
Newfoundland & Labrador

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

IN THE MATTER OF A

GENERAL RATE APPLICATION

FILED BY

NEWFOUNDLAND POWER INC.

**DECISION AND ORDER
OF THE BOARD**

ORDER NO. P.U. 18(2016)

BEFORE:

**Andy Wells
Chair and Chief Executive Officer**

**Darlene Whalen, P.Eng.
Vice-Chair**

**Dwanda Newman, LLB
Commissioner**

**James Oxford
Commissioner**

**NEWFOUNDLAND AND LABRADOR
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES**

**AN ORDER OF THE BOARD
NO. P.U. 18(2016)**

IN THE MATTER OF the *Electrical Power Control Act, 1994*, SNL 1994, Chapter E-5.1 and the *Public Utilities Act, RSNL 1990*, Chapter P-47 as amended, and subordinate regulations;

AND IN THE MATTER OF a general rate application by Newfoundland Power Inc. for approval of, *inter alia*, rates to be charged its customers.

BEFORE:

**Andrew Wells
Chair and Chief Executive Officer**

**Darlene Whalen, P.Eng.
Vice-Chair**

**Dwanda Newman, LL.B.
Commissioner**

**James Oxford
Commissioner**

TABLE OF CONTENTS

PART ONE: APPLICATION AND PROCEEDING

1.0	The Application	1
2.0	Procedural Matters	2
2.1	Notice and Intervenors.....	2
2.2	Pre-Filed Evidence.....	2
2.3	Negotiation and Settlement Process.....	3
2.4	Public Hearing.....	3

PART TWO: BOARD DECISIONS

3.0	Settlement Agreement	4
3.1	Customer, Energy and Demand Forecast.....	4
3.2	Employee Future Benefits Expense.....	5
3.3	Income Tax Expense.....	6
3.4	Finance Charges.....	6
3.5	Power Supply Costs.....	6
3.6	Depreciation Expense.....	7
3.7	Consumer Conservation Program Evaluation.....	7
3.8	Hearing Costs.....	8
3.9	Uncollectible Bills.....	8
3.10	Revenue Shortfall.....	9
3.11	Forecast Average Rate Base.....	9
3.12	Rate Design and Rate Structure.....	9
3.13	Automatic Adjustment Formula.....	10
4.0	Cost of Capital	10
4.1	Risk and Capital Structure.....	11
4.1.1	Market Conditions.....	11
4.1.2	Newfoundland Power's Risk Profile.....	12
4.1.3	Capital Structure.....	19
4.2	Return on Equity.....	25
4.2.1	Methodologies for Estimating Return on Equity.....	25
4.2.2	Selection of Proxy Group and Use of U.S. Data.....	27
4.2.3	Analysis and Recommended Return on Equity of Mr. Coyne (Newfoundland Power).....	29
4.2.4	Analysis and Recommended Return on Equity of Dr. Booth (Consumer Advocate).....	32
4.2.5	Submissions.....	34
4.2.6	Board Findings - Fair Return on Equity Determination.....	36

5.0 Other Issues 40
5.1 Executive Compensation..... 40
5.2 Conservation and Demand Management 44

6.0 Costs 47

PART THREE: RATE IMPLEMENTATION

7.0 Compliance Filing 47

PART FOUR: BOARD ORDER

1 **PART ONE: APPLICATION AND PROCEEDING**

2
3 **1.0 The Application**

4
5 Newfoundland Power Inc. ("Newfoundland Power") filed a general rate application with the
6 Board of Commissioners of Public Utilities (the "Board") on October 16, 2015 for an Order of
7 the Board approving, among other things, an overall average increase in current electricity rates
8 of 3.1% as of July 1, 2016 for the supply of power and energy to its customers. An amended
9 application was filed on March 8, 2016 (the "Application") which reduced the overall average
10 increase to 2.5%.

11
12 In the Application Newfoundland Power proposes that the Board approve:

- 13
14 1. rates, tolls and charges and rules and regulations governing service, to be effective for all
15 service provided on and after July 1, 2016, which result in an overall average increase in
16 current customer rates of 2.5% and average increases in proposed customer rates by class
17 as follows:

Rate Class	Average Increase
Domestic	3.1%
General Service 0-100 kW (110 kVA)	2.5%
General Service 110-1000 kVA	0%
General Service 1000 kVA and Over	2.5%
Street and Area Lighting	2.5%

- 18 2. a rate of return on average rate base for 2016 of 7.66% in a range of 7.48% to 7.84% and
19 for 2017 of 7.64% in a range of 7.46% to 7.82%;
- 20
21 3. a forecast average rate base for 2016 of \$1,061,342,000 and for 2017 of \$1,106,324,000;
- 22
23 4. forecast revenue requirements from customer rates for 2016 of \$669,160,000 and for
24 2017 of \$680,421,000;
- 25
26 5. the continued suspension of the automatic adjustment formula for setting the allowed rate
27 of return on average rate base for Newfoundland Power in years subsequent to 2017;
- 28
29 6. the calculation of the depreciation expense with effect from January 1, 2016 by using the
30 depreciation rates recommended in the Depreciation Study filed with the Application,
31 which rates include the recovery in depreciation expense over the remaining life of the
32 assets of an accumulate reserve variance identified in the Depreciation Study;
- 33
34 7. evaluation of customer conservation programs by the use of the total resource cost test
35 and program administrator cost test;
- 36
37 8. amortizations, for the period 2016 through 2018, to:
- 38 (a) amortize the recovery over a three-year period of an estimated \$1,200,000 in
39 Board and Consumer Advocate costs related to the Application; and

1 (b) amortize the recovery over a three-year period of a forecast 2016 revenue
2 shortfall of an estimated \$1,410,000; and
3

- 4 9. changes to the rules and regulations governing service and to the General Service
5 contribution in aid of construction policy to be effective on and after July 1, 2016.
6

7 **2.0 Procedural Matters**

8 **2.1 Notice and Intervenors**

9
10
11 Notice of the Application and pre-hearing conference was published in newspapers throughout
12 the province beginning on October 31, 2015. The pre-hearing conference was held on November
13 19, 2015. Order No. P.U. 32(2015) identified intervenors, established procedural rules and set
14 the schedule for the proceeding.
15

16 Newfoundland Power was represented by Ian Kelly, QC and Gerard Hayes. Registered
17 intervenors for the proceeding were the Government appointed Consumer Advocate, Thomas
18 Johnson, QC, assisted by Greg Kirby, QC, and Newfoundland and Labrador Hydro ("Hydro"),
19 represented by Geoff Young. Hydro advised subsequent to its Intervenor Submission that it
20 proposed to participate in the proceeding in a limited fashion. Hydro was copied with all the
21 documents throughout the proceeding but did not otherwise participate.
22

23 The Board was assisted by Jacqueline Glynn, Legal Counsel; Maureen Greene, QC, Board
24 Hearing Counsel; and Cheryl Blundon, Board Secretary.
25

26 On March 2, 2016 notice of the hearing was published, inviting participation in the hearing
27 which was scheduled to begin on March 29, 2016.
28

29 **2.2 Pre-Filed Evidence**

30
31 Newfoundland Power filed comprehensive supporting material with the Application, including
32 the written evidence of company and other reports and exhibits. Expert evidence for
33 Newfoundland Power was filed by:

- 34 (i) James Coyne of Concentric Energy Advisors, Inc., in relation to cost of capital
35 ("Coyne Report"); and
36 (ii) John Weidmayer of Gannett Fleming Valuation and Rate Consultants, LLC, in
37 relation to depreciation ("Weidmayer Report").
38

39 On January 28, 2016 the Board's financial consultants, Grant Thornton LLP ("Grant Thornton"),
40 completed its review of the October 2015 application and filed a report. On March 28, 2016
41 Grant Thornton filed an update of its review of the Application.
42

43 On February 18, 2016 evidence was filed on behalf of the Consumer Advocate by:

- 44 (i) Dr. Laurence Booth of the Rotman School of Management, University of Toronto,
45 in relation to cost of capital ("Booth Report"); and
46 (ii) Dr. Sean Cleary of the Smith School of Business, Queen's University, in relation to
47 capital structure ("Cleary Report").

1 On March 18, 2016 Newfoundland Power filed rebuttal evidence as follows:

- 2 (i) Cost of Capital Rebuttal Testimony, prepared by Mr. Coyne (“Coyne Rebuttal”);
 3 (ii) Finance Rebuttal Evidence, prepared by Newfoundland Power (“Newfoundland
 4 Power Finance Rebuttal”), and
 5 (iii) Executive Compensation Review, prepared by Karl Aboud of Hay Group Limited
 6 (“Hay Report”).
 7

8 On April 1, 2016 the Consumer Advocate filed surrebuttal evidence of Dr. Booth (“Booth
 9 Surrebuttal”) and Dr. Cleary (“Cleary Surrebuttal”).
 10

11 A total of 563 Requests for Information were filed and answered in the proceeding.
 12

13 **2.3 Negotiation and Settlement Process**

14

15 The schedule for the proceeding included a number of negotiation days to enable and/or facilitate
 16 discussion between Newfoundland Power and the intervenors to determine what, if any,
 17 agreement may be reached. The Board set aside March 10-15, 2016 for negotiations and Board
 18 Hearing Counsel facilitated the discussions. Hydro did not participate in the settlement
 19 discussions.
 20

21 On March 21, 2016 a settlement agreement between Newfoundland Power and the Consumer
 22 Advocate was filed with the Board (the “Settlement Agreement”). The Settlement Agreement
 23 addressed a range of issues, including forecasting, rate design and structure, certain
 24 amortizations and depreciation.
 25

26 **2.4 Public Hearing**

27

28 The public hearing began as scheduled and testimony was heard on March 29, 30 and 31, 2016
 29 and April 1, 4, 5, 6, 7, 8, 11 and 12, 2016. During the hearing the following witnesses testified:
 30

31 On behalf of Newfoundland Power:

32 Gary Smith President and Chief Executive Officer
 33 Jocelyn Perry Vice-President, Finance and Chief Financial Officer
 34 Karl Aboud Hay Group Limited
 35 James Coyne Concentric Energy Advisors Inc.
 36 Lorne Henderson Director, Revenue and Supply
 37

38 On behalf of the Consumer Advocate:

39 Dr. Laurence Booth Professor of Finance,
 40 Rotman School of Management, University of Toronto
 41 Dr. Sean Cleary BMO Professor of Finance
 42 Smith School of Business, Queen’s University
 43

44 On April 5, 2016 the Board heard a presentation from Terry Burry and on April 12, 2016 the
 45 Board heard a presentation from David Adams. The Board also received a letter of comment and
 46 written presentation from Winston Adams.

1 On April 14, 2016, as agreed at the hearing, the Consumer Advocate filed further written
2 questions to Newfoundland Power on certain issues raised during the hearing. Newfoundland
3 Power responded to the Consumer Advocate's questions by letter dated April 18, 2016.

4
5 On April 26, 2016 written submissions were filed by Newfoundland Power ("Newfoundland
6 Power Submission") and the Consumer Advocate ("Consumer Advocate Submission").

7
8 On April 29, 2016 Newfoundland Power filed a reply submission ("Newfoundland Power Reply
9 Submission").

10 11 12 **PART TWO: BOARD DECISIONS**

13 14 **3.0 Settlement Agreement**

15
16 In considering the Settlement Agreement the Board must be satisfied that the proposals are
17 reasonable and consistent with the existing regulatory framework and legislation, with particular
18 reference to the power policy of the province as set out in section 3 of the *Electrical Power*
19 *Control Act, 1994*, SNL 1994, Chapter E-5.1 (the "EPCA").

20
21 The Settlement Agreement sets out the following consensus issues:

- 22
23
- 24 • 2016 and 2017 Customer, Energy and Demand Forecast;
 - 25 • test year revenue requirement to include employee future benefits expense; income
26 tax expense; finance charges and power supply costs;
 - 27 • depreciation expense;
 - 28 • conservation program tests;
 - 29 • amortization of hearing costs and 2016 revenue shortfall;
 - 30 • uncollectible bills;
 - 31 • forecast average rate base;
 - 32 • rate design and rate structure; and
 - 33 • continued suspension of the Automatic Adjustment Formula.

34 **3.1 Customer, Energy and Demand Forecast**

35
36 Newfoundland Power forecasts an increase in the number of customers of 0.9% in 2016 and
37 0.8% in 2017. Energy sales are forecast to increase by 0.6% in 2016 and 0.1% in 2017. Demand
38 is forecast to increase by 0.3% in 2016 and 0.4% in 2017. Demand purchases from Hydro are
39 forecast to increase by 0.4% in 2016 and 0.4% in 2017.¹ These forecasts include the impacts of
40 both price elasticity and energy and demand management programs.

¹ Application, pages 6-3 to 6-5. The number of customers served by Newfoundland Power is forecast at 264,000 in 2016 and 266,238 in 2017.

1 The parties to the Settlement Agreement agreed that the Board may accept and rely upon the
2 2016 and 2017 Customer, Energy and Demand Forecast, dated February 2016, which was filed
3 with the Application.

4
5 As indicated by Grant Thornton, the Customer, Energy and Demand Forecast forms the
6 foundation of Newfoundland Power's planning process and is a key input in developing
7 estimates of capital expenditures and revenue from electrical sales and expenditures on
8 purchased power. Grant Thornton confirmed that the overall methodology used by
9 Newfoundland Power for estimating revenue, expenses and new earnings is similar to the
10 process and methodology used in the 2013 general rate application, except as noted in CA-NP-
11 197. This exception relates to a change in the budgeting process as a result of the shortened time
12 frame to prepare the application and evidence.²

13
14 **The Board accepts the agreement in relation to the 2016 and 2017 Customer, Energy and**
15 **Demand Forecast filed in the Application to be used in calculating the 2016 and 2017 test**
16 **year forecasts of revenue requirement, rate base and rate of return on rate base for the**
17 **purpose of determining customer rates.**

18 19 3.2 Employee Future Benefits Expense

20
21 The test year revenue requirements in the Application include employee future benefit costs,
22 which includes pension plans and other post-employment benefits (OPEBs), of \$18,564,000 for
23 2016 and \$15,852,000 for 2017, based on a discount rate of 4.1%, a return on pension assets of
24 5.75%, and an expected average remaining service life of employees of 8.04 years for 2016 and
25 7.73 years for 2017.

26
27 The parties agreed with the calculation of 2016 and 2017 employee future benefits expense
28 proposed in the Application, subject to any adjustments arising from the Board's determinations
29 with respect to executive compensation.

30
31 Grant Thornton reviewed the forecast expense for employee future benefits with the support
32 provided by Newfoundland Power's actuaries and found no discrepancies. The Board notes that
33 Newfoundland Power expects total employee future benefits to decrease by approximately \$9.8
34 million from 2013 to 2017.³

35
36 **The Board accepts the agreement in relation to employee future benefits expense for the**
37 **test years 2016 and 2017, subject to any adjustments required as a result of the Board's**
38 **determinations in this Decision and Order**

² In Order No P.U. 13(2013) the Board ordered Newfoundland Power to file its next general rate application with a 2016 test year on or before June 1, 2015 unless further directed by the Board. In Order No. P.U. 15(2015) the Board deferred the filing date for Newfoundland Power's next general rate application to October 16, 2015. In Order No. P.U. 23(2015) the Board denied an application by Newfoundland Power to file its next general rate application by June 1, 2016 with a 2017 test year.

³ Application, page 4-9

3.3 Income Tax Expense

The test year revenue requirements in the Application include income taxes of \$18,719,000 for 2016 and \$19,636,000 for 2017.

The parties agreed with the calculation of 2016 and 2017 income taxes proposed in the Application, subject to any adjustments arising from the Board's determinations with respect to rate of return on equity or capital structure.

Grant Thornton reviewed Newfoundland Power's forecast income tax expense for 2016 and 2017 and confirmed that these expenses appear consistent with changes in the substantively enacted corporate income tax rates and forecast increases in net income.

The Board accepts the agreement in relation to income tax expense for the test years 2016 and 2017, subject to any adjustments required as a result of the Board's determinations in this Decision and Order.

3.4 Finance Charges

The test year revenue requirements in the Application include finance charges of \$35,446,000 for 2016 and \$36,873,000 for 2017. Finance charges relate primarily to interest on long-term debt and other interest, and are expected to increase by approximately \$1.1 million from 2013.

The parties agreed with the calculation of 2016 and 2017 finance charges proposed in the Application, subject to any adjustments arising from the Board's determinations with respect to return on equity or capital structure.

The Board accepts the agreement in relation to finance charges for the test years 2016 and 2017, subject to any adjustments required as a result of the Board's determinations in this Decision and Order.

3.5 Power Supply Costs

Newfoundland Power's test year revenue requirements include power supply costs of \$448,896,000 for 2016 and \$448,648,000 for 2017. Power supply costs include purchases from Hydro and the balances in the Weather Normalization Reserve and the Demand Management Incentive Account. Increases in power supply costs are primarily associated with increased purchases from Hydro to meet customers' requirements.

The parties agreed with the calculation of 2016 and 2017 power supply costs proposed in the Application, subject to any adjustments arising from the Board's determinations with respect to conservation and demand management.

Grant Thornton reconciled the forecasted purchased energy to the Customer, Energy and Demand Forecast dated February 2016 and found no discrepancies.

1 **The Board accepts the agreement in relation to power supply costs for the test years 2016**
2 **and 2017, subject to any adjustments required as a result of the Board's determinations in**
3 **this Decision and Order.**

4 5 **3.6 Depreciation Expense**

6
7 As required by Order No. P.U. 13(2013) Newfoundland Power filed a Depreciation Study (the
8 "2014 Depreciation Study") relating to plant in-service as of December 31, 2014 as part of its
9 Application.

10
11 The parties agreed the Board should approve, with effect from January 1, 2016, Newfoundland
12 Power's proposal to calculate depreciation expense by use of the depreciation rates as
13 recommended in the 2014 Depreciation Study. These depreciation rates include the recovery in
14 depreciation expense over the remaining life of the assets of an accumulated reserve variance
15 identified in the 2014 Depreciation Study.

