WHENEVER. WHEREVER.
We'll be there.

NEWFOUNDLAND POWER
A FORTIS COMPANY

November 9, 2021

Board of Commissioners
of Public Utilities
P.O. Box 21040
120 Torbay Road
St. John's, NL A1A 5B2

Attention: G. Cheryl Blundon
Director of Corporate Services
and Board Secretary

Dear Ms. Blundon:

Re: Newfoundland Power's 2022/2023 General Rate Application – Witness List (Updated) and Rebuttal Evidence

Please find enclosed the original and 10 copies of Newfoundland Power's:

1. Witness List (Updated);

2. Newfoundland Power Inc. Executive Compensation Review prepared by Wiclif Ma of Korn Ferry;

3. DBRS Morningstar Rating Report on Newfoundland Power dated October 19, 2021; and

4. Cost of Capital Rebuttal Testimony prepared by James Coyne of Concentric Energy Advisors Inc.

If you have any questions regarding the enclosed, please feel free to contact the undersigned.

Yours truly,

Lindsay Hollett
Senior Legal Counsel

Enclosures

c. Shirley Walsh
Newfoundland and Labrador Hydro

Dennis Browne, Q.C.
Browne Fitzgerald Morgan & Avis

Newfoundland Power Inc.
55 Kenmount Road • P.O. Box 8910 • St. John's, NL A1B 3P6
PHONE (709) 737-5364 • FAX (709) 737-2974 • **lhollett@newfoundlandpower.com**

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

IN THE MATTER OF a general rate application (the "Application") by Newfoundland Power Inc. ("Newfoundland Power") to establish customer electricity rates for 2022 and 2023.

NEWFOUNDLAND POWER'S WITNESS LIST
(submitted November 9th, 2021)

1. The witnesses who are currently expected to appear in this proceeding on behalf of Newfoundland Power are as follows:

Company Witnesses

Mr. Gary Murray	Corporate Overview
Mr. Byron Chubbs	Customer Operations
Ms. Paige London	Finance; Rate Base & Revenue Requirement
Mr. Michael Comerford (*if required*)	Customer, Energy and Demand Forecast

Expert Witnesses

Mr. James Coyne	Cost of Capital
Mr. Wiclif Ma (*if required*)	Executive Compensation
Mr. John Wiedmayer (*if required*)	Depreciation

2. Biographies of the Company witnesses are attached as Appendix A to this Witness List. Mr. Coyne's biography is contained within the Cost of Capital Report and Mr. Ma's biography is contained within the Executive Compensation Review, both filed with the Board as part of this Application. Mr. Wiedmayer's biography is attached as Appendix B.

3. Newfoundland Power reserves the right to present further witnesses and/or have Company witnesses appear as a panel as may be desirable to expeditiously address issues at hearing that are indicated in the Issues List of other participants, or that otherwise arise in the proceedings on the Application.

DATED at St. John's, Newfoundland and Labrador, this 9th day of November, 2021.

NEWFOUNDLAND POWER INC.
Lindsay Hollett and Liam O'Brien
Counsel for Newfoundland Power Inc.
P.O. Box 8910
55 Kenmount Road
St. John's, NL A1B 3P6

Telephone: (709) 737-5364
Telecopier: (709) 737-2974
Email: lhollett@newfoundlandpower.com
lobrien@curtisdawe.com

Appendix A
Biographies of Company Witnesses

Gary Murray, P. Eng.
President & Chief Executive Officer
Newfoundland Power Inc.

Gary Murray is President and Chief Executive Officer of Newfoundland Power Inc., a company that has proudly served the people of our province for 135 years.

Mr. Murray joined Newfoundland Power in 2002, and has been a member of the Executive Team for over five years. He most recently held the position of Vice President, Customer Operations. Gary has extensive engineering and utility experience within North America. Over his career, he has gained a comprehensive understanding of the provincial electricity system and in depth industry knowledge. Prior to joining Newfoundland Power, Mr. Murray worked in the offshore oil and gas and hydroelectric industries.

Mr. Murray is from Placentia and holds a Bachelor of Engineering (Civil) Degree from Memorial University of Newfoundland. He has completed the Finance for Senior Executives Program at Harvard Business School. Mr. Murray was also inducted as a Fellow of Engineers Canada in 2019.

Mr. Murray serves as a Director of Newfoundland Power, Maritime Electric, Belize Electric Company Ltd. (BECOL) and the Canadian Electricity Association. He is a member of the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador, where he also serves as Chair of the Association's Limited License Committee and a member of their Registration Committee

Gary has been instrumental in building a culture of customer service excellence, operational efficiency and innovative thinking at Newfoundland Power. Under Mr. Murray's leadership, the commitment to delivering safe, reliable electricity service, while focusing on the health and safety of our employees, our customers and our communities, remains stronger than ever.

Byron Chubbs
VP Engineering & Energy Supply
Newfoundland Power Inc.

Byron Chubbs is Vice President, Engineering and Energy Supply, for Newfoundland Power Inc., a company that has proudly served the people of our province for 135 years.

Mr. Chubbs is responsible for energy supply, system planning, engineering and information technology. He also has corporate responsibility for inclusion and diversity.

Mr. Chubbs joined Newfoundland Power in 2006, holding progressively senior roles including Director, Eastern Region, and Director, Operations Technology. In 2016, he joined our sister company, Maritime Electric, as Vice President, Customer Service, with responsibility for transmission and distribution operations, safety, customer service and communications. Byron rejoined Newfoundland Power in July 2018 as Vice President, Energy Supply and Planning.

Under Mr. Chubbs' leadership, the Company is looking to the future with a focus on sustainability and innovation.

Mr. Chubbs is from St. Lewis in Labrador and holds a Bachelor of Engineering (Electrical) Degree from Memorial University of Newfoundland. He has completed the Advanced Leadership Program at Memorial's Gardiner Institute and the Finance for Senior Executives Program at Harvard Business School.

Mr. Chubbs is a member of the Association of Professional Engineers and Geoscientists of Newfoundland & Labrador. Mr. Chubbs also serves on the Canadian Electrical Association's Distribution Council and National Emerging Issues Committee, and is a Director of the St. John's Board of Trade.

Paige London, CPA
Vice President, Finance & Chief Financial Officer
Newfoundland Power Inc.

Paige London is Vice President, Finance, and Chief Financial Officer for Newfoundland Power Inc., a company that has proudly served the people of our province for 135 years.

Ms. London holds both a Bachelor of Commerce Degree (Hons.) and a Bachelor of Arts Degree (Economics) from Memorial University of Newfoundland, and a Chartered Accountant Designation. She is also a member of the Chartered Professional Accountants of Newfoundland and Labrador.

Ms. London joined Newfoundland Power in February 2017 and is responsible for all aspects of the Company's finance function, as well as having corporate responsibility for human resources and the Company's charity, Power of Life.

Prior to joining Newfoundland Power, Ms. London served as Director, Financial Reporting at Fortis Inc. In that position, she had responsibilities associated with financial reporting, financial planning, cash management, capital markets access and investor relations. Prior to that, she held progressive finance positions at Fortis Inc. since 2004.

Ms. London is an active volunteer in Newfoundland and Labrador, and is currently a member of the Dr. H. Bliss Murphy Cancer Care Foundation Board of Directors.

Michael Comerford
Manager, Regulation
Newfoundland Power Inc.

Michael Comerford is Manager of Regulation at Newfoundland Power Inc., a company that has proudly served the people of our province for 135 years.

Mr. Comerford joined Newfoundland Power in 2007 as Controls and Automation Engineer before becoming Superintendent of Regional Engineering for St. John's Region in 2010. He joined the Regulatory Team in 2013 and is responsible for the management of Newfoundland Power's customer, energy, and demand forecasts, cost of service studies, customer rates, and monthly revenue and purchased power reporting.

Mr. Comerford is from St. John's and holds a Bachelor of Engineering (Electrical) Degree and a Master of Business Administration from Memorial University. He is a member of the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador and the Institute of Electrical and Electronics Engineers (IEEE).

Mr. Comerford is a member of the Canadian Electricity Association Economic Regulation Innovation Committee and serves on the Board of Directors of Wataynikaneyap Power, a partnership between Fortis and 24 First Nations communities in northwestern Ontario with a mandate to construct approximately 1,800 km of transmission line to remote First Nations communities.

Appendix B
Biography of Mr. John Wiedmayer

John F. Wiedmayer, CDP
Project Manager, Depreciation Studies
Gannett Fleming Valuation and Rate Consultants, LLC

John Wiedmayer is Project Manager, Depreciation Studies, for Gannett Fleming Valuation and Rate Consultants LLC.

With more than 28 years of consulting experience, Mr. Wiedmayer conducts depreciation and valuation studies for clients in the electric, gas, railroad, telephone, water, and wastewater industries.

A certified depreciation professional, Mr. Wiedmayer is a faculty member of the Society of Depreciation Professionals and provides training to industry professionals at the Society's annual meeting. He has presented expert testimony before state regulatory commissions in Missouri, Illinois, New York, Pennsylvania, Kentucky, Arizona, Utah, and Maryland, and the Canadian public service commissions in Nova Scotia, Newfoundland and Labrador, as well as the Federal Energy Regulatory Commission.

Mr. Wiedmayer holds a bachelor of arts degree in engineering from Lafayette College and a master of business administration from The Pennsylvania State University. A past president of the Society of Depreciation Professionals, he also is an active member of the National Society of Professional Engineers and the Pennsylvania Society of Professional Engineers.

