and impartial way for a witness
 6 to testify before a board?
 7 DR. BOOTH:
 8 A. No, I think it's the job of a witness to
 9 provide impartial, objective evidence to the
 10 Board and lay out all of the information so
 11 the Board can reasonably use that data to
 12 form an opinion and that the Board can see
 13 where the data is before the analyst
 14 exercises their judgment. We all exercise
 15 judgment, but the question is: what's the
 16 starting point? What is the data? And I
 17 don't think Mr. Coyne has done that.
 18 MR. O'BRIEN:
 19 Q. Okay. You have?
 20 DR. BOOTH:
 21 A. Absolutely. I presented not just my
 22 estimates, I presented all these other
 23 estimates from people. I presented more
 24 independent estimates of the market risk
 25 premium and betas than has Mr. Coyne, a lot

Page 59

1 more.
 2 MR. O'BRIEN:
 3 Q. Well, let's go back, and I want to take you
 4 through kind of your history here with the
 5 Board, so, with respect to Newfoundland
 6 Power GRAs. So, you've given evidence on a
 7 number of occasions, I think back to 2009.
 8 Is that the first time you would have given
 9 evidence?
 10 DR. BOOTH:
 11 A. That sounds correct, 15 years, yeah.
 12 MR. O'BRIEN:
 13 Q. Yeah, okay. So, you had given evidence for
 14 the 2010 GRA, the 2013 GRA I believe it was,
 15 '15-16 GRA, the 2019 GRA and '22, 2022 GRA,
 16 as well as this one?
 17 DR. BOOTH:
 18 A. Correct.
 19 MR. O'BRIEN:
 20 Q. Okay. And apart from the last two, you
 21 testified before this Board in each of those
 22 cases?
 23 DR. BOOTH:
 24 A. That's correct.
 25 MR. O'BRIEN:

Page 60

1 Q. Okay, all right. So, and I'm not going to
 2 take you through these, but as we go through
 3 the testimony, I might ask you – I've
 4 provided you with some cross-age just
 5 concerning your – the executive summaries of
 6 your reports. So, there may be some points
 7 that I'm going to ask you to, but I think
 8 you're probably likely to agree with me with
 9 what's in them. But before I get to that,
 10 you made a comment yesterday about Mr. Coyne
 11 and Concentric and the fair return standard,
 12 which I understood to suggest that
 13 Concentric was not applying the appropriate
 14 fair return standard or even had followed –
 15 had cited the appropriate fair return
 16 standard in giving testimony. Do you recall
 17 that?
 18 DR. BOOTH:
 19 A. I do, and in answer to that, I'd like to
 20 draw your attention to Concentric's
 21 rebuttal.
 22 MR. O'BRIEN:
 23 Q. Okay. And before we get to -
 24 COFFEY, KC:
 25 Q. If he could – if I could, Mr. Chair. Could

Page 61

1 he answer the question?
 2 MR. O'BRIEN:
 3 Q. Well, what I was going to -
 4 COFFEY, KC:
 5 Q. Could he finish answering the question,
 6 please?
 7 MR. O'BRIEN:
 8 Q. Yes, he can, and -
 9 CHAIRMAN:
 10 Q. Yeah, just -
 11 COFFEY, KC:
 12 Q. Because you raised it, Mr. O'Brien.
 13 CHAIRMAN:
 14 Q. If you want to clarify your question.
 15 MR. O'BRIEN:
 16 Q. It's a part of the question is what I wanted
 17 to say, is that I wanted to show you where
 18 it was cited in Concentric's evidence, what
 19 the fair return standard was, and I wanted
 20 you to confirm whether or not that was
 21 accurate. Can we do that?
 22 DR. BOOTH:
 23 A. That's correct.
 24 MR. O'BRIEN:
 25 Q. Okay. So, if we can pull up Concentric

Page 62

1 direct, page five, the fair return standard,
 2 there's a section there that's outlined, and
 3 lines 1 to 10, Concentric goes through the
 4 principle surrounding the concept of a fair
 5 return standard and cites the Northwest
 6 Utilities case, the Supreme Court of Canada
 7 case. So, they cite that fair return
 8 standard. Is that an accurate depiction of
 9 the fair return standard in Canada?
 10 DR. BOOTH:
 11 A. I think he uses – yes, that's just Mr.
 12 Justice Lamont's definition.
 13 MR. O'BRIEN:
 14 Q. Yeah, okay.
 15 DR. BOOTH:
 16 A. But go to his rebuttal testimony.
 17 MR. O'BRIEN:
 18 Q. No, and I will, and I do want you to -
 19 COFFEY, KC:
 20 Q. No, if he could.
 21 MR. O'BRIEN:
 22 Q. - have that opportunity to do that. I just
 23 want to make sure that's -
 24 COFFEY, KC:
 25 Q. Mr. Chair, Mr. Chair, could I – in answering

Page 63

1 the question, the witness wants to go to the
 2 rebuttal.
 3 MR. O'BRIEN:
 4 Q. And I -
 5 CHAIRMAN:
 6 Q. That's fair.
 7 MR. O'BRIEN:
 8 Q. Yeah. I just wanted to make sure that that
 9 was the accurate standard that was cited.
 10 COFFEY, KC:
 11 Q. Well, he confirmed that, and he -
 12 MR. O'BRIEN:
 13 Q. And he did confirm that. So, you can take
 14 me to the rebuttal.
 15 DR. BOOTH:
 16 A. That's absolutely correct, Mr. O'Brien.
 17 MR. O'BRIEN:
 18 Q. Yeah, okay.
 19 DR. BOOTH:
 20 A. That's the legal standard. I've been
 21 putting that in my testimony for the last 30
 22 plus years.
 23 MR. O'BRIEN:
 24 Q. And so finish your answer then. That's
 25 good.

Page 64

1 DR. BOOTH:
 2 A. And I've seen American witnesses that in,
 3 but American witnesses are coming from
 4 America, and if you read Mr. Coyne's
 5 rebuttal testimony, and I don't know whether
 6 he did this or Mr. Trogonoski did, and he
 7 said this yesterday or perhaps it was the
 8 day before, page two. "Further, his ROE
 9 recommendations would not provide the
 10 company with a return that is comparable to
 11 those of other companies with similar
 12 business and financial risk."
 13 MR. O'BRIEN:
 14 Q. Okay.
 15 DR. BOOTH:
 16 A. Other companies. That is not the fair
 17 return standard.
 18 CHAIRMAN:
 19 Q. Excuse me. Could you just point out which
 20 page you're referring to?
 21 DR. BOOTH:
 22 A. Page two.
 23 CHAIRMAN:
 24 Q. Page two?
 25 DR. BOOTH:

Page 65

1 A. Of his rebuttal testimony.
 2 COFFEY, KC:
 3 Q. What part of the page?
 4 MS. GLYNN:
 5 Q. Which line?
 6 CHAIRMAN:
 7 Q. Which line number?
 8 DR. BOOTH:
 9 A. Oh, line 21 to 24.
 10 CHAIRMAN:
 11 Q. Okay. Just slow down for a minute, just
 12 till she brings it up. That’s all. Sorry,
 13 thank you.
 14 MR. O'BRIEN:
 15 Q. Okay. So, from the -
 16 DR. BOOTH:
 17 A. Okay, no, I haven’t finished.
 18 MR. O'BRIEN:
 19 Q. Oh, I’m sorry. Apologize.
 20 DR. BOOTH:
 21 A. I finished because Mr. – the Chair
 22 interrupted me.
 23 CHAIRMAN:
 24 Q. Yeah. Give him a chance to reply.
 25 DR. BOOTH:

Page 66

1 A. So, let’s read this and this is what he said
 2 yesterday. So, it’s what you might put as
 3 bulletproof sort of stuff in your testimony
 4 and there’s what you believe. This is what
 5 he said in his rebuttal testimony and it’s
 6 what he said in testimony yesterday.
 7 “Further, his ROE recommendation would not
 8 provide the company with a return that is
 9 comparable to those of other companies with
 10 similar business and financial risk.”
 11 That’s a return on the companies. “On that
 12 basis, Dr. Booth’s ROE recommendation does
 13 not satisfy the fair return standard.” And
 14 I’ll be honest, every time – and he said
 15 that so many times in the past, that is
 16 incorrect. The fair return standard is Mr.
 17 Justice Lamont’s definition. It’s the fair
 18 return not on the companies, not on their
 19 book value, their investment. It’s the
 20 return on the securities. And if you want,
 21 I’ll go through the example I gave you
 22 yesterday and scratch out Labrador Island
 23 Link and put in company A and company B. It
 24 is the required return the investor has.
 25 It’s not the rate of return on other

Page 67

1 companies. That is the fair return
 2 standard. And the Alberta Utilities
 3 Commission has recognized this. It’s a
 4 market opportunity cost applied through a
 5 book value investments, and that’s what I’ve
 6 recommended.
 7 MR. O'BRIEN:
 8 Q. Okay. And I wanted that clarification. So,
 9 I just wanted to make sure. In terms of
 10 what the fair return standard includes,
 11 would you accept the premise that it
 12 includes the comparable investment sort of
 13 piece?
 14 DR. BOOTH:
 15 A. It includes comparable, return on comparable
 16 security.
 17 MR. O'BRIEN:
 18 Q. Right, okay, securities.
 19 DR. BOOTH:
 20 A. It does not include the allowed returns on
 21 other companies.
 22 MR. O'BRIEN:
 23 Q. No, but the comparable investment on that,
 24 comparable security, would you accept that?
 25 DR. BOOTH:

Page 68

1 A. That’s right. See, the problem, Mr.
 2 O’Brien, is investments is an illusive term.
 3 Securities is not.
 4 MR. O'BRIEN:
 5 Q. Okay.
 6 DR. BOOTH:
 7 A. Securities are an investment. The rate of
 8 return on book value is an investment. So,
 9 in Canada, and I’ll be honest when I say
 10 I’ve been looking at this. I looked at the
 11 US standards and this part has been part of
 12 my testimony for probably 30 years. The
 13 Hope standard, the Bluefield standard in the
 14 United States does not refer to securities.
 15 In Canada, it’s explicitly referring to
 16 securities and explicitly referring to
 17 changes in the money market, which we now
 18 understand as the capital market. So,
 19 whether that’s a substandard
 20 (unintelligible) between US and Canada, I
 21 don’t know. But when Mr. Coyne starts
 22 talking about, as he says in his rebuttal –
 23 now, he can say he really meant something
 24 else; it’s badly worded, which I would
 25 accept, but it is the legal standard in

| | | | |
|---------|---|---------|--|
| Page 69 | <p>1 Canada that it's a security market issue.</p> <p>2 It's what investors in the security market</p> <p>3 want is their discount rate, and that's what</p> <p>4 I estimate.</p> <p>5 MR. O'BRIEN:</p> <p>6 Q. Okay. So, it's a comparable security</p> <p>7 investment or -</p> <p>8 DR. BOOTH:</p> <p>9 A. It's a comparative investment in securities.</p> <p>10 MR. O'BRIEN:</p> <p>11 Q. Okay. I'm trying to understand what your</p> <p>12 position is here so that we have that clear</p> <p>13 before the Board. Does it also include then</p> <p>14 the financial integrity standard?</p> <p>15 DR. BOOTH:</p> <p>16 A. Yes. If you – look, if you give people what</p> <p>17 they want or what they require, you</p> <p>18 automatically satisfy the financial</p> <p>19 integrity standard.</p> <p>20 MR. O'BRIEN:</p> <p>21 Q. And Mr. Coyne, Concentric says that as well.</p> <p>22 DR. BOOTH:</p> <p>23 A. I don't know about that. I've always looked</p> <p>24 at the three requirements as being just</p> <p>25 different ways of looking at the same thing.</p> | Page 71 | <p>1 leg comes in because – and we've gone</p> <p>2 through this at the Alberta Utility</p> <p>3 Commission. Suppose for whatever reason, a</p> <p>4 utility has a high embedded cost of debt.</p> <p>5 Perhaps it's, just take an extreme example,</p> <p>6 ten percent. Now, this is not the case for</p> <p>7 Newfoundland Power, but if it's got a very</p> <p>8 high embedded cost of debt, then if you</p> <p>9 lower the allowed ROE to a fair return, all</p> <p>10 of these financial metrics get squeezed and</p> <p>11 as a result, the utility may have problem</p> <p>12 accessing capital and this has happened</p> <p>13 before. In a Consumers Gas hearing,</p> <p>14 Consumers Gas couldn't satisfy its trust</p> <p>15 indenture because of the allowed ROE and</p> <p>16 they wanted an increase in the ROE. And my</p> <p>17 answer to that has always been, you're</p> <p>18 trying to solve a bond market problem by</p> <p>19 changing the equity market, and that's not</p> <p>20 the correct way of looking at it. If in</p> <p>21 fact, there is a bond market problem, you</p> <p>22 don't reward the equity holders with a</p> <p>23 higher than fair ROE. You take other</p> <p>24 measures to address the capital attraction</p> <p>25 without folding everything into the ROE. In</p> |
| Page 70 | <p>1 MR. O'BRIEN:</p> <p>2 Q. Okay. But he indicated there was three legs</p> <p>3 of a stool to look at the same thing. I'm</p> <p>4 trying to figure out do you have an issue</p> <p>5 with the other two legs of that stool?</p> <p>6 DR. BOOTH:</p> <p>7 A. No, see -</p> <p>8 MR. O'BRIEN:</p> <p>9 Q. Financial integrity and the capital</p> <p>10 attraction standard.</p> <p>11 DR. BOOTH:</p> <p>12 A. No, the capital attraction, again it's all a</p> <p>13 – the only time you might get qualifications</p> <p>14 to that is the equity market, you might give</p> <p>15 them a fair return in the equity market.</p> <p>16 You might give them say – the Board looks at</p> <p>17 this and said, “well, we 100 percent agree</p> <p>18 with Dr. Booth. We're going to give</p> <p>19 Newfoundland Power 7.7 percent.” That</p> <p>20 satisfies the fair return standard in terms</p> <p>21 of Mr. Justice Lamont's definition and then</p> <p>22 Newfoundland Power says, “well, our bond</p> <p>23 rating's gone down. We can't attract</p> <p>24 capital on reasonable terms.” That's where</p> <p>25 the second part and the third part of the</p> | Page 72 | <p>1 a nutshell, the equity holder shouldn't get</p> <p>2 a higher ROE simply because a firm has a</p> <p>3 high embedded cost of debt, even if that</p> <p>4 causes problems in the financial metrics and</p> <p>5 possible problems in attracting capital.</p> <p>6 There are other measures the Board can take</p> <p>7 to solve capital attraction problems.</p> <p>8 MR. O'BRIEN:</p> <p>9 Q. So, Dr. Booth, my question was: the capital</p> <p>10 attraction standard, did you accept that as</p> <p>11 one of the three legs of that fair return</p> <p>12 standard? Is that acceptable?</p> <p>13 DR. BOOTH:</p> <p>14 A. Now the answer to that is yes, the firm has</p> <p>15 to be able to attract capital.</p> <p>16 MR. O'BRIEN:</p> <p>17 Q. Okay. And that was my question.</p> <p>18 DR. BOOTH:</p> <p>19 A. Sorry, I – but I've – it was in a context of</p> <p>20 the fair return to the equity -</p> <p>21 MR. O'BRIEN:</p> <p>22 Q. And I'm trying to establish, in terms of the</p> <p>23 fair return, if there's a three-legged stool</p> <p>24 here, if you have an issue with the first</p> <p>25 leg, you've told us that. The other two</p> |

Page 73

1 legs, you don't have issues with?

2 DR. BOOTH:

3 A. That's correct.

4 MR. O'BRIEN:

5 Q. The financial integrity or the capital

6 attraction. So, that's fair.

7 DR. BOOTH:

8 A. A utility has to be able to attract capital

9 on reasonable terms.

10 MR. O'BRIEN:

11 Q. Okay.

12 DR. BOOTH:

13 A. Nobody would ever say anything contrary to

14 that.

15 MR. O'BRIEN:

16 Q. No, and I'm just confirming that. So, and

17 with those three legs of that stool, that

18 three-legged stool, none of them, none of

19 those legs have any particular priority, do

20 they? It's the fair standard overall.

21 DR. BOOTH:

22 A. No, there's – that's true. The – but as I

23 said, there are different mechanism or tools

24 are available. It's not all put on the

25 equity holders and you get out ROE. It's

Page 74

1 also to do with common equity ratio and

2 financing.

3 MR. O'BRIEN:

4 Q. Okay. I want to take you just to some of

5 your comments just in terms of the economic

6 and capital market conditions, and I'm not –

7 I don't want to spend a lot of time on that

8 point, but I do want to ask you whether you

9 can confirm Mr. Coyne's suggestion or

10 Concentric's suggestion that there's been a

11 fundamental shift in economic and capital

12 markets since 2021. That was what his

13 evidence was. You indicated that 2020,

14 Covid, that's nobody's sort of – nobody's

15 indication, but the evidence was actually

16 since March of 2021. So, would you accept

17 there has been a fundamental shift in the

18 market since March of 2021?

19 (10:30 a.m.)

20 DR. BOOTH:

21 A. Actually, his evidence refers to January

22 2020 as well. So, not just – I would fully

23 accept that we have recovered from Covid and

24 that the result is that bond yields which

25 had negative real yields incidentally, don't

Page 75

1 match anybody's definition of fair market

2 value and hopefully we've got beyond that

3 and we're getting back to more normal

4 conditions. I don't think we're there yet,

5 but I will tell you that there's a phase in

6 finance I tell my students, always beware of

7 anybody on the television, a talking head or

8 anybody that says this time is different.

9 Very rarely is it different. These are

10 regular cycles of things we go through.

11 Covid was different, but that's not a

12 financial thing. But recessions and booms,

13 we've seen them years and years. I've seen

14 – I'm old enough to have gone through

15 five/six recessions. The capital markets

16 have seen a lot more than that.

17 MR. O'BRIEN:

18 Q. So, all of these graphs and tables, they're

19 not worth anything to us because everything

20 is going to stay the same?

21 DR. BOOTH:

22 A. I would say -

23 MR. O'BRIEN:

24 Q. Essentially, over time, everything stays the

25 same.

Page 76

1 DR. BOOTH:

2 A. Well, there's a great deal of truth to that,

3 Mr. O'Brien.

4 MR. O'BRIEN:

5 Q. Okay.

6 DR. BOOTH:

7 A. And I'll say it again, it's Whack-a-Mole

8 because utilities generally say this time is

9 different, and you just said it's different

10 from January 2020. It's different from

11 March 2021 and I'll 100 percent agree with

12 that.

13 MR. O'BRIEN:

14 Q. Okay.

15 DR. BOOTH:

16 A. But we're looking forward. Do I expect

17 another Covid? Do I expect another massive

18 bond intervention by the Government of

19 Canada? I don't expect it, and heavens, I

20 hope we don't get it again. I don't think

21 we've got enough resources to be able to

22 support that again.

23 MR. O'BRIEN:

24 Q. But this Board has to take a forward-looking

25 approach to ROE. Is that correct?

Page 77

1 DR. BOOTH:
 2 A. That’s correct. So, they have to think are
 3 we going to have a Covid-19 in the next
 4 three years.
 5 MR. O'BRIEN:
 6 Q. Right, and we’re talking about a short-term
 7 look, three-year look. We’re not talking
 8 about setting an ROE for 15 years down the
 9 road. We’re talking about a short-term
 10 look. So, the fact that markets are
 11 increasing is a factor. Would you agree?
 12 DR. BOOTH:
 13 A. That’s correct.
 14 MR. O'BRIEN:
 15 Q. Okay.
 16 DR. BOOTH:
 17 A. But it was a factor based upon the
 18 settlement agreement that was arrived at in
 19 2021, which I agreed to. It’s a – and I -
 20 MR. O'BRIEN:
 21 Q. Well, you call those black boxes.
 22 DR. BOOTH:
 23 A. I know, but that’s the problem. You can’t
 24 have it both ways.
 25 MR. O'BRIEN:

Page 78

1 Q. Let’s move away from what you already have
 2 indicated is a black box. In other words,
 3 we’re not going to talk about what piece
 4 went in here, what piece came out there.
 5 That’s the settlement piece. So, but in
 6 terms of capital markets, capital markets
 7 have had a fundamental shift since 2021, and
 8 you agreed with me on that.
 9 DR. BOOTH:
 10 A. That’s right, but Mr. O’Brien, you can’t
 11 have it both ways. You can’t say, “well,
 12 let’s look at 2021” and say, “well, the
 13 conditions have – interest rates have
 14 increased since then. The firm needs a
 15 higher rate of return. Dr. Booth agreed to
 16 this, blah, blah, blah”, when in fact that
 17 was a settlement agreement and I didn’t use
 18 the – when I – I said to – I can’t even
 19 remember whether it was Mr. Browne or who it
 20 was. I said, “look, I’ve been using 3.8
 21 percent. I’m not going to say let’s lower
 22 NP’s allowed ROE because currently interest
 23 rates are in the toilet and we got these
 24 incredibly low interest rates.” I didn’t
 25 look at 2021. And I’ve said repeatedly in

Page 79

1 my – I think the litigated hearing in 2016
 2 was the last time that we set Newfoundland
 3 Power’s allowed ROE at 8.5 percent. I don’t
 4 think it’s legitimate to look at 2021 or
 5 2019 because they were settlement boxes.
 6 MR. O'BRIEN:
 7 Q. Okay.
 8 DR. BOOTH:
 9 A. Black boxes.
 10 MR. O'BRIEN:
 11 Q. You agree with me that long term Canada bond
 12 yields are higher than they were in 2016 and
 13 2021? That’s a fair -
 14 DR. BOOTH:
 15 A. That’s a fair comment.
 16 MR. O'BRIEN:
 17 Q. Which doesn’t -
 18 DR. BOOTH:
 19 A. Doesn’t affect my recommendation.
 20 MR. O'BRIEN:
 21 Q. Right, doesn’t affect the recommendation.
 22 DR. BOOTH:
 23 A. No.
 24 MR. O'BRIEN:
 25 Q. And same thing with A rated utility bonds?

Page 80

1 DR. BOOTH:
 2 A. Yeah. They’re not up as much as – they’re
 3 about the same, I think, as in 2016.
 4 Obviously, it depends where in 2016 you
 5 look, whether you look at the time of Mr.
 6 Coyne’s testimony in 2015 or my testimony in
 7 2016. But I’ve got a chart with all of this
 8 in, so the Board could look at it.
 9 MR. O'BRIEN:
 10 Q. Yeah, and I’ve seen the chart.
 11 DR. BOOTH:
 12 A. Okay.
 13 MR. O'BRIEN:
 14 Q. And that’s what I interpret from it. It may
 15 not be as high as the long-term Canada bond,
 16 but the market is higher. Let’s talk just
 17 briefly about cost of capital as in the
 18 general sense and the components of it, I’ll
 19 break it down a little bit later, but
 20 basically, I think all of the cost of
 21 capital witnesses break it down into the
 22 equity thickness and then the ROE. Those
 23 are the separate components, but you look at
 24 them together. Is that fair?
 25 DR. BOOTH:

Page 81

1 A. That's fair enough. The other component is
 2 interest, but the fact is in Canada, except
 3 for the National Energy Board, you don't
 4 take into account the current market cost of
 5 debt.
 6 MR. O'BRIEN:
 7 Q. Okay.
 8 DR. BOOTH:
 9 A. The National Energy Board went with ATWACC
 10 which is what we would do if it was a
 11 private company. We would ask what's the
 12 current required return on debt, what's the
 13 current tax rate, what's the current
 14 required return on equity, which is what
 15 ATWACC is. Everybody's – well, not
 16 everybody, but the LED, the Regie and the
 17 AUC rejected ATWACC, but the NEB decided to
 18 go with it. And the reason is, we don't
 19 take the current opportunity cost of debt.
 20 We treat it as exactly the same as other
 21 expenses. We take the deemed – the current
 22 interest rate on embedded debt and it's
 23 passed off to ratepayers.
 24 MR. O'BRIEN:
 25 Q. And that's not an issue for us before this

Page 82

1 hearing -
 2 DR. BOOTH:
 3 A. No, that's -
 4 MR. O'BRIEN:
 5 Q. - in particular. Is that correct?
 6 DR. BOOTH:
 7 A. It's not an issue, but it's – that's the
 8 problem when you start looking at where you
 9 compare it to other utilities. But the
 10 current cost – the embedded cost of debt has
 11 come down by about one percent since 2016.
 12 So, all those costs that you would expect,
 13 the interest coverage ratio, for example, to
 14 go up and the financial flexibility of
 15 Newfoundland Power to go up. But that's
 16 just passed off. So, the only thing is the
 17 equity, the profit. I know you object to
 18 profit, but I mean, most people say profit
 19 or net income. The net income to the
 20 shareholder, which is Newfoundland – which
 21 is Fortis, which is composed of the allowed
 22 ROE times the equity ratio plus the bonus
 23 for – because they allow range around the
 24 utility cost of capital.
 25 MR. O'BRIEN:

Page 83

1 Q. Okay. With respect to cost of capital
 2 itself, Mr. Coyne gave some evidence, and
 3 I'm wondering if you could confirm this,
 4 whether or not you agree. Would you agree
 5 that the cost of capital is just that, a
 6 cost, and it's something you would expect to
 7 be passed on to customers?
 8 DR. BOOTH:
 9 A. Absolutely. It's the cost of the capital
 10 that the firm has raised, exactly the same
 11 as the rent on the building, as the cost -
 12 MR. O'BRIEN:
 13 Q. No different.
 14 DR. BOOTH:
 15 A. So, if you get into financial trouble, you
 16 might go to the building operator and say,
 17 "well, look, I'm in serious trouble. Can
 18 you lower the rent?" which is in fact what
 19 happened during Covid. You might go to the
 20 equity holders or the bond holder and say,
 21 "can you give me a good deal?" But capital
 22 markets are not as flexible as somebody
 23 you'd rent a building from because they got
 24 way more alternatives. So, it is a cost
 25 that has to be passed on.

Page 84

1 MR. O'BRIEN:
 2 Q. Okay.
 3 DR. BOOTH:
 4 A. And my understanding is the Supreme Court
 5 has confirmed that and nobody's ever
 6 questioned that.
 7 MR. O'BRIEN:
 8 Q. This is not a question. So, like to put a
 9 point on it, I guess, while we've been in
 10 this particular room we've been talking
 11 about other costs that are not technically
 12 Newfoundland Power's costs, for example,
 13 Muskrat Falls Project costs, and that sort
 14 of thing, coming through rates. Those are
 15 not Newfoundland Power's particular costs.
 16 You'd expect those costs to be passed on to
 17 customers?
 18 DR. BOOTH:
 19 A. That's correct. I think the way--if you
 20 look to utilities is regulations changed
 21 over the last 30 years. We've got all sorts
 22 of deferral accounts for gas utilities, for
 23 example, where purchase variance accounts
 24 where the cost is basically passed through.
 25 MR. O'BRIEN:

Page 85

1 Q. Right.

2 DR. BOOTH:

3 A. We've removed that from utilities. So,

4 their risk is lower than it was 30 years

5 ago.

6 MR. O'BRIEN:

7 Q. Right. So, you'd expect the cost to be

8 passed on, and this is not a--the concept

9 here--you talked about the Supreme Court of

10 Canada here, but this is not an issue where

11 Newfoundland Power should be asked to share

12 the pain of a cost that's not their--that's

13 not their cost, not in their control with

14 customers.

15 DR. BOOTH:

16 A. I don't --

17 MR. O'BRIEN:

18 Q. To put a fine point on it, you wouldn't

19 expect this Board to order an unreasonable

20 or unfair ROE to account for those costs,

21 would you?

22 DR. BOOTH:

23 A. That's correct. Now, what the Board could

24 do is put a deferral account and say, well,

25

Page 86

1 we think a fair rate of return is 9 percent,

2 or 8 percent, or whatever, but we're only

3 going to allow you to recover 6 percent in

4 this rate hearing, and just like allowance

5 of funds used during construction, they'll

6 capitalize and be brought forward in the

7 future so that you will not be hurt, but

8 this is part of an attempt to deal with

9 temporary problems.

10 MR. O'BRIEN:

11 Q. That's a method, method of passing on the

12 cost, but not reducing the cost?

13 DR. BOOTH:

14 A. That's why--look, I agree, 100 percent agree

15 with you. I'm just saying that the boards

16 have got lots of levers that they can use to

17 manage short-term problems.

18 MR. O'BRIEN:

19 Q. Okay. And we're not in disagreement on

20 those points. I just want to make sure that

21 this is not a share the pain type of

22 scenario.

23 DR. BOOTH:

24 A. No. If Newfoundland Power says well, we

25

Page 87

1 want to do our bit for Newfoundland, and we

2 want to do this, then they can, but I don't

3 think it's something that can be forced on

4 them.

5 MR. O'BRIEN:

6 Q. Let me ask you about the capital structure

7 and the common equity thickness, and you've

8 made a recommendation in your report. When

9 you came here before this Board in 2010, I

10 guess, for the 2010 hearing, and you had

11 written a report in 2009, at that time--and

12 if we have to I can refer you to the

13 Executive Summary from your report, but I

14 understood that you had done a risk

15 assessment of Newfoundland Power at that

16 time, and it was your judgment, and I'll say

17 the word judgment because we'll use that a

18 fair bit today, and Ms. Greene used it a

19 fair bit yesterday, but it was your judgment

20 that Newfoundland Power was an average

21 business risk utility, and marginally lower

22 with financial risk. Was that fair?

23 DR. BOOTH:

24 A. That's correct.

25

Page 88

1 MR. O'BRIEN:

2 Q. Okay.

3 DR. BOOTH:

4 A. That's with respect to your Canadian

5 comparator group, not with respect to the

6 US.

7 MR. O'BRIEN:

8 Q. And that was your assessment at that time,

9 and that involved an element of judgment on

10 your part, is that fair?

11 DR. BOOTH:

12 A. I would hope so. I will be honest, Mr.

13 O'Brien. When I first started testifying I

14 was petrified. You might find this

15 difficult to imagine. I was petrified -

16 MR. O'BRIEN:

17 Q. I do a bit.

18 DR. BOOTH:

19 A. - to give my judgement, and I hid behind my

20 numbers, and a prominent utility witness,

21 and this was in the early '90's, came to me

22 afterwards, and this was on behalf of the

23 utility, said, Professor Booth, you're going

24 to be a good witness, but the Board wants to

25

Page 89

1 hear your judgment. They don't want to hear
 2 the numbers. Anyone can come up with the
 3 numbers. They want to hear what you think
 4 about this, so don't be afraid to express
 5 your judgement, and I always remember that
 6 because, as I said, you'd be surprised to
 7 know that when I started out doing this I
 8 was hiding behind the numbers, and then over
 9 time I've been here--now I'm tired of the
 10 numbers because I've been doing this for 38
 11 years, and when I look at that, Mr. O'Brien,
 12 I say heavens above, 38 years, coming to
 13 these hearing rooms doing exactly the same
 14 thing. Sometimes I wonder, as I said, how
 15 much longer I'm going to do this.
 16 MR. O'BRIEN:
 17 Q. So, I guess even though you might have been
 18 hiding behind numbers, there couldn't have
 19 been any number out there that said
 20 Newfoundland Power should have this
 21 particular allowed ROE, or sorry, equity
 22 thickness. You must have had some element
 23 of judgment applied to your opinion at that
 24 time.
 25

Page 90

1 DR. BOOTH:
 2 A. That's partially correct. A lot of this
 3 came out of the '90's into the 2000's. In
 4 RH-4, RH-29-4, the National Energy Board had
 5 to deal with the risk of oil utility, oil
 6 pipelines versus gas pipelines, and it makes
 7 a clear statement that we have to look at
 8 the business risk of those and analyze the
 9 difference between a--and there's
 10 significant differences between a gas
 11 pipeline and an oil pipeline, and it set 45
 12 percent for the oil pipelines, 40 percent
 13 for the gas pipelines, 35 percent for west
 14 coast. So, that was what we were doing in
 15 the mid '90's, and then along came the
 16 Alberta Utilities Commission. They didn't
 17 have to deal with pipelines. They had a
 18 pipeline, an ECHO pipeline. They had to do
 19 with gas utilities and the electric
 20 utilities, and gas mainline pipeline NGTL,
 21 and electric transmissions. So, they had to
 22 deal with all of the risks of all of these
 23 other utilities, and I participated in that
 24 hearing, and we looked at the business risk
 25

Page 91

1 of all of those, and I recommended 30
 2 percent, which was actually the NEB's
 3 recommendation for mainline transmission; 35
 4 percent for local gas LDC's, and I think I
 5 had 32 percent for electric transmissions,
 6 and that was a result of a lot of analysis,
 7 and since then risk has not increased except
 8 for the gas companies. For the electric
 9 companies my perception is the risk has
 10 decreased. So, you're absolutely correct.
 11 I used to spend a lot of time doing a more
 12 qualitative assessment, but at the end of
 13 the road there's only two things that we're
 14 looking at, short run risk, the ability to
 15 earn your allowed ROE; long run risk, the
 16 ability to get your capital back, which is
 17 the stranded asset risk.
 18 MR. O'BRIEN:
 19 Q. Okay.
 20 (10:45 a.m.)
 21 DR. BOOTH:
 22 A. And that's significant by the way, Mr.
 23 O'Brien. It was a big deal in Nova Scotia
 24 Power because they've got their coal plants
 25

Page 92

1 that have to come out of the rate base by
 2 2030. It was a significant risk for Trans
 3 Canada Mainline and the Northern Ontario
 4 line when everyone started basically pumping
 5 gas through the United States. So, I'm not
 6 saying the stranded asset risk is
 7 immaterial. It's very important for certain
 8 types of utilities. I don't see it as
 9 important for Newfoundland Power.
 10 MR. O'BRIEN:
 11 Q. Okay. And I'm going to take you through--
 12 just so you understand, I'm going to take
 13 you through each time you've been here and
 14 how you've assessed that. So, just--and I
 15 don't want to cut you off on your responses
 16 at any point, but I just want to let you
 17 know that I do want to take you through
 18 those in terms of your assessment at the
 19 time, okay.
 20 So, at the time when you came here
 21 first of all for Newfoundland Power for the
 22 2010 rate hearing, you expressed that
 23 opinion that we discussed earlier. You
 24 would have been aware, I'm going to put to
 25

Page 93

1 you, that the Board had already in the past
 2 made a determination that Newfoundland Power
 3 was an average risk utility, and that would
 4 include business risk, financial risk, and
 5 any other risk really at that time. That
 6 was the Board's assessment of Newfoundland
 7 Power when you first came here. Is that
 8 fair?
 9 DR. BOOTH:
 10 A. That's correct.
 11 MR. O'BRIEN:
 12 Q. Okay.
 13 DR. BOOTH:
 14 A. And my perception -
 15 MR. O'BRIEN:
 16 Q. And the Board had exercised regulatory
 17 judgment in coming to that, is that fair?
 18 DR. BOOTH:
 19 A. That's correct.
 20 MR. O'BRIEN:
 21 Q. That's not controversial?
 22 DR. BOOTH:
 23 A. No, that's the record.
 24 MR. O'BRIEN:
 25

Page 94

1 Q. That's what the Board does. Okay. And they
 2 had made a determination on what an allowed
 3 ROE should be for Newfoundland Power,
 4 correct, or not ROE, equity thickness?
 5 DR. BOOTH:
 6 A. That's correct.
 7 MR. O'BRIEN:
 8 Q. Okay.
 9 DR. BOOTH:
 10 A. And that included I will remind you
 11 preferred shares in addition to the common
 12 equity.
 13 MR. O'BRIEN:
 14 Q. That included a 45 percent at that point of-
 15 -there were preferred shares, yes. So, when
 16 you came here in 2009, I want to get a
 17 flavour for what your opinion was in terms
 18 of what has to happen to modify an allowed
 19 equity thickness? And my understanding, and
 20 I've read your testimony from the last time,
 21 I've read your testimony from more recently
 22 the Nova Scotia Power's rate case in 2022--
 23 my understanding is that your opinion is
 24 that unless business risk change significant
 25

Page 95

1 you don't modify or change the allowed
 2 equity thickness. Isn't that your expressed
 3 opinion before these Boards?
 4 DR. BOOTH:
 5 A. That's my expressed opinion. I expressed
 6 that to the National Energy Board, that the
 7 capital markets tend to look at the common
 8 equity ratio. It's more definite.
 9 MR. O'BRIEN:
 10 Q. Right.
 11 DR. BOOTH:
 12 A. Whereas the ROE changes all the time, so -
 13 MR. O'BRIEN:
 14 Q. And you've held that -
 15 DR. BOOTH:
 16 A. Hold on, I haven't finished my answer. And
 17 I said that opinion before the AUC.
 18 MR. O'BRIEN:
 19 Q. Okay.
 20 DR. BOOTH:
 21 A. And it assumes that the Board got it right.
 22 My judgment is the Board set in '96/'97 40
 23 to 45 percent. It's stuck now on 45
 24 percent. I can't see any reason for 45
 25

Page 96

1 percent. It's an outlier compared to other
 2 T&D utilities in Canada. So, do I expect
 3 the Board to change? Well, I've been saying
 4 40 percent, Mr. O'Brien, since 2009, and
 5 I've been saying pretty much the same thing.
 6 Basically doing some preferred shares if
 7 they want to go lenient. Basically announce
 8 40 to 45 percent so the rating agencies know
 9 what's going on.
 10 So, my view hasn't changed, and I think
 11 it was in 2016 that the Consumer Advocate
 12 got Professor Cleary to provide testimony on
 13 the common equity ratio, and I was more or
 14 less really focusing on the allowed ROE, but
 15 I also repeated my recommendations.
 16 MR. O'BRIEN:
 17 Q. You did.
 18 DR. BOOTH:
 19 A. I don't see any reason Newfoundland Power
 20 has 45 percent common equity.
 21 MR. O'BRIEN:
 22 Q. So, there's a couple of points I want to
 23 raise with you on that. So, first of all,
 24 your opinion on risk hasn't changed all the
 25

Page 97

1 way along in terms of Newfoundland Power.
 2 You're assessment--your assessment of
 3 Newfoundland Power as having an average
 4 business risk, and having a less than
 5 average financial risk, that hasn't changed
 6 over time.
 7 DR. BOOTH:
 8 A. That hasn't changed -
 9 MR. O'BRIEN:
 10 Q. Right.
 11 DR. BOOTH:
 12 A. - but as I indicated, I've never seen a
 13 utility in Canada where the regulator
 14 doesn't protect the utility, which is to say
 15 when I look--the first thing I do in any
 16 hearing is say, give me the allowed return
 17 versus the actual return going back as long
 18 as you got data so we can actually see what
 19 the short-term risk is, and Newfoundland
 20 Power is absolutely no different from any of
 21 the other Canadian utilities.
 22 Some of them don't have quite as many
 23 deferral accounts. The gas companies, some
 24 of them are exposed to seasonal risk in
 25

Page 99

1 That's contrary to everything that the
 2 Government of Canada and the provinces are
 3 doing to try and get people off oil. So--or
 4 do we expect people in St. John's to start
 5 having wood burning fires. I've got a
 6 cottage and we actually have a wood burning
 7 fire because my heat pump, and I do have my
 8 electric heat pump, it's useless in Canadian
 9 winters because it gets too damn cold and
 10 you have to have a supplementary heat
 11 source.
 12 So, I don't think you're going to find
 13 a lot of people in St. John's suddenly
 14 burning wood fires. Perhaps propane,
 15 perhaps we're going to see some propane
 16 tanks outside of our houses, but that's
 17 fossil fuel.
 18 So, the long run--I don't know what the
 19 next whack-a-mole for utility witnesses is
 20 going to be.
 21 MR. O'BRIEN:
 22 Q. Well, let me ask you.
 23 DR. BOOTH:
 24 A. Perhaps they're going to say--God, I've
 25

Page 98

1 terms of the use of gas, but in a material
 2 sense the short-term risk is basically the
 3 same. It's the long run risk that is a
 4 concern, and in this testimony, unlike 2016,
 5 the only thing that I see is changing is the
 6 long run risk to Newfoundland Power, and in
 7 2016 I highlighted the fact that the
 8 company's witnesses in the '90's were saying
 9 alternative fuel was risky. Heating oil was
 10 a 40 percent discount to using baseboard
 11 heaters, and the company was losing
 12 customers, and this was a risk.
 13 Now, it didn't affect the ROE or the
 14 ability to earn the ROE, but--and I looked
 15 at that and said, well, even if electricity
 16 prices go up, which I don't think they will
 17 for reasons we can talk about to a level of
 18 50 percent to 100 percent we were talking
 19 about at that period, there are no
 20 alternative fuels left.
 21 Does anyone seriously think people are
 22 going to rip out their baseboards and put in
 23 an oil pump when the price of carbon is
 24 going to go from \$80.00 to \$160.00 a tonne?
 25

Page 100

1 forgotten the--I'm getting old, Mr. O'Brien,
 2 my brain sometimes forgets things.
 3 MR. O'BRIEN:
 4 Q. I apologize, I interrupted you.
 5 DR. BOOTH:
 6 A. No, don't apologize on my part. It's for--
 7 in gas companies they use hydrogen. Perhaps
 8 they'll say hydrogen is the next big thing,
 9 and perhaps they'll say, well, the gas
 10 companies are now pumping hydrogen into gas
 11 pipelines, and perhaps we do have fossil--we
 12 do have fuel competition again; it's going
 13 to be hydrogen. Do I think that's going to
 14 happen in next three years? No, but perhaps
 15 you'll see a utility witness saying that
 16 hydrogen is the next big thing, or perhaps a
 17 stranded distribution, perhaps the price of
 18 solar panels is going to drop dramatically,
 19 which hasn't changed much in the last 10
 20 years, but perhaps they're going to become
 21 incredibly cheaper, and stranded asset risk
 22 is going to increase because everyone is
 23 going to have solar panels on their roof.
 24 So, there are things out there that utility
 25

Page 101

1 witnesses can bring up as the next mole in
 2 terms of the risk for Newfoundland Power,
 3 but I can't see it.
 4 MR. O'BRIEN:
 5 Q. I'm interested in your opinion, not what
 6 utility witnesses can come up down the road,
 7 but for this particular hearing, and what I
 8 want to ask you, and you've raised this, and
 9 you've raised this in your testimony
 10 earlier--so, when you came here in 2010 you
 11 had assessed risk of Newfoundland Power, and
 12 you gave an opinion, and I'm going to
 13 suggest to you you gave an opinion that
 14 there should be a reduction in the capital,
 15 or in the equity thickness because you
 16 believe the Board had gotten it wrong
 17 before. You had said that -
 18 DR. BOOTH:
 19 A. That's correct.
 20 MR. O'BRIEN:
 21 Q. - the Board had gotten it wrong. Okay. You
 22 are not basing that opinion on the basis
 23 that Newfoundland Power's risk, business
 24 risk, had significantly changed, which is
 25

Page 102

1 what your opinion is, is that you don't
 2 change equity structure unless risk change.
 3 Is that a fair assessment?
 4 DR. BOOTH:
 5 A. That's a totally correct assessment, and the
 6 only thing that's -
 7 MR. O'BRIEN:
 8 Q. And you did the same thing in 2012 for the
 9 2013. You came in. You didn't feel the
 10 Board had assessed risk correctly, so you
 11 suggested a reduction, not on the basis of
 12 your opinion, that there's a change in risk
 13 which is on--it's your opinion. That's when
 14 we reduce equity, when there's a change in
 15 business risk. It was because the Board had
 16 gotten it wrong. You did the same thing in
 17 2016. You did the same thing in 2019, 2022,
 18 and you're doing the same thing here, and
 19 you referenced yesterday this idea of
 20 utility witnesses, the sky is falling, the
 21 sky is falling, this Chicken Little kind of
 22 scenario. I'm going to suggest to you we're
 23 talking about the boy who cried wolf.
 24 DR. BOOTH:
 25

Page 103

1 A. Who's crying wolf?
 2 MR. O'BRIEN:
 3 Q. You are.
 4 DR. BOOTH:
 5 A. I'm crying wolf?
 6 MR. O'BRIEN:
 7 Q. You're trying to get the Board to change
 8 their decision. They've gotten it wrong all
 9 the time. Not on the basis of your own
 10 opinion that you don't change it unless risk
 11 is changed, because if they did it, they'd
 12 do that contrary to what your opinion is.
 13 Your opinion is, don't change it unless risk
 14 has changed. If you're going to reduce it,
 15 the Board has to base this on risk being
 16 less, and you're not saying that. You're
 17 saying the Board got it wrong. Is that a
 18 fair assessment?
 19 DR. BOOTH:
 20 A. I'd say there's proof to that, but I don't
 21 think it's a fair assessment.
 22 MR. O'BRIEN:
 23 Q. And why is that?
 24 DR. BOOTH:
 25