16
17 Grant Thornton reviewed Newfoundland Power's treatment of the reserve variance and its
18 approach to the calculation of depreciation rates outlined in the 2014 Depreciation Study and
19 noted that Newfoundland Power's approach is consistent with the procedures that were outlined
20 in the 2010 Depreciation Study and approved by the Board in Order No. P.U. 13(2013). Based
21 on its review Grant Thornton confirmed that the depreciation rates used to calculate the proposed
22 forecast for 2016 and 2017, including the true-up provision, agree to those recommended in the
23 2014 Depreciation Study and Newfoundland Power's pre-filed evidence, and that the
24 depreciation expense has been calculated in accordance with these depreciation rates.

25
26 **The Board accepts the agreement in relation to the calculation of depreciation expense**
27 **based on the rates in the 2014 Depreciation Study, which include the recovery in**
28 **depreciation expense over the remaining life of the assets of an accumulated reserve**
29 **variance identified in the 2014 Depreciation Study, subject to any adjustments required as**
30 **a result of the Board's determinations in this Decision and Order.**

31 32 **3.7 Customer Conservation Program Evaluation**

33
34 Newfoundland Power's *Five-Year Conservation Plan: 2016-2020* evaluates the cost
35 effectiveness of customer energy conservation programs using a total resource cost test and
36 program administrator cost test. Previous to this plan customer energy conservation programs
37 were evaluated using the total resource cost test and the rate impact measure test. Newfoundland
38 Power notes that the rate impact measure test is no longer widely used and the total resource cost
39 and program administrator cost tests are consistent with current Canadian utility practice.

40
41 The parties agreed that Newfoundland Power's proposal to discontinue use of the rate impact
42 measure test and to evaluate customer conservation programs by the use of the total resource cost
43 test and program administrator cost test should be approved. The Consumer Advocate reserved
44 the right to cross-examine Newfoundland Power witnesses regarding energy conservation
45 programs and their costs.

1 Grant Thornton confirmed that the results of the total resource cost test and program
2 administrator cost test have been used to determine inclusions to Newfoundland Power's
3 Conservation and Demand Management Cost Deferral Account.

4
5 **The Board accepts the agreement in relation to the tests to be used to evaluate customer
6 conservation programs.**

7
8 Additional matters were raised during the hearing with respect to Newfoundland Power's
9 conservation and demand programs. These matters are discussed further in Section 5.2.

10 11 **3.8 Hearing Costs**

12
13 The Application proposes that approximately \$1.2 million in Board and Consumer Advocate
14 hearing related costs be recovered over a three-year period commencing in 2016.

15
16 The parties agreed that that the Board should approve Newfoundland Power's proposal that the
17 Board and Consumer Advocate hearing costs related to the Application be recovered in customer
18 rates evenly over a three-year period from 2016 to 2018. For rate setting purposes the parties
19 agree that Board and Consumer Advocate hearing costs shall be estimated at \$1.0 million, and
20 that any difference between actual costs and the costs estimated for rate setting purposes shall be
21 collected through the Rate Stabilization Account.

22
23 **The Board accepts the agreement in relation to hearing costs and will approve the
24 amortization of hearing costs in an amount up to \$1.0 million for the period July 1, 2016 to
25 December 31, 2018, with any hearing costs billed to Newfoundland Power over this amount
26 to be collected through the Rate Stabilization Account.**

27 28 **3.9 Uncollectible Bills**

29
30 The test year revenue requirement in the Application include a forecast for uncollectible bills
31 expense of \$1,310,000 for 2016 and \$1,337,000 for 2017.

32
33 The parties agreed that Newfoundland Power's forecast for uncollectible expense in 2016 and
34 2017 are reasonable for rate setting purposes. The parties also agreed that changes in
35 uncollectible bills expense in 2016 and/or 2017 as a result of the Hydro RSP Surplus refund will
36 be addressed within the RSP Surplus refund process on the basis that Newfoundland Power
37 should neither benefit nor lose from the administration of the RSP Surplus refund. The parties
38 further agreed that any recovery through the Hydro RSP Surplus refund of an amount written off
39 as bad debt prior to 2016 will be addressed within the RSP Surplus refund process to ensure that
40 the benefit of the recovery of any past amount is credited to customers.

41
42 The Board notes that uncollectible bills expense in 2015 was approximately \$1.3 million, or
43 approximately 0.2% of 2015 revenue. Newfoundland Power attributes the increase to changing
44 economic conditions. Grant Thornton noted that the forecast uncollectible expense for 2016 and
45 2017 represents approximately 0.2% of revenue from rates.

1 **The Board accepts the agreement in relation to uncollectible bills expense for 2016 and**
2 **2017.**

3 4 **3.10 Revenue Shortfall**

5
6 The Application proposes that the forecast revenue shortfall of \$1,410,000 for 2016 based on a
7 July 1, 2016 rate implementation be recovered through a revenue amortization over the period
8 July 1, 2016 to December 31, 2018. This revenue shortfall will be affected by any delay in rate
9 implementation beyond July 1, 2016.

10
11 The parties agreed that the Board should approve a revenue amortization, from the effective date
12 of the new rates to December 31, 2018, to provide for recovery in customer rates of any 2016
13 revenue shortfall.

14
15 **The Board accepts the agreement in relation to the approval of an amortization from July**
16 **1, 2016 to December 31, 2018 to provide for recovery in customer rates of any 2016 revenue**
17 **shortfall associated with the July 1, 2016 rate implementation.**

18 19 **3.11 Forecast Average Rate Base**

20
21 The parties agreed that Newfoundland Power's forecast 2016 and 2017 average rate base, as set
22 out in the Application, should be used for rate making purposes for the Application, subject to
23 any adjustments arising from the Board's determinations with respect to issues in the Application
24 that are not included in the issues covered by the Settlement Agreement.

25
26 Grant Thornton reviewed the forecast average rate base and concluded that it is in accordance
27 with established practice and accurately reflects Newfoundland Power's proposals with respect
28 to the updated depreciation study, regulatory deferral accounts and the updated calculations
29 related to rate base allowances. Grant Thornton also noted that the HST rate used to calculate the
30 cash working capital allowance proposed for 2016 and 2017 was changed from 15% to 13% to
31 reflect the HST rate in effect at the time of the filing of the Application. The Board notes that
32 Government has stated its intention to increase the HST rate to 15% as of July 1, 2016. If this
33 change is implemented the Board expects it will be addressed in Newfoundland Power's
34 compliance filing.

35
36 **The Board accepts the agreement in relation to forecast average rate base and will approve**
37 **the forecast average rate base for 2016 and 2017 to be used for rate making purposes,**
38 **subject to any adjustments required as a result of the Board's determinations in this**
39 **Decision and Order.**

40 41 **3.12 Rate Design and Rate Structure**

42
43 Newfoundland Power has proposed the following changes to its rate design and rate structure: (i)
44 changes to customer charges for Rate 2.1, which will also involve modification of the
45 Contribution in Aid of Construction Policy for General Service customers, (ii) changes to
46 Curtailable Service Option available to Rate 2.3 and 2.4 customers, and (iii) variation of the rate

1 increase by customer rate class so cost recovery for each class is within the target revenue to cost
2 ratio range of 90% to 110%.

3
4 The parties agreed that the Board should approve Newfoundland Power's proposed changes to
5 its rate design and rate structures as set out in the Application.

6
7 The Board has reviewed the proposed changes to rate design and rate structure as set out in the
8 Application, including the impact on General Service customers, and is satisfied that the
9 agreement on that issue should be accepted.

10
11 **The Board accepts the agreement in relation to Newfoundland Power's proposed changes**
12 **to rate design and rate structure, and the modification of the Contribution in Aid of**
13 **Construction Policy for General Service customers.**

14 15 3.13 Automatic Adjustment Formula

16
17 The Application proposes the continued suspension of the automatic adjustment formula for
18 setting the allowed rate of return for Newfoundland Power.

19
20 The parties agreed that the Board should approve the continued suspension of the use of the
21 automatic adjustment formula in years subsequent to 2017 until Newfoundland Power's next
22 general rate application.

23
24 **The Board accepts the agreement in relation to the automatic adjustment formula and is**
25 **satisfied, based on the evidence, that the continued suspension of the automatic adjustment**
26 **formula is appropriate.**

27 28 4.0 Cost of Capital

29
30 The determination of a fair return for Newfoundland Power is a central issue in this proceeding.
31 The legislative framework in this province for utility regulation provides guidance to the Board
32 on how this is to be done. Section 80(1) of the *Public Utilities Act*, RSNL 1990, Chapter, P-47
33 (the "*Act*") states that "a public utility is entitled to earn annually a just and reasonable return as
34 determined by the board on the rate base as fixed and determined by the board." In carrying out
35 its duties under the *Act* the Board is required by Section 4 of the *EPCA* to observe the power
36 policy of the province as set out in section 3 of the *EPCA*, and to apply tests which are consistent
37 with generally accepted sound public utility practice. Section 3(a)(iii) of the *EPCA* provides that
38 the rates to be charged for the supply of power should provide sufficient revenue to enable the
39 utility to earn a just and reasonable return so that it is "able to achieve and maintain a sound
40 credit rating in the financial markets of the world." Section 3(b)(iii) sets out that power should be
41 delivered at the lowest possible cost consistent with reliable service.

42
43 The Board has considered the relevant legislative provisions in its determination of the fair return
44 for Newfoundland Power in a number of proceedings. In Order No. P.U. 43(2009) and in Order
45 No. P.U. 13(2013), its most recent Order on this issue, the Board stated that "to be considered
46 fair the return must be commensurate with the return on investments of similar risk and sufficient

1 to assure financial integrity and to attract necessary capital.”⁴ This statement, which reflects
 2 accepted regulatory principles, concisely captures the requirements that must be met to
 3 determine a fair return. All three requirements must be met and no one requirement takes
 4 precedence over the other two. It is also accepted that the fair return cannot be determined
 5 independently of a consideration of the utility’s capital structure. The appropriate capital
 6 structure for Newfoundland Power is also an issue in this proceeding.

8 **4.1 Risk and Capital Structure**

10 4.1.1 Market Conditions

12 A fair return on equity should be determined in the context of capital market conditions. James
 13 Coyne, the expert cost of capital witness for Newfoundland Power, stated:

15 Globally, economic and capital market conditions today are generally more favorable
 16 than in September 2012 when the Company last filed cost of capital evidence, although
 17 the outlook is somewhat mixed. In September 2012 the Canadian and U.S. economies
 18 were still recovering from the global financial crisis. As of September 2015, the
 19 financial system has stabilized, economic growth had resumed albeit at somewhat lower
 20 than normal levels prior to sliding into a technical recession for the first two quarters of
 21 2015, and unemployment rates have declined in Canada.⁵

23 Mr. Coyne testified that the global economic and capital markets are more modestly favorable
 24 today than in September 2012, although the outlook varies by country and by region. He further
 25 stated that the U.S. and Canadian economies had moved together to recover from the recession at
 26 very close rates of growth and, while both were impacted by the downturn in China, the
 27 Canadian economy has been more significantly impacted by the downturn in oil and gas prices.⁶
 28 He referred to the recent Conference Board of Canada’s report that described Newfoundland and
 29 Labrador’s outlook as grim and said that the province had “the weakest near term outlook in all
 30 of Canada”.⁷

32 According to Mr. Coyne, interest rates continue at low levels with bond yields continuing at near
 33 all-time lows, reflecting a prolonged period of accommodative monetary policy in Canada and
 34 the U.S. He stated there is a current 46 basis point differential between U.S. and Canadian long-
 35 term government bond yields and corporate and utility spreads over government bonds are
 36 increasing in both countries, but are higher in Canada than in the U.S. In Mr. Coyne’s opinion
 37 the increasing spread in yields for utility and corporate bonds over government bonds indicates
 38 that investors are requiring more compensation for utility and corporate risk than in 2012, both in
 39 relative and absolute terms.⁸

41 Dr. Booth, the cost of capital expert for the Consumer Advocate, also took the position that
 42 current market conditions are much the same as they were at the time of the last general rate

⁴ Order No. P.U. 43(2009), page 11; Order No. P.U. 13(2013), page 12

⁵ Coyne Report, page 8/11-17

⁶ Transcript, April 4, 2016, pages 8-10

⁷ Transcript, April 4, 2016, page 13/10-11

⁸ Transcript, April 4, 2016, page 15/7-15

1 proceeding.⁹ He described what has happened since 2012 as still waiting for a return to normal
2 market conditions:

3
4 In terms of a ranking of global economies around the world, we recovered in 2010. The
5 UK stopped its bond purchase program in 2012. The U.S. actually stopped in 2014, but
6 in 2012 we were waiting for the rest of the world. In the intervening three years, there
7 has been a slowdown in China...¹⁰

8
9 He went on to say that Canada has been in this situation for the last few years:

10
11 2009 we saw a rapid spring-back in the Canadian economy. 2010, the Bank of Canada
12 started moving up short-term interest rates, and the Royal Bank and other forecasters
13 were saying, "Well look, Canada, a sort (sic) recession. We're going to be back on
14 stream". And then we watched our major trading partners, and the U.S. introduced
15 quantitative easing or bond buying. That knocked us back.¹¹

16
17 Dr. Booth stated that a return to normal market conditions had not occurred due to the continuing
18 impact of the global governments bond buying programs and might not for another ten years.¹²
19 He stated that 30-year Canada bond yields are expected to rise to about 3.35% by the end of
20 2017.¹³ He also testified that Canada currently has a "two-speed economy" with a decline in
21 economic activity in the resource provinces, such as Alberta and Newfoundland and Labrador,
22 and an increase in manufacturing activity in central Canada.¹⁴

23
24 Dr. Cleary, the Consumer Advocate's expert on capital structure, did not provide evidence
25 concerning comparative market conditions in 2012 and 2016 but did describe the current
26 Canadian economic outlook. He stated that the global outlook was mixed and for Canada it was
27 solid but unspectacular growth in the 2% area. He also referred to the two-speed Canadian
28 economy with the resource provinces not doing well, while the non-resource sector provinces
29 were improving. With respect to Newfoundland and Labrador, Dr. Cleary noted that the
30 Conference Board of Canada had stated that GDP had declined by 5.4% in 2015 and was
31 forecasting it to be slightly positive in 2016 and improving to 1.1% in 2017.¹⁵

32 33 4.1.2 Newfoundland Power's Risk Profile

34
35 An assessment of Newfoundland Power's risk profile is relevant for the Board's consideration of
36 both the company's capital structure and the allowed return. For the first time in a general rate
37 proceeding before the Board Newfoundland Power takes the position that it is now an above
38 average risk Canadian utility due to increases in its business risk since its last general rate
39 application.

⁹ Booth Report, February 2016, page 36/4-5

¹⁰ Transcript, April 7, 2016, page 132/9-14

¹¹ Transcript, April 8, 2016, page 11/3-12

¹² Transcript, April 8, 2016, page 14/8-14

¹³ Transcript, April 8, 2016, page 5/1-11

¹⁴ Transcript, April 7, 2016, page 134/23 to page 136/10

¹⁵ Transcript, April 11, 2016, page 15/8-25 and page 16/1-3

1 Mr. Coyne concluded that Newfoundland Power has higher business risk today than in 2012. In
 2 reaching this conclusion Mr. Coyne considered Newfoundland Power's small size relative to
 3 other investor-owned electric utilities, the macroeconomic and demographic trends in the
 4 province; the operating risks associated with its service territory, including the impact of severe
 5 weather conditions and the low population density, the upcoming changes in power supply, and
 6 competition from alternative fuels.¹⁶

7
 8 Mr. Coyne's opinion was that Newfoundland Power's small size relative to other investor-owned
 9 electric utilities in Canada and the U.S. proxy group and the adverse economic conditions in the
 10 province present greater risk and reduced financial flexibility for Newfoundland Power than
 11 other utilities.¹⁷ With respect to the macroeconomic and demographic trends, Mr. Coyne stated
 12 that "Newfoundland Power's business environment is characterized by weak long-term
 13 macroeconomic growth in the province and declining population in the company's service
 14 territory."¹⁸ He determined that Newfoundland and Labrador has the lowest projected growth
 15 rates for each of the key economic indicators over the period from 2014-2035 based on the
 16 forecast of the Conference Board of Canada of the macroeconomic conditions in the province
 17 and the forecast for the six provinces that have investor-owned utilities.¹⁹ Mr. Coyne also
 18 recognized that weather related service disruption is an important operating risk for
 19 Newfoundland Power.²⁰

20
 21 While Newfoundland Power's size and operating risks have not changed materially since the last
 22 rate proceeding, Mr. Coyne concluded that its business risk is higher today than in 2012 due to
 23 the exposure to more risk now than in the past associated with power supply from Hydro,
 24 particularly with respect to costs. He also stated that there is more risk due to the weaker
 25 economic outlook for the province and that these two factors place Newfoundland Power "in a
 26 unique and higher risk position than its Canadian and US peers".²¹

27
 28 In discussing the increased business risk due to the increased power supply risk since the last
 29 general rate proceeding, Mr. Coyne stated:

30
 31 Yes. I thought it might be of use to try to put the Muskrat Falls project in perspective
 32 from an investor risk perspective. The project is projected to cost approximately nine
 33 point (sic) billion dollars when placed in service in 2018, although I understand there's
 34 some uncertainty regarding the cost and the in-service date. The combined rate basis of
 35 Newfoundland Power and Hydro is approximately 2.5 billion dollars collectively for
 36 both companies. That investment is ultimately spread across approximately 300,000
 37 customers who will ultimately bear substantially all these cost responsibilities. And let
 38 me – and if I try to put that in perspective in terms of the world of North American
 39 utility projects, there is no other megaproject, and this is a megaproject, I am aware of,
 40 of this size and scale in relation to supporting the rate base and supporting customer
 41 base.²²

¹⁶ Coyne Report, Appendix A, page 10/19-25

¹⁷ Coyne Report, Appendix A, pages 11-13

¹⁸ Coyne Report, Appendix A, page 14/5-8.

