

Via Courier

26 April 2016

Ms. G. Cheryl Blundon Board of Commissioners of Public Utilities 120 Torbay Road, P.O. Box 12040 St. John's, NL A1A 5B2

Dear Ms. Blundon:

RE: Newfoundland Power 2016-2017 General Rate Application

Please find enclosed one (1) original and eleven (11) copies of the Consumer Advocate's Final Submission.

Copies of the Final Submission have also been couriered to the parties listed below.

Electronic copies will be filed in due course.

Yours very truly,

O'DEA, EARLE

THØMAS JOHNSON, Q.C. TJ:jss Enclosures

CC: Newfoundland and Labrador Hydro Attention: Mr. Geoffrey P. Young, Senior Legal Counsel

> Newfoundland Power Attention: Peter Alteen, Q.C.

Curtis Dawe Attention: Ian F. Kelly, Q.C.

# IN THE MATTER OF

the *Public Utilities Act*, R.S.N.L. 1990, Chapter P-47 (the "*Act*"), as amended;

### AND

#### IN THE MATTER OF

A General Rate Application (the "Application") by Newfoundland Power Inc. ("Newfoundland Power") to establish customer electricity rates for 2016 and 2017.

To: The Board of Commissioners of Public Utilities (the "Board")

# CONSUMER ADVOCATE'S FINAL WRITTEN SUBMISSIONS

# April 26, 2016

Thomas Johnson, Q.C. Consumer Advocate O'Dea, Earle Law Offices 323 Duckworth Street St. John's, NL A1C 5X4 Telephone: 726-3524 Facsimile: 726-9600 Email: tjohnson@odeaearle.ca

# TABLE OF CONTENTS

Overview	1
The Expert Witnesses – Assessment	
Return of Equity Methodologies	4
Mr. Covne's Approach - Overview	л
Dr. Booth's Approach – Overview	<del></del> 6
Simple CAPM Estimates	
Conditional CAPM (CCAPM)	
Risk Free Rate	9
Market Risk Premium	11
Beta	15
Mr. Covne's Constant Growth DCF Estimates	18
Mr. Covne's Multi-Stage DCF Estimates	19
Mr. Covne's Proxy Group Selection	21
Regulated vs. Unregulated Operations/Assets	21
Generation v. Poles and Wires	22
Earnings Volatility	23
Other Differences	25
Regulatory Lag and Test Year	25
Customer Mix	26
Capital Cost Recovery	26
Volume/Demand Risk	27
Consider Structure	07
	<u></u>
Overview	27
Financial Rick	
Rusiness Risk	31
Dubinose Mon	<u>9</u> .1.
Mr. Covne's Qualitative Assessment	31
Dr. Cleary's Approach	33
The Current Economy and Future Supply Costs	35
The Current Economy	35
Future Supply Costs	37
The Influence of Mr. Coyne's "Above Average Risk" Assessment	38
Credit Metrices Considerations	30
Other Credit Considerations	42

The Fortis Context	-44
Conclusions and Options on Capital Structure	
Executives and Directors Compensation	
	45
Overview	45
The Peer Group Used is Not Appropriate	46
STI Changes	49
Net Income	51
Regulatory Performance	53
Conservation and Demand Management	55
The Need for Targets	55
Mini Split Heat Pumps (MSHP)	55
Incentives in Aid of the Educational Initiative	57

### **Overview**

For the reasons set out in this submission, a fair return on equity for Newfoundland Power is 7.50% on a capital structure of 40% equity. It is time for Newfoundland Power's capital structure to be brought into line with its Canadian utility counterparts whose equity components are in the 38%-40% range much less than Newfoundland Power's generous 45% common equity component.

6

7 It is also time for the Board to hold that Newfoundland Power's Executive Compensation
 8 arrangement is not justified and imposes an undue cost on its customers.

9

Finally, it is time for the Board to order that Newfoundland Power establish meaningful,incented, corporate targets for its CDM activities and results.

#### The Expert Witnesses - Assessment

#### 12 13 The Consumer Advocate called 2 expert witnesses, Dr. Laurence Booth and Dr. Sean Cleary. 14 Dr. Laurence Booth was asked to provide evidence on two issues: 15 16 1. The fair rate of return on common equity ("ROE"); and 17 The appropriate capital structure for Newfoundland Power. 18 19 Dr. Booth is an expert in finance. Dr. Booth is presently a professor of finance at the University 20 of Toronto's Rotman School of Management where he has held the CIT Chair in Structured 21 Finance since 1999. His C.V. contained in Appendix A of his report and his opening comments, 22 detail his extensive qualifications to provide expert evidence in this proceeding. For example, 23 Dr. Booth: 24 25 holds a B.Sc (Economics), M.A. (Economics), M.B.A. (Finance), and D.B.A. (Finance); 26 has published over seventy journal articles covering a range of financial issues and a . 27 number of text books including a university text on Corporate Finance that has been 28 Americanized and sold into the U.S. market;

1 has taught courses in finance and economics at the undergraduate, graduate, and 2 doctoral levels since 1987 and has supervised Ph.D students who have gone on to 3 teach at major universities in Canada and the U.S; 4 in 2015/2016 was the President of the Mid-West Finance Association, a major regional academic finance association in the United States and for almost 21 years was chair of 5 6 the finance group at the University of Toronto, Canada's largest university; has been an expert financial witness in over thirty utility hearings and numerous civil 7 8 proceedings; and • has appeared before most of the major utility regulatory boards in Canada. 9 10 Dr. Sean Cleary was asked to provide expert evidence on an appropriate capital structure (i.e. 11 equity ratio) for Newfoundland Power. Dr. Cleary is presently the BMO Professor of Finance at 12 13 the Smith School of Business of Queen's University. His C.V. contained in Appendix A of his report and his opening comments to the Board on April 11, 2016 details his extensive 14 15 qualifications to provide expert evidence in this proceeding. For example, Dr. Cleary: 16 17 holds a B.A. (Economics), M.B.A. and Ph.D. (Finance); 18 founded the Queen's Master's in Finance program; holds the Chartered Financial Analyst (CFA) designation which the Economist called the 19 "Gold Standard of Financial Designations" and has taught and prepared readings for the 20 CFA curriculum and served on the Board of the Atlantic Canada and Toronto CFA 21 Societies; 22 23 authored or co-authored fourteen text books in finance; authored numerous papers for peer reviewed journals; 24 . is the editor of the finance area of the Canadian Journal of Administration Sciences: 25 . is the associate editor for the European Journal of Finance; and 26 . has testified on two occasions before the AUC on cost of capital and corporate structure 27 . related matters. 28 29 Both Dr. Booth and Dr. Cleary were clearly highly qualified to provide expert opinions and 30 judgments to the Board. Both testified forthrightly and, in the tradition of what an expert witness 31 32 is supposed to do, gave evidence and assistance to the Board on the issues before it. 33

1 Mr. Coyne, Newfoundland Power's expert witness, testified as regards return on equity and an 2 appropriate capital structure for Newfoundland Power. Mr. Coyne does not have the academic 3 training and credentials possessed by Dr. Booth and Dr. Cleary. Mr. Coyne commenced 4 testifying in cost of capital matters in 2008. His Master's Degree was a Master's of Science in 5 Resource Economics. His thesis studied the relationships between markets and fisheries and 6 prices in these markets. He has not carried out research for or contributed to any peer reviewed 7 academic journals in any area. Mr. Coyne has testified only for utility companies in cost of 8 capital matters. He has been retained by other Fortis affiliated utilities to provide cost of capital 9 evidence, including Fortis BC and Maritime Electric.

10

As regards the ROE, by reason of Dr. Booth's clearly more intensive training, knowledge and experience as regarding financial markets and cost of capital estimation methodologies, where there are differences to be resolved between the experts, Dr. Booth's evidence is more deserving of weight. Beyond the credential gap, there are other reasons not to rely upon Mr. Coyne's opinions where they conflict with Dr. Booth's. The reasons include inconsistency with prior evidence in other proceedings such as:

- 17
- a. recognizing the appropriateness of an incremental ROE of 41 basis points to
   reflect the risk of generation before the Regie in 2013, but not in the present
   matter;
- b. not screening out (nor adjusting for) utilities that own extensive generation
   including nuclear generation in this case but excluding non-generators from his
   proxy group when testifying on behalf of Northern States Power;
- c. presenting a mix and match of Canada and (higher) U.S. risk free rates in his
   CAPM analysis in this proceeding, while presenting Canadian rates in his British
   Columbia evidence prepared only two weeks earlier;
- 27d. in the case of Newfoundland Power (which is rated "A" by DBRS and carries an28A2 rating on its bonds) including companies in the proxy group with an inferior29BBB+ S & P rating (Newfoundland Power is not rated by S & P) while using a S &30P A- rating cut off in his 2013 evidence for Hydro Quebec's transmission and31distribution utilities; and
- e. using a beta of .59 before the Regie in 2013 and using a significantly higher beta
  in this case.

34

These discrepancies call into question whether Mr. Coyne's evidence before the Board truly represents his expert opinion or whether his true opinion is reflected in his other inconsistent evidence. Whatever the conclusion, it makes placing reliance on what Mr. Coyne has stated in this proceeding on these issues unreasonable.

5

Yet, the more profound weakness with Mr. Coyne's ROE evidence and conclusions is the 6 7 complete lack of independent, third party corroboration of the reasonableness of his estimates and the assumptions they are based upon. There are a number of examples of this: Mr. Coyne 8 asserts that the TSX's expected return is approximately 13.50% in the face of clear evidence to 9 10 the contrary from respected market participants. He asserts that the market risk premium is 11 7.62% in part based on data from Duff & Philips when Duff & Philips itself has said the U.S. 12 market risk premium is 5.50%! He asserts the reasonableness of the assumption that low risk, 13 mature utilities can grow at rates at and above the GDP growth rate but has filed no evidence 14 that utilities have ever achieved the growth rate of GDP. Mr. Coyne asserts that U.S. utilities 15 generally earn their allowed returns but he has filed no evidence to substantiate this claim.

16

Similarly, Mr. Coyne's Capital Structure recommendations are borne out of a strictly qualitative assessment that concludes for the first time in Newfoundland Power's history it has become an above average risk Canadian utility. Dr. Cleary's expert quantitative assessment clearly establishes that Newfoundland Power remains a typical, low risk Canadian utility, in line with his qualitative assessment.

22

# 23 Return on Equity Methodologies

24

Mr. Coyne and Dr. Booth used different approaches to estimate the fair return for NewfoundlandPower.

27

# 28 Mr. Coyne's Approach - Overview

29

30 Mr. Coyne's approach relies predominately on the discounted cash flow methodology (DCF).

31 Mr. Coyne's revised Figure 1 is set out below:

	Revised Figure 1: Sur	mmary of Result (in	cluding flotation costs)	1
<u>, n</u> ,	Canadian	US Electric	North American	Average

	Regulated Utilities	Utilities	Utilities	
CAPM	9.0%	9.8%	9.6%	9.5%
Constant Growth DCF	12.8%	9.8%	9.6%	10.7%
Multi Stage DCF	10.3%	9.5%	9.2%	9.7%
Average	10.7%	9.7%	9.5%	10.0%

1 Mr. Coyne places greatest weight on the results of his North American Electric Utilities proxy 2 group. Two-thirds of Mr. Coyne's average ROE results are derived from one form or other of 3 DCF. Mr. Coyne makes no adjustments to his results derived from the United States data to 4 account for differences in the United States and Canadian markets or for differences between 5 Newfoundland Power and the companies it is being compared to for the purpose of the ROE 6 estimation. As will be discussed later in this submission the Consumer Advocate does not 7 regard Mr. Coyne's proxy companies to be reasonable proxies for determining an appropriate 8 return on equity. This alone will prompt the need to make adjustments as the Board recognized 9 in Order No. P.U. 43 (2009) at p. 17, lines 31-33. In Order No. P.U. 13 (2013) the Board held 10 that differences in the U.S. and Canadian experience justify and adjustment to the DCF results 11 of 50 to 100 basis points. To the extent that the Board can rely at all on any of the DCF results 12 in this case, given the demonstrated deficiencies and unsupportable assumptions at their 13 foundation, at least 100 basis points is called for as an adjustment, as a significant adjustment 14 must alone be made for the fact that we are comparing Newfoundland Power to vertically integrated utilities with extensive and riskier generation. To that we also must recognize the 15 16 optimism of growth forecasters which McKinsey have likened to a "broken clock" for being 17 correct twice a day.

18

In P.U. 13 (2013) the Board stated that it will continue to give primary weighting to the capital asset pricing model (CAPM). The Board stated that it would also look to the results of other accepted models and other relevant evidence when determining a fair return for Newfoundland Power. The Board explicitly stated that it placed little weight on the results of the discounted cash flow model (Order No. P.U. 13 (2013) p. 31, lines 31-32). The Consumer Advocate submits that for reasons that will be set out shortly, the Board should place no weight on the results of Mr. Coyne's DCF-based estimates.

1 <u>D</u>

2

### Dr. Booth's Approach - Overview

3 Dr. Booth's approach is to use a conditional CAPM-based equity risk premium approach. Dr.
4 Booth also looks to a DCF analysis to inform his judgment with respect to his ROE
5 recommendation (April 8, p. 195, line 19).

6

CAPM is the most common risk premium model. Dr. Booth explained the theory behind the
 CAPM starting at page 37 of his evidence and summarized why it is so widely used:

9

"Why the CAPM is so widely used is because it is intuitively correct. It captures two of 10 11 the major "laws" of finance: the time value of money and the risk value of money... 12 ...[T]he time value of money is captured in the long Canada bond yield as the risk free 13 rate. The risk value of money is captured in the market risk premium, which anchors an individual firm's risk. As long as the market risk premium is approximately correct the 14 estimate will be in the right "ball park" ... CAPM measures the right thing: which is how 15 much does a security add to the risk of a diversified portfolio, which is the central idea of 16 17 modern portfolio theory. It also reflects the fact that modern capital markets are 18 dominated by large institutions that hold diversified portfolios."

19

The Alberta Utilities Commission (AUC), in a 2011 GCOC decision, described the CAPM as "a well-accepted and theoretically-grounded economic model for valuing securities based on the relationship between non-diversifiable risk and expected return." (Decision 2011 – 474, Decision 9, 2011, p. 7, para. 29). The NEB, in its 2009 Decision in RH-1-2008 stated:

24

25 "The Board is of the view that CAPM is widely accepted as a cost of equity model... In 26 the Board's view, CAPM captures the risk equity holders have to bear when holding a 27 common stock... In the Board's view, even if the DCF model is intuitive and theoretically 28 sound, challenges remain in its applicability since historical growth rates might not reflect 29 the future and analyst expectations might be different than the aggregate expectations of 30 all financial markets participants. As a result of these challenges, the Board with not rely 31 on the DCF model and will be informed by CAPM when estimating the cost of equity..."

- 32
- 33
- 34

#### 1 Simple CAPM Estimates

2

Similar to when he last gave evidence in 2012, Dr. Booth does not believe "simple" CAPM
estimates provide a fair return due to the persistently low government bond rates brought on by
central bank actions around the world.