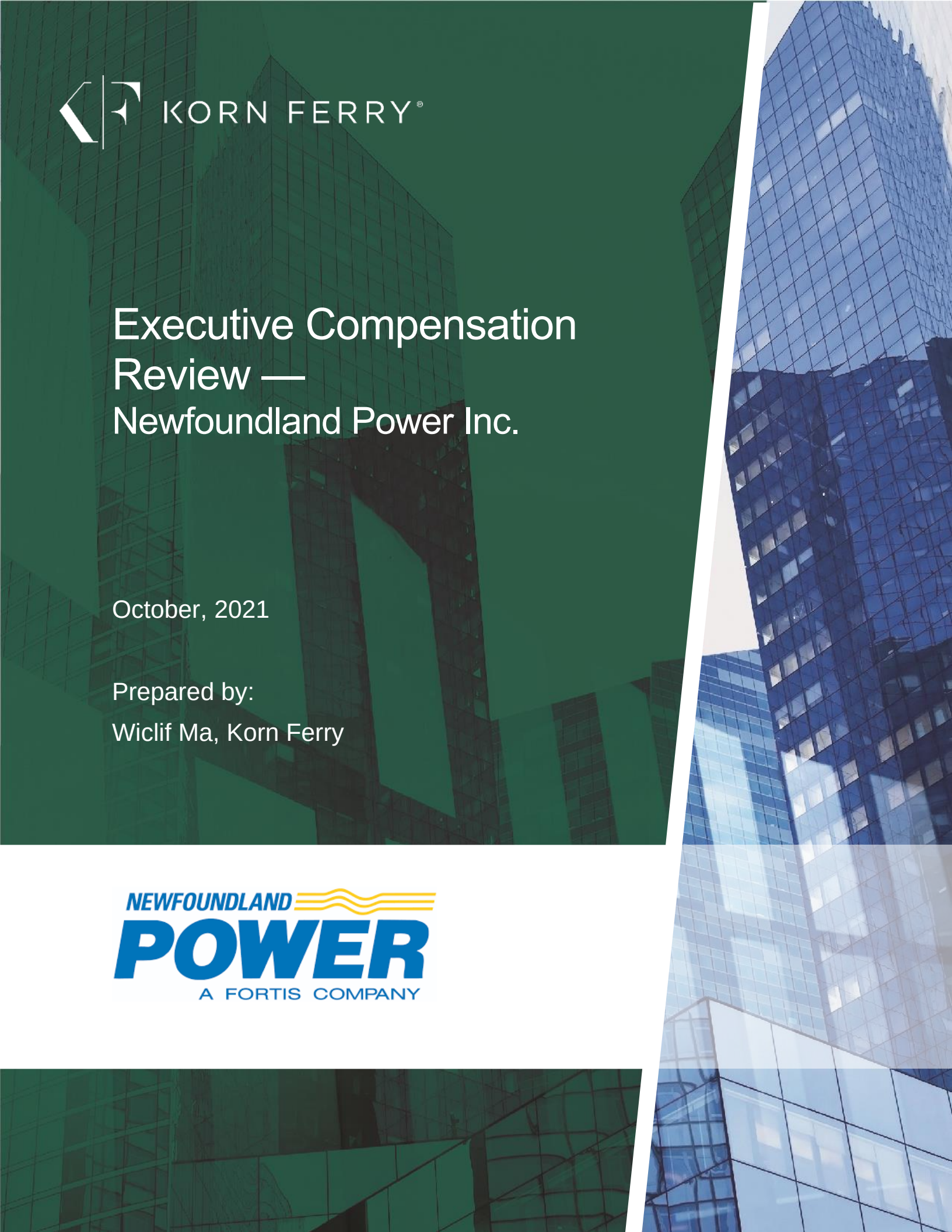
KORN FERRY®

Executive Compensation Review — Newfoundland Power Inc.

October, 2021

Prepared by:
Wiclif Ma, Korn Ferry

NEWFOUNDLAND POWER
A FORTIS COMPANY



Contents

1. Project Scope

Korn Ferry (CA) Ltd. ("**KF**") has been retained by Newfoundland Power Inc. ("**NFP**") to provide a market review of NFP's compensation level for its four senior executive positions:

1. President & CEO
2. VP Customer Operations
3. VP Engineering & Energy Supply
4. VP Finance & CFO

The following are the review objectives:

- Comparing NFP executive jobs to others in the market on the basis of similar job content (i.e., evaluation points), which is consistent with NFP's historical executive compensation principles;
- Comparing NFP compensation values to those of a broad selection of Canadian Commercial Industrial organizations (i.e., the comparator group), which is consistent with NFP's historical executive compensation principles;
- Assessing compensation values against the median level (i.e., 50th percentile or P50) of the defined comparator group, which is consistent with NFP's historical executive compensation principles; and
- Analyzing NFP's total remuneration including salary, short term incentive, long term incentive and benefits (including pension and perquisites).

This review has been prepared by Mr. Wiclif Ma, Client Partner, Korn Ferry Executive Pay and Governance Practice. For references, please see consultant biography in Appendix A.

2. Summary of Observations

- KF believes that it is reasonable for NFP to compare its executive remuneration level against jobs with similar job size (i.e., Hay Points) in the broad Canadian Commercial Industrial market as its comparator group.
- KF believes that it is reasonable for NFP to use the median compensation value of the comparator group compensation values as the basis by which to establish its own executive pay standards. This policy of referencing to the Median is typical in the Canadian marketplace across all industries.
- NFP executive actual salaries range from 12% below the market median to the market median.
- NFP sets its salary range in +/-15% of the market median. The private sector market tends to either set the salary range +/-20% of the market median or do not set any salary range at the executive level. In general, we observe that NFP's salary range spread tends to be narrower than those that adopted a salary range in the market. NFP's salary differentials are within its range structure.
- NFP target short-term incentive (STI) levels, expressed as a % of salary, are lower than the market median.
  - 50% of salary for President & CEO
  - 40% of salary for VP Customer Operations
  - 35% of salary for VP Engineering and Energy Supply; and VP Finance & CFO
- NFP target long term incentive (LTI) levels, are within the range of the market median among those companies that provide LTI. However, when both LTI providers and non-providers are considered, NFP is slightly higher than the market median (P50). This is indicated by the improvement of variance from market median (P50) between Target Total Cash and Target Total Direct.
- Compared to the last review in 2018, we observe that there were declines in the comparator group 2020 market LTI values as a result of the pandemic challenges. These reflect:
  - Some organizations made grants in absolute number of share units, and depressed share prices decreased the LTI value.
  - Some organizations had lower stock option values due to a lower interest rate assumption used in their valuation.

3. Methodology: Job Content / Job Evaluation

Every organization has unique attributes with respect to business functions, size (e.g., revenues, assets), geographical diversity, ownership, and corporate structure. Furthermore, the jobs within each organization are unique relative to factors such as mandate, reporting relationship, decision-making authority, etc. These attributes should be normalized when an organization compares its jobs to those of the market.

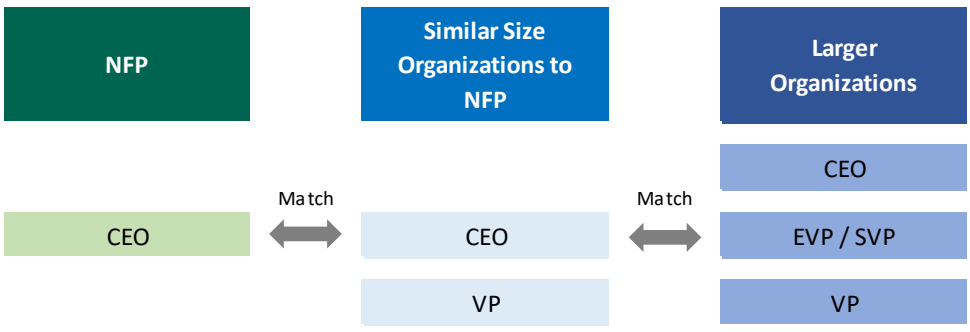
KF uses its job evaluation methodology to "point score" all positions in its compensation database. Job evaluation allows the skills, efforts, and responsibilities of a job to be quantified, such that the resulting points may be used as a comparison proxy that adjusts for the differences between the various comparator organizations and their unique job mandates. Highlights of the KF Method of Job Evaluation are provided in Appendix B.

Each of the four NFP executive jobs in scope has been evaluated, and their Total Job Evaluation Points, which have remained unchanged from 2018, are illustrated in following table (Table 1):

Table 1 – NFP Job Evaluations

NFP Jobs	Total Job Evaluation Points
President & CEO	2128
VP Customer Operations	1566
VP Engineering & Energy Supply	1486
VP Finance & CFO	1418

For comparison purposes, all other positions in the comparator market are assigned job evaluation points using the same and consistent methodology. The use of job evaluation points allows us to expand the selection of comparators by including organizations that are larger or smaller, but are considered relevant to NFP. For example, the NFP CEO would not be benchmarked directly against the CEO of the larger organizations in our compensation analysis, but to an executive level that would have the same job evaluation points as the CEO, as illustrated in the diagram below:



It should be noted that the evaluation process only concerns itself with the skills, efforts and responsibilities required for competent performance. The evaluation points do not reflect incumbent-specific characteristics such as performance, actual pay, or years of service.

4. Methodology: Comparator Markets

For this review, KF dataset is effective as of December 2020 with a total of 546 participating organizations. In aligning with NFP pay principles, 359 Commercial Industrial organizations of the total database have been selected for this review. The participant list of Commercial Industrial organizations is illustrated in Appendix C.

KF believes that it is reasonable for NFP to compare itself to the list of organizations in Appendix C because:

- Jobs are compared on a "point adjusted" basis which means they are compared to those of similar overall skill, effort and responsibility, and not necessarily on the basis of "same title"; and
- The organizations are comparably classified as "private sector commercial industrial" and NFP competes for its executive resources with organizations across the breadth and depth of business sectors across Canada.

5. Methodology: Statistical Percentile

This review will present comparative values at three percentile levels, being:

- The 25th percentile, which represents the compensation values at which twenty-five percent of the database observations pay less and seventy-five percent pay more;
- The Median (50th percentile or P50), which represents the compensation values at which fifty percent of the database observations pay less and fifty percent pay more; and
- The 75th percentile, which represents the compensation values at which seventy-five percent of the database observations pay less and twenty-five percent pay more.
- NFP sets its pay standards relative to Median (50th percentile or P50), which KF believes is reasonable because:
  - As a utility it is appropriate to compare to the standard of a broad market as opposed to only comparing against the higher or lower paying sectors; and
  - NFP has adopted a pay-for-performance principle in its compensation framework and in its determination of incumbent-specific salary and bonus values, such that higher performers will be appropriately paid above market standards (i.e., above P50), while those who have not yet proven themselves may not be fully paid to market standards (i.e., below P50).

6. Methodology: Compensation Elements

The review will consider the compensation elements as listed and defined below.

- Actual Base Salary: The actual annual base salary paid to the comparable database observations.
- Target Total Cash: Actual base salary plus an annual bonus value that represents the target award assuming that all incentive provisions are accomplished exactly to plan.
- Target Total Direct: Target total cash plus a mid/long term incentive value (i.e., LTI) that represents the assumed annualized net present value of the mid/long term incentive grants.
- Target Total Remuneration: Target total direct plus a noncash value that is the estimated value of the sum of the employer provided benefit, perquisite, and retirement programs.

Further explanation of the calculation of the benefit items is found in Appendix D.

7. Compensation Analysis

Tables 2 and 3, following, compare NFP compensation values to those of the comparator market. KF's valuation method is to apply the same economic and demographic assumptions and valuation standards across all database participants, for relative comparison purposes. Please refer to Appendix D for a more detailed explanation.