¹⁹ Coyne Report, Appendix A, page 20/11-15 and page 21/1-4

²⁰ Coyne Report, page 15/11-18

²¹ Transcript, April 4, 2016, page 17/3-22

²² Transcript, April 4, 2016, page 18/18 to page 19/14

1 He further stated:

2
3 There is simply no other North American utility exposed to this level of risk that I am
4 aware of from a supply cost perspective and this is a risk that's not off in the distant
5 future. It's within the near-term planning horizon. This creates more supply cost risk
6 than any other company we've analyzed in Canada or the US. One thing is clear,
7 electricity prices will rise. Nalcor projects over 50 percent, and this creates both market
8 and regulatory uncertainty for the company because the company and the Board only
9 have so many tools available to you and the company in order to be able to manage
10 these cost pressures.²³

11
12 Mr. Coyne also expressed the opinion that the risk associated with Muskrat Falls is a near term
13 risk that should be taken into account in this proceeding:

14
15 So it could be that the actual power doesn't flow until after this GRA, but the risk is
16 there, you know. The credit ratings agencies are already writing about it, so an investor
17 would certainly be aware of it, and a consumer would be aware of it as well. So there's
18 no reason to believe that the risk will not materialize the very date that the power starts
19 to flow. Consumers will start to make adjustments at least on the margin beforehand. If
20 they think they are going to see a 50 percent increase in power supply costs, I think
21 they'll be concerned with that and credit rating agencies are looking at it in terms of the
22 credit rating for the company, and what it could mean in terms of its long term ability to
23 fully recover its cost. That's why I think it's in this horizon even though the megawatt
24 hours are principally going to be probably in the next GRA.²⁴

25
26 With respect to the increase in risk associated with the weaker economic provincial outlook since
27 the last rate proceeding, Mr. Coyne stated that the long term economic outlook over the next
28 decade and longer is for a pretty flat provincial economy, which is a negative attribute from a
29 risk standpoint which would be noted by investors. However, by itself it is uncertain that the
30 weaker economic outlook would lead to a conclusion that Newfoundland Power's business risk
31 is above average. Mr. Coyne testified that it is the combination of the weaker provincial
32 economic outlook and the risk associated with Muskrat Falls that leads him to his opinion that
33 Newfoundland Power is now somewhat above average risk.²⁵

34
35 Mr. Coyne also compared Newfoundland Power's business risk to five other Canadian investor-
36 owned electric utilities (ATCO Electric, FortisAlberta, Fortis BCElectric, Maritime Electric and
37 Nova Scotia Power) on six factors: power supply risk and electricity prices; macro-economic and
38 demographic conditions; volume/demand risk; competition from alternative fuels; regulatory
39 environment and capital and operating cost recovery. Based on this analysis, Mr. Coyne
40 concluded that Newfoundland Power has above average business risk compared to these
41 Canadian utilities.²⁶ When compared to a proxy group of U.S. electric utilities on seven factors
42 (regulated generation risk, fuel and purchased power cost risk; volume/demand risk; capital cost
43 recovery risk; rate regulation and earnings sharing; regulatory lag; and operating cost recovery

²³ Transcript, April 4, 2016, page 20/6-21

²⁴ Transcript, April 7, 2016, page 54/14 to page 55/10

²⁵ Transcript, April 7, 2016, page 47/12-25 and page 48/1-16

²⁶ Coyne Report, Appendix A, pages 18 to 25

1 mechanisms) Mr. Coyne found that Newfoundland Power has somewhat higher business risks
2 than the U.S. proxy group.²⁷

3
4 In discussing the materiality of the increase in business risks since the last rate proceeding, Mr.
5 Coyne acknowledged that the assessment is necessarily qualitative and not quantitative in nature,
6 and his opinion that Newfoundland Power's business risk is above average is based on his
7 analysis of the data.²⁸

8
9 With respect to the Company's financial risk Mr. Coyne expressed his opinion that
10 Newfoundland Power has comparable financial risk to its Canadian peers while having greater
11 financial risk than the U.S. peer group.²⁹

12
13 The combination of higher business risk and comparable financial risk in relation to the
14 Canadian and U.S. peer groups makes Newfoundland Power, in Mr. Coyne's opinion, overall
15 "somewhat above average risk."³⁰

16
17 Gary Smith, President and Chief Executive Officer, and Jocelyn Perry, Vice-President of
18 Finance, both agreed with Mr. Coyne's assessment and testified that Newfoundland Power is
19 now an above average risk Canadian utility.³¹ Ms. Perry explained the company's perspective
20 that the downturn in the economy and the significant cost increase coming with Muskrat Falls
21 have increased business risk:

22
23 I do believe that the economics of this province are much grimmer than they have been
24 in a long time, in decades, I believe that's what is stated, but I can't help but say that the
25 fact that I understand that the province is also going to be facing on top of its current
26 deficits the financing and cost associated with Muskrat Falls, and the people of this
27 province are also going to, in addition to the declining economy, be faced with pretty
28 significant cost associated with the electricity potentially. Together, that's probably
29 what pushed us up over the average risk utility. Now again I'm going to stop [sic] back
30 leave that up to Mr. Coyne to make the assessment, but if you were to ask me, I think
31 that the two together sort of do make it significant enough where I agree that, you know,
32 we're just pushing the risk of the utility upwards with these two events.³²

33
34 Ms. Perry described the current situation with respect to business risk as follows:

35
36 So it's like the perfect storm; you have the economy, you have the cost, and then you
37 have a utility that has to continue to operate, provide good service, continue to invest in
38 the electrical system, but at the same time it's important that we earn a fair return. So in
39 the context of risk, we agree with Mr. Coyne that while some of the risk always existed
40 with respect to the Newfoundland economy and the cost coming with Muskrat, the

²⁷ Coyne Report, Appendix A, page 30/23-29 and page 31/1-9

²⁸ Transcript, April 7, 2016, page 63/4 to page 68/20

²⁹ Coyne Report, Appendix A, page 32

³⁰ Transcript, April 7, page 63/15 to page 65/25; page 67/1-14

³¹ Transcript, March 31, 2016, page 77/13-25; page 78/5-13; and page 80/4-16

³² Transcript, March 31, 2016, page 100/4-24

1 economy is worse, we now know a little bit more about Muskrat, so the risk is just
2 pushing upwards for us, in our opinion.³³
3

4 The Consumer Advocate submits that Newfoundland Power continues to be an average risk
5 utility. His expert, Dr. Booth, determines that Newfoundland Power continues to be a typical low
6 risk Canadian utility. Dr. Booth explained that he believes that Newfoundland Power has low
7 business risk:

8
9 NP has low business risk, I don't think there is any question about that and that's
10 nothing unusual. That's exactly the same across all the utilities in Canada. In fact, trying
11 to make a difference in the business risk of Canadian utilities after you take into account
12 regulation, is like splitting hairs. They all earn their ROE on a regular basis.
13 Comparators, Alberta and Quebec, those are the obvious comparators in terms of recent
14 decisions. And Fortis, you have to look at the parent because the parent basically
15 accesses its capital market on the strength of its operating subsidiaries business risk and
16 other companies within Fortis.³⁴
17

18 Dr. Booth acknowledged that the provincial economy is not as strong as it was a few years ago³⁵
19 and that there may be problems associated with electricity cost increases flowing from Muskrat
20 Falls.³⁶ However, Dr. Booth expressed the opinion that the risks associated with Muskrat Falls
21 and the weaker provincial economic outlook are not so significant as to cause Newfoundland
22 Power to become an above average business risk utility. According to Dr. Booth any risk
23 associated with Muskrat Falls is a ratepayers' risk, not the company's, and that, while rate shock
24 may be an issue for customers, he did not think the Board or government would see the utility
25 financially harmed.³⁷ He explained his position further as follows:

26
27 No, but I know what every other board in Canada has done, which is when there's
28 anything that comes up to jeopardize a utility, they have a hearing, that's the Canadian
29 regulatory compact and if the incidents you are talking about is severe enough to
30 seriously affect Newfoundland's ability to earn its allowed ROE, I fully expect the
31 company to come before the Board and this Board to hear the evidence and think about
32 what can we do to make sure that Newfoundland Power can continue to have an
33 expectation that it's going to earn its allowed ROE. That's what happened every time
34 I've seen it in Canada.³⁸
35

36 Dr. Booth also pointed out that any risk associated with Muskrat Falls is not a factor to be
37 considered in this proceeding given the anticipated date for delivery of power from the project.
38 His position was that these risks fall outside the test period and the period rates from this
39 proceeding are expected to remain in effect. In Dr. Booth's opinion, if risks related to Muskrat
40 Falls do materialize, it would be appropriate to deal with them at that time in subsequent
41 proceedings.³⁹

³³ Transcript, March 31, 2016, page 76/22-25 and page 77/1-11

³⁴ Transcript, April 7, 2016, page 120/22 to page 121/12

³⁵ Transcript, April 8, 2016, page 116/7-11

³⁶ Transcript, April 7, 2016, page 111/16-25 and page 112/1-5

³⁷ NP-CA-061, Transcript, April 8, 2016, page 141/20 to page 142/2

³⁸ Transcript, April 8, 2016, page 146/8-22

³⁹ Transcript, April 8, 2016, page 157/15-23 and page 170/3-16

1 Dr. Cleary stated that Newfoundland Power has always been small relative to other utilities and
2 this had not changed nor has there been any evidence that its size has hindered Newfoundland
3 Power in accessing debt.⁴⁰ With respect to the risk of severe weather events, Dr. Cleary's opinion
4 is that it is difficult to see why this creates additional business risk for Newfoundland Power
5 compared to other Canadian and U.S utilities that are also subject to similar risks.⁴¹

6
7 Dr. Cleary acknowledged that the economic forecast for the Province is not encouraging for the
8 next two to three years, with the Conference Board of Canada forecasting negative GDP growth
9 of -0.8 % in 2016, followed by a slight rebound of +0.2% in 2017 and a further rebound to
10 +1.4% in 2018.⁴² However, given Newfoundland Power's low risk business model and strong
11 regulatory support, Dr. Cleary's opinion was that a weak economy does not result in a significant
12 increase in its business risk. He also pointed out that Newfoundland Power has weathered
13 previous economic downturns and managed to maintain growth in sales and operating income,
14 even in poor economic times.⁴³ With respect to the risks associated with Muskrat Falls, Dr.
15 Cleary stated there is no concrete evidence to suggest that Muskrat Falls will lead to an increase
16 or decrease in business risk for Newfoundland Power.⁴⁴

17
18 Based on the allowed equity returns and equity ratios of Canadian electric and gas distributors
19 from 2011-2015, Dr. Cleary concluded that Newfoundland Power's allowed return on equity
20 over the period was slightly above the average and/or median level for Canadian distribution
21 utilities while its equity ratio is well above the mean and medians of 38-40% of the group, and in
22 fact was the highest.⁴⁵ According to Dr. Cleary this demonstrates that Newfoundland Power has
23 lower financial risk than other Canadian distribution utilities.⁴⁶ Dr. Cleary also compared
24 Newfoundland Power's credit metrics to six comparable Canadian utilities: CU Inc., Enbridge
25 Gas, FortisAlberta, FortisBC, Gas Metro and Nova Scotia Power.⁴⁷ He determined that
26 Newfoundland Power's debt-to-capital ratio of 55% is well below the group average or median,
27 its interest coverage is well above the group average and median, and its cash flow to debt ratio
28 is also higher than the others in the group. He concluded that this also demonstrates that
29 Newfoundland Power has lower financial risk than its Canadian peers.⁴⁸

30
31 Dr. Cleary also performed a quantitative assessment of Newfoundland Power's operating income
32 volatility in comparison to that of the Canadian proxy, the U.S. proxy and the North American
33 proxy groups used by Mr. Coyne for his analysis. This assessment of the coefficient of variation
34 of Earnings Before Interest (EBIT) indicates that Newfoundland Power has less volatility in
35 earnings than the companies in Mr. Coyne's Canadian and U.S. proxy groups.⁴⁹ Dr. Cleary stated
36 that EBIT volatility is a standard measure of business risk used in finance textbooks, accounting

⁴⁰ Cleary Report, page 23/5-15

⁴¹ Cleary Report, page 22/11-15

⁴² Cleary Report, page 19/9-12

⁴³ Cleary Report, page 19/13-19 and page 20/1-10

⁴⁴ Cleary Report, page 22/4-10

⁴⁵ Cleary Report, Tables 9 and 10, pages 28 and 30

⁴⁶ Cleary Report, pages 28-31

⁴⁷ Cleary Report, Table 11, page 31

⁴⁸ Cleary Report, pages 31 -32

⁴⁹ Cleary Report, Figure 7 and Table 8, pages 25 and 26

1 textbooks and in the Chartered Financial Analysts' curriculum.⁵⁰ He stated that this quantitative
2 analysis supports his qualitative assessment that Newfoundland Power has low business risk. Dr.
3 Cleary summarized his opinion on Newfoundland Power's business risk as follows:

4
5 The qualitative analysis above confirms that NP continues to be a low business risk
6 electric distribution utility operating in a very supportive regulatory environment similar
7 to the conclusions reached by the Board in previous decisions, and also consistent with
8 the analyses of credit rating agencies of NP. My quantitative analysis provides strong
9 support for these qualitative conclusions, as NP is shown to display much lower
10 volatility in operating income than comparable U.S. firms, and slightly below Canadian
11 comparable utilities.⁵¹
12

13 The Consumer Advocate submitted that Mr. Coyne's comparative analysis of Newfoundland
14 Power's business risks with those of his selected Canadian utilities was qualitative in nature and
15 comes down to his judgment, and that there are problems inherent in the analysis. He concluded
16 that it is "incredibly difficult to draw reliable conclusions" by reference to Mr. Coyne's
17 qualitative analysis.⁵² The Consumer Advocate further submitted that Mr. Coyne's assessment
18 that Newfoundland Power is an "above average risk" Canadian utility due to the combination of
19 weaker economic conditions in the province and power supply costs risks due to future
20 interconnection with Muskrat Falls has been undermined and cannot form the basis for such a
21 finding.⁵³
22

23 In its submission on market conditions and risk Newfoundland Power stated that the current
24 capital market conditions are substantially similar to those that existed at the time of the last
25 general rate application and that the historical risk elements, including its relatively small size,
26 service territory demographics, challenging operating conditions, low cost flexibility and sole
27 source dependence, were largely unchanged since 2012. However the struggling provincial
28 economic outlook and increased power supply risk are significant changes which, Newfoundland
29 Power submitted, together have increased its risk profile when compared to other electric utility
30 operating companies. Newfoundland Power also submitted that neither Dr. Booth nor Dr. Cleary
31 factored these significant changes in their risk assessments and their failure to appropriately
32 consider them should affect the weight the Board attributes to their evidence.⁵⁴
33

34 Board Findings – Newfoundland Power's Risk Profile 35

36 Newfoundland Power's overall risk profile reflects both financial risk in the current markets and
37 the business risk of its operations. The Board has consistently determined that Newfoundland
38 Power is, overall, an average risk utility in relation to other Canadian utilities. In Order No. P.U.
39 13(2013) the Board found that the evidence did not demonstrate that Newfoundland Power's
40 financial risk or overall risk had changed since its last general rate application proceeding in
41 2009.

⁵⁰ Transcript, April 11, 2016, page 136/1-5

⁵¹ Cleary Report, page 28/1-6

⁵² Consumer Advocate Submission, page 32/11-32

⁵³ Consumer Advocate Submission, page 38/2-5

⁵⁴ Newfoundland Power Submission, page C-22/8-24 and page C-23/1-4

1 In this proceeding both Newfoundland Power and the Consumer Advocate agree that market
2 conditions are substantially similar to the conditions during the last general rate application, with
3 continued low interest rates and bond yields. However Newfoundland Power submits that the
4 provincial economic outlook and increased power supply risks have increased its business risk
5 such that it is now an above average risk Canadian utility. Newfoundland Power presented
6 evidence that the combination of the weaker economic outlook and the risks associated with
7 Muskrat Falls lead to the conclusion that it is now an above average risk utility. However neither
8 Dr. Booth nor Dr. Cleary believe that these risks are so significant as to cause Newfoundland
9 Power to be considered an above average business risk utility. They both expressed the opinion
10 that Newfoundland Power has low business risk and note the role that supportive regulation may
11 play. The assessment of business risk is acknowledged by the experts to be primarily a
12 qualitative judgment, although Dr. Cleary did provide a quantitative assessment of operating
13 income volatility which, he stated, supported his qualitative assessment of a low business risk for
14 Newfoundland Power.

15
16 The Board accepts that the risks associated with Muskrat Falls, both in terms of supply and costs,
17 are real and may have an impact on Newfoundland Power's business risk. In addition the Board
18 accepts that the economic indicators for the test year period are not strong and that this could
19 also have an impact on Newfoundland Power's business risk. However, the Board notes that
20 credit-rating agencies appear to consider Newfoundland Power's business risk as low. In its
21 February 5, 2016 opinion Moody's cited Newfoundland Power's low risk as a credit strength and
22 its stable rating outlook as reflecting Newfoundland Power's low business risk. While Moody's
23 noted that a credit rating upgrade was unlikely without further clarity on the timing and size of
24 the increases in electricity rates in relation to the Muskrat Falls project, the Board notes that
25 Moody's did not downgrade Newfoundland Power on the basis of the risks associated with
26 Muskrat Falls.⁵⁵ The Board agrees with the opinions of Drs. Booth and Cleary that the risks
27 associated with Muskrat Falls and the negative economic outlook have not increased
28 Newfoundland Power's business risk from average to above average at this time, compared to
29 other Canadian utilities.