6

Dr. Booth's simple CAPM estimate (at p. 42) for 2016 is 6.08% (the average of a "low end" estimate of 5.56% and a "high end" estimate of 6.61%). This is based on Dr. Booth's market risk premium of common equities over long term Canada Bonds at 5.0-6.0%, and a relative risk adjustment (i.e. beta) of .45 to .55 which provides a going forward utility risk premium in the range of 2.25% to 3.30%. If this is added to a 2.81% consensus forecast for the average long term Canada bond yield for 2016 and a .50% flotation cast allowance this yields the low and high end CAPM estimates on which the average of 6.08% is calculated.

14

Mr. Covne also provides a simple or unadjusted CAPM estimate of 6.8% as explained in reply to 15 16 PUB-NP-064. In reply to PUB-NP-064, Mr. Covne confirms that his 9.0% CAPM result for the 17 Canadian Utility Proxy group includes adjustments made to compensate for the current market 18 environment. Mr. Coyne's adjustments include using a forecast (2016-2018) Canadian risk free 19 rate, a market risk premium that combines both U.S. and Canadian market inputs including both 20 historic and forward-looking estimates, and the adjusted beta coefficient for the Canadian and 21 U.S. proxy companies. In order to compute his "unadjusted" CAPM, Mr. Coyne relied on the 22 following inputs and assumptions:

23

24	•	Current risk-free rate	: 2.24% (	(30 yearlong	Canada Bank	yields as of 8/29/2015)
----	---	------------------------	-----------	--------------	-------------	-------------------------

- Bloomberg Beta: .64
  - Market Risk Premium: 6.3% (Historical MRP only)
- 26 27

Based on these assumptions, the "unadjusted" CAPM result for the Canadian Utility Proxy
would be 6.8%, including 50 basis points for financial flexibility and flotation costs.

- 30
- 31
- 32
- 33
- 34

#### 1 Conditional CAPM (CCAPM)

2

At the current point in time, Dr. Booth states that conditions in the Canadian bond market are
largely being driven by external factors and are still not "average" market conditions. To adjust
for this Dr. Booth makes two adjustments:

- 6
- The first is to make the CAPM estimate conditional on the state of the markets thereby
   converting it into a CCAPM.
- 10

9

 The second is to adjust for the abnormally low Canada bond yields resulting from bond buying programs by central banks.

11

12 The first adjustment concerns the fact that at this point in time "A" spreads are at 1.91% or 91 13 basis points more than the typical average for the business cycle, which Dr. Booth states is 14 1.0%. Consequently, Dr. Booth adds .45% for this credit market effect. Dr. Booth regards this 15 adjustment as converting the CAPM into a conditional CAPM where the CAPM holds conditional 16 upon the state of the financial markets. Dr. Booth's report (p. 45) states that while it remains 17 difficult to "disentangle the liquidity component" from the pure credit component in credit 18 spreads, since 2010 as Canadian capital markets were returning to normal, he has been 19 recommending a 50% adjustment to change in credit spreads. This adjustment has been 20 incorporated into ROE adjustment models adopted by the OEB, Regie and the BCUC.

21

22 There are two points to be made about Dr. Booth's credit spread adjustment, First, as Dr. Booth 23 testified (April 8, p. 191) research at the Bank of Canada suggests that the adjustments should 24 not be as high as 50 percent of the credit spread because their research shows that for 25 investment grade firms 63% of the spread is attributable to liquidly. Therefore, Dr. Booth's 26 approach is conservative yet as he states (April 8, p. 191, lines 21-25) "almost every board that 27 I'm aware of that's thought about an automatic adjustment mechanism has incorporated 50 28 percent adjustment to spreads, so I'd say that's reasonably acceptable." The second point is 29 that Dr. Booth's credit spread adjustments are objective. At the hearing, Dr. Booth stated during 30 cross-examination by the Board Hearing Counsel (April 8, p. 193, lines 1-17):

31

"Well, I'd qualify that and say that not the full 175 basis points is judgment. I think the 45
 basis points for the credit spreads is just basically the same as the OEB, the same as
 the Regie, the same as the BC Utilities Commission, so I would say that - I'm not

imposing significant judgment there. I'm just making the estimate a little bit more
 sensitive to the business cycle. The major area of judgment is this attempt to try and
 handle the bond buying, the implications of the bond buying program, and 130 basis
 points now, 80 basis points three years ago, 80 basis points I was comfortable with, 130
 I'm not comfortable with, but that is certainly the major area of judgment."

6

7 The result of CCAPM for 2016 (i.e. incorporating the .45% for the credit spread effect) is an 8 average ROE estimate of 6.54% being the average of a low end estimate of 6.01% and a high-9 end estimate of 7.06%.

10

Dr. Booth regards the ROE resulting from the CCAPM as an under-estimate at this point in time
 because capital markets are not typical as a result of massive bond buying programs by central
 banks which have created abnormally low Canada bond yields.

14

As discussed in the "Risk Free Rate" section, on account of the bond buying programs, Dr. 15 16 Booth has added 130 basis points to the CCAPM estimate of approximately 6.54% to arrive at a 17 fair ROE of 7.83% for a benchmark utility, which is the midpoint between the low estimate (of 18 7.31%) and the high end estimate (of 8.36%). Dr. Booth points out in his report however that 19 taking into account the current yields on utility preferred shares and the difficulty in making a 20 direct transfer from preferred shared to common shares, he would tend to be conservative and 21 therefore he recommends the same 7.5% as in 2012. The Consumer Advocate would note that 22 it must also be observed that providing a floatation and financial flexibility allowance of 50 basis 23 points exceeds the 30 basis points allowed by the Regie and is higher than the allowance in the 24 United States, where for instance, in Wisconsin, no allowance is given.

25

# 26 Risk Free Rate

27

It is not a matter controversy that current bond yields are near historical lows and that consequently adjustments are necessary to arrive at an appropriate risk for rate. Dr. Booth's evidence (p. 26) is that interest rates are not, and probably will not for the foreseeable future, be set by private investors. Instead, they are being set by what has been called the "global policy maker".

Dr. Booth observes that the average of the March and December consensus forecasts which is
a proxy for the average for the year as a whole, and consistent with the application to an
average forward test year rate base is 2.81%.

4

5 The CAPM is an equilibrium where private investors trade off risk versus expected return. This 6 results in a premium over the risk free rate. Because the risk free rate, the government bond 7 rate, is being determined by what RBC calls the global policy maker, Dr. Booth judges it 8 necessary to determine what the correct risk free rate is in the risk return trade off which is why 9 Dr. Booth uses preferred shares as a proxy for a yield relatively less affected by central bank 10 bond buying (NP-CA-046). In its last NP GRA order, the Board accepted Dr. Booth's 80 basis 11 point adjustment to the long term Canada bond yield to reflect the unusual conditions brought 12 on by actions of global policy makers (P.U. 13 (2013) p. 23, lines 12-17). In Dr. Booth's current 13 evidence he observes that there has been an increase in the preferred share yield spread from 14 .80% in 2012 to the current 2015 average of 1.3% for an increase of .50%. There is absolutely 15 no doubt that expert judgement is required when making such an adjustment as Dr. Booth 16 explained in cross-examination by Board hearing counsel, Ms. Greene, Q.C. However, what is 17 important to note is that his judgment of what a normalized bond yield is, is shared by other 18 market participants. As Dr. Booth states (April 8, p. 193-line 18 to p. 194-line 21).

19 20

Greene, Q.C.:

21 22

23

24

Q. "And again you have agreed that more judgement even is required this time when looking at how CAPM should be adjusted for the marketplace?"

Dr. Booth:

25 Α. "That's correct, but I'll just point out there that it's not just me saying this, I 26 mean, the Duff & Phelps report that I sent around, they've recalibrated the 27 market risk premium at 5.5 percent, which is right in the middle of my 5 to 28 6 percent range, except that it's based upon a normalized long term U.S. 29 government bond yield, and they use 4 percent, I tend to think 3.8 30 percent, but the point is they accept the normalized bond yield when they 31 do their risk premium analysis. AON Hewitt looks at a normalized long run 32 - they call it a long run target bond yield of 4.18 percent. So I think 33 everybody will recognize that the current long term bond yields are not 34 anywhere close to normal equilibrium, however you want to define it, so

1

2 3 3.8, 4, 4.1, I think it is from the AON Hewitt, that's where my judgment comes in, but it's not just my judgement, it's the judgment of almost all market participants."

4

In the Consumer Advocate's submission, the Board is once again justified in relying upon Dr.
Booth's expert opinion to make the "Operation Twist" adjustment of 130 basis points to arrive at
a risk free rate of 3.8%.

8

# 9 Market Risk Premium

10

Dr. Booth estimates the market risk premium (MRP) of common equities over long term bonds at 5.0% to 6.0%. The Consumer Advocate submits that the evidence in the hearing overwhelmingly supports the reasonableness of Dr. Booth's estimate over the estimate of Mr. Coyne who states that the market risk premium is 7.62%.

15

First, let us turn to Dr. Booth's 5-6% MRP assessment. Dr. Booth's estimate is drawn from Canadian capital market history back to 1924 (report, p. 40, line 26-27). The outcome indicated an MRP of under 5%. The important thing to observe about Dr. Booth's MRP judgment is that it is firmly in accordance with other independent market observers.

20

We must start with the view of Duff & Phelps. Dr. Booth's sur-rebuttal evidence revealed that in March, 2016 Duff & Phelps released their latest estimates for the US market risk premium estimate which they increased from 5% to 5.5% measured relative to a normalized yield of 4.0% on 20 year US Treasury Bonds. It is not without irony that Mr. Coyne claims to be using data from Duff & Phelps to support his much higher MRP of 7.6%. As Dr. Booth states (at p. 11) the normalized 4.0% 20 year US Treasury Yield is also very similar to his approach and that of AON Hewitt.

28

Dr. Booth's opinion that the MRP is 5.0% to 6.0% is also completely in line with a very recent November 2015 survey (Appendix B, p. 10, Table 2) by Professor Fernandez which surveyed a large sample of analysts, companies, and finance professors to estimate the MRP in various markets. The survey respondents placed the Canadian MRP at a median of 6.0% and an average of 5.9%, and the US MRP at a median of 5.5% and an average of 5.3%. Of particular note is that the survey respondents also put the **overall** expected equity market return at about 8.0% in Canada and in the United States. This gives a valuable "reality check" on Mr. Coyne's
 ROE recommendation for Newfoundland Power and buttresses the reasonableness of Dr.
 Booth's estimate.

4

7

5 Dr. Booth's judgment is also supported by TD Economics. In his conclusions in Appendix B., p.
6 12-13, he referenced the 2012 TD report and stated:

- 8 "The TD analysis placed long run Canadian equity returns at 7.00%, the same as in the US and internationally, whereas bond returns were forecast at 3.0% for the Dex universe 9 10 bond index, that is, including corporate as well as government bonds. The implication is for a long run market risk premium of 4.00% of equities over bonds and slightly higher 11 over government bonds. This is an increase compared to a similar report in March 12 13 2011, where Canadian equity returns were forecast at 7.5% and bond returns at 4.00%. 14 TD Economics is predicting a return to a balanced portfolio of 4.0-6.0%, which with 2% 15 inflation implies a real return at a maximum of 4.0%. This is the same sort of analysis 16 that underlies most defined benefit pension plans.
- 17

18These particular return estimates are for long run (next decade) which would be closer to19geometric (compound) returns than arithmetic returns. <u>An adjustment to convert them to</u>20arithmetic returns would move the market risk premium closer to 6.0%."

21

As noted, Dr. Booth's estimated expected returns can also be compared against the
expectations of the independent market forecaster, AON Hewitt. AON Hewitt's January 7, 2016
report "Capital Market Assumptions & Methodology (Canadian Version)" (CA NP 269,
Attachment "B" at p. 3 of 28) describes its purposes as follows:

26

27 "This document summarizes Aon Hewitt Canada's 10-year forward-looking capital 28 market assumptions ("CMAs") <u>that are to be used in the determination of strategic</u> 29 <u>portfolio allocations and related modeling or projection studies</u>. The methodology 30 described herein is also the basis of longer-term 30-yr CMAs that can be used to 31 determine an expected long-term portfolio return for the purposes of performing an 32 actuarial valuation." (underline added)

- 33
- 34

1 On the same page it states:

- 3 "The CMAs presented in this document represent Aon Hewitt Canada's best-estimate view of future economic conditions and are established by a national committee 4 comprised of Investment and Risk Management practitioners. The determination of the 5 CMAs involves a thorough analysis of all available quantitative and qualitative resources 6 7 including, but not limited to, in-house analyses of historical returns, external analyses of 8 long-term historical returns presented in published research articles, the actual state of 9 the market and the good judgment of the national assumptions committee. Additionally, the CMAs reflect the analyses and research done by Aon Hewitt investment 10 and risk management colleagues around the globe and are checked for global 11 consistency." (underlining added) 12
- 13

2

The AON Hewitt Capital Market assumptions are independent and the result of a major effortmade for the purpose of advising clients.

16

17 The AON results confirm Dr. Booth's market return conclusions and are consistent with the 18 previously mentioned Fernandez and TD Economics findings. AON Hewitt's 10 year Average 19 Annual Return (Arithmetic) expectation for Canadian Equities is 8.3% and for US Equities 20 (hedged) it is 8.0%.

21

Similar market return expectations are supported by Mercer, Newfoundland Power's pension
advisors, who put the expected return for equities at 8.1% (Arithmetic 9.6% - CA NP 014) and
bonds at 3.5%.

25

It is a matter of indisputable fact that the returns that Dr. Booth utilized in determining his MRP and his proposed ROE are reasonable when one looks at not one, but several independent and credible forecasts of future returns. In contrast, the forecast returns that Mr. Coyne used in determining his MRP of 7.6% and his ROE recommendation of 9.5% for a low risk utility are a significant departure from these sources and exceed the expectations of each of the independent forecasters for the market as a whole.

32

The reasons for Mr. Coyne's gross over-estimation of the MRP are very evident: First, Mr.
 Coyne's forward looking Canadian MRP of 9.8% and US MRP of 8.1% (which he

"conservatively" (p. 30, line 19) averages with historical Canadian and US MRPs of 5.6% and
7.0% respectively to arrive at an MRP of 7.6%, are based on optimistic constant growth DCF
methodology.

4

As Dr. Booth's sur-rebuttal evidence pointed out (p. 11-12):

5 6

"In terms of Mr. Coyne's forward looking market risk premium estimates of 9.8% for 7 8 Canada and 8.1% for the US, he was subjected to cross examination on this before the BCUC two weeks ago. The basic problem was that he assumed the constant growth 9 10 form of the DCF model to generate his estimates and this clearly does not hold for most 11 companies. The reason for this is simply that the assumed analyst growth rates in his 12 estimates vastly exceed any possible growth rate in the economy, resulting in internally 13 inconsistent estimates. I assume to head off cross examination on this inconsistency Mr. 14 Coyne on page 29 provides what he terms a "more conservative" estimate based on the 15 multi-stage DCF model, which is what he was asked to do in BC as an undertaking, These estimates reduce the market risk premium for Canada from 9.8% to 5.39% or by 16 17 4.41% and from 8.1% to 3.96% or by 4.14% for the US.

18 19

20

These new "forward looking" market risk premium estimates have three implications.

- First, they demonstrate the huge errors introduced by the careless use of the constant growth DCF model. By any stretch of the imagination reducing the market risk premium estimate by 4.41% in Canada and 4.14% in the US is a significant error and likely greater than even the careless use of the CAPM.
- Second, Mr. Coyne regards the results of his own estimates as "anomalous" and rejects them based on his regression analysis, which in turn is based on the same constant growth DCF estimates which are incorrect. Further this is the same regression model that predicted a huge negative risk premium during the financial crisis!
- Third, when we partially discount the optimism of short run analyst forecasts by
   using the multi-stage DCF model the forward looking DCF market risk premium is
   consistent with historic estimates."