Page 104

1 A. Because the Board had 40 to 45 percent in
 2 the '96/'97 hearing, and I think that was
 3 reasonable, and within that range of 40 to
 4 45. I'm not saying 37 percent for Alberta.
 5 I'm not saying 35 percent, which I
 6 recommended was the TDs across Canada. I'm
 7 saying go to the bottom of your 40 to 45
 8 percent range. That was the Board's
 9 decision.
 10 Now, what's changed? Well, ask Nova
 11 Scotia Power what's changed since 2016.
 12 2016 they had all these gas--sorry, all
 13 these coal power plants. They weren't
 14 planning to take them out of service.
 15 What's changed since then is the Government
 16 of Canada and the provinces.
 17 Global warming has become on the
 18 political agenda. We got an increase in
 19 carbon tax, \$80.00 a tonne to \$160.00 a
 20 tonne. We got provincial governments
 21 telling Nova Scotia Power take those coal
 22 plants out of service. We've got, as I'm
 23 sure you're going to talk about, BCUC, where
 24 the gas company, Fortis Energy Inc. in a
 25

Page 105

1 hearing in 2012, not 2016, or 2023, the
 2 Chairman of the company said we are not a
 3 transitional fuel, we're here for the long
 4 run. But even then in BC they were talking
 5 about getting gas out of the system. Quebec
 6 was talking about getting gas out.
 7 So, when you look at this has anything
 8 changed since 2016? I would say a huge
 9 amount has changed since 2016. Not in terms
 10 of the short run risk, but in terms of the
 11 long run risk. I would say that the
 12 stranded asset risk attached to Newfoundland
 13 Power is gone from being negligible to less
 14 than negligible. How is that significant?
 15 I can't think of any alternative to
 16 electricity in the—over the future test
 17 years in Newfoundland. Whereas in 2016 and
 18 earlier we could think about home heating
 19 oil, and this is--this is a company that
 20 doesn't serve industrial users, it serves--
 21 it serves residential and commercial with a
 22 little bit of streetlights.
 23 I don't know about streetlights. I
 24 don't know how you're going to fuel them
 25

Page 106

1 with gas, or hydrogen, or whatever, but I'm
 2 sure an engineer can work that out.
 3 MR. O'BRIEN:
 4 Q. You didn't indicate in your report there's
 5 been a significant change in Newfoundland
 6 Power's business risk in your evidence for
 7 this hearing.
 8 DR. BOOTH:
 9 A. I did say that the low run stranded asset
 10 was -
 11 MR. O'BRIEN:
 12 Q. You didn't say a significant business risk.
 13 That's not what you said.
 14 DR. BOOTH:
 15 A. I said the stranded asset was gone down.
 16 MR. O'BRIEN:
 17 Q. You said if anything, risk may have gone
 18 down -
 19 DR. BOOTH:
 20 A. If anything, that's right.
 21 MR. O'BRIEN:
 22 Q. - but you did not say there's a significant
 23 difference, and that's what your opinion has
 24 been all along, there has to be a
 25

Page 107

1 significant difference. You didn't come out
 2 and say that, did you?
 3 DR. BOOTH:
 4 A. I think you're correct there.
 5 MR. O'BRIEN:
 6 Q. Okay.
 7 (11:00 a.m.)
 8 DR. BOOTH:
 9 A. I mean, it's a question--as I said it's gone
 10 down from negligible to less than
 11 negligible. So, I mean, it's--if anything
 12 it's gone down. I don't think the long run
 13 stranded asset risk attached to Newfoundland
 14 Power is very high.
 15 MR. O'BRIEN:
 16 Q. And I found it interesting you mentioned
 17 Nova Scotia Power, and you brought that up a
 18 couple of times in terms of some differences
 19 in risk. When you gave evidence in terms
 20 of--direct evidence now. I don't think you
 21 testified at that hearing. I think there
 22 was a settlement.
 23 DR. BOOTH:
 24 A. That's correct.
 25

Page 108

1 MR. O'BRIEN:
 2 Q. At that hearing you indicated Nova Scotia
 3 Power is no more risky than anyone else, and
 4 you did not recommend an increased in equity
 5 thickness.
 6 DR. BOOTH:
 7 A. I think more accurately, Mr. O'Brien, I said
 8 its ability to earn its allowed ROE hasn't
 9 changed because it still earns its allowed
 10 ROE, and it's got a little bit more
 11 variability because of the power cost, and I
 12 said what the company is proposing is a
 13 billion dollars worth of assets in coal
 14 plants which have to be out of service by
 15 2030. The company wanted to put that into a
 16 deferral account, and it wanted to recover
 17 those costs from rate payers in Halifax
 18 beyond 2030. So, effectively they're still
 19 paying for those coal plants. And in
 20 addition, they'll pay for the cost of
 21 replacement energy, and I said--and I didn't
 22 object to that, Mr. O'Brien.
 23 MR. O'BRIEN:
 24 Q. Well, there's a settlement to it, yes.
 25

Page 109

1 DR. BOOTH:
 2 A. Well, no, I didn't object to it in my
 3 testimony. I raised the question to the
 4 Board that there's this compact, and I think
 5 I said it specifically; I'm not objecting to
 6 focusing the rate payers in Halifax, which
 7 already has much higher electricity costs
 8 than St. John's, to basically pay twice for
 9 electricity, because the Board approved
 10 those plants for use, and Nova Scotia had
 11 every expectation that they'll continue to
 12 be used and useful and get a return on that,
 13 and that's all in the business risk
 14 testimony, and unlike this hearing, I think
 15 I'm correct in saying that I started out in
 16 the Nova Scotia Power hearing with a long
 17 discussion on its business risk because that
 18 was the elephant in the room. What do you
 19 do with all these coal plants? The
 20 Government of Canada and the Province said
 21 take them out of rate base. Who bears that
 22 stranded asset risk? And on reference to
 23 Stores decision, well, the Supreme Court of
 24 Canada, they said the ownership of the
 25

Page 110

1 assets belongs to the utility. And I said
 2 it's a good argument, that the risk of those
 3 plants belongs to the utility owners.
 4 MR. O'BRIEN:
 5 Q. Utility, right.
 6 DR. BOOTH:
 7 A. - not--because they're no longer used and
 8 useful, but they were put into rate base by
 9 the Board, and a regulatory compact in
 10 Canada requires, I would say, that you
 11 protect the utility. Now, as you probably
 12 know, after I put my testimony in the
 13 Government of Nova Scotia passed regulations
 14 to basically overruled or limited what the
 15 Board could do, which this is--this is
 16 reminiscent of what happens in the United
 17 States sometimes. The government just
 18 changes the regulations and forces the Board
 19 to do some things. And if you remember in
 20 the Nova Scotia Power decision, I was the
 21 Board witness, and they say specifically a
 22 foundational part of Dr. Booth's testimony
 23 was the regulatory compact, and we're not
 24 sure what his opinion would have--how it
 25

Page 111

1 would have changed given the intervention by
 2 the government in Nova Scotia, and he
 3 certainly would have changed it. It
 4 violates my understanding of what we've been
 5 doing in Canada for the last 35 years.
 6 MR. O'BRIEN:
 7 Q. I think we can take our break at this point.
 8 CHAIR:
 9 Q. Take a break right now. Thank you.
 10 (BREAK - 11:03 a.m.)
 11 (RESUME - 11:32 a.m.)
 12 CHAIR:
 13 Q. Welcome back everyone. No preliminary
 14 matters?
 15 MS. GLYNN:
 16 Q. No.
 17 CHAIR:
 18 Q. Okay, well back to Mr. O'Brien.
 19 MR. O'BRIEN:
 20 Q. Thank you, Mr. Chair. I'm just going to
 21 lead you off on this last piece, Dr. Booth,
 22 just on the equity thickness and I'm just
 23 wondering whether you would agree with me
 24 that when it comes to utilities and credit
 25

Page 112

1 rating agencies, the credit rating agencies
 2 do look at the stability of equity thickness
 3 as a credit strength, would you agree with
 4 me on that?
 5 DR. BOOTH:
 6 A. I'd say that the credit rating agency don't
 7 like surprises.
 8 MR. O'BRIEN:
 9 Q. Yeah.
 10 DR. BOOTH:
 11 A. Which is why I said in the recommendation if
 12 the Board lays down a marker, 40 to 45
 13 percent going back to '96, '97, I'd be happy
 14 if the Board does that and then we get some
 15 clearance on Muskrat Falls and rate
 16 mitigation, then the Board can revisit this
 17 and decide, well is its decision of the
 18 business risk hasn't changed still valid.
 19 MR. O'BRIEN:
 20 Q. And a significant change by a regulator in
 21 the allowed equity thickness, would a credit
 22 rating agency see that as a minus?
 23 DR. BOOTH:
 24 A. Depends which way the equity ratio goes. I
 25 suspect that the next report on FEI whereas

| | |
|---|--|
| <p style="text-align: right;">Page 113</p> <p>1 equity ratio has gone up from 38.5 to 45 2 percent, they'll be very happy. Everybody's 3 gas has gone up. Gas companies, the equity 4 ratios seem to have gone up. It depends on 5 the ROE and I agree 100 percent with Mr. 6 Coyne that the ROE times the equity ratio 7 gives the amount of net income that the 8 owner is getting out of the utility. So if 9 the Board—and I say this explicitly, don't 10 accept the allowed ROEs from elsewhere, like 11 9 percent or 9 ¼ from elsewhere and then 12 keep the 45 percent because that's higher 13 than all these other utilities. If you 14 lower it to 40 percent, I might be happy 15 with a higher ROE, but it's the combination 16 of the ROE and the common equity ratio. No 17 question in my judgment Newfoundland Power 18 has got a high common equity ratio. If, in 19 the Board's deliberations it said, well, we 20 should all agree with Percible's (phonetic) 21 judgment but he didn't take into account 22 that we give it a lower, an allowed ROE and 23 if they lower the allowed ROE, I was 24 intrigued by one of the Board's questions 25 about the fact that the ROE gets knocked</p> | <p style="text-align: right;">Page 115</p> <p>1 different risks built into their profile. 2 Not every risk profile is exactly the same, 3 you agree with me on that? And I'll give 4 you where I'm coming from on that in that 5 the Board has to exercise judgment in 6 setting an allowed ROE based on a particular 7 set or risk profile for a utility. 8 DR. BOOTH: 9 A. That's correct, I mean I'm not quite sure—I 10 want to say in two parts, one the Board has 11 to determine based upon the evidence in 12 front of it. If there's no evidence in 13 front of it, it can't make a decision, so 14 the evidentiary basis is very important. 15 Secondly, it has to look beyond some of the 16 numbers and I think Mr. Coyne—is he still 17 here, but Mr. Coyne mentioned he was doing 18 work for Ontario power generation. Bam, 19 nuclear products. I was involved in the 20 hearing in 2007 when they were refurbishing 21 Pickering and now they're refurbishing 22 Darlington. You look at that and you say, 23 well, they've got nuclear powers, just like 24 Duke. The problem is there's a whole set of 25 regulations, who bears that regulatory risk</p> |
| <p style="text-align: right;">Page 114</p> <p>1 onto Newfoundland Hydro and the Labrador 2 Link, perhaps give them more equity and a 3 lower ROE saves ratepayers right the way 4 across the board and not just on 5 Newfoundland Power, but also on, it 6 mitigates some of the rate increases coming 7 through from elsewhere, so the Board has to 8 deal with these questions. 9 MR. O'BRIEN: 10 Q. Are you able to point me to anywhere in any 11 Board order where the Board has indicated 12 that the 45 percent equity, allowed equity 13 is as a result of a particular ROE? 14 DR. BOOTH: 15 A. No, I can't. I said if, if that's the 16 Board's opinion after it reviews this 17 information, then that's something it should 18 be considering, the combination of the ROE 19 and the common equity ratio. I think Mr. 20 Coyne and I both agree on that. 21 MR. O'BRIEN: 22 Q. And would you agree with me that when it 23 comes to assessing risk and risk profile for 24 a utility, you talk about T&D utilities and 25 all kinds of other utilities, they all have</p> | <p style="text-align: right;">Page 116</p> <p>1 and in practice it seems that most of it is 2 passed on to the province and the taxpayers 3 of Ontario. And the Board looks at that and 4 they look at the percentage of Hydro versus 5 nuclear in the rate base for Ontario power 6 generation, so you have to go beyond the 7 statistics and when I started looking at 8 this, they talked about business risk, 9 financial risk and regulation risk and I 10 said, no, that's not right. It's not right 11 in Canada, there isn't regulation risk, it 12 reduces the risk, so when you look at 13 business risk, it's not a question of just 14 looking at the, some of the statistics, you 15 have to go and look at the deferral accounts 16 and the amount of regulatory protection. So 17 the Board knows how it protects Newfoundland 18 Power and where the risk is and I'm sure 19 Board staff know how they basically generate 20 over earning, more so than you or I, they 21 just look at the numbers. They're a lot 22 closer to what goes on and goes into the 23 data. 24 MR. O'BRIEN: 25 Q. Okay, before we go on to your proposal and</p> |

Page 117

1 return on equity, I did want to revert to
 2 one point we talked earlier, just about
 3 capital markets, and A rated bonds and I
 4 asked you a question as to whether or not
 5 they had significantly increased since 2016,
 6 and I believe your answer was that no, they
 7 hadn't, am I wrong in that?
 8 DR. BOOTH:
 9 A. My answer was it depends and going into the
 10 hearing whether you look at 2015, the time
 11 of Mr. Coyne's evidence, 2016 my one
 12 (phonetic) because obviously those yields
 13 change and I was just looking at the graph –
 14 MR. O'BRIEN:
 15 Q. And it might help if I brought up your
 16 evidence, I think, that might help.
 17 DR. BOOTH:
 18 A. Yeah, I think it's actually in the beginning
 19 of my testimony.
 20 MR. O'BRIEN:
 21 Q. Yeah, in your testimony, in your direct at
 22 page 31 I think there's a chart. A & B,
 23 right, so if we look to—where are we here,
 24 15, 16, 2016.
 25 DR. BOOTH:

Page 118

1 A. Well actually you can look at it from the
 2 executive summary where I've got the time in
 3 my testimony.
 4 MR. O'BRIEN:
 5 Q. But even looking at this yield, this yield,
 6 I mean, if we look, compare 2016 to where we
 7 are now, there's a significant increase in A
 8 and BBB bonds, isn't there?
 9 DR. BOOTH:
 10 A. When I look at the—in the executive summary,
 11 page 2, I've got long-Canada yield, 2.05,
 12 the A spread 1.94, so A bonds were basically
 13 just over 4 percent.
 14 MR. O'BRIEN:
 15 Q. There is, I think, a fair increase.
 16 DR. BOOTH:
 17 A. Okay, look, I –
 18 MR. O'BRIEN:
 19 Q. I just want to clarify because your
 20 testimony gave me the impression that there
 21 wasn't.
 22 DR. BOOTH:
 23 A. Well, I look mainly at the spread rather
 24 than the actual level of the yields. But if
 25 we look at the graph on page 31, I mean I

Page 119

1 can actually go back and look at the data in
 2 an undertaking if you feel it's important,
 3 but 2016, beginning of 2016 looks to have
 4 been, well it's between 3.5 and 4.5 and now
 5 it is, which I said was 4.05, now it's, the
 6 A spread or the A yield is closer to 4.6
 7 percent.
 8 MR. O'BRIEN:
 9 Q. So the spread may be similar but the yields
 10 are high.
 11 DR. BOOTH:
 12 A. That's correct, so the borrowing cost to
 13 Newfoundland Power as a private issuer, has
 14 probably gone up, but as you probably know,
 15 it's been refunding its debt and its
 16 embedded interest costs have dropped by 1
 17 percent since 2016.
 18 MR. O'BRIEN:
 19 Q. I think you might be giving me more credit
 20 than I deserve when you say "as you probably
 21 know".
 22 DR. BOOTH:
 23 A. Well I was very impressed with Mr. Kelly
 24 eight years ago, Mr. O'Brien, so you got a
 25 high standard to maintain.

Page 120

1 MR. O'BRIEN:
 2 Q. Listen, I know my limitations and I do not
 3 compare myself to Mr. Kelly.
 4 COFFEY, KC:
 5 Q. At least at that point, Mr. Kelly's career.
 6 MR. O'BRIEN:
 7 Q. That's right. Okay, let's move to your
 8 proposal on the return on equity and you
 9 gave some evidence here today on that and I
 10 think I've read through your chart or your
 11 direct, I want to ask you just in terms of
 12 generalities in the last few years, would
 13 you agree with me that return on equities
 14 for utilities, if regulators are sort of
 15 allowing higher return on equities in the
 16 last few years?
 17 DR. BOOTH:
 18 A. I would say that they've come up from a low
 19 of about 8.3 percent, which I think was
 20 three, four years ago. So despite my
 21 recommendations in not changing the allowed
 22 ROE, unless it's 3.8 percent, they actually
 23 did lower the allowed ROES because long-
 24 Canada bond yields were so low, so in that
 25 respect, they accepted my formula they

Page 121

1 shouldn't change it unless the yields went
 2 below 3.8 percent, but when the abandoned
 3 the formula, it went to litigated hearings,
 4 they did lower the allowed ROEs and they
 5 have come up from those lows.
 6 MR. O'BRIEN:
 7 Q. So they've come up.
 8 DR. BOOTH:
 9 A. Yeah, that's correct. Now I wouldn't have
 10 recommended that they come up because I
 11 wouldn't have recommended they went down in
 12 the first place.
 13 MR. O'BRIEN:
 14 Q. No, and I'll get to that, just in terms of
 15 what you recommended, but just as a general
 16 comment, general commentary and observation
 17 you would agree with me?
 18 DR. BOOTH:
 19 A. I would agree with that.
 20 MR. O'BRIEN:
 21 Q. Okay. So let's have a look at your
 22 proposal, so your proposal in terms of ROE
 23 is 7.7 on a 40 percent equity.
 24 DR. BOOTH:
 25 A. That's what I think satisfied the fair

Page 122

1 return standard and that's what it comes
 2 from looking at comparable risk Canadian
 3 utilities, I find it very difficult to get
 4 above 7.7 percent for the ROE.
 5 MR. O'BRIEN:
 6 Q. Okay, and that's the median between 7.28 and
 7 8.13.
 8 DR. BOOTH:
 9 A. Yeah, that's right, if the Board, I mean and
 10 I would also add when I was asked in
 11 settlement was 8.5 percent reasonable, I
 12 didn't object to it. So there's different –
 13 MR. O'BRIEN:
 14 Q. Yeah, and I'm not going to ask you to
 15 comment on that just where, I mean those are
 16 settlement discussions really at this point,
 17 but your proposal at this stage.
 18 DR. BOOTH:
 19 A. That's right, but there's different
 20 definitions of fairness. I mean, I think
 21 something in the low 8 is about the top of,
 22 actual fair return which is supported, I
 23 hate to say, by the Labrador Link and KKR,
 24 but as I've said for decades, Boards tend to
 25 be conservative, they protect the utility

Page 123

1 and they tend to give more than a fair
 2 return.
 3 MR. O'BRIEN:
 4 Q. So you've come across, clearly you've come
 5 across Concentric and Mr. Coyne over the
 6 years in terms of cost of capital hearings
 7 and you've come across other experts for
 8 utilities, you've made a number of comments
 9 to say that utility experts say this, say
 10 that, so you're familiar with the players in
 11 the game, sort of thing, is that fair?
 12 DR. BOOTH:
 13 A. I'm familiar with a lot of them. I remember
 14 when Concentric first came into Alberta, I
 15 think it was 2009 and they provided, I'm not
 16 quite sure whether they provided full ROE
 17 testimony, but that was when the first time
 18 I heard of Concentric.
 19 MR. O'BRIEN:
 20 Q. Right, but there's a number of people in the
 21 area that are giving testimony on cost of
 22 capital across the country and you're
 23 familiar with a number of them, I take it?
 24 (11:45 a.m.)
 25 DR. BOOTH:

Page 124

1 A. I'm familiar mainly with Concentric and the
 2 Brattle Group. After that, it tends to be
 3 individual people, rather than a consulting
 4 group. I know Sean Cleary, my former PC
 5 student, used to appear before the AUC. I
 6 met Randy Woolridge who provided testimony
 7 before the Nova Scotia Utility Board. I
 8 remember Mr. Coyne referred to Professor
 9 Vander Weide from Duke University. I've
 10 seen his testimony on a number of occasions,
 11 so I'm familiar with some of them.
 12 MR. O'BRIEN:
 13 Q. And would you agree with me that your—and
 14 this is apropos of your earlier comment that
 15 I think regulatory boards tend to give
 16 higher than a fair ROE, that was your
 17 comment. Would you accept that generally
 18 speaking you tend to be on the conservative
 19 side when it comes to experts for cost of
 20 capital?
 21 DR. BOOTH:
 22 A. I would say I tend to be on the academic
 23 side.
 24 MR. O'BRIEN:
 25 Q. And I was just going to ask you about that,

Page 125

1 and do you consider that different than the
 2 regulatory side?
 3 DR. BOOTH:
 4 A. I would say that’s correct. Estimating the
 5 cost of capital was something I’ve done
 6 research on, published papers on. It is an
 7 academic topic. The bias involved in
 8 security analysts, there’s thousands of—
 9 perhaps not thousands, hundreds of academic
 10 research papers on that topic, and then I
 11 come into a regulatory setting and a lot of
 12 the witnesses don’t know the academic
 13 literature.
 14 MR. O’BRIEN:
 15 Q. So in that context, I guess back to my
 16 questions in terms of your being a
 17 conservative expert in terms of estimating
 18 ROE, that’s not a surprise to you for me to
 19 ask you that, that you would normally be
 20 along, either among the lowest or the lowest
 21 in a hearing for a recommendation of a ROE,
 22 is that a fair assessment?
 23 DR. BOOTH:
 24 A. I think that’s a reasonable assessment. I
 25 noticed in the AUC I wouldn’t have been the

Page 126

1 lowest. Sean Cleary would have been the
 2 lowest, he was in the sixes, and there was
 3 another witness that would have been at 7.7
 4 percent who I think was an Intervenor
 5 witness as well. It’s not at all unusual
 6 for Intervenor witnesses to be about 1
 7 percent below where the Board ends up and
 8 the utility witnesses, 1, 1.5 percent above
 9 where the Board ends up. Now whether they
 10 actually just saw off the numbers, I don’t
 11 know. The OEB did that, by the way, they
 12 just took the four witnesses, three by the
 13 utilities, one by me and they just averaged
 14 them, which I was really annoyed about, but
 15 that’s how they came up with the entering
 16 ROE in the OEB hearing back in 2009.
 17 MR. O’BRIEN:
 18 Q. Could you answer for me whether or not--
 19 being an academic, obviously, I think I know
 20 the answer to this, but the fact that your
 21 proposed ROE would be 130 basis points below
 22 what the average ROE would be for a utility,
 23 would that make a difference to you for your
 24 opinion?
 25 DR. BOOTH:

Page 127

1 A. No. My job is to give the Board—and this is
 2 the requirement of any witness, as I’m sure
 3 you’re aware, is independent of who hires
 4 them to be of assistance to the Board and
 5 offer an independent view, and I don’t think
 6 you’ll find anybody that’s familiar with
 7 what I’ve done in regulatory circles who
 8 will say, well Professor Booth is beholden
 9 to who pays his bill, that he’s independent
 10 and entirely consistent with academic
 11 literature and academic theory. There’s
 12 nothing I say here that I wouldn’t say in an
 13 MBA class and don’t say in an MBA class.
 14 MR. O’BRIEN:
 15 Q. And the fact that your 7.7 proposal is 160
 16 basis points below the average for an
 17 investor-owned electric utility in Canada,
 18 that makes no difference to your opinion?
 19 DR. BOOTH:
 20 A. I do look at them and I look at the ones
 21 that I participated in. I look at Maritime
 22 Electric, for example, they have a higher
 23 ROE than I recommended and I was the Board
 24 witness there. And you wonder what goes
 25 into some of these decisions, but Maritime

Page 128

1 Electric has only got 40 percent common
 2 equity, not 45 percent.
 3 MR. O’BRIEN:
 4 Q. And this is kind of where I’m going when you
 5 say you wonder what goes into these
 6 decisions. Do you consider these decisions
 7 when you put together your opinion? Is it
 8 made up, does it make up any part of your
 9 judgment as to what would be a fair return
 10 on equity, given there are other utilities
 11 out there with higher returns and other
 12 commissions and regulatory boards ordering
 13 higher returns, does that make any sort of
 14 impact on your assessment of ROE?
 15 DR. BOOTH:
 16 A. Well there’s two parts to that, Mr. O’Brien.
 17 First of all do I read the decisions I’m
 18 involved with? Of course I do. I’m vain,
 19 most people are vain. You want to read the
 20 decision and they say, “Oh, Professor Booth
 21 did a fabulous job, we love his opinion”, so
 22 and when they say “Well, we rejected his
 23 opinion for doing this”, I look and I think
 24 what in the heck did they do that? So do I
 25 read the decisions? Of course I read the

Page 129

1 decisions. Do I pay attention to them?
 2 Yes, in the sense that if I look at the
 3 reason for why they rejected and I think, oh
 4 my God, obviously I did a bad job in looking
 5 at that, I've got to do something else.
 6 I've got to correct my testimony to make my
 7 position clear, because the Boards made
 8 decisions based upon the evidence in front
 9 of them. If you don't provide them with
 10 everything you know, and God, how many pages
 11 have I got here? Probably around 200 pages,
 12 there's things that I could add to that
 13 without any trouble whatsoever, but then you
 14 get into the problem, you give them too much
 15 information, they can't absorb it, my
 16 students can't absorb it so I can't expect
 17 three board members, no matter how clever
 18 they are, to read 220 pages and distil all
 19 of it, it's a tough ask. But do I look at
 20 board decisions? Yes. Do I look at allowed
 21 ROEs? Yes. Do I look at common equity
 22 ratios? Yes, mainly common equity ratios
 23 because they're, as I say, they're more
 24 standard, they're more permanent which is
 25 why I gave the Fortis electric companies as

Page 130

1 a yardstick. Do I pay attention to the
 2 allowed ROEs? I look at them, but I'm not
 3 going to change my decisions or what I do
 4 and I can't change the betas, they're not my
 5 betas, they're RBCs betas. I can't change
 6 Kroll's market risk premium, it's Kroll's
 7 market risk premium. I can change the long-
 8 Canada rate, but there's a number of things
 9 that I can't change them and reconciling
 10 that with some of the allowed ROEs, I read
 11 the decisions and sometimes I don't
 12 understand how they come up with their
 13 numbers, and sometimes they don't exactly
 14 spell out where they come out with their
 15 numbers.
 16 MR. O'BRIEN:
 17 Q. So rather than try to compare them, you
 18 don't use those as a comparator in any way,
 19 shape or form for your opinion, you read
 20 them and I presume you look at them to see
 21 how they came to the decision, but does that
 22 affect your ultimate opinion?
 23 DR. BOOTH:
 24 A. No.
 25 MR. O'BRIEN:

Page 131

1 Q. And when I say the decisions, I'm talking
 2 about the other ROEs out there.
 3 DR. BOOTH:
 4 A. No, it doesn't, I look at, for example, this
 5 Board used an explicit capital asset pricing
 6 model back in 2009.
 7 MR. O'BRIEN:
 8 Q. Sure.
 9 DR. BOOTH:
 10 A. Did I look at that? Of course I looked at
 11 it. I looked at their market risk premium,
 12 I looked at their long-Canada rate, I looked
 13 at their beta, I looked at their—and I
 14 thought, well, that's reasonable, how did
 15 they get that? And so, am I going to change
 16 my market risk premium to please the Board?
 17 No, I'm not, that's not my duty. My duty is
 18 to give an unbiased opinion on what I know,
 19 as a professor of finance, and what the
 20 academic literature that's done research on
 21 these topics informs that judgment.
 22 MR. O'BRIEN:
 23 Q. You mentioned earlier and I believe you
 24 prefaced this by, I'm sure Mr. O'Brien is
 25 going to ask me this, but in the event the

Page 132

1 Board did reduce the ROE here for
 2 Newfoundland Power to 7.7 on a 40 percent
 3 equity thickness, do you think that that
 4 would have an effect on credit rating
 5 agencies' assessment of Newfoundland Power?
 6 DR. BOOTH:
 7 A. Absolutely. As I mentioned, any sort of a
 8 shock affects the rating agencies, they
 9 don't like—they like prediction and one of
 10 the things, I mean I think it's Moody's
 11 explicitly says 50 percent of their
 12 weighting, its ability to earn the allowed
 13 ROE and regulatory protection. Credit
 14 metrics are important, but the most
 15 important thing is that the bond holders get
 16 their money back and what they want to know
 17 is how the regulator behaves on that and as
 18 you know, I'm sure, Mr. O'Brien, that after,
 19 God I'm forgetting the—anyway, after a big
 20 pipeline in the United States went bankrupt—
 21 how in earth is it that I can't remember
 22 their name.
 23 MR. O'BRIEN:
 24 Q. Nortel.
 25 DR. BOOTH:

Page 133

1 A. No, no, the US pipeline.
 2 MR. O'BRIEN:
 3 Q. Enron.
 4 DR. BOOTH:
 5 A. Enron, after Enron went bankrupt, the bond
 6 holders lost a lot of money and Standard and
 7 Poor's was really annoyed with the FERC
 8 because they didn't make chances to protect
 9 the bond holders in Enron. Their primary
 10 concern is getting the money back to the
 11 bond holders. They are not equity
 12 investors, they are rating the ability of
 13 the utility to repay the bonds. And they'll
 14 look at that and they'll say, oh, less
 15 equity, less ROE, less net income,
 16 absolutely certainty, earnings before
 17 interest and tax and the coverage ratio
 18 would go down from what it was previously.
 19 Now offsetting that, it's a horrible thing
 20 to say but taxes have gone up in
 21 Newfoundland and it's not the actual ROE,
 22 it's the pre-tax ROE that matters. Now that
 23 doesn't help Fortis, they're just going to
 24 say we're going to get less money, but the
 25 rate that goes into determining the coverage

Page 134

1 ratio is not my 7.7 percent, it's 7.7
 2 percent divided by .695, 1 minutes the tax
 3 rate, and that is still better or very
 4 similar to, say, an Alberta utility getting
 5 9 percent on 40 percent common equity ratio
 6 because their tax rates in Alberta are so
 7 low. So as far as the utility—sorry, the
 8 bond holders are concerned, we don't care
 9 about the taxes, we get paid before the
 10 government because it's a prior charge.
 11 MR. O'BRIEN:
 12 Q. It's your position bond holders would not be
 13 affected by this type of a regulatory shock,
 14 I would suggest, of 7.7 and 40 percent?
 15 DR. BOOTH:
 16 A. I think this would be a surprise to the
 17 credit rating agencies and I'll freely admit
 18 that. I can't change what I regard as fair
 19 based upon the fact that there may be some
 20 reduction in Newfoundland Power's bond
 21 rating. At the moment, they've got just
 22 about the most general bond rating in
 23 amongst any Canadian utility, matched only
 24 by FEI and they're basically Mood's A, to
 25 middle of the A range; whereas most Canadian

Page 135

1 utilities are low, A minus. So they've got
 2 a better than normal bond rating, so and
 3 that's mainly because of the 45 percent
 4 common equity ratio, it's not because of the
 5 ROE.
 6 MR. O'BRIEN:
 7 Q. Well let me follow up on that comment, "I
 8 can't change what's fair", okay, and we've
 9 got, you've indicated that your
 10 recommendation is to 7.7, but as I read
 11 through your report and I've done it a
 12 number of times, obviously, I came to a
 13 point where I thought it seems to me you are
 14 recommending that actually the 8.5 is fair.
 15 DR. BOOTH:
 16 A. I do think the 8.5 is fair. I've agreed to
 17 it in settlements, Mr. O'Brien.
 18 MR. O'BRIEN:
 19 Q. No, and I'm not asking you that because I
 20 think that's kind of a discussion with the
 21 Consumer Advocate, but your report says
 22 that, so if we can bring up Dr. Booth's
 23 report, page 117, lines 7 to 15. You say
 24 there, "In my view a fair ROE is 7.7 on 40
 25 percent equity ratio or a profit for Fortis

Page 136

1 investment in Newfoundland Power of 3.08
 2 percent for every dollar. This is lower
 3 than that allowed other utilities within
 4 Fortis, but in my judgment regulators tend
 5 to err on the side of caution in both 2018"—
 6 and you go through a scenario here where you
 7 describe the 2018 and 2021 settlements.
 8 Then you say, "Consequently I regard an 8.5
 9 percent ROE as fair and reasonable. This is
 10 particularly true since the 8.5 percent is
 11 very similar to what emerges from adjusted
 12 NEB ROE formula in my appendix E." Now I've
 13 listened to testimony earlier where you've
 14 gone through, you've broken down your ROE
 15 from your 7.28 to your 8.13 range, you get
 16 your 7.7 in the middle, but you also talked
 17 about floatation and 50 basis points, almost
 18 to the extent that you would drop 50 basis
 19 points off of the 7.28 and 50 basis points
 20 off of the 8.13, so we're even well down
 21 below the 7.7 and now you're saying 8.5 is
 22 far. How do you sort of explain that to the
 23 Board and square that, is it 8.5 that's
 24 fair?
 25 (12:00 p.m.)

Page 137

1 DR. BOOTH:
 2 A. First of all, the 50 basis points is in my
 3 recommendation, I regard that as part of the
 4 issuing costs for a utility, but I flagged
 5 the Board's attention, I don't know what the
 6 legal requirement is to allow a cost that's
 7 not been incurred, and as I said, the Regie,
 8 they flagged that as well. So we sort of,
 9 I'd say there seemed to be a consensus
 10 amongst witnesses not to argue over the
 11 floatation costs in the sense that Mr. Coyne
 12 uses 50 basis points. Before that, Ms.
 13 McShane and I used to argue about floatation
 14 costs. At one point she used a market book
 15 ratio of 1.15 to adjust her recommendations,
 16 but now we've sort of settled on 50 basis
 17 points. I don't bring in any testimony for
 18 that, but I'm just flagging the fact that
 19 for the first time I've heard a utility say
 20 we never incurred any floatation costs, so
 21 legally I don't know whether you can
 22 actually charge off to ratepayers a cost
 23 that the utility hasn't incurred, so I'm
 24 just flagging that for the Board's
 25 attention, but my recommendation is 7.7

Page 138

1 percent. How do I flag that with the fact
 2 that 8.5 percent, I would say that you do
 3 look at other recommendations, allowed ROES,
 4 it doesn't change my view. My view is still
 5 7.7 percent. Do I think the NEB formulas
 6 give a reasonable rate of return? That was
 7 a formula that was satisfactory for a long
 8 period of time and if we use my minimum rate
 9 of 3.8 percent, it's giving a rate very
 10 similar to what the Board is allowing. So
 11 I've accepted the NEB formula, I was part of
 12 the hearing in '94, I've accepted that as
 13 giving fair and reasonable allowed ROEs, so
 14 am I going to argue a rate of 8.44 for the
 15 NEB formula versus 8.5? No. That is one
 16 definition of fair and reasonable which is
 17 the formula that was standard in Canada for
 18 15 years.
 19 MR. O'BRIEN:
 20 Q. So that formula is not used here.
 21 DR. BOOTH:
 22 A. No, we've got our own formula and before we
 23 answer that, I have said repeatedly for two
 24 decades why on earth do we have all these
 25 cost of capital hearings? We should have

Page 139

1 one cost of capital hearing in Canada and
 2 then basically determine the generic ROE and
 3 then in the GRA for each utility determine
 4 the common equity ratio for specific factors
 5 relative to that utility. That's, because
 6 there's so much repetitive evidence on this,
 7 but you can't do that because of provincial
 8 regulation and not federal regulation and it
 9 brings up all sorts of legal problems.
 10 MR. O'BRIEN:
 11 Q. It's not really an argument to have, I mean
 12 it's, at this point, if you can't do it, you
 13 can't do it.
 14 DR. BOOTH:
 15 A. You can't do it, yeah, it's provincial
 16 regulation and we get enough provincial
 17 versus federal as it is.
 18 MR. O'BRIEN:
 19 Q. But getting back to the 8.5, I'm going to
 20 suggest to you and you can agree with me,
 21 disagree with me, there's one of two things
 22 going on here, either A, you're using
 23 comparable ROEs out there as part of your
 24 analysis, or B, you think your 7.7 is too
 25 low, which is it?

Page 140

1 DR. BOOTH:
 2 A. Neither of those.
 3 MR. O'BRIEN:
 4 Q. Okay.
 5 DR. BOOTH:
 6 A. My fair return is 7.7 percent, but I've
 7 supported the NEB formula for 30 years, and
 8 if you adjust for the same thing that
 9 everybody is using an adjustment for credit
 10 spreads to correct the weakness of the
 11 formula in 2009, you get something very
 12 similar to the Board's 8.5 percent. And
 13 I've got a question, I think it was from the
 14 Board, do I think 8.5 percent is fair on 40
 15 percent or on 45 percent? I regard 8.5
 16 percent on 40 percent as being fair. If the
 17 Board—and then I got a question from the
 18 Board saying well perhaps we increase the
 19 common equity ratio, reduce the ROE, I
 20 regard that as being fair. As long as you
 21 look at the common equity ratio and the
 22 allowed ROE because they sort of, they go
 23 hand in hand.
 24 MR. O'BRIEN:
 25 Q. Because that's not clear from your comment

Page 141

1 there, that is 8.5 with a 40 percent.

2 DR. BOOTH:

3 A. Yeah, well that makes sense, 8.5 on 40 is

4 fair.

5 MR. O'BRIEN:

6 Q. But is that what your evidence is that 8.5

7 on 40 is fair

8 MR. BOOTH:

9 A. 8.5 percent on 40, I've said repeatedly that

10 I don't think 45 percent is appropriate for

11 Newfoundland Power, that it's excessive

12 compared to Maritime Electric, Fortis

13 Ontario, Fortis, BC Energy, the old West

14 Kootenay Power. So does that clarify it,

15 Mr. O'Brien?

16 MR. O'BRIEN:

17 Q. I'm not certain it does, but that's fine,

18 Dr. Booth.

19 DR. BOOTH:

20 A. I must admit, I'm giving the Board some

21 options, I'm not dogmatic on this, Mr.

22 O'Brien, I know that they've rejected my 40

23 percent common equity ratio repeatedly for

24 the last, ever since 2009, and I think, as I

25 have said in my opening statement, that I'd

Page 142

1 at least like the Board to say we go back to

2 40 to 45 percent as being reasonable, as

3 they've decided in the past, and I don't

4 know what goes on in their deliberations,

5 but whenever they set the ROE, I hope they

6 take into account the common equity ratio

7 and I hope they spell it out in their

8 decision.

9 MR. O'BRIEN:

10 Q. I'm going to jump to another area, Dr.

11 Booth, and you've raised this a couple of

12 times and it's been raised by Mr. Coffey

13 with Concentric, and that's the excessive

14 earnings band, I think, or account that was

15 discussed, so it's the excessive earnings on

16 the rate of return on rate base. In your

17 evidence and I'm going to ask that we pull

18 up the direct evidence on page, I think it's

19 page 1, pdf 3, there's a number of key

20 points that you outline here. Actually,

21 it's two pages in, I think, next one, yeah,

22 it's page 3 of the report. Yeah, here it

23 is, if we scroll up a bit, Item No. 5 there

24 and this talks about the commentary you were

25 giving yesterday as well about the actual

Page 143

1 ROE and the effective ROE of Newfoundland

2 Power being not 8.5 but actually closer to

3 8.9. Now, this is line 7 to 9, "My

4 recommendation is that the Board set what it

5 regards as a fair and reasonable ROE and any

6 excess earned above that amount be shared

7 50/50 with ratepayers." Were you asked to

8 go –

9 DR. BOOTH:

10 A. And go on to the next sentence.

11 MR. O'BRIEN:

12 Q. "Otherwise, it is difficult to understand

13 what the Board considers to be a fair and

14 reasonable allowed ROE." Were you asked to

15 assess the issue of a shared, of the sharing

16 of excess earnings as part of your –

17 DR. BOOTH:

18 A. No, I wasn't and that's not what this is

19 about.

20 MR. O'BRIEN:

21 Q. No, I understand what this is about, I'm

22 just asking, but it says a recommendation

23 here, so it actually says "my recommendation

24 here is a 50/50 earning sharing".

25 DR. BOOTH:

Page 144

1 A. That's correct.

2 MR. O'BRIEN:

3 Q. That's correct, right, that's your

4 recommendation there. And you indicate, I

5 think, and if we could pull up MPCA No. 2,

6 you were asked whether or not that was—I

7 mean, is this a recommendation on your part

8 and I think based on what I believe you're

9 going to indicate is that you didn't give

10 evidence on sharing mechanisms, this has to

11 do with the earned ROE, is that fair?

12 DR. BOOTH:

13 A. That's absolutely correct. It's a question

14 of what does the Board really think is a

15 fair and reasonable allowed ROE.

16 MR. O'BRIEN:

17 Q. Okay.

18 DR. BOOTH:

19 A. If it's 8.5 percent and they consistently

20 make 40 basis points more, it's not 8.5

21 percent, it's 8.9 percent, and I would like—

22 and this comes, I mean Mr. Coyne picked up

23 on this, we come back down to comparisons.

24 If you consistently allow the utility to

25 earn 40 basis points more, then what you're

Page 145

1 really saying is the allowed ROE, the fair
 2 allowed ROE is 8.9 percent and I would like
 3 the Board to spell out, in its decision, as
 4 what it regards as a fair allowed ROE.
 5 MR. O'BRIEN:
 6 Q. Okay.
 7 DR. BOOTH:
 8 A. In my perception it is not 8.5 percent.
 9 MR. O'BRIEN:
 10 Q. So in this answer to an RFI here, there's a
 11 question here, A, "Is Dr. Booth recommending
 12 that the Board place a hard cap on
 13 Newfoundland Power's authorized ROE, such
 14 that any earnings above the authorized ROE
 15 should be shared evenly with customers", and
 16 your answer—and is this your answer, do you
 17 adopt this as your answer?
 18 DR. BOOTH:
 19 A. Look, nobody interferes with neither my
 20 evidence or my IRIs, except to tell typos.
 21 MR. O'BRIEN:
 22 Q. Right, okay, so the answer is no, Dr. Booth
 23 had not presented evidence on earnings
 24 sharing mechanisms and that's what I want to
 25 ask you about, on earnings sharing

Page 146

1 mechanisms, so if we could go back, I want
 2 to get a flavour for what sort of analysis
 3 you did on earnings sharing mechanisms for
 4 this report.
 5 DR. BOOTH:
 6 A. Well I'll give you a clear answer on that,
 7 nothing.
 8 MR. O'BRIEN:
 9 Q. Nothing, okay.
 10 DR. BOOTH:
 11 A. My concern is not with the earnings sharing
 12 mechanism, my concern is with the fair and
 13 reasonable ROE and what the Board regards as
 14 a fair and reasonable ROE.
 15 MR. O'BRIEN:
 16 Q. That's my understanding. So why did you
 17 recommend a 50/50 sharing of earnings?
 18 DR. BOOTH:
 19 A. Well if the Board generally believes that
 20 there's uncertainty and you're basically
 21 giving them the opportunity to earn their
 22 fair ROE, then standard economic theory is
 23 that's a rational forecast, there's equal
 24 probability of being above or below, in
 25 which case, share it.