- Table 2 compares the values of all compensation elements previously defined in this report.
- Table 3 excludes the NFP compensation elements that are not borne by the rate-payers (i.e., NFP long term incentive values and the non-regulated portion of the short term incentive values).

Table 2 – Total Remuneration (All Compensation Elements)

Title	Points	Actual Base Salary ($)	Target Total Cash ($)	Long-Term * Incentive Present Value (Eligible) ($)	Target Total Direct Compensation ($)	Target Total Remuneration ($)
President & CEO	**2128**	**397,000**	**595,500**	**357,300**	**952,800**	**1,096,621**
P75		530,220	932,370	740,457	1,525,693	1,639,804
P50		451,927	711,092	400,641	923,176	1,030,173
P25		355,270	492,582	173,918	581,289	639,805
NFP vs. P50		-12%	-16%	-11%	3%	6%
VP Customer Operations	**1566**	**285,000**	**399,000**	**142,500**	**541,500**	**647,804**
P75		404,991	623,584	396,852	814,995	924,794
P50		324,511	458,091	189,376	564,478	625,273
P25		262,513	336,931	83,786	366,613	393,310
NFP vs. P50		-12%	-13%	-25%	-4%	4%
VP Engineering & Energy Supply	**1486**	**293,000**	**395,550**	**117,200**	**512,750**	**607,368**
P75		374,443	585,569	336,647	704,741	808,955
P50		303,332	424,156	178,104	478,673	536,291
P25		251,342	323,687	79,435	354,080	382,933
NFP vs. P50		-3%	-7%	-34%	7%	13%
VP Finance & CFO	**1418**	**288,500**	**389,475**	**115,400**	**504,875**	**598,390**
P75		351,645	553,256	279,611	638,356	738,698
P50		287,461	406,652	158,292	449,358	504,672
P25		241,847	312,429	74,736	343,427	374,219
NFP vs. P50		0%	-4%	-27%	12%	19%

Notes:
* NFP LTI values reflect Policy LTI values.

Table 3 – Adjusted Total Remuneration (Non-Regulated Portion of STI and LTI are excluded for NFP)

Title	Points	Target Total Remuneration ($)	Short-Term Incentive Non-Regulated Portion ($)	Long-Term * Incentive Non-Regulated Portion ($)	Adjusted ** Target Total Remuneration ($)
President & CEO	**2128**	**1,096,621**	**(26,798)**	**(357,300)**	**712,523**
P75		1,639,804			1,639,804
P50		1,030,173			1,030,173
P25		639,805			639,805
NFP vs. P50		6%			-31%
Market Position					P30
VP Customer Operations	**1566**	**647,804**	**(11,970)**	**(142,500)**	**493,334**
P75		924,794			924,794
P50		625,273			625,273
P25		393,310			393,310
NFP vs. P50		4%			-21%
Market Position					P36
VP Engineering & Energy Supply	**1486**	**607,368**	**(10,768)**	**(117,200)**	**479,400**
P75		808,955			808,955
P50		536,291			536,291
P25		382,933			382,933
NFP vs. P50		13%			-11%
Market Position					P41
VP Finance & CFO	**1418**	**598,390**	**(17,418)**	**(115,400)**	**465,572**
P75		738,698			738,698
P50		504,672			504,672
P25		374,219			374,219
NFP vs. P50		19%			-8%
Market Position					P43

Notes:

* NFP LTI values reflect Policy LTI values.

** NFP total remuneration after non-rate payer adjustments (i.e., non-regulated STI and all LTI), but is compared to market data that includes full value of STI and LTI.

Appendix A – Consultant Biography

Wiclif Ma

Client Partner,
Lead, Canadian Executive Pay & Governance

E: wiclif.ma@kornferry.com
T: 1 (647) 798 3716
C: 1 (416) 562 6702

Delivering Results for Clients

Wiclif Ma is a Client Partner for Korn Ferry, based in the firm's Toronto office.

He has provided executive pay and governance ("EP&G") advisory services to many major organizations in the industrial and financial sectors.

In his 25+ years at formerly Hay Group, Mr. Ma has worked with many global and local clients to define their executive pay strategy, design their total reward programs to support their business effectively, and articulate their pay governance standards and processes.

Expertise

Mr. Ma's expertise spans many areas related to executive pay matters, include pay strategy diagnostics, development of pay principles, assessment and modelling of performance metrics, assessment, and management of pay risk, regulatory compliance, governance and oversight, and market practices, etc.

He is the Canadian leader in EP&G expertise development, covering pay research, white paper development, methods for total incentive diagnostics & valuation, methodologies for total remuneration benchmarking and evaluation. He has also advised various clients in both public and private sectors with respect to benefits and pension (SERP) arrangements.

Academic and Professional Background

Prior to joining Korn Ferry, Wiclif led the remuneration function of a major utilities corporation in Hong Kong where he was responsible for the planning and implementation of pay and benefits policies.

Wiclif holds degrees in Business Administration and Economics from York University, in Toronto.

Appendix B – Korn Ferry Hay Guide Chart-Profile Method[SM] of Job Evaluation

Korn Ferry Hay Guide Chart-Profile Method[SM] of Job Evaluation ("JE Method") is the most widely used process for evaluating executive, management, professional, technical, and clerical jobs in the world. Our proprietary method is also commonly used for organizational and job analysis as well as compensation comparison, allowing us to benchmark jobs across industries and different ownership structures.

Our JE Method has taken into consideration the organization size, type of function, scope and portfolio of the executive role. Two principles are fundamental to the Korn Ferry Hay Guide Chart–Profile Method[SM]:

- An understanding of the content of the job to be measured.
- The direct comparison of one job with another job to determine relative value.

The comparison is made between different aspects of total job content, defined as know-how, problem solving and accountability. The sum of these measures, expressed in KF Hay Points, represents the value of the whole job.

Know-How	+	Problem Solving	+	Accountability	=	KF Hay Points
measures the total of every kind of knowledge and skill, however acquired, needed for acceptable job performance.		measures the thinking required in the job.		measures the relative degree to which the job, when performed competently, can affect the end results of the organization or a unit within the organization.		

Know How

- Practical procedures and knowledge, specialized techniques, and learned skills;
- Planning, coordinating, directing or controlling the activities and resources associated with an organizational unit or function; and
- Active, practicing, person-to-person skills in the area of human relationships.

Problem Solving

- Environment in which the thinking takes place; and
- Challenge presented by the thinking to be done.

Accountability

- Nature and degree of the decision-making or influence of the job;
- Unit or function most clearly affected by the job; and
- Nature of that effect.

Appendix C – Commercial Industrial Market Participants

3M Canada Company
ABB Inc.
Abercrombie & Fitch – Kids
Abercrombie & Fitch - Outlet
Abercrombie & Fitch Co. - Abercrombie
Abercrombie & Fitch Co. - Hollister
Acciona
Adient
Advance Auto Parts Inc.
Afton Chemical Canada Corporation
Agnico-Eagle Mines Limited
Air New Zealand
Air Products Canada Ltd.
AkzoNobel Canada Inc.
Alamos Gold Inc.
Alberta-Pacific Forest Industries Inc.
Albertsons LLC
Allnex Canada Inc.
ALS Canada Ltd.
Amazon Canada
Amcor Rigid Plastics
American Eagle Outfitters Canada Inc.
Amgen Canada Inc.
Amico Canada Inc.
Amway Canada Corporation
AOC Aliancys
Apotex Inc.
ArcelorMittal - Baffinland Iron Mines Corporation
ArcelorMittal Canada
ArcelorMittal Dofasco Inc.
ArcelorMittal Mines Canada
ArcelorMittal Tailored Blanks Americas Corp.
Archer-Daniels-Midland Company (Canada) Ltd.
Aritzia Inc.
Arlanxeo Canada Inc.
Armacell Canada Inc.
Ascena Retail Group - Loft
Astellas Pharma Canada Inc.
AstraZeneca Canada Inc.
AT&T Global Services Canada Co.
ATCO Wood Products Ltd.
Atlantic Gold Corporation
Avis Budget Group, Inc.
B2Gold Corp.
Barilla
Barrick Gold Corporation
Barry Callebaut Canada Inc.
Basell Canada Inc.
BASF Canada Inc.
Bayer Inc.
Bell Canada
Best Buy Canada Ltd.
BigSteelBox Corporation
BlackLine Systems, Inc.
Boehringer Ingelheim (Canada) Ltd.
Boortmalt
Brand Loyalty Canada
Bristol-Myers Squibb Canada Co.
Burberry Canada
Bureau Veritas
Bylands Nurseries Ltd.
Cabot Canada Ltd.
Campari Canada
Canadian Pharmaceutical Distribution Network
Canpotex Limited
Capgemini Canada
Capstone Mining Corp.
Cardone Industries
Carter's Canada
Casper Sleep Inc.
Caterpillar of Canada Corporation
Centerra Gold Inc.
Centric Brands
Centric Brands -- BCBG
Centric Brands -- Buffalo Jeans
CEPSA Química Bécancour
CGGVeritas
Champion Petfoods LP
Charlotte Tilbury
Chartered Professional Accountants of Canada
CHEP Canada Inc.
Chico's FAS, Inc.
Chico's FAS, Inc. - Outlet
Chico's FAS, Inc. - White House/Black Market
Chico's FAS, Inc. - White House/Black Market - Outlet
Christie Digital Systems Canada Inc.
CKF Inc.
Corbion Canada
CRH
D Wave Systems Inc.
Danfoss Inc.
David Yurman
Delicato Family Wines
Distell Wine & Spirits (Canada) Inc.
Dominion Diamond Corporation - Ekati Diamond Mine
dormakaba Canada Inc.
Dow Chemical Canada Inc.
Dr. Oetker Canada Ltd.
DSM Nutritional Products Canada Inc.
Dymax Corporation
Dyno Nobel Canada Inc.
Eaton Corporation
Edgewell Personal Care Canada, ULC
EDP Renewables Canada Ltd.
Egger Group
Elliott Turbomachinery Canada, Inc.
EnerSys Canada Inc.
EPCOR Electricity Distribution Ontario Inc.
ERIKS Canada
ESC Corporate Services Ltd.
Evolution Mining
Evonik Canada Inc.
Fast Retailing Co., Ltd. - UNIQLO
Federated Cooperatives Ltd.
Ferrero Canada Limited
First Majestic Silver Corp.
First Quantum Minerals Ltd.
Fisher & Paykel Healthcare Inc.
Follett Corporation
Fossil Canada