Second, Mr. Coyne arrives at his historical MRPs for Canada and the United States by
 engaging in a dubious exercise whereby he presents the risk premium over the bond income
 returns as opposed to the risk premium over the total bond returns. The result of this exercise is
 to inflate the historical risk premium (Undertaking No. 12).

5

The Consumer Advocate submits that an MRP of 5 to 6%, as estimated by Dr. Booth is borne
out by evidence and should be accepted by the Board.

- 8
- 9 <u>Beta</u>
- 10

In risk premium models the relative risk coefficient adjusts the overall market risk premium up or
down depending on whether the individual security is more or less risky than the market as a
whole.

14

Dr. Booth's analysis clearly shows that the market recognizes that Canadian utilities are lower
than average risk. Dr. Booth judges the relative risk of a Canadian utility to be 45-55% of that of
the market as a whole.

18

Mr. Coyne, on the other hand, uses "adjusted betas" and states that the average beta for his US Proxy Group is .73, while the average beta for the Canadian Proxy Group is lower at .64, with the average beta for the North American Group being .72. Mr. Coyne's report states that "Both Value Line and Bloomberg report adjusted betas to compensate for the tendency of beta to revert towards the market average of 1.0 over time." (Coyne Report, p. 28, lines 5-6). Mr. Coyne's report continues:

25

26 "There are two primary reasons to adjust raw betas. First numerous empirical studies 27 have provided evidence that an individual company beta is more likely than not to move 28 toward the market average of 1.0 over time. Second, adjusting beta serves a statistical 29 purpose. Because betas are statistically estimated and have associated error terms. 30 betas that are greater than 1.0 tend to have positive estimated errors and thus tend to 31 overestimate further returns. Betas that are below the market average of 1.0 tend to 32 have negative error terms and underestimate further returns. Consequently, it is 33 necessary to adjust forecasted betas toward 1.0 in an effort to improve forecasts." 34 (emphasis added) (Coyne Report, p. 28, lines 9-16).

Mr. Coyne's use of adjusted betas has been explicitly rejected by the A.U.C. As noted in Dr.
Booth's sur-rebuttal evidence (p. 12) and as acknowledged by Mr. Coyne (Transcript, April 4, p.
31) the A.U.C. stated as follows in the 2009 A.U.C. Generic Cost of Capital Order at paragraph
251:

6

1

7 "The Commission is persuaded by the empirical analysis of Drs. Kryzanowski and 8 Roberts that there is insufficient evidence to support the use of adjusted betas for 9 Canadian utilities if the purpose of the adjustment is to adjust the beta towards one and 10 therefore, beta should not be adjusted towards one. Therefore, the Commission rejects 11 Mr. Coyne's beta results as unreasonably high, because he adjusted his beta estimates 12 on the assumption that they would revert to 1.00. In other words, his analysis assumes 13 that, in time, utilities would be as risky as the market as a whole."

14

15 Dr. Booth's sur-rebuttal evidence observes (p. 12, lines 25-29):

16

17 "Apart from the fact that the AUC specifically rejected Mr. Coyne's evidence, I am not 18 aware of any Canadian regulator that has accepted betas adjusted toward 1.0. Mr. 19 Coyne references the 2009 OEB technical conference and that the Board took no 'issue 20 with Concentric's adjusted betas.' However, not specifically rejecting estimates is not 21 the same thing as accepting them. Further, the OEB decision was not the result of a 22 litigated hearing with information requests and cross examination, so a larger number of 23 issues went unexamined including this inappropriate adjustment."

24

25 Mr. Coyne's report leaves the impression that Value Line and Bloomberg only report adjusted 26 betas. In fact, Bloomberg also reports unadjusted or raw betas. Mr. Covne was requested by 27 the Consumer Advocate to undertake to provide the raw betas for his proxy groups, which Mr. 28 Coyne provided in Undertaking No. 17. A comparison of the differences between the "raw 29 betas" and the "adjusted betas" can be seen on Undertaking No. 19 – Attachment A, p. 2 of 2. 30 Here one can observe that for the US Proxy Group the adjusted beta used by Mr. Covne was 31 .73 versus a raw beta of .54 and an Industry Index beta of .51. For the Canadian Proxy Group, 32 Mr. Coyne's adjusted betas are .64 versus a raw beta of .46 and an Industry Index beta of .54. Finally, for the North American Group, Mr. Coyne's adjusted beta was .72 versus a raw beta of 33 34 .53 and an Industry Index beta of .49.

1

Given Mr. Coyne's reliance on adjusted betas, the same cannot be accepted as reasonable or reliable. Dr. Booth's evidence is that regression estimates of utility risk for the last five year period ending in 2014 show a beta estimate at .45 (Appendix D, p. 5). Dr. Booth observes that as interest rates increase back to normal levels he expects utility betas to increase as they trade less on their bond values and more as regular equities. Dr. Booth expects some tendency for their betas to revert back to their long run average level: for the market as a whole this is 1.0., but for regulated utilities this is about .45-.55 (Appendix D, p. 6).

9

10 Before leaving the topic of beta, given the prevalent use of US proxy groups in Canadian utility 11 rate hearings, it must be observed that the evidence is quite clear in this proceeding that the 12 betas for US utility holding companies are higher than those of Canadian utilities. Unfortunately, 13 we cannot observe what the beta for a stable, non-volatile and consistent earner like Newfoundland Power would be. However, we can observe that as noted above that the raw 14 15 betas for the Canadian Proxy Group are at .46 versus .54 for the US Proxy Group. We observed from Mr. Coyne's recent evidence in British Columbia for Fortis BC Energy Inc. that 16 his US Proxy Group had a raw beta of .62 versus a raw beta of .47 for the Canadian Proxy 17 Group. The beta when adjusted to industry average was .57 for the US Proxy Group and again 18 lower at .49 for the Canadian Proxy Group (CA NP 152, Attachment "A", at p. 240 of 247). Dr. 19 20 Booth's report (at Appendix "C", p. 7, lines 17-26) sets out further data as to the high utility betas in the US versus in Canada. Dr. Booth concludes (Appendix "C", p. 7, line 26 to p. 8, line 2): 21

- 22
- 23 24

"The data indicates clear differences in risk perception of Canadian UHCs relative to US electric companies and a less clear difference for the US gas companies."

25

Mr. Coyne was asked whether he had any data that would indicate that Canadian utilities do not persistently have lower betas than US utilities. He stated referring to his reports for Newfoundland Power and Fortis BC (Transcript, April 6<sup>th</sup>, p. 55, lines 20-22):

- 29
- 30 31

"Well, they certainly are in these two cases. I don't know about consistently over time. Perhaps they are."

32

33 Dr. Booth's beta estimate is also consistent with the view of Barron's which states in a May 34 2015 article that the U.S. utility sector "has only about half the market's volatility" (Information No. 26). The Consumer Advocate submits that Dr. Booth's beta estimate of .45 to .55 is
 reasonable.

- 3
- 4

#### Mr. Coyne's "Constant Growth DCF" Estimates

5

In Mr. Coyne's "Summary of Results" (including flotation costs) the Constant Growth DCF
methodology produced the highest ROE estimates (U-15 Revised Figure 1). These estimates
ranged from 9.6% for the North American Electric Utilities to 12.3% for the Canadian Regulated
Utilities. Mr. Coyne used the Constant Growth DCF methodology to estimate the market risk
premium. [Transcript, April 4<sup>th</sup>, p. 154]

11

12 The predictable result of using "out-sized" constant growth estimates is to arrive at an "out-13 sized" market risk premium. The Board will recall during the hearing that Mr. Coyne's constant 14 growth DCF produced a 13.46% required return on the TSX – a truly eye popping figure that is 15 clearly not grounded in reality. Mr. Coyne could only offer that the required return of the 16 Canadian market "implied by the stock prices, divided yields and estimates built into those 17 forecasts. . . tells us this is what investors are expecting today based on those assumptions." [Transcript, April 5<sup>th</sup>, p. 104] On cross-examination, Mr. Coyne was asked whether he could 18 19 point to any independent third party source that would support such a high required return. Not surprisingly, Mr. Covne stated, "I cannot, no." [Transcript, April 5th, p. 105] 20

21

22 It is for good reason that this Board stated in P.U. 13 (2013) (p. 27 - lines 28 to 31) as follows:

23

24 "The Board does not believe that much weight should be given to the experts'
25 recommendations in relation to either the historic or forward-looking equity risk premium
26 models as these are largely based on inadequate Canadian data, unadjusted United
27 States data <u>and analysts' growth forecasts using the constant growth model.</u>" (emphasis
28 added)

29

At page 31 of P.U. 13 (2013) the board explicitly stated that it "does not accept the use of analysts' forecasts using the constant growth model. . ." [Lines 27-28]. The Board should completely disregard the constant growth estimates put forward in this case by Mr. Coyne. The same goes for Mr. Coyne's multi-stage DCF estimate, which we turn to next.

1

#### Mr. Coyne's Multi-Stage DCF Estimates

In Mr. Coyne's "Summary of Results", the Multi-Stage DCF produced the second highest ROE
estimates at 9.7%. These estimates ranged from 9.2% for the North American Electric Utilities
to 10.3% for the Canadian proxy group.

6

7 In Mr. Coyne's Multi-Stage DCF Analysis the US Proxy Group is assumed to grow at an 8 average rate of 5.32% for the first 5 years, tapering from 5.06% to 4.68% over years 6 to 10 and 9 growing thereafter at the US GDP rate of 4.55% in perpetuity (Exhibit JMC-4, p. 1 of 3). This 10 analysis yields a mean ROE of 9.45% including .50% for flotation costs. For the Canadian 11 Proxy Group, the companies grow at 8.05% for the first 5 years, tapering from 7.35% to 4.62% over years 6 to 10 and thereafter growing at the assumed Canadian GDP rate of 3.94% in 12 perpetuity (Exhibit JMC-4, p. 2 of 3). This analysis yields a mean ROE of 9.45% including 13 14 flotation. Finally, for the North American Proxy Group, Mr. Coyne has the average growth rate 15 at 5.28% for the first 5 years, tapering from 5.14% to 4.56% over years 6 to 10 and growing thereafter at an assumed GDP rate of 4.41% in perpetuity. This analysis yields a mean ROE of 16 17 9.24% including flotation.

18

As was pointed out during Mr. Coyne's cross-examination, these Multi-Stage DCF analyses all 19 20 assume that the utilities' growth will exceed GDP for the first ten years by a sizable margin and then go on in perpetuity at the rate of estimated GDP growth. These are not reasonable 21 22 assumptions and are certainly not assumptions that are borne out by the evidence in this 23 proceeding. During cross-examination, the Consumer Advocate asked Mr. Coyne if he had any evidence that electric utilities have on average grown at the rate of GDP in either Canada or the 24 United States. Mr. Coyne replied, "No, I have not provided that evidence." [Transcript, April 6th, 25 26 p. 131, lines 5 to 24]

27

Notably, the A.U.C in its March 2015 generic cost of capital decision stated (CA-NP-169,
Attachment A, para. 190,191)

30

190... However, the Commission is also mindful that, as both experts acknowledged, the
 GDP growth rate may be an ambitious target for long-run earnings growth in respect of
 low risk, mature, utilities.

1 191... After considering the characteristics of the various DCF-based ROE estimation 2 models employed by the participating expert witnesses, the Commission finds that 3 reasonable DCF estimates for the Alberta Utilities are in the range of 7.0 per cent to 9.0 4 per cent and that this range is consistent with an expected average equity market return 5 between 8.0 per cent and 9.0 per cent. In arriving at this conclusion, the Commission 6 noted that Ms. McShane's DCF results for her U.S. utility sample, for which the growth 7 rates were very close to the forecast GDP growth rate, were in the range 8.5 per cent to 8 9.0 per cent. However, the Commission considers growth rates that are close to the forecast GDP growth rate to be overly optimistic for regulated utilities. [footnotes omitted 9 10 and emphasis added]

11

Mr. Coyne testified that this was the model adopted by FERC and the one that's most broadly used when you're adopting a multi-stage approach. [Transcript, April 6<sup>th</sup>, p. 131] Notably, FERC's Order which was put to Dr. Booth on cross-examination (Information No. 32) states at paragraph 43 that participants to that proceeding will be given an opportunity to present evidence concerning the appropriate long-term growth projection to be used for public utilities under the FERC's two-step DCF methodology.

18

A 2015 Oliver Wyman report put to Mr. Coyne on cross-examination (Information No. 21)
estimated that utility earnings will grow on average 3.3 percent annually during the next 15
years, far lower than the rate of growth used in Mr. Coyne's analysis [Transcript, April 6, p. 133]

The Consumer Advocate submits that Mr. Coyne's multi-stage DCF analysis cannot be relied upon by the Board as it too suffers from optimistic growth rate assumptions and leads to an exaggerated ROE at the expense of customers. The Multi-Stage DCF model is very difficult to place any weight upon. As Dr. Booth said on this point during cross-examination by Ms. Green, Q.C.: [Transcript, April 18, p. 204-205]

28

Well, here's an interesting question. If the Board thinks that the short run five year growth rates are biased, and as a result it puts greater weight on multi period, then you look at it and you say, well, if you think the first five years are overoptimistic, and then you taper to the long run growth rate and the GDP as saying that the next five years are overoptimistic, straight off the bat it's saying that the first ten years of a multi-stage DCF analysis are optimistic. So you get into bind. If you reject constant growth, you also reject

1	the first ten years of a multistage model, and then there's no evidence whatsoever that
2	utilities grow at a growth rate of GDP. The AUC mentioned this, and, in fact, if I picked
3	up the tabs from the FERC, the FERC recognizes it as well."
4	
5	Mr. Coyne's Proxy Group Selection
6	
7	Mr. Coyne's report's contention is that the proxy companies used in his ROE analysis possess a
8	set of business and financial characteristics that are similar to Newfoundland Power's regulated
9	electric utility operations, and these provide a reasonable basis for the derivation and
10	assessment of ROE and capital structure estimates."
11	
12	On cross, Mr. Coyne stated that the return should be comparable to the one that one could earn
13	on like risk "so that really grounds our analysis around trying to find those that are like risk, and
14	so we wouldn't want to use the universe of utilities so the idea is to narrow it down to those
15	that look most like the target company for the purposes of cost of capital analysis." [Transcript,
16	April 7, p. 2]
17	
18	This Board stated in Reasons for Decision Order No. P.U. 43 (2009) as follows:
19	
20	"The Board believes that in this type of analysis, it is not enough that the chosen
21	comparables are the best available. If this data is to be relied on it must be shown to be
22	a reasonable proxy or that reasonable adjustments can be made to account for
23	differences." [p. 17, lines 3-5]
24	
25	Regulated vs. Unregulated Operations/Assets
26	
27	Newfoundland Power is a "poles and wires", transmission and distribution utility. It has a very
28	small amount of generation. Its assets are 100 percent regulated. In contrast, each of the
29	companies that populate the proxy group of Mr. Coyne is a utility holding company. The utility
30	holding companies are not comprised of 100 percent regulated assets, nor are their earnings
31	derived from 100 percent regulated earnings as is the case with Newfoundland Power.
32	
33	In the case of the Canadian utility Proxy Group, because there are so few publically traded
34	regulated Canadian electric and gas utilities, the only screening criteria was that the company

possess an investment grade credit rating (Coyne Report, p. 15, lines 21-22). Mr. Coyne admitted that his Canadian Proxy Group companies were not close matches for Newfoundland Power (Transcript, April 6<sup>th</sup>, p. 179, lines 7-12). Canadian Utilities Limited and Emera, both of which are also included in Mr. Coyne's North American Proxy Group have major differences from Newfoundland Power. The former is an international, global entity and the latter's major subsidiary, Nova Scotia Power, is a vertically integrated utility with large generation capacity.