Page 147

1 MR. O'BRIEN:
 2 Q. So you haven't done any assessment, any
 3 jurisdictional review on earnings sharing
 4 mechanisms, is that fair?
 5 DR. BOOTH:
 6 A. That's absolutely fair. As I said there, I
 7 mean, this is not really—I'm not presenting
 8 earning sharing mechanism and you can strike
 9 that 50/50 if you like. I just want to know
 10 what the fair and reasonable ROE is.
 11 MR. O'BRIEN:
 12 Q. And that's my point, Doctor, you just said
 13 you can strike that 50/50, it's in your
 14 report as a recommendation. It's not
 15 observation, this was a recommendation on a
 16 50/50 earnings sharing mechanism and I'm
 17 going to suggest to you you weren't asked to
 18 look at it, you didn't do any jurisdictional
 19 review to assess the appropriateness of a
 20 50/50 earning sharing mechanism, that's
 21 fair, correct?
 22 DR. BOOTH:
 23 A. That's correct.
 24 MR. O'BRIEN:
 25 Q. All right, yet you put it in your report as

Page 148

1 a recommendation to this Board.
 2 DR. BOOTH:
 3 A. That's correct, but as I said, there's the
 4 otherwise after that, that qualifies that
 5 statement.
 6 MR. O'BRIEN:
 7 Q. So that qualification can't be based on a
 8 review of earning mechanisms because you
 9 didn't do that.
 10 DR. BOOTH:
 11 A. Well, that's correct, but I mean, if in fact
 12 it's a fair ROE and you got equal
 13 probability of over or under earning, they
 14 should be shared – I would judge that a
 15 rational forecast should result in both over
 16 and under earning, in which case you might
 17 as well share those. But you're absolutely
 18 correct, I have not done any research on
 19 earning sharing mechanism, and as I said,
 20 otherwise, and this is where it comes in,
 21 it's a question of what is the fair and
 22 reasonable ROE. If a company consistently
 23 over earns, as Newfoundland Power does, you
 24 got to ask what does the Board really think
 25 is the fair and reasonable ROE when in fact,

Page 149

1 it doesn't make it's fair and reasonable
 2 ROE, it earns in excess of that.
 3 MR. O'BRIEN:
 4 Q. So, this Board has already made a
 5 determination on an excess earnings account.
 6 There's one in existence.
 7 DR. BOOTH:
 8 A. Yeah, I know.
 9 MR. O'BRIEN:
 10 Q. Right. You under – obviously, you know
 11 that. But you haven't done any research and
 12 you've made a recommendation here. You
 13 haven't presented any evidence. Do you
 14 agree with me that as an expert before this
 15 Board, you should be presenting evidence in
 16 a fair, impartial, unbiased manner? Agree
 17 with me?
 18 DR. BOOTH:
 19 A. That is impartial and fair.
 20 MR. O'BRIEN:
 21 Q. But you haven't done any research on this.
 22 You haven't presented any evidence and now
 23 you're making a recommendation.
 24 DR. BOOTH:
 25 A. I'm making a recommendation of what the

Page 150

1 Board thinks is a fair and reasonable ROE,
 2 and I would tell you, Mr. O'Brien, I was
 3 contacted by a litigation expert in Quebec.
 4 They got a class action suit against Hydro
 5 Quebec. Why have they got a class action
 6 suit in Hydro Quebec? It's because they
 7 consistently over earn their allowed ROE and
 8 the claim – yeah, but they're certified, but
 9 the claim is that Hydro Quebec basically
 10 manipulates its forecast to consistently
 11 over earn. I've told them I want nothing to
 12 do with it, but they wanted to hire me as an
 13 expert witness. But it does raise the base
 14 – and this was only – this was after I filed
 15 my testimony. But it raises a fundamental
 16 point which I'm addressing here is what is a
 17 fair and reasonable ROE. You're right, I
 18 put in 50/50. Perhaps I shouldn't have done
 19 that. But you got to read the otherwise.
 20 Otherwise what is the fair and reasonable
 21 ROE if NP consistently over earns?
 22 MR. O'BRIEN:
 23 Q. Dr. Booth, I'm going to be honest to you, I
 24 was going to come back to this at the end of
 25 my questioning, this particular RFI

Page 151

1 response, and you've just presented some of
 2 the commentary I was going to put to you.
 3 (12:15 p.m.)
 4 DR. BOOTH:
 5 A. So, we agree with each other?
 6 MR. O'BRIEN:
 7 Q. In this RFI response, and this is your RFI
 8 response, is it not?
 9 DR. BOOTH:
 10 A. Yeah.
 11 MR. O'BRIEN:
 12 Q. You have mentioned what you just mentioned
 13 about being contacted by a lawyer and Hydro
 14 Quebec – “being certified for a class action
 15 against Hydro Quebec for knowingly and
 16 recklessly presenting evidence on its costs
 17 and expenses resulting in consistent over
 18 earning over an eight-year period. Dr.
 19 Booth wonders whether a similar suit would
 20 be certified in Newfoundland and Labrador
 21 given Newfoundland Power's 25-year history
 22 of over earning.” Do you have any evidence
 23 to suggest Newfoundland Power knowingly and
 24 recklessly presents its costs and expenses
 25 to this Board?

Page 152

1 DR. BOOTH:
 2 A. No.
 3 MR. O'BRIEN:
 4 Q. Not a shred, do you?
 5 DR. BOOTH:
 6 A. No, but all I do know is it consistently
 7 over earned and I just say I'm wondering.
 8 I'm not saying that I know.
 9 MR. O'BRIEN:
 10 Q. Dr. Booth, this is not a passing comment.
 11 This is not a benign comment here.
 12 Knowingly and recklessly, the implication is
 13 Newfoundland Power is doing the same.
 14 DR. BOOTH:
 15 A. That is not the implication. The
 16 implication is that Newfoundland Power is
 17 consistently over earning its allowed ROE.
 18 MR. O'BRIEN:
 19 Q. You could have easily said that without
 20 mentioning knowingly and recklessly
 21 presenting evidence of cost in that manner.
 22 You could have easily said they consistently
 23 earn their ROE and left it at that, but you
 24 chose not to.
 25 DR. BOOTH:

Page 153

1 A. No, they consistently over earn -
 2 MR. O'BRIEN:
 3 Q. Yeah, but you chose -
 4 DR. BOOTH:
 5 A. - their allowed ROE.
 6 MR. O'BRIEN:
 7 Q. You could have left it at that, but you
 8 chose not to.
 9 DR. BOOTH:
 10 A. No.
 11 MR. O'BRIEN:
 12 Q. You suggested they could be certified on the
 13 same basis that Hydro Quebec was certified,
 14 and you have absolutely no shred of evidence
 15 to say Newfoundland Power is engaging in
 16 that kind of conduct. Is that fair?
 17 DR. BOOTH:
 18 A. I have not looked into the mechanism by
 19 which Newfoundland Power has consistently
 20 over earned its allowed ROE.
 21 MR. O'BRIEN:
 22 Q. So, they could be doing that? Is that what
 23 you're saying?
 24 DR. BOOTH:
 25 A. I don't know. I'm wondering. I don't know.

Page 154

1 I'm wondering, Mr. O'Brien. I'm not saying
 2 they're doing it. I'm just saying I'm
 3 wondering how is it that year after year
 4 Newfoundland Power over earns its allowed
 5 ROE, and I'm - and I mean, the Board allows
 6 the 40 basis points around the utility cost
 7 of capital. So, and I have to go back to
 8 Hydro Quebec and work out what they allow,
 9 but I'm just pointing out that this question
 10 of over earning has resulted in a class
 11 action suit in Quebec, and that's based upon
 12 eight years.
 13 MR. O'BRIEN:
 14 Q. So, that must be happening here?
 15 DR. BOOTH:
 16 A. Here, we're concerned with 30.
 17 MR. O'BRIEN:
 18 Q. Is that - it must be happening here?
 19 DR. BOOTH:
 20 A. Well, I don't know. If there's any lawyers
 21 in the room, they might look at this and
 22 say, "well, if they can get certified in
 23 Quebec -
 24 MR. O'BRIEN:
 25 Q. This is your response, Doctor, and you're

Page 155

1 intending to be an impartial witness before
 2 this tribunal. Is that fair?
 3 DR. BOOTH:
 4 A. That's correct.
 5 MR. O'BRIEN:
 6 Q. I'm going to suggest to you that's an
 7 inappropriate comment. Without any evidence
 8 or any shred of evidence, that's an
 9 inappropriate comment.
 10 DR. BOOTH:
 11 A. Well, you might - look, that might be your
 12 judgment. I'm just - I'm not saying that
 13 they've done anything. I'm just wondering
 14 if in fact Quebec, they're certifying a
 15 class action based upon eight years, what
 16 would happen when they look at Newfoundland
 17 Power over 30 years.
 18 MR. O'BRIEN:
 19 Q. So, you're going to stick to your guns on
 20 that?
 21 DR. BOOTH:
 22 A. Well, no, I'm just saying it's a fact that
 23 Newfoundland Power has over earned
 24 consistently for 30 years, and generally,
 25 that's about 30 basis points. I'd like the

Page 156

1 Board to state what it thinks is the fair
 2 and reasonable ROE, whether it's 8.5 plus 30
 3 or 8.5 plus 40, but the fact is Newfoundland
 4 Power has consistently over earned. And as
 5 I've said repeatedly, that's not just
 6 Newfoundland Power. That's right the way
 7 across Canada, and I don't know what's going
 8 on in Quebec. I was contacted by the lawyer
 9 and I said no, I'm not going to do that.
 10 But the fact is there is a lawsuit in Quebec
 11 about over earning. The lawyers have been
 12 certified as knowingly and recklessly. I
 13 haven't said it's knowingly and recklessly.
 14 I'm just -
 15 MR. O'BRIEN:
 16 Q. You wondered it.
 17 DR. BOOTH:
 18 A. Well, that's why it's in brackets, but it's
 19 not what I've said. That's what the lawsuit
 20 says, and it's been certified in Quebec.
 21 MR. O'BRIEN:
 22 Q. Doctor, I'm going to take you through some
 23 further testimony on the models that you use
 24 and that sort of thing, and you've testified
 25 already here in your direct that you use a

Page 157

1 fair bit of judgment in certain areas. You
 2 rely on data, but you also impose your own
 3 judgment in -
 4 DR. BOOTH:
 5 A. I would hope so.
 6 MR. O'BRIEN:
 7 Q. Right, you agree with me on that?
 8 DR. BOOTH:
 9 A. Yeah, absolutely.
 10 MR. O'BRIEN:
 11 Q. All right. So, how is it that in imposing
 12 that judgment, and I'm going to use a phrase
 13 from your own report. You talk about the
 14 use of US utility data as looking through a
 15 dirty window, I think is what you use,
 16 because it gives biased results, biased high
 17 results, and I'm going to use that phrase of
 18 dirty window and I want to understand
 19 whether or not – how is it you, when
 20 exercising your judgment, make sure you do
 21 so without looking through your own dirty
 22 window to see if there's no bias on your
 23 behalf when you're exercising that judgment?
 24 What do you do?
 25 DR. BOOTH:

Page 158

1 A. I think you misunderstand the dirty window.
 2 MR. O'BRIEN:
 3 Q. Well, I'm using it in a different way.
 4 DR. BOOTH:
 5 A. Exactly.
 6 MR. O'BRIEN:
 7 Q. But it's bias.
 8 DR. BOOTH:
 9 A. Very much in a different way.
 10 MR. O'BRIEN:
 11 Q. It's a bias issue that you raise in here,
 12 the US bias – US results are biased high.
 13 That's the way you describe it. So, I'm
 14 asking how you get rid of your own bias, if
 15 you have any, any inherent biases?
 16 DR. BOOTH:
 17 A. I don't think I have any inherent bias. I'm
 18 saying exactly the same thing for the last
 19 35 years and it's based upon standard
 20 economic and financial theory and basically
 21 looking at the data. So, I don't – look, I
 22 would say that the AUC, some of the
 23 witnesses were much lower than I recommend.
 24 So, I don't think what I'm recommending is
 25 biased low, and we can talk about KKR buying

Page 159

1 its share and there's absolutely no question
 2 that its fair rate of return is less than
 3 8.5 percent, in which case – and I can't see
 4 how it's higher than my recommendation. So,
 5 I don't think my recommendation is biased.
 6 I don't think I have a dirty window. And by
 7 the way, Mr. O'Brien, the phrase “dirty
 8 window”, I've been using it for the last 35
 9 years in Canada, increasingly so because we
 10 need to look at the operating company. We
 11 can't see the operating company. It is a
 12 dirty window, trying to extract from the
 13 holding company what's going on in the
 14 operating company. And I've talked about
 15 regulators about this issue for a long time.
 16 We lost Maritime Electric. We could have
 17 looked at Maritime Electric and we could
 18 look at their stock price, their beta and we
 19 could look at everything and there was no
 20 dirty window. Now, to look at Maritime
 21 Electric, we have to go through Fortis and
 22 we have to pick samples. It's a dirty
 23 window that we're trying to look through to
 24 find out what's going out with a regulated
 25 utility and all we've got is these utility

Page 160

1 holding companies. Now, that's not a bias.
 2 It's a fact is we have got a dirty window
 3 and I don't think that US electric holding
 4 companies are a good proxy for Newfoundland
 5 Power, as I made that clear.
 6 MR. O'BRIEN:
 7 Q. You've made that clear.
 8 DR. BOOTH:
 9 A. Yeah, they're holding companies. They're
 10 not operating companies. They're riskier
 11 than operating companies is well accepted.
 12 They've got generation. They've got
 13 industrial – they've got so many things that
 14 make them non-comparable, as this Board has
 15 accepted. Looking through that dirty window
 16 is incredibly difficult. We have to make
 17 adjustments. I would love us to have more
 18 pure operating companies trading. The only
 19 one we've got is Hydro One and a beta for
 20 Hydro One is .3 to .38, which is way lower,
 21 and that's a pure T&D utility, and it's
 22 traded and we've got the betas. We've got
 23 the information for Hydro One. I would like
 24 nothing better to go back to 20 years and
 25 have Consumers Gas traded, to have Union Gas

Page 161

1 traded, to have Maritime Electric traded, to
 2 have Maritime T&T still around. We can't do
 3 that. They don't exist anymore. We're
 4 looking at through dirty windows to try and
 5 get what's going on for these utilities.
 6 That means we have to exercise judgment
 7 because there is no data, except for Hydro
 8 One, on a Canadian operating T&D utility,
 9 and unless this Board decides we're just
 10 going to use Hydro One, which is not in
 11 Newfoundland, it's in Ontario, that's all
 12 we've got. Everything else involves looking
 13 through a dirty window.
 14 MR. O'BRIEN:
 15 Q. Doctor, in terms of the earned ROE,
 16 Newfoundland Power having earned it for the
 17 last number of decades, is that part of the
 18 fair return standard? Is that one of the
 19 legs of the fair return standard; for the
 20 regulator to look back and decide "well,
 21 you've earned your ROE, so we're not going
 22 to raise it"? Is that the approach that has
 23 to happen here? Is that what you're
 24 suggesting?
 25 DR. BOOTH:

Page 162

1 A. I'm not suggesting that at all.
 2 MR. O'BRIEN:
 3 Q. Okay.
 4 DR. BOOTH:
 5 A. The fair return standard basically – look,
 6 you got to remember where all of this comes
 7 from. It comes from the fact that utilities
 8 are regulated monopolists and without
 9 regulation, they'd charge unfair prices.
 10 So, the key is the prices. There's nothing
 11 in regulation to say, "well, give them a
 12 deferral account for their pension benefits.
 13 Give them a deferral account for all these
 14 other things." That's not in the fair
 15 return standard. That's the way we
 16 implement the fair return standard. But
 17 what we – but technically, there should be
 18 losses and gains. All we need to do is
 19 regulate their prices and then like a
 20 regular company, if there's a shock, they
 21 get losses and they lose money. And if it's
 22 a positive shock, they make money. There's
 23 nothing in regulation that says that we
 24 should basically regulate them so carefully
 25 that they exactly earn their allowed ROE.

Page 163

1 But the fact that they earn their allowed
 2 ROE should be used by the Board to assess
 3 how good a job they're doing in transferring
 4 the risk from the utility to the ratepayers,
 5 which is what all these deferral accounts
 6 do. And that's part of the regulatory
 7 protection and the regulatory compact in
 8 Canada.
 9 MR. O'BRIEN:
 10 Q. So, it's not the fact that they've earned it
 11 that should set what the ROE is?
 12 DR. BOOTH:
 13 A. No, I think it should take into account the
 14 fact that we – look, as I said, when I first
 15 testified I used to see the company
 16 witnesses coming in talking about business
 17 risk, financial risk, regulatory risk.
 18 There is no regulatory risk. It's
 19 regulatory protection in Canada.
 20 MR. O'BRIEN:
 21 Q. And you agree with me that determination of
 22 what an ROE is, this is a forward-looking
 23 determination? It's not looking back at the
 24 last 25 years to say you've earned your ROE,
 25 so we're going to knock you down one.

Page 164

1 DR. BOOTH:
 2 A. No, I don't recommend that.
 3 MR. O'BRIEN:
 4 Q. No.
 5 DR. BOOTH:
 6 A. I say that the Board should look at the past
 7 experience and take that into account in
 8 assessing its business risk, as in fact
 9 Moody's recommends.
 10 MR. O'BRIEN:
 11 Q. And let me move just to your models that
 12 you've used with respect to the ROE and how
 13 you – and you've taken the Board through a
 14 fair bit in your direct on that and I've
 15 listened to your description of how you use
 16 models. I want to ask you in general
 17 whether you agree with me when it comes to
 18 the use of models, in order to establish a
 19 fair – what a fair ROE might be. You've
 20 mentioned over time you've gone back and
 21 forth with some models. You had some DCF
 22 models you used earlier in your career and
 23 you've changed somewhat. But would you
 24 agree with me there's no single widely
 25 accepted best financial model to use to set

Page 165

1 an ROE?

2 DR. BOOTH:

3 A. No.

4 MR. O'BRIEN:

5 Q. And that's – I mean, I don't think that's

6 controversial, right.

7 DR. BOOTH:

8 A. The financial theory says that the DCF,

9 Gordon model, whatever you want to call it,

10 and the risk premium should give the same

11 answer.

12 MR. O'BRIEN:

13 Q. Yeah, and so -

14 DR. BOOTH:

15 A. And then you -

16 MR. O'BRIEN:

17 Q. Oh, sorry.

18 DR. BOOTH:

19 A. Then, as the survey said, you talk to people

20 what are their expectations and then you use

21 common sense in terms of a risk ranking.

22 That's exactly the same. It's a data

23 question in terms of which ones are better.

24 Mr. Coyne takes exception to the fact that I

25 said the DCF model fell out of favour in the

Page 166

1 '90s. Well, the fact is it did, and it – we

2 used risk premium models right the way up

3 until 2009 when we had this massive bond

4 buying. So, the usefulness of these models

5 depends upon the underlying data that's

6 available and if the data become corrupt in

7 some way, then the usefulness of that model

8 goes away. And I'm not – I would not

9 continue slavishly using a model where the

10 underlying data, such as the long Canada

11 rate, is no longer fair market value and is

12 corrupt.

13 MR. O'BRIEN:

14 Q. I'll get to that point because I think you

15 do make some adjustments to continue to use

16 that model. Is that fair?

17 DR. BOOTH:

18 A. That's correct.

19 MR. O'BRIEN:

20 Q. Yeah. So, you do use the model?

21 DR. BOOTH:

22 A. I use the model because there is a -

23 MR. O'BRIEN:

24 Q. Yeah, but it's a contingent model, I think

25 is what you called it.

Page 167

1 DR. BOOTH:

2 A. I used to call it a contingent, cap asset

3 pricing model by making it contingent upon

4 credit spreads -

5 MR. O'BRIEN:

6 Q. Right.

7 DR. BOOTH:

8 A. - because there's consensus across Canada

9 that when the credit spreads widen, you're

10 in a default and the equity costs goes up,

11 and I've never been a big fan of that

12 because it evens out over the business

13 cycle, but I've accepted that and it's in my

14 recommendations and within – and it's in

15 almost every formula. So, that is there and

16 I have to make adjustments to use the long -

17 the risk-free rate. I cannot use a -

18 MR. O'BRIEN:

19 Q. You can -

20 DR. BOOTH:

21 A. - rate that's not fair market value.

22 MR. O'BRIEN:

23 Q. Would you agree that cost of capital models

24 are imperfect tools? I mean, each one of

25 them has its own limitations. That's not

Page 168

1 controversial, is it?

2 DR. BOOTH:

3 A. No, I'd say the models are credibly valid,

4 but the data is imperfect in the practical

5 applications of them.

6 (12:30 p.m.)

7 MR. O'BRIEN:

8 Q. But there's limitations for the purpose

9 we're using them for?

10 DR. BOOTH:

11 A. I would say that's – I'd say that we've used

12 a CAPM for the last 20 years without too

13 many problems.

14 MR. O'BRIEN:

15 Q. Well, if there's no limitations to it,

16 you've just mentioned there's a limitation,

17 the long-term Canada bond.

18 DR. BOOTH:

19 A. That's right.

20 MR. O'BRIEN:

21 Q. So, there's a limitation to that.

22 DR. BOOTH:

23 A. Well, that's true. There's always data

24 problems in putting that in and so, I'll

25 agree with you on that, Mr. O'Brien, and the

Page 169

1 DCF fell out of fashion when inflation
 2 dropped and all of a sudden growth rates
 3 became a lot more difficult to focus.
 4 MR. O'BRIEN:
 5 Q. Yes, and I'm not – I'm not arguing economic
 6 theory with you and whether the models
 7 themselves are supposed to bring out a
 8 certain result, but the fact of the matter
 9 is there are limitations with each one of
 10 them, depending on certain factors, data,
 11 that sort of thing? You'd agree with me?
 12 DR. BOOTH:
 13 A. I would agree with that.
 14 MR. O'BRIEN:
 15 Q. Yeah, okay.
 16 DR. BOOTH:
 17 A. And that's in my testimony.
 18 MR. O'BRIEN:
 19 Q. And depending on the approach used, I mean,
 20 this whole cost of capital assessment, as
 21 Ms. Greene has indicated, there can be more
 22 of an art to it than a science.
 23 DR. BOOTH:
 24 A. Non-finance people say that. So, I mean -
 25 MR. O'BRIEN:

Page 170

1 Q. I'm a non-finance person.
 2 DR. BOOTH:
 3 A. Yeah. Well, I know, you're a lawyer. I
 4 hate lawyers.
 5 MR. O'BRIEN:
 6 Q. I'm sure you hate me more today than
 7 yesterday.
 8 DR. BOOTH:
 9 A. And I say that because I was taught a long
 10 time ago to read paragraphs and I know
 11 there's a lot of lawyers in the room and a
 12 lawyer explained to me, we don't read
 13 paragraphs, we read words, and how you
 14 interpret that word – look, and I've been in
 15 tax cases where it hinges on the
 16 interpretation of the word. I read the
 17 paragraph and I say, "my God, it's obvious"
 18 and then the lawyer says, "no, it's that
 19 word". So, lawyers are not like other
 20 people. I'll say professors of finance are
 21 not – professors of finance are not like
 22 other people.
 23 MR. O'BRIEN:
 24 Q. There's one on the Board.
 25 DR. BOOTH:

Page 171

1 A. It's because we're all trained to think in a
 2 certain way, and it's our professional
 3 training that takes us down a silo, as it
 4 were. So, I don't – and I don't think
 5 that's that revolutionary, but I mean,
 6 finance academics, estimating the cost of
 7 capital is not the most difficult problem in
 8 finance.
 9 MR. O'BRIEN:
 10 Q. No.
 11 DR. BOOTH:
 12 A. And I said that before the CRTC when they
 13 were saying how difficult it was. I said
 14 it's not difficult. This is something we
 15 give our undergraduates. But it becomes
 16 difficult when you're in a litigated hearing
 17 and you end up with nuances in terms of the
 18 data and the estimation processes.
 19 MR. O'BRIEN:
 20 Q. And that's where judgment comes in?
 21 DR. BOOTH:
 22 A. That's where judgment comes in, but
 23 honestly, what I do, I don't think there's a
 24 lot of judgment in it, and my estimates –
 25 the judgment is really on the long Canada

Page 172

1 rate.
 2 MR. O'BRIEN:
 3 Q. Well -
 4 DR. BOOTH:
 5 A. And the market risk premium and betas, I use
 6 public market betas and public market data
 7 to backup my judgment in those areas and I
 8 do not deviate from consensus in those
 9 areas. The long Canada rate, I do deviate
 10 because – and I've deviated consistently
 11 because I think I understand a little bit
 12 more about the global capital markets and
 13 the intervention of the central banks and
 14 sometimes I listen to some of the witnesses,
 15 particularly the United States witnesses.
 16 They generally, in the US, they don't have a
 17 big section on financial market conditions
 18 and the economy. They come in and they –
 19 and in fact, I was told – not told, but said
 20 "why do you have all of this economic stuff
 21 in here? We just want to know what your
 22 estimates are." And that was before the
 23 Canadian Association of Petroleum Producers
 24 when I first put my testimony. I said, "we
 25 need it in Canada. It's a legal requirement

Page 173

1 to look at conditions in the money market.”
 2 So, you can’t – and the ROE comes out of
 3 those conditions in the money market. But
 4 my understanding is a lot of people don’t do
 5 that. And yet, to use the CAPM, you have to
 6 have the appropriate risk-free rate.
 7 MR. O'BRIEN:
 8 Q. So, Doctor, I guess my question was more of
 9 a general question that there are areas
 10 where you have to exercise judgment in
 11 giving a cost of capital opinion, in
 12 interpreting, in what data to put in there,
 13 and that sort of thing, and this is where, I
 14 think, myself and Ms. Greene had put kind of
 15 questions to the cost of capital experts
 16 that it may be more of an art than a
 17 science, and that’s what I’m wondering. Do
 18 you agree with that?
 19 DR. BOOTH:
 20 A. No.
 21 MR. O'BRIEN:
 22 Q. In that context. You don’t?
 23 DR. BOOTH:
 24 A. No, not in terms of the market risk premium,
 25 not in terms of betas.

Page 174

1 MR. O'BRIEN:
 2 Q. Okay.
 3 DR. BOOTH:
 4 A. Not at the current point in time. If you
 5 went back to 2000, we were getting negative
 6 betas and I’d say yes. But at the current
 7 point in time, I don’t see there’s
 8 significant difference between me and most
 9 of the independent people that provide
 10 betas. The area where there’s more judgment
 11 is in the long Canada rate. Do we use the
 12 actual rate in the capital market and ignore
 13 the fact that the Bank of Canada is holding
 14 300 billion dollars worth of Government of
 15 Canada debt.
 16 MR. O'BRIEN:
 17 Q. So, Doctor, when you indicated earlier
 18 you’ve reviewed the testimony from 2016, and
 19 in 2016, Mr. Kelly asked you a number of
 20 questions concerning judgment where you had
 21 indicated, for example, the market risk
 22 premium, there’s an element of judgment that
 23 you exercise there. The beta estimates,
 24 there’s an element of judgment that you
 25 exercise there. Are you saying you don’t

Page 175

1 exercise judgment today? Is that what
 2 you’re saying?
 3 DR. BOOTH:
 4 A. Mr. O’Brien, I would never say I don’t
 5 exercise judgment.
 6 MR. O'BRIEN:
 7 Q. Okay. Well, that’s what I’m trying to get
 8 at.
 9 DR. BOOTH:
 10 A. It’s the job, my job to advise the Board.
 11 MR. O'BRIEN:
 12 Q. That’s what I thought.
 13 DR. BOOTH:
 14 A. And that’s judgment.
 15 MR. O'BRIEN:
 16 Q. I didn’t think we’d be at odds on this
 17 point.
 18 DR. BOOTH:
 19 A. I exercise judgment, but the biggest area of
 20 judgment at the moment, particularly in the
 21 risk premium, is in the long Canada rate.
 22 MR. O'BRIEN:
 23 Q. Okay.
 24 DR. BOOTH:
 25 A. Not in the betas and not in the market risk

Page 176

1 premium.
 2 MR. O'BRIEN:
 3 Q. Okay. Well, let’s talk about that, the long
 4 Canada rate. So, that biggest area of
 5 judgment. So, we’re talking – and you
 6 walked us through here today the components
 7 of that CAPM model with risk-free rate.
 8 That’s the long-term Canada bond. And then
 9 you got your risk premium. So, you got your
 10 market risk and then you got your beta. So,
 11 I mean, those are your components to that
 12 model. Is that fair?
 13 DR. BOOTH:
 14 A. Yeah, yeah.
 15 MR. O'BRIEN:
 16 Q. Okay. So, in your risk-free rate, you used
 17 a long-term Canada bond. You’ve used a 3.8
 18 kind of holding figure, trigger value I
 19 think is what you called it, right?
 20 DR. BOOTH:
 21 A. Yeah, I’ve used it as trigger.
 22 MR. O'BRIEN:
 23 Q. Yeah, I think that’s fair. You called it a
 24 trigger value. And that’s an area where
 25 you’ve exercised judgment with that model.

Page 177

1 Is that correct?

2 DR. BOOTH:

3 A. That's correct.

4 MR. O'BRIEN:

5 Q. All right. And is that an area where other

6 cost of capital experts have used the same

7 judgment?

8 DR. BOOTH:

9 A. You mean the same judgment, the same value?

10 MR. O'BRIEN:

11 Q. Yeah. I'm just trying to get a sense where

12 this comes from.

13 DR. BOOTH:

14 A. Kroll used – I mean, look, Kroll – people

15 pay Kroll for their cost of capital

16 navigator series. They have exactly – look,

17 same problem we all face, which is that the

18 long Canada bond and the US treasury yield

19 are not fair market value. They're affected

20 by the massive holdings by the central

21 banks. Kroll uses 3.5 percent as their

22 trigger and that's 3.5 percent in the United

23 States and that's over the 20-year rather

24 than we use the 30-year in Canada. So,

25 there's a few basis points there. So, and

Page 178

1 they are certainly an authority in terms of

2 the market risk premium. Other than that, I

3 don't see a lot of people using the current

4 spot rate for the long Canada rate. Mr.

5 Coyne, I'd have to check what he's doing at

6 the moment, but he used to use a normalized

7 long Canada rate, and he used to go out and

8 look at the rate -

9 MR. O'BRIEN:

10 Q. Over a three-year period.

11 DR. BOOTH:

12 A. Yeah. He would – because he had the same

13 problem. Look, the problems he and I face

14 are exactly the same, which is the base of

15 the risk premium, time value of money is

16 distorted and it's less distorted now than

17 it was say three years ago. Three years

18 ago, in 2021 when we had a negative real

19 return on a long Canada bond yield, that was

20 absolute nonsense. I mean, nobody trades

21 off the risk of equities versus a negative

22 return on long Canada bond. It's

23 incompatible with basic financial models,

24 and all of these models are based upon

25 economy theory where individuals are assumed

Page 179

1 to be maximizing their utility and trading

2 off risk versus return. And that's not

3 happening in the government bond market

4 because it's not individuals trading of risk

5 and return. It's the government intervening

6 for specific reasons. So, I don't think Mr.

7 Coyne and I disagree about the fundamental

8 problem. We disagree about how that's

9 incorporated into our models and how we

10 adjust for it.

11 MR. O'BRIEN:

12 Q. And so, why don't you use four, instead of

13 three?

14 DR. BOOTH:

15 A. I have used four.

16 MR. O'BRIEN:

17 Q. When have you used four?

18 DR. BOOTH:

19 A. I can't remember. I went back and looked at

20 my testimony. The bulk of the time I've

21 used 3.8, but I did use four percent in a

22 hearing, and I can't remember which one it

23 is.

24 MR. O'BRIEN:

25 Q. Recently?

Page 180

1 DR. BOOTH:

2 A. No, this is going back right at the

3 beginning, when we first had the problem for

4 the long Canada bond in 2011-2012. But I've

5 used 3.8 percent as a minimum rate. I don't

6 think, if we didn't have the government –

7 well, if we didn't have the Government of

8 Canada, we wouldn't have Government of

9 Canada bonds, but if we didn't have the

10 central bank intervening in the bond market,

11 I suspect the yield on the long Canada bond

12 would be higher than the 3.2 percent which

13 it is at the moment. It's how much higher

14 I've got – in my Appendix B, I've got a

15 model that predicts the real return on the

16 long Canada bond and the factors that

17 determine that return. Like everything

18 else, it's supply and demand. It's – one of

19 my students asked me what determines this.

20 I say it's supply and demand. Everything is

21 supply and demand. It's a question of what

22 goes into those supply and demand curves and

23 the long Canada bond, I've got the deficit.

24 When the governments run deficits, they're

25 flooding the market with bonds and it ends

Page 181

1 up that the prices go down and the yields go
 2 up. So, it's not an accident that our
 3 yields drop below those of the United
 4 States. When the Conservative government
 5 moved the – well, actually the Liberal
 6 government balanced the budget, we moved
 7 into surplus. This is why long Canada bonds
 8 went down and as a result, the – we had high
 9 rates on long Canada bonds. Now, we've got
 10 a government that's increasing the supply of
 11 long Canada bonds again and if the Federal
 12 government persists in 50-billion-dollar
 13 deficits, that's 50 billion dollars of
 14 Government bonds that are added to the
 15 Canada bond market and if the government –
 16 and if central bank then basically sells 300
 17 billion dollars, you wonder where are
 18 interest rates going to go. So, 3.8 percent
 19 is my minimum bound. I would expect,
 20 depending upon the actions of the government
 21 and the central bank, to see those yields go
 22 up significantly above 3.8 percent.
 23 MR. O'BRIEN:
 24 Q. So, Doctor, the 3.8 percent, your minimum
 25 bound, that's a figure you exercise your

Page 182

1 judgment and chose that particular figure.
 2 That's fair?
 3 DR. BOOTH:
 4 A. That's fair.
 5 MR. O'BRIEN:
 6 Q. Okay. And -
 7 DR. BOOTH:
 8 A. And it's been accepted by this Board and the
 9 BCUC and other boards.
 10 MR. O'BRIEN:
 11 Q. And you've used different – you've used four
 12 before in another board. I think you used
 13 this trigger value. I'm going to suggest
 14 you used something – a different approach
 15 back early on in 2011-2012, when this first
 16 initially became an issue for you, and in
 17 the 2013 hearing here, you cited the bond,
 18 the two – I think it was 2.81, 2.9,
 19 something in that range, and you added 130
 20 basis points or operation twist I think is
 21 what you called it. So, you used a
 22 different approach at that time.
 23 DR. BOOTH:
 24 A. No, that's – no, that's exactly the same.
 25 MR. O'BRIEN:

Page 183

1 Q. You didn't use 3.8.
 2 DR. BOOTH:
 3 A. No, that's exactly the same. What happened,
 4 it was in – we had preferred yields and we
 5 had the time series of preferred yields put
 6 out by the Toronto Stock Exchange. So, we
 7 had good data or preferred shares. We don't
 8 no longer have that. And I looked at –
 9 preferred share, it's a question of what is
 10 a made-in-Canada rate. What is it that
 11 people trade off to buy equities? And you –
 12 at that time, the US was flooding the market
 13 with bonds and they were being bought by the
 14 central bank and we were being whip sored.
 15 I mean, we're not perfectly integrated with
 16 the United States. The United States is the
 17 elephant in the room in all this, in the
 18 sense that we get buffeted by what's going
 19 on in the United States. So, that's
 20 obvious. And it impacted the bond market
 21 because the bond market is integrated
 22 globally. So, when the ECB and the Bank of
 23 England and the US Central Bank started
 24 buying bonds, absolutely no question, it
 25 impacted on Canada, and in fact, at one

Page 184

1 point, the Bank of Canada pointed out the
 2 Government bond market was 60 percent owned
 3 by foreigners because the money – the demand
 4 was coming into Canada. The preferred share
 5 market wasn't buffeted by foreign capital
 6 coming into Canada. Preferred share market
 7 is an almost entirely Canadian market
 8 because – I don't know whether you're a
 9 private investor, but we get the dividend
 10 tax credit for buying dividend paying
 11 stocks, and the Americans don't. The Brits
 12 don't. The Europeans don't. It's a
 13 Canadian market. So, I was trying to look
 14 at how to gauge this buffeting that was
 15 going on in the bond market and I said, ah-
 16 ah, we have the preferred share market
 17 that's not being buffeted and I tracked the
 18 spread between preferred shares and the A
 19 bond yield because preferred shares are
 20 generally regarded as not quite junk bond,
 21 but they're lower rated debt in terms of
 22 their risk, and the spread had increased and
 23 I used that, as you mentioned, to come up
 24 with an estimate of the 3.8 percent. And
 25 I've stuck with that mainly because I can't

Page 185

1 look at the preferred shares anymore because
 2 we don't have the data.
 3 MR. O'BRIEN:
 4 Q. Okay.
 5 DR. BOOTH:
 6 A. So, there's things that we can do if we got
 7 the data and if we don't have the data, we
 8 can't do it.
 9 MR. O'BRIEN:
 10 Q. So, otherwise, you stick with your own
 11 personal sort of figure, your personal
 12 assessment. You feel that's a reasonable
 13 assessment and that's what you're stuck
 14 with, the 3. -
 15 DR. BOOTH:
 16 A. Well, it's personal assessment. I mean, the
 17 data wasn't a personal assessment. The data
 18 is the data. So, the spread between the
 19 preferred share yield and the A bond yield,
 20 it increased because foreign investors
 21 didn't buy preferred shares, they bought the
 22 Canadian bond market. So, that's not
 23 personal judgment. That is what it is.
 24 MR. O'BRIEN:
 25 Q. Well, the trigger value, using it as a

Page 186

1 trigger value when the risk-free rate is not
 2 3.8, that's a personal judgment.
 3 DR. BOOTH:
 4 A. It comes from applying the statistics and
 5 the data on the spread between the preferred
 6 share and the A bond yield and how that
 7 changed as a result of this flood of capital
 8 coming into Canada and adding that to the
 9 existing Canada bond yield to say well, but
 10 for this distortion caused by foreign
 11 capital coming into Canada in the bond
 12 market, the best I can come up with is
 13 adding this spread and you get 3.8 percent,
 14 and that is an imprecise estimate. I will
 15 give -
 16 MR. O'BRIEN:
 17 Q. I think that's my point, Doctor.
 18 DR. BOOTH:
 19 A. It's the best estimate I could come up with
 20 and nobody else has even tried to do an
 21 estimate like that. They've just - they
 22 just washed their hands of trying to
 23 actually solve the problem of how distorted
 24 is the yield on the Canada bond market.
 25 MR. O'BRIEN:

Page 187

1 Q. Well, let's move to the market risk premium,
 2 and you mentioned a fair number of things
 3 there in your slides this morning. Your
 4 market risk premium range is 5.5 to 6. Is
 5 that right?
 6 DR. BOOTH:
 7 A. That's correct.
 8 MR. O'BRIEN:
 9 Q. Yeah. And -
 10 DR. BOOTH:
 11 A. The actual range from the historic estimates
 12 is 4.87 to 6.4 or whatever.
 13 MR. O'BRIEN:
 14 Q. Right. And then I believe Concentric's is
 15 6.4 range. So, there's a difference between
 16 what you, as experts, have used for that
 17 market risk premium, and that affects the
 18 outcome of the model.
 19 DR. BOOTH:
 20 A. I mean, they're basically using what looks
 21 to me like the US experience historic market
 22 risk premium.
 23 MR. O'BRIEN:
 24 Q. So, the last time you were before the Board,
 25 you had a 5 to 6 range. So, what has

Page 188

1 changed to bring you up to 5.5?
 2 DR. BOOTH:
 3 A. Well, some of it's the data.
 4 MR. O'BRIEN:
 5 Q. And where does that come from?
 6 DR. BOOTH:
 7 A. Well, it comes from we got another year of
 8 data.
 9 MR. O'BRIEN:
 10 Q. Yeah.
 11 DR. BOOTH:
 12 A. In 2016, we had 1956 to 2015. Now we got
 13 1956 - sorry, 1926 to 2013. So, some of
 14 it's data. Not a big amount is data. Some
 15 of it is the result of looking at what Kroll
 16 is doing. Some of it is due to the fact
 17 that the Fernandez survey seemed to come out
 18 at 5.5 to 6 percent, and Damodaran, and when
 19 people did it, they did a little survey in
 20 some magazine, I forget which it is, who do
 21 you look for for market risk premium. They
 22 said Damodaran, Fernandez and Kroll. So,
 23 I'm using the three sources that were cited
 24 as independent estimates of the market risk
 25 premium.

Page 189

1 MR. O'BRIEN:
 2 Q. When you were here before the Board last in
 3 2016, Mr. Kelly did ask you do you exercise
 4 any judgment in coming to your figure, as to
 5 what the appropriate figure would be, and
 6 you indicated to him that you do. I'm
 7 wondering sort of can you tell the Board
 8 what element of personal judgment do you
 9 apply to that data to come up with your
 10 figure?
 11 DR. BOOTH:
 12 A. I think in 2016, there wasn't this survey
 13 that indicated the three sources of
 14 independent advice on the market risk
 15 premium. I certainly didn't use Damodaran,
 16 his independent estimates. I certainly did
 17 use Fernandez, which has changed. I can't
 18 remember whether I used Kroll. I'd have to
 19 go back and see if I used Kroll. But you
 20 asked me what do I do when I read a
 21 decision, and obviously I look – as I said,
 22 I'm vain. I think everyone's vain. You
 23 like to see whether they like what you did,
 24 and what they didn't like, you say, "well, I
 25 know I'm right. I'm going to have to find –

Page 190

1 try and rectify that perception that I
 2 didn't do a good job", and I've now got the
 3 Kroll work. I've got the Damodaran work and
 4 does that inform my judgment? Yes, it does.
 5 Do I just look at my estimates and say,
 6 "well, these are my estimates, historic
 7 estimates, I'm going to live and die by
 8 them"? No, I don't. You have to look at
 9 expectations. That's one of the things that
 10 the survey of cost of capital looks at and
 11 I've tried to do everything in that survey
 12 which is indicated as important things in
 13 estimating the cost of capital.
 14 MR. O'BRIEN:
 15 Q. I got the impression from either a response
 16 to an RFI or somewhere in your evidence that
 17 the survey results from this Fernandez
 18 survey had sort of made an impression on you
 19 to increase your estimate to the 5.5 versus
 20 the 5 bottom. Is that fair?
 21 DR. BOOTH:
 22 A. I think that's fair.
 23 MR. O'BRIEN:
 24 Q. Yeah.
 25 DR. BOOTH:

Page 191

1 A. I think the first time Fernandez came out,
 2 it was – I was – gave testimony before the
 3 Regie in Montreal and I actually said,
 4 "here's my market risk premium. Here's an
 5 adjustment for other professional advice"
 6 and I think I said I can't ignore the fact
 7 that 1,000 – whatever the number was of
 8 people came in and said the market risk
 9 premium. Other professionals think it's
 10 this. So, that's probably a more current
 11 forward-looking estimate of what the market
 12 risk premium is, rather than just looking
 13 straight at the historic data.
 14 MR. O'BRIEN:
 15 Q. Is it fair to say that ultimately in the
 16 grand scheme of things in your report that
 17 that change in the Fernandez report probably
 18 had a fair impact on you jumping from 7.5 to
 19 7.7?
 20 DR. BOOTH:
 21 A. I think the 20 basis points has gone up
 22 because of my increase in the market risk
 23 premium.
 24 MR. O'BRIEN:
 25 Q. Yeah.

Page 192

1 DR. BOOTH:
 2 A. And you're absolutely correct. When the
 3 survey, the 41 survey respondents said six
 4 percent in Canada. I used to use a range of
 5 five to six percent. When Kroll said 5.5,
 6 when the survey respondents in the US said
 7 5.7, when Damodaran said 5.5, I thought
 8 well, five seems to be a little bit low,
 9 compared to what I was doing before. So, I
 10 did bump it up to 5.5 to 6 percent.
 11 MR. O'BRIEN:
 12 Q. And if it wasn't for that change, we'd be
 13 back – you'd be recommending 7.5 likely?
 14 DR. BOOTH:
 15 A. I think the betas, the betas that I used
 16 this time are slightly higher than in -
 17 MR. O'BRIEN:
 18 Q. I'll get to that.
 19 DR. BOOTH:
 20 A. - in 2016. So -
 21 MR. O'BRIEN:
 22 Q. Okay. It's a combination of the two?
 23 DR. BOOTH:
 24 A. It's a combination of the two, basically as
 25 20 basis points.

Page 193

1 MR. O'BRIEN:
 2 Q. That Fernandez survey, has there been any
 3 concern raised about that survey itself over
 4 time that you've been using it, any issues
 5 with its validity that you're aware of?
 6 DR. BOOTH:
 7 A. I think there's always a concern with the
 8 validity of surveys. One of the concerns is
 9 who actually fills out the survey.
 10 MR. O'BRIEN:
 11 Q. Exactly.
 12 DR. BOOTH:
 13 A. We do surveys for chief executive officers,
 14 for example, on financial things. We send
 15 them a survey. They say, "I'm not going to
 16 answer this. I'm going to give it to that
 17 hire with the MBA from Wharton" and then the
 18 MBA from Wharton says, "well, what did they
 19 tell me to do in my finance classes? Ah-ah,
 20 capital asset pricing model". So, the big
 21 problem in – I mean, surveys are important,
 22 but I mean, I wouldn't totally hang my hat
 23 on them because there is a certain – there's
 24 a response bias attached to surveys.
 25 MR. O'BRIEN:

Page 194

1 Q. So, how do you account for that in your own
 2 personal assessment of what the market risk
 3 premium would be if there's a response bias
 4 there?
 5 DR. BOOTH:
 6 A. Well, I think it's five to six percent. The
 7 response in the United States, 5.7, Canada,
 8 six percent, Damodaran, 5.47 percent, Kroll,
 9 5.5. When you get this overwhelming number
 10 of values, did I look at Fernandez and say,
 11 "well, I'm going to hang my head on – or my
 12 hat on that?" No, I honestly don't know
 13 what – how much I filtered that information
 14 to come up with 5.5 to 6. It's more
 15 impressionistic that that was basically what
 16 was coming back in the data from external
 17 experts. Tell me what I could have done is
 18 say, well, I'm – Booth isn't going to do
 19 anything, and I used to do everything
 20 myself, all my own estimates. Now, there's
 21 a lot of people out there that do this and
 22 it's public information. So, Fernandez
 23 survey is out there. Damodaran is out
 24 there. Kroll is out there. I'm looking at
 25 this saying, "why do I bother to produce my

Page 195

1 own estimates of the market risk premium? I
 2 could just use these public market. Why do
 3 I bother coming up with my own beta
 4 estimates? I can just use public beta
 5 estimates" and I would dramatically reduce a
 6 lot of my testimony. But I feel, as an
 7 expert, I have to validate the external
 8 work, and that's a job that I do. So, how
 9 much do I weigh these things? I honestly
 10 don't know. There's no formulaic 30 percent
 11 Fernandez, 20 percent Damodaran to come up
 12 with that. It's what I think is reasonable
 13 given the values that come out.
 14 MR. O'BRIEN:
 15 Q. Okay, all right. So, let's talk about that
 16 then. You were here last time and you had –
 17 in 2016, and you had a range of five to six.
 18 Why has your range – you've upped your range
 19 now or you've changed your range to five and
 20 a half to six. Why has it narrowed? Why
 21 haven't you gone five and a half to six and
 22 a half?
 23 DR. BOOTH:
 24 A. I haven't seen any reputable people
 25 producing an estimate above six percent.