Fossil Canada - Outlet
G4S
Gap (Canada) Inc.
Gap (Canada) Inc. - Banana Republic
Gap (Canada) Inc. - Banana Republic - Outlet
Gap (Canada) Inc. - Gap
Gap (Canada) Inc. - Gap - Outlet
Gap (Canada) Inc. - Intermix
Gap (Canada) Inc. - Old Navy
Gap (Canada) Inc. - Old Navy - Distribution Center
GE Canada
GE Digital
GE FieldCore
GE Global Growth
GE Global Operations
GE Healthcare Canada
GE Lighting
GE Power
General Kinetics Engineering Corporation
Gensource Potash Corporation
Gentherm
Gerdau Long Steel North America
Glatfelter Gatineau Ltée
GlaxoSmithKline Inc.
Glencore Canada Corporation - Copper
Glencore Canada Corporation - Sudbury INO
Glencore Canada Corporation - Zinc
Granite Construction Inc.
Griffith Foods Limited
Groupe SEB Canada Inc.
GS1 Canada
Hanesbrands Canada
Harte Gold Corp.
Hendrix Genetics
Henry Schein Canada
Hilti (Canada) Corporation
Holland Christian Homes
Holt Renfrew
Holt Renfrew - Outlet
Home Hardware Stores Limited
Honda Canada Inc.
Hotelbeds
HudBay Minerals Inc.
Hudson's Bay Company
Huntsman Polyurethanes
IAMGOLD Corporation
IMDEX Limited
Impala Canada Ltd.
Information Services Corporation
Innophos Canada Inc.
Instacart
IXS Holdings, Inc.
J.Crew Group, Inc.
J.Crew Group, Inc. - Outlet
J.D. Irving, Limited
J.D. Irving, Ltd. - Cavendish
J.D. Irving, Ltd. - Construction and Equipment Division
J.D. Irving, Ltd. - Irving Consumer Products & Personal Care
J.D. Irving, Ltd. - Irving Group of Companies
J.D. Irving, Ltd. - Media Division
J.D. Irving, Ltd. - Midland
J.D. Irving, Ltd. - Pulp and Paper Division
J.D. Irving, Ltd. - Retail Division
J.D. Irving, Ltd. - Sawmills and Woodlands
J.D. Irving, Ltd. - Shipbuilding Division
J.D. Irving, Ltd. - Transportation and Logistics
Janssen Inc.
John Deere Limited Canada
JTI
JYSK Canada
K92 Mining Inc.
Kantar
Kellogg Canada Inc.
Kimberly-Clark Corporation
Kinross Gold Corporation
Klockner-Pentaplast
Koninklijke Vopak
L Brands Inc. - Bath & Body Works
L Brands Inc. - Bath & Body Works -- Outlet
L Brands Inc. - Victoria Secret
L Brands Inc. - Victoria Secret -- Outlet
Lafarge Canada Inc.
Lake Shore Gold Corporation
Lantic Inc.
LANXESS Canada Co./Cie
LEGO
Leo Pharma
Levi Strauss & Co. (Canada) Inc.
Lhoist North America, Inc.
LifeLabs
Loblaws
Louboutin
Lowe's
Lowe's -- Outlet
Lundin Mining Corporation
Luxottica Group
Luxottica Group - Antoine Laoun Pro Inc.
Luxottica Group - Distribution Centre
Luxottica Group - LensCrafters
Luxottica Group - Luxury Stores
Luxottica Group - Oakley
Luxottica Group - Oakley Wholesale
Luxottica Group - Oliver Peoples
Luxottica Group - Pearle Vision
Luxottica Group - Sunglass Hut
LVMH Moet Hennessy Louis Vuitton - Celine
LVMH Moet Hennessy Louis Vuitton - Christian Dior
LVMH Moet Hennessy Louis Vuitton - Fendi
LVMH Moet Hennessy Louis Vuitton - Fresh
LVMH Moet Hennessy Louis Vuitton - Loro Piana
LVMH Moet Hennessy Louis Vuitton S.A.
Magna International Inc.
Manitoulin Group of Companies
Marine Harvest Canada
Maschinenfabrik Reinhausen GmbH
McCormick Canada Co.
McElhanney Ltd.
Melitta Canada Inc.
Mercedes-Benz Canada Inc.
Messer Canada Inc.
Methanex Corporation
Mexichem Fluor Canada Inc.
Michelin North America (Canada) Inc.
Microsoft Canada Inc.
Mine Canadian Malartic

Montship Inc.
Moog
Mountain Equipment Co-op
Mountain Province Diamonds Inc.
Mozilla Foundation
NDT Global Inc.
New Gold Inc.
Newmont Goldcorp
Nike Canada
Nike Canada - Converse
Nike Canada - Outlet
Nokian Tyres Canada Inc.
Nordstrom, Inc.
Nutreco Canada Inc.
OceanaGold Corporation
Olin Corporation
Orica Canada Inc.
Pandora
Pandora - Outlet
PARC Retirement Living
PepsiCo Canada
Permian Industries Ltd.
Perry Ellis International Canada
Pet Valu Canada Inc.
PetSmart, Inc.
Philip Morris Canada
Pinnacle Renewable Energy Inc.
Pretium Resources Inc.
Procon Mining & Tunnelling
PRYSMIAN
Purdue Pharma
Ralph Lauren Corporation
Real Estate Council of Alberta
Richemont
Rio Tinto Alcan
Riversdale Resources Limited
Rolls-Royce Canada Ltd.
Rotho Blaas
Royal Caribbean Cruises Ltd.
RUETGERS Canada Inc.
SABIC Innovative Plastics Canada Incorporated
Saks Fifth Avenue
Samuel, Son & Co., Limited
Santen Pharmaceutical Co., Ltd
Sarens
Schlumberger Oilfield Services
Schweitzer Engineering Laboratories
SEMAFO Inc.
Shaw Communications Inc.
Sherritt International Corporation
SHV Energy N.V.
Siegwerk Canada Inc.
Siemens Canada Limited
Sika Canada Inc.
SmileDirectClub
SMS Equipment Inc.
Smurfit Kappa Bag-In-Box Canada
Sodexo Canada
Solar Turbines Incorporated
Solvay Canada
Sonoco Canada Corporation
Staples Business Depot
Star Diamond Corporation
Talentsoft
Tapestry -- Coach Inc.
Tapestry -- Coach Inc. -- Outlet
Tapestry -- Kate Spade & Company
Tapestry -- Kate Spade & Company -- Outlet
Tapestry -- Stuart Weitzman Canada
Tapestry -- Stuart Weitzman Canada -- Outlet
Tapestry Inc.
TAQA North
Tech Data Canada Corporation
Teck Resources Limited
The Boston Beer Company
The Calgary Stampede
The Children's Place
The Children's Place - Outlet
The China Navigation Company Pte. Ltd.
The Green Organic Dutchman Holdings
The Home Depot Canada
The Little Potato Company
The Mosaic Company
TIETO OYJ
Tiger Calcium Services Inc.
TinyEYE Therapy Services
TJX Companies
TMF Canada Operations Inc.
Tolko Industries Ltd.
Torex Gold Resources Inc.
Torrid
Toyota Canada Inc.
Toyota Motor Manufacturing Canada Inc.
Trevali Mining Corporation
Trilogy Metals Inc.
Under Armour Canada
Unifrax
uniPHARM Wholesale Drugs Ltd.
UPM Raflatac
Urban Outfitters, Inc.
VAISALA OYJ
Vale Canada Limited
Valmet Ltd.
Valvoline Canada Corp.
Vitro Flat Glass Canada, Inc.
Wal-Mart Canada Corp.
Warby Parker
Wärtsilä Canada Incorporated
WD-40 Products Canada Ltd.
Westlake Chemical Corporation
Westmoreland Mining Holdings LLC
Wilo Canada Inc.
Yamana Gold Inc.
Zumiez Inc.

Appendix D – Korn Ferry Benefit Valuation Methodology

For the purpose of evaluating benefit plan competitiveness (not actual cost), KF utilizes a proprietary actuarial valuation methodology to evaluate benefit plans based on the cash equivalence value of the benefits.

The following are the key considerations.

- The comparison of actual benefit cost between employers is generally affected by differences in demographic, claim experience, plan coverage and features, and actuarial assumptions etc.
- In evaluating a program's competitiveness, KF's benefit valuation model uses "standard cost assumptions", instead of a company's specific costs, which eliminates the impact of cost variables, as mentioned above.
- KF's valuation model places a relative cash equivalent value on each specific feature of a benefit program. The value for each plan is then compiled to produce an overall program value appropriate for market comparison. In general, the more generous the feature, the higher the relative value. For example, life insurance coverage of 3x salary is more valuable than 2x salary.
- For benefit items, which are conditional on the occurrence of an event such as disability, death or continuous employment in an organization, the cash equivalent value has been calculated on the basis of the probability of receiving such items using appropriate actuarial assumptions. For items such as cars and other perquisites which have an immediate value, the cash equivalent value has been calculated on the basis of the most probable average projected replacement cost in Canada.

For compensation comparison, only those benefit programs over and above minimum statutory requirements are valued in our report. KF benefit values take into account the employer-paid portion only and exclude holidays and vacations.

About Korn Ferry

Korn Ferry is a global organizational consulting firm. We help clients synchronize strategy and talent to drive superior performance. We work with organizations to design their structures, roles, and responsibilities. We help them hire the right people to bring their strategy to life, and we advise them on how to reward, develop, and motivate their people.

KORN FERRY®

MORNINGSTAR | DBRS

Rating Report
Newfoundland Power Inc.

DBRS Morningstar
October 19, 2021

Contents

Vipin Pal
+1 416 597-7572
vipin.pal@dbrsmorningstar.com

Tom Li
+1 416 597-7378
tom.li@dbrsmorningstar.com

Ratings

Debt	Rating	Rating Action	Trend
Issuer Rating	A	Confirmed	Stable
First Mortgage Bonds	A	Confirmed	Stable

Rating Update

On October 4, 2021, DBRS Limited (DBRS Morningstar) confirmed Newfoundland Power Inc.'s (Newfoundland Power or the Company) Issuer Rating and First Mortgage Bonds rating at "A." All trends are Stable. The ratings are supported by the Company's stable regulated operations, mainly consisting of electricity distribution; the reasonable regulatory regime under the Board of Commissioners of Public Utilities (PUB); and a solid financial profile.

Newfoundland Power is regulated under cost-of-service (COS) regulation by the PUB and continues to benefit from multiple regulatory deferral accounts, reducing volatility in earnings and cash flow. Effective July 1, 2021, the PUB approved an effective increase of 2.5% in electricity rates charged to customers due to Company's rate stabilization adjustment mechanism. On May 27, 2021, the Company has also filed for a 2022/2023 general rate application (GRA); the GRA is currently under review by the PUB.