7

### 8 Generation vs. Poles and Wires

9

In fact, in the case of the US Utility Holding Companies, all but Eversource have significant generation: Allete-1985 MW, Duke-49,600 MW, Great Plains Energy-6660 MW, OGE-6845 MW, Pinnacle West-6400 MW, and Westar-7200 MW. A number of these companies also own and operate nuclear generation facilities. It is difficult to conceive of Newfoundland Power with its Petty Harbour hydro plant being considered a close match to these utilities. [Transcript, April 4<sup>th</sup>, pp. 100 to 116]

16

17 It is well recognized, including by Mr. Coyne, that electrical generation exposes a utility to more 18 risk than transmission and distribution. This is recognized by both DBRS and Moody's. Mr. 19 Coyne makes no adjustment for this fact which is simply unreasonable and inconsistent with his 20 own evidence before the Régie where his 2013 evidence was that the incremental ROE 21 required to offset the increased operating risk of regulated generation is approximately 41 basis 22 points. [Transcript, April 4<sup>th</sup>, p. 86, lines 13-24; CA NP 154, p. 53]

23

24 During cross-examination, Mr. Coyne was also referred to his May 29, 2015 evidence on behalf 25 of Northern States Power. For Northern States Power, a company with 830 MWs of generation. Mr. Coyne screened out companies whose owned generation did not comprise greater than 26 27 25% of the MWH sales to ultimate customers (Transcript, April 4<sup>th</sup>, p. 124). In Wisconsin, Mr. Coyne considers the risk of generation to be a factor that investors consider in making their 28 investment decisions in utility companies (Transcript, April 4th, p. 127). 6 of the 7 US companies 29 (Transcript, April 4th, p. 131) that are in Newfoundland Power's Proxy Group were also used in 30 Wisconsin but Newfoundland Power, if it were publically listed, would not have passed the 31 32 generation screen in Wisconsin because it lacks the risk associated with owned generation.

1 Mr. Coyne's explanation for not applying an adjustment to account for the proxy group's 2 generation compared to Newfoundland Power was that "we examined Newfoundland Power's 3 overall risk profile and we find that from an investor standpoint, they have credit ratings, they're comparable to Newfoundland Power, so they're not being diminished in their credit rating as a 4 5 result in that business. If they were significantly disadvantaged as a result of being generators we might see that show up in their credit rating. So we don't see that here." [Transcript, April 6 4<sup>th</sup>, p. 117, line 18 - p. 118, line 3]. This is not a credible explanation. If it were, Mr. Coyne 7 would have had no need to screen out non-generators in his Wisconsin evidence for NSPW -8 9 he could have merely ensured that the credit ratings were comparable.

10

#### 11 Earnings Volatility

12

13 While downplaying the significance of the risk factor of generation present in his proxy groups 14 relative to Newfoundland Power, Mr. Coyne fails to consider the important factor of "earnings 15 volatility" of Newfoundland Power versus the proxy group companies, a clear case were Newfoundland Power is at less risk than the firms in the proxy groups. The Board noted in P.U. 16 17 43 (2009) that "earnings volatility" was a significant difference between Newfoundland Power 18 and the proxy group companies (p. 17, line 8). Nor does Mr. Coyne address or consider the 19 relative ability of Newfoundland Power to earn its allowed return versus the proxy group's performance. Ms. Perry testified that she believed that whether a firm achieves its allowed 20 return "would be important to an equity investor" (Transcript, March 29th, p. 143). Ms. Perry 21 22 then admitted, "No, I have not had conversations with Mr. Coyne about whether or not U.S. utilities or his sample companies earn their allowed returns" (Transcript, March 29th, p. 142). In 23 fact, neither Ms. Perry nor Mr. Smith ever talked to Mr. Coyne prior to his providing his reports in 24 25 this matter.

26

Mr. Coyne testified that the Quebec regulator, the Régie, had requested that it be provided with data as to whether the proxy group's utilities were able to earn their allowed returns, noting that the Régie had indicated this was a "*constraint for them in terms of being able to utilize U.S. data and U.S. proxy groups.*" Mr. Coyne testified that he did not provide such data in this case as the Board did not ask for it (April 4<sup>th</sup>, 2016, p. 206), though he admitted that it was important whether the US operating companies in his proxy group were actually able to earn their allowed returns (April 4<sup>th</sup>, p. 207, line 11). Mr. Coyne stated (April 4<sup>th</sup>, p. 207, lines 11-23):

1 "Well, it is important in what I looked at beyond—and again, I mentioned the problems in 2 the accounting data—it is important and the way I looked at it is I looked at the 3 regulatory provisions that they had down to the tariff level in place that allowed them to 4 manage their costs so that they would be able to earn their allowed returns. So, we 5 looked at a more fundamental way because you're trying to look—this would tell you 6 what they are able to do historically, but it doesn't tell you what they're going to be able 7 to do on a going forward basis."

8

9 The ability to earn the return is where as Dr. Booth stated, "the rubber hits the road". The ability 10 of the utility to earn its ROE reflects the sum impact of everything that a utility is subject to short 11 run business risks, financial risks. . ." (Transcript, April 7<sup>th</sup>, p. 103, lines 15-22). Newfoundland 12 Power has earned its allowed return for over two straight decades.

13

Mr. Covne admitted that he has not filed evidence that establishes that North American utilities 14 earn their allowed returns (April 4<sup>th</sup>, p. 193, lines 9-10). Mr. Coyne asserted that he had "done 15 16 other examinations on this issue and what I find is that on average, both Canada and U.S. 17 utilities earn their allowed returns." He stated that the last time he had looked at the matter was in the 2013 Hydro Quebec hearing (April 4<sup>th</sup>, p. 199). In point of fact, the chart filed in Quebec 18 19 comparing allowed versus actual returns for a small number of US operating companies showed 20 that in 4 of the 11 years, from 2000 to 2011, the operating utilities failed to earn the allowed return on average (Transcript, April 5<sup>th</sup>, p. 5, line 3-8). Mr. Coyne admitted that he had not 21 22 researched more broadly how US utilities perform in relation to actual versus allowed returns (Transcript, April 4<sup>th</sup>, p. 202, lines 12-17). 23

24

Of course, in this case we are comparing Newfoundland Power to utility holding companies. Dr. Booth's report (at p. 67-68) and Schedule 8 clearly demonstrates that Newfoundland Power's ROEs are much more stable than the proxy group firms whose earnings are quite susceptible to significant variation. On cross examination, Mr. Coyne was presented with the allowed versus actual returns of his US proxy group companies as reported by AUS. [April 5<sup>th</sup>, p. 6]

30

This data which showed that several of the US proxy companies were not earning the allowed return was disputed by Mr. Coyne. However, Mr. Coyne declined to file data that indicated that

33 his proxy group companies actually earned their allowed returns. [April 5<sup>th</sup>, pp. 24-25]

During cross examination, Mr. Coyne was also provided with a 2015 report by Oliver Wyman (Information No. 21) which reported that the average US utility does not earn its allowed return on equity and citing that in 2014, the average return on equity was 8.1% (April 5<sup>th</sup>, p. 28). Mr. Coyne stated that he was not sure how Oliver Wyman had reached that conclusion but again declined to point to a report or paper by a third party source to re-but Oliver Wyman's findings and suggested that the Board should prefer the research he had filed in Quebec (April 5<sup>th</sup>, pp. 29-30; p. 32).

8

9 Newfoundland Power has put forward, through its expert witness, companies that it maintains it 10 is comparable to. Its CFO and its expert have confirmed that the issue of a company's ability to 11 earn its allowed return is important to an equity investor. For Newfoundland Power, its track 12 record of achieving its ROE speaks for itself. There is no evidence whatsoever that US utilities, 13 much less the proxy group companies earn their allowed return on a regular basis. This is 14 where the rubber hits the road. This lack of evidence draws into serious question the 15 comparability of US and, for that matter, Canadian utility holding companies with Newfoundland 16 Power.

17

#### 18 Other Differences

19

20 On a number of other features, Newfoundland Power, is less risky that the proxy companies 21 used by Mr. Coyne. These features are:

- 22 23
- Regulatory Lag and Test Year
- Customer Mix
- Capital Cost Recovery
  - Volume/Demand Risk
- 26 27

# 28 Regulatory Lag and Test Year

29

Newfoundland Power is certainly less risky than the US proxy companies on the issue of Regulatory Lag and Test Year. Fortis Inc. states in its MD&A's Corporate Overview section that if a historical test year is used there may be regulatory lag between when costs are incurred and when they are reflected in rates (Transcript, March 29<sup>th</sup>, pp. 139-140; Information No. 5 – p. 2). The vast majority of the US proxy group's operating utilities are on historic test years, unlike the 1 Canadian experience where forecast test years are the norm. Mr. Coyne stated that most 2 utilities would probably prefer a forecast test year (Transcript, April 4<sup>th</sup>, p. 164, line 4). As 3 regards rate case lag, Newfoundland Power, at 6 months, is the lowest and is well below the 4 majority of US operating utilities as is clear in Exhibit JMC-5, Schedule 5 of Appendix A. 5 Timeliness of decisions has been cited as one of the reasons why the Board is regarded as one 6 of the more supportive regulators in Canada by Moody's.

7

#### 8 Customer Mix

9

Newfoundland Power's customer mix is less risky than the proxy group companies. 10 11 Newfoundland Power's customer base, being comprised solely of residential and commercial 12 customers, is cited as a strength of its business profile (DBRS Report of August 21, 2015, p. 2). 13 From a customer mix perspective, Mr. Coyne agreed that residential customers are less cyclical and from that standpoint are preferable (Transcript, April 4th, p. 185). Mr. Coyne's report 14 provides data on the proxy group companies' customer mix which clearly show that most of the 15 16 companies are more exposed to industrial and non-residential customers than is Newfoundland This risk factor which is in favour of Newfoundland Power vis-à-vis the other 17 Power. 18 companies, was not considered by Mr. Coyne as part of his overall risk assessment of 19 Newfoundland Power.

20

### 21 Capital Cost Recovery

22

23 Newfoundland Power obtains pre-approval of the Board in respect of its annual capital 24 expenditures, which neither Emera nor Canadian Utilities Ltd.'s utilities enjoy. Indeed, out of the 25 17 operating utilities of the US Proxy Group, only 4 have a pre-approval regime. Mr. Coyne 26 admitted that a pre-approval regime is the least risk regime in terms of imprudence findings after the fact (Transcript, April 4<sup>th</sup>, p. 154, lines 15-16). Moody's states that the Board's review and 27 approval of Newfoundland Power's capital spending plans and long-term debt issuances 28 29 "significantly reduce the risk of cost disallowances and support the company's ability to recover 30 costs." (Moody's Report of February 5, 2016, p. 3). Disallowances are a direct risk to utility 31 shareholders, a risk that has been minimized in this jurisdiction compared to the jurisdictions of 32 proxy group companies of Mr. Coyne.

33

#### 1 Volume/Demand Risk

2

3 Newfoundland Power has a weather normalization account. None of the 17 operating utilities 4 (owned by the US Proxy Group firms) in the US has this mechanism (Exhibit JMC-5, Schedule 5 2). 7 of the 17 have no protection whatsoever from volume/demand variances. Nova Scotia 6 Power has only partial decoupling and no weather normalization protection. Its partial 7 decoupling only concerns the load 1 or 2 of its large industrial customers (Transcript, April 4<sup>th</sup>, p. 8 172, lines 10-11). It would be unrealistic to not consider Newfoundland Power as being better 9 protected than a number of the US companies, as well as Emera and Canadian Utilities Limited 10 (which has no volume/demand risk mitigation).

11

# 12 Capital Structure

13

#### 14 Overview

15

16 In Order No. P.U. 13 (2013) the Board found that there was little substantive evidence 17 demonstrating that the appropriate common equity ratio for Newfoundland Power is 40% and 18 found that a change on the common equity ratio had not been justified (Order No. P.U. 13 19 (2013). At the same time, the Board clearly recognized that it had been some time since 20 Newfoundland Power's capital structure had been comprehensively reviewed and the Board 21 ordered Newfoundland Power to file a comprehensive report in relation to its capital structure in 22 its next general rate application. To that end, Mr. Coyne and his colleague, Mr. Trogonoski 23 (who did not testify), prepared a report on Capital Structure and the Consumer Advocate 24 retained Drs. Booth and Cleary to provide their expert opinions to the Board on an appropriate 25 capital structure for Newfoundland Power.

26

First, it is necessary to put Newfoundland Power's longstanding 45% common equity component into a proper perspective for the purposes of the Board's assessment of an appropriate common equity ratio for Newfoundland Power. At the outset, the fact that Newfoundland Power has had a deemed common equity ratio for the last 25 years does not mean that it enjoys a presumption of being reasonable and appropriate in this proceeding, particularly in the light of the fact that it has not been comprehensively reviewed for many years.

33

1 In this assessment, it must be recognized that Newfoundland Power's deemed 45% common 2 equity component is materially higher than those of other Canadian utilities. Dr. Cleary's report 3 (Table 10) shows that the median common equity ratio of electric distributors is 40% and it is 4 lower again for gas distributors at 35%. Newfoundland Power's sister utility, Fortis Alberta, has 5 a common equity ratio of 40% on which its allowed ROE is 8.30% compared to Newfoundland 6 Power's present ROE of 8.80%. Even Fortis's Maritime Electric on PEI, which is generally 7 regarded as higher risk than average T&D companies, has 41.90% common equity. In a similar 8 vein, Mr. Coyne's Figure 1 at p. 6 shows that Newfoundland Power has 45% common equity 9 compared to an average of just 39.1% for the 5 investor owned utilities he compares 10 Newfoundland Power to, including Maritime Electric.

11

### 12 Financial Risk

13

In assessing Newfoundland Power's overall risk as a utility, we turn first to its "financial risk". Newfoundland Power's expert has posited that with its 45% common equity ratio, Newfoundland Power has "comparable financial" risk as other investor-owned utilities in Canada. In referring to financial risk, Mr. Coyne observes at p. 2 that, "*Financial risk primarily relates to the risk associated with the way in which a company has financed its business, as evidenced by the relative percentages of debt and equity in the capital structure.*" Mr. Coyne defines "Financial Risk" as follows (Appendix A, p. 3):

21

"Financial risk exists to the extent a company incurs debt obligations in financing its
 operations. These fixed obligations increase the level of income which must be
 generated to cover interest payments before common stakeholders receive any return,
 and they are considered by both debt and equity investors in addition to business risks."

27 In P.U. 19 (2003) at page 31, the Board accepted the following definitions by Dr. Morin:

28

26

- 29 "Refers to the additional variably of earnings induced by the employment of fixed cost
  30 financing, that is, debt and capital stock."
- 31

32 and by Drs. Winters and Waters:

33

34 "Risks that arise through the corporations' financing and capital structure."