30
31 **The Board concludes that Newfoundland Power's financial and business risk have not**
32 **materially changed since the last general rate application. The Board finds that**
33 **Newfoundland Power continues to be an average risk utility.**

34 35 4.1.3 Capital Structure

36
37 The issue of the appropriate capital structure for Newfoundland Power was raised by the
38 Consumer Advocate during the proceeding. He argues that Newfoundland Power's 45%
39 common equity ratio is too high and that it should be reduced to 40%. In the Application
40 Newfoundland Power pointed out that, since at least 1996, the Board has accepted that a capital
41 structure with a target common equity ratio of 45% is reasonable for setting customer rates. The
42 justification was that a strong equity component is needed to mitigate Newfoundland Power's
43 small size and low growth potential.⁵⁶ Newfoundland Power also stated that the capital structure

⁵⁵ Moody's Credit Opinion, February 5, 2016

⁵⁶ Application, page 4-22

1 has historically been viewed as a credit strength by credit rating agencies.⁵⁷ Newfoundland
2 Power's position is that the requested return on equity of 9.5% is fair based upon a capital
3 structure with a target ratio of 45%.

4
5 Mr. Coyne expressed the opinion that the current common equity ratio remains the minimum
6 appropriate level given Newfoundland Power's financial and business risks.⁵⁸ He testified that
7 the existing capital structure is warranted by the company's risk profile and any reduction in the
8 equity ratio would be viewed negatively by credit rating agencies and investors and would
9 expose equity investors to greater financial risk.⁵⁹ In response to a question from Board Hearing
10 Counsel on the current justification for the 45% equity ratio, Mr. Coyne stated:

11
12 I'd say even more so now. It is at the higher end of its Canadian peers, but it's 5 percent
13 below its U.S. peers, and that's true even for the pure T & D companies that we looked
14 at. So it has a—given its risk profile, vis-a-vis those companies, I think it's appropriate to
15 have it at the higher end of the Canadian competitors or comparators, but I worry about
16 still being 5 percent below its U.S. peers. There's a history in Canada of Canadian
17 regulators allowing lower capital equity ratios than the U.S. peers, so I take that into
18 account. That's why I'm not recommending a 5 percent increase to look like the U.S.
19 proxy companies, but I think you have to acknowledge that gap. So that's why I
20 recommend 45 stay in place. I think it serves as a counter balance to these other risk
21 factors.⁶⁰

22
23 Mr. Coyne also stated that a reduction in the equity component would send a negative message
24 to debt investors at a time when Newfoundland Power is a higher risk utility than its Canadian
25 peers and that it is not an optimal time to think about reducing the equity ratio.⁶¹ According to
26 Mr. Coyne caution is warranted in considering any changes in the capital structure at this time.
27 He suggested that, as the risk factors play out over time, the Board can continue to examine the
28 capital structure to see if it continues to be appropriate on a go forward basis. He noted that
29 Canadian regulators tend to put capital structures in place and leave them in place while
30 adjusting returns with capital markets and that this is a good regulatory practice.⁶²

31
32 Dr. Booth recommended that Newfoundland Power finance with 40% equity and that, as an
33 interim measure, the required 5% equity reduction be deemed using Fortis' cost of preferred
34 shares until the next rate hearing. At that time, if there is any rate shock expected from the
35 recovery of Muskrat Falls costs, the 5% could be replaced with long term debt to reduce
36 Newfoundland Power's cost of capital.⁶³ Dr. Booth stated that:

37
38 ...utilities have very low business risk; have reserve borrowing power by being able to
39 return to the regulator, minuscule bankruptcy/distress costs and hard tangible assets that
40 are easy to borrow against. In fact, utilities are almost unique in terms of their financing

⁵⁷ Application, page 4-23/1

⁵⁸ Coyne Report, Appendix A, page 32/5-7

⁵⁹ Transcript, April 4, 2016, page 21/1-11

⁶⁰ Transcript, April 7, 2016, page 70/1-22

⁶¹ Transcript, April 7, 2016, page 79/17-22

⁶² Transcript, April 7, 2016, page 70/22 to page 71/15

⁶³ Booth Report, page 3/16-22

1 possibilities, and are prime candidates for using large amounts of debt to utilise their
2 significant tax advantages.⁶⁴
3

4 Dr. Booth referred to the situation of utilities such as Newfoundland Power within holding
5 companies like Fortis, and stated:
6

7 ...the parent has an incentive to finance the utility with as much equity as possible, so
8 that the tax advantages to financing with debt are shifted to the parent. In this way it is
9 the parent's shareholders that get the tax advantages to debt financing and not the utility
10 ratepayers. This is often called the "double leverage" problem, where the utility assets
11 support debt at both the utility level and then again at the parent level.⁶⁵
12

13 According to Dr. Booth, Fortis states it has a target equity ratio of 45% comprising both common
14 and preferred shares and in 2014 its common shares were only 35%, and that an "objective
15 measure" for the Board to consider is that Newfoundland Power's parent finances with only 35%
16 common equity and has strong credit ratings from DBRS and Standard & Poors.⁶⁶ He also
17 referred to Newfoundland Power's credit ratings from Moody's and DBRS, and noted that no
18 other utility in the Fortis group had higher credit ratings.⁶⁷ Dr. Booth summarized his opinion
19 during direct examination:
20

21 I regard NP's 45 percent common equity ratio as being generous. I said that three years
22 ago. I think even in 2009 I probably said it. At that point I said don't change it because
23 we were so close to the financial crisis I didn't see that it was something that was
24 prudent at that point in time. I recommended three years ago that a five percent common
25 equity be replaced with preferred shares. At this point in time, I'm actually a bit milder
26 than I was three years ago and milder in the sense that I recognize that there may be
27 something happening in Muskrat Falls that will cause problems for the Board in the
28 next test year, so I'm basically recommending the five percent preferred shares be
29 deemed for the next-until the next rate hearing until the situation with power costs
30 becomes clearer in the next rate hearing.⁶⁸
31

32 Dr. Booth also pointed out that his recommendation to deem 5% common shares as preferred is a
33 policy that is followed by the Regie in Quebec, which deems certain shares as preferred for Gaz
34 Metro. The result, in his opinion, is that preferred shares do not add any risk because they do not
35 exist in a real sense as they are only deemed but they do lower the cost of capital.⁶⁹
36

37 Dr. Cleary recommended that the common equity be reduced to 40%, which would bring it in
38 line with, but still slightly above, Canadian utility averages. He stated that the additional "above
39 average" 5-6% equity thickness is not warranted based on Newfoundland Power's business or
40 financial risk nor is it required to maintain its credit metrics.⁷⁰ This recommendation is based on
41 his qualitative and quantitative assessment of Newfoundland Power's risk, which indicated that

⁶⁴ Booth Report, page 86/36-37 and page 87/1-3

⁶⁵ Booth Report, page 92/11-15

⁶⁶ Transcript, April 7, 2016, page 114-116

⁶⁷ Transcript, April 7, 2016, page 119/19-25 and page 120/1-12

⁶⁸ Transcript, April 7, 2016, page 121/13 to page 122/7

⁶⁹ Transcript, April 7, 2016, page 123/22 to page 124/10

⁷⁰ Cleary Report, page 2/28 to page 3/2

1 Newfoundland Power has very low business risk and lower financial risk than its Canadian
2 peers. An analysis of the impact on Newfoundland Power's credit metrics of a reduction in
3 common equity led Dr. Cleary to conclude that Newfoundland Power's credit metrics would
4 remain "solid" with a reduction to 40% common equity and a return on equity as low as 7.5%.⁷¹
5

6 Newfoundland Power addressed the forecast impact of the recommendations of Drs. Booth and
7 Cleary on capital structure. It stated that a reduction of the common equity to 40% would
8 practically require the company to refinance to reflect the reduced equity. The refinancing would
9 include payment of a common dividend equal to the difference between 45% and 40% common
10 equity of approximately \$55 million and borrowings of a similar amount to fund the dividend.
11 Newfoundland Power further stated that implementation of Dr. Booth's recommended interim
12 measure to replace the 5% equity with preferred shares would have the same financing result as
13 in their opinion any issuance of preference shares must be over \$100 million to be financeable.
14 Similarly, implementation of Dr. Booth's recommendation to deem 5% of the common equity as
15 preferred would cause Newfoundland Power to have to borrow the money to dividend the shares
16 in this situation. Otherwise, Fortis would in effect be receiving a preferred equity return on a
17 common equity investment.⁷² Newfoundland Power also stated that the issuance of preferred
18 shares is not consistent with current Canadian electric utility financing practices as preferred
19 shares issued would have a coupon reset provision and this would result in their not being treated
20 as equity.⁷³
21

22 Newfoundland Power stated that borrowing to refinance to reflect a reduction of 5% in its
23 common equity would increase financial risk and decrease its credit metrics, and there would
24 likely be a re-evaluation of regulatory support by credit rating agencies.⁷⁴ Ms. Perry testified that
25 the Consumer Advocate's proposal of an return on equity of 7.5% and a capital structure of 40%
26 equity could affect the company's credit metrics, specifically the forecast cash flow-to-debt ratio
27 and the earnings test required by the First Mortgage Trust Deed. Ms. Perry testified that this
28 would limit future financing options as the company would not be able to issue first mortgage
29 bonds in 2017.⁷⁵
30

31 In commenting on the comparisons made by Drs. Booth and Cleary to FortisAlberta
32 Newfoundland Power noted that, while the ratemaking equity returns for FortisAlberta, with its
33 common equity of 40%, were lower than Newfoundland Power's from 2012-2014, FortisAlberta
34 achieved equity returns consistently higher than Newfoundland Power. Newfoundland Power
35 stated that the credit rating agencies consider achieved returns for calculating the credit metrics.⁷⁶
36 During the hearing Ms. Perry also stated the common equity ratio of 45% is a "cornerstone of the
37 company's financial integrity" and has been recognized by the credit rating agencies as a "key
38 financial strength."⁷⁷ Ms. Perry summarized the negative impacts Newfoundland Power believes
39 would flow from implementation of Drs. Booth and Cleary's recommendations:

⁷¹ Cleary Report, pages 34-36

⁷² Newfoundland Power Finance Rebuttal Evidence, pages 2-3; Transcript, March 29, 2016, page 42/25 to page 43/11

⁷³ CA-NP-050

⁷⁴ Newfoundland Power Finance Rebuttal Evidence, page 3/11-15; Transcript, March 29, 2016, page 42/2-18

⁷⁵ Transcript, March 29, 2016, page 49/11 to page 50/13

⁷⁶ Transcript, March 29, 2016, page 45/16 to page 47/25; Newfoundland Power Finance Rebuttal Evidence, page 7

⁷⁷ Transcript, March 29, 2016, page 33/16-17 and page 34/9-13

1 These impacts raise serious concerns for me. The consumer advocate's proposals
2 include the lowest regulated return in the country. It includes a reduction in our capital
3 structure at a time when our business risks are increasing, and it results in material
4 decline in our credit metrics and it actually precludes us from the issuance of first
5 mortgage bonds. As CFO I believe that these proposals jeopardize Newfoundland
6 Power's credit ratings, both the level of regulatory support and the financial strength of
7 this company I believe would be in question. These proposals simply disregard the
8 requirement that we maintain a sound credit rating in the financial markets of the
9 world.⁷⁸

10
11 At the hearing Ms. Perry explained Undertaking U-4, which shows the impact on Newfoundland
12 Power's credit metrics for 2017 of different allowed equity returns ranging from 8.3% to 9.5%,
13 and with different common equity ratios ranging from 40% to 45%. She advised that under all
14 scenarios Newfoundland Power's credit metrics would meet the requirements of Moody's to
15 maintain its credit rating but expressed reservations regarding the cash flow to debt coverage.
16 She stated that Moody's has expressed the expectation that Newfoundland Power be in the high
17 end of the range of 15-17%, which in her opinion is 16.5% and above.⁷⁹ With respect to the
18 earnings test in the First Mortgage Trust Deed, Ms. Perry explained that the forecast impacts
19 show there could be concerns at certain equity returns and levels of common equity such that the
20 company might not be able to issue first mortgage bonds in certain scenarios.⁸⁰

21
22 The Consumer Advocate submitted that the evidence of Drs. Booth and Cleary shows that
23 Newfoundland Power continues to have low business risk, similar or slightly lower than similar
24 Canadian utilities and lower financial risk than other Canadian utilities. He stated that, according
25 to the evidence, Newfoundland Power would maintain solid credit metrics with an equity ratio of
26 40% and a lower allowed return on equity. He submitted that the Board has the option to move
27 Newfoundland Power to a more appropriate equity ratio for rate making purposes by ordering
28 that a percentage of common shares be replaced with lower cost debt or it can deem preferred
29 shares as done in Quebec for Gaz Metro and as outlined by Dr. Booth.⁸¹

30
31 Newfoundland Power replied that its longstanding equity ratio of 45% is consistent with
32 maintenance of its creditworthiness and cost effective access to capital. It further submitted that,
33 if adopted by the Board, Drs. Booth and Cleary's recommendations would reduce its
34 creditworthiness due to weakened credit metrics and the likely perception of debt investors of
35 reduced overall regulatory support and would preclude the company from issuing further First
36 Mortgage Bonds, the least cost long-term source of financing. Newfoundland Power also noted
37 that Dr. Booth's recommendation to deem 5% equity as preferred shares at Fortis's cost is
38 inconsistent with the standalone principle expressed by the Board in Order No. P.U. 19 (2003).
39 Finally, Newfoundland Power submitted that the recommendations of Drs. Booth and Cleary are
40 inconsistent with the fair return standard because they reduce the company's creditworthiness
41 and impair its access to least cost funding.⁸²

⁷⁸ Transcript, March 29, 2016, page 50/17 to page 51/8

⁷⁹ Transcript, March 31, 2016, page 70/20 to page 73/23

⁸⁰ Transcript, March 31, 2016, page 2/6 to page 9/1

⁸¹ Consumer Advocate Submission, page 45

⁸² Newfoundland Power Submission, pages C-34 to C-35

1 Board Findings – Capital Structure
2

3 The Board has accepted a capital structure of 45% equity for rate setting for Newfoundland
4 Power since 1996. In more recent decisions [Order Nos. P.U. 32(2007) and P.U. 43(2009)] the
5 Board accepted the settlement of the parties recommending a 45% common equity ratio for rate
6 setting purposes. In Order No. P.U. 13(2013) the Board did not accept the Consumer Advocate's
7 proposal, as put forward by Dr. Booth, to reduce the equity ratio to 40%, stating:

8
9 Newfoundland Power has had a deemed common equity ratio of approximately 45% for
10 the last twenty-five years and the evidence is clear that the rating agencies place
11 importance on its strong common equity position. There is no evidence of a change in
12 circumstances which would justify a change in the ratio and there is little substantive
13 evidence demonstrating that the appropriate common equity ratio for Newfoundland
14 Power is 40%.⁸³
15

16 The Board acknowledged in Order No. P.U. 13(2013) that Newfoundland Power's capital
17 structure had not been reviewed in some time and directed Newfoundland Power to file a report
18 in relation to its capital structure as part of its next general rate application, which it has done.
19

20 Newfoundland Power's small size relative to its peers and its low growth potential have been
21 identified by the Board in the past as supporting a 45% common equity ratio. These factors have
22 been acknowledged by the experts in this proceeding as still present. Mr. Coyne acknowledged
23 that 45% is "at the higher end of its Canadian peers" but cautioned the Board about changing the
24 capital structure in the context of the risks facing Newfoundland Power. Newfoundland Power
25 cites its longstanding capital structure as consistent with maintenance of its creditworthiness and
26 cost effective access to capital. The Consumer Advocate proposed to reduce the common equity
27 ratio to 40%, to bring it in line with other Canadian utilities. According to the Consumer
28 Advocate the reduction in common equity can be achieved by ordering that a percentage of
29 common shares be replaced with lower cost debt or by deeming preferred shares as proposed by
30 Dr. Booth.
31

32 The Board notes that Newfoundland Power's capital structure is recognized by credit rating
33 agencies as a strength, which positively impacts its credit worthiness. Moody's cites the higher
34 deemed equity level of 45% as a factor which mitigates against the lower return on equity
35 allowed by the Board compared to other Canadian utilities. The Board accepts that there is a cost
36 to maintaining the higher common equity ratio. However there may also be a cost to reducing the
37 equity ratio in terms of required borrowings, potential credit metric impacts and increased
38 financial risk, as described by Ms. Perry in her testimony.
39

40 The Board is not satisfied that the evidence supports a decrease in the common equity
41 component at this time. As noted by Newfoundland Power, the Court of Appeal has alluded to
42 the importance of stability in the management of capital structure for a utility:
43

44 [135] In approaching these questions, it has to be remembered that there is no such thing
45 as one ideal capital structure. It is a function of economic conditions, business risks and

⁸³ Order No. P.U. 13(2013), page 17

1 'largely a matter of business judgment'. Furthermore, a given capital structure cannot be
2 changed easily or quickly. As well, the long-term effects of changes on capital structure
3 on the enterprise and on the future cost of capital may not be easily predictable.⁸⁴
4

5 In the circumstances the Board does not believe it is appropriate to deem a reduced common
6 equity ratio for Newfoundland Power given the uncertainty associated with Muskrat Falls and
7 the economic outlook for the province and also in light of the concerns set out by Newfoundland
8 Power in relation to the issuance or deeming of preferred shares. The Board is concerned about
9 the impact of such a change on Newfoundland Power's credit metrics and how this would be
10 viewed by the markets. The Board believes that the circumstances require a conservative and
11 stable regulatory approach and therefore Newfoundland Power's deemed common equity ratio
12 will not be lowered at this time.
13

14 **The Board finds that Newfoundland Power's common equity ratio for rate setting purposes**
15 **should remain at no higher than 45%.**
16

17 4.2 Return on Equity

18

19 Newfoundland Power proposes that for rate setting purposes its return on equity for the test years
20 2016 and 2017 be 9.5%, with a capital structure that includes 45% common equity. This proposal
21 is based on the opinion of its cost of capital expert Mr. Coyne. In the previous section the Board
22 determined that the appropriate capital structure for Newfoundland Power for rate setting should
23 remain at 45%. In this section the Board will consider the fair return for the test years 2016 and
24 2017 in the context of current market conditions and this capital structure. The equity ratio and
25 the return on equity should be considered together to determine the fair return for Newfoundland
26 Power.
27

28 4.2.1 Methodologies for Estimating Return on Equity

29

30 The appropriate return on equity to be used for utility rate setting is usually selected based on the
31 results obtained from conventional financial models, including the Capital Asset Pricing Model
32 (CAPM), the Discounted Cash Flow method (DCF), and others. Experts often have different
33 opinions on which model, or combination of models, should be relied upon in any given
34 proceeding for the determination of the fair return on equity but generally acknowledge that the
35 prevailing financial and economic conditions at the time are important considerations affecting
36 the methodology choice and results.
37

38 In past proceedings cost of capital experts have canvassed multiple methodologies and resulting
39 equity returns for the Board's consideration. Prior to 2009 the Board relied principally upon the
40 equity risk premium test, referencing the stability of the bond market at the time. In its most
41 recent decisions on cost of capital the Board has relied primarily on equity risk premium tests,
42 giving more weight to CAPM and less weight to DCF results in arriving at a fair return.
43

44 CAPM is based on the relationship between the required return for a security and the risk of the
45 security. The model determines the required or fair return as the sum of the risk free rate plus a

⁸⁴ The Stated Case, June 15, 1998, Newfoundland and Labrador Court of Appeal.