DBRS Morningstar considers the biggest challenge Newfoundland Power faces to be the potential rate shock for ratepayers from the Muskrat Falls project, an 824-megawatt hydroelectric generating facility developed by Nalcor Energy. Nalcor Energy notes that commissioning of the Muskrat Falls project will most likely miss the deadline of November 2021. A rate shock could severely reduce electricity volumes and affordability for Newfoundland Power's customers and negatively affect the Company's earnings and cash flow. On July 28, 2021, the government of Newfoundland and Labrador and the Government of Canada announced an agreement in principle for the financial restructuring of the Muskrat Falls project. Although DBRS Morningstar views this as a positive development, the uncertainty on future rates remains. DBRS Morningstar will continue to monitor the situation and treat a potential rate shock as an event risk.

DBRS Morningstar views weak provincial economic conditions with high dependence on volatile commodity prices as another challenge because it could significantly affect the affordability for Newfoundland Power's customers. In 2020, the Coronavirus Disease (COVID-19) pandemic and low oil prices severely affected the provincial economy. The monthly unemployment rate spiked to 17.9% in June 2020 from 12.4% in February 2020. However, DBRS Morningstar notes that provincial economic

conditions have improved compared with the previous year because of higher oil prices and high vaccination rates. Nevertheless, DBRS Morningstar believes that the Company's strong financial profile provides enough flexibility to absorb any short-term negative impact on cash flow to support the current ratings.

Newfoundland Power's key credit metrics remained solid for the current ratings in 2020 and for the last 12 months (LTM) ended June 30, 2021. The Company's earnings and cash flow from operations have largely remained steady year over year (YOY), reflecting the stable nature of its operations. Newfoundland Power is expected to have moderate free cash flow deficits for the next few years because of the maintenance and growth capital spending along with dividend payout. DBRS Morningstar expects the Company to manage these deficits prudently to maintain leverage in line with the regulated capital structure, allowing key credit metrics to stay within the current rating category. A positive rating action for the Company is unlikely in the near to medium term because of the weaker franchise area and uncertainty regarding the rate impact from the Muskrat Falls project. Although unlikely, if ratepayers' ability to pay bills or Newfoundland Power's ability to fully pass on costs is negatively affected, DBRS Morningstar may downgrade the Company's ratings by multiple notches.

Financial Information

	6 mos. June 30		12 mos. to June 30	For the year ended December 31				
Newfoundland Power Inc.	**2021**	**2020**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**
Total debt in capital structure	54.9%	56.1%	54.9%	55.3%	54.1%	54.5%	54.6%	53.8%
Cash flow/Total debt	17.5%	15.0%	18.7%	17.7%	18.4%	17.5%	18.3%	18.2%
EBIT gross interest coverage (times)	2.46	2.37	2.65	2.60	2.54	2.58	2.72	3.03
(CFO+interest)/(Interest+sinking fund payment)	5.05	4.52	3.49	3.32	3.46	3.32	3.42	3.32

Issuer Description

Newfoundland Power is a regulated utility that primarily distributes but also generates and transmits electricity to approximately 271,000 customers throughout the island portion of the Province of Newfoundland and Labrador (the Province: rated A (low) with a stable trend by DBRS Morningstar). The Company is a subsidiary of Fortis Inc. (rated A (low) with a stable trend by DBRS Morningstar).

Rating Considerations

Strengths

1. Stable and supportive regulatory environment

Newfoundland Power operates in a stable and supportive regulatory environment that is based on COS regulation. The PUB allows for the pass-through of purchased power costs, and a Rate Stabilization Account (RSA) is in place to absorb fluctuations in purchased power costs relating primarily to the cost of fuel oil used by Newfoundland and Labrador Hydro (NLH; rated A (low) with a Stable trend by DBRS Morningstar) to generate electricity. Furthermore, the Company also has a Weather Normalization Reserve (WNR) to mitigate earnings volatility due to variances in the weather from the normal weather conditions.

2. Solid financial profile

Newfoundland Power has maintained a solid financial profile, underpinned by the Company's reasonable financial leverage and stable cash flow. For the LTM ended June 30, 2021, Newfoundland Power's total debt in the capital structure remained low at approximately 54.9%, while its cash flow-to-debt and EBIT interest coverage ratios remained solid at 18.7% and 2.65 times, respectively.

3. Stable customer base

Newfoundland Power has a stable customer base with power sales consisting solely of those to residential and commercial customers. As such, the Company is somewhat less sensitive to economic cycles than utilities with exposure to industrial customers, and it has relatively more stable throughputs YOY.

Challenges

1. Uncertainty about rate shock from the Muskrat Falls project

The Muskrat Falls project is an 824-megawatt hydroelectric generating facility developed by Nalcor (100% owned by the Province). The latest estimate for the total cost for the project has gone up to $13.1 billion from $12.7 as estimated in June 2017 and it is currently uncertain how costs for the project will be recovered from Newfoundland Power's customers. Based on current projections, without any rate mitigation, rates are expected to increase to 22.9 cents per kilowatt hour (kWh) in 2022 (13.5 cents/kWh in 2021). DBRS Morningstar notes that on July 28, 2021, the government of Newfoundland and Labrador and the Government of Canada announced an agreement in principle for the financial restructuring of the Muskrat Falls project. Although DBRS Morningstar view this as a positive development regarding the potential relief that will be provided to ratepayers, the uncertainty on future rates remains. Should the upward pressure on rates affect the Company's ability to pass on costs, this would negatively affect its credit profile. DBRS Morningstar continues to monitor the situation and treats a potential rate shock as an event risk.

2. Weak economic outlook and franchise area

DBRS Morningstar views weak provincial economic conditions with high dependence on volatile commodity prices as another challenge because it could significantly affect the affordability for Newfoundland Power's customers. In 2020, the pandemic and low oil prices severely affected the provincial economy. The monthly unemployment rate spiked to 17.9% in June 2020 from 12.4% in February 2020. However, DBRS Morningstar notes that provincial economic conditions have improved compared with the previous year because of higher oil prices and high vaccination rates. Additionally, electricity consumption growth in the Province is largely driven by growth in the customer base, which is dependent on population growth. The Province has seen a decline in its overall population since 2017. DBRS Morningstar notes that if the decline in the overall population continues, it may negatively affect the franchise area of the Company.

3. Reliance on one major power supplier

Newfoundland Power relies heavily on NLH for its power supply, sourcing approximately 93% of its power requirements from one provider. As the Province experiences relatively extreme weather, including winter storms, there have been instances in the past where infrastructure malfunctions for NLH have led to widespread blackouts. DBRS Morningstar notes that after the Muskrat Falls project's commissioning, approximately 35% to 40% of the peak demand will be served from the mainland via Labrador Island Link (LIL). As a result, the reliability of the LIL will become very critical for the Company's power supply. LIL is 1,100 kilometer-long transmission line between Muskrat Falls project and the Avalon peninsula on the Island of Newfoundland. DBRS Morningstar also notes that once the Muskrat Falls project comes into service, dependency on bunker C fuel, which is used by the Holyrood Thermal Generating Station and has seen some volatility over the past few years, would decrease.

Earnings and Outlook

	6 mos. June 30		12 mos. to June 30	For the year ended December 31				
(CAD millions where applicable)	**2021**	**2020**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**
Net revenues	120	121	249	250	239	237	232	229
EBITDA	80	80	170	169	162	160	161	169
EBIT	44	45	97	98	94	95	98	108
Gross interest expense	18	19	37	38	37	37	36	36
Earning before taxes	24	23	56	55	54	54	54	52
Net income before non-recurring items	19	18	44	44	43	42	42	41
Reported net income	19	18	44	44	43	42	42	41
Actual return on equity	7.3%	7.0%	8.5%	8.4%	8.3%	8.3%	8.4%	8.6%
Regulated rate base	N/A	N/A	N/A	1,182	1,154	1,117	1,092	1,061

2020 Summary

- EBITDA was higher in 2020 when compared with 2019, reflecting higher rate base and lower corporate costs partially offset by higher operating expenses associated with the January 2020 storm.
- Net income has consistently increased in 2020–16, reflecting the growing rate base.

2021 Summary/Outlook

- EBITDA slightly increased for the LTM ended June 30, 2021, largely reflecting lower operating expense during the second half of 2021 (H2 2021) compared with the same period in 2020 because of the costs associated with the storm in January 2020.
- DBRS Morningstar expects relatively stable financial performance in 2021 because the Company operates a critical infrastructure and is not subjected to volume risk associated with changes in weather.

Financial Profile

	6 mos. June 30		12 mos. to June 30	For the year ended December 31				
(CAD millions where applicable)	**2021**	**2020**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**
Net income before non-recurring items	19	18	44	44	43	42	42	41
Depreciation & amortization	36	35	73	71	68	65	63	61
Deferred income taxes and other	0	(4)	1	(2)	3	(0)	5	4
Cash flow from operations[1]	55	50	118	113	114	107	110	105
Dividends paid	(14)	(14)	(46)	(46)	(28)	(28)	(39)	(22)
Capital expenditures	(47)	(44)	(102)	(100)	(105)	(99)	(92)	(103)
Free cash flow (bef. working cap. changes)	(6)	(9)	(31)	(33)	(19)	(20)	(21)	(20)
Changes in non-cash work. cap. items	4	(16)	53	33	10	6	0	14
Net free cash flow	(2)	(25)	22	(0)	(8)	(14)	(21)	(6)
Net equity change	0	(9)	0	(9)	(0)	(0)	(0)	(0)
Net debt change	(6)	48	(36)	18	8	15	21	7
Other	8	(0)	0	(8)	(0)	(1)	(0)	(1)
Change in cash	(0)	14	(14)	0	(0)	0	(0)	(0)
Total debt	632	669	632	638	621	612	597	576
Total debt in capital structure	54.9%	56.1%	54.9%	55.3%	54.1%	54.5%	54.6%	53.8%
Cash flow/Total debt	17.5%	15.0%	18.7%	17.7%	18.4%	17.5%	18.3%	18.2%
EBIT gross interest coverage (times)	2.46	2.37	2.65	2.60	2.54	2.58	2.72	3.03
Dividend payout ratio	75.2%	78.1%	105.0%	106.5%	65.8%	66.6%	93.9%	54.4%

1. Excluding cash change due to regulatory mechanism.

2020 Summary

- Newfoundland Power's key credit metrics remained supportive of the "A" ratings in 2020.
- DBRS Morningstar adjusted cash flow from operations for 2020 is slightly lower than 2019 because of the timing of cashflow due to lower-than-expected sale volumes.
- Similar to previous years, the majority of capital expenditures (capex) in 2020 was maintenance capex.
- The Company paid dividends in accordance with its policy of maintaining the debt-to-capital in line with the regulatory capital structure as approved by the PUB for rate-setting purposes.