- 1
- Using Mr. Coyne's definition, it is clear that Newfoundland Power incurs less debt obligations in
   financing its operations than all other transmission and distribution utilities in Canada.
- 4

5 Dr. Cleary has concluded that in fact Newfoundland Power, with its 45% common equity 6 component, has **lower** financial risk than both Canadian electric distributors which have a 7 median common equity ratio of 40% and Canadian gas distributors which have a median 8 common equity ratio of 38%. At the same time, Newfoundland Power has had an allowed ROE 9 from 2011 to 2015 that is slightly above both the average and median ROEs for both Canadian 10 gas and electric utilities. [Report of Dr. Cleary, p. 28, line 11; p. 29, lines 2 to 9]

11

Newfoundland Power's expert, Mr. Coyne, has erred in his conclusions regarding Newfoundland
 Power's financial risk.

- 14
- Mr. Coyne has erroneously concluded that Newfoundland Power with its 45%
   common equity component has comparable financial risk as other investor owned electric utilities in Canada.
- 18

22

- 192)Mr. Coyne has also erred in his conclusion that Newfoundland Power's credit20rating of "Baa1" from Moody's which Mr. Coyne asserts is "equivalent to BBB+21from S&P" is one notch lower than the Canadian proxy group average of A-.
- 3) Mr. Coyne has also erred in his assertion that Newfoundland Power's credit
   metrics are weaker than average for the Canadian proxy group companies in
   terms of cash flow interest coverage and cash flow to debt. These incorrect
   assertions are made at p. 9-10 of Mr. Coyne's Capital Structure evidence.
- 27

Let us turn to Mr. Coyne's incorrect assertion that Newfoundland Power's Moody's issuer credit rating of Baa1 "is one notch lower than Canadian Proxy Group S&P of A-". This conclusion is wrong on a number of fronts. First, Newfoundland Power does not have a rating from S&P but it does have a DBRS rating of A while Valener and Enbridge each have lower DBRS credit ratings of BBB+ and BBB (High) respectively. Canadian Utilities also has an A DBRS rating like Newfoundland Power. Emera is not rated by DBRS (Undertaking No. 21). Demonstrably, Newfoundland Power does not have a lower credit rating than the Canadian Proxy Group firms,

1 as Mr. Covne asserts. In fact, it has a higher one on average. Second, Mr. Covne's assertion 2 that Newfoundland Power's Moody's issuer rating of Baa1 is one notch lower than the Canadian 3 Proxy Group only of A- is premised on his unsubstantiated assertion that a Moody's issuer rating of Baa1 is "equivalent to BBB+" from S&P. There is no independent evidence in support 4 5 of that assertion on the record. Dr. Cleary observed that it was his view that if Newfoundland 6 Power had an S&P rating, it would probably be A- or A (Transcript, April 11<sup>th</sup>, pp. 36-37). The third problem with Mr. Coyne's assertion is that he ignores the fact that Moody's rates the first 7 8 mortgage bonds of Newfoundland Power as A2. As Ms. Perry explained, Moody's "provides a 9 double notch upgrade because our debt is secured into our trust deed." (Transcript, March 29<sup>th</sup>, 10 p. 156, lines 19-22). Ms. Perry explained that secured debt provides more security to lenders 11 than unsecured debt as the assets of the company are put up as security. Holders of unsecured debt would rank behind holders of secured debt (Transcript, March 29th, p. 137, lines 12 13 14-25; p. 158, lines 1-8).

14

Dr. Booth explained that Newfoundland Power's Moody's A2 rating is the rating that is "used to access the capital markets." (Transcript, April 7<sup>th</sup>, p. 119, lines 19-25; p. 120, line 104). This was not challenged on cross examination. In fact, as referenced by Dr. Booth in his evidence (p. 94), Fortis itself in its third quarter 2015 report refers to Newfoundland Power's bond rating as "A" from DBRS and "A2" for Moody's. No Fortis subsidiary has a higher bond rating than Newfoundland Power, in fact, as Dr. Booth stated.

21

22 Finally, Mr. Coyne also erred in stating that Newfoundland Power's credit metrics are weaker 23 than average for the Canadian Proxy Group companies in terms of cash flow interest coverage 24 and cash flow to debt. Frankly, even if this were true it would add little to the discussion as to 25 whether Newfoundland Power is an overall average risk Canadian utility because these are 26 utility holding companies that are not close matches to Newfoundland Power and Valener and 27 Enbridge are not primarily engaged in the provision of electricity (Transcript, April 6<sup>th</sup>, p. 174). Removing Valener, the remaining firms in the Canadian Proxy Group had an average of 13.37% 28 29 cash flow to debt, and Newfoundland Power's was much superior at 17.5%. Furthermore, with 30 Valener excluded, the remaining firms' debt to EBITDA ratio was 5.54 versus Newfoundland Power's much stronger 3.30 (Transcript, April 6th, pp. 174-178). 31

32

Furthermore, Newfoundland Power's credit ratings are not only strongly relative to the Canadian
 Proxy Group firms and strongly relative to other Fortis affiliates, its DBRS rating and interest

coverage is amongst the strongest in Canada amongst utilities, according to DBRS. During the 1 2 hearing, Ms. Perry was cross examined concerning a comparative analysis of utilities' credit 3 metrics, allowed ROE and equity thickness filed before the BCUC (Information No. 6) by Fortis BC Energy Inc. on October 2, 2015. The source of the data utilized in Fortis BC Energy's 4 5 analysis was DBRS Research. What is absolutely clear is that Newfoundland Power enjoys materially superior interest coverage than both electric distribution transmission companies as 6 7 well as natural gas distribution and transportation firms. In fact, Newfoundland Power's interest coverage exceeded all 10 of the 11 utilities surveyed by Fortis BC Energy over the 2012-2014 8 period. In fact, the 11<sup>th</sup> firm, Hydro One Inc. which is rated A (high) by DBRS equaled 9 10 Newfoundland Power in 2013 and was itself bested by Newfoundland Power in 2014 in interest 11 coverage. Newfoundland Power also was shown to have the highest equity ratio of any of the 12 firms while having a ROE that was about average for the electric distribution group surveyed.

13

14 It is quite clear that Mr. Coyne's conclusions with regard to Newfoundland Power's financial risk 15 do not withstand scrutiny and are wrong. In fact, Newfoundland Power has clearly been 16 demonstrated to have less financial risk than other investor owned utilities in Canada. The 17 Consumer Advocate submits that if this Board were to conclude that Newfoundland Power has 18 comparable financial risk with other investor owned utilities, the Board would need to identify the 19 evidence that supports this conclusion. We submit that the Board will find itself unable to do so.

20

#### 21 Business Risk

22

23 Mr. Coyne provides the following definition of "Business Risk":

24

25 "Business risk for a regulated utility results from variability in cash flows and earnings
26 that impact the ability of the utility to recover its costs including the fair return on, and of,
27 its capital in a timely manner. Concentric includes operating risk and regulatory risk
28 under the broad definition of business risk."

- 29
- 30 Mr. Coyne's Qualitative Assessment
- 31

Mr. Coyne compares the business risk of Newfoundland Power to 5 other Canadian investor owned utilities in order to assess whether Newfoundland Power continues to be an average risk
 Canadian utility. The 5 investor owned utilities are: ATCO Electric, Fortis Alberta, Fortis BC

Electric, Maritime Electric and Nova Scotia Power. In assessing the business risk of
 Newfoundland Power relative to these utilities, Mr. Coyne considered the following factors:

- 3 4
- power supply risk and electricity prices;
- 5 2) macro-economic and demographic conditions;
- 6 3) volume/demand risk;
- competition from alternative funds;
- 8 5) regulatory environment; and
- 9 6) capital and operating cost recovery.
- 10

11 An examination of Mr. Coyne's comments on these various factors (pages 18-24 of Appendix A) 12 reveals that Mr. Coyne's analysis is gualitative in nature, not guantitative. Accordingly, Mr. 13 Coyne's conclusion as to the relative risk of Newfoundland Power on the listed factors 14 essentially comes down to Mr. Coyne's judgment. To illustrate, as regards operating cost 15 recovery, Mr. Coyne compares the utilities' operating cost recovery mechanisms such as 16 pension/ OPEB expense, storm costs, DSM and cites Newfoundland Power's lack of a storm 17 deferral account and thereafter cites weather and storm related risk as a factor contributing to his assessment that Newfoundland Power's business risk has increased compared to the 18 19 Canadian investor-owned electric utilities since the last GRA. While Newfoundland Power does 20 not have a storm-related deferral account it has other accounts which other utilities lack such as 21 Pension/OPEB's expense. What is the value of a OPEBs and Pension account compared to a 22 DSM account? Is the lack of a storm deferral account offset by the fact that NL is regarded as 23 having a more supportive regulatory regime than in Nova Scotia and Alberta according to Mr. 24 Coyne's evidence? This indicates the problems inherent in the qualitative analysis of Mr. 25 Coyne.

26

Likewise, Mr. Coyne cites the Province's macro-economic and demographic trends as a factor contributing to his assessment that Newfoundland Power's business risk has increased relative to the Canadian investor-owned electric utilities since the last GRA. (P. 24 of Appendix A, lines 19-20). However, there is no evidence as to what the macro-economic and demographic trends were in 2012 relative to this GRA in PEI, Nova Scotia, B.C., Alberta and NL – being the 5 provinces where the comparator utilities operate.

33

We observe that in Newfoundland Power's Revised Application (Vol II, Tab 5, p.17) the 1 2 Conference Board of Canada 2016 forecast puts NL's household disposable income per capita 3 over 2015 to 2017 higher than PEI's (by \$5,000 to \$6,000), Nova Scotia's (by \$4,000 to \$5,000), 4 Ontario's (by \$2,000 to \$3,000), New Brunswick's (by \$4,000 to \$6,000), Quebec's (by \$6,000 5 to \$7,000) and Manitoba's (by \$4,000 to \$5,000). The point here is that it is incredibly difficult to draw reliable conclusions as to the relative risk of Newfoundland Power as compared to the 5 6 7 investor-owned utilities that Mr. Coyne analyzes by reference to a purely qualitative 8 assessment. 9

Э

10 As Dr. Cleary stated:

11

"....being a finance guy, if there's a way that you can justify things instead of just waving
your hands and saying, 'This is more risk' and 'This is less risk', it's always nice if you
can jump to [the] punch line [if] you will, because all of those factors that have been
discussed here that affect business risk...you put them all together and the impact
should be on business risk or the operating earnings." (April 11, p. 25, lines 7 to 17)

17

Mr. Coyne did not compare the volatility of earnings of Newfoundland Power to other Canadian
utilities (April 6, p. 172, lines 12-14), whilst clearly acknowledging that operating risk shows up in
earnings as the following exchange shows: (p. 175, lines 1-10)

21

22	Q.	"But these are the companies that you're asserting Newfoundland
23		Power is now above average risk in relation to, correct?"
24	Mr. Coyne::	
25	Α.	"From an operating risk standpoint, yes."
26	Johnson, Q.C	.:
27	Q.	"Operating risk shows up in earnings, does it not?"
28	Mr. Coyne:	
29	A.	"Yes."
30		
31	Dr. Cleary's Approa	ch

32

33 Dr. Cleary's approach therefore is to provide the Board with a quantitative assessment to 34 support his qualitative opinions that Newfoundland Power remains a typical low risk Canadian utility. Such an assessment is necessary and indeed logical given that business risk by
 definition concerns variability in cash flow and earnings.

3

4 The purpose of Dr. Cleary's analysis (as explained in PUB CA 025 and in his surrebuttal 5 evidence at p. 9) was to provide quantitative evidence to evaluate Mr. Coyne's claims that 6 Newfoundland Power had higher business risk than both his Canadian proxy group and his U.S. 7 proxy group. Figure 7 and Table 8 of Dr. Cleary's report objectively demonstrates that 8 Newfoundland Power has much less volatility in its EBIT (Earnings Before Interest) than the 9 U.S. firms in Mr. Coyne's proxy group and also less volatility than the operating companies of 10 the Canadian companies that Mr. Coyne included in his Canadian proxy group. The figures 11 presented by Dr. Cleary do not lie and were not challenged by Newfoundland Power during the 12 hearing.

13

14 Dr. Cleary also explained that the measure of CV (EBIT/Sales) on which Newfoundland Power 15 bests the Canadian firms and the U.S. firms is not subject to growth in EBIT due to rate base 16 growth (April 11, p. 29, lines 15-25). Dr. Cleary testified that EBIT volatility is a standard 17 measure of business risk in finance textbooks, accounting textbooks as well as the Chartered 18 Financial Analysts curriculum. (April 11, p. 136, lines 1-5). Clearly, such standard measures of business risk are relevant and non-judgmental evidence of the level of Newfoundland Power's 19 20 business risk relative to other firms. It would be illogical to think otherwise. It is in fact precisely 21 the type of information that regulatory boards should be considering in assessing utility claims 22 as to their risk profile in relation to others. It is not surprising that the Regie, as testified by Mr. 23 Coyne, sought quantitative data as to the ability of U.S. utilities to actually earn their allowed 24 returns. Notably, in his analysis Mr. Coyne used the co-efficient of variations in ROE. (April 11, 25 p. 138, Lines 3-4).

26

Dr. Cleary also testified that the difference in betas between the US and Canadian utilities is
consistent with the fact that US utilities faces higher business risk than Canadian utilities. Dr.
Cleary explained (Transcript, April 11, pp. 33-34):

30

"So, the other thing that I did want to mention is there's a lot of discussion about betas
Iast week and I did discuss betas in my evidence. It's also consistent if you look at—I
don't think there was any debate that the U.S. utilities had higher betas. It was whether it
be .5 or .6 was the discussion and whether U.S. was .6 and Canada was .5, for

1 example. Well, let's just say that's the truth. I think Mr. Coyne's evidence is .67 and .6. 2 but if you looked at it and you said, okay, if they have the same business risk, then they 3 should both have a beta of .5. Let's say .5 is the number you start with. Now, if one utility 4 has more financial risk than the other, ie. Higher leverage, then we would expect its beta to be .6. I'm just pulling these numbers out for illustrative purposes and the other one 5 6 would stay at .5, it has lower financial risk. But on the other hand we know that the U.S. 7 utilities have less leverage, yet their betas are .7 versus .6 or .6 versus .5. It clearly 8 shows that the U.S. utilities in this sample have higher business risk because they have 9 lower financial risk, yet they have higher betas. So, that's consistent with my analysis. 10 And it's consistent with all the discussions that have been going on about the 11 comparison of these two."

12

# 13 The Current Economy and Future Supply Costs

14

15 Mr. Coyne has put forward two reasons for asserting that Newfoundland Power has high 16 business risk today than at the time of its last GRA in 2012, namely:

17

18

- 1) Deterioration in provincial economy; and
- Increased supply costs upon interconnection.
- 19 20
- 21 The Current Economy
- 22

It is clearly the case that the provincial economy in common with the economies of other oil producing provinces in Canada has been hit by the sharp drop in oil prices. It is not in dispute that the provincial economy is weaker now than three years ago. However, it is also true that Newfoundland Power has faced challenging economic conditions in the province contributors in the past such as during the post-moratorium period and periods of recession.