Page 196

1 MR. O'BRIEN:
 2 Q. No reputable people?
 3 DR. BOOTH:
 4 A. No.
 5 MR. O'BRIEN:
 6 Q. None?
 7 DR. BOOTH:
 8 A. And I say the three main sources are
 9 Damodaran, Kroll and Fernandez. 41
 10 respondents put the median for Canada at six
 11 percent, which is the top of the range. I
 12 haven't seen any support of anything beyond
 13 six percent.
 14 MR. O'BRIEN:
 15 Q. Any relevance to the US data?
 16 DR. BOOTH:
 17 A. The US data is lower. They're now coming
 18 with a US market risk premium in the survey
 19 of 5.7 percent and Damodaran's estimate of
 20 5.4 percent is US data, and Kroll's estimate
 21 is US data at 5.5, now reduced to five
 22 percent.
 23 MR. O'BRIEN:
 24 Q. So, are these figures all narrowing all
 25 across the board, like the data?

Page 197

1 DR. BOOTH:
 2 A. I'm surprised at how narrow they are. And I
 3 used to use three percent, Mr. O'Brien.
 4 That was back in the '90s when long Canada
 5 bond yields were up at 14 percent and the
 6 spread for the equity market was a lot
 7 narrower than it is today. My estimates
 8 have gone up for the market risk premium as
 9 long Canada bond yields – expected normal
 10 long Canada bond yields come down.
 11 MR. O'BRIEN:
 12 Q. Let's talk about your betas.
 13 DR. BOOTH:
 14 A. Yeah.
 15 MR. O'BRIEN:
 16 Q. Your beta estimates. So, that's the
 17 coefficient that represents the relative
 18 risk of the utility or whatever you're
 19 measuring. Is that fair?
 20 DR. BOOTH:
 21 A. It's the relative risk and risk relative -
 22 MR. O'BRIEN:
 23 Q. To the market.
 24 DR. BOOTH:
 25 A. - to a diversified portfolio of equities.

Page 198

1 MR. O'BRIEN:
 2 Q. Yeah, okay. And I gather from a review of
 3 your previous evidence before the Board in
 4 2016, you had betas in the range or a beta
 5 range of .45 to .55. Is that correct?
 6 DR. BOOTH:
 7 A. That's correct.
 8 MR. O'BRIEN:
 9 Q. All right. Was that reflective of market
 10 data at that time?
 11 DR. BOOTH:
 12 A. No, that was mainly the estimate of the
 13 long-run tendency of betas in the Canadian
 14 market. As I explained in my direct, the
 15 question is if you see an observation, do
 16 you adjust it, and you have – we call this
 17 Bayesian adjustment. It's due to a British
 18 clergyman called Reverend Thomas Bayes
 19 hundreds of years ago. Basically you look
 20 at something and you assess "is that
 21 reasonable?" and you update your estimate,
 22 which we all do this. We look at things and
 23 it changes our knowledge and we update what
 24 we do. So, when we look at betas, we all
 25 adjust betas. How much we adjust them, it

Page 199

1 depends upon the betas that we observe, and
 2 I think back in 2016, I was adjusting them
 3 towards the Grand Mean -
 4 MR. O'BRIEN:
 5 Q. Grand Mean, I believe, yeah.
 6 DR. BOOTH:
 7 A. The betas, which was the evidence of beta
 8 adjustment processes in the United States.
 9 MR. O'BRIEN:
 10 Q. And was that something that came out of
 11 research that you were involved in?
 12 DR. BOOTH:
 13 A. No, that came – well, before the National
 14 Energy Board in 2001, my late colleague, Dr.
 15 Berkowitz and I, and it was mainly Mike,
 16 that was something that he was interested
 17 in, we looked at the number of Canadian
 18 pure, reasonably pure regulated utilities
 19 and we did a Blume adjustment at that time,
 20 and the adjustment was, surprise, surprise,
 21 to the Grand Mean, consistent with the work
 22 in the United States on beta adjustment, and
 23 we presented that before the NEB and it
 24 wasn't controversial. If you see a utility
 25 and it's always had a beta of .5 and then

Page 200

1 you look at your estimates and it's dropped
 2 to .1, you say, "what on earth's happened
 3 here? That looks to be something special.
 4 I need to adjust that" and that's all that
 5 the beta adjustment does. So, it's not a
 6 question of do we adjust betas. It's a
 7 question of do we adjust them towards the
 8 average risk of the stock in the market,
 9 which is what the Blume adjustment does to
 10 all stocks in the market, and if I didn't
 11 know anything about what's going on in the
 12 stock market, Blume is right, that if you
 13 just tell me that beta is .2, and you don't
 14 tell me the stock, like a game, they hide
 15 the game, they hide the utility behind a
 16 wall and they say, "it's a beta of .2".
 17 (1:00 p.m.)
 18 I'd say "well, I think the appropriate beta
 19 would be .33 plus 66 – two-thirds of that
 20 .2" and then if they said, "ah, by the way,
 21 it's a tech company" and I say, "well,
 22 that's ridiculous". You don't adjust it to
 23 one. Tech stocks are riskier than one. I
 24 would change my beta adjustment. And if you
 25 told me, "Ah-ah, it's a bank". I'd say,

Page 201

1 “well, banks have got betas around about
 2 one.” I would adjust it with the Blume
 3 adjustment. And if you told me it was a
 4 utility, I’d say, “well, utility are low
 5 risk. The .2 may be low, but it’s not
 6 excessively low”, I’d adjust it upwards to
 7 .5. So that is where Blume is right and
 8 Blume is wrong. He’s right for the overall
 9 stock market. He’s not right for anybody
 10 that knows anything about the beta and the
 11 information about that company, and we know
 12 a lot about utilities.
 13 MR. O'BRIEN:
 14 Q. I’ll get to Blume. I’m just wondering about
 15 your betas first.
 16 DR. BOOTH:
 17 A. Well, 2001, my colleague, Mike Berkowitz
 18 looked at a beta adjustment for Canadian
 19 utilities. Can’t do that anymore. They
 20 don’t exist.
 21 MR. O'BRIEN:
 22 Q. No.
 23 DR. BOOTH:
 24 A. So, I looked at the betas for the electric
 25 utility holding companies that I had and I

Page 202

1 did a Blume assessment on those electric
 2 utility holding companies as beta, and I
 3 discovered that the intersect was .45 and
 4 the coefficient on the actual beta was .05,
 5 barely significant, and as I say, the best I
 6 could say is .45 to .5 looks to be
 7 reasonable for the beta adjustment for the
 8 grand mean.
 9 MR. O'BRIEN:
 10 Q. And did you assess that against any other
 11 empirical data out there or was that just
 12 your best assessment at that time, your
 13 personal assessment?
 14 DR. BOOTH:
 15 A. That was my empirical assessment and I
 16 started doing this, I think – I think when
 17 did I – last year. It’s relatively recently
 18 because, as I think I’ve said, I’ve been
 19 dragged or forced into looking at US
 20 utilities to counter or to assess the
 21 reasonableness of other American witnesses
 22 who are looking at the same companies. And
 23 there’s no beta adjustment for the US
 24 electric utilities. The Blume model just
 25 doesn’t hold for them. And did I assess it

Page 203

1 relative to other people? Yes. The only
 2 other refereed publication looking at US
 3 regulated utilities was in the electricity
 4 journal by two people. I’ve forgotten the
 5 first – and the second name was Theodossiou.
 6 They could find no beta adjustment for US
 7 electric utilities either.
 8 MR. O'BRIEN:
 9 Q. I sent you a – or I’ve given counsel a
 10 cross-aid and this was a BCUC decision from
 11 2016, and I’m going to ask you just about
 12 how the commission had assessed your betas,
 13 and maybe we can put that in as an
 14 information item? I’ve got two copies
 15 there.
 16 GREENE, KC:
 17 Q. A decision -
 18 MR. O'BRIEN:
 19 Q. That was the 2016 – it’s a 2016 one.
 20 MS. PHILPOTT:
 21 Q. So, the 2016 decision between Fortis Energy
 22 Inc., the application for its common equity
 23 component and return on equity, is
 24 Information Item number 26.
 25 COFFEY, KC:

Page 204

1 Q. I’m sorry, number –
 2 MR. O'BRIEN:
 3 Q. 26.
 4 MS. PHILPOTT:
 5 Q. 26.
 6 COFFEY, KC:
 7 Q. 26? Thank you.
 8 MR. O'BRIEN:
 9 Q. Dr. Booth, did you give testimony in this
 10 particular matter?
 11 DR. BOOTH:
 12 A. I think so, yes.
 13 MR. O'BRIEN:
 14 Q. Okay. And I’m going to ask if we can scroll
 15 to page 71.
 16 MS. PHILPOTT:
 17 Q. Sorry, my apologies, it should actually be
 18 Information Item number 25.
 19 MR. O'BRIEN:
 20 Q. 25, sorry. Thanks.
 21 MS. PHILPOTT:
 22 Q. Got ahead of myself.
 23 MR. O'BRIEN:
 24 Q. And if we scroll down, and this is the
 25

Page 205

1 Commission's determination with respect to
 2 betas. I think right down near the bottom
 3 of the page there's a comment there, and
 4 you'd indicated already that you look at
 5 Commission decisions and consider them and
 6 how they've ruled in your evidence that was
 7 given, and even make adjustments going
 8 forward. The Commission says it does not
 9 accept it should rely solely on Dr. Booth's
 10 judgment without stronger empirical
 11 corroborating evidence to support his beta
 12 judgments. Accordingly, the Panel finds it
 13 can place only limited weight on Dr. Booth's
 14 beta estimates. Did you have cause to
 15 review this particular decision after it
 16 came out?
 17 DR. BOOTH:
 18 A. Yes, and I now look at beta adjustments
 19 specifically to address this.
 20 MR. O'BRIEN:
 21 Q. Okay.
 22 DR. BOOTH:
 23 A. There was no beta adjustment in the 2016. I
 24 relied upon the work that I referenced,
 25

Page 206

1 which was the only empirical work that was
 2 there. Since then there's the Thomadakis
 3 paper that looks at beta adjustment for US
 4 utilities, and since then I've resurrected
 5 the work I did in--my colleague and I did in
 6 2001 before the NEB, and I've looked to the
 7 beta adjustment for electric utilities in
 8 the United States. So, as I said, I look at
 9 it and I say, wow, I obviously didn't do a
 10 good job there. I'm going to have to do
 11 some work on beta adjustment techniques, and
 12 I did that.
 13 MR. O'BRIEN:
 14 Q. And in that particular hearing was your
 15 assessment similar, .45 to .55? Would that
 16 have been your assessment?
 17 DR. BOOTH:
 18 A. Probably, because the estimate of the grand
 19 mean was about .52, so that would probably
 20 be--would have been my estimate.
 21 MR. O'BRIEN:
 22 Q. Yes, and I recall that coming out of the
 23 last hearing. .52 I think is what your
 24 evidence said, so that would make sense.
 25

Page 207

1 So, since that point in time, and in this
 2 particular hearing we've got a different
 3 beta assessment--you've got .5 to .6 in this
 4 one.
 5 DR. BOOTH:
 6 A. That's correct.
 7 MR. O'BRIEN:
 8 Q. And how much of that is based on your
 9 estimates, and how much is based on market
 10 data? How much is based on an
 11 interpretation of the two?
 12 DR. BOOTH:
 13 A. I'd say the--well, I don't--I'd have to go
 14 back to what I did in the BCUC, but I don't
 15 think I used only public market betas that I
 16 do now. I'm almost certain I didn't.
 17 That's something that I've tried to
 18 emphasize. And also to be fair in response
 19 to other witnesses, I estimate my betas, but
 20 I now have RBC betas, and I have all these
 21 other betas, so that the judgment component
 22 is--I mean, when I say judgment I mean the
 23 betas are the betas, are what they are.
 24 They're empirical estimates. I use the same
 25

Page 208

1 software to develop those betas as Bloomberg
 2 or anybody else. So, that's what the data
 3 shows. I have come up from Nord .45 to Nord
 4 .55, to Nord .5 to Nord .6. So, there has
 5 been an increase in my beta estimates.
 6 They're still not adjusted because I can't
 7 find any evidence whatsoever for a beta
 8 adjustment towards 1, but I still do think
 9 we should adjust beta estimates based upon
 10 judgment.
 11 MR. O'BRIEN:
 12 Q. Your estimates are significantly below the
 13 raw data presented by Mr. Coyne and
 14 Concentric.
 15 DR. BOOTH:
 16 A. That I don't understand because what Mr.
 17 Coyne is saying is not just that Booth uses
 18 judgment, which I don't, but his estimates
 19 are too low. The Royal Bank of Canada's
 20 estimates are too low. CFRA's estimates
 21 are too low. The Globe and Mail's estimates
 22 are too low, and Yahoo, S&P's estimates are
 23 too low. So, it's like everybody else is
 24 too low, but leave my betas.
 25

Page 209

1 Mr. Coyne hasn't provided, as far as I
 2 can see, apart from the beta, the adjusted
 3 betas, any corroborating evidence for his
 4 betas. I do note that he tends to use
 5 weekly betas, and I present evidence--and
 6 again, the only published research on this
 7 area that there's a time horizon over which
 8 you estimate the betas reduces, so instead
 9 of monthly they use weekly. then the
 10 estimates for thinly traded stocks go down,
 11 and for thickly traded stocks go up, and the
 12 reason for that is straightforward. Thinly
 13 traded stocks don't trade, and if they don't
 14 trade, the prices stay exactly the same.
 15 So, the estimate of their volatility goes
 16 down so they look less risky, where thickly
 17 traded stocks, they trade all the time, and
 18 you got all this information about what's
 19 going on.
 20 So, since they have to add up to 1, it
 21 means the thickly traded stocks, the beta
 22 estimates, are over-estimated. So, that is
 23 empirical evidence. I don't use weekly
 24 betas because everybody in academia has
 25

Page 210

1 access to the same data tapes, and for the
 2 last 30 or 40 years we've used the Center
 3 for Research and Security Prices which has
 4 monthly beta on stock prices and returns.
 5 Mr. Coyne uses Bloomberg, but these
 6 series weren't available 10, 20, years ago.
 7 A lot of the data that's available now
 8 simply wasn't available when I started
 9 testifying, and he uses weekly beta, weekly
 10 beta. I mean, this has been an issue before
 11 the Alberta Utilities Commission. Why is
 12 Mr. Coyne's beta estimates so high. One is
 13 because their adjustments are regarded as
 14 inappropriate. The other is because he uses
 15 weekly betas and not monthly betas. And if
 16 you use six monthly betas, i.e. betas that
 17 are estimated over six monthly periods,
 18 they've been even lower because the
 19 frequency with which you estimate the beta
 20 has an impact on the value that you get out
 21 of them, and it's not an accident, and most
 22 of the utility witnesses have gone to weekly
 23 betas, and almost all academics continue to
 24 use monthly data.
 25

Page 211

1 MR. O'BRIEN:
 2 Q. Okay. So, back to--my question really is
 3 more along the lines of--I'm trying to get a
 4 sense of what you've done since 2016 to
 5 change your approach here, and have you
 6 looked at more data? Have you exercised
 7 more judgment to suggest that, okay, I need
 8 to increase my data estimates? Just sort of
 9 how do you get from the .45 to the .5?
 10 DR. BOOTH:
 11 A. I've been criticized.
 12 MR. O'BRIEN:
 13 Q. It's not a big jump.
 14 DR. BOOTH:
 15 A. Yeah, I know. It's a tiny jump.
 16 MR. O'BRIEN:
 17 Q. A tiny jump.
 18 DR. BOOTH:
 19 A. In fact -
 20 MR. O'BRIEN:
 21 Q. Yes, tiny jump.
 22 DR. BOOTH:
 23 A. Mr. Coyne usually criticizes me. He's been
 24 at 7.5 for the last 10 years, and now I'm
 25

Page 212

1 being criticized by going up 20 basis
 2 points. But I have increased--I've
 3 decreased the reliance on my own estimates,
 4 and increased reliance on public market
 5 data. Why? Because when I started out
 6 doing this there was no public data on
 7 betas. There were no estimates on the
 8 market risk premium, you had to do it
 9 yourself, and I did it myself, and I
 10 continue to do it myself, but I've added a
 11 lot, a large amount of external estimates,
 12 and low and behold, if we all do the same
 13 thing on the same day that we should end up
 14 with the same results, and by and large, the
 15 external data gives exactly the same
 16 results.
 17 MR. O'BRIEN:
 18 Q. So, the Bloomberg data that Mr. Coyne uses
 19 has raw data up close to .8 sort of range
 20 and higher in some cases for Canadian, US,
 21 and North America? That's the raw data?
 22 DR. BOOTH:
 23 A. As of what time period and what estimation -
 24 MR. O'BRIEN:
 25

Page 213

1 Q. In the last five years.
 2 DR. BOOTH:
 3 A. I cannot understand that because it's--well,
 4 I can understand it in the sense that the
 5 Bloomberg data -
 6 MR. O'BRIEN:
 7 Q. (Unintelligible)?
 8 DR. BOOTH:
 9 A. It just looks at price changes. They don't
 10 look at dividends, and when you include
 11 dividends, as you do, for the overall rate
 12 of return, that tends to moderate the beta
 13 estimates; whereas Bloomberg I know uses
 14 price changes. It says so on their webpage.
 15 But I can't understand, if that is correct,
 16 and I haven't looked at Bloomberg, and I
 17 don't have a Bloomberg, I do not understand
 18 why those estimates are so different from
 19 public market beta estimates. And as I
 20 said, you can check Bloomberg betas on the
 21 internet and you can find out how they do—
 22 estimate their betas, and they report both
 23 Bloom adjusted betas, and they report
 24 unadjusted raw betas. I cannot understand
 25

Page 214

1 how their estimates disagree from all the
 2 other public market -
 3 MR. O'BRIEN:
 4 Q. Now, Mr. Coyne has shown adjusted and
 5 unadjusted, so raw and adjusted, in his
 6 report, in Concentric's report.
 7 DR. BOOTH:
 8 A. Okay. Well, the public market -
 9 MR. O'BRIEN:
 10 Q. They're shown.
 11 DR. BOOTH:
 12 A. The unadjusted -
 13 MR. O'BRIEN:
 14 Q. And he adjusted--and there's a narrow range
 15 between the two I'm going to suggest to you
 16 now, more so than there was before.
 17 DR. BOOTH:
 18 A. Well, look, that's true. If there's a
 19 narrow range, by definition they have to be
 20 a lot closer. I mean because otherwise the
 21 difference in the--the point of adjusting
 22 them is because there's a big difference, so
 23 the range should get--I mean, look if the
 24 beta was equal to 1, the adjusted beta is
 25

Page 215

1 also 1, because you're adjusting towards 1.
 2 So, the higher the beta by definition the
 3 range is going to get smaller.
 4 MR. O'BRIEN:
 5 Q. But even the raw data is closer to 1.
 6 (1:15 p.m.)
 7 DR. BOOTH:
 8 A. Yeah, I don't understand that to be
 9 absolutely honest because it's not--it's not
 10 consistent with the data in the Centre for
 11 Research and Security Prices. It's not
 12 consistent with the data in the Toronto
 13 Stock Exchange database. It's not
 14 consistent with all of the betas produced by
 15 independent authorities. So, it has to be
 16 that they use weekly betas, estimated the
 17 data, and you use the short time period, and
 18 probably the short time period is you're
 19 saying that whatever happens in that short
 20 time period is going to happen in the
 21 future. So, it would have to be covering
 22 the period of the last 36--the last three
 23 years if you're using three year weekly
 24 betas, and then you must then be assuming
 25

Page 216

1 that whatever happened in the last three
 2 years, or from--I think somewhere uses
 3 January 2020, is going to repeat in the
 4 future, which means--which means that you're
 5 COVID and the rising interest rate period
 6 over the last 18 months is going to happen
 7 again in the future.
 8 MR. O'BRIEN:
 9 Q. So, that's your assumption?
 10 DR. BOOTH:
 11 A. No, I'd say that is--that is not my
 12 assumption, that's what it is.
 13 MR. O'BRIEN:
 14 Q. You just said you haven't looked at it.
 15 DR. BOOTH:
 16 A. No, no. Look, if you estimate the data--all
 17 you do when you estimate is you look at the
 18 data and you estimate a beta. If you
 19 estimate that beta over the last three
 20 years, and you say that is the latest beta,
 21 I'm going to use that going forward, you are
 22 saying that the experience over the last
 23 three years is going to be repeated in the
 24 future. That is your estimate. And if Mr.
 25

Page 217

1 Coyne had done that in 2021, and we got
 2 negative betas, he would have said that's
 3 the current beta, I'm going to use that
 4 beta. I would have said that's nonsense.
 5 You have to look at the time period over
 6 which the betas are estimated.
 7 It's like somebody saying well, today
 8 is a hot day in Newfoundland. Suppose you
 9 estimated the weather, the temperature, over
 10 the last three days in Newfoundland and
 11 said, well, 24 degrees, 25 degrees. I'm
 12 going to assume it's going to be 24, 25,
 13 degrees for the rest of the summer. That's
 14 the data. That is what you're doing.
 15 You're estimating--you're looking at the
 16 data and saying I'm assuming that's going to
 17 continue in the future, and that's not my
 18 estimate, that's what the data says.
 19 Well, by using a short time period you
 20 are making an assumption, and I wouldn't say
 21 the temperature in Newfoundland and St.
 22 John's is going to be 24 degrees for the
 23 rest of the summer. I'm told it's
 24 ridiculously high at the moment. You
 25

Page 218

1 basically say, well, I'm going to ignore
 2 that, I'm going to adjust my forecast for
 3 the last three days, and that's where we get
 4 to betas. It's actually no different from
 5 looking at anything else. It's a question
 6 of whether you think the sample data that
 7 you estimate something on is reasonable for
 8 the forecast test period. And if you think
 9 the last five years of COVID, and the
 10 massive government borrowing, and the rise
 11 in interest rates, is going to be repeated
 12 in the future, I think I'd retire because I
 13 don't like that scenario, and I don't think
 14 for one minute that's going to be repeated.
 15 MR. O'BRIEN:
 16 Q. We talked earlier about how everything was
 17 up and down, and up and down, and you seem
 18 to think everything was all on the line.
 19 So, why isn't--aren't these things going to
 20 happen?
 21 DR. BOOTH:
 22 A. Well, if Mr. Coyne thinks we're going to get
 23 COVID I think I don't want to stay in my
 24 house but -
 25

Page 219

1 MR. O'BRIEN:
 2 Q. (Unintelligible).
 3 DR. BOOTH:
 4 A. - I'm not doing anything for two years thank
 5 you.
 6 MR. O'BRIEN:
 7 Q. I'm saying Bloom and Value think--Bloomberg
 8 and Value think this. That's what their
 9 betas are.
 10 DR. BOOTH:
 11 A. No, no, they don't -
 12 MR. O'BRIEN:
 13 Q. The raw data is closer to 1 than it is to
 14 .52, your grand mean.
 15 DR. BOOTH:
 16 A. They are producing an estimate.
 17 MR. O'BRIEN:
 18 Q. Yes.
 19 DR. BOOTH:
 20 A. And I can't understand the estimate, except
 21 for the fact it must be a short-term
 22 estimate based upon the last few years data,
 23 because otherwise it's substantial deviation
 24 from everything else that's out there in the
 25

Page 220

1 market, and as I said, we don't want the
 2 latest beta, we want an estimate of what is
 3 the risk of this utility relative to the
 4 stock market going forward.
 5 MR. O'BRIEN:
 6 Q. So, the betas presented by Concentric are
 7 similar to those adjusted betas presented in
 8 the BCUC case in 2023, is that correct?
 9 You've reviewed that case.
 10 DR. BOOTH:
 11 A. No, I haven't reviewed that case. I wasn't
 12 involved with that case.
 13 MR. O'BRIEN:
 14 Q. Okay. And it was given to you, I think, as-
 15 -well, it might have been given to all
 16 counsel. I'm not certain you would have
 17 seen it, but I can suggest to you that they
 18 were accepted adjusted beta, the Bloom and--
 19 Bloom and Value adjusted betas were accepted
 20 by the BCUC. Do you have any reason to
 21 disagree with me on that?
 22 DR. BOOTH:
 23 A. No. I can take you to Mr. Coyne's rebuttal
 24 evidence if I can find it. Where is it?
 25

Page 221

1 Because he has a direct quote in the BCUC
 2 which I thought was--it was quite relevant.
 3 Well, it's here somewhere, Mr. O'Brien.
 4 I'll find it sooner or later, but it's a
 5 direct quote from the BC Utilities
 6 Commission, and I'll remind you that the
 7 only witnesses presenting evidence before
 8 the BCUC were American witnesses, and why
 9 they would do that I have no idea, but--and
 10 American witnesses brought in what they do
 11 in the United States, where I'd absolutely
 12 agree with Mr. Coyne that used adjusted
 13 betas.
 14 MR. O'BRIEN:
 15 Q. So, do you consider the BCUC -
 16 DR. BOOTH:
 17 A. Hold on now. I will find the exactly quote.
 18 MR. O'BRIEN:
 19 Q. I thought you did agree with that.
 20 DR. BOOTH:
 21 A. No, no, no. Look, I agree he said that, but
 22 when I read the quote it was like, oh my,
 23 God, what else could we do. The only
 24 evidence before us is these betas. Nobody
 25

Page 222

1 disagreed with him, so we're forced to
 2 accept them. And as I said, it's a question
 3 of the evidentiary basis put before the
 4 Commission.
 5 CHAIR:
 6 Q. Excuse me. Mr. O'Brien, while the witness
 7 is trying to find the information, do you
 8 want to just talk about like how much time
 9 you'll require and we can figure out
 10 somewhat of a plan?
 11 MR. O'BRIEN:
 12 Q. Sure. I'm guessing I might be 45 minutes
 13 tomorrow.
 14 GREENE, KC:
 15 Q. Page 30, Dr. Booth. You can read it while
 16 they're -
 17 DR. BOOTH:
 18 A. Actually, that's exactly what I was looking
 19 for, yes.
 20 MR. O'BRIEN:
 21 Q. Maybe 30 to 45 minutes I would think.
 22 GREENE, KC:
 23 Q. And I will have some questions for Dr. Booth
 24 as well, but not too many.
 25

Page 223

1 SIMMONS, KC:
 2 Q. And, Mr. Chair, at present I don't have any
 3 questions for Dr. Booth.
 4 CHAIR:
 5 Q. Do you want to talk about--do you want to
 6 proceed for a little while longer, or do you
 7 want to hold off until tomorrow?
 8 MR. O'BRIEN:
 9 Q. And I hate to say this, but my daughter's
 10 cap and gown is at 2:30, so her graduation
 11 is this afternoon, so I'm not certain I can
 12 go much longer than the 1:30.
 13 CHAIR:
 14 Q. Sounds -
 15 GREENE, KC:
 16 Q. And in any event, if Mr. O'Brien is going to
 17 be up to 45 minutes and I'm--we'll be over
 18 an hour anyway.
 19 MR. O'BRIEN:
 20 Q. Yes.
 21 CHAIR:
 22 Q. Okay. Thank you. Thank you, Dr. Booth.
 23 MR. O'BRIEN:
 24 Q. Did you find the quote?
 25

Page 224

1 DR. BOOTH:
 2 A. Yes, I did.
 3 MR. O'BRIEN:
 4 Q. Okay.
 5 DR. BOOTH:
 6 A. And it's on page 30, and this is from the
 7 decision. "The Panel notes Mr. Coyne's
 8 explanation that Dr. Blume, founder, is
 9 estimates are applicable to all betas," and
 10 I'm going to read this quickly because it's
 11 on the record. "Ranges of below .5 to a
 12 high of 1.5, and in Mr. Coyne's view there
 13 is no reason to expect the regulated
 14 utilities would be an exception to this
 15 rule." No reason in Mr. Coyne's--he didn't
 16 provide any evidence whatsoever that
 17 utilities satisfied that. He just said that
 18 low risk companies were in the sample that
 19 Bloom used, and I don't have a problem with
 20 that.
 21 "Given the views of the two experts in
 22 this proceeding, both of them American, both
 23 of them using--and since none of the parties
 24 object to Mr. Coyne's use of Bloom adjusted
 25

Page 225

1 beta, the Panel accepts the expert's
 2 recommendation to use Bloom adjusted betas."
 3 The Panel has no choice.
 4 MR. O'BRIEN:
 5 Q. You're saying that a competent tribunal of
 6 competent jurisdiction, like the BCUC, has
 7 no choice? Is that your suggestion?
 8 DR. BOOTH:
 9 A. No. I would say that my experience has been
 10 that the panel, every panel, makes a
 11 decision based upon the evidentiary basis
 12 put before them, and the evidentiary basis
 13 put before the BCUC was from two witnesses,
 14 both of whom apparently used adjusted betas.
 15 MR. O'BRIEN:
 16 Q. Do you know whether the BCUC had actually
 17 rejected using adjusted betas previously?
 18 DR. BOOTH:
 19 A. I think it looks at all the data from--the
 20 BCUC looked at all the betas in the past and
 21 then forms its assessment. So -
 22 MR. O'BRIEN:
 23 Q. I think they rejected those adjusted betas
 24 in the past, and actually had made a change
 25

Page 226

1 in approach in this case.
 2 DR. BOOTH:
 3 A. I think it said something--well, we go back
 4 to the 2016 case, but I think it said that
 5 Dr. Booth's adjustments to the grand mean of
 6 the betas--and it wasn't my adjustment.
 7 This is the--this is quoted in the academic
 8 journals, they didn't accept. Now, why they
 9 reject an evidentiary basis specific to
 10 utilities, while evidentiary basis that's
 11 not specific to utilities, I'll leave in the
 12 minds of the BCUC, it's their decision.
 13 MR. O'BRIEN:
 14 Q. They would exercise regulatory judgment and
 15 make a decision on the basis of what's
 16 before them.
 17 DR. BOOTH:
 18 A. That's right, but they can't change
 19 financial theory I'm afraid, Mr. O'Brien, or
 20 they can't change -
 21 MR. O'BRIEN:
 22 Q. I'm not suggesting -
 23 DR. BOOTH:
 24 A. They can't financial data, and I have now
 25

Page 227

1 substantially increased my coverage of
 2 adjusted betas. This was never an issue in
 3 Canada because we never accepted adjusted
 4 betas until American witnesses came in. And
 5 now I'm providing evidence that there's no
 6 evidence whatsoever the electric utility
 7 beta adjust towards 1, none, absolutely
 8 none. And I've never, ever, seen, even a
 9 utility witness, put in evidence to show
 10 that utility betas adjust towards 1. They
 11 just say, oh, no, Bloom--this is a Bloom
 12 adjustment, and the Bloom adjustment was not
 13 anything to do with utilities.
 14 MR. O'BRIEN:
 15 Q. Just a last couple of questions on the CAPM
 16 model. So, your results from that model,
 17 you come up with a 7.05 to 7.9 range, I
 18 think, and a midpoint of 7.45. Does that
 19 sound right to you?
 20 DR. BOOTH:
 21 A. What was--when?
 22 MR. O'BRIEN:
 23 Q. Your CAPM model comes up with that range, a
 24 mid range of 7.45, and then you add the
 25

Page 228

1 spread to it, a credit spread of .23. So,
 2 you come up with -
 3 DR. BOOTH:
 4 A. Yeah, okay.
 5 MR. O'BRIEN:
 6 Q. Do you know what I'm saying?
 7 DR. BOOTH:
 8 A. If you -
 9 MR. O'BRIEN:
 10 Q. I'm just doing the math there, but I think
 11 that's what -
 12 DR. BOOTH:
 13 A. But if we flash up what I actually do, then
 14 it might help the Board.
 15 MR. O'BRIEN:
 16 Q. I'm not certain. I don't have a note here
 17 as to where that is. I guess my question is
 18 actually more along that credit spread, the
 19 point .23 basis point credit spread that you
 20 add to your mean. Can you explain just
 21 where that spread comes from, that .23, how
 22 you come up with that figure?
 23 DR. BOOTH:
 24 A. It's 50 percent of the adjustment of the
 25

Page 229

1 spread between utility A bonds and the
 2 Government of Canada bond rate. So, that's
 3 the--right. So, that spread before the
 4 financial crisis was typically 100 basis
 5 points. And when we first looked at this,
 6 Ms. McShane, the witness for Newfoundland
 7 Power, in a hearing in Gazifere used an
 8 adjustment of 100 basis points for the
 9 credit spread before the financial crisis
 10 and then looked at the current credit spread
 11 to reflect--to make the capital more
 12 sensitive to capital market conditions. And
 13 just about everybody, as far as I'm aware,
 14 has agreed that since 2009 that the fair
 15 ROE, if you make a 50 percent adjustment,
 16 .5, times the change in the credit spread
 17 from 1 percent, and that's what we were
 18 using back in 2011, that would make the
 19 capital market, the CAPM, a little bit more
 20 sensitive to capital market conditions.
 21 So, in the height of the financial
 22 crisis, that spread--I forget how big it
 23 was, but it was huge, but supposed it was
 24 200 basis points, because the markets were
 25

Page 230

1 in freefall and people were just selling A
 2 rated bonds. So, if the spread was 2
 3 percent, normally it's 1 percent, then we
 4 got an indicator of actual current
 5 conditions in the capital market, and the
 6 recommendation was to say the .5 adjustment
 7 of that change in the credit spread. So, if
 8 your credit spread is adjusted by 1 percent
 9 you add 50 basis points, .5 times 1 percent.
 10 And that was sort of commonly accepted
 11 across the board.
 12 I can't remember whether this Board
 13 accepted or used that credit, but certainly
 14 the Regis did, the Ontario Energy Board did,
 15 the Alberta Utilities Commission did, the
 16 BCUC Commission did, just to make the CAPM a
 17 little bit more sensitive to market
 18 conditions, and to remove the impact that we
 19 had in 2008/2009, remember this flight to
 20 quality and ROE tied to long-term Canada
 21 bond went down, whereas at the same time the
 22 borrowing cost for the utility went up,
 23 which people regarded as—and I would regard
 24 it as anomalous. It was temporary. It
 25

Page 231

1 didn't last very long, but we included that
 2 spread adjustment, and the first people to
 3 use it I think was the Ontario Energy Board,
 4 and it increased the ROE if they had it in
 5 2009 to remove the problem of this A bond
 6 cost going up, ROE going down, and since
 7 then--I mean, the OEB still uses it.
 8 Everybody as far as I'm aware uses it.
 9 MR. O'BRIEN:
 10 Q. Is that something that came out of the NEB
 11 formula, that 50 percent?
 12 DR. BOOTH:
 13 A. No, before--the NEB formula was working
 14 until 2008, the financial crisis, and it was
 15 dumped--they used the ATWACC, A-T-W-A-C-C,
 16 and then they dropped it, and now the NEB,
 17 for all pipe clients, there are settlements
 18 because you're dealing with a smaller number
 19 of shippers and the pipelines, and they
 20 negotiated an agreement.
 21 MR. O'BRIEN:
 22 Q. And is there any personal sort of judgment
 23 as to what percentage to use there, or is
 24 that something everybody uses?
 25

Page 232

1 DR. BOOTH:
 2 A. I answered evidence that the Bank of Canada
 3 estimated the credit spread as being worthy
 4 of a 37 percent adjustment, and that's the
 5 only evidence I've seen for that adjustment,
 6 and because when you look at an A bond yield
 7 it's risky. It's risky for the Government
 8 of Canada. You got default risk. But it's
 9 also less liquid than the Government of
 10 Canada bond yield.
 11 So, when we look at the A bond yield we
 12 have to extract the liquidity impact and the
 13 default impact, and those are the two
 14 components, the main components, to get into
 15 the credit spread. And when you look at
 16 those two, liquidity doesn't affect the
 17 equity market. In times of financial
 18 crisis, liquidity in the bond market goes
 19 down, but liquidity in the equity market
 20 goes up. There's a huge increase in
 21 volumes. People trade shares.
 22 So, the problem the Bank of Canada
 23 researchers had that looked at this was
 24 trying to extract the liquidity component
 25

Page 233

1 from the default component in the credit
 2 spread, and their analysis showed it should
 3 be a .37 adjustment.
 4 The first time this came up I said
 5 well, the only evidence we got on the record
 6 is research by the Bank of Canada. It
 7 should be a 37 percent adjustment to the
 8 change in the credit spread, but we all
 9 sort--37 percent is a funny number. We
 10 actually--everyone agreed with 50 percent,
 11 mainly because the Ontario Energy Board, I
 12 think, used 50 percent.
 13 So, the 50 percent is a judgment call.
 14 It's not my judgment call. I wasn't
 15 particularly favourable to a credit spread
 16 adjustment because it should even out over
 17 the business cycle, but I have no problem
 18 with using a credit spread adjustment
 19 because it does make the ROE a little bit
 20 more sensitive to capital market conditions,
 21 and I discussed that in Appendix E in
 22 detail.
 23 MR. O'BRIEN:
 24 Q. I think –
 25

Page 235

CERTIFICATE

I, Judy Moss, hereby certify that the foregoing is a true and correct transcript of hearing in the matter of Newfoundland Power Inc. 2025-2026 General Rate Application heard on June 20th, 2024 before the Newfoundland and Labrador Board of Commissioners of Public Utilities, 120 Torbay Road, 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, Newfoundland and Labrador this 20th day of June, 2024

Judy Moss

Page 234

1 CHAIR:
 2 Q. Do you want to conclude now for today?
 3 MR. O'BRIEN:
 4 Q. We can conclude for today, Mr. Chair.
 5 CHAIR:
 6 Q. See you in the morning, everybody.
 7 Upon conclusion at 1:33 p.m.
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25

| A | | | | |
|---|--|--|---|--|
| <p>Abandoned - 121:2</p> <p>Ability - 54:8, 91:14, 91:16, 98:14, 108:8, 132:12, 133:12</p> <p>Able - 2:23, 72:15, 73:8, 76:21, 114:10</p> <p>Above - 51:17, 89:12, 122:4, 126:8, 143:6, 145:14, 146:24, 181:22, 195:25</p> <p>Absolute - 178:20</p> <p>Absorb - 129:15, 129:16</p> <p>Academia - 209:24</p> <p>Academic - 6:20, 124:22, 125:7, 125:9, 125:12, 126:19, 127:10, 127:11, 131:20, 226:7</p> <p>Academically - 8:1</p> <p>Academics - 8:15, 171:6, 210:23</p> <p>Accept - 16:14, 43:2, 43:11, 67:11, 67:24, 68:25, 72:10, 74:16, 74:23, 113:10, 124:17, 205:9, 222:2, 226:8</p> <p>Acceptable - 72:12</p> <p>Accepted - 2:11, 33:17, 33:19, 120:25, 138:11, 138:12, 160:11, 160:15, 164:25, 167:13, 182:8, 220:18, 220:19, 227:3, 230:10, 230:13</p> <p>Accepts - 225:1</p> <p>Access - 4:6, 210:1</p> <p>Accessing - 4:4, 10:2, 71:12</p> <p>Accident - 181:2, 210:21</p> <p>According - 43:5</p> <p>Accordingly - 205:12</p> <p>Account - 81:4, 85:20, 85:24, 108:16, 113:21, 142:6, 142:14,</p> | <p>149:5, 162:12, 162:13, 163:13, 164:7, 194:1</p> <p>Accounting - 31:15</p> <p>Accounts - 84:22, 84:23, 97:23, 116:15, 163:5</p> <p>Accurate - 61:21, 62:8, 63:9</p> <p>Accurately - 108:7</p> <p>Across - 10:7, 104:6, 114:4, 123:4, 123:5, 123:7, 123:22, 156:7, 167:8, 196:25, 230:11</p> <p>Action - 150:4, 150:5, 151:14, 154:11, 155:15</p> <p>Actions - 181:20</p> <p>Actual - 41:15, 97:17, 118:24, 122:22, 133:21, 142:25, 174:12, 187:11, 202:4, 230:4</p> <p>Add - 39:12, 41:4, 41:19, 122:10, 129:12, 209:20, 227:24, 228:20, 230:9</p> <p>Added - 47:4, 181:14, 182:19, 212:10</p> <p>Adding - 32:6, 186:8, 186:13</p> <p>Addition - 94:11, 108:20</p> <p>Address - 71:24, 205:19</p> <p>Addressing - 150:16</p> <p>Adds - 34:12</p> <p>Adjust - 19:3, 19:13, 28:2, 28:7, 28:14, 28:17, 28:23, 137:15, 140:8, 179:10, 198:16, 198:25, 200:4, 200:6, 200:7, 200:22, 201:2, 201:6, 208:9, 218:2, 227:7, 227:10</p> <p>Adjusted - 12:23, 19:12, 19:13, 20:7,</p> | <p>20:23, 26:14, 29:19, 30:2, 30:4, 30:12, 47:12, 136:11, 208:6, 209:2, 213:23, 214:4, 214:5, 214:14, 214:24, 220:7, 220:18, 220:19, 221:12, 224:24, 225:2, 225:14, 225:17, 225:23, 227:2, 227:3, 230:8</p> <p>Adjusting - 4:9, 27:3, 29:7, 45:16, 199:2, 214:21, 215:1</p> <p>Adjustment - 17:6, 17:7, 26:11, 26:25, 27:8, 27:9, 29:1, 29:11, 29:14, 30:16, 33:19, 33:25, 34:1, 34:11, 36:14, 44:18, 44:19, 44:22, 44:23, 47:5, 48:24, 49:7, 49:18, 49:23, 53:2, 53:12, 54:19, 140:9, 191:5, 198:17, 199:8, 199:19, 199:20, 199:22, 200:5, 200:9, 200:24, 201:3, 201:18, 202:7, 202:23, 203:6, 205:23, 206:3, 206:7, 206:11, 208:8, 226:6, 227:12, 228:24, 229:8, 229:15, 230:6, 231:2, 232:4, 232:5, 233:3, 233:7, 233:16, 233:18</p> <p>Adjustments - 56:5, 160:17, 166:15, 167:16, 205:7, 205:18, 210:13, 226:5</p> <p>Admit - 39:14, 134:17, 141:20</p> <p>Adopt - 20:24, 145:17</p> <p>Advantages - 49:3</p> <p>Advice - 14:5, 14:10, 189:14, 191:5</p> | <p>Advise - 15:4, 175:10</p> <p>Advising - 41:16</p> <p>Advocate - 50:15, 50:16, 51:9, 96:11, 135:21</p> <p>Affect - 79:19, 79:21, 98:13, 130:22, 232:16</p> <p>Affected - 19:24, 134:13, 177:19</p> <p>Affects - 132:8, 187:17</p> <p>Affirmed - 45:17, 45:18</p> <p>Afraid - 56:9, 89:4, 226:19</p> <p>Afternoon - 223:11</p> <p>Against - 25:9, 150:4, 151:15, 202:10</p> <p>Age - 30:11, 60:4</p> <p>Agencies - 96:8, 112:1, 132:8, 134:17</p> <p>Agencies' - 132:5</p> <p>Agency - 112:6, 112:22</p> <p>Agenda - 104:18</p> <p>Agree - 36:24, 50:25, 60:8, 70:17, 76:11, 77:11, 79:11, 83:4, 86:14, 111:23, 112:3, 113:5, 113:20, 114:20, 114:22, 115:3, 120:13, 121:17, 121:19, 124:13, 139:20, 149:14, 149:16, 151:5, 157:7, 163:21, 164:17, 164:24, 167:23, 168:25, 169:11, 169:13, 173:18, 221:12, 221:19, 221:21</p> <p>Agreed - 50:21, 77:19, 78:8, 78:15, 135:16, 229:14, 233:10</p> <p>Agreement - 77:18, 78:17, 231:20</p> <p>Ah - 184:15, 184:16, 193:19, 200:20, 200:25</p> <p>Ahead - 2:25, 204:22</p> | <p>Aid - 203:10</p> <p>Air - 39:21</p> <p>Alberta - 42:12, 43:5, 43:8, 44:3, 44:10, 44:13, 47:10, 48:24, 49:2, 54:6, 54:19, 67:2, 71:2, 90:16, 104:4, 123:14, 134:4, 134:6, 210:11, 230:15</p> <p>Alberta's - 43:15</p> <p>Allow - 34:10, 82:23, 86:3, 137:6, 144:24, 154:8</p> <p>Allowance - 86:4</p> <p>Allowed - 22:4, 32:17, 34:10, 43:24, 44:10, 53:13, 53:20, 54:9, 67:20, 71:9, 71:15, 78:22, 79:3, 82:21, 89:21, 91:15, 94:2, 94:18, 95:1, 96:14, 97:16, 108:8, 108:9, 112:21, 113:10, 113:22, 113:23, 114:12, 115:6, 120:21, 120:23, 121:4, 129:20, 130:2, 130:10, 132:12, 136:3, 138:3, 138:13, 140:22, 143:14, 144:15, 145:1, 145:2, 145:4, 150:7, 152:17, 153:5, 153:20, 154:4, 162:25, 163:1</p> <p>Allowing - 120:15, 138:10</p> <p>Allows - 4:24, 42:24, 50:10, 154:5</p> <p>Alpha - 18:16</p> <p>Alternative - 98:9, 98:20, 105:15</p> <p>Alternatives - 83:24</p> <p>America - 64:4, 212:21</p> <p>American - 22:10, 22:11, 30:10, 64:2, 64:3, 202:21, 221:8, 221:10, 224:22, 227:4</p> <p>Americans - 23:21,</p> |