2021 Summary/Outlook

- Newfoundland Power's key credit metrics for the LTM ended June 30, 2021, continued to support the current rating category.
- Higher cash flow from operations for H2 2021, compared with the same period in 2020, reflects the timing of cashflow due to operation of regulatory mechanisms.
- The PUB has approved a capital plan of $112.8 million for 2021. The Company had spent approximately $41 million as of June 30, 2021.
- DBRS Morningstar expects Newfoundland Power to continue to maintain its approved capital structure through dividend management and debt financing.

Long-Term Debt Maturities and Liquidity

(CAD millions - as at June 30, 2021)	2021-2022	2023-2024	2025-2026	Thereafter	Total
First mortgage sinking fund bonds	35.6	13.6	42.0	542.9	634.1
Credit facilities (unsecured)	0.0	0.0	0.0	0.0	0.0
Demand facility (uncommitted)	0.9	0.0	0.0	0.0	0.9
Total	**36.5**	**13.6**	**42.0**	**542.9**	**635.0**

Note: Gross debt; debt issue costs not subtracted from total debt.

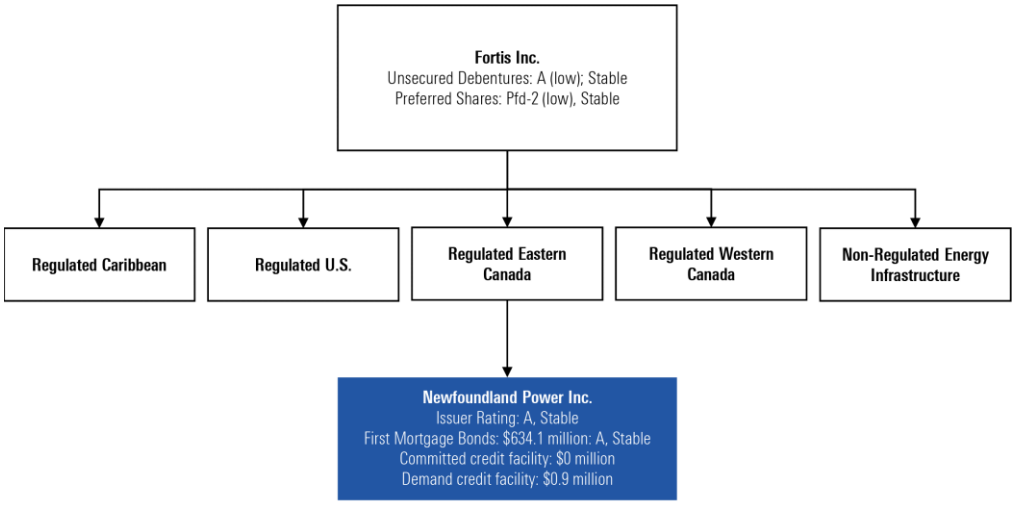
- Newfoundland Power has a $100.0 million committed revolving unsecured credit facility expiring in August 2026 (nil outstanding as at June 30, 2021) and a $20.0 million uncommitted demand facility ($0.9 million outstanding as at June 30, 2021).
- The credit facilities contain customary covenants, including maintaining a debt-to-capitalization ratio at or below 65%. The Company was in compliance with all covenants as at June 30, 2021.
- The debt repayment schedule is modest in the near term to the medium term.

Debt Outstanding

(CAD millions)		
Debt Outstanding		**Dec 2020**
First mortgage sinking fund bonds:		
$40 million Series AF, due 2022	10.125%	28.8
$40 million Series AH, due 2026	8.900%	30.4
$50 million Series AI, due 2028	6.800%	39.0
$75 million Series AJ, due 2032	7.520%	61.5
$60 million Series AK, due 2035	5.441%	50.4
$70 million Series AL, due 2037	5.901%	60.2
$65 million Series AM, due 2039	6.606%	57.2
$70 million Series AN, due 2043	4.805%	65.1
$75 million Series AO, due 2045	4.446%	70.5
$75 million Series AP, due 2057	3.815%	72.0
$100 million Series AQ, due 2060	3.608%	99.0
		634.1
Credit & demand facilities		0.0
		634.1
Less: current portion		(7.2)
		626.9

- The First Mortgage Bonds are secured by a first fixed and specific charge on property, plant, and equipment owned or to be acquired by the Company and by a floating charge on all other assets.
- The Company must meet an Earnings Test, whereby the net earnings are at least twice the annual interest charges on all bonds outstanding after any proposed additional bond issue. Net earnings are considered in a period of any 12 consecutive months, terminating within 24 months preceding the delivery of such additional bonds.
- The Company must also meet the Additional Property Test, whereby the additional bonds must not exceed 60% of the fair value of the additional property.
- Given the availability of funds under the credit facilities and stable cash flow from operations, the Company's liquidity remains adequate to fund both working capital requirements and cash flow deficits.

Organizational Structure



As at June 30, 2021.

Regulation

Regulatory Overview

- Newfoundland Power is regulated by the PUB, which is responsible for setting electricity rates, approving capex, and deciding on the appropriate capital structure and return on equity (ROE) for rate-setting purposes. Rates are set based on a COS methodology.
- On January 24, 2019, the PUB issued the order on Newfoundland Power's 2019/2020 GRA, which established the Company's allowed ROE at 8.50% and common equity at 45.00% for the 2019 through 2021 rate years. DBRS Morningstar views the capital structure as favourable and a positive for the Company's credit profile.
    - The order didn't make any changes in the deferral accounts.
    - The order did not lead to any increase in electricity rates.
- Effective July 1, 2021, PUB approved an effective increase of 2.5% in electricity rates charged to customers as a result of the annual operation of Company's rate stabilization adjustment.
- In March 2021, the PUB approved Newfoundland Power's 2021 capital plan of $112.8 million.
- On May 27, 2021, the Company filed a 2022/2023 GRA for the PUB's approval. The decision on 2022/2023 GRA is expected in Q1 2022.

Regulator-Approved Accounts

Deferral accounts are used to smooth the impact of realized expenses and events differing from forecast.

- **Weather Normalization Reserve (WNR):** The WNR reduces earnings volatility by adjusting electricity purchases and sales to eliminate the variance between normal weather conditions, based on long-term averages, and actual realized weather conditions.
- **Rate Stabilization Account (RSA):** The RSA allows Newfoundland Power to pass through costs related to changes in the price and quantity of fuel charged by NLH to the end consumer. On July 1 of each year, customer rates are recalculated to amortize the balance in the RSA as of March 31 of the current year over the subsequent 12 months. In the absence of rate regulation, these transactions would be accounted for in a similar manner; however, the amount and timing of the recovery would not be subject to PUB approval. To the extent that actual electricity sales in any period exceed forecast electricity sales used to set customer rates, marginal purchased power expense will exceed related revenue. Effective January 1, 2008, the PUB ordered that variations in purchased power expense caused by differences between the actual unit cost of energy and the cost reflected in customer rates be recovered from (refunded to) customers through the RSA.
- **Demand Management Incentive Account (DMIA):** Through the DMIA, variations in the unit cost of purchased power related to demand are limited, at the discretion of the PUB, to 1.0% of demand costs reflected in customer rates. Balances in this account are recorded as a regulatory asset or regulatory liability on Newfoundland Power's balance sheet. The final balance of regulatory assets and liabilities is determined by the PUB, which considers the merits of the Company's conservation efforts and demand-management activities.
- **Pension Expense Variance Deferral Account (PEVDA):** The PEVDA is used when differences exist between the defined benefit pension expense calculated in accordance with designated accounting standards and the pension expense approved by the PUB for rate-setting purposes.
- **Other Post-Employment Benefits (OPEB):** The OPEB cost deferral account is used when differences exist between the OPEB expenses calculated in accordance with designated accounting standards and the OPEB expenses approved by the PUB for rate-setting purposes.
- **Excess Earnings Account (EEA):** Any earnings that exceed the upper limit of the allowed range of return on rate base set by the PUB are credited to the Company's EEA. Amounts credited to the EEA are subject to further order of the PUB.

Newfoundland Power Inc.							
(CAD millions)	June 30	Dec. 31	Dec. 31		June 30	Dec. 31	Dec. 31
Assets	**2021**	**2020**	**2019**	**Liabilities & Equity**	**2021**	**2020**	**2019**
Cash & equivalents	0	0	0	S.T. borrowings	1	7	1
Accounts receivable	60	66	84	Accounts payable	43	74	90
Regulatory assets	9	15	17	Current portion L.T.D.	36	7	87
Prepaid expenses & other	3	12	6	Other current liab.	31	21	21
Total Current Assets	**71**	**92**	**106**	**Total Current Liab.**	**111**	**109**	**200**
Net fixed assets	1,251	1,237	1,204	Long-term debt	596	624	533
Future income tax assets	227	331	347	Provisions	281	294	270
Intangibles	31	31	28	Deferred income taxes	174	175	173
Regulatory assets	98	0	0	Other L.T. liab.	29	1	1
Pensions & Other	32	28	18	Preferred shares	0	0	9
				Common equity	521	516	518
Total Assets	**1,711**	**1,720**	**1,703**	**Total Liab. & SE**	**1,711**	**1,720**	**1,703**

	6 mos. June 30		12 mos. to June 30	For the year ended December 31				
Balance Sheet & Liquidity & Capital Ratios	**2021**	**2020**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**
Current ratio	0.64	1.06	0.64	0.84	0.53	0.71	0.82	0.58
Total debt in capital structure	54.9%	56.1%	54.9%	55.3%	54.1%	54.5%	54.6%	53.8%
Cash flow/Total debt	17.5%	15.0%	18.7%	17.7%	18.4%	17.5%	18.3%	18.2%
(Cash flow-dividends)/Capex (times)	0.87	0.80	0.70	0.67	0.82	0.80	0.77	0.80
Dividend payout ratio	75.2%	78.1%	105.0%	106.5%	65.8%	66.6%	93.9%	54.4%
Coverage Ratios (times)								
EBIT gross interest coverage	2.46	2.37	2.65	2.60	2.54	2.58	2.72	3.03
EBITDA gross interest coverage	4.49	4.25	4.61	4.49	4.38	4.36	4.47	4.72
Fixed-charges coverage	2.46	2.31	2.65	2.56	2.49	2.53	2.66	2.96
Profitability Ratios								
EBITDA margin	67.0%	65.8%	68.2%	67.7%	67.8%	67.5%	69.3%	73.7%
EBIT margin	36.8%	36.8%	39.1%	39.2%	39.4%	40.0%	42.1%	47.2%
Profit margin	15.8%	15.2%	17.7%	17.4%	17.9%	17.6%	17.9%	17.7%
Return on equity	7.3%	7.0%	8.5%	8.4%	8.3%	8.3%	8.4%	8.6%
Return on capital	5.5%	5.4%	5.9%	6.0%	6.0%	6.0%	6.1%	6.3%