28

Dr. Booth put the present circumstances into perspective: (Apr. 18, p. 121 line 22 to p. 122 line
14)

- 31
- A. "Well when you look at these issues, Mr. Kelly, you have to look at it in the context of
   is there anything unusual about this, and going back over the last 25 years for the
   province, we've had periods of very good economic growth; we've had periods of not

very good economic growth. We've had periods of bad winter storms; we've had
periods where we had mild winter storms. We've had, I would suspect most of the
underlying risks that affect the utility, so I don't look at an individual factor, I just look
at, well, what is the upshot of these, what does it really mean in terms of the
performance of the utility, which is why I look at the ability of the utility to earn its
allowed ROE."

7

8 The undisputed fact is that Newfoundland Power has consistently earned its allowed ROE 9 during the past two decades and Dr. Cleary's evidence clearly shows that Newfoundland 10 Power's earnings have grown consistently every year since 1995 (Figure 6) and that its revenue 11 growth has been much less volatile and more resilient than NL's real GDP growth rates. 12 (Figures 5). Dr. Cleary's report states (p. 19, lines 13-19),

13

14 "While the forecast economic decline is not a positive development. 15 fortunately for NP it is less affected than companies operating in cyclical industries such as real estate or consumer durables. Further, given its 16 low-risk business model accompanied with strong regulatory support, 17 there is no obvious reason that a weak economy represents a 18 19 significant increase in permanent business risk for NP. Indeed, the 20 historical record confirms that NP has weathered previous economic 21 "storms" and managed to maintain growth in sales and operating income. 22 and earn ROEs at or above the allowed ROEs."

23

Utilities are always exposed to forecast risk as the ability of a utility to recover its prudently incurred costs and earn a return depends on the ability to achieve the forecast used in the rate setting process. (March 29, p. 120, lines 11-23) Mr. Henderson confirmed that there was no reason to believe that the Company's ability to forecast load going forward would be any less reliable than it was in the past (April 12, p. 114, line 12).

29

30 Newfoundland Power's position that the weakened economy has contributed to it now being an 31 "above average risk" Canadian utility would certainly create a contradiction as to how 32 Newfoundland Power viewed its business risk profile when the NL economy was more robust 33 and sales were growing well above the usual trend. During these periods as seen in its GRA

applications in 2007, 2009 and 2012 (Information No. 1, 2 and 3) the company did not maintain
 that the then prevailing more positive economic circumstances had reduced its business risk.

3

#### 4 Future Supply Costs

5

Next, we turn to the position that Newfoundland Power has become an above average risk
Canadian utility on account of its being exposed to an increase in the price of electricity supply
after the interconnection.

9

10 Dr. Booth's evidence in respect of business risks is that there are short run and long run risks. 11 Short run risk is the ability to earn the allowed ROE and reflects the return on capital. Long run 12 risk is the return of capital and reflects the ability of the utility to recover its investment in plant 13 and equipment; that is, capital recovery risk. (Booth evidence p. 72, lines 2-5; April 7, p. 102, 14 lines 18-24). Mr. Coyne made it clear that he is not contending that the risk faced by 15 Newfoundland Power is one of recovery of its prudently incurred costs. He was explicit on this 16 point and testified that he does not anticipate the Board walking away from the regulatory 17 compact. (April 7, p. 58 lines 15-25; p. 59 lines 1-21; p. 61 line 20, line 21-25; p. 62, lines 1-25; 18 p. 63, line 1). Dr. Booth is in full agreement.

19

Rather, Mr. Coyne's contention is instead that Newfoundland Power's earnings will be at greater risk. The risk identified was that due to increased power supply costs, customers will find a way to consume other fuels "which means between rate cases if your demand is shrinking and you customer count is held flat, you typically have a harder time recovering your allowed return". (April 7, p. 59, lines 9-13).

25

26 In this GRA we are setting rates for 2016-2018 in all likelihood. The power supply costs will not 27 be changing due to the interconnection during this period of time. To elevate Newfoundland 28 Power's risk profile from average to above average risk in this proceeding is clearly not justified. 29 Indeed, Newfoundland Power's risk profile was not previously changed when in the 1990s 30 electricity was actually experiencing a 40% cost disadvantage to furnace oil used for home 31 heating and Newfoundland Power continued to earn its allowed ROE and saw minimal numbers 32 of customers switch (CANP 042) to furnace oil and other fuel sources. Switching from electric 33 heating to oil-based heating involves a significant capital expenditure in the range of \$25,000 to 34 20,000, depending upon the configuration adopted (CANP 041).

1 Mr. Coyne's assessment of Newfoundland Power being characterized as an "above average 2 3 risk" Canadian utility was due to the combination of weaker economic conditions in the province 4 and power supply costs risks due to future interconnection. The reasons for his assessments in 5 both of these regards has been undermined and cannot form the basis for such a finding. 6 The Influence of Mr. Coyne's "Above Average Risk" Assessment 7 8 9 While Mr. Coyne stated that his "above average risk" assessment did not directly influence his 10 recommendation on the ROE, he stated that it did influence his recommendation with respect to the capital structure, as the following exchange clearly demonstrates: (April 17, p. 68 line 22-11 12 25, p. 69 line 1-14) 13 14 Greene, Q.C.: 15 Q. "Did it influence your recommendation with respect to the capital 16 structure?" 17 Mr. Coyne: A. "Well I took it into account because that accounts for the comparable 18 financial risk, so it is the capital structure that enables the company with 19 its risk profile to be comparable to its Canadian peers, and I think given its 20 21 business risk combined, the capital structure added up with its credit 22 metrics in the business risk make it only somewhat above average." 23 Greene, Q.C.: 24 Q. "So I take from that answer, it did influence your recommendation on 25 maintaining the 45 percent common equity?" 26 Mr. Coyne: 27 Α. "Yes, very much, yeah, explicitly." 28 29 Mr. Coyne also makes it clear that his 45% recommendation is borne out of a "worry" of his that Newfoundland Power's equity ratio is lower than its "U.S. peers". Mr. Coyne states that 30 Newfoundland Power's 45% equity: 31 32 33 "is 5% below its U.S. Peers, and that's true even for the pure T&D companies that we looked at. So it has a -given its risk profile, vis-à-vis those companies, I think it's

38

appropriate to have it at the high end of the Canadian competition or comparators, but <u>I</u>
 <u>still worry about still being 5% below its U.S. peers</u>. There's a history in Canada of
 Canadian regulators allowing lower capital equity ratios than the U.S. peers, so I take
 that into account. That's why I am not recommending a 5% increase to look like the U.S.
 proxy companies, <u>but I think you have to acknowledge that gap</u>. So that's why I
 recommend 45 stay in place." (April 7, p. 70 line 1to 20)

7

Basing a recommendation of 45% equity in any way upon a "worry" that Newfoundland Power's 8 9 common equity component is low relative to U.S. utilities is patently unreasonable. There is no 10 regulatory precedent for a Canadian regulator to determine an appropriate capital structure 11 based upon the level of common equity permitted in the U.S. for utilities, Furthermore, 12 Newfoundland Power's previous long time expert is on the record as stating that the universe of 13 U.S. utilities has higher business risk than the typical Canadian utility which is a wires and pipes 14 utility. (April 4, p. 211; Information No. 18, p. 2 of 5). Notably, Mr. Covne testified that he made 15 no judgment as to whether the universe of U.S. utilities has more or less risk than his proxy 16 group. (April 4, p.217 line 18-21) and testified that he was not looking for companies that were 17 low risk per se (April 7, p.6 line 18). Newfoundland Power has an A bond rating from DBRS and 18 an A2 bond rating from Moody's. Only 4% of U.S. investor owned utilities have an "A" bond 19 rating and only 23% have an A- rating. 32% have a "BBB+ rating, while 42% have a BBB rating 20 or lower, (CANP 126, Attachment A, p. 1 of 1)

21

# 22 Credit Metrices Considerations

23

Newfoundland Power does not require a 45% of common equity structure in order to maintain credit and raise capital. Dr. Cleary's report at Table 15 sets out the credit metric estimates using a 40% equity ratio with ROEs at 7.50%, 8.00%, 8.30% and 8.50%. Dr. Cleary's report confirms that if the equity ratio was reduced to 40% Newfoundland Powers credit metrics for 2016 and 2017 remain firmly in the Baa issuer range for Moody's and in the mid to high A range for DBRS under all of the ROE scenarios

30

At the request of the Board Hearing counsel, Newfoundland Power produced (Undertaking No. 4) *pro forma* 2017 metrics for pre-tax interest coverage, cash flow interest coverage and cash flow to debt coverage for a range of equity ratios between 40% and 45% and a range of allowed ROEs between 8.3% and 9.5%. Under all scenarios, the metrics presented are within the range

of an A credit rating according to Moody's criteria. The metrics provided also assume that 1 2 Newfoundland Power pays out a \$55,000,000 dividend to reduce its equity component from 3 45% to 40% (March 31, p. 20, lines 3-6). However, Ms. Perry erroneously stated that in respect 4 of the cash flow to debt coverage metrices that Moody's "actually have indicated that to maintain 5 the credit that we have today, that they expect us to be at the high end of the range, between 15 6 and 17." (Table 3 of Undertaking No. 4 reports that at 40% equity and an 8.30% ROE, the 7 coverage is 15%) Ms. Perry's statement is not accurate. Moody's does not condition the 8 maintenance of Newfoundland Power's credit rating to the cash flow to debt ratio being in the 9 high end of the range of 15% to 17%. Moody's 12-18 month forward view as of February 2, 10 2016 is for the ratio to be between 15%-17% (Exhibit 4, p. 4) and Moody's has stated that a 11 downgrade is unlikely in the near term but that a downgrade would be likely if combined with a meaningful reduction in the level of regulatory support, there was a sustained deterioration in 12 13 NPI's financial metrics "such as" cash flow to debt falling into the low teens.

14

Ms. Perry also addressed the 2017 pro forma earnings test interest coverage calculation which 15 16 is required for Newfoundland Power to issue First Mortgage Bonds in 2017 for a range of equity ratios between 45% and 40% and a range of allowed ROEs between 8.3% and 9.5%. Ms. Perry 17 18 stated that any coverage metric around 2.10 would cause her to be uncomfortable, whereas the 19 coverage required was 2.0. Ms. Perry stated that if the debt cost for the new issuance in 2016 20 went up by one percent (from 5% to 6% - p. 16, line 23) and at the same time Newfoundland 21 Power's earned ROE varied by 40 basis points (p. 7, line 25), this would cause a .10 drop in the 22 bond interest coverage. Given Newfoundland Power's track record of earning its return, this 23 analysis bears little resemblance to reality. The upshot of Ms. Perry's testimony is that to satisfy her comfort level, the Board would need to award Newfoundland Power a rather generous ROE 24 25 and common equity component as follows:

- 26
- 27

28

9.50% ROE on 42%-45% common equity;

8.80% ROE on 44%-45% common equity;

9.00% ROE on 44%-45% common equity;

8.50% ROE on 45% common equity.

- 29
- 30
- 31

As regards Newfoundland Power's presentation of its Earnings Test Interest Coverage in
 Undertaking No. 4, the Consumer Advocate sought clarification from Newfoundland Power to
 show how the *pro forma* interest coverage based on a 8.00% ROE and 40% equity component

was calculated. Newfoundland Power's response in Undertaking U-7 (in footnote 2) shows that the calculations were based on a 75,000,000 sinking fund bond issue at a rate of 5.50%. However, Ms. Perry previously testified (March 30, p. 45, line 10) that the new issuance was estimated to be at 5% and that the 5% cost was the rate assumption built into the company's metrics reported in Exhibit 5 of its Application. Accordingly, the tables in Undertaking 4 are not based on an assumption that is consistent with the testimony of Newfoundland Power's CFO, Ms. Perry, nor the assumption used in the exhibits.

8

9 More importantly, despite the Consumer Advocate's correspondence to Newfoundland Power of 10 April 14, 2016, seeking information aimed at clarifying why Newfoundland Power's interest 11 coverage calculations based on an allowed 8.30% ROE on a 40% equity ratio in Undertaking 12 No. 7 do not appear to be consistent with an 8.3% ROE, the reply of Newfoundland Power of 13 April 18, 2016 is unresponsive to certain detailed and specific data requests. Newfoundland 14 Power has judged the data to be "unduly burdensome, and [are] not necessary for a satisfactory understanding of the matters under consideration" by the Board in the GRA. This is 15 16 unacceptable as Newfoundland Power is relying upon interest coverage calculations to help 17 ground its request for an ROE and 45% equity component. The response of Newfoundland 18 Power to the Consumer Advocate's letter of April 14, 2016 is insufficient to make conclusions 19 regarding Newfoundland Power's interest coverage ratio calculations. Newfoundland Power's 20 interest coverage calculations as Dr. Cleary has testified are not in accordance with either his 21 ratio calculation (which, at no time was disputed or challenged by Newfoundland Power) or 22 those of DBRS, its own bond rating agency. Interestingly, Newfoundland Power states in its 23 April 18, 2016 letter that the calculation of the interest coverage ratio is based on "Standard and 24 Poor's Ratings Services methodology" and not DBRS methodology, despite the fact that that 25 Newfoundland Power is not rated by Standard and Poors. Newfoundland Power also 26 acknowledges that differences in metric calculations by credit rating are "inevitable".

27

The fact that the metrics related to "cash flows" (i.e., CF/Debt coverage and CF interest coverage) are similar to those calculated by Dr. Cleary speaks volumes – since cash flows don't lie. On the other hand, many assumptions can be made to alter income – either at the bottom level (i.e., net income available to common shareholders) or at the operating income level (i.e., earnings before interest and taxes or EBIT). The fact that Newfoundland Power does not adequately reconcile their EBIT with the net income available to common shareholders shows this point to be true. In fact, in Attachment B of NP's April 18, 2016 response, NP refer to "net

earnings" of \$80,199 in row 1, then further down NP refers to "net earnings" of \$35,048, begging the question " which is it?"

3

4 Newfoundland Power suggests the differences are due to differences in accounting decisions made for regulatory purposes, versus those for financial reporting purposes. This may well be 5 6 the case – unfortunately. Newfoundland Power does not provide sufficient details to show this to 7 be the case. When we have a situation where a utility's bond rating agency DBRS, let alone Dr. 8 Cleary, is calculating interest coverage levels higher than those presented by the utility, there is 9 a clear need for transparency. We recommend that the Board's financial consultants Grant 10 Thornton review the data Newfoundland Power provides to external parties for calculation of 11 ratios, as well as the ratios it provides to the Board. There needs to be consistency and the 12 ratios should be calculated as they are by debt rating agencies used by the utility. This does not 13 appear to be an issue with Newfoundland Power's cash flow metrics, since accounting 14 "decisions" do not impact cash flows as much as they can income measures.

15

In this discussion about Newfoundland Power's credit metrics, it is important to keep in mind that the Board as it has stated previously does not regulate interest coverage but rather looks to credit metrics as an indication of the extent to which a return will assure financial integrity as required by the fair return standard. Indeed as noted by the Board in Order No P.U. 43 (2009) (page 24, lines 1-25) in Order No. P.U. 32 (2007) the Board approved a cost of capital proposed by the parties in a settlement that resulted in forecast credit metrics that were marginally below the bottom of the range recommended by Moody's.