| | | | | |
|--|---|---|---|--|
| <p>30:23, 184:11 Among - 125:20 Amongst - 134:23, 137:10 Amount - 105:9, 113:7, 116:16, 143:6, 188:14, 212:11 Analysis - 13:1, 27:21, 31:7, 37:4, 55:3, 91:6, 139:24, 146:2, 233:2 Analyst - 24:19, 37:13, 38:10, 40:13, 40:18, 40:21, 58:13 Analysts - 38:12, 38:14, 38:15, 38:16, 38:17, 38:18, 38:20, 125:8 Analysts' - 39:10 Analyze - 90:8 Announce - 96:7 Announced - 15:2 2 Annoyed - 23:23, 25:21, 126:14, 133:7 Annual - 5:2 Anomalous - 46:10, 230:24 Anticipating - 18:1 0 Anybody's - 75:1 Anymore - 22:16, 35:20, 36:7, 161:3, 185:1, 201:19 Anyway - 132:19, 223:18 Anywhere - 9:25, 114:10 Apologies - 204:17 Apologize - 3:3, 56:10, 65:19, 100:4, 100:6 Apparently - 225:1 4 Appeal - 50:9 Appear - 56:24, 124:5 Appendices - 55:1 1 Appendix - 37:3, 53:8, 55:8, 55:11, 55:12, 136:12, 180:14, 233:21 Applicable - 224:9</p> | <p>Application - 2:1, 50:24, 203:22 Applications - 168:5 Applied - 67:4, 89:23 Apply - 189:9 Applying - 60:13, 186:4 Approach - 76:25, 161:22, 169:19, 182:14, 182:22, 211:5, 226:1 Appropriate - 60:1 3, 60:15, 141:10, 173:6, 189:5, 200:18 Appropriateness - 147:19 Approved - 109:9 Approximately - 1 3:19 Apropos - 124:14 AQR - 14:15, 14:19 Area - 11:11, 12:17, 123:21, 142:10, 174:10, 175:19, 176:4, 176:24, 177:5, 209:7 Areas - 8:22, 14:21, 42:7, 157:1, 172:7, 172:9, 173:9 Aren't - 51:7, 51:8, 218:19 Argue - 11:5, 137:10, 137:13, 138:14 Arguing - 169:5 Argument - 110:2, 139:11 Arithmetic - 8:12 Arrangements - 2: 22 Arrived - 77:18 Art - 169:22, 173:16 Article - 9:10, 23:2 Asian - 3:21 Assess - 143:15, 147:19, 163:2, 198:20, 202:10, 202:20, 202:25 Assessed - 92:14, 101:11, 102:10, 203:12 Assessing - 114:2 3, 164:8</p> | <p>Assessment - 87:1 5, 88:8, 91:12, 92:18, 93:6, 97:2, 102:3, 102:5, 103:18, 103:21, 125:22, 125:24, 128:14, 132:5, 147:2, 169:20, 185:12, 185:13, 185:16, 185:17, 194:2, 202:1, 202:12, 202:13, 202:15, 206:15, 206:16, 207:3, 225:21 Asset - 6:16, 6:19, 7:20, 7:24, 11:21, 27:12, 35:12, 35:13, 41:13, 48:10, 50:23, 56:8, 91:17, 92:6, 100:21, 105:12, 106:9, 106:15, 107:13, 109:22, 131:5, 167:2, 193:20 Assets - 108:13, 110:1 Assistance - 127:4 Association - 172: 23 Assumed - 178:25 Assumption - 216: 9, 216:12, 217:20 Assumptions - 14: 11, 16:18 Aswath - 13:7 Attached - 11:12, 11:13, 34:16, 37:8, 37:10, 39:5, 105:12, 107:13, 193:24 Attempt - 86:8 Attempted - 8:17 Attention - 43:14, 45:20, 52:21, 60:20, 129:1, 130:1, 137:5, 137:25 Attract - 70:23, 72:15, 73:8 Attracting - 72:5 Attraction - 70:10, 70:12, 71:24, 72:7, 72:10, 73:6 ATWACC - 56:6, 81:9, 81:15, 81:17,</p> | <p>231:15 AUC - 42:24, 81:17, 95:17, 124:5, 125:25, 158:22 Audience - 23:22 Author - 12:25 Authorities - 215:1 5 Authority - 178:1 Authorized - 145:1 3, 145:14 Automatic - 33:19, 34:2, 48:23, 49:1, 49:18, 49:22, 51:2, 53:1, 53:11, 54:22 Automatically - 69: 18 Available - 73:24, 166:6, 210:6, 210:7, 210:8 Average - 8:12, 9:11, 9:12, 32:22, 37:23, 37:24, 41:11, 55:13, 87:20, 93:3, 97:3, 97:5, 126:22, 127:16, 200:8 Averaged - 126:13 Avoid - 26:22 Aware - 8:23, 92:24, 127:3, 193:5, 229:13, 231:8</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p>B</p> </div> <p>Back - 2:19, 2:24, 9:12, 9:14, 11:25, 20:6, 23:3, 26:21, 33:18, 37:18, 47:8, 48:23, 49:10, 51:6, 52:3, 53:1, 56:3, 59:3, 59:7, 75:3, 91:16, 97:17, 111:13, 111:18, 112:13, 119:1, 125:15, 126:16, 131:6, 132:16, 133:10, 139:19, 142:1, 144:23, 146:1, 150:24, 154:7, 160:24, 161:20, 163:23, 164:20, 174:5, 179:19, 180:2, 182:15, 189:19, 192:13, 194:16, 197:4, 199:2,</p> | <p>207:14, 211:2, 226:3, 229:18 Backup - 172:7 Badly - 68:24 Balanced - 181:6 Bam - 115:18 Band - 142:14 Bank - 4:7, 4:11, 5:15, 14:24, 14:25, 17:7, 18:6, 18:9, 24:13, 25:5, 46:4, 47:20, 47:24, 48:8, 52:7, 52:11, 52:16, 174:13, 180:10, 181:16, 181:21, 183:14, 183:22, 183:23, 184:1, 200:25, 208:19, 232:2, 232:22, 233:6 Bankers - 14:5 Banking - 46:2 Bankrupt - 20:4, 132:20, 133:5 Banks - 5:24, 12:8, 41:16, 46:3, 51:23, 52:22, 172:13, 177:21, 201:1 Bar - 1:9 Barely - 202:5 Base - 92:1, 103:15, 109:21, 110:8, 116:5, 142:16, 150:13, 178:14 Baseboard - 98:10 Baseboards - 98:2 2 Based - 9:15, 9:16, 35:13, 45:16, 55:23, 77:17, 115:6, 115:11, 129:8, 134:19, 144:8, 148:7, 154:11, 155:15, 158:19, 178:24, 207:8, 207:9, 207:10, 208:9, 219:22, 225:11 Basic - 7:5, 178:23 Basing - 101:22 Basis - 34:12, 34:22, 34:24, 39:12, 41:20, 46:18, 66:12, 101:22, 102:11, 103:9, 115:14,</p> |
|--|---|---|---|--|

| | | | | |
|--|---|--|---|---|
| <p>126:21, 127:16, 136:17, 136:18, 136:19, 137:2, 137:12, 137:16, 144:20, 144:25, 153:13, 154:6, 155:25, 177:25, 182:20, 191:21, 192:25, 212:1, 222:3, 225:11, 225:12, 226:9, 226:10, 226:15, 228:19, 229:4, 229:8, 229:24, 230:9</p> <p>Bayes - 198:18</p> <p>Bayesian - 198:17</p> <p>BBB - 118:8</p> <p>BC - 44:21, 47:10, 105:4, 141:13, 221:5</p> <p>BCE - 23:16</p> <p>BCUC - 19:12, 33:18, 36:16, 44:20, 44:21, 104:23, 182:9, 203:10, 207:14, 220:8, 220:20, 221:1, 221:8, 221:15, 225:6, 225:13, 225:16, 225:20, 226:12, 230:16</p> <p>Bears - 109:21, 115:25</p> <p>Became - 5:18, 18:12, 169:3, 182:16</p> <p>Become - 23:1, 100:20, 104:17, 166:6</p> <p>Becomes - 171:15</p> <p>Behaves - 132:17</p> <p>Behind - 88:19, 89:8, 89:18, 200:15</p> <p>Behold - 25:10, 212:12</p> <p>Beholden - 127:8</p> <p>Believer - 44:19</p> <p>Believes - 146:19</p> <p>Bell - 23:15</p> <p>Belongs - 110:1, 110:3</p> <p>Below - 5:22, 33:3, 33:12, 121:2, 126:7, 126:21, 127:16, 136:21,</p> | <p>146:24, 181:3, 208:12, 224:11</p> <p>Benchmark - 25:3</p> <p>Benchmarked - 25:8</p> <p>Benefit - 16:16, 49:24</p> <p>Benefits - 162:12</p> <p>Benign - 152:11</p> <p>Berkowitz - 199:15, 201:17</p> <p>Beta - 8:14, 17:24, 18:17, 19:4, 19:5, 19:6, 19:7, 20:1, 20:9, 24:5, 24:6, 24:11, 24:14, 24:15, 24:17, 25:3, 25:16, 25:17, 26:11, 26:17, 26:19, 27:1, 27:5, 27:11, 27:17, 27:23, 27:24, 28:4, 28:11, 28:19, 29:19, 30:9, 30:15, 31:11, 31:16, 31:19, 31:24, 34:4, 56:5, 131:13, 159:18, 160:19, 174:23, 176:10, 195:3, 195:4, 197:16, 198:4, 199:7, 199:22, 199:25, 200:5, 200:13, 200:16, 200:18, 200:24, 201:10, 201:18, 202:2, 202:4, 202:7, 202:23, 203:6, 205:11, 205:14, 205:18, 205:23, 206:3, 206:7, 206:11, 207:3, 208:5, 208:7, 208:9, 209:2, 209:21, 210:4, 210:9, 210:10, 210:12, 210:19, 213:12, 213:19, 214:24, 215:2, 216:18, 216:19, 216:20, 217:3, 217:4, 220:2, 220:18, 225:1, 227:7</p> <p>Betas - 8:21, 19:3, 19:10, 19:12, 19:13, 20:5, 20:6, 20:7, 20:23, 21:3, 21:18, 21:20,</p> | <p>21:23, 22:5, 23:10, 24:23, 24:25, 25:9, 25:25, 26:1, 26:13, 26:14, 26:24, 28:13, 29:6, 29:7, 29:10, 29:14, 29:16, 29:21, 29:22, 29:25, 30:1, 30:2, 30:3, 30:4, 30:6, 30:7, 30:12, 30:20, 31:8, 32:1, 32:7, 32:11, 32:19, 32:20, 32:22, 58:25, 130:4, 130:5, 160:22, 172:5, 172:6, 173:25, 174:6, 174:10, 175:25, 192:15, 197:12, 198:4, 198:13, 198:24, 198:25, 199:1, 199:7, 200:6, 201:1, 201:15, 201:24, 203:12, 205:2, 207:15, 207:19, 207:20, 207:21, 207:23, 208:1, 208:24, 209:3, 209:4, 209:5, 209:8, 209:24, 210:15, 210:16, 210:23, 212:7, 213:20, 213:22, 213:23, 213:24, 215:14, 215:16, 215:24, 217:2, 217:6, 218:4, 219:9, 220:6, 220:7, 220:19, 221:13, 221:24, 224:9, 225:2, 225:14, 225:17, 225:20, 225:23, 226:6, 227:2, 227:4, 227:10</p> <p>Bever - 31:8</p> <p>Beware - 75:6</p> <p>Bias - 23:13, 38:10, 39:5, 40:17, 125:7, 157:22, 158:7, 158:11, 158:12, 158:14, 158:17, 160:1, 193:24, 194:3</p> <p>Biased - 38:5, 38:19, 38:25, 39:2,</p> | <p>39:16, 157:16, 158:12, 158:25, 159:5</p> <p>Biases - 12:1, 158:15</p> <p>Big - 30:21, 39:16, 91:23, 100:8, 100:16, 132:19, 167:11, 172:17, 188:14, 193:20, 211:13, 214:22, 229:22</p> <p>Biggest - 15:7, 17:14, 25:5, 33:8, 46:4, 175:19, 176:4</p> <p>Bill - 127:9</p> <p>Billion - 52:8, 108:13, 174:14, 181:12, 181:13, 181:17</p> <p>Bit - 3:6, 4:18, 4:20, 20:13, 42:25, 55:17, 55:19, 56:9, 80:19, 87:1, 87:18, 87:19, 88:17, 105:22, 108:10, 142:23, 157:1, 164:14, 172:11, 192:8, 229:19, 230:17, 233:19</p> <p>Black - 15:7, 15:18, 77:21, 78:2, 79:9</p> <p>Blah - 78:16</p> <p>Blip - 26:7</p> <p>Bloom - 213:23, 219:7, 220:18, 220:19, 224:19, 224:24, 225:2, 227:11, 227:12</p> <p>Bloomberg - 29:13, 29:15, 29:16, 29:25, 30:4, 30:7, 30:9, 208:1, 210:5, 212:18, 213:5, 213:13, 213:16, 213:17, 213:20, 219:7</p> <p>Bloomberg's - 30:6</p> <p>Bluefield - 68:13</p> <p>Blume - 26:16, 27:7, 27:8, 27:20, 28:3, 29:1, 29:11, 29:19, 30:2, 30:16, 199:19, 200:9, 200:12, 201:2, 201:7, 201:8,</p> | <p>201:14, 202:1, 202:24, 224:8</p> <p>Board - 2:21, 7:16, 7:19, 7:21, 10:15, 21:9, 21:10, 21:11, 24:8, 28:3, 33:17, 36:16, 47:10, 49:17, 50:12, 50:14, 51:3, 51:12, 53:3, 53:15, 53:19, 53:23, 54:14, 54:16, 54:23, 54:24, 56:10, 58:6, 58:10, 58:11, 58:12, 59:5, 59:21, 69:13, 70:16, 72:6, 76:24, 80:8, 81:3, 81:9, 85:19, 85:23, 87:9, 88:24, 90:4, 93:1, 93:16, 94:1, 95:6, 95:21, 95:22, 96:3, 101:16, 101:21, 102:10, 102:15, 103:7, 103:15, 103:17, 104:1, 109:4, 109:9, 110:9, 110:15, 110:18, 110:21, 112:12, 112:14, 112:16, 113:9, 114:4, 114:7, 114:11, 115:5, 115:10, 116:3, 116:17, 116:19, 122:9, 124:7, 126:7, 126:9, 127:1, 127:4, 127:23, 129:17, 129:20, 131:5, 131:16, 132:1, 136:23, 138:10, 140:14, 140:17, 140:18, 141:20, 142:1, 143:4, 143:13, 144:14, 145:3, 145:12, 146:13, 146:19, 148:1, 148:24, 149:4, 149:15, 150:1, 151:25, 154:5, 156:1, 160:14, 161:9, 163:2, 164:6, 164:13, 170:24, 175:10, 182:8, 182:12, 187:24, 189:2, 189:7, 196:25, 198:3,</p> |
|--|---|--|---|---|

| | | | | | |
|---|--|---|----------|---|---|
| <p>199:14, 228:14, 230:11, 230:12, 230:14, 231:3, 233:11 Boarder - 10:7 Boards - 86:15, 95:3, 122:24, 124:15, 128:12, 129:7, 182:9 Board's - 93:6, 104:8, 113:19, 113:24, 114:16, 137:5, 137:24, 140:12 Bogged - 42:9 Bond - 3:11, 3:12, 4:5, 4:17, 10:2, 13:14, 14:23, 15:2, 15:16, 15:17, 18:24, 19:1, 33:3, 33:14, 42:17, 43:7, 44:24, 45:13, 46:11, 46:12, 46:16, 47:25, 48:1, 48:9, 48:12, 51:22, 52:15, 70:22, 71:18, 71:21, 74:24, 76:18, 79:11, 80:15, 83:20, 120:24, 132:15, 133:5, 133:9, 133:11, 134:8, 134:12, 134:20, 134:22, 135:2, 166:3, 168:17, 176:8, 176:17, 177:18, 178:19, 178:22, 179:3, 180:4, 180:10, 180:11, 180:16, 180:23, 181:15, 182:17, 183:20, 183:21, 184:2, 184:15, 184:19, 184:20, 185:19, 185:22, 186:6, 186:9, 186:11, 186:24, 197:5, 197:9, 197:10, 229:2, 230:21, 231:5, 232:6, 232:10, 232:11, 232:18 Bonds - 15:15, 16:21, 33:12, 33:22, 36:18, 36:19, 52:9, 52:11,</p> | <p>52:12, 52:17, 79:25, 117:3, 118:8, 118:12, 133:13, 180:9, 180:25, 181:7, 181:9, 181:11, 181:14, 183:13, 183:24, 229:1, 230:2 Bonus - 82:22 Book - 66:19, 67:5, 68:8, 137:14 Booms - 75:12 Booth's - 25:22, 43:11, 66:12, 110:22, 135:22, 205:9, 205:13, 226:5 Bore - 38:10 Borrowing - 46:21, 119:12, 218:10, 230:22 Both - 22:19, 26:23, 77:24, 78:11, 114:20, 136:5, 148:15, 213:22, 224:22, 225:14 Bother - 194:25, 195:3 Bottom - 42:19, 104:7, 190:20, 205:2 Bought - 183:13, 185:21 Bound - 181:19, 181:25 Bow - 57:25 Box - 78:2 Boxes - 77:21, 79:5, 79:9 Boy - 102:23 Brackets - 33:8, 156:18 Brain - 100:2 Brattle - 55:22, 124:2 Break - 3:5, 80:19, 80:21, 111:7, 111:9, 111:10 Bridge - 10:19, 10:20 Brings - 65:12, 139:9 British - 198:17 Brits - 184:11 Broken - 136:14 Brothers - 45:22 Brought - 45:20,</p> | <p>55:10, 86:6, 107:17, 117:15, 221:10 Browne - 78:19 Brunswick - 7:21, 7:23 Bs - 3:20 Bubble - 6:3, 19:21, 19:25, 20:21 Budget - 181:6 Budgeting - 8:3 Buffeted - 183:18, 184:5, 184:17 Buffeting - 184:14 Building - 83:11, 83:16, 83:23 Built - 39:3, 115:1 Bulk - 29:8, 179:20 Bulletproof - 66:3 Bump - 192:10 Bunch - 3:8, 21:4 Burning - 99:5, 99:6, 99:14 Business - 13:5, 16:6, 25:15, 32:18, 38:1, 38:12, 39:22, 54:10, 55:3, 64:12, 66:10, 87:21, 90:8, 90:24, 93:4, 94:24, 97:4, 101:23, 102:15, 106:6, 106:12, 109:13, 109:17, 112:18, 116:8, 116:13, 163:16, 164:8, 167:12, 233:17 Buy - 3:15, 33:22, 38:15, 38:16, 38:18, 183:11, 185:21 Buying - 19:20, 33:12, 36:19, 48:9, 158:25, 166:4, 183:24, 184:10 <table border="1" data-bbox="766 1537 997 1570"> <tr> <td style="text-align: center;">C</td> </tr> </table> Calculate - 8:4, 13:22, 17:3, 27:4 Calculating - 36:8 Call - 3:10, 18:15, 26:25, 31:13, 38:13, 39:24, 56:7, 77:21, 165:9, 167:2, 198:16, 233:13, 233:14 Called - 5:12, 5:16, 19:17, 29:21, 56:6,</p> | C | <p>166:25, 176:19, 176:23, 182:21, 198:18 Can - 3:18, 3:20, 3:21, 3:22, 3:24, 4:13, 5:6, 5:20, 6:1, 9:8, 11:9, 21:2, 21:10, 22:6, 24:9, 27:4, 29:3, 29:20, 29:22, 29:24, 31:16, 34:17, 34:21, 39:5, 40:3, 40:4, 42:10, 42:16, 43:4, 43:6, 45:19, 47:9, 47:25, 53:8, 53:15, 54:2, 57:12, 58:11, 58:12, 61:8, 61:21, 61:25, 63:13, 68:23, 72:6, 74:9, 83:17, 83:21, 86:16, 87:2, 87:3, 87:12, 89:2, 97:18, 98:17, 101:1, 101:6, 106:2, 111:7, 112:16, 118:1, 119:1, 130:7, 135:22, 137:21, 139:20, 147:8, 147:13, 154:22, 158:25, 167:19, 169:21, 185:6, 186:12, 189:7, 195:4, 203:13, 204:14, 205:13, 209:2, 213:4, 213:20, 213:21, 220:17, 220:23, 220:24, 222:9, 222:15, 223:11, 228:20, 234:4 Canada - 3:12, 3:15, 4:6, 4:7, 4:11, 4:12, 6:10, 7:7, 8:16, 8:23, 9:20, 10:1, 10:2, 11:14, 15:11, 17:15, 18:23, 18:24, 19:1, 21:18, 21:19, 21:22, 22:6, 22:18, 22:21, 23:9, 23:16, 24:13, 25:6, 33:3, 33:8, 36:18, 40:25, 41:11, 44:24, 45:13, 48:9, 48:12, 50:19, 51:13, 51:16, 51:22, 52:7, 52:9, 52:11, 52:12, 52:15, 54:5, 54:24,</p> | <p>62:6, 62:9, 68:9, 68:15, 68:20, 69:1, 76:19, 79:11, 80:15, 81:2, 85:10, 92:3, 96:2, 97:13, 99:2, 104:6, 104:16, 109:20, 109:24, 110:10, 111:5, 116:11, 118:11, 120:24, 127:17, 130:8, 131:12, 138:17, 139:1, 156:7, 159:9, 163:8, 163:19, 166:10, 167:8, 168:17, 171:25, 172:9, 172:25, 174:11, 174:13, 174:15, 175:21, 176:4, 176:8, 176:17, 177:18, 177:24, 178:4, 178:7, 178:19, 178:22, 180:4, 180:8, 180:9, 180:11, 180:16, 180:23, 181:7, 181:9, 181:11, 181:15, 183:10, 183:25, 184:1, 184:4, 184:6, 186:8, 186:9, 186:11, 186:24, 192:4, 194:7, 196:10, 197:4, 197:9, 197:10, 227:3, 229:2, 230:20, 232:2, 232:8, 232:10, 232:22, 233:6 Canada's - 25:14, 52:17, 208:19 Canadian - 9:10, 9:13, 13:1, 15:12, 19:16, 19:22, 21:25, 22:8, 22:15, 30:19, 30:21, 41:3, 41:12, 46:16, 88:4, 97:21, 99:8, 122:2, 134:23, 134:25, 161:8, 172:23, 184:7, 184:13, 185:22, 198:13, 199:17, 201:18, 212:20 Can't - 6:12, 11:9, 20:17, 31:11, 43:12,</p> |
| C | | | | | |

| | | | | |
|--|--|--|--|--|
| <p>70:23, 77:23, 78:10, 78:11, 78:18, 95:24, 101:3, 105:15, 114:15, 115:13, 129:15, 129:16, 130:4, 130:5, 130:9, 132:21, 134:18, 135:8, 139:7, 139:12, 139:13, 139:15, 148:7, 159:3, 159:11, 161:2, 173:2, 179:19, 179:22, 184:25, 185:8, 189:17, 191:6, 201:19, 208:6, 213:15, 219:20, 226:18, 226:20, 226:24, 230:12 Cap - 7:20, 145:12, 167:2, 223:10 Capital - 6:9, 6:11, 6:16, 6:19, 7:23, 8:3, 9:22, 11:21, 13:2, 15:24, 16:1, 16:13, 17:21, 20:21, 22:13, 23:7, 24:12, 25:2, 25:20, 25:23, 26:11, 27:12, 35:11, 35:13, 35:22, 36:11, 41:2, 48:10, 50:23, 52:12, 55:13, 56:8, 68:18, 70:9, 70:12, 70:24, 71:12, 71:24, 72:5, 72:7, 72:9, 72:15, 73:5, 73:8, 74:6, 74:11, 75:15, 78:6, 80:17, 80:21, 82:24, 83:1, 83:5, 83:9, 83:21, 87:6, 91:16, 95:7, 101:14, 117:3, 123:6, 123:22, 124:20, 125:5, 131:5, 138:25, 139:1, 154:7, 167:23, 169:20, 171:7, 172:12, 173:11, 173:15, 174:12, 177:6, 177:15, 184:5, 186:7, 186:11, 190:10, 190:13, 193:20, 229:11, 229:12, 229:19,</p> | <p>229:20, 230:5, 233:20 Capitalize - 86:6 CAPM - 7:5, 7:15, 8:10, 8:14, 8:16, 32:25, 168:12, 173:5, 176:7, 227:15, 227:23, 229:19, 230:16 Captured - 7:5 Captures - 6:21, 7:15 Carbon - 98:23, 104:19 Care - 134:8 Career - 120:5, 164:22 Carefully - 162:24 Case - 62:6, 62:7, 71:6, 94:22, 146:25, 148:16, 159:3, 220:8, 220:9, 220:11, 220:12, 226:1, 226:4 Cases - 59:22, 170:15, 212:20 Cashflow - 7:2, 7:4, 35:6, 35:7 Cashflows - 6:23, 6:24, 8:7, 32:5 Cataclysmic - 46:6 Cause - 205:14 Caused - 47:19, 186:10 Causes - 72:4 Caution - 136:5 Center - 210:2 Central - 18:6, 18:9, 47:20, 47:24, 52:22, 172:13, 177:20, 180:10, 181:16, 181:21, 183:14, 183:23 Centre - 215:10 CEO - 15:19 Certain - 7:2, 7:4, 11:11, 92:7, 141:17, 157:1, 169:8, 169:10, 171:2, 193:23, 207:16, 220:16, 223:11, 228:16 Certainly - 28:8, 111:3, 178:1, 189:15, 189:16, 230:13</p> | <p>Certainty - 133:16 Certified - 150:8, 151:14, 151:20, 153:12, 153:13, 154:22, 156:12, 156:20 Certifying - 155:14 Cfos - 9:1 CFRA - 24:18, 24:22, 25:7 CFRA's - 208:20 CHAIR - 1:1, 1:6, 1:16, 2:14, 2:18, 56:16, 56:22, 60:25, 62:25, 65:21, 111:8, 111:12, 111:17, 111:20, 222:5, 223:2, 223:4, 223:13, 223:21, 234:1, 234:4, 234:5 CHAIRMAN - 56:13 , 56:17, 61:9, 61:13, 63:5, 64:18, 64:23, 65:6, 65:10, 65:23, 105:2 Chance - 65:24 Chances - 19:8, 133:8 Change - 2:2, 2:5, 2:8, 6:12, 44:23, 47:5, 54:8, 94:24, 95:1, 96:3, 102:2, 102:12, 102:14, 103:7, 103:10, 103:13, 106:5, 112:20, 117:13, 121:1, 130:3, 130:4, 130:5, 130:7, 130:9, 131:15, 134:18, 135:8, 138:4, 191:17, 192:12, 200:24, 211:5, 225:24, 226:18, 226:20, 229:16, 230:7, 233:8 Changed - 84:20, 96:10, 96:24, 97:5, 97:8, 100:19, 101:24, 103:11, 103:14, 104:10, 104:11, 104:15, 105:8, 105:9, 108:9, 111:1, 111:3, 112:18, 164:23, 186:7, 188:1,</p> | <p>189:17, 195:19 Changes - 68:17, 95:12, 110:18, 198:23, 213:9, 213:14 Changing - 71:19, 98:5, 120:21 Charge - 4:10, 34:17, 34:21, 134:10, 137:22, 162:9 Charges - 4:19 Chart - 80:7, 80:10, 117:22, 120:10 Cheaper - 100:21 Check - 29:24, 42:14, 178:5, 213:20 Chicago - 9:17, 14:16 Chicken - 102:21 Chief - 193:13 Choice - 30:8, 225:3, 225:7 Chose - 152:24, 153:3, 153:8, 182:1 Chretien - 8:17 Chretien's - 8:24 Circles - 127:7 Cite - 62:7 Cited - 60:15, 61:18, 63:9, 182:17, 188:23 Cites - 62:5 Citibank - 46:5 City - 5:15, 5:17, 5:21 Claim - 25:14, 150:8, 150:9 Clarification - 67:8 Clarify - 61:14, 118:19, 141:14 Class - 10:24, 127:13, 150:4, 150:5, 151:14, 154:10, 155:15 Classes - 193:19 Classic - 46:10 Clearance - 112:15 Cleary - 96:12, 124:4, 126:1 Clergyman - 198:1 8 Clever - 129:17 Click - 41:22 Clients - 24:16, 41:16, 231:17</p> | <p>Close - 49:5, 51:1, 212:19 Closer - 116:22, 119:6, 143:2, 214:20, 215:5, 219:13 Coal - 91:24, 104:13, 104:21, 108:13, 108:19, 109:19 Coast - 90:14 Coefficient - 18:17, 197:17, 202:4 Coefficients - 20:9 Coffey - 2:19, 2:20, 42:4, 56:15, 60:24, 61:4, 61:11, 62:19, 62:24, 63:10, 65:2, 120:4, 142:12, 203:25, 204:6 Coin - 17:22 Cold - 99:9 Colleague - 35:2, 199:14, 201:17, 206:5 Column - 45:12, 45:13, 45:14 Combination - 113 :15, 114:18, 192:22, 192:24 Combola - 28:14 Come - 6:4, 10:24, 25:1, 27:16, 28:20, 30:9, 39:19, 41:10, 51:6, 51:9, 51:10, 52:3, 54:21, 56:3, 58:3, 82:11, 89:2, 92:1, 101:6, 107:1, 120:18, 121:5, 121:7, 121:10, 123:4, 123:7, 125:11, 130:12, 130:14, 144:23, 150:24, 172:18, 184:23, 186:12, 186:19, 188:5, 188:17, 189:9, 194:14, 195:11, 195:13, 197:10, 208:3, 227:17, 228:2, 228:22 Comes - 39:21, 71:1, 111:24, 114:23, 122:1, 124:19, 144:22, 148:20, 162:6, 162:7, 164:17,</p> |
|--|--|--|--|--|

| | | | | |
|---|---|--|---|---|
| <p>171:20, 171:22, 173:2, 177:12, 186:4, 188:7, 227:23, 228:21 Coming - 38:4, 39:20, 42:17, 64:3, 84:14, 89:12, 93:17, 114:6, 115:4, 163:16, 184:4, 184:6, 186:8, 186:11, 189:4, 194:16, 195:3, 196:17, 206:22 Comment - 56:23, 60:10, 79:15, 121:16, 122:15, 124:14, 124:17, 135:7, 140:25, 152:10, 152:11, 155:7, 155:9, 205:3 Commentary - 121:16, 142:24, 151:2 Comments - 57:12, 74:5, 123:8 Commercial - 105:21 Commission - 42:13, 43:6, 43:9, 47:11, 48:25, 54:20, 67:3, 71:3, 90:16, 203:12, 205:5, 205:8, 210:11, 221:6, 222:4, 230:15, 230:16 Commissioners - 1:16 Commissions - 128:12 Commission's - 205:1 Common - 42:19, 42:23, 53:14, 53:24, 74:1, 87:7, 94:11, 95:7, 96:13, 96:20, 113:16, 113:18, 114:19, 128:1, 129:21, 129:22, 134:5, 135:4, 139:4, 140:19, 140:21, 141:23, 142:6, 165:21, 203:22 Commonly - 230:10 Compact - 109:4, 110:9, 110:23, 163:7</p> | <p>Companies - 21:21, 21:23, 21:25, 22:16, 22:20, 23:11, 25:5, 32:15, 35:24, 38:8, 39:7, 64:11, 64:16, 66:9, 66:11, 66:18, 67:1, 67:21, 91:8, 91:9, 97:23, 100:7, 100:10, 113:3, 129:25, 160:1, 160:4, 160:9, 160:10, 160:11, 160:18, 201:25, 202:2, 202:22, 224:18 Company - 19:16, 23:17, 23:18, 27:22, 31:9, 31:21, 31:22, 32:25, 38:17, 55:22, 64:10, 66:8, 66:23, 81:11, 98:11, 104:24, 105:2, 105:19, 108:12, 108:15, 148:22, 159:10, 159:11, 159:13, 159:14, 162:20, 163:15, 200:21, 201:11 Company's - 98:8 Comparable - 64:10, 66:9, 67:12, 67:15, 67:23, 67:24, 69:6, 122:2, 139:23, 160:14 Comparative - 69:9 Comparator - 88:5, 130:18 Compare - 26:18, 27:1, 82:9, 118:6, 120:3, 130:17 Compared - 96:1, 141:12, 192:9 Comparisons - 144:23 Competent - 225:5, 225:6 Competition - 100:12 Competitive - 33:16 Component - 81:1, 203:23, 207:21, 232:24, 233:1 Components - 80:18, 80:23, 176:6,</p> | <p>176:11, 232:14 Composed - 82:21 Compound - 37:19 Compustats - 24:16 Concentric - 60:11, 60:13, 61:25, 62:3, 69:21, 123:5, 123:14, 123:18, 124:1, 142:13, 208:14, 220:6 Concentric's - 60:20, 61:18, 74:10, 187:14, 214:6 Concept - 62:4, 85:8 Concern - 98:4, 133:10, 146:11, 146:12, 193:3, 193:7 Concerned - 134:8, 154:16 Concerning - 60:5, 174:20 Concerns - 193:8 Conclude - 234:2, 234:4 Conclusion - 234:7, 22:14, 74:6, 75:4, 78:13, 172:17, 173:1, 173:3, 229:12, 229:20, 230:5, 230:18, 233:20 Conduct - 153:16 Confess - 12:25 Confirm - 61:20, 63:13, 74:9, 83:3, 45:3, 63:11, 84:5 Confirmed - 45:2, 45:3, 63:11, 84:5 Confirming - 73:16 Confusing - 3:7 Consensus - 137:9, 167:8, 172:8 Consequently - 136:8 Conservative - 122:25, 124:18, 125:17, 181:4 Consider - 44:14, 125:1, 128:6, 205:5, 221:15 Considering - 114:18 Considers - 143:13 Consistent - 4:2,</p> | <p>33:14, 127:10, 151:17, 199:21, 215:10, 215:12, 215:14 Consistently - 12:3, 48:15, 144:19, 144:24, 148:22, 150:7, 150:10, 150:21, 152:6, 152:17, 152:22, 153:1, 153:19, 155:24, 156:4, 172:10 Constant - 31:18 Constantly - 55:7 Constrains - 11:9, 16:12 Construction - 27:12, 27:19, 86:5 Consultant - 17:1 Consulted - 15:21 Consulting - 124:3 Consumer - 50:15, 51:9, 96:11, 135:21 Consumers - 71:13, 71:14, 160:25 Contacted - 150:3, 151:13, 156:8 Context - 72:19, 125:15, 173:22 Contingent - 166:24, 167:2, 167:3 Continue - 109:11, 166:9, 166:15, 210:23, 212:10, 217:17 Contracts - 45:7 Contrary - 35:3, 73:13, 99:1, 103:12 Contribution - 14:13 Control - 2:23, 85:13 Controversial - 27:10, 34:14, 93:21, 165:6, 168:1, 199:24 Convert - 17:1, 17:8 Converts - 8:18 Copies - 203:14 Corporate - 12:9 Corporation - 17:19 Corporations - 13:6 Correctly - 102:10</p> | <p>Corroborating - 205:11, 209:3 Corrupt - 166:6, 166:12 Cost - 13:1, 17:20, 34:7, 41:17, 43:19, 43:21, 44:3, 44:8, 44:14, 44:15, 55:13, 67:4, 71:4, 71:8, 72:3, 80:17, 80:20, 81:4, 81:19, 82:10, 82:24, 83:1, 83:5, 83:6, 83:9, 83:11, 83:24, 84:24, 85:7, 85:12, 85:13, 86:12, 108:11, 108:20, 119:12, 123:6, 123:21, 124:19, 125:5, 137:6, 137:22, 138:25, 139:1, 152:21, 154:6, 167:23, 169:20, 171:6, 173:11, 173:15, 177:6, 177:15, 190:10, 190:13, 230:22, 231:6 Costs - 34:11, 34:17, 34:20, 34:22, 46:21, 82:12, 84:11, 84:12, 84:13, 84:15, 84:16, 85:20, 108:17, 109:7, 119:16, 137:4, 137:11, 137:14, 137:20, 151:16, 151:24, 167:10 Cottage - 99:6 Couldn't - 35:17, 71:14, 89:18 Counsel - 1:18, 203:9, 220:16 Counter - 202:20 Country - 22:12, 123:22 Couple - 9:16, 26:4, 35:23, 96:22, 107:18, 142:11, 227:15 Course - 12:11, 128:18, 128:25, 131:10 Court - 62:6, 84:4, 85:9, 109:23 Coverage - 82:13,</p> |
|---|---|--|---|---|

| | | | | |
|--|--|---|--|---|
| <p>133:17, 133:25, 227:1 Covering - 215:21 COVID - 3:24, 5:7, 6:4, 14:6, 18:6, 18:8, 18:11, 48:6, 49:13, 74:14, 74:23, 75:11, 76:17, 77:3, 83:19, 216:5, 218:9, 218:23 Coyne - 1:12, 8:1, 12:18, 13:21, 17:24, 23:21, 25:21, 26:12, 29:13, 30:19, 33:1, 35:3, 36:25, 48:16, 50:25, 55:18, 57:2, 57:23, 58:17, 58:25, 60:10, 68:21, 69:21, 83:2, 113:6, 114:20, 115:16, 115:17, 123:5, 124:8, 137:11, 144:22, 165:24, 178:5, 179:7, 208:13, 208:17, 209:1, 210:5, 211:23, 212:18, 214:4, 217:1, 218:22, 221:12 Coyne's - 39:14, 55:2, 64:4, 74:9, 80:6, 117:11, 210:12, 220:23, 224:7, 224:12, 224:15, 224:24 Crash - 3:18 Crazy - 19:20, 33:24 Create - 35:24 Credibly - 168:3 Credit - 2:25, 3:10, 4:1, 5:25, 33:25, 46:15, 47:4, 47:13, 49:7, 54:19, 111:24, 112:1, 112:3, 112:6, 112:21, 119:19, 132:4, 132:13, 134:17, 140:9, 167:4, 167:9, 184:10, 228:1, 228:18, 228:19, 229:9, 229:10, 229:16, 230:7, 230:8, 230:13, 232:3, 232:15,</p> | <p>233:1, 233:8, 233:15, 233:18 Crib - 30:11, 31:4 Cried - 102:23 Crisis - 3:19, 3:21, 3:23, 4:11, 4:13, 5:9, 6:3, 47:7, 47:16, 47:21, 49:15, 52:24, 229:4, 229:9, 229:22, 231:14, 232:18 Criticized - 33:1, 211:11, 212:1 Criticizes - 211:23 Cross - 22:8, 56:19, 60:4, 203:10 CRTC - 171:12 Crying - 103:1, 103:5 Current - 6:23, 17:25, 18:1, 18:2, 26:1, 27:1, 49:8, 52:4, 81:4, 81:12, 81:13, 81:19, 81:21, 82:10, 174:4, 174:6, 178:3, 191:10, 217:3, 229:10, 230:4 Currently - 78:22 Curves - 180:22 Custodian - 14:25 Customers - 83:7, 84:17, 85:14, 98:12, 145:15 Cut - 92:15 Cycle - 16:6, 38:2, 167:13, 233:17 Cycles - 75:10</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p>D</p> </div> <p>Damn - 10:21, 10:22, 99:9 Damodaran - 188:18, 188:22, 189:15, 190:3, 192:7, 194:8, 194:23, 195:11, 196:9 Damodaran's - 196:19 Damodoran - 13:7, 13:16 Darlington - 115:22 Data - 9:16, 10:11, 10:12, 11:17, 12:19,</p> | <p>22:10, 22:11, 25:7, 29:15, 29:17, 30:8, 31:12, 34:6, 35:20, 36:6, 45:4, 58:11, 58:13, 58:16, 97:18, 116:23, 119:1, 157:2, 157:14, 158:21, 161:7, 165:22, 166:5, 166:6, 166:10, 168:4, 168:23, 169:10, 171:18, 172:6, 173:12, 183:7, 185:2, 185:7, 185:17, 185:18, 186:5, 188:3, 188:8, 188:14, 189:9, 191:13, 194:16, 196:15, 196:17, 196:20, 196:21, 196:25, 198:10, 202:11, 207:10, 208:2, 208:13, 210:1, 210:7, 210:24, 211:6, 211:8, 212:5, 212:6, 212:15, 212:18, 212:19, 212:21, 213:5, 215:5, 215:10, 215:12, 215:17, 216:16, 216:18, 217:14, 217:16, 217:18, 218:6, 219:13, 219:22, 225:19, 226:24 Database - 27:16, 215:13 Datapoint - 21:7, 26:22 Date - 2:3, 53:11 Dated - 1:24 Daughter's - 223:9 Day - 64:8, 212:13, 217:8 Days - 57:1, 217:10, 218:3 DCF - 16:2, 35:1, 37:4, 37:9, 37:12, 39:9, 40:22, 41:8, 41:17, 164:21, 165:8, 165:25, 169:1 Deal - 49:15, 53:3, 54:14, 55:8, 76:2, 83:21, 86:8, 90:5,</p> | <p>90:17, 90:22, 91:23, 114:8 Dealing - 231:18 Debt - 10:2, 17:23, 36:2, 46:14, 46:15, 46:16, 46:19, 71:4, 71:8, 72:3, 81:5, 81:12, 81:19, 81:22, 82:10, 119:15, 174:15, 184:21 Decades - 122:24, 138:24, 161:17 Decide - 112:17, 161:20 Decided - 46:23, 81:17, 142:3 Decides - 161:9 Decision - 7:19, 7:21, 7:22, 7:24, 22:21, 44:21, 49:19, 51:2, 51:4, 103:8, 104:9, 109:23, 110:20, 112:17, 115:13, 128:20, 130:21, 142:8, 145:3, 189:21, 203:10, 203:17, 203:21, 205:15, 224:7, 225:11, 226:12, 226:15 Decisions - 9:5, 127:25, 128:6, 128:17, 128:25, 129:1, 129:8, 129:20, 130:3, 130:11, 131:1, 205:5 Decreased - 91:10, 212:3 Deem - 53:15, 53:17 Deemed - 81:21 Default - 47:6, 167:10, 232:8, 232:13, 233:1 Deferral - 84:22, 85:24, 97:23, 108:16, 116:15, 162:12, 162:13, 163:5 Deficit - 180:23 Deficits - 180:24, 181:13 Defined - 16:16 Definite - 95:8</p> | <p>Definition - 62:12, 66:17, 70:21, 75:1, 138:16, 214:19, 215:2 Definitions - 122:20 Degrees - 217:11, 217:13, 217:22 Deliberations - 113:19, 142:4 Delta - 18:18 Demand - 17:22, 180:18, 180:20, 180:21, 180:22, 184:3 Demonstrate - 22:5 Dependent - 52:16 Depiction - 62:8 Deregulated - 35:15 Derivative - 11:12 Describe - 136:7, 158:13 Description - 164:15 Deserve - 119:20 Desperate - 47:18, 47:24 Despite - 51:22, 120:20 Destroyed - 46:2 Determination - 93:2, 94:2, 149:5, 163:21, 163:23, 205:1 Determine - 14:12, 115:11, 139:2, 139:3, 180:17 Determined - 33:15, 45:8 Determines - 180:19 Determining - 133:25 Develop - 208:1 Deviate - 172:8, 172:9 Deviated - 172:10 Deviation - 219:23 Didn't - 15:25, 20:19, 47:15, 50:19, 51:25, 78:17, 78:24, 90:16, 98:13, 102:9, 106:4, 106:12, 107:1,</p> |
|--|--|---|--|---|