Operating Statistics

Operating Statistics	For the year ended December 31				
Electricity sales - breakdown (GWh)	**2020**	**2019**	**2018**	**2017**	**2016**
Residential	3,547	3,560	3,593	3,645	3,655
General service	2,182	2,287	2,283	2,277	2,295
Total sales	5,729	5,847	5,876	5,922	5,950
Growth in volume throughputs	-2.0%	-0.5%	-0.8%	-0.5%	-0.1%
Customers					
Residential	235,260	234,132	233,104	231,639	229,815
Commercial	35,025	34,913	34,891	34,811	34,591
Total	270,285	269,045	267,995	266,450	264,406
Energy generated and purchased (GWh)					
Energy generated	439	431	435	437	427
Energy purchased	5,604	5,742	5,769	5,829	5,868
Energy generated + purchased	6,043	6,173	6,204	6,266	6,295
Less: transmission losses + internal use	314	327	328	343	345
Total sales	5,729	5,847	5,876	5,923	5,950
System losses and internal use	5.5%	5.6%	5.6%	5.8%	5.8%
Installed generation capacity (MW)					
Hydroelectric	97	97	97	97	97
Gas turbine	41	37	37	37	37
Diesel	5	5	5	5	5
Total	143	139	139	139	139
Native peak demand (MW)	1,356	1,458	1,385	1,446	1,381
Rate base (CAD millions)	1,182	1,154	1,117	1,092	1,061
Growth in rate base	2%	3%	2%	3%	4%

Rating History

	Current	2020	2019	2018	2017	2016
Issuer Rating	A	A	A	A	A	A
First Mortgage Bonds	A	A	A	A	A	A
Preferred Shares – cumulative, redeemable	n/a	Pfd-2	Pfd-2	Pfd-2	Pfd-2	Pfd-2

Previous Action

- Confirmed, October 1, 2020.

Related Research

- "Corporate Risk Assessment Scorecard for the Utilities Industry," November 24, 2020.

Previous Report

- Newfoundland Power Inc.: Rating Report, October 19, 2020.

Notes:
All figures are in Canadian dollars unless otherwise noted.

For the definition of Issuer Rating, please refer to Rating Definitions under Rating Policy on www.dbrsmorningstar.com.

Generally, Issuer Ratings apply to all senior unsecured obligations of an applicable issuer, except when an issuer has a significant or unique level of secured debt.

About DBRS Morningstar

DBRS Morningstar is a full-service global credit ratings business with approximately 700 employees around the world. We're a market leader in Canada, and in multiple asset classes across the U.S. and Europe.

We rate more than 3,000 issuers and nearly 60,000 securities worldwide, providing independent credit ratings for financial institutions, corporate and sovereign entities, and structured finance products and instruments. Market innovators choose to work with us because of our agility, transparency, and tech-forward approach.

DBRS Morningstar is empowering investor success as the go-to source for independent credit ratings. And we are bringing transparency, responsiveness, and leading-edge technology to the industry.

That's why DBRS Morningstar is the next generation of credit ratings.

Learn more at dbrsmorningstar.com.

The DBRS Morningstar group of companies consists of DBRS, Inc. (Delaware, U.S.)(NRSRO, DRO affiliate); DBRS Limited (Ontario, Canada)(DRO, NRSRO affiliate); DBRS Ratings GmbH (Frankfurt, Germany)(EU CRA, NRSRO affiliate, DRO affiliate); and DBRS Ratings Limited (England and Wales)(UK CRA, NRSRO affiliate, DRO affiliate). For more information on regulatory registrations, recognitions and approvals of the DBRS Morningstar group of companies, please see: https://www.dbrsmorningstar.com/research/225752/highlights.pdf.

The DBRS Morningstar group of companies are wholly-owned subsidiaries of Morningstar, Inc.

PREPARED REBUTTAL TESTIMONY:
JAMES M. COYNE

PREPARED FOR:
NEWFOUNDLAND POWER INC.

BEFORE THE:
NEWFOUNDLAND AND LABRADOR BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

NOVEMBER 9, 2021

www.ceadvisors.com

Table of Contents

Table of Figures

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is James M. Coyne, and I am employed by Concentric Energy Advisors, Inc. ("Concentric") as a Senior Vice President. My business address is 293 Boston Post Road West, Suite 500, Marlborough, MA 01752.

Q. Did you also submit a pre-filed expert report in this proceeding?

A. Yes, I submitted evidence on behalf of Newfoundland Power Inc. ("Newfoundland Power" or the "Company") with regard to the appropriate cost of equity and capital structure to the Newfoundland and Labrador Board of Commissioners of Public Utilities (the "Board").

Q. What is the purpose of your Rebuttal Testimony?

A. The purpose of my Rebuttal Testimony is to respond to the evidence submitted on behalf of the Consumer Advocate of the Province of Newfoundland and Labrador ("Consumer Advocate") by Dr. Laurence D. Booth pertaining to the recommended return on equity ("ROE") and capital structure for Newfoundland Power.

II. SUMMARY AND OVERVIEW

Q. Please provide a brief overview of Dr. Booth's Evidence.

A. Dr. Booth recommends an ROE of 7.50 percent for Newfoundland Power, which is 100 basis points ("bps") lower than the Company's current authorized ROE of 8.50 percent, and a reduction in the Company's deemed equity ratio from 45.0 percent to 40.0 percent. Dr. Booth uses a Capital Asset Pricing Model ("CAPM") analysis and Discounted Cash Flow ("DCF") analysis, plus an adjustment of 50 basis points for

flotation costs and financial flexibility. Dr. Booth argues that Newfoundland Power is an average risk Canadian utility, and he compares the Company's deemed equity ratio to other Fortis subsidiaries in Canada. Although Dr. Booth recommends a reduction in the Company's deemed equity ratio from 45.0 percent to 40.0 percent, he does not contend that Newfoundland Power's business risk has decreased since the 2018 General Rate Application ("GRA"), when the Board accepted that the deemed common equity ratio for Newfoundland Power should be maintained at 45.0 percent. Lastly, Dr. Booth recommends continued suspension of the Automatic Adjustment Mechanism ("AAM").

Q. Are there areas in which you and Dr. Booth are in agreement?

A. Yes. Dr. Booth and I agree that:

- Canada's real GDP growth is projected at approximately 2.0 percent per year over the next several years, after the rebound in 2021 from the COVID induced recession of 2020.

- It is important to use more than one methodology to estimate the cost of equity for Newfoundland Power, although we disagree on certain inputs to the CAPM and DCF models.

- Interest rates are abnormally low and have been influenced by global economic policy. Forecasters are predicting higher interest rates in both Canada and the U.S. as economic conditions strengthen and central banks pursue a less accommodative monetary policy.

- Analyses that depend on the current level of government interest rates, such as the CAPM or Risk Premium analyses, are not providing reasonable results. For that reason, it is reasonable to consider forecast interest rates in the CAPM and Risk Premium analyses and also to consider the results of alternative financial models including the DCF model in estimating the cost of equity for Newfoundland Power in this proceeding.

- An adjustment of 50 bps for flotation costs and financing flexibility is reasonable and appropriate.

- The AAM should not be reinstated at this time.

- There have been no material changes in Newfoundland Power's business risk since the 2018 GRA, when the Board accepted that the capital structure of Newfoundland Power should be maintained at 45.0 percent common equity and 55.0 percent long-term debt.

Q. What are the primary areas in which you and Dr. Booth disagree?

A. In general, Dr. Booth's proposed reduction in the authorized ROE for Newfoundland Power from 8.50 percent to 7.50 percent, in conjunction with his proposed reduction in the Company's common equity ratio from 45.0 percent to 40.0 percent, are both individually and collectively lower than any reasonable estimate of Newfoundland Power's cost of capital. Dr. Booth's ROE recommendation is not reflective of proxy group results using commonly accepted inputs for cost of capital analyses (i.e., DCF, CAPM, Risk Premium, etc.), and does not adequately reflect the risk of Newfoundland Power relative to the other investor-owned electric utilities in Canada or the U.S. On

that basis, Dr. Booth's ROE recommendation does not satisfy the Fair Return Standard.

The key areas of specific disagreement with Dr. Booth are as follows:

- Dr. Booth's judgmental estimate of Beta of 0.45 to 0.55 is substantially below the Value Line and Bloomberg Beta estimates used in my CAPM analyses for the Canadian, North American and U.S. proxy groups, and does not account for the well-documented empirical evidence that Beta coefficients (below 1.0) systematically understate returns and thus warrant an adjustment towards the market mean of 1.0.[1] Dr. Booth's Evidence recommends adjustment towards the "grand mean" of utility Betas, which results in CAPM estimates that are unreasonably low. I have only experienced this debate on the adjustment methodology for Beta in proceedings in which Dr. Booth or his colleague Dr. Cleary have been involved as a testifying witness.

- Dr. Booth's Beta estimate of 0.45 to 0.55 is based on his personal judgment and fails to reflect current market data. As explained in my Cost of Capital Report, five year Beta coefficients (both raw and adjusted) for regulated utilities in both Canada and the U.S. have increased substantially since February 2020, as utility companies have traded more like the broad market instead of being a safe haven for investors as they traditionally have been in prior economic downturns. Dr. Booth's CAPM analysis fails to take into account the level of risk for utilities

[1] *See* Marshall E. Blume, On the Assessment of Risk, The Journal of Finance, Vol. XXVI, No. 1 (March 1971) and Marshall E. Blume, Betas And Their Regression Tendencies, The Journal of Finance, Vol. XXX, No. 3 (June 1975), where Blume found that there was strong evidence that Beta regressed toward the market mean, and that tendency was strongest in the case of the lowest risk portfolios.

relative to the broader market, and therefore substantially understates the cost of equity for an electric utility.

- Dr. Booth's estimated market risk premium ("MRP") of between 5.0 and 6.0 percent is lower than the market risk premium I have relied on of 8.18 percent. Dr. Booth's MRP is based on investor surveys and his own judgment and does not reflect the well-established inverse relationship between the market risk premium and interest rates. In addition, his MRP based on investor surveys is significantly below any forward-looking risk premium estimate based on current market data. Simply put, when interest rates are near historically low levels, one would expect the equity market risk premium to be higher than the long-term historical average.

- Dr. Booth's CAPM analysis, as adjusted for credit spreads and the bond buying programs of central banks, produces an ROE estimate within a range from 6.77 percent to 7.97 percent. His recommended ROE for a benchmark utility of 7.50 percent is slightly above the 7.37 percent midpoint of this CAPM analysis. This return, however, is approximately 100 basis points below the lowest authorized ROE for <u>any regulated utility in Canada</u>.