1 risk premium for the risks associated with the security. The risk free rate is generally accepted as
2 the forecast long Canada bond yield. The risk premium for the security is comprised of the
3 market risk premium times the security's relative risk or beta. The beta is usually derived
4 statistically based on an analysis of historical returns for the security and overall capital returns
5 for the same period. The inputs to be used for CAPM are usually the subject of expert opinion
6 during cost of capital proceedings.

7
8 The DCF model uses the current dividend yield of the company's shares plus expected future
9 dividend growth rate to estimate the cost of a company's common equity. There are several
10 forms of the DCF model depending on the assumptions for future growth. A constant growth
11 DCF model assumes constant growth in dividends and earnings in perpetuity, at a constant
12 annual rate, and relies on analysts' estimates of future earnings growth. A multi-stage model
13 assumes growth to occur at different stages and is more complex, but still requires estimates of
14 future growth. During cost of capital hearings the appropriate growth rate to be used in the DCF
15 models is usually the subject of expert opinion.

16
17 According to Mr. Coyne multiple approaches should be used to estimate the cost of common
18 equity as no one financial model can exactly pinpoint the correct return on equity. Each model
19 brings a different perspective and adds to the analysis but each has its own inherent weaknesses
20 and should not be relied upon without corroboration from other methods. Use of multiple tests
21 allows each test result to be considered as part of the informed judgment that must be applied to
22 assess the reasonableness of the results to determine the appropriate return on equity.⁸⁵

23
24 Mr. Coyne relied primarily on DCF analysis to arrive at his recommended return on equity, and
25 gave less weight to CAPM. He expressed specific concerns about the ability of CAPM to
26 produce reasonable results without adjustment for the current market conditions, and identified
27 two specific issues.⁸⁶ The first is that there may be controversy about the three inputs required
28 for the CAPM analysis.⁸⁷ The second is that the current capital market conditions have affected
29 the risk free rate significantly so that judgment must be used to take that into account and there
30 may be wide differences of opinion about how the judgment should be exercised.⁸⁸ He stated that
31 it is essential in his view to use alternative models, especially in current market conditions, to
32 estimate the cost of equity.⁸⁹ Mr. Coyne stated that the adjustments he makes for current market
33 conditions are the use of forward-looking inputs, including a forecasted Canadian risk free rate
34 and a market risk premium that combines Canadian and U.S. market inputs, both historic and
35 forward looking.⁹⁰

36
37 Dr. Booth stated that CAPM remains the most common way of estimating the fair return, noting
38 that every regulatory board in Canada has accepted CAPM and has used it to estimate the fair
39 return for the last twenty years. He states that it is still overwhelmingly the most popular model
40 in finance because it is intuitively correct and captures the three basic principles: time value of

⁸⁵ Coyne Report, page 19/10-17

⁸⁶ Coyne Report, page 34/14-19

⁸⁷ Transcript, April 7, 2016, page 14/3-13 and page 39/1-23

⁸⁸ Transcript, April 7, 2016, page 14/1 to page 15/11

⁸⁹ Transcript, April 4, 2016, page 21/22-25

⁹⁰ Transcript, April 7, 2016, page 16/16 to page 17/22

1 money, the risk value of money and the tax value of money.⁹¹ However, while CAPM is
 2 appropriate under normal or average market conditions, Dr. Booth's opinion was that it is not
 3 appropriate without adjustment under current market conditions in Canada, which are being
 4 driven by external factors. He agreed with Mr. Coyne that adjustments need to be made to adjust
 5 for the current capital market conditions with the low long term Canada bond yields caused by
 6 external factors.⁹²

7
 8 Similar to Mr. Coyne's approach of using multiple methodologies, Dr. Booth used both CAPM
 9 and DCF analysis of the overall Canadian and U.S. stock markets as well as U.S. gas and electric
 10 companies to inform his judgment on the fair return on equity.⁹³ Dr. Booth also considered
 11 independent third parties' views of the long term returns for defined pension plans and the
 12 overall historic returns for the Canadian equity markets in assessing the reasonableness of his
 13 recommended return on equity.⁹⁴

14 15 Board Findings – Methodologies

16
 17 The Board notes that both Mr. Coyne and Dr. Booth used a combination of methodologies,
 18 primarily founded in the CAPM and DCF approaches, to arrive at a recommended return on
 19 equity in this proceeding. This is consistent with the Board's approach in Order No. P.U.
 20 13(2013), in which the Board found that, given the financial and economic conditions at the
 21 time, the simple application of the CAPM model could not be relied upon to produce a fair return
 22 for Newfoundland Power. Instead the Board found that a broader view and assessment of other
 23 information in relation to fair return was necessary. The Board determined that primary
 24 weighting should be given to CAPM results but also looked to the results of other accepted
 25 models and other relevant evidence when determining the fair return.

26
 27 In assessing the fair return for Newfoundland Power in this proceeding the Board notes that the
 28 experts agree that the capital market conditions are substantially similar to those in the last
 29 general rate application. The Board has also found that Newfoundland Power's overall risk
 30 profile has not changed. In this circumstance and consistent with its past approach the Board will
 31 give primary weighting to CAPM results and will consider as well other evidence in informing
 32 its determination on the fair return.

33
 34 **The Board will give primary consideration to the CAPM estimates in conjunction with**
 35 **other evidence and information in the determination of a fair return for Newfoundland**
 36 **Power.**

37 38 4.2.2 Selection of Proxy Group and Use of U.S. Data

39
 40 As explained by Mr. Coyne, since return on equity is a market-based concept and as
 41 Newfoundland Power is not publicly traded, it is necessary to establish a group of companies that
 42 are publicly traded and comparable to Newfoundland Power's business and financial

⁹¹ Booth Report, page 37/1-24

⁹² Booth Report, page 43/2-11

⁹³ Booth Report, page 65/17 to page 66/12; Transcript, April 8, 2016, page 195/14 to page 196/13

⁹⁴ Booth Report, pages 57-61

1 characteristics to serve as its “proxy” for the purpose of estimating the return on equity. The use
 2 of a group also will mitigate the effects of anomalous events associated with one company. Mr.
 3 Coyne’s opinion is that U.S. data and U.S. proxy groups are appropriate to use without any
 4 adjustment in setting the fair return for a Canadian utility. He stated that multiple regulatory
 5 authorities have recognized that Canadian utility companies are competing for capital in global
 6 financial markets and Canadian data is limited by the small number of publicly traded utilities.
 7 He further stated that the integrated nature of Canadian and U.S. financial markets and the
 8 similarity of the regulatory regimes also make the use of U.S. data appropriate.⁹⁵

9
 10 Mr. Coyne selected three proxy groups of companies, Canadian, U.S. and North American, that
 11 he determined were comparable to Newfoundland Power with respect to business and financial
 12 risk. Since there are very few publicly traded companies in Canada Mr. Coyne’s only screening
 13 criteria was an investment grade rating for the Canadian proxy group. Fortis, as the parent of
 14 Newfoundland Power, was excluded as was TransCanada Mainline due to its riskier profile. This
 15 left only Canadian Utilities, Emera, Enbridge and Valener in the Canadian proxy group. Seven
 16 U.S. utilities were selected for the U.S. proxy group, while the North American proxy group
 17 included all seven U.S. utilities plus two Canadian utilities: Canadian Utilities and Emera.

18
 19 Dr. Booth stated with respect to the integration of the U.S. and Canadian markets:

20
 21 Sure. I mean, the capital markets between the U.S and Canada are reasonably
 22 integrated. They’re reasonably integrated even more so between the U.S. and the U.K.
 23 You can also say they’re integrated with Brazil, Mexico, Thailand. The global capital
 24 markets are becoming more integrated all the time...so integrated doesn’t mean to say
 25 the rates of return are exactly the same. It just means to say that the capital markets
 26 trading amongst these securities is basically free of impediments.⁹⁶

27
 28 In response to a question on the type of adjustment the Board should consider when looking at
 29 U.S. data, Dr. Booth stated:

30
 31 Before the BCUC, I recommended adjustment - I can’t remember whether I
 32 recommended 50 or 100, but the BCUC, I think, took 50 to 100. This Board took 50 to
 33 100 in 2013. When we look at what is going on in the U.S. versus Canada, I would say
 34 there’s absolutely no question that the U.S. utilities, and I’m referring to U.S. holding
 35 companies, the ones that we’re using to get insight into the fair rate of return for
 36 Newfoundland Power, there’s no question in my mind that the electric holding
 37 companies in the U.S. are riskier than Newfoundland Power... If you take this Board’s
 38 6.5 percent risk premium, market risk premium, and you got a .1 beta difference,
 39 straight of the bat you’re saying 65 basis point adjustment for risk, and then I think it’s
 40 acknowledged, Mr. Coyne said that U.S. “A” bonds were 11 basis points higher than in
 41 Canada, I have a slightly bigger number, but if you take that as indicative rather than the
 42 Government bond yields, you’re looking at 70/80 basis points, which is not much
 43 different from what Mr. McDonald and I recommended three years ago and this Board
 44 took 50 to 100 basis points discount to U.S. DCF estimate.⁹⁷

⁹⁵ Coyne Report, page 18/17-20

⁹⁶ Transcript, April 8, 2016, page 196/15-24 and page 197/1-7

⁹⁷ Transcript, April 8, 2016, page 197/15 to page 199/1

1 Newfoundland Power submitted that the use of U.S. data and proxy groups has become more
 2 accepted by Canadian utility regulators due to the lack of sufficient Canadian data, and in
 3 recognition of the integration of U.S. and Canadian financial markets, the similarity of the
 4 regulatory regimes and the need for Canadian utilities to compete globally for capital.⁹⁸
 5

6 The Consumer Advocate submitted that the proxy groups selected by Mr. Coyne are not
 7 reasonable for determining Newfoundland Power's fair return on equity. He submits that the
 8 groups, including the Canadian proxy group with Emera and Canadian Utilities, include
 9 vertically integrated utilities with extensive and riskier generation and different risk attributes for
 10 other characteristics.⁹⁹ To the extent the Board relies on these proxy groups or DCF analysis with
 11 its deficient assumptions, the Consumer Advocate submits an adjustment of at least 100 basis
 12 points should be made.¹⁰⁰
 13

14 Board Findings – Proxy Groups and U.S. Data

 15

16 The Board accepts that the limited Canadian data may require the use of U.S. data in some
 17 circumstances, and also that integration of Canadian and U.S. financial markets may support this
 18 approach. However the Board does not believe that the integration of these markets means that
 19 U.S. utilities should be considered to be the same as Canadian utilities. While the Board
 20 acknowledges that other Canadian regulatory boards have recently determined that it is not
 21 necessary to adjust the U.S. utility data, the Board continues to believe that an adjustment is
 22 appropriate. The Board believes that there are differences in risk and associated returns between
 23 Canadian and U.S. utilities and is not satisfied that the results from using U.S. data, in the form
 24 of a proxy group of companies, can be accepted without adjustment to account for these
 25 differences. In Order No. P.U. 13(2013) the Board accepted a downward adjustment of 50-100
 26 basis points in relation to the U.S. utility results. Dr. Booth's evidence is that an adjustment in
 27 this range remains appropriate.
 28

29 **The Board accepts the use of U.S. data but only with adjustment, and will apply a 50-100**
 30 **basis points downward adjustment to results based on U.S. data where appropriate.**
 31

32 4.2.3 Analysis and Recommended Return on Equity of Mr. Coyne (Newfoundland Power)

 33

34 Mr. Coyne estimated the cost of common equity for each of his three selected proxy groups
 35 using constant growth DCF and multi-stage DCF methodologies, and CAPM. Mr. Coyne
 36 testified that this proceeding is the first time he used a North American proxy group in his
 37 analysis of a fair return for a Canadian utility.¹⁰¹ Mr. Coyne testified that he gave primary weight
 38 to the DCF method with greater weight on the multi-stage method in reaching his opinion on the
 39 fair return on equity for Newfoundland Power.¹⁰² He stated that more weight is placed on DCF
 40 analysis than CAPM in determining the allowed return for regulated utilities in the United States
 41 and FERC uses DCF exclusively.¹⁰³ According to Mr. Coyne more regulators use DCF because

⁹⁸ Newfoundland Power Submission, page C-38

⁹⁹ Consumer Advocate Submission, pages 21-27

¹⁰⁰ Consumer Advocate Submission, page 5/1-17

¹⁰¹ Transcript, April 7, 2016, page 3/14- 25

¹⁰² Transcript, April 7, 2016, page 37/14-17 and page 28/8-12

¹⁰³ Transcript, April 7, 2016, page 15/13-25 and page 14/1

1 it removes the need to “second guess” the capital market inputs and gives them a more objective
2 model.¹⁰⁴ Mr. Coyne also stated that he draws upon market-based and transparent inputs from
3 reliable third party sources.¹⁰⁵ He did acknowledge that judgment is used with the selection of
4 the inputs and is still required on the determination of the fair return regardless of the
5 methodology used.¹⁰⁶

6
7 In his constant growth DCF model Mr. Coyne relied on the future earnings growth forecast from
8 four providers with no adjustment to offset analysts’ bias in these growth forecasts.¹⁰⁷ His
9 opinion is that such an adjustment is not required. In response to a question from Board Hearing
10 Counsel about analyst bias he testified:

11
12 So I understand the general concern and- around that, but if that is the general concern,
13 it should certainly be diminished for companies like utilities that operate in a very
14 transparent way and have a pretty simple and straightforward business model compared
15 to these more complex entities that are involved in multiple businesses and multiple
16 geographies and countries doing business in China and things of that nature.¹⁰⁸

17
18 Mr. Coyne’s equity returns for his proxy groups based on his constant growth DCF analysis
19 ranged from a high of 12.8% for the Canadian group to a low of 9.6% for the North American
20 group and an average of 10.7%, including 50 basis points for floatation costs.

21
22 The second DCF model used by Mr. Coyne was the multi-stage method, which produces a range
23 of equity returns for his proxy groups from 10.3% for the Canadian proxy group to 9.2% for the
24 North American with an average of 9.6%. Exhibit JMC-4 provides the average growth rates used
25 by Mr. Coyne in his multi-stage DCF analysis for the U.S. proxy group as 5.32% for the first 5
26 years, 5.19% to 4.68% for years 6 to 10 and growing thereafter at the US GDP rate of 4.55%.
27 The growth rates for the Canadian proxy group are 8.03% for the first 5 years, 7.35% to 4.62%
28 for years 6 to 10 and thereafter growing at the Canadian GDP rate of 3.94%. The similar figures
29 for the North American proxy group are 5.28%, 5.14% tapering to 4.56% for years 6 to 10 and
30 4.41% in perpetuity.

31
32 Mr. Coyne’s CAPM analysis used a three-year (2016-2018) forecast from *Consensus Economics*
33 of the Canadian 10-year government bond plus the historical spread between 10-year and 30-
34 year government bonds to determine a risk free rate for Canada of 3.68%.¹⁰⁹ He also determined
35 a 4.29% risk free rate for the U.S.¹¹⁰ His unadjusted risk free rate for Canada is 2.24% based on a
36 spot bond yield for the 30-year Canada bond yield as of August 29, 2015. He explained that he
37 used an adjusted risk free rate as a three-year forecast captures the forward-looking view
38 investors have and the period that rates coming from this general rate application are expected to
39 be in effect.¹¹¹

¹⁰⁴ Transcript, April 7, 2016, page 39/ 17-23

¹⁰⁵ Transcript, April 4, 2016, page 22/ 1-11

¹⁰⁶ Transcript, April 7, 2016, page 40/7 to page 41/9

¹⁰⁷ PUB-NP-056 and PUB-NP-092

¹⁰⁸ Transcript, April 7, 2016, page 32/16 to page 33/1

¹⁰⁹ Updated to 3.58% in PUB-NP-061

¹¹⁰ Updated to 4.10% in PUB-NP-061

¹¹¹ PUB-NP-064; Transcript, April 7, 2016, page 18/15 to page 19/20

1 Mr. Coyne derived a single forward-looking market risk premium for Canada and the U.S.
 2 because, in his view, it is reasonable to do so since the risk premiums for each country are highly
 3 correlated given that the U.S. and Canadian economies are highly integrated and capital flows
 4 freely between them. In his opinion historic market risk premiums underestimate the market risk
 5 premium in the current market as they reflect higher government bond yields than is currently
 6 the case. As a result he also used forward-looking market risk premiums, as he believed they are
 7 more reflective of the current markets, and averaged both the historic and forward-looking
 8 market risk premiums which he believes is a conservative approach. The market risk premium
 9 Mr. Coyne recommended using this approach is 7.6%.¹¹² Mr. Coyne stated that his estimate of
 10 the market risk premium includes an adjustment for current market conditions. With no
 11 adjustment, it would be 6.3%.¹¹³

12
 13 Mr. Coyne's analysis used betas based on estimates from Value Line and Bloomberg. The betas
 14 are 0.64 for his Canadian proxy group, 0.70 to 0.76 for his U.S. proxy group and 0.69 to 0.76 for
 15 his North American proxy group. Mr. Coyne stated that he used adjusted betas because empirical
 16 studies have shown that an individual company's stock is more likely than not to move toward
 17 the market average of 1.0 over time and for statistical purposes.¹¹⁴

18
 19 Mr. Coyne also explained that it is common practice for Canadian regulators to allow an
 20 adjustment for flotation costs and financing flexibility. As the Board has previously determined
 21 that an appropriate adjustment for this is 50 basis points his DCF and CAPM results have been
 22 adjusted upwards by 50 basis points for flotation costs and financing flexibility.