23

# 24 Other Credit Considerations

25

26 It is necessary of course to look beyond the credit metrics because credit metrics alone are not 27 the only determinants of a credit rating. In the case of Moody's, 40% of the rating is related to 28 "Financial Strength" being comprised of the specific metrices used by Moody's. 60% of the 29 rating is related to other factors:

- 30
- 31 Factor 1: Regulatory Framework (25%)
- 32 a) Legislative and Judicial Underpinning of the Regulatory Framework
  - b) Consistency and Predictability of Regulation
- 34

1	Factor 2:	Ability to Recover Costs and Earn Returns (25%)
2		a) Timelines of Recovery of Operating and Capital Costs
3		<ul> <li>b) Sufficiency of Rates and Returns</li> </ul>
4		
5	Factor 3:	Diversification (10%)
6		a) Market Position
7		b) Generation and Fuel Diversity

8

9 During her direct testimony, Ms. Perry stated that Newfoundland Power's 45% equity ratio is 10 viewed as a "primary indicator of overall regulatory support for the company's credit worthiness". 11 Moody's, in fact, does not state that the 45% common equity ratio is a "primary indicator" of 12 overall regulatory support as Ms. Perry suggests. Moody's explicitly states that it considers the 13 "PUB's regulation of NPI to be credit supportive primarily because of a track record of 14 reasonably timely and balanced decisions that enable NPI to generate stable and predictable 15 cash flows and earns its allowed ROE." There is no merit to any suggestion that a reduction of 16 Newfoundland Power's equity component would hinder the utility from having stable and 17 predictable cash flows and to earn its allowed ROE. There is no evidence or suggestion that the 18 Board's decisions are about to become less timely and less balanced. Nor is there validity to a 19 suggestion that the Board's adjusting the company's equity component to be in line with other 20 Canadian utilities would constitute a "meaningful reduction" in the level of regulatory support 21 (which, if combined with a "sustained deterioration" in financial metrics) could lead to a 22 downgrade by Moody's.

23

24 During the Hearing, Ms. Perry agreed that factors in a rating grid do not constitute all of the factors that go into a rating." (March 30, p. 102) and agrees that as its Fortis BC sister company 25 26 stated in its recent filing, consideration of issues such as liquidity, management quality, 27 ownership and governance all play a part. Newfoundland Power's core liquidity comes from its 28 \$100 million credit facility which has a no material adverse change clause (March 30, p. 103). 29 There is no reason to believe that Newfoundland Power does not compare favorably to the 30 Canadian utilities on other considerations, including management quality, ownership and 31 governance.

32

Claims that the board's reduction of Newfoundland Power's equity component will cause a reevaluation of regulatory support must be put into perspective as such arguments are not just made here. In the Fortis BC Energy Inc. filing of October, 2015 (in which Mr. Coyne also gave evidence) the company sought an increase in the equity component of its capital structure from 38.5% to 40% (Info. No. 6, p. 17, lines 23-24) because of it high risks relative to the majority of proxy companies (p. 17, lines 31 – p. 18, line 3). Fortis BC Energy Inc.'s submission was that "Reductions in either allowed ROE or equity thickness will not only weaken financial metrics, it may also lead credit rating agencies to reconsider *the qualitative evaluation of regulatory support* and stability of financial metrics, putting pressure on FEI's ratings."

8

#### 9 The Fortis Context

10

The fact is that Newfoundland Power's executives, and indeed utility executives generally, are never going to recommend a reduction of equity in the capital structure. Officers have a fiduciary duty to the corporation with the principal objective of enhancing shareholder value. As Dr. Booth's report states:

15

"This imposes on the directors a fiduciary responsibility to the company's shareholders
and not their customers. In NP's case this means Fortis Inc. In this context utilities
claiming to be facing more risk to support either high or more common equity are acting
like the managers of any their private corporation, which is to say acting in the best
interest of their shareholders." (Booth report, p. 91, lines 17-20)

21

22 Dr. Booth's evidence is that for utilities owned within a holding company, like Fortis inc., "the 23 parent has an incentive to finance the utility with as much equity as possible, so that the tax 24 advantages to financing with debt are shifted to the parent." (Booth report, p. 92 - lines 10-12). 25 Dr. Booth's description of the incentive that is at play was not challenged by Newfoundland Power. It is the parent company's shareholders that get the tax advantages to debt financing 26 27 and not the utility rate-payers. This is called the "double leverage" problem. As described by Dr. 28 Booth, Fortis clearly states that its target equity ratio is 45% comprising both common and 29 preferred shares, when in 2014 its common shares were only 35%. Dr. Booth states "Fortis also 30 states that it buys regulated utilities with a mixture of common and preferred shares, as well as debt. This is a clear admission of double leverage or that the utilities themselves have an 31 32 inefficient capital structure" (Booth report, p. 93, lines 2-4)

- 33
- 34

1 Conclusions and Options on Capital Structure

2

3 Both the evidence of Drs. Booth and Cleary buttressed by the quantitative analysis of Dr. Cleary 4 show that Newfoundland Power continues to have low business risk, similar or slightly lower 5 than that of similar Canadian utilities. The report of Dr. Cleary (Section 3.3.1 and 3.3.2) 6 demonstrates that Newfoundland Power currently has less financial risk than other Canadian 7 utilities based on an examination of allowable ROEs and equity ratios and of existing credit 8 metrics. Furthermore, Dr. Cleary's examination indicates that Newfoundland Power would 9 maintain solid metrics if the equity ratios were reduced to 40% and if the allowed ROE was also 10 reduced. Indeed, even using the company's manner of presenting the credit metrices (pending a 11 requested further review by Grant Thornton), Mr. Coyne agreed during the Board hearing 12 counsel's cross-examination that there is some flexibility in the metrics at various capital 13 structures, and even at lower capital structures without there being a negative impact on 14 Newfoundland Power's financial integrity (April 7, p.78, lines 11-15).

15

16 The Board has options as to how to move Newfoundland Power to a more appropriate equity 17 ratio for rate making purposes. It can order that a percentage of common shares be replaced 18 with lower cost debt or it can deem preferred shares as done in Quebec by the Regie in the 19 case of Gaz Metro as recommended by Dr. Booth. To go the deeming route, Dr. Booth 20 recommends (p. 97) that as an interim measure and until the next hearing, the Board asks 21 Newfoundland Power to provide the average preferred share yields on Fortis Inc.'s preferred 22 shares issued during December 2015 and deem this cost for its common equity for the test 23 year. Dr. Booth recommends that the Board indicate that this is a first step towards the 24 replacement of 5% common shares with long term debt at the next hearing. At the next hearing 25 the Board can consider whether there is any electricity price shock and whether it continues with 26 the replacement.

27

#### 28 Executive and Director Compensation

29

30 Overview

31

32 The Consumer Advocate has four (4) concerns with the method used by Newfoundland Power 33 to determine the amount of executive compensation that it has included in its revenue 34 requirement.

- 1 2 1. The peer group that it has traditionally used to serve as a comparator for the overall level 3 of executive compensation is not reflective of the level of compensation needed to 4 attract and retain competent executives and directors at the present time. 5 2. 6 The adjustments since the last GRA that have been made to the level of STI-related 7 compensation that is included in the revenue requirement has increased executive compensation by an amount that is out-of-step with current economic conditions in 8 9 Newfoundland and Labrador. 10 The weighting given to "earnings" within the Short Term Investment Plan (STI) results in 11 3. 12 a disproportionate amount of the company's STI that is included in its revenue 13 requirement being directed to the benefit of shareholders at the expense of ratepayers. 14 15 4. The inclusion of "regulatory performance" as a discretionary factor in the STI is 16 inconsistent with the established practice in other Canadian jurisdictions (Information No. 17 11) and further skews the proportion of STI that is based on factors that benefit 18 shareholders at the expense of ratepayers inappropriately. 19 20 The Peer Group used is not Appropriate 21 22 Newfoundland Power's executive and director compensation is established on the basis of a so-23 called peer group that clearly does not consist of peers. 24 25 Newfoundland Power is an electric utility. The peers to Newfoundland Power executives . should clearly include the executives in other Canadian utilities. The selected Hay 26 27 comparator excludes other utilities.
- Newfoundland Power is a company operating in the Atlantic Canada region. The peers
   to Newfoundland Power executives should clearly include the executives in other
   companies operating in the Atlantic Canadian region. The selected Hay comparator
   excludes comparable companies in the Atlantic Canada.

32

33 While it is conceivable that at some time in the distant past, when this current comparator group 34 was originally adopted by Newfoundland Power this comparator group might have been appropriate – although there is no evidence that the selection of the comparator was based on an analysis of different available peer groups to determine which was most appropriate, it is clear that the only rationale for continuing to use this peer group is because it is the way they have always done it. Doing anything the same old way does not meet any reasonable standard for the **company's burden of proof** in demonstrating that the costs it seeks to pass through to ratepayers have been prudently incurred.

7

8 Newfoundland Power uses the broad Canadian Commercial Industrial markets to determine 9 comparable compensation levels. This group is not refined by location, industry, or size but is 10 comprised entirely of private companies that are clients of Hay Group (April 1, p. 95:11). A list of 11 Atlantic Canada companies provided by Hay Group (Undertaking - U-10) shows that of the 278 12 companies in the broad Canadian Commercial Industrial market peer group used by NP, only 9 13 (3.2%) are located in Atlantic Canada. Mr. Aboud, from Hay Group, asserts without providing 14 any analytic support that this is the most appropriate comparator group for Newfoundland 15 Power.

16

Mr. Aboud uses the example of Siemens Canada, a Toronto-based company that is 5 times the size of Newfoundland Power. Mr. About states: "There's absolutely no reason that you wouldn't, shouldn't recruit an executive from Siemens Canada" (April 1, 25:22-24). Mr. Aboud might be correct, but this logic for what should be included in the peer group implies that it is appropriate to exclude other utilities and other Canadian companies operating in the Atlantic Canada because Newfoundland Power should not be recruiting from utilities or other Atlantic Canada companies. The logic supporting the choice of peer group is transparently flawed.

24

This perspective clearly does not line up with Newfoundland Power's recruitment history. Each of Newfoundland Power's executives attended university in Newfoundland and were promoted from within Fortis Inc. Of the eleven directors, Newfoundland Power could point to only two that were hired from outside the company (Undertaking - U-9) - both of whom were already located in St. John's. In using the broad Canadian market as a peer group, Newfoundland Power is failing to recognize its history of hiring from within the Atlantic Canadian utilities market.

31

32 Mr. Smith stated "...Hay puts together the group for us in terms of what they feel is the 33 comparable group..." and went on to say "Hay recommends to the company that the broad 34 Canadian Industrial group [as] the recommendation and Hay goes and finds the companies that

1 fit that group." (March 30, p. 149:1-518). Newfoundland Power's board of directors must then 2 approve the recommendation. Neither Newfoundland Power nor Hay Group has been able to produce any analysis that supports Hay's recommendation to use the broad Canadian 3 Commercial industrial market. This is out of step with other regional electric utilities. Both NS 4 5 Power and NB Power have a focus on regional companies and utilities (Information No. 14). 6 While the Board has accepted this group in that past, that is not enough to support its continuing use. Given the exclusion of the very companies that common sense would suggest are most 7 8 comparable to Newfoundland Power, it is the Consumer Advocate's view that this policy cannot 9 withstand scrutiny in the absence of any analysis of the alternatives.

10

11 The evidence on the record suggests that by excluding what would seem to be the most 12 obvious comparators results in an inflated comparator median salary. According to the Hay 13 Group itself, the median salary in the broad Commercial Industrial executive and non-executive 14 market is 32.5% higher than the Atlantic Canada Industrial executive and non-executive market 15 in 2012 (CA-NP-199, Attachment B, page 13). In using the broad Canadian Commercial 16 Industrial market without supportive analysis, Newfoundland Power is effectively expecting 17 ratepayers to pay a 32.5% premium on its executives and directors without justification other 18 than the observation that they have always done it that way. Even if it was acceptable in the 19 past, the evidence shows that it is not currently appropriate.

Total base salaries for NP's executives and directors in 2016 are forecasted to be \$2,986,900.
Using the 32.5% figure derived from salary discrepancies in Hay's report, total salaries would be
\$2,253.421.

	2016 Salary	2016 Salary Adjusted for Atlantic Region	Difference
Executives	\$1,170,000	\$882,688	\$287,312
Directors	\$1,816,900	\$1,370,732	\$446,168
Total	\$2,986,900	\$2,253,421	\$733,479

The executives and directors, having salaries set according to the Canada-wide market, will cumulatively receive \$733,479 more than they would if properly identified as part of the Atlantic Canada market. In addition, all incentives tied to base salary are inflated by 32.5%.

Mr. Aboud, referring to table 3 in the most recent Hay Report (NP Rebuttal Evidence, Section 3,
 Page 8) suggests ratepayers are benefiting from the exclusion of LTI in rates:

3

The ratepayer is paying 31.7 percent below market. So in terms of the ratepayer implication, the ratepayer not being obligated to cover the LTI or short-term incentive over 100 percent of target and short-term incentive, the ratepayer is paying 31 percent below market, 26 percent below, 15 percent below, 11 percent below. So in total if I add up those four percentages, the ratepayer is paying 22 percent below market for the Newfoundland Power four executives. (April 1, 15:6-17)

10

His contention that Newfoundland ratepayers are paying below market on executive compensation is not supported by the evidence. The market in which Mr. Aboud is referring is the broad Canadian Commercial Industrial market. As previously explained, this market pays executives a great deal above the Atlantic Canada market.

15

16 Excluding LTI from revenue requirement is already standard practice and should not be 17 accepted as a justification for continued use of a market that has not been justified with 18 analysis.

19

The Consumer Advocate submits that Newfoundland Power has failed to demonstrate that the forecast costs to compensate its executives and directors that it is seeking to include in its revenue requirement have been prudently incurred. The company has not met its burden of proof in this regard therefore the full amount of compensation that it is seeking to include in its revenue requirement should be reduced to a level for which the prudence has been demonstrated. It is the view of the Consumer Advocate a prudent level of compensation would be no higher than the level paid for comparable positions in Atlantic Canada.

27

# 28 STI Changes

29

30 CA-NP-322 outlines the salary policy for the four executive members of Newfoundland Power 31 as well as the eleven senior managers. Since the 2013 GRA, there has been another change to 32 the STI plan. As outlined in (Information No.12 – reproduced below), target STI as a percentage

33 of salary has increased for 3 of the 4 executives.

Evecutive	Hay	Target STI as % of Salary		2016 Salary	2016 Red S	coverable Tl	Add Recove	itional erable STI
EACOULIVE	Points	Former Policy	New Policy	2010 Janary	Former Policy	New Policy	%	Total
Gary Smith	2128	40%	50%	\$360,000	\$144,000	\$180,000	25%	\$36,000
Gary Murray	1628	40%	40%	\$250,000	\$100,000	\$100,000	-	-
Jocelyn Perry	1560	35%	40%	\$280,000	\$98,000	\$112,000	14.3%	\$14,000
Peter Alteen	1560	35%	40%	\$280,000	\$98,000	\$112,000	14.3%	\$14,000
Total	-	-	-	\$1,170,000	\$440,000	\$504,000	14.5%	\$64,000

1 The policy change lead to a 14.5% increase in recoverable STI. This is addition to increases to

2 base salaries and corresponding proportional increases to STI.

3 This STI target is based on achievement of 100% of corporate and individual targets. Pursuant

4 to PU 19 (2003), any target reached in excess of 100% by the executive or managers does not

5 form an obligation on rate payers. Amounts in excess of 100% of target are deemed to be non-

6 regulated and therefore the cost of same is borne by shareholders and not customers.