| | | | | |
|---|---|---|---|---|
| <p>108:21, 109:2, 113:21, 122:12, 133:8, 144:9, 147:18, 148:9, 175:16, 180:6, 180:7, 180:9, 183:1, 185:21, 189:15, 189:24, 190:2, 200:10, 206:9, 207:16, 224:15, 226:8, 231:1 Die - 190:7 Difference - 3:11, 17:13, 34:9, 37:21, 90:9, 106:23, 107:1, 126:23, 127:18, 174:8, 187:15, 214:21, 214:22 Differences - 13:21, 25:11, 90:10, 107:18 Different - 4:21, 21:19, 22:3, 22:11, 22:12, 22:13, 25:12, 26:20, 41:7, 41:21, 55:5, 69:25, 73:23, 75:8, 75:9, 75:11, 76:9, 76:10, 83:13, 97:20, 115:1, 122:12, 122:19, 125:1, 158:3, 158:9, 182:11, 182:14, 182:22, 207:2, 213:18, 218:4 Difficult - 16:10, 88:15, 122:3, 143:12, 160:16, 169:3, 171:7, 171:13, 171:14, 171:16 Dimon - 15:19 Dire - 46:7 Dirty - 157:15, 157:18, 157:21, 158:1, 159:6, 159:7, 159:12, 159:20, 159:22, 160:2, 160:15, 161:4, 161:13 Disagree - 13:12, 139:21, 179:7, 179:8, 214:1, 220:21 Disagreed - 222:1</p> | <p>Disagreement - 86:19 Discount - 8:5, 8:10, 8:25, 10:25, 34:25, 37:14, 37:15, 69:3, 98:10 Discounted - 34:8, 35:6, 35:7 Discovered - 202:3 Discussions - 122:16 Dispute - 8:22 Distil - 129:18 Distorted - 178:16, 186:23 Distortion - 186:10 Distribution - 100:17 Diversified - 197:25 Divid - 8:24 Divide - 43:25, 44:6, 44:7 Divided - 44:1, 134:2 Dividend - 10:25, 16:3, 31:22, 31:23, 31:25, 35:1, 37:14, 38:5, 184:9, 184:10 Dividends - 7:7, 7:8, 37:17, 37:19, 40:5, 40:6, 213:10, 213:11 Doctor - 147:12, 154:25, 156:22, 161:15, 173:8, 174:17, 181:24, 186:17 Doesn't - 10:18, 10:20, 11:1, 12:20, 38:23, 51:17, 56:2, 79:17, 79:19, 79:21, 97:14, 105:20, 131:4, 133:23, 138:4, 149:1, 202:25, 232:16 Dogmatic - 141:21 Dollar - 136:2, 181:12 Dollars - 52:8, 108:13, 174:14, 181:13, 181:17 Domain - 39:1 Dominates - 52:23 Don't - 7:1, 10:11, 10:15, 11:16, 11:19,</p> | <p>15:11, 16:24, 18:1, 18:10, 22:16, 24:25, 26:24, 27:22, 28:16, 28:21, 30:20, 33:2, 36:6, 38:11, 39:2, 41:25, 42:9, 48:20, 49:24, 50:3, 50:20, 50:22, 51:10, 51:16, 52:1, 54:11, 58:17, 64:5, 68:21, 69:23, 71:22, 73:1, 74:7, 74:25, 75:4, 76:19, 76:20, 79:3, 81:3, 81:18, 85:16, 87:2, 89:1, 89:4, 92:8, 92:15, 95:1, 96:19, 97:22, 98:16, 99:12, 99:18, 100:6, 102:1, 103:10, 103:13, 103:20, 105:23, 105:24, 107:12, 107:20, 112:6, 113:9, 125:12, 126:10, 127:5, 127:13, 129:9, 130:11, 130:13, 130:18, 132:9, 134:8, 137:5, 137:17, 137:21, 141:10, 142:3, 153:25, 154:20, 156:7, 158:17, 158:21, 158:24, 159:5, 159:6, 160:3, 161:3, 164:2, 165:5, 170:12, 171:4, 171:23, 172:16, 173:4, 173:22, 174:7, 174:25, 175:4, 178:3, 179:6, 179:12, 180:5, 183:7, 184:8, 184:11, 184:12, 185:2, 185:7, 190:8, 194:12, 195:10, 200:13, 200:22, 201:20, 207:13, 207:14, 208:16, 208:18, 209:13, 209:23, 213:9, 213:17, 215:8, 218:13, 218:23, 219:11,</p> | <p>220:1, 223:2, 224:19, 228:16 Dory - 27:18, 48:17 Dot - 15:14 Dragged - 202:19 Dramatic - 49:11 Dramatically - 100:18, 195:5 Draw - 43:14, 60:20 Drop - 100:18, 136:18, 181:3 Dropped - 20:4, 119:16, 169:2, 200:1, 231:16 Due - 188:16, 198:17 Duff - 9:18, 12:19 Duke - 115:24, 124:9 Dump - 3:14 Dumped - 231:15 Dumps - 52:12 Duty - 131:17</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;"> <p>E</p> </div> <p>Each - 1:22, 2:2, 2:6, 2:8, 59:21, 92:13, 139:3, 151:5, 167:24, 169:9 Earlier - 1:17, 26:19, 92:23, 101:10, 105:18, 117:2, 124:14, 131:23, 136:13, 164:22, 174:17, 218:16 Early - 6:2, 10:5, 18:12, 19:10, 19:22, 23:8, 24:20, 35:16, 36:13, 88:21, 182:15 Earn - 39:25, 40:15, 41:13, 54:8, 91:15, 98:14, 108:8, 132:12, 144:25, 146:21, 150:7, 150:11, 152:23, 153:1, 162:25, 163:1 Earned - 143:6, 144:11, 152:7, 153:20, 155:23, 156:4, 161:15, 161:16, 161:21, 163:10, 163:24</p> | <p>Earning - 39:23, 116:20, 143:24, 147:8, 147:20, 148:8, 148:13, 148:16, 148:19, 151:18, 151:22, 152:17, 154:10, 156:11 Earnings - 32:13, 37:15, 37:16, 37:20, 37:25, 38:4, 38:7, 39:22, 39:24, 40:6, 41:10, 43:22, 43:23, 133:16, 142:14, 142:15, 143:16, 145:14, 145:23, 145:25, 146:3, 146:11, 146:17, 147:3, 147:16, 149:5 Earns - 108:9, 148:23, 149:2, 150:21, 154:4 Earth - 56:1, 132:21, 138:24 Earth's - 200:2 Easily - 152:19, 152:22 Easy - 5:23, 6:6, 40:10 ECB - 183:22 ECHO - 90:18 Economic - 21:6, 49:25, 74:5, 74:11, 146:22, 158:20, 169:5, 172:20 Economist - 21:5, 39:1 Economy - 3:8, 3:10, 32:9, 172:18, 178:25 Effect - 2:7, 132:4 Effective - 143:1 Effectively - 108:18 Efficiencies - 49:25 Efficiency - 51:4, 53:4 Eight - 8:20, 51:20, 53:16, 119:24, 151:18, 154:12, 155:15 Electric - 21:23, 22:6, 39:9, 41:17, 90:19, 90:21, 91:5, 91:8, 99:8, 127:17,</p> |
|---|---|---|---|---|

| | | | | |
|---|--|--|---|---|
| <p>127:22, 128:1, 129:25, 141:12, 159:16, 159:17, 159:21, 160:3, 161:1, 201:24, 202:1, 202:24, 203:7, 206:7, 227:6 Electricity - 98:15, 105:16, 109:7, 109:9, 203:3 Element - 88:9, 89:22, 174:22, 174:24, 189:8 Elephant - 109:18, 183:17 Else's - 41:8 Elsewhere - 113:10, 113:11, 114:7 Embedded - 71:4, 71:8, 72:3, 81:22, 82:10, 119:16 Emerges - 136:11 Emphasize - 15:4, 207:18 Empirical - 11:14, 29:9, 56:7, 202:11, 202:15, 205:10, 206:1, 207:24, 209:23 Enbridge - 7:22, 22:18, 23:8 Enbridge's - 23:3 Encapsulate - 5:19 Ends - 126:7, 126:9, 180:25 Energy - 7:16, 35:10, 36:15, 81:3, 81:9, 90:4, 95:6, 104:24, 108:21, 141:13, 199:14, 203:21, 230:14, 231:3, 233:11 Engaging - 153:15 Engineer - 40:4, 106:2 Engineers - 10:14, 10:16, 10:23 England - 183:23 Enormous - 36:17 Enron - 133:3, 133:5, 133:9 Enter - 29:24 Entering - 126:15 Entirely - 7:20, 7:23, 52:5, 52:15, 127:10, 184:7 Environment - 21:</p> | <p>6 Epsilon - 18:19 Equal - 27:5, 27:11, 27:23, 27:24, 28:11, 146:23, 148:12, 214:24 Equation - 11:8 Equities - 16:22, 31:2, 36:1, 120:13, 120:15, 178:21, 183:11, 197:25 Equity - 4:22, 4:25, 5:1, 5:3, 5:5, 9:23, 9:24, 14:22, 15:12, 15:13, 16:9, 16:20, 17:4, 30:25, 34:7, 41:3, 41:8, 41:17, 42:20, 42:23, 43:19, 43:20, 43:21, 44:8, 44:14, 53:14, 53:25, 70:14, 70:15, 71:19, 71:22, 72:1, 72:20, 73:25, 74:1, 80:22, 81:14, 82:17, 82:22, 83:20, 87:7, 89:21, 94:4, 94:12, 94:19, 95:2, 95:8, 96:13, 96:20, 101:15, 102:2, 102:14, 108:4, 111:22, 112:2, 112:21, 112:24, 113:1, 113:3, 113:6, 113:16, 113:18, 114:2, 114:12, 114:19, 117:1, 120:8, 121:23, 128:2, 128:10, 129:21, 129:22, 132:3, 133:11, 133:15, 134:5, 135:4, 135:25, 139:4, 140:19, 140:21, 141:23, 142:6, 167:10, 197:6, 203:22, 203:23, 232:17, 232:19 Equivalent - 18:24, 28:21, 36:1, 36:3 Err - 136:5 Error - 28:1, 37:8 Errors - 37:10 Essentially - 57:25, 75:24</p> | <p>Establish - 72:22, 164:18 Estimate - 12:20, 13:11, 13:13, 14:25, 15:14, 18:7, 19:5, 19:25, 20:5, 21:2, 21:3, 25:25, 29:16, 29:18, 29:19, 29:20, 29:22, 32:20, 35:5, 41:5, 69:4, 184:24, 186:14, 186:19, 186:21, 190:19, 191:11, 195:25, 196:19, 196:20, 198:12, 198:21, 206:18, 206:20, 207:19, 209:8, 209:15, 210:19, 213:22, 216:16, 216:17, 216:18, 216:19, 216:24, 217:18, 218:7, 219:16, 219:20, 219:22, 220:2 Estimated - 26:17, 29:6, 35:25, 37:10, 209:22, 210:17, 215:16, 217:6, 217:9, 232:3 Estimates - 6:14, 8:13, 9:9, 11:8, 11:10, 11:14, 13:5, 13:6, 18:4, 19:4, 21:17, 24:5, 24:6, 24:7, 24:12, 24:14, 24:15, 24:18, 25:3, 25:16, 25:17, 26:1, 26:23, 35:18, 38:5, 38:21, 40:20, 40:22, 41:22, 42:10, 42:14, 58:22, 58:23, 58:24, 171:24, 172:22, 174:23, 187:11, 188:24, 189:16, 190:5, 190:6, 190:7, 194:20, 195:1, 195:4, 195:5, 197:7, 197:16, 200:1, 205:14, 207:9, 207:24, 208:5, 208:9, 208:12, 208:18, 208:20, 208:21, 208:22, 209:10,</p> | <p>209:22, 210:12, 211:8, 212:3, 212:7, 212:11, 213:13, 213:18, 213:19, 214:1, 224:9 Estimating - 125:4, 125:17, 171:6, 190:13, 217:15 Estimation - 20:5, 37:8, 37:10, 171:18, 212:23 Euro - 47:21, 47:23 Europeans - 184:1, 2 Evaluate - 8:5, 38:18 Evenly - 145:15 Evens - 167:12 Everybody - 20:24, 47:1, 47:12, 81:16, 140:9, 208:23, 209:24, 229:13, 231:8, 231:24, 234:6 Everybody's - 81:1, 5, 113:2 Everyone - 1:2, 92:4, 100:22, 111:13, 233:10 Everyone's - 189:2, 2 Everything - 52:23, 58:2, 71:25, 75:19, 75:24, 99:1, 129:10, 159:19, 161:12, 180:17, 180:20, 190:11, 194:19, 218:16, 218:18, 219:24 Evidence - 1:11, 9:14, 9:15, 13:19, 29:4, 29:7, 29:9, 37:18, 58:9, 59:6, 59:9, 59:13, 61:18, 74:13, 74:15, 74:21, 83:2, 106:6, 107:19, 107:20, 115:11, 115:12, 117:11, 117:16, 120:9, 129:8, 139:6, 141:6, 142:17, 142:18, 144:10, 145:20, 145:23, 149:13, 149:15, 149:22, 151:16, 151:22, 152:21, 153:14,</p> | <p>155:7, 155:8, 190:16, 198:3, 199:7, 205:6, 205:11, 206:24, 208:7, 209:3, 209:5, 209:23, 220:24, 221:7, 221:24, 224:16, 227:5, 227:6, 227:9, 232:2, 232:5, 233:5 Evidentiary - 115:1, 4, 222:3, 225:11, 225:12, 226:9, 226:10 EXAMINATION - 5, 6:19 Examined - 22:8 Example - 66:21, 71:5, 82:13, 84:12, 84:23, 127:22, 131:4, 174:21, 193:14 Exceed - 9:24 Exceeds - 51:14 Except - 11:11, 34:14, 81:2, 91:7, 145:20, 161:7, 219:20 Exception - 8:2, 165:24, 224:14 Excess - 143:6, 143:16, 149:2, 149:5 Excessive - 141:11, 142:13, 142:15 Excessively - 201:6 Exchange - 19:19, 36:7, 183:6, 215:13 Executive - 1:22, 2:6, 60:5, 87:13, 118:2, 118:10, 193:13 Exercise - 24:7, 58:14, 115:5, 161:6, 173:10, 174:23, 174:25, 175:1, 175:5, 175:19, 181:25, 189:3, 226:14 Exercised - 93:16, 176:25, 211:6 Exercises - 58:14 Exercising - 22:7, 157:20, 157:23 Existence - 149:6</p> |
|---|--|--|---|---|

| | | | | |
|--|---|---|--|--|
| <p>Expect - 15:16, 28:18, 28:24, 32:23, 33:7, 76:16, 76:17, 76:19, 82:12, 83:6, 84:16, 85:7, 85:19, 96:2, 99:4, 129:16, 181:19, 224:13 Expectation - 15:2, 16:13, 109:11 Expectations - 9:2, 9:3, 11:23, 14:2, 14:4, 14:18, 14:19, 16:1, 41:15, 165:20, 190:9 Expected - 15:1, 15:15, 20:2, 197:9 Expense - 34:16 Expenses - 34:11, 81:21, 151:17, 151:24 Experience - 164:7, 187:21, 216:22, 225:9 Experienced - 9:23 Expert - 8:16, 17:17, 125:17, 149:14, 150:3, 150:13, 195:7 Experts - 123:7, 123:9, 124:19, 173:15, 177:6, 187:16, 194:17, 224:21 Expert's - 225:1 Explain - 136:22, 228:20 Explained - 170:12, 198:14 Explaining - 2:4 Explanation - 224:8 Explicit - 131:5 Explicitly - 55:25, 68:15, 68:16, 113:9, 132:11 Exposed - 97:24 Express - 89:4 Expressed - 92:22, 95:2, 95:5 Extent - 136:18 External - 194:16, 195:7, 212:11, 212:15 Extra - 34:22 Extract - 159:12, 232:12, 232:24</p> | <p>Extrapolation - 38:23 Extreme - 71:5 Extremes - 12:12</p> <div style="border: 1px solid black; text-align: center; width: 40px; margin: 10px auto;">F</div> <p>Fabulous - 128:21 Face - 177:17, 178:13 Factors - 6:22, 139:4, 169:10, 180:16 Fad - 20:21 Faddish - 20:22 Failed - 46:3, 46:6 Fair - 9:9, 33:4, 33:16, 34:9, 34:25, 35:5, 48:13, 48:14, 48:21, 50:20, 53:24, 60:11, 60:14, 60:15, 61:19, 62:1, 62:4, 62:7, 62:9, 63:6, 64:16, 66:13, 66:16, 66:17, 67:1, 67:10, 70:15, 70:20, 71:9, 71:23, 72:11, 72:20, 72:23, 73:6, 73:20, 75:1, 79:13, 79:15, 80:24, 81:1, 86:1, 87:18, 87:19, 87:22, 88:10, 93:8, 93:17, 102:3, 103:18, 103:21, 118:15, 121:25, 122:22, 123:1, 123:11, 124:16, 125:22, 128:9, 134:18, 135:8, 135:14, 135:16, 135:24, 136:9, 136:24, 138:13, 138:16, 140:6, 140:14, 140:16, 140:20, 141:4, 141:7, 143:5, 143:13, 144:11, 144:15, 145:1, 145:4, 146:12, 146:14, 146:22, 147:4, 147:6, 147:10, 147:21, 148:12, 148:21, 148:25, 149:1, 149:16, 149:19, 150:1, 150:17, 150:20, 153:16,</p> | <p>155:2, 156:1, 157:1, 159:2, 161:18, 161:19, 162:5, 162:14, 162:16, 164:14, 164:19, 166:11, 166:16, 167:21, 176:12, 176:23, 177:19, 182:2, 182:4, 187:2, 190:20, 190:22, 191:15, 191:18, 197:19, 207:18, 229:14 Fairness - 122:20 Faith - 6:18 Fall - 10:18, 10:20 Falling - 102:20, 102:21 Falls - 20:14, 84:13, 112:15 Fan - 167:11 Far - 8:22, 134:7, 136:22, 209:1, 229:13, 231:8 Fashion - 169:1 Favour - 165:25 Favourable - 233:15 Favourably - 7:8 Fear - 3:13, 5:11, 5:12 Federal - 5:15, 139:8, 139:17, 181:11 Feds - 52:19 Feel - 102:9, 119:2, 185:12, 195:6 Fees - 4:10, 4:15 FEI - 112:25, 134:24 Fell - 165:25, 169:1 FERC - 133:7 Fernandez - 11:23, 188:17, 188:22, 189:17, 190:17, 191:1, 191:17, 193:2, 194:10, 194:22, 195:11, 196:9 Figure - 1:10, 1:11, 70:4, 176:18, 181:25, 182:1, 185:11, 189:4, 189:5, 189:10, 222:9, 228:22 Figures - 196:24</p> | <p>File - 1:6, 1:21 Filed - 1:25, 150:14 Fills - 193:9 Filtered - 194:13 Final - 44:18 Finally - 5:14, 25:12, 31:7, 32:13 Finance - 6:20, 7:13, 10:24, 11:4, 11:11, 12:9, 12:10, 14:21, 21:14, 43:5, 43:6, 43:12, 75:6, 131:19, 169:24, 170:1, 170:20, 170:21, 171:6, 171:8, 193:19 Financeable - 42:16 Financial - 3:23, 4:13, 5:9, 5:16, 5:17, 5:21, 5:23, 6:3, 6:6, 10:4, 15:20, 42:15, 44:11, 46:9, 47:7, 47:16, 49:12, 49:15, 52:24, 64:12, 66:10, 69:14, 69:18, 70:9, 71:10, 72:4, 73:5, 75:12, 82:14, 83:15, 87:22, 93:4, 97:5, 116:9, 158:20, 163:17, 164:25, 165:8, 172:17, 178:23, 193:14, 226:19, 226:24, 229:4, 229:9, 229:21, 231:14, 232:17 Financing - 42:7, 74:2 Financings - 44:17 Find - 88:14, 99:12, 122:3, 127:6, 159:24, 189:25, 203:6, 208:7, 213:21, 220:24, 221:4, 221:17, 222:7, 223:24 Finds - 205:12 Fine - 85:18, 141:17 Fire - 99:7 Fires - 99:5, 99:14 Firm - 25:8, 31:23, 72:2, 72:14, 78:14, 83:10</p> | <p>Firms - 31:14, 32:6, 32:21, 32:22, 39:21, 41:12 First - 10:13, 18:17, 45:12, 49:20, 59:8, 72:24, 88:13, 92:21, 93:7, 96:23, 97:15, 121:12, 123:14, 123:17, 128:17, 137:2, 137:19, 163:14, 172:24, 180:3, 182:15, 191:1, 201:15, 203:5, 229:5, 231:2, 233:4 Five - 18:4, 18:5, 23:4, 27:2, 40:8, 50:4, 51:25, 55:10, 62:1, 192:5, 192:8, 194:6, 195:17, 195:19, 195:21, 196:21, 213:1, 218:9 Five/Six - 75:15 Flag - 138:1 Flagged - 137:4, 137:8 Flagging - 137:18, 137:24 Flash - 228:13 Flavour - 94:17, 146:2 Flexibility - 82:14 Flexible - 83:22 Flick - 2:24 Flight - 230:19 Flip - 17:18 Floatation - 136:17, 137:11, 137:13, 137:20 Flood - 186:7 Flooding - 180:25, 183:12 Focus - 169:3 Focusing - 96:14, 109:6 Folding - 71:25 Follow - 135:7 Followed - 60:14 Fond - 26:12 Forced - 22:9, 22:14, 87:3, 202:19, 222:1 Forces - 110:18 Forecast - 39:4, 39:10, 39:11, 40:18,</p> |
|--|---|---|--|--|

| | | | | |
|---|--|---|--|--|
| <p>45:12, 48:1, 51:14, 51:22, 146:23, 148:15, 150:10, 218:2, 218:8 Forecasters - 51:23 Forecasts - 37:13, 38:4, 39:14 Foreign - 184:5, 185:20, 186:10 Foreigners - 184:3 Forest - 20:14 Forget - 7:12, 188:20, 229:22 Forgets - 100:2 Forgetting - 132:19 Forgotten - 100:1, 203:4 Form - 58:12, 130:19 Former - 7:22, 124:4 Forms - 225:21 Formula - 44:18, 44:22, 45:1, 45:2, 45:5, 45:8, 45:14, 45:16, 46:25, 47:12, 48:2, 49:4, 49:8, 49:18, 49:23, 50:2, 50:6, 50:17, 50:22, 51:2, 53:2, 54:16, 54:17, 54:22, 120:25, 121:3, 136:12, 138:7, 138:11, 138:15, 138:17, 138:20, 138:22, 140:7, 140:11, 167:15, 231:11, 231:13 Formulaic - 195:10 Formulas - 34:2, 44:20, 47:2, 138:5 Forth - 164:21 Fortis - 82:21, 104:24, 129:25, 133:23, 135:25, 136:4, 141:12, 141:13, 159:21, 203:21 Forward - 20:3, 20:19, 21:13, 76:16, 76:24, 86:6, 163:22, 191:11, 205:8, 216:21, 220:4</p> | <p>Fossil - 99:17, 100:11 Found - 107:16 Foundational - 110:22 Founder - 224:8 Four - 26:19, 35:4, 36:12, 50:4, 120:20, 126:12, 179:12, 179:15, 179:17, 179:21, 182:11 Fourth - 18:18 Free - 6:25, 12:23, 33:15, 36:22, 36:23, 167:17, 173:6, 176:7, 176:16, 186:1 Freefall - 45:23, 230:1 Freely - 134:17 Frequency - 210:19 Frequently - 15:21 Front - 115:12, 115:13, 129:8 Fuel - 98:9, 99:17, 100:12, 105:3, 105:24 Fuels - 98:20 Full - 123:16 Fully - 74:22 Function - 12:10 Fund - 38:17 Fundamental - 8:8, 74:11, 74:17, 78:7, 150:15, 179:7 Funded - 14:14 Funds - 86:5 Funny - 233:9 Further - 64:8, 66:7, 156:23 Future - 18:10, 32:5, 32:12, 37:8, 86:7, 105:16, 215:21, 216:4, 216:7, 216:24, 217:17, 218:12</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;"> <p>G</p> </div> <p>Gains - 162:18 Game - 123:11, 200:14, 200:15 Gamma - 18:15, 18:18, 18:21 Gas - 7:23, 21:20, 35:9, 71:13, 71:14,</p> | <p>84:22, 90:6, 90:10, 90:13, 90:19, 90:20, 91:4, 91:8, 92:5, 97:23, 98:1, 100:7, 100:9, 100:10, 104:12, 104:24, 105:5, 105:6, 106:1, 113:3, 160:25 Gauge - 184:14 Gave - 7:19, 34:2, 36:23, 66:21, 83:2, 101:12, 101:13, 107:19, 118:20, 120:9, 129:25, 191:2 Gazifere - 229:7 GDP - 16:4 General - 1:25, 80:18, 121:15, 121:16, 134:22, 164:16, 173:9 Generalities - 120:12 Generally - 18:4, 76:8, 124:17, 146:19, 155:24, 172:16, 184:20 Generate - 21:12, 116:19 Generated - 21:7 Generation - 115:18, 116:6, 160:12 Generic - 139:2 Get - 3:4, 3:5, 3:13, 4:15, 9:3, 12:6, 21:2, 23:3, 24:11, 25:20, 27:8, 29:16, 32:7, 34:25, 39:4, 39:6, 39:17, 41:20, 42:9, 43:20, 44:2, 51:17, 60:9, 60:23, 70:13, 71:10, 72:1, 73:25, 76:20, 83:15, 91:16, 94:16, 99:3, 103:7, 109:12, 112:14, 121:14, 122:3, 129:14, 131:15, 132:15, 133:24, 134:9, 136:15, 139:16, 140:11, 146:2, 154:22, 158:14, 161:5, 162:21, 166:14, 175:7, 177:11, 183:18, 184:9,</p> | <p>186:13, 192:18, 194:9, 201:14, 210:20, 211:3, 211:9, 214:23, 215:3, 218:3, 218:22, 232:14 Gets - 16:10, 23:22, 99:9, 113:25 Give - 12:13, 14:10, 37:5, 51:15, 52:3, 65:24, 69:16, 70:14, 70:16, 70:18, 83:21, 88:19, 97:16, 113:22, 114:2, 115:3, 123:1, 124:15, 127:1, 129:14, 131:18, 138:6, 144:9, 146:6, 162:11, 162:13, 165:10, 171:15, 186:15, 193:16, 204:9 Given - 37:7, 59:6, 59:8, 59:13, 111:1, 128:10, 151:21, 195:13, 203:9, 205:7, 220:14, 220:15, 224:21 Gives - 34:7, 113:7, 157:16, 212:15 Global - 9:22, 25:13, 25:14, 52:23, 104:17, 172:12 Globally - 183:22 Globe - 208:21 GLYNN - 1:4, 2:12, 2:16, 65:4, 111:15 Go - 2:15, 2:25, 4:14, 5:10, 13:23, 14:13, 15:16, 15:17, 15:18, 20:2, 20:22, 24:11, 26:10, 26:21, 35:19, 36:13, 38:1, 45:22, 46:20, 46:23, 51:8, 52:14, 59:3, 60:2, 62:16, 63:1, 66:21, 75:10, 81:18, 82:14, 82:15, 83:16, 83:19, 96:7, 98:16, 98:24, 104:7, 116:6, 116:15, 116:25, 119:1, 133:18, 136:6, 140:22,</p> | <p>142:1, 143:8, 143:10, 146:1, 154:7, 159:21, 160:24, 178:7, 181:1, 181:18, 181:21, 189:19, 207:13, 209:10, 209:11, 223:12, 226:3 Going - 6:13, 9:12, 9:14, 13:23, 18:8, 20:19, 21:13, 24:1, 29:2, 33:22, 37:18, 40:14, 43:2, 43:10, 50:2, 51:24, 52:1, 60:1, 60:7, 61:3, 70:18, 75:20, 77:3, 78:3, 78:21, 86:3, 88:23, 89:15, 92:11, 92:12, 92:24, 96:9, 97:17, 98:22, 98:24, 99:12, 99:15, 99:20, 99:24, 100:12, 100:13, 100:18, 100:20, 100:22, 100:23, 101:12, 102:22, 103:14, 104:23, 105:24, 111:20, 112:13, 117:9, 122:14, 124:25, 128:4, 130:3, 131:15, 131:25, 133:23, 133:24, 138:14, 139:19, 139:22, 142:10, 142:17, 144:9, 147:17, 150:23, 150:24, 151:2, 155:6, 155:19, 156:7, 156:9, 156:22, 157:12, 157:17, 159:13, 159:24, 161:5, 161:10, 161:21, 163:25, 180:2, 181:18, 182:13, 183:18, 184:15, 189:25, 190:7, 193:15, 193:16, 194:11, 194:18, 200:11, 203:11, 204:14, 205:7, 206:10, 209:19, 212:1, 214:15, 215:3, 215:20, 216:3,</p> |
|---|--|---|--|--|

| | | | | |
|--|---|---|--|--|
| <p>216:6, 216:21, 216:23, 217:3, 217:12, 217:16, 217:22, 218:1, 218:2, 218:11, 218:14, 218:19, 218:22, 220:4, 223:16, 224:10, 231:6 Gold - 28:15 Gone - 14:22, 14:23, 15:1, 15:3, 23:2, 46:21, 48:17, 53:21, 70:23, 71:1, 75:14, 105:13, 106:15, 106:17, 107:9, 107:12, 113:1, 113:3, 113:4, 119:14, 133:20, 136:14, 164:20, 191:21, 195:21, 197:8, 210:22 Good - 1:2, 1:16, 5:24, 13:8, 48:7, 63:25, 83:21, 88:24, 110:2, 160:4, 163:3, 183:7, 190:2, 206:10 Gordon - 35:3, 165:9 Got - 19:3, 19:5, 19:15, 31:5, 31:9, 31:12, 32:17, 35:15, 39:3, 39:12, 40:19, 40:24, 40:25, 41:1, 44:16, 47:8, 49:7, 52:19, 53:9, 53:11, 55:11, 55:12, 71:7, 75:2, 76:21, 78:23, 80:7, 83:23, 84:21, 86:16, 91:24, 95:21, 96:12, 97:18, 99:5, 103:17, 104:18, 104:20, 104:22, 108:10, 113:18, 115:23, 118:2, 118:11, 119:24, 128:1, 129:5, 129:6, 129:11, 134:21, 135:1, 135:9, 138:22, 140:13, 140:17, 148:12, 148:24, 150:4, 150:5, 150:19, 159:25,</p> | <p>160:2, 160:12, 160:13, 160:19, 160:22, 161:12, 162:6, 176:9, 176:10, 180:14, 180:23, 181:9, 185:6, 188:7, 188:12, 190:2, 190:3, 190:15, 201:1, 203:14, 204:22, 207:2, 207:3, 209:18, 217:1, 230:4, 232:8, 233:5 Government - 3:12, 3:15, 10:3, 10:5, 10:6, 15:21, 46:11, 52:8, 52:11, 76:18, 99:2, 104:15, 109:20, 110:13, 110:17, 111:2, 134:10, 174:14, 179:3, 179:5, 180:6, 180:7, 180:8, 181:4, 181:6, 181:10, 181:12, 181:14, 181:15, 181:20, 184:2, 218:10, 229:2, 232:7, 232:9 Governments - 10 4:20, 180:24 Gown - 223:10 GRA - 53:6, 59:14, 59:15, 139:3 Graduation - 223:10 Grand - 191:16, 199:3, 199:5, 199:21, 202:8, 206:18, 219:14, 226:5 Graph - 1:9, 117:13, 118:25 Graphs - 75:18 Gras - 49:20, 59:6 Greater - 41:6, 42:25 Greece - 47:22, 47:23 Greek - 18:19 Green - 18:13 Greene - 1:13, 1:15, 13:24, 87:18, 169:21, 173:14, 203:16, 222:14, 222:22, 223:15</p> | <p>Group - 14:15, 88:5, 124:2, 124:4 Growing - 32:9 Growth - 16:4, 32:3, 32:6, 32:9, 32:13, 35:1, 37:9, 37:13, 37:19, 37:24, 38:3, 38:6, 39:18, 39:19, 40:1, 40:7, 40:10, 40:16, 40:18, 40:19, 40:21, 41:19, 169:2 Guaranteed - 33:13 Guess - 13:15, 19:23, 84:9, 87:10, 89:17, 125:15, 173:8, 228:17 Guessing - 222:12 Guidance - 53:10, 53:24 Guns - 155:19 Gynn - 1:3</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p>H</p> </div> <p>Hadn't - 117:7 Half - 35:17, 39:13, 41:10, 195:20, 195:21, 195:22 Halifax - 108:17, 109:6 Hand - 10:1, 140:23 Hands - 186:22 Hang - 193:22, 194:11 Hangover - 49:13, 49:14 Happening - 46:1, 154:14, 154:18, 179:3 Happy - 112:13, 113:2, 113:14 Hard - 145:12 Hasn't - 23:19, 96:10, 96:24, 97:5, 97:8, 100:19, 108:8, 112:18, 137:23, 209:1 Hat - 193:22, 194:12 Hate - 18:16, 44:5, 122:23, 170:4, 170:6, 223:9 Haven't - 22:4, 30:14, 65:17, 95:16, 147:2,</p> | <p>149:11, 149:13, 149:21, 149:22, 156:13, 195:21, 195:24, 196:12, 213:16, 216:14, 220:11 Hay - 1:21, 1:23, 1:24, 2:8 Head - 75:7, 194:11 Hear - 20:16, 50:3, 89:1, 89:3 Heard - 30:18, 54:5, 55:16, 123:18, 137:19 Hearing - 32:8, 45:1, 45:21, 46:8, 55:19, 55:21, 71:13, 79:1, 82:1, 86:4, 87:10, 89:13, 90:24, 92:22, 97:16, 101:7, 104:2, 105:1, 106:7, 107:21, 108:2, 109:14, 109:16, 115:20, 117:10, 125:21, 126:16, 138:12, 139:1, 171:16, 179:22, 182:17, 206:14, 206:23, 207:2, 229:7 Hearings - 44:25, 51:5, 121:3, 123:6, 138:25 Heat - 99:7, 99:8, 99:10 Heaters - 98:11 Heating - 98:9, 105:18 Heavens - 76:19, 89:12 Heck - 128:24 Height - 229:21 Held - 95:14 He'll - 2:23 Help - 117:15, 117:16, 133:23, 228:14 Here's - 191:4 He's - 12:2, 13:8, 15:20, 15:23, 127:9, 178:5, 201:8, 201:9, 211:23 Hid - 88:19 Hide - 200:14, 200:15</p> | <p>Hiding - 89:8, 89:18 Hierarchy - 40:23, 41:3 High - 3:20, 26:9, 31:22, 31:23, 31:25, 32:6, 43:17, 46:17, 71:4, 71:8, 72:3, 80:15, 107:14, 113:18, 119:10, 119:25, 157:16, 158:12, 181:8, 210:12, 217:24, 224:12 Higher - 4:1, 9:19, 10:3, 21:25, 23:10, 32:7, 44:9, 71:23, 72:2, 78:15, 79:12, 80:16, 109:7, 113:12, 113:15, 120:15, 124:16, 127:22, 128:11, 128:13, 159:4, 180:12, 180:13, 192:16, 212:20, 215:2 Highlighted - 98:7 Hinges - 170:15 Hire - 150:12, 193:17 Hires - 127:3 Historic - 10:11, 10:12, 13:18, 187:11, 187:21, 190:6, 191:13 Historical - 2:1, 8:13, 9:11 History - 1:21, 2:5, 53:9, 54:3, 59:4, 151:21 Hold - 95:16, 202:25, 221:17, 223:7 Holder - 72:1, 83:20 Holders - 71:22, 73:25, 83:20, 132:15, 133:6, 133:9, 133:11, 134:8, 134:12 Holding - 23:11, 32:15, 159:13, 160:1, 160:3, 160:9, 174:13, 176:18, 201:25, 202:2 Holdings - 177:20</p> |
|--|---|---|--|--|

| | | | | |
|---|--|---|---|--|
| <p>Hole - 42:12 Home - 105:18 Honest - 49:18, 55:14, 66:14, 68:9, 88:12, 150:23, 215:9 Honestly - 171:23, 194:12, 195:9 Honky - 27:18 Hope - 13:23, 33:6, 68:13, 76:20, 88:12, 142:5, 142:7, 157:5 Hopefully - 10:22, 75:2 Horizon - 209:7 Horrible - 133:19 Hot - 217:8 Hour - 223:18 House - 10:18, 218:24 Houses - 99:16 Huge - 18:25, 23:9, 49:3, 54:23, 105:8, 229:23, 232:20 Hundreds - 125:9, 198:19 Hunky - 48:17 Hurt - 86:7 Hydro - 114:1, 116:4, 150:4, 150:6, 150:9, 151:13, 151:15, 153:13, 154:8, 160:19, 160:20, 160:23, 161:7, 161:10 Hydrogen - 100:7, 100:8, 100:10, 100:13, 100:16, 106:1</p> | <p>66:21, 68:9, 76:7, 76:11, 80:18, 87:16, 115:3, 121:14, 134:17, 146:6, 166:14, 168:24, 170:20, 192:18, 201:14, 221:4, 221:6, 226:11 Illusive - 68:2 Imagine - 88:15 Immaterial - 92:7 Immediately - 16:2 3, 16:24 Impact - 3:24, 6:2, 19:7, 128:14, 191:18, 210:20, 230:18, 232:12, 232:13 Impacted - 183:20, 183:25 Impartial - 58:5, 58:9, 149:16, 149:19, 155:1 Imperfect - 167:24, 168:4 Implement - 162:1 6 Implication - 152:1 2, 152:15, 152:16 Implications - 46:6 Implying - 4:25 Importance - 9:1 Important - 8:11, 15:24, 92:7, 92:9, 115:14, 119:2, 132:14, 132:15, 190:12, 193:21 Impose - 157:2 Imposing - 157:11 Imprecise - 186:14 Impressed - 119:2 3 Impression - 118:2 0, 190:15, 190:18 Impressionistic - 1 94:15 Inappropriate - 15 5:7, 155:9, 210:14 Inc - 104:24, 203:22 Incidentally - 74:2 5 Income - 82:19, 113:7, 133:15 Incompatible - 178 :23 Incorporated - 179</p> | <p>:9 Incorrect - 26:16, 30:5, 66:16 Increase - 4:15, 51:16, 51:24, 51:25, 52:2, 71:16, 100:22, 104:18, 118:7, 118:15, 140:18, 190:19, 191:22, 208:5, 211:8, 232:20 Increased - 26:4, 26:5, 26:8, 78:14, 91:7, 108:4, 117:5, 184:22, 185:20, 212:2, 212:4, 227:1, 231:4 Increases - 3:17, 17:4, 114:6 Increasing - 4:19, 48:5, 77:11, 181:10 Increasingly - 159: 9 Incredible - 46:4 Incredibly - 23:1, 78:24, 100:21, 160:16 Incurred - 34:20, 34:23, 137:7, 137:20, 137:23 Indefinite - 50:5, 50:10 Indenture - 71:15 Independently - 30 :15 Index - 4:23, 5:12, 5:13, 5:16, 5:17, 5:22, 22:1, 36:9 Indexes - 35:24 Indicated - 11:21, 70:2, 74:13, 78:2, 97:12, 108:2, 114:11, 135:9, 169:21, 174:17, 174:21, 189:6, 189:13, 190:12, 205:4 Indicating - 6:6 Indication - 4:4, 74:15 Indicator - 230:4 Indicators - 4:22, 5:14 Indifferent - 49:19 Industrial - 105:20, 160:13 Infinity - 40:14</p> | <p>Inflation - 33:11, 169:1 Influence - 24:24 Informed - 48:25 Informs - 131:21 Inherent - 158:15, 158:17 Initially - 182:16 Institutional - 31:1 Institutions - 15:5, 31:3 Instructor - 13:8 Instrument - 36:2, 36:3 Instrumental - 31:1 3 Insurance - 38:17 Integrated - 183:15 , 183:21 Integration - 55:12 Integrity - 69:14, 69:19, 70:9, 73:5 Intending - 155:1 Intends - 52:9 Intents - 19:8 Intercept - 18:17 Interest - 7:8, 10:9, 12:25, 18:15, 18:22, 19:8, 30:23, 43:22, 43:23, 48:16, 50:13, 78:13, 78:22, 78:24, 81:2, 81:22, 82:13, 119:16, 133:17, 181:18, 216:5, 218:11 Interesting - 24:18, 107:16 Interferes - 145:19 Internet - 6:3, 19:20, 19:21, 19:24, 20:20, 213:21 Interpret - 20:9, 80:14, 170:14 Interpretation - 17 0:16, 207:11 Interpreting - 20:1 9, 173:12 Interrupted - 65:22 , 100:4 Intersect - 202:3 Intervening - 179:5 , 180:10 Intervenor - 126:4, 126:6 Intervention - 18:6,</p> | <p>18:9, 47:20, 47:25, 76:18, 111:1, 172:13 Intrigued - 113:24 Introduced - 36:15 Invented - 35:2 Investing - 39:22 Investment - 14:5, 41:15, 51:23, 66:19, 67:12, 67:23, 68:7, 68:8, 69:7, 69:9, 136:1 Investments - 8:6, 8:7, 12:8, 67:5, 68:2 Investor - 8:9, 9:1, 9:3, 14:2, 33:5, 33:11, 33:21, 66:24, 127:17, 184:9 Investors - 7:1, 30:24, 33:7, 33:15, 34:8, 34:18, 69:2, 133:12, 185:20 Involves - 161:12 Iris - 145:20 Iron - 7:12 Irons - 37:22 Island - 66:22 Isn't - 42:2, 95:2, 116:11, 118:8, 194:18, 218:19 Issue - 14:1, 18:12, 34:10, 34:17, 69:1, 70:4, 72:24, 81:25, 82:7, 85:10, 143:15, 158:11, 159:15, 182:16, 210:10, 227:2 Issued - 34:22 Issuer - 119:13 Issues - 13:12, 73:1, 193:4 Issuing - 137:4 Italy - 47:23 Item - 142:23, 203:14, 203:24, 204:18 I've - 14:19, 16:11, 17:13, 19:5, 21:16, 22:8, 23:12, 25:8, 28:8, 38:19, 40:18, 44:16, 45:19, 51:11, 53:8, 54:5, 55:10, 55:11, 55:12, 55:15, 55:16, 60:3, 63:20, 64:2, 67:5, 68:10, 69:23, 72:19,</p> |
| <p style="text-align: center;">I</p> <p>I'd - 11:14, 11:17, 33:5, 53:23, 57:19, 60:19, 103:20, 112:6, 112:13, 137:9, 141:25, 155:25, 168:3, 168:11, 174:6, 178:5, 189:18, 200:18, 200:25, 201:4, 201:6, 207:13, 216:11, 218:12, 221:11 I'll - 28:23, 33:25, 40:9, 45:5, 50:12, 52:3, 56:22, 66:14,</p> | | | | |

| | | | | |
|--|--|---|---|--|
| <p>75:13, 78:20, 78:25, 80:7, 80:10, 89:9, 89:10, 94:20, 94:21, 96:3, 96:5, 97:12, 99:5, 99:24, 118:2, 118:11, 120:10, 122:24, 124:9, 125:5, 127:7, 129:5, 129:6, 135:11, 135:16, 136:12, 137:19, 138:11, 138:12, 140:6, 140:13, 141:9, 150:11, 156:5, 156:19, 159:8, 159:14, 164:14, 167:11, 167:13, 170:14, 172:10, 176:21, 179:20, 180:4, 180:14, 180:23, 184:25, 190:2, 190:3, 190:11, 202:18, 203:4, 203:9, 203:14, 206:4, 206:6, 207:17, 211:11, 212:2, 212:10, 227:8, 232:5</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;">J</div> <p>Jamie - 15:19 January - 74:21, 76:10, 216:3 JDS - 19:17 Job - 58:8, 127:1, 128:21, 129:4, 163:3, 175:10, 190:2, 195:8, 206:10 John's - 99:4, 99:13, 109:8, 217:22 Joined - 48:9 Jonathan - 19:11 Journal - 203:4 Journals - 226:8 JP - 15:18, 15:19, 15:23 Judge - 148:14 Judgement - 88:19, 89:5 Judgment - 11:4, 11:6, 11:7, 16:12, 20:9, 21:14, 22:7, 24:4, 24:5, 24:6,</p> | <p>24:8, 25:18, 25:22, 31:5, 33:1, 33:2, 33:20, 34:6, 43:8, 49:1, 49:4, 50:24, 58:14, 58:15, 87:16, 87:17, 87:19, 88:9, 89:1, 89:23, 93:17, 95:22, 113:17, 113:21, 115:5, 128:9, 131:21, 136:4, 155:12, 157:1, 157:3, 157:12, 157:20, 157:23, 161:6, 171:20, 171:22, 171:24, 171:25, 172:7, 173:10, 174:10, 174:20, 174:22, 174:24, 175:1, 175:5, 175:14, 175:19, 175:20, 176:5, 176:25, 177:7, 177:9, 182:1, 185:23, 186:2, 189:4, 189:8, 190:4, 205:10, 207:21, 207:22, 208:10, 208:18, 211:7, 226:14, 231:22, 233:13, 233:14</p> <p>Judgments - 205:12</p> <p>Jump - 142:10, 211:13, 211:15, 211:17, 211:21</p> <p>Jumping - 191:18</p> <p>Junk - 184:20</p> <p>Jurisdiction - 43:15, 43:17, 225:6</p> <p>Jurisdictional - 147:3, 147:18</p> <p>Justice - 62:12, 66:17, 70:21</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;">K</div> <p>Kahl - 28:14 Kansas - 5:15, 5:17, 5:21 KC - 1:15, 2:20, 42:4, 56:15, 60:24, 61:4, 61:11, 62:19, 62:24, 63:10, 65:2, 120:4, 203:16, 203:25, 204:6,</p> | <p>222:14, 222:22, 223:1, 223:15 Kelly - 6:15, 51:20, 119:23, 120:3, 174:19, 189:3 Kelly's - 120:5 Kettle - 31:8 Key - 142:19, 162:10 Kinds - 114:25 KKR - 122:23, 158:25 Knock - 163:25 Knocked - 36:20, 113:25 Knowingly - 151:15, 151:23, 152:12, 152:20, 156:12, 156:13 Knowledge - 198:23 Knows - 116:17, 201:10 Kootenay - 141:14 Kroll - 9:18, 12:19, 12:20, 12:22, 13:17, 177:14, 177:15, 177:21, 188:15, 188:22, 189:18, 189:19, 190:3, 192:5, 194:8, 194:24, 196:9 Kroll's - 130:6, 196:20</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;">L</div> <p>Labrador - 66:22, 114:1, 122:23, 151:20 Lake - 23:4 Lamont's - 62:12, 66:17, 70:21 Large - 40:5, 212:11, 212:14 Lasted - 50:6 Late - 35:2, 199:14 Later - 80:19, 221:4 Latest - 54:19, 216:20, 220:2 LAURENCE - 56:19 Lawsuit - 156:10, 156:19 Lawyer - 45:24, 45:25, 151:13,</p> | <p>156:8, 170:3, 170:12, 170:18 Lawyers - 154:20, 156:11, 170:4, 170:11, 170:19 Lays - 112:12 LDC's - 91:4 Lead - 111:21 Leave - 208:24, 226:11 LED - 81:16 Left - 98:20, 152:23, 153:7 Leg - 47:14, 47:15, 71:1, 72:25 Legal - 6:9, 34:20, 53:17, 54:13, 63:20, 68:25, 137:6, 139:9, 172:25 Legally - 137:21 Legged - 72:23, 73:18 Legitimate - 46:22, 79:4 Legitimately - 46:20 Legs - 70:2, 70:5, 72:11, 73:1, 73:17, 73:19, 161:19 Lehman - 45:22 Lending - 4:9, 5:25 Lenient - 96:7 Lesser - 19:11 Let's - 31:21, 39:3, 39:4, 59:3, 66:1, 78:1, 78:12, 78:21, 80:16, 120:7, 121:21, 176:3, 187:1, 195:15, 197:12 Letters - 18:19 Level - 7:9, 98:17, 118:24 Levels - 46:17 Levers - 86:16 LIAM - 56:19 Liar - 57:2, 57:24 Liberal - 10:5, 181:5 Liberty - 7:22 Limitation - 168:16, 168:21 Limitations - 120:2, 167:25, 168:8, 168:15, 169:9 Limited - 110:14,</p> | <p>205:13 Line - 18:14, 23:3, 30:10, 31:5, 65:5, 65:7, 65:9, 92:4, 143:3, 218:18 Lines - 62:3, 135:23, 211:3 Link - 66:23, 114:2, 122:23 Liquid - 36:10, 232:9 Liquidity - 232:12, 232:16, 232:18, 232:19, 232:24 Listened - 136:13, 164:15 Listening - 13:24 Literally - 13:10 Literature - 125:13, 127:11, 131:20 Litigated - 79:1, 121:3, 171:16 Litigation - 8:19, 8:20, 150:3 Lived - 21:16 Lo - 25:9 Loan - 4:7, 4:10, 4:12, 4:14, 4:16, 4:19 Local - 91:4 Long - 2:25, 5:1, 14:18, 14:20, 17:1, 17:8, 18:24, 19:1, 19:16, 26:6, 26:21, 28:14, 33:3, 36:17, 37:21, 38:5, 40:13, 40:25, 41:14, 44:24, 45:13, 48:12, 50:18, 51:13, 51:16, 51:22, 52:15, 54:18, 79:11, 80:15, 91:15, 97:17, 98:3, 98:6, 99:18, 105:3, 105:11, 107:12, 109:16, 118:11, 120:23, 130:7, 131:12, 138:7, 140:20, 159:15, 166:10, 167:16, 168:17, 170:9, 171:25, 172:9, 174:11, 175:21, 176:3, 176:8, 176:17, 177:18, 178:4, 178:7, 178:19, 178:22,</p> |
|--|--|---|---|--|