23
 24 Mr. Coyne's unadjusted CAPM results were provided in response to PUB-NP-064:

25		
26	Risk free rate:	2.24% (30-year long Canada bond yield as of 8/29/15)
27	Bloomberg Beta:	0.64
28	Market Risk Premium:	6.3% (historical only)
29		

30 Mr. Coyne's "unadjusted" CAPM results for the Canadian proxy group would be approximately
 31 6.8%, including the addition of 50 basis points for financial flexibility and flotation costs. Mr.
 32 Coyne's opinion is that this return on equity does not meet the requirements for a fair return and
 33 is well below any authorized return for a regulated electric or gas utility in Canada or the U.S.
 34 His adjustments to the inputs to his CAPM analysis to account for the abnormal market
 35 conditions bring the CAPM return on equity for his Canadian proxy group to 9.0%, which is 220
 36 basis points above his unadjusted CAPM.

37
 38 Mr. Coyne's results for each of his proxy groups, based on his analyses and including financing
 39 costs of 50 basis points, are shown below:¹¹⁵

¹¹² Coyne Report, pages 29-30

¹¹³ PUB-NP-064; Transcript, April 7, 2016, page 21/8 to page 22/25

¹¹⁴ Coyne Report, page 28/9-19

¹¹⁵ Coyne Report, Figure 1, page 3

	Canadian Regulated Utilities	US Electric Utilities	North American Electric Utilities	Average
CAPM	9.0%	10.4%	10.1%	9.8%
Constant Growth DCF	12.8%	9.8%	9.6%	10.7%
Multi-Stage DCF	10.3%	9.5%	9.2%	9.6%
Average	10.7%	9.9%	9.7%	10.1%

1 The average of all three methods used by Mr. Coyne is 10.1%; however, as Mr. Coyne found the
2 North American proxy group to be most representative of Newfoundland Power, he placed
3 greater weight on those results. The average for the North American proxy group is 9.7%. Mr.
4 Coyne stated that his recommendation of 9.5% is also supported by the other methods and proxy
5 groups, except Canadian CAPM.

6
7 In his analysis Mr. Coyne also included a comparison of the authorized equity returns for
8 investor-owned utilities in Canada, other than Newfoundland Power, and in the U.S. According
9 to Mr. Coyne it is appropriate to consider the returns of other investor-owned utilities given the
10 "opportunity cost" concept underlying the fair return standard. Figure 15 in his pre-filed
11 evidence lists the authorized equity returns for six Canadian utilities, which range from a low of
12 8.3% for utilities in Alberta to a high of 9.3% in Ontario. During the hearing it was confirmed
13 that the return on equity for Maritime Electric, listed as 9.75% in Figure 15, had recently been
14 lowered to 9.35% through a settlement process. The average for the U. S. Utilities is 9.71%.

16 4.2.4 Analysis and Recommended Return on Equity of Dr. Booth (Consumer Advocate)

17
18 Dr. Booth expressed two concerns with the use of the constant growth DCF method to estimate
19 fair returns: the existence of analysts' bias and the assumption that growth goes on in perpetuity.
20 According to Dr. Booth there is absolutely no question that analysts are biased which means they
21 tend to be optimistic.¹¹⁶

22
23 So I deliberately try in my evidence to put information that is out there being told to
24 investors. RBC is telling investors in its Playbook that analysts are biased. McKenzie is
25 telling people analysts are biased. Parkinson of the Globe and Mail is reporting on
26 McKenzie saying, well, look, not much has changed, Wall Street is still biased. I could
27 give you a lot of academic articles, but I prefer to give you things that are in the public
28 domain that are more likely to influence investors.¹¹⁷

29
30 With respect to the use of the constant growth DCF method with its assumption of growth in
31 perpetuity to determine the fair return on equity, Dr. Booth stated it doesn't make sense to make
32 such an assumption:

33
34 I would agree with the AUC, that when you're getting estimates from DCF estimates so
35 significantly above the long run growth in GDP, and you are assuming that these are

¹¹⁶ Transcript, April 8, 2016, page 200/6-21

¹¹⁷ Transcript, April 8, 2016, page 201/24 to page 202/12

1 going to go on forever by utility, that just doesn't make any sense...You have to bear in
 2 mind that overall we're constrained by the growth rate in the economy. Some firms may
 3 grow faster than the economy for a period of time, but not indefinitely, not forever, and
 4 certainly not utilities.¹¹⁸
 5

6 Dr. Booth stated that the same issue of analysts' bias applies to the multi-stage DCF method as to
 7 the constant growth DCF method, although not to the same degree. As a result, if the constant
 8 growth method is rejected, the multi-stage method has to be as well because it produces utilities'
 9 growth rates that exceed GDP for the first ten years and growth thereafter at the average GDP in
 10 perpetuity, which is not reasonable. His position is that the DCF method should be rejected as a
 11 method to estimate the fair return on equity.¹¹⁹ Dr. Booth uses DCF analysis of the overall
 12 Canadian and U.S. stock markets and U.S. gas and electric companies to inform his judgment on
 13 the fair return on equity; however, he makes adjustments for analysts' bias and uses growth rates
 14 at sustainable levels.¹²⁰ Dr. Booth's DCF estimates are as follows:
 15

- 16 • Overall equity market return: 8.50%-10.00%
- 17 • Median Corporate Canada ROEs: 9.90%
- 18 • U.S. SP500 Electric: 6.80%
- 19 • U.S. utility sample average: 6.80%-7.30%
- 20 • Market to book model for U.S. utilities: 7.15%

21
 22 In his CAPM analysis, Dr. Booth used a consensus forecast for the average long-term Canadian
 23 bond yield for 2016 of 2.81% in his simple or unadjusted CAPM analysis.¹²¹ If a two-year
 24 forecast is used, as Dr. Booth did in the last rate proceeding in 2012 when there were also two
 25 test years, then 20 basis points would be added to the forecast risk free rate for 2017, bringing it
 26 to 3.01%.¹²²
 27

28 Dr. Booth estimated the market risk premium of common equities over long-term Canadian
 29 bonds at 5-6%. While the Canadian historic data back to 1924 indicates a market risk premium
 30 of 5%, Dr. Booth believes U.S. data is relevant as lower interest rates has removed the historic
 31 bias of a smaller Canadian market risk premium over a higher and riskier Canadian bond yield.
 32 Dr. Booth also gives weight to the results of a survey by Professor Fernandez of thousands of
 33 academics, financial analysts and corporate executives on their expectations of the market risk
 34 premiums. Dr. Booth also provided forecasts of the market risk premium from third parties,
 35 including TD Economics, Aon Hewitt and Duff and Philips which support his estimate of the
 36 market risk premium.¹²³
 37

38 Dr. Booth does not use adjusted betas since his view is that the relative risk of Canadian utilities
 39 is significantly lower than the average Canadian equity security and will not move to the market
 40 average over time. In his CAPM analysis in this proceeding he used a beta of 0.45-0.55.

¹¹⁸ Transcript, April 8, 2016, page 202/19-24 and page 203/13-18

¹¹⁹ Transcript, April 8, 2016, page 205/6 to page 206/22

¹²⁰ Booth Report, pages 65-66

¹²¹ Booth Report, page 42/6-7

¹²² Transcript, April 8, 2016, page 26/11 to page 29/7

¹²³ Booth Report, pages 57-65; Booth Surrebutal, page 10; Transcript, April 8, 2016, page 194/1-21

1 Dr. Booth's unadjusted CAPM results are:

2		
3	Risk free rate:	2.81% (forecast long-term Canada bond yield)
4	Beta:	0.45-0.55
5	Market Risk Premium:	5-6%
6		

7 Dr. Booth's unadjusted CAPM return on equity ranged from a low of 5.56% to a high of 6.61%,
8 including 50 basis points for financial flexibility and flotation costs. To arrive at a recommended
9 return on equity Dr. Booth made two adjustments: the first was to make the CAPM estimate
10 conditional on the state of the market, converting it into a conditional CAPM; and the second
11 was to adjust for the abnormally low Canada bond yields caused by the global bond buying
12 programs.

13
14 Dr. Booth noted that current credit spreads are about 91 basis points more than the normal credit
15 spreads so he adds a credit spread adjustment of 50% or 45 basis points. He described the result
16 as a conditional CAPM where CAPM holds conditional upon the state of the financial markets.
17 Dr. Booth proposed a similar adjustment in 2012 for credit spreads then of 40 basis points.
18 During the hearing Dr. Booth explained that this adjustment is objective and has been accepted
19 by other regulators in Canada.¹²⁴ His conditional CAPM, with this addition, ranged from a low of
20 6.01% to a high of 7.06%, which was still too low in his opinion.¹²⁵

21
22 The second adjustment Dr. Booth made was to adjust for the impact on the long-term Canada
23 bond yield of the U.S. and other global governments' bond buying programs which he referred to
24 as an "Operation Twist" adjustment. Dr. Booth recommended that 130 basis points be added for
25 this adjustment. His recommendation in 2012 for this adjustment was 80 basis points. During the
26 hearing Dr. Booth explained that this adjustment requires judgment on the implications of the
27 bond buying program.¹²⁶ Dr. Booth also agreed that financing flexibility should be included and
28 made an adjustment of 50 basis points to his recommended return on equity for these costs.

29
30 The addition of these two adjustments and the financing costs resulted in a range for Dr. Booth's
31 appropriate return on equity from a low of 7.31% to a high of 8.36%, with a mid-point of 7.83%.
32 Dr. Booth, however, recommends 7.5%, taking into account the current yield on utility preferred
33 shares and the difficulty in making a direct transfer from preferred shares to common shares.¹²⁷
34 This is the same return on equity recommended by Dr. Booth for 2013 and 2014 test years in
35 Newfoundland Power's last general rate application.

36 37 4.2.5 Submissions

38
39 Newfoundland Power submitted that the Board should accept Mr. Coyne's use of multiple
40 methodologies to estimate the fair return on equity.¹²⁸ Newfoundland Power also submitted that
41 Mr. Coyne's opinion is based on a detailed risk assessment of Newfoundland Power in relation

¹²⁴ Transcript, April 8, 2016, page 193/1-10

¹²⁵ Booth Report, page 45/5-21

¹²⁶ Transcript, April 8, 2016, page 193/10-17

¹²⁷ Booth Report, page 51/1-10

¹²⁸ Newfoundland Power Submission, page C-43

1 to U.S. and Canadian utilities Mr. Coyne has determined are comparable, and takes into account
2 Newfoundland Power's increasing risk profile. Newfoundland Power notes that the proposed
3 9.5% is marginally higher than the current range for Canadian investor-owned utilities but lower
4 than the range for comparable U.S. utilities.

5
6 In support of its submission Newfoundland Power referenced Order No. P.U. 13(2013) and
7 stated that Mr. Coyne's approach is consistent with the Board's conclusions at that time that
8 reliance cannot be placed on a simple application of the capital asset pricing model in the current
9 financial and economic conditions, and that a broader view must be taken with other available
10 information also being necessary to consider. Newfoundland Power submitted that Mr. Coyne's
11 approach uses both CAPM and DCF based models, which is essential in the current market
12 environment, and also uses market based inputs to the extent possible, although there is an
13 element of judgment in selecting the input and methods. Newfoundland Power submitted that
14 Mr. Coyne's approach is also consistent with accepted regulatory practice.

15
16 Newfoundland Power submitted that Dr. Booth's conditional CAPM-based equity risk premium
17 approach includes a series of subjective adjustments. The uncertainty associated with his
18 subjective adjustments and the difficulties in the application of the risk premium models were,
19 according to Newfoundland Power, acknowledged by Dr. Booth in his evidence. Newfoundland
20 Power submitted that Dr. Booth's recommendation is: i) substantially lower than the current
21 range of allowed return on equity for investor-owned Canadian electric utilities; ii) does not
22 reflect a return comparable to other investor's owned utilities; and iii) is inconsistent with the
23 maintenance of the Company's creditworthiness and impairs future access to least cost financing.
24 Newfoundland Power submitted that Dr. Booth's recommendation does not meet any element of
25 the fair return standard.¹²⁹

26
27 The Consumer Advocate submitted that Mr. Coyne places greatest weight on his North
28 American proxy group with two-thirds of his average return on equity results being derived from
29 one form or other of DCF analysis. Mr. Coyne makes no adjustments to his results to account for
30 differences in the U.S. and Canadian markets or for differences between Newfoundland Power
31 and companies within his proxy groups. The Consumer Advocate submitted that this is not
32 consistent with Order No. P.U. 13(2013), where the Board held that the differences in the U.S.
33 and Canadian markets exist and justify an adjustment to the DCF results of 50-100 basis points.
34 The Consumer Advocate also submitted that the proxy companies used by Mr. Coyne are not
35 reasonable proxies as they include vertically integrated utilities with extensive and riskier
36 generation.

37
38 With respect to Mr. Coyne's DCF results the Consumer Advocate noted that Mr. Coyne's
39 constant growth DCF method produced a 13.46% required return for the TSX, which clearly is
40 not grounded in reality. He also pointed out that Mr. Coyne's DCF analysis includes the
41 optimism of growth forecasts which the Board found was a concern in Order No. P.U. 13(2013).
42 He submits that Mr. Coyne's constant growth DCF analysis should be rejected in this proceeding
43 as it was by the Board in 2013.¹³⁰ Similarly the Consumer Advocate submitted that Mr. Coyne's
44 multi-stage DCF analysis cannot be relied on as, like the constant growth method, it suffers from

¹²⁹ Newfoundland Power Submission, page C-43/9-21

¹³⁰ Consumer Advocate Submission, page 18/22-33

1 optimistic growth assumptions, and leads to an exaggerated return on equity at the expense of
2 ratepayers.¹³¹ For all these reasons the Consumer Advocate submitted that the Board should
3 place no weight on Mr. Coyne's DCF analysis.
4

5 With respect to Mr. Coyne's CAPM analysis the Consumer Advocate pointed out that: i) Mr.
6 Coyne uses a three-year forecast for the Canadian risk free rate while Dr. Booth uses a one-year
7 forecast; ii) that his market risk premium includes analysis that used the constant growth model
8 DCF, with all its problems for the forward looking market risk premium; and iii) he used
9 adjusted betas which are not reasonable or reliable.¹³²
10

11 The Consumer Advocate stated that Mr. Coyne's estimate of the market risk premium of 7.6% is
12 based on a DCF constant growth method which has optimistic growth that exceeds the growth
13 rate of the economy. He also submitted that Mr. Coyne's historic market risk premiums are
14 presented as the risk premiums over the bond income returns as opposed to the risk premium
15 over the total bond returns. He submitted that Dr. Booth's estimate of a market risk premium in
16 the 5-6% range is supported by the evidence.¹³³
17

18 The Consumer Advocate also noted that Mr. Coyne's use of adjusted betas has been specifically
19 rejected by the Alberta Utilities Commission as being unreasonably high as the adjusted betas
20 assume utilities are as risky as the market as a whole over time. Undertaking No. 19 provides a
21 comparison of the raw and adjusted betas. For the Canadian proxy group the raw beta is 0.46 and
22 the Industry Index beta is 0.54 versus Mr. Coyne's of 0.64.¹³⁴
23

24 The Consumer Advocate submitted that the Board should accept Dr. Booth's recommended
25 return on equity of 7.5% as being the fair return.
26

27 4.2.6 Board Findings - Fair Return on Equity 28

29 Newfoundland Power proposes that its current approved return on equity of 8.8% be increased to
30 9.5% for 2016 and 2017 based on the opinion of its expert, Mr. Coyne. Current allowed equity
31 returns for investor-owned Canadian electric utilities range from 8.3% to 9.35%.¹³⁵ Both
32 Newfoundland Power and the Consumer Advocate agree in this proceeding that market
33 conditions are substantially the same as during the last proceeding, with continued low interest
34 rates and bond yields. In addition the Board believes that Newfoundland Power's overall risk has
35 not changed and that it continues to be an average risk utility.
36

37 In Order No. P.U. 13(2013) the Board gave primary weighting to the CAPM results but also
38 looked to other information, including the results of other models, in informing its judgment as
39 to the fair return. The Board was also of the view that, where possible, Canadian comparables
40 should be used and that U.S. comparables would have to be appropriately adjusted. The Board
41 has determined that this approach continues to be reasonable in the context of the current market

¹³¹ Consumer Advocate Submission, page 20/23-26

¹³² Consumer Advocate Submission, page 13/33 to page 15/4 and page 15/19 to page 17/3

¹³³ Consumer Advocate Submission, pages 14-15

¹³⁴ Consumer Advocate Submission, page 16

¹³⁵ Coyne Report, Figure 15, page 32

1 conditions and so it will look to the CAPM results for the Canadian utility proxy group first. This
 2 requires the Board to first assess the basis and reasonableness of the recommendations of Mr.
 3 Coyne and Dr. Booth for the risk free rate, market risk premium, and beta to be used in
 4 determining the CAPM return.