7 The Consumer Advocate recognizes that it is not the role of interveners or even the Board to 8 dictate Newfoundland Power's compensation policies. It is, however, appropriate for the Board 9 to only allow in the company's revenue requirement and rates a level of compensation that is 10 demonstrably prudent. In the Consumer Advocate's submissions it is neither prudent nor 11 reasonable to expect Newfoundland Power's customers in this province to pay higher rates in 12 order to support a 14.5% increase in the target STI payout to executives. This would be highly 13 guestionable at the best of times. For the current economic situation, it is simply 14 unconscionable.

- 16
- 17
- 18
- 19
- 20
- 21

- 1 Net Income
- 2

The STI corporate targets and results for 2015 are outlined in PUB-NP-079 and reproduced
below.

# Short Term Incentive Plan Corporate Targets and Result for 2015

		Target			
Category	Measure	(100%)	Weight	Result	
Reliability	Outage Duration Index (SAIDI)	2.3	15%	2.36	
Customer	% Customer Setisfaction	94 709/	150/	96 409/	
Satisfaction	% Customer Satisfaction	04.70%	15%	00.10%	
Safety	Injury Frequency Rate	0.69	20%	0.176	
Regulatory	Regulatory Performance	Subjective	15%	140%	
Tinensial	Controllable Operating	¢000	409/	¢000	
Financial	Cost/Customer	\$Z3Z	10%	<b>⊅</b> ∠∠0	
	Earnings	\$37.7m	25%	\$38.8m	

5 The largest component, earnings, comprises 25% of the STI plan. In the 2013 GRA, the 6 Consumer Advocate pointed to regulatory precedents in other jurisdictions to demonstrate that 7 STI related to earnings were being excluded from revenue requirements:

8

9 The Consumer Advocate submits that the revenue requirement for 2013 and 2014 10 should not include expenses in relation to the portion of the short term incentive plan for 11 executives and managers that relates to achieving earnings targets. He argues that the 12 achievement of these targets is for the primary benefit of shareholders and not rate 13 payers. In support of his position, the Consumer Advocate provides regulatory precedent 14 from the Public Utilities Board of Northwest Territories, Alberta Energy Utilities Board, 15 and the Ontario Energy Board, and he submits that Newfoundland Power's earnings 16 base compensation targets are not truly distinguishable from these regulatory precedents, and urges the Board not to allow their inclusion of expenses in relation to 17 18 this portion of the Short Term Incentive plan in revenue requirement for the test years". 19 (GRA 2013 Decision - p.52, 34-43)

Newfoundland Power argued that including financial performance as a component of STI is
 common in British Columbia, Alberta, and Prince Edward Island. The Board ultimately decided
 in 2013 to leave earnings as a recoverable component of STI. Since that decision, British
 Columbia's Utilities Commission has reversed its policy:

5

6 The Panel has concerns as to whether all of the components of FBC's corporate and 7 individual performance objectives or scorecard provide value to the ratepayer. The Panel 8 notes that the corporate financial objective with the highest weighting, at 30 percent, is 9 regulated earnings. While there is no disagreement as to the importance of a utility being 10 healthy and financially sound financially, the Panel is not persuaded that exceeding its 11 approved ROE is in the interest of ratepayers. For these reasons, the Panel is not 12 persuaded there is sufficient evidence to support the need for the STIP to be fully funded 13 by the ratepayer. The Commission Panel finds that 30 percent of the STIP costs are on 14 the account of the shareholder. Therefore, the Panel directs FBC to recover only 70 15 percent of the STIP from the ratepayer and reduce its O&M Base accordingly. (FortisBC 16 2014-18 PRB Decision, p. 202-203)

17

18 Alberta's Utilities Commission clarified its position in ATCO Electric's 2013-2014 Tariff19 Application:

20

The Commission reiterates its findings from Decision 2011-450 that a net income component greater than 10 per cent might result in an inherent conflict between shareholder interests and customers. If ATCO Electric wishes to include a net income component for specific individuals higher than 10 per cent of their VPP compensation, those costs are to be borne by shareholders. (ATCO 2013-2014 Tariff Application p. 215)

27

The Consumer Advocate agrees with British Columbia and Alberta's utility commissions that earnings should not be a recoverable component of the STI plan. The ratepayer's best interests are at odds with the executive earnings incentives and should not be paying this incentive through rates. It is clear that excluding the earnings component of STI has become typical among Canadian utilities.

- 33
- 34

1 Regulatory Performance

2	
3	Regulatory performance accounts for 15% of the STI plan. It is explained in PUB-NP-081:
4	
5	The corporate performance measure Regulatory Performance is intended to reflect the
6	criticality of timely, efficient acquisition of regulatory approvals to Newfoundland Power's
7	overall performance. This performance measure does not lend itself well to statistical or
8	simple cost based analysis. As a result, it is evaluated on a subjective basis.
9	
10	This component is not common among Canadian utilities. Furthermore, it is completely
11	discretionary, which is uncommon for any component of STI amongst Canadian utilities. The
12	following exchange between the Consumer Advocate and Mr. Smith points to a connection
13	between the ROE obtained by Newfoundland Power's executives and Regulatory Performance
14	incentives:
15	Mr. Johnson:
16	Q. So can you tell me how much your bonus would be if the Board were to
17	approve 9.5 percent ROE versus, say, approving 7.5 percent?
18	Mr. Smith:
19	A. In the regulatory area?
20	Mr. Johnson:
21	Q. Yeah.
22	Mr. Smith:
23	A. I certainly can't speak to the decision that my Board will make, but they will
24	assess the overall decision of the Board.
25	Mr. Johnson:
26	Q. And they would view that 9.5 is considerably more success, correct?
27	Mr. Smith:
28	A. They would view the decision of the Board to make sure we can maintain our
29	financial integrity as a success. (March 31, 55:19-56:12)
30	
31	It is clear that, like net income, the incentives associated with this unusual component of STI are
32	more aligned with shareholders than with ratepayers.
33	

By including regulatory performance and earnings in the required revenue, ratepayers are covering the costs of these incentives for executives to improve or maintain financial integrity with a higher ROE. Mr. Smith agreed that a higher ROE results in higher rates for customers (March 31, p. 28:21-25). Therefore, the Consumer Advocate submits that the short term incentive components related to regulatory performance earnings should be excluded from the revenue requirement. As a consequence, 40% of the amount of the compensation corresponding to these STI targets should be removed from the revenue requirement.

8

9 The following table compares Newfoundland Power's proposal, the Consumer Advocate's 10 proposal, and a scenario with Newfoundland Power's proposed salaries with adjustments to 11 exclude regulatory performance and earnings from recoverable STI.

Executives & Directors		Newfoundland Power's Proposal	NP Salaries with adjusted STI	Consumer Advocate's Proposal
Total Salaries		\$2,986,900	\$2,986,900	\$2,253,421
Total STI		\$776,535	\$465,921	\$351,507
Reliability	15%	\$116,480	\$116,480	\$87,877
Customer Satisfaction	15%	\$116,480	\$116,480	\$87,877
Safety	20%	\$155,307	\$155,307	\$117,169
Regulatory Performance	15%	\$116,480		-
Costs	10%	\$77,654	\$77,654	\$58,584
Earnings	25%	\$194,134		-
Total Compensation		\$3,763,435	\$3,452,821	\$2,604,928

Factoring in the salary adjustment that accounts for bringing salaries in line with the Atlantic Canada median and removing the components of STI that solely benefit shareholders, total executive and director compensation totals \$2,604,928. This amount is 31.8% lower than the amount Newfoundland Power is seeking to currently recovers in rates. These adjustments bring compensation more in line with competitive regional salaries and common industry practices.

1 2

#### **Conservation and Demand Management**

### 3 The Need for Targets

4

5 Newfoundland Power sets corporate performance targets for reliability, safety, earnings, 6 controllable costs and other areas but has no such targets in place that specifically drive 7 performance on achieving results in relation to conservation and demand management. This is 8 a fundamental failure of not only Newfoundland Power's but also Newfoundland and Labrador's 9 corporate approach in this area. The Consumer Advocate firmly believes that targets for 10 participation and demand and energy savings should be set in conjunction with the Board on an 11 annual basis, with the results published annually.

12

### 13 Mini Spilt Heat Pumps (MSHP)

14

The Conversation and Demand Management Plan includes the development of an Educational
Initiative to promote mini split heat pumps. The Plan is set to commence in 2016. (Application,
Volume II, Section 2, p 2-14, lines 11-12)

18

19 The objective of the Mini Split Heat Pump Educational Initiative is to encourage customers to 20 choose high efficient mini split heat pumps installed by qualified contractors. Financing will be 21 made available to support the uptake of high efficiency units.

22

Financing is planned to be limited to MSHPs with an estimate of Heating Seasonal Performance Factor (HSPF) of 9.6 or higher. The company states that this aligns with the minimum HSPF required for certification of units meetings the Energy Star Most Efficient 2015 designation. To qualify for financing, the installation must be performed by a contractor that has the necessary permits and certification to perform electrical and refrigeration work in the province.

28

29 Only very modest spending is planned for this initiative, averaging approximately \$100,000.00 30 per year over each of the next 5 years. [Schedule C, p. 13 of 24]

- 32 Newfoundland Power indicates that an incentive could not be offered for this program because it
- 33 does not pass the economic analysis.
- 34

1 The Consumer Advocate is concerned by the low level of spending and effort directed toward 2 this educational initiative. Research carried out by Newfoundland Power as reported in its Mini 3 Split Heat Pump Research Report indicates that the residential MSHP market appears to be 4 developing in urban centers. As at the end of 2015 the company reports that less than 4,000 of 5 Newfoundland Power's customers had a MSHP installed in their home. The report also 6 confirms that the sizing and location of the systems are important to ensure maximum efficiency 7 is achieved. (Information No. 40, p.2, footnote 4) Sizing and location of MSHPs is important. 8 The report states, "If the system is oversized relative to the size of the space or located in an 9 area such as a hallway, short cycling may result, reducing system efficiency". (p.6) As the 10 report points out, "Some MSHP are capable of producing savings at very low temperatures 11 while other systems stop providing savings at much warmer temperatures" (p.5)

12

The report observes that suppliers and installers indicate that not all MSHP brands and products are equal with respect to efficiency, quality and price. Some models are capable of maintaining high efficiency at outside temperatures as low as -20°C, which other models can produce very little heat at -10°c (p.9)

17

18 The report finds that in the St. John's area, a high efficiency MSHP is capable of providing 19 energy savings 100% of the time during the heating season under normal temperature 20 conditions, and 99.3% under extreme conditions. By comparison, in the same area, a lower 21 efficiency system can provide savings for 96.3% of the heating system under normal 22 temperatures, but as low as 61.1% under extreme temperatures. The report also observes that 23 in addition to the less efficient systems underperforming on energy savings. "...higher system 24 peaks could be expected from the installation in colder areas of the province and from less 25 efficient systems, particularly if the system continues to operate when energy input exceeds 26 energy output." (p.27)

27

Indications of growing interest and growing potential for Mini Splits could lead to increasing installations of MSHPs that are not efficient and which could contribute to a higher system peak. Therefore, there are real risks that without a properly funded and resourced educational initiative, we could end up with a situation where installations which will be in place for decades are not optimal. Frankly, it is difficult to conceive that spending only \$100,000 per year on the Mini Split Heat Pump Educational Initiative will be sufficient to educate and guide consumer choices in a timely fashion. The amount of spending should reflect the amount of risk involved

with customers choosing inefficient technology and installation procedures for the island's future
 energy consumption and demand.

3

### 4 Incentives In Aid of the Educational Initiative

5

Newfoundland Power states that an incentive for MSHPs could not be offered because it did not pass the economic analysis. Mr. Henderson testified, "Mini splits do not currently meet the requirement of utility economic testing. That means from a system perspective, the cost of mini splits could not be recovered from the system savings." (April 12, p. 49, line 1-2)

10

11 Mr. Henderson stated that the potential study estimated the current cost of conserved energy or 12 CCE of mini splits at about eight to ten cents per kilowatt hour. This represents a levelized cost 13 per kilowatt hour of energy saved over the life of a mini split. The mini split CCE is roughly 14 equivalent to current marginal costs of energy at Holyrood which is about ten cents. However, it 15 is double the current estimates of four to five cents per kilowatt hour for marginal cost of energy following interconnection to the North America grid. So from a total cost perspective mini splits 16 17 will not be an economical viable conservation measure following interconnection. (April 12, 18 2016, p. 40-41)

19

20 Newfoundland Power's MSHP Report states that analysis of weather conditions and metering 21 data suggest that MSHP's "will likely contribute to high electrical demand at time of system 22 peak." Newfoundland Power reports that based on data from monitoring of homes with MSHP 23 over the 2014-2015 winter season, load for the MSHP homes was higher than that for electric 24 baseboard heated homes at times during system peak periods. However, Mr. Henderson 25 acknowledged that the study had limitations and did not regard the work carried out as 26 authoritatively concluding that MSHPs are not of value from a system peak perspective. (April 27 12, p. 58, lines 16-21). In the NL Conservation Demand Management Potential Study of 28 January 2015 by ICF International (Information No. 36) the authors state (at Section 8.6) that in 29 the study most of the heat pump measures are assumed not to produce any peak demand savings because during the winter peak period the heat pumps and mini splits are expected to 30 revert back to electric resistance heating. However, the authors point out that this is a 31 conservative assumption for the Island Interconnected region. They note that although the peak 32 33 demand occurs on the coldest winter days in a climate such as that of St. John's, the

temperature is typically not very extreme on those peak days; therefore many heat pumps will
 continue to work in heat pump mode and not revert to electric resistance.

3

Nova Scotia Power has embarked on a study of both central and ductless heat pumps (mini
splits) to determine amongst the other things, the impact to the average household contribution
to peak of installing a ductless mini split or a central heat pump in a home with existing electric
baseboard heating. (April 12, p. 94, lines 4-24; undertaking No. 22)

8

9 New Brunswick is a winter peaking province and NB Power's \$500.00 rebate program's goal is 10 stated to "encourage homeowners to install heat pumps which are best suited to New 11 Brunswick's climate and over winter peaking electricity system." (Information No. 39; April 12, 12 p. 75-76). Mr. Henderson observed that in New Brunswick it was Newfoundland Powers 13 understanding that this technology was passing total resources cost tests (April 12, p. 77, lines 14 7-8) to homeowner. However, he did not know whether peak reduction was the reason they are 15 able to justify it. (p.77, line 13-15)

16

The Consumer Advocate submits that Newfoundland Power should be ordered to file an update to its MSHP Report incorporating data as regards the peak reduction benefits, if any, found in New Brunswick and to track and report on this progress and results of Nova Scotia Power's study, subject to that utility's cooperation. In the meantime, given the current marginal cost of energy pending first power from the interconnection and the recognized need to educate the public about the installation of suitable, efficient MSHP technology, a rebate in support of the educational initiative's goals should be implemented for MSHPs.

24

25 ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS 26th day of April, 2016.

Thomas Johnson, Q.C. Consumer Advocate O'Dea, Earle Law Offices 323 Duckworth Street St. John's, NL A1C 5X4 Telephone: 726-3524 Facsimile: 726-9600 Email: tjohnson@odeaearle.ca

clg:\gina martin\15-j-095 final submission.docx