| | | | | |
|--|--|--|---|--|
| <p>180:4, 180:11, 180:16, 180:23, 181:7, 181:9, 181:11, 197:4, 197:9, 197:10, 198:13, 230:20, 231:1 Longer - 23:13, 23:18, 54:7, 89:15, 110:7, 166:11, 183:8, 223:6, 223:12 Look - 3:9, 3:17, 3:25, 4:22, 5:20, 6:7, 6:10, 8:14, 9:8, 10:12, 11:19, 11:22, 12:13, 12:16, 16:11, 18:13, 20:18, 21:10, 22:14, 23:20, 24:3, 24:9, 26:5, 26:7, 28:12, 31:21, 32:3, 40:23, 45:19, 49:6, 55:1, 69:16, 70:3, 77:7, 77:10, 78:12, 78:20, 78:25, 79:4, 80:5, 80:8, 80:23, 83:17, 84:20, 86:14, 89:11, 90:7, 95:7, 97:15, 105:7, 112:2, 115:15, 115:22, 116:4, 116:12, 116:15, 116:21, 117:10, 117:23, 118:1, 118:6, 118:10, 118:17, 118:23, 118:25, 119:1, 121:21, 127:20, 127:21, 128:23, 129:2, 129:19, 129:20, 129:21, 130:2, 130:20, 131:4, 131:10, 133:14, 138:3, 140:21, 145:19, 147:18, 154:21, 155:11, 155:16, 158:21, 159:10, 159:18, 159:19, 159:20, 159:23, 161:20, 162:5, 163:14, 164:6, 170:14, 173:1, 177:14, 177:16, 178:8, 178:13, 184:13, 185:1,</p> | <p>188:21, 189:21, 190:5, 190:8, 194:10, 198:19, 198:22, 198:24, 200:1, 205:4, 205:18, 206:8, 209:16, 213:10, 214:18, 214:23, 216:16, 216:17, 217:5, 221:21, 232:6, 232:11, 232:15 Looked - 14:19, 16:11, 26:18, 28:15, 68:10, 69:23, 90:24, 98:14, 131:10, 131:11, 131:12, 131:13, 153:18, 159:17, 179:19, 183:8, 199:17, 201:18, 201:24, 206:6, 211:6, 213:16, 216:14, 225:20, 229:5, 229:10, 232:23 Looking - 11:16, 16:8, 25:13, 28:9, 30:13, 39:8, 39:17, 48:6, 51:11, 68:10, 69:25, 71:20, 76:16, 76:24, 82:8, 91:14, 116:7, 116:14, 117:13, 118:5, 122:2, 129:4, 157:14, 157:21, 158:21, 160:15, 161:4, 161:12, 163:22, 163:23, 188:15, 191:11, 191:12, 194:24, 202:19, 202:22, 203:2, 217:15, 218:5, 222:18 Lose - 33:13, 162:21 Losing - 33:23, 98:11 Losses - 162:18, 162:21 Lost - 50:9, 133:6, 159:16 Lot - 13:8, 14:21, 17:14, 22:15, 23:6, 30:19, 44:9, 54:25, 58:25, 74:7, 75:16, 90:2, 91:6, 91:11,</p> | <p>99:13, 116:21, 123:13, 125:11, 133:6, 169:3, 170:11, 171:24, 173:4, 178:3, 194:21, 195:6, 197:6, 201:12, 210:7, 212:11, 214:20 Lots - 42:11, 86:16 Love - 8:15, 128:21, 160:17 Low - 5:3, 15:15, 28:10, 28:23, 32:9, 32:10, 32:11, 32:17, 32:18, 32:19, 32:24, 43:15, 78:24, 106:9, 120:18, 120:24, 122:21, 134:7, 135:1, 139:25, 158:25, 192:8, 201:4, 201:5, 201:6, 208:19, 208:20, 208:21, 208:22, 208:23, 208:24, 212:12, 224:18 Lower - 10:10, 14:16, 31:24, 32:1, 32:22, 44:10, 71:9, 78:21, 83:18, 85:4, 87:21, 113:14, 113:22, 113:23, 114:3, 120:23, 121:4, 136:2, 158:23, 160:20, 184:21, 196:17, 210:18 Lowered - 13:3 Lowest - 125:20, 126:1, 126:2 Lows - 121:5 Luck - 10:20 Lunch - 45:23</p> <div style="border: 1px solid black; text-align: center; width: fit-content; margin: 10px auto;"> <p>M</p> </div> <p>Magazine - 188:20 Mail - 25:13, 25:14 Mail's - 208:21 Main - 196:8, 232:14 Mainline - 90:20, 91:3, 92:3 Mainly - 6:21, 118:23, 124:1, 129:22, 135:3,</p> | <p>184:25, 198:12, 199:15, 233:11 Maintain - 42:16, 119:25 Major - 9:1, 9:7, 14:25, 15:4, 18:12, 25:6, 41:15 Make - 9:8, 11:2, 13:5, 20:15, 26:23, 47:3, 56:23, 62:23, 63:8, 67:9, 86:20, 115:13, 126:23, 128:8, 128:13, 129:6, 133:8, 144:20, 149:1, 157:20, 160:14, 160:16, 162:22, 166:15, 167:16, 205:7, 206:24, 226:15, 229:11, 229:15, 229:18, 230:16, 233:19 Making - 34:1, 149:23, 149:25, 167:3, 217:20 Manage - 86:17 Manager - 15:7, 41:14 Manipulates - 150: 10 Manna - 39:20 Many - 22:17, 36:11, 66:15, 97:22, 129:10, 160:13, 168:13, 222:24 March - 1:24, 74:16, 74:18, 76:11 Marginally - 87:21 Margins - 16:6 Maritime - 127:21, 127:25, 141:12, 159:16, 159:17, 159:20, 161:1, 161:2 Marker - 112:12 Markets - 5:3, 5:5, 6:9, 6:11, 9:22, 15:24, 17:17, 20:21, 41:4, 45:22, 52:21, 74:12, 75:15, 77:10, 78:6, 83:22, 95:7, 117:3, 172:12, 229:24 Marshall - 26:16, 27:7 Massive - 18:6, 18:9, 47:19, 47:24,</p> | <p>76:17, 166:3, 177:20, 218:10 Match - 75:1 Matched - 134:23 Material - 40:3, 54:9, 98:1 Materially - 41:7 Math - 228:10 Math's - 40:9 Matters - 1:3, 1:5, 43:19, 111:14, 133:22 Maximizing - 179:1 MBA - 127:13, 193:17, 193:18 Mcshane - 137:13, 229:6 Means - 8:21, 22:3, 31:18, 43:10, 48:18, 161:6, 209:21, 216:4 Meant - 68:23 Measure - 3:25, 5:20, 20:17, 20:18, 40:17 Measurement - 28: 1 Measures - 3:9, 5:19, 6:8, 7:5, 20:10, 36:23, 71:24, 72:6 Measuring - 36:4, 197:19 Mechanically - 37: 2 Mechanism - 48:24 , 49:2, 73:23, 146:12, 147:8, 147:16, 147:20, 148:19, 153:18 Mechanisms - 144: 10, 145:24, 146:1, 146:3, 147:4, 148:8 Median - 12:14, 122:6, 196:10 Medium - 14:18 Meets - 32:16 Mellon - 14:24 Meltdown - 46:9 Members - 2:21, 3:3, 10:15, 33:6, 129:17 Memory - 19:15 Mentioning - 152:2 0 Mercer - 16:25 Mercer's - 41:5</p> |
|--|--|--|---|--|

| | | | | |
|--|--|--|---|--|
| <p>Met - 124:6 Method - 86:11 Methods - 36:12 Metrics - 44:11, 71:10, 72:4, 132:14 Michefielder - 28:25 Michigan - 23:2, 23:4 Midpoint - 227:18 Mike - 199:15, 201:17 Minds - 226:12 Mine - 19:16 Minimum - 138:8, 180:5, 181:19, 181:24 Minor - 40:2 Minus - 27:6, 43:25, 112:22, 135:1 Mistake - 15:10 Misunderstand - 158:1 Mitigates - 114:6 Mitigation - 112:16 Model - 6:17, 6:19, 6:20, 7:20, 7:24, 7:25, 8:25, 10:25, 11:2, 11:21, 11:22, 27:1, 27:13, 31:17, 33:20, 35:12, 35:14, 36:25, 37:9, 37:14, 37:15, 48:11, 50:23, 56:2, 56:6, 56:7, 56:8, 131:6, 164:25, 165:9, 165:25, 166:7, 166:9, 166:16, 166:20, 166:22, 166:24, 167:3, 176:7, 176:12, 176:25, 180:15, 187:18, 193:20, 202:24, 227:16, 227:23 Models - 10:16, 10:17, 10:23, 11:3, 11:5, 11:13, 35:5, 36:14, 36:15, 45:3, 53:12, 55:24, 56:4, 156:23, 164:11, 164:16, 164:18, 164:21, 164:22, 166:2, 166:4, 167:23, 168:3, 169:6, 178:23,</p> | <p>178:24, 179:9 Moderate - 213:12 Modified - 54:15 Modify - 94:18, 95:1 Mole - 55:6, 58:1, 58:2, 76:7, 99:19, 101:1 Money - 6:11, 6:23, 7:7, 7:13, 7:14, 15:6, 15:8, 24:21, 31:6, 33:13, 33:23, 40:24, 68:17, 132:16, 133:6, 133:10, 133:24, 162:21, 162:22, 173:1, 173:3, 178:15, 184:3 Monopolists - 162:8 Monthly - 209:9, 210:4, 210:15, 210:16, 210:17, 210:24 Months - 216:6 Montreal - 191:3 Mood's - 134:24 Moody's - 132:10, 164:9 Morgan - 15:18, 15:19, 15:23 Morning - 1:2, 1:16, 187:3, 234:6 Move - 56:18, 78:1, 120:7, 164:11, 187:1 Moved - 10:7, 47:12, 181:5, 181:6 Moving - 29:10 MPCA - 144:5 Much - 6:17, 32:12, 32:21, 56:16, 80:2, 89:15, 96:5, 100:19, 109:7, 129:14, 139:6, 158:9, 158:23, 180:13, 194:13, 195:9, 198:25, 207:8, 207:9, 207:10, 222:8, 223:12 Multi - 8:14 Multiple - 8:21, 8:22, 9:6 Muskrat - 84:13, 112:15 Myron - 35:3</p> | <p style="text-align: center;">N</p> <p>Narrow - 197:2, 214:14, 214:19 Narrowed - 195:20 Narrower - 197:7 Narrowing - 196:24 National - 7:16, 36:15, 81:3, 81:9, 90:4, 95:6, 199:13 Navigator - 13:2, 177:16 Near - 205:2 NEB - 44:25, 45:2, 45:4, 45:8, 45:10, 45:14, 46:7, 46:23, 48:1, 49:4, 49:8, 50:5, 50:6, 54:15, 54:17, 81:17, 136:12, 138:5, 138:11, 138:15, 140:7, 199:23, 206:6, 231:10, 231:13, 231:16 NEB's - 91:2 Negligible - 105:13, 105:14, 107:10, 107:11 Negotiated - 231:20 Neither - 140:2, 145:19 Nervous - 4:15 Net - 82:19, 113:7, 133:15 New - 7:21, 7:23, 14:7, 14:24, 46:25, 55:7, 55:8, 55:9 Newfoundland - 1:6, 1:18, 1:20, 1:22, 16:14, 16:19, 17:11, 31:10, 32:8, 32:16, 32:24, 34:18, 34:23, 36:5, 41:5, 43:1, 43:16, 43:17, 44:6, 44:12, 48:23, 50:1, 50:13, 50:21, 51:6, 53:1, 53:6, 54:1, 54:2, 54:13, 59:5, 70:19, 70:22, 71:7, 79:2, 82:15, 82:20, 84:12, 84:15, 85:11, 86:24, 87:1, 87:15, 87:20, 89:20, 92:9, 92:21, 93:2, 93:6, 94:3, 96:19, 97:1, 97:3,</p> | <p>97:19, 98:6, 101:2, 101:11, 101:23, 105:12, 105:17, 106:5, 107:13, 113:17, 114:1, 114:5, 116:17, 119:13, 132:2, 132:5, 133:21, 134:20, 136:1, 141:11, 143:1, 145:13, 148:23, 151:20, 151:21, 151:23, 152:13, 152:16, 153:15, 153:19, 154:4, 155:16, 155:23, 156:3, 156:6, 160:4, 161:11, 161:16, 217:8, 217:10, 217:21, 229:6 Newspaper - 23:2, 25:15 NGTL - 90:20 Nine - 39:11, 39:12, 41:16, 43:11, 43:24, 44:1 Nobody - 11:10, 49:1, 73:13, 145:19, 178:20, 186:20, 221:24 Nobody's - 74:14, 84:5 Noise - 20:15 Non - 32:20, 160:14, 169:24, 170:1 Nonsense - 26:15, 178:20, 217:4 Nord - 22:1, 22:2, 26:3, 27:23, 28:5, 28:6, 28:12, 28:20, 28:24, 208:3, 208:4 Normal - 5:25, 6:1, 75:3, 135:2, 197:9 Normalized - 178:6 Normally - 125:19, 230:3 Nortel - 19:17, 20:3, 132:24 North - 212:21 Northern - 92:3 Northwest - 62:5 Northwestern - 14:17 Notably - 42:18 Note - 209:4,</p> | <p>228:16 Notes - 224:7 Nova - 91:23, 94:22, 104:10, 104:21, 107:17, 108:2, 109:10, 109:16, 110:13, 110:20, 111:2, 124:7 Nowadays - 40:23 NP - 51:5, 51:15, 53:18, 150:21 NP's - 78:22 Nuances - 171:17 Nuclear - 115:19, 115:23, 116:5 Numbers - 18:13, 25:19, 88:20, 89:2, 89:3, 89:8, 89:10, 89:18, 115:16, 116:21, 126:10, 130:13, 130:15 Nutshell - 72:1 NYC - 30:22 NYU - 13:7, 13:8</p> <p style="text-align: center;">O</p> <p>Object - 82:17, 108:22, 109:2, 122:12, 224:24 Objected - 50:8 Objecting - 50:7, 109:5 Objection - 52:25 Objective - 58:5, 58:9 Obligation - 54:6, 54:12 O'brien's - 43:10 Observation - 56:24, 121:16, 147:15, 198:15 Observe - 199:1 Occasions - 59:7, 124:10 Odds - 175:16 OEB - 126:11, 126:16, 231:7 Offer - 127:5 Officers - 4:12, 4:14, 4:19, 193:13 Offices - 4:8, 15:20 Offsetting - 133:19 Often - 5:12 Oil - 23:4, 35:9, 90:5, 90:11, 90:12, 98:9, 98:23, 99:3,</p> |
|--|--|--|---|--|

| | | | | |
|---|---|---|--|--|
| <p>105:19 Old - 20:13, 75:14, 100:1, 141:13 One - 3:10, 5:20, 7:6, 8:12, 8:16, 8:19, 14:7, 17:2, 17:9, 17:25, 19:6, 19:18, 20:15, 24:10, 24:22, 25:4, 25:6, 27:11, 27:17, 27:20, 30:11, 31:4, 33:8, 35:7, 35:10, 35:11, 37:24, 40:7, 43:25, 47:7, 47:8, 49:2, 50:8, 53:4, 54:23, 54:24, 56:5, 56:6, 56:7, 59:16, 72:11, 82:11, 113:24, 115:10, 117:2, 117:11, 126:13, 132:9, 137:14, 138:15, 139:1, 139:21, 142:21, 149:6, 160:19, 160:20, 160:23, 161:8, 161:10, 161:18, 163:25, 167:24, 169:9, 170:24, 179:22, 180:18, 183:25, 190:9, 193:8, 200:23, 201:2, 203:19, 207:4, 210:12, 218:14 Ones - 127:20, 165:23 Ontario - 47:11, 92:3, 115:18, 116:3, 116:5, 141:13, 161:11, 230:14, 231:3, 233:11 Open - 33:16 Opening - 53:22, 141:25 Operating - 159:10, 159:11, 159:14, 160:10, 160:11, 160:18, 161:8 Operation - 182:20 Operator - 83:16 Opinion - 58:12, 89:23, 92:23, 94:17, 94:23, 95:3, 95:5, 95:17, 96:24, 101:5, 101:12, 101:13, 101:22,</p> | <p>102:1, 102:12, 102:13, 103:10, 103:12, 103:13, 106:23, 110:24, 114:16, 126:24, 127:18, 128:7, 128:21, 128:23, 130:19, 130:22, 131:18, 173:11 Optimism - 39:5 Optimistic - 51:19 Options - 141:21 Order - 8:5, 58:3, 85:19, 114:11, 164:18 Ordering - 128:12 Organizations - 25:24 Otherwise - 143:12, 148:4, 148:20, 150:19, 150:20, 185:10, 214:20, 219:23 Outcome - 187:18 Outlandish - 11:10 Outlier - 96:1 Outline - 142:20 Outlined - 62:2 Overestimated - 40:21 Overfond - 39:7 Overlapping - 26:24 Overruled - 110:14 Overwhelming - 194:9 Overwhelmingly - 8:11 Own - 24:14, 31:7, 45:25, 54:17, 103:9, 138:22, 157:2, 157:13, 157:21, 158:14, 167:25, 185:10, 194:1, 194:20, 195:1, 195:3, 212:3 Owned - 127:17, 184:2 Owner - 113:8 Owners - 110:3 Ownership - 109:24 <div style="border: 1px solid black; width: 40px; height: 15px; margin: 10px auto; text-align: center;">P</div> Paid - 30:17, 40:6, 52:21, 134:9 Pain - 85:12, 86:21</p> | <p>Panel - 3:3, 33:6, 205:12, 224:7, 225:1, 225:3, 225:10 Panels - 100:18, 100:23 Papers - 125:6, 125:10 Parameters - 42:15 Partial - 26:25 Partially - 90:2 Participated - 90:23, 127:21 Particularly - 3:20, 22:20, 36:14, 36:18, 136:10, 172:15, 175:20, 233:15 Parties - 45:10, 224:23 Parts - 115:10, 128:16 Passed - 81:23, 82:16, 83:7, 83:25, 84:16, 84:24, 85:8, 110:13, 116:2 Passing - 86:11, 152:10 Past - 18:4, 27:9, 66:15, 93:1, 142:3, 164:6, 225:20, 225:24 Pay - 40:4, 44:15, 58:1, 108:20, 109:8, 129:1, 130:1, 177:15 Payers - 108:17, 109:6 Paying - 31:23, 108:19, 184:10 Payout - 31:22, 31:25 Pays - 127:9 PC - 124:4 Pdf - 142:19 Peculiar - 20:17 Pembina - 23:9 Pension - 14:10, 14:12, 14:14, 16:16, 16:19, 17:15, 17:18, 38:17, 162:12 People - 3:14, 9:2, 9:8, 11:24, 12:6, 12:7, 12:16, 13:5, 14:3, 15:3, 15:4, 15:16, 19:15,</p> | <p>58:23, 69:16, 82:18, 98:21, 99:3, 99:4, 99:13, 123:20, 124:3, 128:19, 165:19, 169:24, 170:20, 170:22, 173:4, 174:9, 177:14, 178:3, 183:11, 188:19, 191:8, 194:21, 195:24, 196:2, 203:1, 203:4, 230:1, 230:23, 231:2, 232:21 Perceived - 46:13 Percentage - 116:4, 231:23 Perception - 91:9, 93:14, 145:8, 190:1 Percible's - 113:20 Perfectly - 46:22, 183:15 Perhaps - 64:7, 71:5, 99:14, 99:15, 99:24, 100:7, 100:9, 100:11, 100:14, 100:16, 100:17, 100:20, 114:2, 125:9, 140:18, 150:18 Period - 18:5, 20:1, 20:8, 20:11, 21:1, 26:6, 26:17, 40:13, 48:15, 49:21, 50:10, 54:18, 98:19, 138:8, 151:18, 178:10, 212:23, 215:17, 215:18, 215:20, 215:22, 216:5, 217:5, 217:19, 218:8 Periods - 5:9, 21:17, 26:20, 26:21, 29:5, 37:22, 210:17 Permanent - 129:24 Persists - 181:12 Person - 26:13, 170:1 Personal - 185:11, 185:16, 185:17, 185:23, 186:2, 189:8, 194:2, 202:13, 231:22</p> | <p>Pessimistic - 51:21 Petrified - 88:14, 88:15 Petroleum - 172:23 Phase - 75:5 Phds - 14:17 Phelps - 9:18, 12:19 Philosophy - 20:13 PHILPOTT - 203:20, 204:4, 204:16, 204:21 Phrase - 157:12, 157:17, 159:7 Pick - 159:22 Picked - 144:22 Pickering - 115:21 Piece - 67:13, 78:3, 78:4, 78:5, 111:21 PIGS - 47:22 Pioneers - 14:20 Pipe - 231:17 Pipeline - 23:4, 23:10, 90:11, 90:18, 90:20, 132:20, 133:1 Pipelines - 22:25, 23:6, 90:6, 90:12, 90:13, 90:17, 100:11, 231:19 Pipes - 23:20 Place - 1:19, 121:12, 145:12, 205:13 Plan - 14:12, 16:16, 16:19, 17:18, 222:10 Planning - 104:14 Plans - 14:10, 15:22, 17:15, 53:5 Plants - 91:24, 104:13, 104:22, 108:14, 108:19, 109:10, 109:19, 110:3 Play - 55:6, 58:2 Players - 123:10 Pointed - 184:1 Pointing - 154:9 Points - 1:21, 2:2, 2:8, 34:12, 34:22, 34:24, 37:6, 39:12, 41:20, 46:18, 60:6, 86:20, 96:22, 126:21, 127:16, 136:17, 136:19,</p> |
|---|---|---|--|--|

| | | | | |
|---|--|---|--|---|
| <p>137:2, 137:12, 137:17, 142:20, 144:20, 144:25, 154:6, 155:25, 177:25, 182:20, 191:21, 192:25, 212:2, 229:5, 229:8, 229:24, 230:9 Political - 104:18 Poor's - 24:17, 25:7, 133:7 Popular - 5:18 Portfolio - 197:25 Portugal - 47:22 Position - 1:22, 2:2, 2:7, 69:12, 129:7, 134:12 Positive - 162:22 Power - 1:6, 1:18, 1:20, 1:23, 16:14, 16:19, 17:11, 31:10, 32:8, 32:16, 32:24, 34:18, 34:23, 36:5, 41:5, 43:1, 43:17, 44:12, 48:23, 50:1, 50:14, 50:22, 51:6, 53:1, 53:6, 54:1, 59:6, 70:19, 70:22, 71:7, 82:15, 85:11, 86:24, 87:15, 87:20, 89:20, 91:24, 92:9, 92:21, 93:2, 93:7, 94:3, 96:19, 97:1, 97:3, 97:20, 98:6, 101:2, 101:11, 104:11, 104:13, 104:21, 105:13, 107:14, 107:17, 108:3, 108:11, 109:16, 110:20, 113:17, 114:5, 115:18, 116:5, 116:18, 119:13, 132:2, 132:5, 136:1, 141:11, 141:14, 143:2, 148:23, 151:23, 152:13, 152:16, 153:15, 153:19, 154:4, 155:17, 155:23, 156:4, 156:6, 160:5, 161:16, 229:7 Powers - 115:23 Power's - 54:3,</p> | <p>79:3, 84:12, 84:15, 94:22, 101:23, 106:6, 134:20, 145:13, 151:21 Practical - 168:4 Practically - 38:16 Practice - 116:1 Pre - 133:22 Predict - 31:16 Predictable - 27:18 Predicting - 43:18 Prediction - 132:9 Predicts - 180:15 Prefaced - 131:24 Prefer - 7:2, 7:7, 22:10 Preference - 54:15 Preferred - 35:11, 35:22, 35:24, 36:3, 36:6, 36:8, 40:25, 53:15, 53:18, 53:19, 94:11, 94:15, 96:6, 183:4, 183:5, 183:7, 183:9, 184:4, 184:6, 184:16, 184:18, 184:19, 185:1, 185:19, 185:21, 186:5 Preferreds - 35:21 Preliminary - 1:2, 1:5, 1:13, 111:13 Premier - 25:15 Premise - 67:11 Premium - 6:20, 7:1, 7:25, 9:19, 11:15, 11:18, 12:4, 12:21, 13:4, 13:11, 13:14, 13:15, 13:20, 13:22, 14:8, 16:23, 22:3, 34:4, 34:5, 35:10, 36:1, 36:13, 36:25, 37:4, 37:11, 45:3, 58:25, 130:6, 130:7, 131:11, 131:16, 165:10, 166:2, 172:5, 173:24, 174:22, 175:21, 176:1, 176:9, 178:2, 178:15, 187:1, 187:4, 187:17, 187:22, 188:21, 188:25, 189:15, 191:4, 191:9, 191:12, 191:23, 194:3,</p> | <p>195:1, 196:18, 197:8, 212:8 Premiums - 5:10, 17:4, 36:5 Prepare - 15:25 Prepared - 15:25 Present - 2:3, 24:8, 209:5, 223:2 Presentation - 3:6, 41:23 Presented - 58:21, 58:22, 58:23, 145:23, 149:13, 149:22, 151:1, 199:23, 208:13, 220:6, 220:7 Presenting - 147:7, 149:15, 151:16, 152:21, 221:7 Presents - 151:24 Pressure - 23:6 Pretax - 43:19, 43:21, 44:3, 44:8, 44:15 Previous - 198:3 Previously - 133:18, 225:17 Price - 15:23, 52:13, 98:23, 100:17, 159:18, 213:9, 213:14 Prices - 98:16, 162:9, 162:10, 162:19, 181:1, 209:14, 210:3, 210:4, 215:11 Pricing - 6:17, 6:19, 7:20, 7:24, 11:21, 27:13, 35:12, 35:14, 48:11, 50:23, 56:8, 131:5, 167:3, 193:20 Prime - 7:17 Principle - 6:16, 6:22, 62:4 Prior - 134:10 Priority - 73:19 Private - 81:11, 119:13, 184:9 Probability - 146:24, 148:13 Problem - 4:4, 10:14, 17:16, 28:1, 37:16, 48:10, 68:1, 71:11, 71:18, 71:21, 77:23, 82:8, 115:24, 129:14, 171:7,</p> | <p>177:17, 178:13, 179:8, 180:3, 186:23, 193:21, 224:19, 231:5, 232:22, 233:17 Problems - 3:23, 10:1, 10:4, 47:22, 72:4, 72:5, 72:7, 86:9, 86:17, 139:9, 168:13, 168:24, 178:13 Proceed - 2:17, 223:6 Processes - 171:18, 199:8 Produce - 11:10, 21:8, 21:9, 24:14, 25:16, 38:21, 194:25 Produced - 31:4, 215:14 Producers - 172:23 Producing - 195:25, 219:16 Products - 115:19 Profession - 13:7 Professional - 30:24, 171:2, 191:5 Professionals - 12:5, 12:7, 12:17, 191:9 Professor - 8:24, 21:14, 24:4, 35:2, 88:23, 96:12, 124:8, 127:8, 128:20, 131:19 Professors - 9:17, 12:10, 170:20, 170:21 Profile - 114:23, 115:1, 115:2, 115:7 Profit - 16:6, 82:17, 82:18, 135:25 Program - 48:9 Project - 8:8, 84:13 Prominent - 88:20 Proof - 103:20 Propane - 99:14, 99:15 Proponent - 6:16 Proposal - 116:25, 120:8, 121:22, 122:17, 127:15 Proposed - 126:21 Proposing - 108:12</p> | <p>Protect - 97:14, 110:11, 122:25, 133:8 Protection - 116:16, 132:13, 163:7, 163:19 Protects - 116:17 Provide - 9:10, 9:13, 24:15, 25:2, 42:15, 58:9, 64:9, 66:8, 96:12, 129:9, 174:9, 224:16 Provided - 14:7, 60:4, 123:15, 123:16, 124:6, 209:1 Provider - 29:15 Providers - 25:6 Provides - 14:4 Providing - 24:21, 42:9, 227:5 Province - 44:8, 109:20, 116:2 Provinces - 99:2, 104:16 Provincial - 104:20, 139:7, 139:15, 139:16 Proxy - 160:4 Public - 38:25, 172:6, 194:22, 195:2, 195:4, 207:15, 212:4, 212:6, 213:19, 214:2, 214:8 Publication - 13:2, 203:2 Published - 125:6, 209:6 Publishes - 45:4, 45:10 Pull - 61:25, 142:17, 144:5 Pump - 98:23, 99:7, 99:8 Pumping - 92:4, 100:10 Purchase - 84:23 Pure - 42:23, 160:18, 160:21, 199:18 Pushed - 19:22 Puts - 5:15 Putting - 37:3, 49:22, 52:25, 63:21, 168:24</p> |
|---|--|---|--|---|

| | | | | |
|--|---|---|--|--|
| <p style="text-align: center;">Q</p> <p>Qualification - 148:7 Qualifications - 70:13 Qualifies - 148:4 Qualitative - 91:12 Quality - 230:20 Quebec - 34:15, 55:21, 105:5, 150:3, 150:5, 150:6, 150:9, 151:14, 151:15, 153:13, 154:8, 154:11, 154:23, 155:14, 156:8, 156:10, 156:20 Questioned - 84:6 Questioning - 150:25 Quick - 29:24 Quickly - 224:10 Quote - 29:3, 39:1, 221:1, 221:5, 221:17, 221:22, 223:24 Quoted - 226:7</p> | <p>Rarely - 75:9 Rate - 1:25, 6:12, 7:1, 8:10, 9:9, 12:23, 15:1, 16:4, 16:20, 17:8, 17:9, 17:17, 19:8, 22:19, 22:22, 23:13, 23:16, 23:18, 27:14, 34:8, 35:5, 35:8, 36:22, 36:23, 37:19, 37:24, 37:25, 39:18, 39:23, 39:25, 40:1, 40:8, 40:10, 40:11, 40:17, 40:24, 40:25, 41:1, 43:14, 43:16, 43:18, 44:1, 51:13, 51:16, 66:25, 68:7, 69:3, 78:15, 81:13, 81:22, 86:1, 86:4, 92:1, 92:22, 94:22, 108:17, 109:6, 109:21, 110:8, 112:15, 114:6, 116:5, 130:8, 131:12, 133:25, 134:3, 138:6, 138:8, 138:9, 138:14, 142:16, 159:2, 166:11, 167:17, 167:21, 172:1, 172:9, 173:6, 174:11, 174:12, 175:21, 176:4, 176:7, 176:16, 178:4, 178:7, 178:8, 180:5, 183:10, 186:1, 213:11, 216:5, 229:2 Rated - 46:14, 46:15, 46:16, 79:25, 117:3, 184:21, 230:2 Ratepayers - 34:21, 44:15, 81:23, 114:3, 137:22, 143:7, 163:4 Rates - 8:5, 9:11, 9:12, 10:9, 14:13, 18:15, 18:22, 34:25, 38:6, 40:19, 40:21, 48:16, 50:13, 50:19, 78:13, 78:23, 78:24, 84:14,</p> | <p>134:6, 169:2, 181:9, 181:18, 218:11 Rather - 46:25, 118:23, 124:3, 130:17, 177:23, 191:12 Rating - 42:17, 43:7, 96:8, 112:1, 112:6, 112:22, 132:4, 132:8, 133:12, 134:17, 134:21, 134:22, 135:2 Rating's - 70:23 Ratio - 42:20, 53:14, 74:1, 82:13, 82:22, 95:8, 96:13, 112:24, 113:1, 113:6, 113:16, 113:18, 114:19, 133:17, 134:1, 134:5, 135:4, 135:25, 137:15, 139:4, 140:19, 140:21, 141:23, 142:6 Rational - 146:23, 148:15 Rationale - 2:4 Ratios - 53:25, 113:4, 129:22 Raw - 208:13, 212:19, 212:21, 213:24, 214:5, 215:5, 219:13 RBC - 24:13, 25:5, 39:2, 207:20 Rbcs - 130:5 Reached - 46:17 Ready - 2:15, 2:17 Realized - 7:17 Reap - 49:25 Reason - 19:14, 54:25, 71:3, 81:18, 95:24, 96:19, 129:3, 209:12, 220:20, 224:13, 224:15 Reasonable - 40:20, 50:17, 70:24, 73:9, 104:3, 122:11, 125:24, 131:14, 136:9, 138:6, 138:13, 138:16, 142:2, 143:5, 143:14, 144:15,</p> | <p>146:13, 146:14, 147:10, 148:22, 148:25, 149:1, 150:1, 150:17, 150:20, 156:2, 185:12, 195:12, 198:21, 202:7, 218:7 Reasonableness - 202:21 Reasonably - 58:11, 199:18 Reasons - 2:4, 98:17, 179:6 Rebuttal - 1:11, 24:2, 57:17, 60:21, 62:16, 63:2, 63:14, 64:5, 65:1, 66:5, 68:22, 220:23 Rec - 3:22, 6:2 Recent - 18:3 Recently - 13:3, 28:25, 94:21, 179:25, 202:17 Recession - 3:13, 3:14, 4:14 Recessions - 75:12, 75:15 Recklessly - 151:16, 151:24, 152:12, 152:20, 156:12, 156:13 Recognize - 23:7 Recognized - 67:3 Recommend - 48:22, 49:17, 53:13, 108:4, 146:17, 158:23, 164:2 Recommendation - 52:5, 66:7, 66:12, 79:19, 79:21, 87:8, 91:3, 112:11, 125:21, 135:10, 137:3, 137:25, 143:4, 143:22, 143:23, 144:4, 144:7, 147:14, 147:15, 148:1, 149:12, 149:23, 149:25, 159:4, 159:5, 225:2, 230:6 Recommen-dations - 55:23, 64:9, 96:15, 120:21, 137:15, 138:3, 167:14 Recommended - 4</p> | <p>2:22, 43:3, 67:6, 91:1, 104:6, 121:10, 121:11, 121:15, 127:23 Recommending - 43:1, 135:14, 145:11, 158:24, 192:13 Recommends - 164:9 Reconciling - 130:9 Recorded - 19:25 Recover - 47:15, 48:8, 86:3, 108:16 Recovered - 47:18, 74:23 Rectify - 190:1 Reduce - 4:16, 51:17, 102:14, 103:14, 132:1, 140:19, 195:5 Reduced - 196:21 Reduces - 116:12, 209:8 Reducing - 86:12 Reduction - 36:17, 101:14, 102:11, 134:20 Refereed - 203:2 Referenced - 102:19, 205:24 Referred - 124:8 Refers - 74:21 Reflect - 229:11 Reflected - 1:24 Reflective - 198:9 Refunding - 119:15 Refurbishing - 115:20, 115:21 Regarded - 184:20, 210:13, 230:23 Regards - 143:5, 145:4, 146:13 Regie - 7:17, 8:18, 47:11, 81:16, 137:7, 191:3 Regis - 55:24, 230:14 Regular - 75:10, 162:20 Regulate - 162:19, 162:24 Regulated - 22:20, 23:14, 23:17, 23:18, 159:24, 162:8, 199:18,</p> |
| <p style="text-align: center;">R</p> <p>Rabbit - 42:12 Raise - 96:23, 150:13, 158:11, 161:22 Raised - 61:12, 83:10, 101:8, 101:9, 109:3, 142:11, 142:12, 193:3 Raises - 150:15 Randy - 124:6 Range - 2:6, 2:7, 53:22, 82:23, 104:3, 104:8, 134:25, 136:15, 182:19, 187:4, 187:11, 187:15, 187:25, 192:4, 195:17, 195:18, 195:19, 196:11, 198:4, 198:5, 212:19, 214:14, 214:19, 214:23, 215:3, 227:17, 227:23, 227:24 Ranges - 224:11 Ranking - 165:21</p> | <p>134:6, 169:2, 181:9, 181:18, 218:11 Rather - 46:25, 118:23, 124:3, 130:17, 177:23, 191:12 Rating - 42:17, 43:7, 96:8, 112:1, 112:6, 112:22, 132:4, 132:8, 133:12, 134:17, 134:21, 134:22, 135:2 Rating's - 70:23 Ratio - 42:20, 53:14, 74:1, 82:13, 82:22, 95:8, 96:13, 112:24, 113:1, 113:6, 113:16, 113:18, 114:19, 133:17, 134:1, 134:5, 135:4, 135:25, 137:15, 139:4, 140:19, 140:21, 141:23, 142:6 Rational - 146:23, 148:15 Rationale - 2:4 Ratios - 53:25, 113:4, 129:22 Raw - 208:13, 212:19, 212:21, 213:24, 214:5, 215:5, 219:13 RBC - 24:13, 25:5, 39:2, 207:20 Rbcs - 130:5 Reached - 46:17 Ready - 2:15, 2:17 Realized - 7:17 Reap - 49:25 Reason - 19:14, 54:25, 71:3, 81:18, 95:24, 96:19, 129:3, 209:12, 220:20, 224:13, 224:15 Reasonable - 40:20, 50:17, 70:24, 73:9, 104:3, 122:11, 125:24, 131:14, 136:9, 138:6, 138:13, 138:16, 142:2, 143:5, 143:14, 144:15,</p> | <p>146:13, 146:14, 147:10, 148:22, 148:25, 149:1, 150:1, 150:17, 150:20, 156:2, 185:12, 195:12, 198:21, 202:7, 218:7 Reasonableness - 202:21 Reasonably - 58:11, 199:18 Reasons - 2:4, 98:17, 179:6 Rebuttal - 1:11, 24:2, 57:17, 60:21, 62:16, 63:2, 63:14, 64:5, 65:1, 66:5, 68:22, 220:23 Rec - 3:22, 6:2 Recent - 18:3 Recently - 13:3, 28:25, 94:21, 179:25, 202:17 Recession - 3:13, 3:14, 4:14 Recessions - 75:12, 75:15 Recklessly - 151:16, 151:24, 152:12, 152:20, 156:12, 156:13 Recognize - 23:7 Recognized - 67:3 Recommend - 48:22, 49:17, 53:13, 108:4, 146:17, 158:23, 164:2 Recommendation - 52:5, 66:7, 66:12, 79:19, 79:21, 87:8, 91:3, 112:11, 125:21, 135:10, 137:3, 137:25, 143:4, 143:22, 143:23, 144:4, 144:7, 147:14, 147:15, 148:1, 149:12, 149:23, 149:25, 159:4, 159:5, 225:2, 230:6 Recommen-dations - 55:23, 64:9, 96:15, 120:21, 137:15, 138:3, 167:14 Recommended - 4</p> | <p>2:22, 43:3, 67:6, 91:1, 104:6, 121:10, 121:11, 121:15, 127:23 Recommending - 43:1, 135:14, 145:11, 158:24, 192:13 Recommends - 164:9 Reconciling - 130:9 Recorded - 19:25 Recover - 47:15, 48:8, 86:3, 108:16 Recovered - 47:18, 74:23 Rectify - 190:1 Reduce - 4:16, 51:17, 102:14, 103:14, 132:1, 140:19, 195:5 Reduced - 196:21 Reduces - 116:12, 209:8 Reducing - 86:12 Reduction - 36:17, 101:14, 102:11, 134:20 Refereed - 203:2 Referenced - 102:19, 205:24 Referred - 124:8 Refers - 74:21 Reflect - 229:11 Reflected - 1:24 Reflective - 198:9 Refunding - 119:15 Refurbishing - 115:20, 115:21 Regarded - 184:20, 210:13, 230:23 Regards - 143:5, 145:4, 146:13 Regie - 7:17, 8:18, 47:11, 81:16, 137:7, 191:3 Regis - 55:24, 230:14 Regular - 75:10, 162:20 Regulate - 162:19, 162:24 Regulated - 22:20, 23:14, 23:17, 23:18, 159:24, 162:8, 199:18,</p> | |