5
 6 The CAPM inputs for risk free rate, market risk premium, and beta as accepted by the Board in
 7 Order No. P.U. 13(2013) and as used in this proceeding by Mr. Coyne and Dr. Booth for their
 8 return on equity recommendation for Newfoundland Power are summarized below:

	P.U. 13(2013)	Mr. Coyne	Dr. Booth
Market risk premium	6.50%	7.60%	5.00% - 6.00%
Risk free rate	3.00% unadjusted 3.80% adjusted	3.68% (three-year forecast)	2.81% (one-year forecast)
Beta	0.6	0.64	0.45 to 0.55
Financing Costs	0.50%	0.50%	0.50%
Adjustment			1.75% (market spreads and Operation Twist)
Recommended CAPM return on equity	8.80%	9.00%	7.5% (7.31% to 8.36%)

9 The Board notes that the recommended returns of both Mr. Coyne and Dr. Booth are higher than
 10 their unadjusted CAPM calculations. Mr. Coyne's unadjusted CAPM result, based on PUB-NP-
 11 064, is 6.8%. Mr. Coyne explains that the risk free rate used in the unadjusted calculation of
 12 2.24%, based on the forecast long-term Canada bond yield for one year, did not reflect his
 13 expectation that the rate will increase.¹³⁶ He therefore used a three-year forecast which he felt
 14 was more appropriate in the circumstances.¹³⁷ In addition Mr. Coyne did not use the historical
 15 6.30% market risk premium and instead used a market risk premium of 7.6% that combined both
 16 Canadian and U.S. market inputs and historic and forward looking estimates.¹³⁸ Dr. Booth's
 17 unadjusted CAPM estimate is 6.08% based on an average of the low end estimate of 5.56% and
 18 the high end estimate of 6.61%. Dr. Booth applied an "Operation Twist" adjustment of 1.30% to
 19 account for the impact of the U.S. bond buying on Canadian yields, and also applied a credit
 20 market effect adjustment of 0.45% to account for higher market spreads than average. Dr. Booth
 21 explained that he was less confident about the Operation Twist adjustment at this time and, to be
 22 conservative, his recommended CAPM return on equity is on the lower end of the resulting
 23 range.¹³⁹

24
 25 As stated in Order No. P.U. 13(2013) it is Canadian regulatory practice, and the practice of this
 26 Board, to use the forecast yield for the long-term Canada bond yield as the risk free rate in equity
 27 risk premium models, including CAPM. However, both Mr. Coyne and Dr. Booth agreed that
 28 capital market conditions continue to be abnormal. Mr. Coyne believes that the one-year forecast
 29 long-term Canada bond yield is too low and instead used the three-year forecast of 3.58%. Dr.
 30 Booth used a one-year forecast but explained that if he used a two-year forecast as he did during

¹³⁶ Mr. Coyne's and Dr. Booth's one year forecasts differ because they are as of different points in time.

¹³⁷ Transcript, April 7, 2016, page 19/6-20

¹³⁸ Transcript, April 7, 2016, page 21/6 to page 22/25

¹³⁹ Transcript, April 8, 2016, page 193/1-17; PUB-CA-008

1 the last hearing the risk free rate would be 20 basis points higher, or 3.01%.¹⁴⁰ The Board
 2 continues to believe that the risk free rate should be based on the long-term Canada bond yield.
 3 However, the Board believes that the one-year forecast of the long-term Canada bond yield may
 4 not appropriately reflect the risk free rate in the circumstances. Therefore the Board will accept a
 5 risk free rate of 3.0%, based on Dr. Booth's evidence of the forecast long-term Canada bond
 6 yields for 2016 and 2017, the two test years.

7
 8 The market risk premium is related to long-term Canada bond yields, with lower forecast yields
 9 reflected in higher market risk premiums. In Order No. P.U. 13(2013) the Board accepted an
 10 increase in the market risk premium from 6% to 6.5% on the basis that the forecast long-term
 11 Canada bond yields had decreased from 4.5% to 3.0% since the Board issued Order No. P.U.
 12 43(2009). In this proceeding Mr. Coyne used an adjusted market risk premium of 7.6%, which is
 13 a combination of historical and forward looking market risk premiums for the U.S. and Canada.
 14 Dr. Booth used a range of 5%-6%, which is based on average historic long run equity returns,
 15 and is the same risk premium used in his CAPM model in Newfoundland Power's last general
 16 rate application. The Board notes that the forecast long-term Canada bond yields are not
 17 materially different than in 2013 and that the experts agree that market conditions have not
 18 changed significantly since then. Given the presence of similar market conditions to 2013 and
 19 also a similar forecast long-term Canada bond yield, the Board is satisfied that a market risk
 20 premium for CAPM of 6.5% is reasonable.

21
 22 With respect to the beta to be applied to the market risk premium to measure market volatility
 23 and relative risk, the Board has accepted a beta of 0.6 for Newfoundland Power's CAPM in the
 24 last two general rate applications. Mr. Coyne determined an adjusted beta of 0.64 for his
 25 Canadian proxy group based on estimates from Value Line and Bloomberg. Dr. Booth's opinion
 26 was that the relative risk of a Canadian utility is 45-55% of that of the market as a whole, which
 27 is the basis for his beta range of 0.45-0.55. Dr. Booth does not use adjusted betas. The Board is
 28 satisfied that a beta of 0.6 continues to be appropriate for Newfoundland Power.

29
 30 Using the inputs for risk free rate, market risk premium and beta as accepted above the CAPM
 31 required return, including an allowance of 50 basis points for financing flexibility, for
 32 Newfoundland Power is estimated as follows:

UNADJUSTED CAPM Calculation		
Risk free rate		3.0%
Market Risk Premium	6.5%	
Beta	0.6%	
Adjusted Market Risk Premium		3.9%
Allowance for financing flexibility		0.5%
CAPM Return on Equity		7.4%

33 The Board believes that this simple calculation of CAPM does not result in a fair return for
 34 Newfoundland Power and should be adjusted to reflect the unusual financial market conditions.

¹⁴⁰ Transcript, April 8, 2016, page 187/9-16

1 Both Mr. Coyne and Dr. Booth applied adjustments to their simple CAPM return on equity
2 calculations. Mr. Coyne's total adjustment was 220 basis points.¹⁴¹ Dr. Booth's total adjustment
3 was 175 basis points, though his recommended CAPM return on equity was 30 basis points
4 below the midpoint of his calculated range which he explained reflected his lack of confidence in
5 the "Operation Twist" adjustment.¹⁴²
6

7 As stated above the Board has in the past given primary weighting to the CAPM results in
8 determining a fair return. However current market conditions require that the Board exercise
9 judgment in considering these results. The Board will look to other evidence, including the
10 results from other models, to inform its final determination of a fair return for Newfoundland
11 Power. This includes the DCF results of Mr. Coyne and Dr. Booth, and the information provided
12 on investor expectations and comparative returns for other utilities in Canada.
13

14 With respect to the DCF methodology, the Board has determined that Canadian utility data is
15 inadequate to complete a DCF analysis and that U.S. data may be informative. The Board also
16 found that a downward adjustment of 50 to 100 basis points should be applied to the DCF results
17 to account for the differences in U.S. and Canadian experience. The Board also notes the
18 concerns identified by Dr. Booth in relation to the constant growth DCF model used by Mr.
19 Coyne, which assumes constant growth in perpetuity and no offsetting adjustment to account for
20 analysts' bias. These concerns were also raised in the last general rate application for
21 Newfoundland Power, with the result that the Board considered the multi-stage DCF model only
22 in its assessment of a fair return. The Board continues to prefer the multi-stage model. As a result
23 in this proceeding the Board will look primarily to the results for the multi-stage DCF model
24 using U.S. data, adjusted downward to account for the differences in the Canadian and U.S.
25 experience.
26

27 Mr. Coyne's multi-stage DCF model indicates an unadjusted return of 9.5% for U.S. comparable
28 utilities. Applying the 50 to 100 basis point adjustment suggests a range of 8.5%-9.0% for U.S.
29 comparable utilities. The Board notes that Mr. Coyne found his North American electric utility
30 proxy group to be most representative of Newfoundland Power. The multi-stage DCF result for
31 this group was 9.2%. Given that this group includes some Canadian utility data, the Board would
32 make a smaller adjustment for this group of 50 basis points, the low end of the range, suggesting
33 a return of 8.7% for the North American electric utility proxy group. Dr. Booth also used DCF
34 analysis of the overall Canadian and U.S. stock markets and U.S. gas and electric utilities to
35 inform his judgment on the fair equity return. Dr. Booth's DCF estimates range from 6.80%-
36 10.00%.¹⁴³ Dr. Booth also looked to independent third parties' views of the long term returns for
37 defined pension plans and the overall historic returns for the Canadian equity markets in
38 assessing the reasonableness of his recommended equity return.
39

40 Based on the above the Board finds the unadjusted CAPM calculation of 7.4% does not produce
41 a fair return for Newfoundland Power and should be considered in light of the other available
42 evidence, including the multi-stage DCF. After appropriate adjustments, Mr. Coyne's multi-stage
43 DCF calculation for the North American electric utility proxy group and the U.S. comparable

¹⁴¹ Transcript, April 7, page 23/12 to page 24/1-12

¹⁴² Transcript, April 8, 2016, page 193/1-17; PUB-CA-008

¹⁴³ Booth Report, February 2016, page 66

1 utilities would result in a range of 8.5%-9.0%. In Dr. Booth's opinion his DCF estimates and
2 review of independent third parties' views support his recommended return of 7.5%. The Board
3 notes that approved returns in other Canadian jurisdictions generally seem to be lower today than
4 they were in 2013. Considering all of the circumstances, the Board is satisfied that a fair rate of
5 return on equity for Newfoundland Power for rate setting purposes for 2016 and 2017 is 8.5%.

6
7 **The Board finds that, for the 2016 and 2017 test years, a rate making return on common**
8 **equity of 8.5%, with a deemed common equity component of 45%, will provide**
9 **Newfoundland Power with the opportunity to earn a just and reasonable return on rate**
10 **base consistent with the fair return principle and the provision of least cost reliable service.**

11 **5.0 Other Issues**

12 **5.1 Executive Compensation**

13
14
15
16 The level of compensation Newfoundland Power provides its executive group and the associated
17 costs proposed to be recovered from ratepayers was an issue in this proceeding. Executive
18 compensation, including the incentive structure and costs, has been reviewed by the Board in
19 most general rate applications for the past 20 years.

20
21 As set out in the Application Newfoundland Power's executive compensation policy is based on
22 a broad Canadian Commercial Industrial comparator group identified by Hay Group from its
23 client base. This policy was first reviewed and accepted by the Board in 1998 and has been used
24 by Newfoundland Power since that time.¹⁴⁴ Newfoundland Power's pay standards for its
25 executive group are based on the median/50th percentile levels of the comparator group
26 compensation values.¹⁴⁵

27
28 The Consumer Advocate raised four concerns with Newfoundland Power's methodology for
29 determining the level of executive compensation included in its revenue requirement: i) choice of
30 peer group; ii) changes to short-term incentive (STI) targets; iii) inclusion of and weighting given
31 to earnings in the STI plan; and iv) inclusion of regulatory performance as a discretionary factor
32 in the STI plan.

33
34 According to the Consumer Advocate the peer group used as the basis for determining executive
35 compensation is not an appropriate peer group since it excludes other utilities and does not
36 include executives in other companies operating in the Atlantic Canada region.¹⁴⁶ He also notes
37 that, according to Information No. 14, both Nova Scotia Power and New Brunswick Power have
38 a focus on regional companies and utilities. The Consumer Advocate submitted these exclusions
39 result in inflated median comparator salaries compared to the Atlantic Canada Industrial
40 executive and non-executive market. Based on CA-NP-199 the Consumer Advocate submitted
41 that the total base salaries for Newfoundland Power's executives and directors are 32.5% or

¹⁴⁴ Order No. P.U. 36(1998-99), page 41

¹⁴⁵ Newfoundland Power Submission, page D-2

¹⁴⁶ Consumer Advocate Submission, page 46

1 \$733,479 higher than necessary, with the corresponding increases in STI payments which are
2 linked to base salary.¹⁴⁷

3
4 The Consumer Advocate also submitted that increases in target STIs since the 2013 general rate
5 application result in a 14.5% or \$64,000 increase in the STI amounts included in revenue
6 requirement.¹⁴⁸ He acknowledged that it is “not the role of interveners or even the Board to
7 dictate Newfoundland Power’s compensation policies” but submitted that the revenue
8 requirement and rates should only include “a level of compensation that is demonstrably
9 prudent.”¹⁴⁹

10
11 The Consumer Advocate also noted that Newfoundland Power’s STI plan includes a 25%
12 weighting component for achieving earnings targets. This issue was also raised by the Consumer
13 Advocate in the 2013 general rate application with the Board ultimately accepting the inclusion
14 of this STI factor and weighting at the time. The Consumer Advocate noted that some regulators
15 in Canada have reversed their policy on this issue stating:

16
17 The Consumer Advocate agrees with British Columbia and Alberta’s utility
18 commissions that earnings should not be a recoverable component of the STI plan. The
19 ratepayer’s best interests are at odds with the executive earnings incentives and should
20 not be paying this incentive through rates. It is clear that excluding the earnings
21 component of STI has become typical among Canadian utilities.¹⁵⁰

22
23 Newfoundland Power’s STI plan also includes a 15% weighting for regulatory performance
24 which, according to the Consumer Advocate, is not common among Canadian utilities and is
25 completely discretionary as, according to PUB-NP-081, it is evaluated on a subjective basis.
26 Similar to the earnings component above, the Consumer Advocate submitted that this incentive
27 component is more aligned with shareholders than with ratepayers:

28
29 By including regulatory performance and earnings in the required revenue, ratepayers
30 are covering the costs of these incentives for executives to improve or maintain
31 financial integrity with a higher ROE.¹⁵¹

32
33 The Consumer Advocate proposed that Newfoundland Power’s executive compensation and STI
34 be adjusted to reflect Atlantic Canadian median compensation levels for executives and the
35 removal of the performance and earnings components of the STI that solely benefit shareholders.
36 He calculates this adjustment will reduce Newfoundland Power’s proposed compensation
37 included in revenue requirement from approximately \$3.7 million to \$2.6 million and would
38 bring compensation more in line with competitive regional salaries and common industry
39 practices.¹⁵²

¹⁴⁷ Consumer Advocate Submission, page 48

¹⁴⁸ Consumer Advocate Submission, page 50

¹⁴⁹ Consumer Advocate Submission, page 50/7-10

¹⁵⁰ Consumer Advocate Submission, page 52

¹⁵¹ Consumer Advocate Submission, page 54

¹⁵² Consumer Advocate Submission, page 54

1 Newfoundland Power pointed to the testimony of its witness Karl Aboud of Hay Group, who
2 stated that Newfoundland Power's use of the broad Canadian Commercial Industrial market as
3 its comparator group is reasonable:
4

5 Because your perspective market for talent is beyond just utilities, you, for executives,
6 you should go to a broad market of companies, and that's what we've done. And these
7 companies are across Canada because you shouldn't be restricted to looking for talent
8 just of a region for executive jobs. So what we've done here is consistent with what we
9 would do for any large, sophisticated company at the executive level, look as broad a
10 market as you could and should for executive talent and price to that market, and that's
11 why this is a broad market.¹⁵³
12

13 Newfoundland Power submitted that the Consumer Advocate presented no evidence in support
14 of the use of Atlantic Canada Industrial market as a reasonable comparator for setting
15 Newfoundland Power's executive compensation policies, or that the STI components should not
16 be accepted.
17

18 Newfoundland Power noted that the rationale for including earnings and regulatory components
19 in the STI plan was addressed by Mr. Smith in his testimony and that similar submissions
20 regarding STI exclusions have been rejected by the Board in the past on the basis that there was
21 no evidence its practices in this area were unreasonable. Newfoundland Power submitted that the
22 continuing financial integrity of the company is consistent with the least cost delivery of power
23 to customers in the long-term and that sound financial and regulatory management are also
24 consistent with maintenance of the company's financial integrity. According to Newfoundland
25 Power no reasonable basis exists for the Consumer Advocate's proposition that any of the
26 company's STI targets are "at odds" with the ratepayer's interests.
27

28 Board Findings – Executive Compensation 29

30 Executive compensation for Newfoundland Power has been reviewed by the Board in previous
31 general rate applications and the methodology, components and levels of executive
32 compensation have been found to be reasonable.¹⁵⁴ The Board's objective in reviewing executive
33 compensation is to ensure that the costs included in rates for executive compensation are
34 reasonable and provide value to ratepayers. In Order No. P.U. 13(2013) the Board stated:
35

36 The Board believes that the design of Newfoundland Power's overall compensation
37 package goes to the core of the discretion of management to attract and retain its
38 workforce. The Board will defer to the determinations of management in this regard
39 unless the evidence demonstrates that unreasonable or imprudent costs may be passed
40 on to ratepayers.¹⁵⁵
41

42 The issues raised in this proceeding relate to the peer group used as the basis for setting
43 compensation levels and the STI components to be included in the costs to be recovered from
44 ratepayers.

¹⁵³ Newfoundland Power Reply Submission, page E-2; Transcript, April 1, 2016, page 26/10-23

¹⁵⁴ Order Nos. P.U. 36(1998-99) and P.U. 19(2003)

¹⁵⁵ Order No. P.U. 13(2013), page 52/15-18

1 The Board has accepted the use of the broad Canadian Commercial Industrial comparator group
2 as the basis for Newfoundland Power's executive salary policy since 1998. The Consumer
3 Advocate submits that the fact that the Board has accepted this methodology in the past is not
4 enough to support its continuing use. The Board agrees and looks to the evidence in each case in
5 assessing whether the proposed costs are supported and reasonable. In this case Mr. Aboud of the
6 Hay Group testified to the appropriateness of the peer group used to determine Newfoundland
7 Power's executive compensation levels and the Board has been presented with no evidence to
8 support a finding that the use of this comparator group, with the median/50th percentile
9 compensation values as the basis for setting executive pay and standards, is now unreasonable.

10
11 With respect to STI targets and the costs to be recovered from ratepayers, the Board agrees that
12 the revenue requirement should include only those compensation costs that are found to be
13 demonstrably prudent. Newfoundland Power's STI plan has been reviewed by the Board in
14 previous proceedings and has been found to be reasonable. The specific elements of the plan,
15 including the target STIs, are within the purview of Newfoundland Power's management. It is
16 not the role of the Board to substitute its judgment for that of management unless there is some
17 compelling evidence to suggest that the targets or costs are unreasonable.

18
19 The Board notes that earnings have been a component of Newfoundland Power's STI plan since
20 1997 and now has the highest weighting in the target STI corporate objectives, at 25%.¹⁵⁶ This is
21 lower than the corporate targets for reliability and safety, which are core to the business of a
22 utility. As noted by the Consumer Advocate the British Columbia Utilities Commission and the
23 Alberta Utilities Commission have addressed this issue in recent decisions, ordering that
24 shareholders should bear some portion of the STI costs associated with earnings/net income
25 targets.¹⁵⁷ While there does not appear to be full exclusion of these costs in those cases, as
26 proposed by the Consumer Advocate in this proceeding, these jurisdictions appear to have
27 changed their position since this issue was last reviewed by the Board in 2013.

28
29 Sound financial management, including earning the allowed return, is important to the ongoing
30 financial strength of Newfoundland Power and translates into lower costs for customers. A sound
31 credit rating is also provided for in the *EPCA* and is one of the guiding principles for the Board
32 in setting a fair return for a utility. In setting a fair return a balance is being struck between the
33 shareholders and customers. In this jurisdiction the shareholder benefits from any earnings in
34 excess of the return allowed, subject to the excess earnings cap. While the Board agrees with
35 Newfoundland Power that strong performance in earnings may provide benefits to customers in
36 the long term in terms of maintaining financial integrity there is also clearly a benefit to
37 shareholders in this regard.

38
39 The Board is satisfied that STI targets related to earnings should continue to be included in the
40 STI plan. Since achievement of the STI targets for earnings provides benefits for both ratepayers
41 and shareholders the Board is of the view that the associated costs should be shared. The Board
42 holds the same view with respect to the regulatory performance STI component, especially given
43 its discretionary and subjective nature. The Board is not persuaded however that the total costs
44 should be excluded from the revenue requirement, given the benefits to both ratepayers and

¹⁵⁶ PUB-NP-079

¹⁵⁷ Consumer Advocate Submission, page 52

1 shareholders. The Board will allow for recovery of 50% of the costs for the earnings and
 2 regulatory components of Newfoundland Power's STI plan.

3
 4 **The Board accepts Newfoundland Power's executive compensation policies as reasonable,**
 5 **except that only 50% of the costs of the STI components for earnings and regulatory**
 6 **performance will be allowed to be recovered in rates.**

7
 8 **5.2 Conservation and Demand Management**

9
 10 Newfoundland Power and Hydro have offered customer energy conservation programs on a joint
 11 and coordinated basis since 2009. The *Five-Year Conservation Plan: 2016-2020*, dated October
 12 2015, was developed by both Hydro and Newfoundland Power and updates the previous *Five-*
 13 *Year Conservation Plan: 2012-2016*.¹⁵⁸ The updated plan sets out the utilities' joint plans for
 14 program offerings in conservation and demand management, and customer education and
 15 support. The planning and evaluation criteria and programming costs for the next five years are
 16 also set out. The proposed change to use the total resource cost test as a primary means of
 17 program economic screening was accepted by the Board in its acceptance of the Settlement
 18 Agreement.

19
 20 The updated *Five-Year Conservation Plan: 2016-2020* reflects the events of recent winters
 21 which identified issues with peak load and generating capacity on the Island Interconnected
 22 system that will continue into the planning period. Other considerations included the anticipated
 23 decrease in marginal energy costs with the interconnection of Muskrat Falls, which will limit the
 24 types of conservation programs that will be cost-effective, and the incorporation of higher supply
 25 costs into customer rates, which is expected to increase the demand for conservation
 26 programming. Economic conditions, technology advancements, and changes to codes and
 27 standards also affect the types of conservation programs that are to be offered.

28
 29 Two issues were raised by the Consumer Advocate with respect to Newfoundland Power's
 30 proposals for conservation and demand management programming for its customers: i)
 31 performance targets for conservation program results, and ii) the proposed educational initiative
 32 to promote mini split heat pumps.

33
 34 The Consumer Advocate noted that Newfoundland Power's corporate performance targets do not
 35 include achievement of results in relation to conservation and demand management. He
 36 submitted that targets for participation and demand and energy savings should be set in
 37 conjunction with the Board on an annual basis, with the results published annually.

38
 39 The Consumer Advocate also noted that the five-year conservation and demand management
 40 plan includes an educational initiative targeted at mini split heat pumps starting in 2016. The
 41 educational initiative is intended to encourage customers to choose high efficient mini split heat
 42 pumps installed by qualified contractors. On-bill financing for qualified systems and installations
 43 undertaken by qualified contractors will also be available. The Consumer Advocate submitted
 44 that the \$100,000 identified in the plan for each year for this initiative is very modest, and
 45 expressed concern about the low level of spending and effort directed to this educational

¹⁵⁸ The Joint Plan was filed in Volume 2 of the Application.

1 initiative. He referenced the findings in the *Mini Split Heat Pump Research Report* completed by
2 Newfoundland Power, which identified the importance of proper sizing and location of mini
3 splits, as well varying operational performance results for different mini splits:

4
5 Indications of growing interest and growing potential for Mini Splits could lead to
6 increasing installations of MSHPs that are not efficient and which could contribute to a
7 higher system peak. Therefore, there are real risks that without a properly funded and
8 resourced educational initiative, we could end up with a situation where installations
9 which will be in place for decades are not optimal. Frankly it is difficult to conceive that
10 spending only \$100,000 per year on the Mini Split Heat Pump Educational Initiative
11 will be sufficient to educate and guide consumer choices in a timely fashion. The
12 amount of spending should reflect the amount of risk involved with customers choosing
13 inefficient technology and installation procedures for the island's future energy
14 consumption and demand.¹⁵⁹
15

16 The Consumer Advocate referenced the current programs being undertaken by Nova Scotia
17 Power and New Brunswick Power with respect to mini splits. According to the Consumer
18 Advocate Nova Scotia Power is currently studying the impact to the average household
19 contribution to peak of mini splits or central heat pumps in a home with existing electric
20 baseboard heating. New Brunswick Power has a \$500 rebate program with the goal to encourage
21 homeowners "to install heat pumps which are best suited to New Brunswick's climate and over
22 winter peaking electricity system." He submitted:

23
24 Newfoundland Power should be ordered to file an update to its MSHP Report
25 incorporating data as regards the peak reduction benefits, if any, found in New
26 Brunswick and to track and report on this progress and results of Nova Scotia Power's
27 study, subject to that utility's cooperation. In the meantime, given the current marginal
28 cost of energy pending first power from the interconnection and the recognized need to
29 educate the public about the installation of suitable, efficient MSHP technology, a
30 rebate in support of the educational initiative's goals should be implemented for
31 MSHPs.¹⁶⁰
32

33 Newfoundland Power submitted that its approach to conservation and demand targets has been
34 consistent and that Newfoundland Power is required to report annually to the Board on its
35 conservation and demand management performance. Newfoundland Power submits that no
36 evidence has been presented to show that its performance in relation to conservation and demand
37 management has not been reasonable.
38

39 In reply to the Consumer Advocate's submissions on mini split heat pumps Newfoundland
40 Power pointed to Mr. Henderson's testimony on the cost-effectiveness of mini split heat pumps
41 from the perspective of system savings:
42

43 Mini-splits do not currently meet the requirement of utility economic testing. That
44 means from a system perspective, the cost of mini-splits could not be recovered from
45 the system savings. Nevertheless Newfoundland Power recognizes that customer
46 demand for mini-splits will increase as customer rates increase. To support customer

¹⁵⁹ Consumer Advocate Submission, page 56/28 to page 57/2

¹⁶⁰ Consumer Advocate Submission, page 58/17-23

1 needs, the company's five year conservation plan includes a program to address
2 customer education and installer capacity. We will also provide on bill financing for
3 mini-split installation. Our program is similar to other utilities mini-split programs
4 except it does not include any rebates.¹⁶¹
5

6 Newfoundland Power noted that, between 2016 and 2020, it plans to spend approximately
7 \$529,000 on the mini split heat pump initiative and that the program "will be monitored and
8 continually reviewed to ensure it is promoting MSHP in a manner that will provide customers
9 the highest achievable savings at a reasonable cost."¹⁶² Newfoundland Power also submitted that
10 the Consumer Advocate provided no evidence that its approach to educating customers on mini
11 split heat pump technology is not reasonable and provided no evidence in support of either an
12 alternative approach or a higher expenditure on the educational initiative.
13

14 With respect to the request by the Consumer Advocate that it be required to update its mini split
15 heat pump report, incorporating data and findings from New Brunswick and Nova Scotia,
16 Newfoundland Power noted that it works with suppliers and installers to stay current with mini
17 split heat pump technology and participates in a working group that includes other Atlantic
18 Canadian utilities and provincial governments. Newfoundland Power stated that it will continue
19 to report on developments with respect to mini split heat pumps in its annual conservation and
20 demand management reports.
21

22 Newfoundland Power stated the inclusion of a rebate for mini split heat pumps as proposed by
23 the Consumer Advocate is not economically justified based on the tests used for screening and
24 selection of cost-effective programs consistent with the least-cost provision of service.
25 According to Newfoundland Power the mini split heat pump technology did not pass the Total
26 Resource Cost test, even using a favourable load factor assumption, meaning a rebate would not
27 be a cost effective utility investment.
28

29 Board Findings – Conservation and Demand Side Management 30

31 The Board is satisfied the Newfoundland Power's approach to conservation and demand
32 management is appropriate and aligns with utility and customer interests. The Board notes that in
33 Order No. P.U. 13(2013) Newfoundland Power was required to file a report in relation to its
34 conservation program and review process. In developing its updated Conservation Potential
35 Study, Newfoundland Power worked jointly with Hydro to ensure consultation with interested
36 parties and stakeholders. Throughout the process, workshops were held with residential and
37 commercial customers, trade allies, retail partners, and government and non-government
38 agencies. The utilities also made a joint presentation to the Board. These efforts ensured that all
39 parties were aware of and had opportunities to contribute to the *Five-year Conservation Plan:
40 2016-2020*. Newfoundland Power also reports to the Board on its conservation and demand
41 performance annually.
42

43 The Board also recognizes the value of the educational initiative being undertaken by
44 Newfoundland Power to increase customer awareness of the importance of proper sizing and

¹⁶¹ Newfoundland Power Reply Submission, page F-3

¹⁶² Newfoundland Power Reply Submission, page F-3

1 installation of mini split heat pumps. In the Board's view Newfoundland Power is taking a
2 responsible, proactive approach to this issue and the allocation of \$100,000 to this initiative is
3 reasonable. The Board notes Mr. Henderson's testimony that mini splits do not currently meet
4 the least-cost test required under the legislation, which means that system savings from the
5 installation of this technology are not sufficient to recover utility costs at this point. The Board
6 accepts that customers may benefit on an individual basis from installing mini split heat pumps
7 in terms of lower overall energy costs, as demonstrated in Mr. Adam's presentation on the mini
8 split heat pump installation in his own house. However the Board is responsible for ensuring the
9 provision of least cost reliable power and therefore approaches that do not result in overall
10 system savings, and therefore savings to all customers should not be approved. The Board
11 acknowledges that other jurisdictions appear to be taking different approaches but without an
12 understanding of the policy and regulatory framework under which these programs are being
13 undertaken, the Board does not believe it is appropriate to require any additional effort or
14 demands from Newfoundland Power in this area.

15 16 **6.0 Costs**

17
18 Newfoundland Power shall pay the costs of the Board arising from this Application, including
19 the costs of the Consumer Advocate incurred by the Board, pursuant to sections 90(1) and 117(3)
20 of the *Act*.

21 22 23 **PART THREE: RATE IMPLEMENTATION**

24 25 **7.0 Compliance Filing**

26
27 As a result of the determinations of the Board in this Order revisions to the forecast 2016 and
28 2017 revenue requirement and calculation of the forecast average rate base and rate of return on
29 rate base for 2016 and 2017 may be required. No submissions were made in these proceedings in
30 relation to the Newfoundland Power's established range of return on rate base of ± 18 basis
31 points, which will be maintained.

32
33 **Newfoundland Power will be required to file a revised forecast 2016 and 2017 revenue**
34 **requirement to reflect the determinations of the Board in this Decision and Order.**

35
36 **Newfoundland Power will be required to file an application for approval of a revised**
37 **calculation of the forecast average rate base and rate of return on rate base for the 2016**
38 **and 2017 test years to reflect the determinations of the Board in this Decision and Order.**

39
40 Newfoundland Power will also be required to file an application for approval of a Schedule of
41 Rates, Tolls and Charges effective July 1, 2016, to implement the proposals in the Application,
42 incorporating the determinations of the Board in this Decision and Order. As a part of the
43 accepted regulatory process Newfoundland Power will also be filing an application for approval
44 of new rates effective July 1, 2016 as a result of the annual Rate Stabilization Account
45 adjustment. The Board will require Newfoundland Power to combine the application in relation
46 to the Rate Stabilization Account adjustment with the application to be filed as a result of this
47 Order.

1 **Newfoundland Power will be required to file an application for approval of a revised**
2 **Schedule of Rates, Tolls and Charges, reflecting the determinations of the Board in this**
3 **Decision and Order and incorporating the annual Rate Stabilization Account adjustment,**
4 **effective for service provided on and after July 1, 2016.**

1 **PART FOUR: BOARD ORDER**

2
3 **IT IS THEREFORE ORDERED THAT:**

4
5 **Rate Base, Return on Rate Base and Range of Return**

- 6
7 1. Newfoundland Power shall file an application for approval of a revised forecast
8 average rate base and rate of return on rate base for 2016 and 2017, based on the
9 proposals in the Application and incorporating the determinations of the Board in this
10 Order, including:
11 i) a common equity component in the capital structure not to exceed 45% for
12 ratemaking purposes; and
13 ii) a ratemaking rate of return on common equity of 8.5%.
14
15 2. Newfoundland Power shall file an application on or before November 15, 2017 for
16 approval of the 2018 forecast average rate base and rate of return on rate base
17 maintaining the ratemaking common equity ratio and return on common equity
18 established in this Order.
19
20 3. Newfoundland Power shall, unless otherwise directed by the Board, file its next general
21 rate application, with a 2019 test year, no later than June 1, 2018.
22
23 4. The use of an automatic adjustment formula shall be suspended pending a further
24 Order of the Board.
25

26 **Revenue Requirement**

- 27
28 5. Newfoundland Power shall calculate and file a revised forecast revenue requirement
29 for the 2016 and 2017 test years, based on the proposals contained in the Application
30 and incorporating the determinations of the Board in this Order, including a reduction
31 of 50% in the Short-Term Incentive amounts related to earnings and regulatory
32 performance.
33

34 **Depreciation**

- 35
36 6. Newfoundland Power's proposal to use the depreciation rates recommended in the
37 2014 Depreciation Study filed for the calculation of depreciation expense with effect
38 from January 1, 2016 is approved.
39

40 **Other Regulatory Matters**

- 41
42 7. The amortization from July 1, 2016 to December 31, 2018 of hearing costs in an
43 amount of up to \$1.0 million is approved, and any costs over this amount billed to
44 Newfoundland Power may be collected through the Rate Stabilization Account.

- 1 8. The amortization from July 1, 2016 to December 31, 2018 of the amount of the revenue
2 shortfall for 2016 resulting from the July 1, 2016 implementation of new rates arising
3 from this Order is approved.
4
- 5 9. Newfoundland Power's proposal to change its evaluation of customer conservation
6 programs by use of the total resource cost test and program administrator cost test is
7 approved.
8

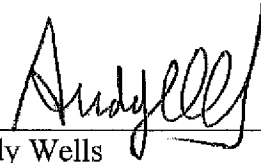
9 Rates, Rules and Regulations

- 10
- 11 10. Newfoundland Power's proposed changes to the rules and regulations covering service,
12 and proposed changes to rate design and structure, as set out in the Application, are
13 approved.
14
- 15 11. Newfoundland Power's proposed changes to the General Service Contribution in Aid
16 of Construction Policy to be effective on and after July 1, 2016 are approved.
17
- 18 12. Newfoundland Power shall file an application for approval of a revised Schedule of
19 Rates, Tolls and Charges effective for service provided on and after July 1, 2016, based
20 on the proposals in the Application, incorporating the determinations of the Board in
21 this Order, and the annual Rate Stabilization Account adjustment.
22
- 23 13. Newfoundland Power shall file a revised Rules and Regulations to be effective July 1,
24 2016.
25

26 Costs

- 27
- 28 14. Newfoundland Power shall pay the costs and expenses of the Board arising from the
29 Application, including the expenses of the Consumer Advocate incurred by the Board.

DATED at St. John's, Newfoundland and Labrador, this 8th day of June, 2016.



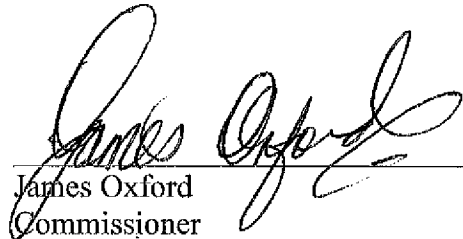
Andy Wells
Chair & Chief Executive Officer



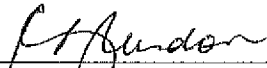
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Board Secretary

Newfoundland & Labrador

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