| | | | | |
|--|--|---|---|--|
| <p>203:3, 224:13 Regulating - 50:1 Regulation - 22:22, 35:9, 116:9, 116:11, 139:8, 139:16, 162:9, 162:11, 162:23 Regulations - 22:13, 84:20, 110:13, 110:18, 115:25 Regulator - 51:4, 97:13, 112:20, 132:17, 161:20 Regulators - 120:14, 136:4, 159:15 Regulatory - 9:5, 53:4, 93:16, 110:9, 110:23, 115:25, 116:16, 124:15, 125:2, 125:11, 127:7, 128:12, 132:13, 134:13, 163:6, 163:7, 163:17, 163:18, 163:19, 226:14 Reinvested - 40:7 Reiterate - 53:24 Reject - 48:25, 56:2, 226:9 Rejected - 55:25, 56:5, 81:17, 128:22, 129:3, 141:22, 225:17, 225:23 Relative - 17:24, 25:4, 27:14, 32:15, 139:5, 197:17, 197:21, 203:1, 220:3 Relatively - 6:6, 202:17 Relevance - 196:15 Reliance - 7:16, 212:3, 212:4 Relied - 22:17, 205:24 Rely - 22:9, 31:3, 38:3, 42:12, 51:5, 157:2, 205:9 Remarks - 53:23 Remind - 50:12, 94:10, 221:6 Reminiscent - 110:16 Remove - 54:12, 230:18, 231:5</p> | <p>Removed - 85:3 Rent - 83:11, 83:18, 83:23 Repay - 133:13 Repeated - 96:15, 216:23, 218:11, 218:14 Repeatedly - 78:25, 138:23, 141:9, 141:23, 156:5 Repetitive - 55:1, 55:2, 55:4, 139:6 Replacement - 108:21 Reply - 65:24 Report - 1:24, 2:3, 11:25, 14:6, 17:6, 25:15, 30:2, 30:3, 42:18, 87:8, 87:11, 87:13, 106:4, 112:25, 135:11, 135:21, 135:23, 142:22, 146:4, 147:14, 147:25, 157:13, 191:16, 191:17, 213:22, 213:23, 214:6 Reported - 16:21, 30:6 Reports - 24:21, 24:23, 38:18, 60:6 Represented - 6:25 Reputable - 195:24, 196:2 Request - 1:14, 14:8, 16:17, 45:9 Requests - 7:18 Require - 69:17, 222:9 Required - 14:3, 24:20, 66:24, 81:12, 81:14 Requirement - 127:2, 137:6, 172:25 Requirements - 69:24 Requires - 110:10 Research - 24:21, 24:23, 25:8, 30:14, 125:6, 125:10, 131:20, 148:18, 149:11, 149:21, 199:11, 209:6, 210:3, 215:11, 233:6 Researchers - 232:</p> | <p>23 Reserve - 5:15 Residential - 105:21 Resources - 31:6, 76:21 Respect - 59:5, 83:1, 88:4, 88:5, 120:25, 164:12, 205:1 Respondents - 192:3, 192:6, 196:10 Response - 1:7, 12:12, 151:1, 151:7, 151:8, 154:25, 190:15, 193:24, 194:3, 194:7, 207:18 Responses - 13:18, 92:15 Restraint - 11:6 Result - 3:16, 9:22, 46:10, 71:11, 74:24, 91:6, 114:13, 148:15, 169:8, 181:8, 186:7, 188:15 Resulted - 154:10 Resulting - 151:17 Results - 34:3, 36:24, 37:1, 50:11, 51:7, 51:8, 157:16, 157:17, 158:12, 190:17, 212:14, 212:16, 227:16 RESUME - 111:11 Resurrected - 206:4 Retaining - 39:21 Retention - 39:24, 40:11 Retire - 218:12 Retirement - 15:22 Retooled - 47:1, 47:2 Return - 6:12, 9:9, 9:11, 14:18, 14:22, 14:23, 15:1, 15:2, 16:20, 17:2, 17:5, 17:8, 17:9, 17:10, 17:17, 17:20, 22:19, 22:22, 23:14, 23:17, 23:18, 34:10, 35:5, 35:9, 39:23, 39:25, 43:20, 43:24, 48:13, 60:11, 60:14,</p> | <p>60:15, 61:19, 62:1, 62:5, 62:7, 62:9, 64:10, 64:17, 66:8, 66:11, 66:13, 66:16, 66:18, 66:20, 66:24, 66:25, 67:1, 67:10, 67:15, 68:8, 70:15, 70:20, 71:9, 72:11, 72:20, 72:23, 78:15, 81:12, 81:14, 86:1, 97:16, 97:17, 109:12, 117:1, 120:8, 120:13, 120:15, 122:1, 122:22, 123:2, 128:9, 138:6, 140:6, 142:16, 159:2, 161:18, 161:19, 162:5, 162:15, 162:16, 178:19, 178:22, 179:2, 179:5, 180:15, 180:17, 203:23, 213:12 Returns - 9:23, 9:25, 15:15, 15:17, 16:2, 17:2, 17:7, 41:8, 41:14, 67:20, 128:11, 128:13, 210:4 Reuters - 24:24, 25:4 Reverend - 198:18 Reverse - 40:4 Revert - 117:1 Reverted - 20:6 Reviewed - 174:18, 220:9, 220:11 Reviews - 114:16 Revised - 1:9 Revisit - 112:16 Revolutionary - 171:5 Reward - 71:22 RFI - 17:25, 145:10, 150:25, 151:7, 190:16 Rfis - 42:11 RH - 44:25, 90:4 RH1 - 7:17 Rid - 158:14 Ridiculous - 12:13, 200:22 Ridiculously - 217:24 Rip - 98:22</p> | <p>Rise - 218:10 Rising - 216:5 Riskier - 32:7, 54:4, 160:10, 200:23 Risks - 90:22, 115:1 Risky - 3:14, 23:1, 32:3, 46:13, 98:9, 108:3, 209:16, 232:7 Road - 77:9, 91:13, 101:6 Rock - 15:7, 15:18 Rockstar - 15:20 ROE - 22:4, 32:17, 32:18, 34:2, 34:12, 34:25, 36:14, 41:12, 43:11, 44:10, 44:19, 45:2, 45:7, 45:14, 45:16, 46:20, 49:1, 50:3, 50:17, 50:22, 51:2, 51:5, 53:11, 53:13, 53:20, 54:9, 54:22, 64:8, 66:7, 66:12, 71:9, 71:15, 71:16, 71:23, 71:25, 72:2, 73:25, 76:25, 77:8, 78:22, 79:3, 80:22, 82:22, 85:20, 89:21, 91:15, 94:3, 94:4, 95:12, 96:14, 98:13, 98:14, 108:8, 108:10, 113:5, 113:6, 113:15, 113:16, 113:22, 113:23, 113:25, 114:3, 114:13, 114:18, 115:6, 120:22, 121:22, 122:4, 123:16, 124:16, 125:18, 125:21, 126:16, 126:21, 126:22, 127:23, 128:14, 132:1, 132:13, 133:15, 133:21, 133:22, 135:5, 135:24, 136:9, 136:12, 136:14, 139:2, 140:19, 140:22, 142:5, 143:1, 143:5, 143:14, 144:11, 144:15, 145:1, 145:2,</p> |
|--|--|---|---|--|

| | | | | |
|---|---|---|---|---|
| <p>145:4, 145:13, 145:14, 146:13, 146:14, 146:22, 147:10, 148:12, 148:22, 148:25, 149:2, 150:1, 150:7, 150:17, 150:21, 152:17, 152:23, 153:5, 153:20, 154:5, 156:2, 161:15, 161:21, 162:25, 163:2, 163:11, 163:22, 163:24, 164:12, 164:19, 165:1, 173:2, 229:15, 230:20, 231:4, 231:6, 233:19 Roes - 113:10, 120:23, 121:4, 129:21, 130:2, 130:10, 131:2, 138:3, 138:13, 139:23 Roof - 100:23 Room - 19:15, 84:10, 109:18, 154:21, 170:11, 183:17 Rooms - 89:13 Roulette - 7:3 Royal - 24:13, 208:19 Rule - 224:15 Ruled - 205:6 Rules - 7:13 Run - 5:1, 17:1, 17:8, 17:9, 38:5, 41:14, 91:14, 91:15, 98:3, 98:6, 99:18, 105:4, 105:10, 105:11, 106:9, 107:12, 180:24, 198:13 Rush - 46:10, 53:17</p> <div style="border: 1px solid black; width: 50px; margin: 10px auto; text-align: center; padding: 2px;">S</div> <p>S&P - 9:24, 41:9 S&P's - 208:22 Safety - 46:11 Salary - 2:6, 2:7 Sample - 22:8, 23:12, 23:15, 35:8, 218:6, 224:18 Samples - 159:22</p> | <p>Satisfactory - 51:7, 51:8, 138:7 Satisfied - 121:25, 224:17 Satisfies - 33:4, 70:20 Satisfy - 48:13, 48:21, 50:19, 66:13, 69:18, 71:14 Saves - 114:3 Savings - 54:23 Saw - 126:10 Scandal - 24:19 Scenario - 86:22, 102:22, 136:6, 218:13 Scheme - 191:16 Scholes - 31:8 Science - 169:22, 173:17 Scotia - 91:23, 94:22, 104:11, 104:21, 107:17, 108:2, 109:10, 109:16, 110:13, 110:20, 111:2, 124:7 Scratch - 66:22 Screen - 42:5 Scroll - 142:23, 204:14, 204:24 Sean - 124:4, 126:1 Seasonal - 97:24 Second - 1:12, 8:12, 45:13, 47:14, 70:25, 203:5 Secondly - 115:15 Securities - 3:14, 3:16, 4:24, 27:14, 27:16, 36:2, 38:13, 66:20, 67:18, 68:3, 68:7, 68:14, 68:16, 69:9 Security - 8:6, 67:16, 67:24, 69:1, 69:2, 69:6, 125:8, 210:3, 215:11 See - 3:18, 3:20, 3:21, 3:22, 3:24, 4:13, 5:6, 6:1, 23:21, 24:9, 47:25, 49:24, 53:23, 54:2, 58:12, 68:1, 70:7, 92:8, 95:24, 96:19, 97:18, 98:5, 99:15, 100:15, 101:3, 112:22, 130:20,</p> | <p>157:22, 159:3, 159:11, 163:15, 174:7, 178:3, 181:21, 189:19, 189:23, 198:15, 199:24, 209:2, 234:6 Seen - 22:4, 32:14, 38:19, 64:2, 75:13, 75:16, 80:10, 97:12, 124:10, 195:24, 196:12, 220:17, 227:8, 232:5 Sell - 13:6, 38:11, 38:12, 38:13, 52:9 Selling - 12:17, 230:1 Sells - 181:16 Senior - 4:12 Sensitive - 229:12, 229:20, 230:17, 233:20 Sensitivity - 18:14, 18:21 Sent - 203:9 Separate - 80:23 Series - 177:16, 183:5, 210:6 Serious - 3:22, 4:4, 83:17 Seriously - 36:19, 98:21 Serve - 54:6, 54:12, 105:20 Serves - 105:20, 105:21 Service - 12:18, 23:5, 30:17, 104:14, 104:22, 108:14 Set - 14:15, 53:19, 79:2, 90:11, 95:22, 115:7, 115:24, 142:5, 143:4, 163:11, 164:25 Setting - 27:5, 77:8, 115:6, 125:11 Settled - 137:16 Settlement - 77:18, 78:5, 78:17, 79:5, 107:22, 108:24, 122:11, 122:16 Settlements - 22:2 3, 22:24, 46:24, 135:17, 136:7, 231:17</p> | <p>Seven - 41:16 Several - 5:6 Severe - 3:19 Shape - 130:19 Shapes - 5:24 Share - 16:7, 35:24, 36:8, 53:18, 85:11, 86:21, 146:25, 148:17, 159:1, 183:9, 184:4, 184:6, 184:16, 185:19, 186:6 Shared - 143:6, 143:15, 145:15, 148:14 Shareholder - 82:2 0 Shares - 35:11, 35:22, 36:4, 36:6, 53:15, 53:19, 94:11, 94:15, 96:6, 183:7, 184:18, 184:19, 185:1, 185:21, 232:21 Sharing - 143:15, 143:24, 144:10, 145:24, 145:25, 146:3, 146:11, 146:17, 147:3, 147:8, 147:16, 147:20, 148:19 Sheet - 30:11, 31:4 She's - 13:24 Shift - 74:11, 74:17, 78:7 Shippers - 45:9, 46:24, 231:19 Shock - 49:11, 132:8, 134:13, 162:20, 162:22 Shocked - 45:25 Shouldn't - 72:1, 121:1, 150:18 Show - 2:2, 2:6, 34:15, 61:17, 227:9 Showed - 32:14, 233:2 Shown - 214:4, 214:10 Shows - 2:7, 208:3 Shred - 152:4, 153:14, 155:8 Side - 38:11, 38:14, 38:15, 38:16, 38:18, 124:19, 124:23, 125:2,</p> | <p>136:5 Sides - 17:21 Significant - 18:22, 90:10, 91:22, 92:2, 94:24, 105:14, 106:5, 106:12, 106:22, 107:1, 112:20, 118:7, 174:8, 202:5 Significantly - 4:21 , 10:10, 21:24, 101:24, 117:5, 181:22, 208:12 Silo - 171:3 Similar - 21:22, 25:10, 64:11, 66:10, 119:9, 134:4, 136:11, 138:10, 140:12, 151:19, 206:15, 220:7 SIMMONS - 223:1 Simple - 33:9, 38:22 Simply - 3:3, 18:3, 22:16, 23:24, 27:5, 42:10, 72:2, 210:8 Single - 52:21, 164:24 Six - 40:8, 40:9, 40:10, 192:3, 192:5, 194:6, 194:8, 195:17, 195:20, 195:21, 195:25, 196:10, 196:13, 210:16, 210:17 Sixes - 126:2 Sky - 102:20, 102:21 Slashed - 10:6 Slavishly - 11:12, 11:13, 11:16, 20:24, 21:8, 166:9 Slides - 2:23, 3:5, 187:3 Slight - 37:21 Slightly - 25:11, 41:6, 192:16 Slow - 32:9, 65:11 Smaller - 215:3, 231:18 Smoking - 40:15 Software - 208:1 Solar - 100:18, 100:23 Sold - 10:4, 46:13, 52:10</p> |
|---|---|---|---|---|

| | | | | | |
|--|---|--|---|---|----------|
| <p>Solely - 205:9 Solve - 27:6, 71:18, 72:7, 186:23 Somewhat - 164:23, 222:10 Sooner - 221:4 Sophisticated - 8:15 Sored - 183:14 Sorts - 84:21, 139:9 Sound - 227:19 Sounds - 59:11, 223:14 Source - 99:11 Sources - 9:6, 9:7, 188:23, 189:13, 196:8 Spain - 47:23 Special - 200:3 Specific - 139:4, 179:6, 226:9, 226:11 Spell - 130:14, 142:7, 145:3 Spend - 74:7, 91:11 Spending - 10:6 Spike - 5:7, 5:8 Spikes - 6:4 Spot - 42:13, 178:4 Spread - 3:16, 46:15, 47:4, 47:6, 47:13, 54:19, 118:12, 118:23, 119:6, 119:9, 184:18, 184:22, 185:18, 186:5, 186:13, 197:6, 228:1, 228:18, 228:19, 228:21, 229:1, 229:3, 229:9, 229:10, 229:16, 229:22, 230:2, 230:7, 230:8, 231:2, 232:3, 232:15, 233:2, 233:8, 233:15, 233:18 Spreads - 2:25, 3:11, 3:17, 4:1, 5:25, 49:7, 140:10, 167:4, 167:9 Square - 136:23 Squeezed - 71:10 St - 99:4, 99:13, 109:8, 217:21</p> | <p>Stability - 112:2 Staff - 15:25, 116:19 Stage - 122:17 Standard - 6:10, 17:7, 18:20, 24:17, 25:7, 26:14, 28:15, 29:9, 32:23, 48:13, 60:11, 60:14, 60:16, 61:19, 62:1, 62:5, 62:8, 62:9, 63:9, 63:20, 64:17, 66:13, 66:16, 67:2, 67:10, 68:13, 68:25, 69:14, 69:19, 70:10, 70:20, 72:10, 72:12, 73:20, 119:25, 122:1, 129:24, 133:6, 138:17, 146:22, 158:19, 161:18, 161:19, 162:5, 162:15, 162:16 Standards - 68:11 Start - 31:20, 82:8, 99:4 Started - 25:13, 34:1, 35:4, 36:19, 36:22, 37:1, 37:3, 48:5, 88:13, 89:7, 92:4, 109:15, 116:7, 183:23, 202:16, 210:8, 212:5 Starting - 1:23, 58:16 Starts - 68:21 State - 3:7, 3:9, 6:8, 6:10, 26:10, 156:1 Statement - 90:7, 141:25, 148:5 Statistic - 20:10, 20:25, 21:12 Statistical - 19:25, 24:7, 27:21, 29:6 Statistician - 21:2 Statistics - 18:20, 21:8, 21:10, 25:19, 116:7, 116:14, 186:4 Stay - 75:20, 209:14, 218:23 Stays - 75:24 Stick - 155:19, 185:10 Stipulated - 45:7</p> | <p>Stock - 15:23, 19:19, 19:23, 36:7, 38:9, 159:18, 183:6, 200:8, 200:12, 200:14, 201:9, 210:4, 215:13, 220:4 Stockpile - 52:10, 52:17, 52:19 Stocks - 18:14, 18:23, 19:21, 19:24, 30:11, 30:13, 30:15, 30:20, 30:21, 32:1, 184:11, 200:10, 200:23, 209:10, 209:11, 209:13, 209:17, 209:21 Stool - 70:3, 70:5, 72:23, 73:17, 73:18 Stopped - 36:8 Stores - 109:23 Straight - 16:2, 191:13 Straightforward - 209:12 Straits - 46:7, 47:19, 47:24 Stranded - 91:17, 92:6, 100:17, 100:21, 105:12, 106:9, 106:15, 107:13, 109:22 Street - 13:9, 13:10 Streetlights - 105:22, 105:23 Strength - 112:3 Stress - 5:16, 5:17, 5:21 Strike - 147:8, 147:13 Strip - 19:7 Strong - 5:5 Stronger - 205:10 Structure - 87:6, 102:2 Stuck - 95:23, 184:25, 185:13 Student - 124:5 Students - 7:11, 10:13, 10:14, 13:9, 75:6, 129:16, 180:19 Subscription - 30:17 Substandard - 68:19</p> | <p>Substantial - 219:23 Substantially - 227:1 Substitute - 11:7 Sudden - 169:2 Suddenly - 99:13 Suggested - 51:12, 57:2, 102:11, 153:12 Suggestion - 19:2, 57:1, 57:24, 74:9, 74:10, 225:7 Suit - 150:4, 150:6, 151:19, 154:11 Summaries - 60:5 Summary - 87:13, 118:2, 118:10 Summer - 217:13, 217:23 Supplementary - 99:10 Supply - 17:22, 180:18, 180:20, 180:21, 180:22, 181:10 Support - 76:22, 196:12, 205:11 Supported - 122:22, 140:7 Supports - 43:6 Suppose - 31:9, 71:3, 217:8 Supposed - 169:7, 229:23 Supreme - 62:6, 84:4, 85:9, 109:23 Surplus - 10:8, 181:7 Surprise - 125:18, 134:16, 199:20 Surprised - 28:11, 89:6, 197:2 Surprises - 112:7 Surrounding - 62:4 Survey - 4:12, 8:1, 9:4, 11:20, 12:1, 12:2, 165:19, 188:17, 188:19, 189:12, 190:10, 190:11, 190:17, 190:18, 192:3, 192:6, 193:2, 193:3, 193:9, 193:15, 194:23, 196:18 Surveys - 4:7,</p> | <p>11:24, 13:18, 30:10, 193:8, 193:13, 193:21, 193:24 Suspect - 112:25, 180:11 Suspend - 50:17, 50:22 Suspended - 53:12 Sustainable - 39:18, 40:1, 40:16, 40:19, 41:19 System - 46:2, 49:12, 105:5</p> <table border="1" data-bbox="1312 594 1546 625"> <tr> <td style="text-align: center;">T</td> </tr> </table> <p>T&D - 42:23, 54:4, 96:2, 114:24, 160:21, 161:8 T&T - 161:2 Table - 42:17, 42:20, 43:4 Tables - 75:18 Taking - 42:11 Tan - 5:4 Tandem - 5:4 Tanks - 99:16 Tapes - 210:1 Taught - 170:9 Tax - 7:6, 7:14, 33:8, 33:10, 43:14, 43:15, 43:16, 43:17, 43:18, 43:20, 43:22, 43:23, 43:25, 44:14, 55:13, 81:13, 104:19, 133:17, 133:22, 134:2, 134:6, 170:15, 184:10 Taxable - 33:5, 33:6, 33:11, 33:15, 33:21 Taxed - 7:9, 33:9, 36:2, 36:3 Taxes - 133:20, 134:9 Taxpayers - 116:2 TD - 14:5, 14:9, 14:14, 14:15, 17:7 Tds - 104:6 Tec - 3:22 Tech - 6:2, 200:21, 200:23 Technical - 2:21, 13:12, 13:25 Technically - 84:11, 162:17</p> | T |
| T | | | | | |

| | | | | |
|--|--|--|--|--|
| <p>Techniques - 25:1 2, 206:11</p> <p>Telcos - 35:8, 35:15</p> <p>Television - 75:7</p> <p>Telling - 33:22, 41:23, 104:21</p> <p>Tells - 33:21, 34:6</p> <p>Temperature - 217: 9, 217:21</p> <p>Temporary - 86:9, 230:24</p> <p>Ten - 4:3, 12:3, 41:13, 71:6</p> <p>Tendency - 198:13</p> <p>Term - 2:25, 4:9, 4:16, 14:18, 14:19, 36:17, 38:3, 40:2, 50:18, 68:2, 77:6, 77:9, 79:11, 80:15, 86:17, 97:19, 98:2, 168:17, 176:8, 176:17, 219:21, 230:20</p> <p>Terms - 4:9, 6:14, 9:1, 9:10, 16:5, 16:6, 16:20, 17:20, 31:7, 54:10, 67:9, 70:20, 70:24, 72:22, 73:9, 74:5, 78:6, 92:18, 94:17, 97:1, 98:1, 101:2, 105:9, 105:10, 107:18, 107:19, 120:11, 121:14, 121:22, 123:6, 125:16, 125:17, 161:15, 165:21, 165:23, 171:17, 173:24, 173:25, 178:1, 184:21</p> <p>Test - 18:11, 53:5, 105:16, 218:8</p> <p>Testimony - 12:22, 24:3, 35:13, 42:8, 50:3, 55:1, 55:2, 55:4, 55:5, 56:25, 58:1, 58:3, 60:3, 60:16, 62:16, 63:21, 64:5, 65:1, 66:3, 66:5, 66:6, 68:12, 80:6, 94:20, 94:21, 96:12, 98:4, 101:9, 109:3, 109:14, 110:12, 110:22, 117:19, 117:21, 118:3,</p> | <p>118:20, 123:17, 123:21, 124:6, 124:10, 129:6, 136:13, 137:17, 150:15, 156:23, 169:17, 172:24, 174:18, 179:20, 191:2, 195:6, 204:9</p> <p>Testing - 40:17</p> <p>Testy - 55:18, 56:9, 56:24</p> <p>Thanks - 204:20</p> <p>Theodossiou - 28: 25, 203:5</p> <p>Theory - 127:11, 146:22, 158:20, 165:8, 169:6, 178:25, 226:19</p> <p>There's - 3:8, 7:24, 8:21, 14:6, 18:7, 20:8, 20:13, 20:15, 23:5, 26:3, 36:11, 37:7, 37:9, 37:21, 54:7, 54:25, 62:2, 66:4, 72:23, 73:22, 74:10, 75:5, 76:2, 90:9, 91:13, 96:22, 102:12, 102:14, 103:20, 106:4, 106:22, 108:24, 109:4, 115:12, 115:24, 117:22, 118:7, 122:12, 122:19, 123:20, 125:8, 127:11, 128:16, 129:12, 130:8, 139:6, 139:21, 142:19, 145:10, 146:20, 146:23, 148:3, 149:6, 154:20, 157:22, 159:1, 162:10, 162:20, 162:22, 164:24, 167:8, 168:8, 168:15, 168:16, 168:21, 168:23, 170:11, 170:24, 171:23, 174:7, 174:10, 174:22, 174:24, 177:25, 185:6, 187:15, 193:7, 193:23, 194:3, 194:20, 195:10, 202:23, 205:3, 206:2, 209:7, 214:14,</p> | <p>214:18, 214:22, 227:5, 232:20</p> <p>Thers - 163:18</p> <p>These - 3:4, 5:19, 6:7, 9:7, 12:6, 13:6, 14:17, 15:3, 15:4, 17:1, 20:22, 21:16, 21:17, 25:23, 25:25, 30:7, 37:13, 38:11, 42:15, 58:22, 60:2, 71:10, 75:9, 75:18, 78:23, 89:13, 90:22, 95:3, 104:12, 104:13, 109:19, 113:13, 114:8, 127:25, 128:5, 128:6, 131:21, 138:24, 159:25, 161:5, 162:13, 163:5, 166:4, 178:24, 190:6, 195:2, 195:9, 196:24, 207:20, 210:5, 218:19, 221:24</p> <p>They'd - 103:11, 162:9</p> <p>They'll - 51:8, 86:5, 100:8, 100:9, 108:20, 109:11, 113:2, 133:13, 133:14</p> <p>They're - 5:25, 8:6, 8:7, 11:6, 12:7, 12:8, 12:10, 14:15, 14:20, 15:5, 15:9, 17:21, 18:3, 24:17, 24:23, 25:1, 25:10, 25:17, 25:18, 26:2, 26:9, 28:10, 30:7, 30:8, 30:13, 30:20, 30:22, 33:23, 34:16, 35:8, 36:10, 37:23, 38:7, 38:19, 38:24, 39:2, 39:5, 39:7, 40:22, 41:8, 41:9, 48:13, 48:19, 52:1, 54:22, 75:18, 80:2, 99:24, 100:20, 108:18, 110:7, 115:21, 116:21, 129:23, 129:24, 130:4, 130:5, 133:23, 134:24, 150:8, 154:2, 155:14, 160:9, 160:10,</p> | <p>163:3, 177:19, 180:24, 184:21, 187:20, 196:17, 207:24, 208:6, 214:10, 222:16</p> <p>They've - 4:3, 22:24, 26:8, 34:19, 37:6, 39:3, 91:24, 103:8, 115:23, 120:18, 121:7, 134:21, 135:1, 141:22, 142:3, 155:13, 160:12, 160:13, 163:10, 186:21, 205:6, 210:18</p> <p>Thickly - 209:11, 209:16, 209:21</p> <p>Thickness - 80:22, 87:7, 89:22, 94:4, 94:19, 95:2, 101:15, 108:5, 111:22, 112:2, 112:21, 132:3</p> <p>Thin - 39:21</p> <p>Thinly - 209:10, 209:12</p> <p>Third - 7:6, 18:18, 40:7, 40:11, 45:14, 49:23, 52:10, 53:5, 70:25</p> <p>Thirds - 27:9, 40:5, 200:19</p> <p>Thomadakis - 206: 2</p> <p>Thomas - 198:18</p> <p>Thomson - 25:4</p> <p>Thousand - 11:24</p> <p>Thousands - 125:8 , 125:9</p> <p>Three - 6:21, 7:12, 25:17, 26:20, 27:2, 32:19, 36:12, 49:20, 49:21, 50:3, 51:25, 53:6, 55:23, 56:4, 69:24, 70:2, 72:11, 72:23, 73:17, 73:18, 77:4, 77:7, 100:14, 120:20, 126:12, 129:17, 178:10, 178:17, 179:13, 188:23, 189:13, 196:8, 197:3, 215:22, 215:23, 216:1, 216:19, 216:23, 217:10, 218:3</p> | <p>Tied - 230:20</p> <p>Time - 2:8, 6:23, 6:25, 7:3, 7:13, 8:18, 12:21, 14:20, 21:1, 26:6, 26:17, 26:20, 26:22, 28:14, 29:5, 33:13, 36:21, 37:6, 37:22, 40:14, 45:21, 46:5, 47:21, 50:4, 50:5, 51:14, 52:1, 53:7, 54:18, 59:8, 66:14, 70:13, 74:7, 75:8, 75:24, 76:8, 79:2, 80:5, 87:11, 87:16, 88:8, 89:9, 89:24, 91:11, 92:13, 92:19, 92:20, 93:5, 94:20, 95:12, 97:6, 103:9, 117:10, 118:2, 123:17, 137:19, 138:8, 159:15, 164:20, 170:10, 174:4, 174:7, 178:15, 179:20, 182:22, 183:5, 183:12, 187:24, 191:1, 192:16, 193:4, 195:16, 198:10, 199:19, 202:12, 207:1, 209:7, 209:17, 212:23, 215:17, 215:18, 215:20, 217:5, 217:19, 222:8, 230:21, 233:4</p> <p>Times - 18:23, 22:2, 39:25, 40:1, 66:15, 82:22, 107:18, 113:6, 135:12, 142:12, 229:16, 230:9, 232:17</p> <p>Timespan - 16:25</p> <p>Tiny - 211:15, 211:17, 211:21</p> <p>Tired - 55:14, 55:19, 89:9</p> <p>Today - 56:9, 57:2, 87:18, 120:9, 170:6, 175:1, 176:6, 197:7, 217:7, 234:2, 234:4</p> <p>Toilet - 78:23</p> <p>Tomorrow - 222:13 , 223:7</p> |
|--|--|--|--|--|

| | | | | |
|---|---|--|--|--|
| <p>Tonne - 98:24, 104:19, 104:20 Took - 22:22, 126:12 Tools - 73:23, 167:24 Top - 42:21, 53:21, 122:21, 196:11 Topic - 125:7, 125:10 Topics - 131:21 Toronto - 19:19, 36:7, 183:6, 215:12 Torture - 11:2 Tough - 129:19 Towards - 24:10, 27:20, 28:2, 28:7, 28:17, 28:23, 29:8, 29:10, 29:14, 199:3, 200:7, 208:8, 215:1, 227:7, 227:10 TQM - 22:21, 45:21 Tracked - 184:17 Trade - 183:11, 209:13, 209:14, 209:17, 232:21 Traded - 30:22, 31:3, 31:14, 32:20, 160:22, 160:25, 161:1, 209:10, 209:11, 209:13, 209:17, 209:21 Trades - 178:20 Trading - 160:18, 179:1, 179:4 Traditionally - 10:1 Trained - 171:1 Training - 171:3 Trans - 22:18, 22:20, 23:8, 92:2 Transcanada - 45:24, 50:7 Transcript - 51:20 Transferring - 163:3 Transitional - 105:3 Translate - 16:7 Transmission - 91:3 Transmissions - 90:21, 91:5 Treasuries - 52:20 Treasury - 177:18 Treat - 81:20 Tree - 20:14</p> | <p>Trend - 24:10, 27:20 Trepidation - 23:25 Trible - 3:19 Tribunal - 155:2, 225:5 Trigger - 49:6, 51:12, 176:18, 176:21, 176:24, 177:22, 182:13, 185:25, 186:1 Trogonoski - 64:6 Trouble - 15:8, 83:15, 83:17, 129:13 Truism - 27:10, 27:19 Trust - 71:14 Truth - 76:2 Tune - 22:1 Tweaks - 16:5 Twice - 50:8, 109:8 Twist - 182:20 Twists - 16:3 Two - 1:5, 6:21, 7:4, 7:15, 8:19, 17:21, 19:3, 27:8, 35:6, 35:9, 40:5, 45:15, 49:20, 51:14, 56:25, 59:20, 64:8, 64:22, 64:24, 70:5, 72:25, 91:13, 115:10, 128:16, 138:23, 139:21, 142:21, 182:18, 192:22, 192:24, 200:19, 203:4, 203:14, 207:11, 214:15, 219:4, 224:21, 225:13, 232:13, 232:16 TXS - 37:18 Types - 29:5, 92:8 Typical - 41:12, 44:13 Typically - 47:7, 229:4 Typos - 145:20</p> <div style="border: 1px solid black; text-align: center; width: 40px; margin: 10px auto;"> <p>U</p> </div> <p>Ultimate - 130:22 Unadjusted - 26:13, 29:21, 30:3, 30:6, 213:24, 214:5, 214:12 Unanimous - 14:24</p> | <p>Unbiased - 38:14, 38:21, 38:24, 131:18, 149:16 Uncertainty - 146:20 Undergraduate - 21:3 Undergraduates - 171:15 Underlying - 166:5, 166:10 Understood - 60:12, 87:14 Undertaking - 1:7, 1:8, 1:14, 1:19, 2:9, 2:13, 119:2 Unfair - 50:11, 85:20, 162:9 Unfortunately - 43:16 Unintelligible - 27:17, 35:21, 68:20, 213:7, 219:2 Union - 160:25 Uniphase - 19:17 United - 9:20, 10:10, 11:17, 11:25, 16:2, 21:20, 21:21, 21:24, 22:15, 26:2, 29:2, 32:16, 39:15, 41:11, 46:1, 47:17, 52:18, 68:14, 92:5, 110:16, 132:20, 172:15, 177:22, 181:3, 183:16, 183:19, 194:7, 199:8, 199:22, 206:8, 221:11 University - 124:9 Unless - 94:24, 102:2, 103:10, 103:13, 120:22, 121:1, 161:9 Unlike - 98:4, 109:14 Unreasonable - 50:21, 51:11, 85:19 Unsatisfactory - 34:3 Untowards - 4:20 Unusual - 6:5, 126:5 Unwinding - 52:16 Update - 1:10, 198:21, 198:23 Upped - 195:18 Upwards - 201:6</p> | <p>Used - 8:23, 9:18, 12:22, 22:6, 22:9, 23:16, 25:11, 26:20, 29:5, 30:16, 30:23, 30:25, 31:14, 31:15, 32:25, 33:16, 35:4, 35:21, 35:23, 35:25, 36:10, 37:2, 45:5, 45:6, 45:17, 48:14, 53:18, 54:20, 86:5, 87:18, 91:11, 109:12, 110:7, 124:5, 131:5, 137:13, 137:14, 138:20, 163:2, 163:15, 164:12, 164:22, 166:2, 167:2, 168:11, 169:19, 176:16, 176:17, 176:21, 177:6, 177:14, 178:6, 178:7, 179:15, 179:17, 179:21, 180:5, 182:11, 182:12, 182:14, 182:21, 184:23, 187:16, 189:18, 189:19, 192:4, 192:15, 194:19, 197:3, 207:15, 210:2, 221:12, 224:19, 225:14, 229:7, 230:13, 231:15, 233:12 Usefulness - 166:4, 166:7 Useless - 99:8 Users - 105:20 Uses - 9:6, 12:18, 17:24, 26:13, 62:11, 137:12, 177:21, 208:17, 210:5, 210:9, 210:14, 212:18, 213:13, 216:2, 231:7, 231:8, 231:24 Using - 11:14, 11:17, 11:18, 26:22, 29:17, 30:8, 38:22, 78:20, 98:10, 139:22, 140:9, 158:3, 159:8, 166:9, 168:9, 178:3, 185:25, 187:20, 188:23,</p> | <p>193:4, 215:23, 217:19, 224:23, 225:17, 229:18, 233:18 Utilities - 4:6, 16:11, 18:21, 19:23, 22:5, 22:6, 23:14, 27:20, 28:9, 28:16, 29:1, 31:24, 32:21, 35:10, 39:6, 39:9, 40:4, 40:14, 41:18, 42:13, 43:5, 43:9, 44:22, 46:19, 46:24, 47:11, 54:4, 54:7, 54:10, 62:6, 67:2, 76:8, 82:9, 84:20, 84:22, 85:3, 90:16, 90:19, 90:20, 90:23, 92:8, 96:2, 97:21, 111:24, 113:13, 114:24, 114:25, 120:14, 122:3, 123:8, 126:13, 128:10, 135:1, 136:3, 161:5, 162:7, 199:18, 201:12, 201:19, 202:20, 202:24, 203:3, 203:7, 206:4, 206:7, 210:11, 221:5, 224:14, 224:17, 226:10, 226:11, 227:13, 230:15 Utility - 18:14, 18:23, 20:6, 22:1, 23:11, 28:5, 28:7, 28:13, 28:19, 29:7, 29:10, 29:12, 30:15, 31:21, 32:15, 34:4, 40:13, 41:2, 42:23, 44:13, 46:19, 48:24, 50:10, 54:20, 55:6, 55:9, 56:3, 57:24, 71:2, 71:4, 71:11, 73:8, 79:25, 82:24, 87:21, 88:20, 88:23, 90:5, 93:3, 97:13, 97:14, 99:19, 100:15, 100:24, 101:6, 102:20, 110:1, 110:3, 110:5, 110:11, 113:8, 114:24, 115:7,</p> |
|---|---|--|--|--|

| | | | | |
|--|---|--|---|--|
| <p>122:25, 123:9, 124:7, 126:8, 126:22, 127:17, 133:13, 134:4, 134:7, 134:23, 137:4, 137:19, 137:23, 139:3, 139:5, 144:24, 154:6, 157:14, 159:25, 160:21, 161:8, 163:4, 179:1, 197:18, 199:24, 200:15, 201:4, 201:25, 202:2, 210:22, 220:3, 227:6, 227:9, 227:10, 229:1, 230:22 Utterance - 52:22</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;"> <p>V</p> </div> <p>Vain - 128:18, 128:19, 189:22 Valid - 112:18, 168:3 Validate - 195:7 Validity - 193:5, 193:8 Valuable - 6:24 Valuation - 6:22 Value - 7:6, 15:14, 16:8, 19:19, 27:3, 27:4, 27:9, 30:9, 30:10, 31:4, 33:4, 36:20, 36:21, 48:14, 48:21, 50:20, 66:19, 67:5, 68:8, 75:2, 166:11, 167:21, 176:18, 176:24, 177:9, 177:19, 178:15, 182:13, 185:25, 186:1, 210:20, 219:7, 219:8, 220:19 Valued - 6:23, 7:13, 7:14, 18:7, 21:13 Values - 8:19, 8:20, 17:25, 18:1, 18:2, 18:3, 24:10, 29:17, 32:19, 194:10, 195:13 Valuing - 32:4 Vander - 124:9 Variability - 32:13, 32:17, 32:18, 108:11</p> | <p>Variables - 31:14, 31:15 Variance - 84:23 Varied - 40:22 Versus - 14:22, 21:18, 37:4, 90:6, 97:17, 116:4, 138:15, 139:17, 178:21, 179:2, 190:19 View - 96:10, 127:5, 135:24, 138:4, 224:12 Views - 224:21 Violates - 111:4 Volatile - 37:17, 37:25, 38:7, 38:8, 41:9 Volatility - 4:23, 4:25, 5:2, 5:4, 5:7, 5:8, 5:10, 5:12, 6:1, 18:25, 37:22, 209:15 Volumes - 232:21</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;"> <p>W</p> </div> <p>Waiting - 47:17 Walked - 176:6 Wall - 13:9, 13:10, 200:16 Wants - 24:3, 54:16, 63:1, 88:24 Warming - 104:17 Washed - 186:22 Wasn't - 35:20, 54:9, 118:21, 143:18, 184:5, 185:17, 189:12, 192:12, 199:24, 210:8, 220:11, 226:6, 233:14 Ways - 45:15, 69:25, 77:24, 78:11 Weakness - 140:10 Weather - 217:9 Webpage - 213:14 Website - 29:24, 30:2 We'd - 175:16, 192:12 Week - 1:17, 13:3 Weekly - 209:5, 209:9, 209:23, 210:9, 210:15, 210:22, 215:16, 215:23 Weide - 124:9</p> | <p>Weigh - 195:9 Weight - 205:13 Weighted - 55:13 Weighting - 132:12 Welcome - 111:13 We'll - 2:11, 46:23, 87:17, 223:17 We're - 2:15, 2:24, 16:8, 18:10, 22:14, 32:7, 48:18, 49:5, 49:12, 49:13, 49:21, 50:2, 51:10, 70:18, 75:3, 75:4, 76:16, 77:6, 77:7, 77:9, 78:3, 86:2, 86:19, 91:13, 99:15, 102:22, 105:3, 110:23, 133:24, 136:20, 154:16, 159:23, 161:3, 161:9, 161:21, 163:25, 168:9, 171:1, 176:5, 183:15, 218:22, 222:1 Weren't - 104:13, 147:17, 210:6 West - 90:13, 141:13 We've - 5:5, 18:25, 32:14, 34:13, 40:24, 53:16, 53:21, 71:1, 75:2, 75:13, 76:21, 84:9, 84:10, 84:21, 85:3, 104:22, 111:4, 135:8, 137:16, 138:22, 159:25, 160:19, 160:22, 161:12, 168:11, 181:9, 207:2, 210:2 Whack - 55:6, 58:1, 58:2, 76:7, 99:19 Wharton - 193:17, 193:18 What's - 6:13, 20:10, 58:15, 60:9, 81:11, 81:12, 81:13, 96:9, 104:10, 104:11, 104:15, 135:8, 156:7, 159:13, 159:24, 161:5, 183:18, 200:11, 209:18, 226:15 Whatsoever - 17:1, 3, 24:25, 29:10,</p> | <p>129:13, 208:7, 224:16, 227:6 Wheel - 7:3 Whereas - 95:12, 105:17, 112:25, 134:25, 213:13, 230:21 Whip - 183:14 Whole - 3:8, 21:4, 29:3, 46:2, 115:24, 169:20 Who's - 103:1 Widely - 164:24 Widen - 167:9 Will - 1:8, 2:13, 13:24, 28:7, 29:25, 39:14, 45:8, 52:14, 62:18, 75:5, 86:7, 88:12, 94:10, 98:16, 127:8, 186:14, 221:17, 222:23 Window - 20:5, 35:18, 35:19, 157:15, 157:18, 157:22, 158:1, 159:6, 159:8, 159:12, 159:20, 159:23, 160:2, 160:15, 161:13 Windows - 161:4 Winner - 9:21 Winters - 99:9 Witness - 55:22, 58:5, 58:8, 63:1, 88:20, 88:24, 100:15, 110:21, 126:3, 126:5, 127:2, 127:24, 150:13, 155:1, 222:6, 227:9, 229:6 Witnesses - 55:6, 55:10, 56:3, 57:25, 64:2, 64:3, 80:21, 98:8, 99:19, 101:1, 101:6, 102:20, 125:12, 126:6, 126:8, 126:12, 137:10, 158:23, 163:16, 172:14, 172:15, 202:21, 207:19, 210:22, 221:7, 221:8, 221:10, 225:13, 227:4 Wolf - 102:23, 103:1, 103:5</p> | <p>Wonders - 151:19 Won't - 38:10 Wood - 99:5, 99:6, 99:14 Woolridge - 124:6 Word - 87:17, 170:14, 170:16, 170:19 Worded - 68:24 Words - 22:9, 78:2, 170:13 Work - 4:24, 11:1, 11:2, 11:20, 12:1, 12:2, 17:14, 17:16, 21:4, 106:2, 115:18, 154:8, 190:3, 195:8, 199:21, 205:24, 206:1, 206:5, 206:11 Worked - 49:3, 50:24, 54:18 Working - 12:8, 12:9, 231:13 Works - 10:22 World - 46:5 Worlds - 15:7 Worrying - 32:12 Worst - 46:9 Worth - 52:8, 53:4, 75:19, 108:13, 174:14 Worthy - 232:3 Wouldn't - 28:8, 38:15, 47:3, 85:18, 121:9, 121:11, 125:25, 127:12, 180:8, 193:22, 217:20 Wow - 206:9 Write - 13:13, 55:8 Written - 55:10, 87:11</p> <div style="border: 1px solid black; text-align: center; width: 100px; margin: 10px auto;"> <p>Y</p> </div> <p>Yahoo - 24:16, 25:6, 208:22 Yardstick - 27:13, 130:1 Year - 4:18, 17:2, 17:9, 18:4, 18:5, 26:2, 37:24, 49:20, 49:21, 49:23, 53:4, 53:5, 55:20, 55:21, 77:7, 151:18, 151:21, 154:3, 177:23, 177:24, 178:10, 188:7,</p> |
|--|---|--|---|--|

| | | | | |
|---|---|--|--|--|
| <p>202:17, 215:23 Years - 4:3, 5:6, 5:18, 6:24, 11:6, 12:3, 18:11, 21:16, 21:23, 22:18, 22:25, 23:19, 25:17, 26:4, 26:19, 26:20, 27:2, 28:10, 31:8, 34:13, 42:22, 48:19, 49:4, 49:20, 50:4, 50:7, 51:14, 51:20, 52:1, 52:20, 53:7, 53:16, 55:16, 59:11, 63:22, 68:12, 75:13, 77:4, 77:8, 84:21, 85:4, 89:11, 89:12, 100:14, 100:20, 105:17, 111:5, 119:24, 120:12, 120:16, 120:20, 123:6, 138:18, 140:7, 154:12, 155:15, 155:17, 155:24, 158:19, 159:9, 160:24, 163:24, 168:12, 178:17, 198:19, 210:2, 210:6, 211:24, 213:1, 215:23, 216:2, 216:20, 216:23, 218:9, 219:4, 219:22 Year's - 7:3 Yesterday - 11:4, 23:1, 30:19, 32:14, 56:10, 60:10, 64:7, 66:2, 66:6, 66:22, 87:19, 102:19, 142:25, 170:7 Yield - 3:12, 3:13, 16:4, 33:3, 35:1, 44:24, 45:13, 48:1, 48:12, 52:14, 118:5, 118:11, 119:6, 177:18, 178:19, 180:11, 184:19, 185:19, 186:6, 186:9, 186:24, 232:6, 232:10, 232:11 Yields - 10:2, 15:16, 15:17, 33:14, 46:11, 46:12, 46:17, 48:1, 51:22, 74:24, 74:25, 79:12, 117:12,</p> | <p>118:24, 119:9, 120:24, 121:1, 181:1, 181:3, 181:21, 183:4, 183:5, 197:5, 197:9, 197:10 York - 14:24 You'd - 83:23, 84:16, 85:7, 89:6, 169:11, 192:13, 205:4 You'll - 100:15, 127:6, 222:9 You're - 32:4, 32:6, 32:12, 33:9, 43:2, 49:9, 57:23, 60:8, 64:20, 71:17, 88:23, 91:10, 97:2, 99:12, 102:18, 103:7, 103:14, 103:16, 104:23, 105:24, 107:4, 123:10, 123:22, 127:3, 136:21, 139:22, 144:8, 144:25, 146:20, 148:17, 149:23, 150:17, 153:23, 154:25, 155:19, 157:23, 161:23, 167:9, 170:3, 171:16, 175:2, 184:8, 185:13, 192:2, 193:5, 197:18, 215:1, 215:18, 215:23, 216:4, 217:14, 217:15, 225:5, 231:18 You've - 49:7, 59:6, 72:25, 87:7, 92:13, 92:14, 95:14, 101:8, 101:9, 123:4, 123:7, 123:8, 135:9, 136:13, 136:14, 142:11, 149:12, 151:1, 156:24, 160:7, 161:21, 163:24, 164:12, 164:13, 164:19, 164:20, 164:23, 168:16, 174:18, 176:17, 176:25, 182:11, 193:4, 195:18, 195:19, 207:3, 211:4, 220:9</p> | <div style="border: 1px solid black; text-align: center; padding: 2px;">Z</div> <p>Zen - 20:13 Zero - 5:22, 20:2</p> | | |
|---|---|--|--|--|