- Dr. Booth also presents several DCF estimates: 1) for the broad equity market in both Canada and the U.S., and 2) for a sample of U.S. electric utilities similar to my U.S. proxy group. He argues that these DCF analyses corroborate the reasonableness of his CAPM results. Dr. Booth's DCF estimates, however, are understated because he has relied on historical GDP growth rates and "sustainable" growth rates, both of which under-estimate future utility growth

prospects as estimated by knowledgeable equity analysts. In addition, Dr. Booth has not provided a DCF analysis using Canadian utilities. In my analysis, the Canadian proxy group's DCF results were substantially higher than those of the U.S. comparator group for both the Constant Growth and Multi-Stage DCF models. Finally, the results of the DCF model have been distorted by the low yields on government bonds, which has caused investors to seek higher income from dividend paying stocks such as public utilities. This has led to higher stock prices and lower dividend yields for these utility companies. Analysts have indicated that these high valuations and low dividend yields for utilities are not sustainable, especially considering projections for higher interest rates. So, even using reasonable estimates of earnings growth (which I contend Dr. Booth has not done), provides a lower than sustainable ROE using the DCF model given currently deflated dividend yields.

- Dr. Booth's position is that the allowed ROE for Newfoundland Power should be substantially lower today than when the Board approved the settlement agreement in the Company's 2018 GRA, which included an allowed ROE of 8.5 percent. My analysis indicates that equity costs have moved higher, as the Beta coefficients for regulated utilities have increased substantially, and yields on long-term government bonds have increased since July 2020 and are projected to continue to increase in response to stronger economic conditions in both Canada and the U.S.

- Dr. Booth on the one hand accepts the use of U.S. data but argues that an adjustment is needed to account for differences in risk between Canada and the U.S. In arguing that U.S. utilities have greater regulatory risk than Canadian

utilities, Dr. Booth cites reports from Moody's Investors Service ("Moody's") in 2005 and 2009, while completely disregarding the September 2013 report from Moody's indicating that the credit rating agency changed its view on the relative risk of the U.S. as compared to Canada.[2] In addition, I agree that while certain Canadian regulators previously determined that an adjustment for U.S. data was necessary to account for differences in risk between Canada and the U.S., the British Columbia Utilities Commission ("BCUC") did not make an adjustment to the U.S. proxy group in its August 2016 decision for FortisBC Energy, Inc. Dr. Booth's assertion of a U.S. risk adjustment is simply not warranted by either supporting analysis or current regulatory treatment of utilities in Canada.

- While Dr. Booth dismisses the risks associated with the Muskrat Falls project on Newfoundland Power's customers, he ultimately concludes "As it is, I agree with the company's assessment (CA-NP-022) that the business risks have not materially changed since 2018 and Newfoundland Power's business risks also continue to be defined by long standing factors."[3] In this regard, we are in general agreement.

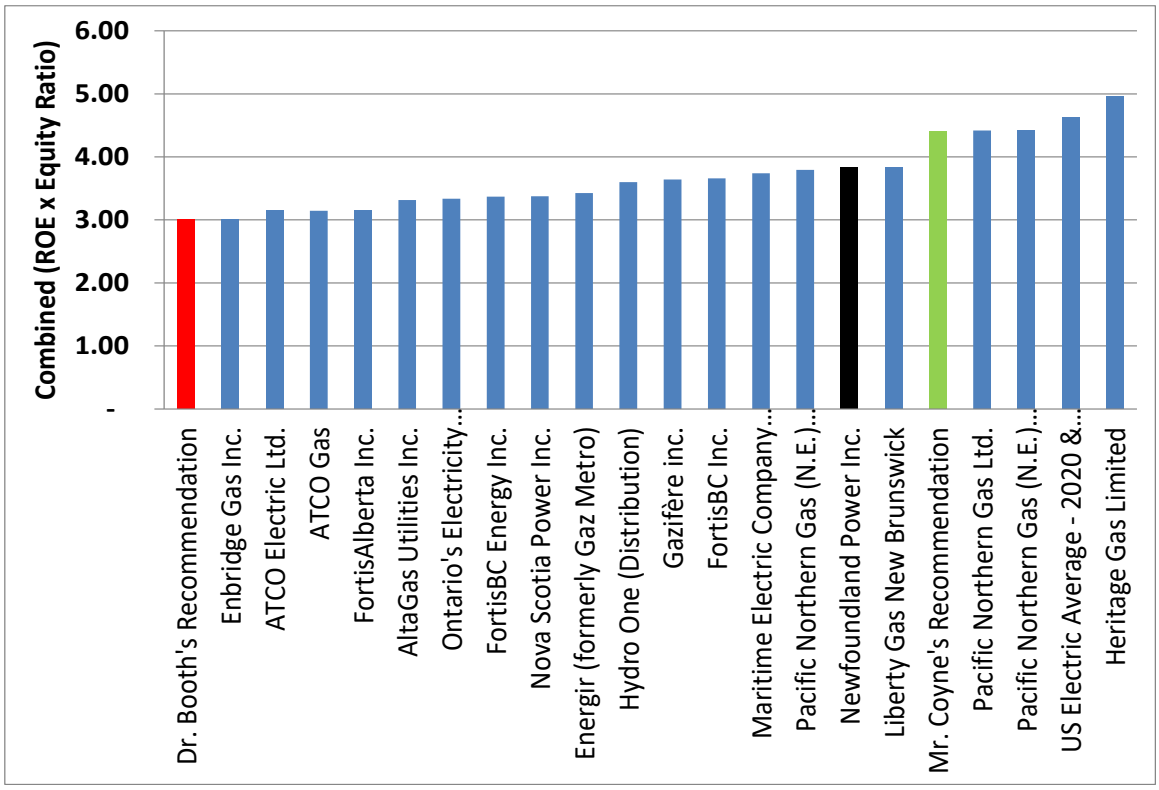
Q. Please place Dr. Booth's ROE and capital structure recommendation in the context of other Canadian electric and gas distributors.

A. Figure 1 illustrates where Newfoundland Power's weighted equity cost rate (the product of the authorized ROE and the deemed equity ratio) would fall compared to other Canadian investor-owned electric and gas distributors, based on Dr. Booth's ROE and capital structure recommendations. As the Figure shows, the combination

[2] See Concentric's Cost of Capital Report, at 40.
[3] Evidence of Laurence D. Booth, at 51.

of Dr. Booth's recommended 7.5 percent ROE and common equity ratio of 40.0 percent produces a weighted equity cost rate of 3.0 percent for Newfoundland Power. This weighted equity return falls below all but one other Canadian investor-owned electric or gas distributor (i.e., Enbridge Gas Inc.) that sets rates through a litigated proceeding. Dr. Booth's cost of capital recommendation, if adopted, would place Newfoundland Power at a significant disadvantage relative to other Canadian investor-owned utilities when raising capital and would not satisfy the Fair Return Standard.

Figure 1: Recommendation vs. Allowed for Canadian Distributors
(ROE x equity ratio)



Another important consideration is that Newfoundland Power has an Excess Earnings Account that limits the Company's return on equity to approximately 40 to 50 basis

points above the authorized return for ratemaking purposes. By contrast, Alberta's utilities can earn up to 500 basis points over their allowed return in a single year or 300 basis points for two consecutive years.[4] Ontario's electric distributors have a 300 basis point earnings deadband.[5] Fortis' two BC utilities: FortisBC Energy Inc. ("FEI", the gas utility) and FortisBC Inc. ("FBC", the electric utility) can earn up to 150 basis points over their allowed ROEs; those excess earnings are shared 50/50 with customers. An off-ramp is triggered if achieved earnings deviate from the authorized level by more than 150 basis points, either above or below the authorized ROE.[6] These are important considerations to equity investors. As shown in Figure 2, Newfoundland Power has the second lowest weighted equity return among these utilities on this basis.

Figure 2: Weighted Equity Return Based on Upper Bound ROE

Utility	Authorized ROE	Deadband	Upper Bound ROE	Equity Ratio	Upper Bound Weighted ROE
Newfoundland Power	8.50%	0.50%	9.00%	45.0%	4.05%
Alberta Electric Utilities – one year	8.50%	5.00%	13.50%	37.0%	5.00%
Alberta Electric Utilities – two years	8.50%	3.00%	11.50%	37.0%	4.26%
Ontario Electric Utility Distributors	8.34%	3.00%	11.34%	40.0%	4.54%
FortisBC Energy Inc. (gas)	8.75%	1.50%	10.25%	38.5%	3.95%
FortisBC Inc. (electric)	9.15%	1.50%	10.65%	40.0%	4.26%

4 See AUC Decision 2012-237, September 12, 2012, at para 737.
5 See Report of the Ontario Energy Board, Renewed Regulatory Framework for Electricity, October 18, 2012, at 13.
6 See BCUC Orders G-165-20 and G-166-20, June 22, 2020, at ii.

Q. Do you have any other comments on Dr. Booth's ROE recommendation for Newfoundland Power?

A. Dr. Booth quotes the Supreme Court of Canada's *Northwestern* decision in a few instances. I take issue with his interpretation of the decision in one instance, and then his failure to adhere to its most basic guidance.

Q. Please explain.

A. Dr. Booth, in his response to NP-CA-055, defends his recommended ROE of 7.5% as meeting the comparability test of the Fair Return Standard, by interpreting *Northwestern* as meaning "The critical fact is the fair return standard refers to the return on other "securities" not other allowed ROEs. Regulators in Canada have consistently referred to this as a market rate of return applied to a book value cost." With this argument, Dr. Booth seems to be suggesting that investors should ignore allowed returns in other jurisdictions as a basis of assessing comparability of return. While not offering a legal opinion, my experience is that investors do focus on allowed returns in other jurisdictions as a basis for formulating their return expectations. Further, Dr. Booth ignores the full language of *Northwestern* that provides a regulator with considerable latitude in terms of what evidence is required to reach its determination of a fair return. Perhaps most on point, Justice Smith writes in the *Northwestern* decision:

> [T]he question of a fair rate of return is largely one of opinion, hardly capable of being reduced to certainty by evidence, and appears to be one of the things entrusted by the statute to the judgment of the Board.

Nothing in this writing suggests that a regulator should not consider allowed returns in other jurisdictions.

Dr. Booth also argues that the allowed ROE should be set in the context of conditions in the economy and capital markets,[7] and I agree. He acknowledges that the COVID pandemic has "caused enormous disruption to the global economy and all countries, including Canada,"[8] and he recognizes that Canada has undertaken extraordinary measures to support the national economy both during and after the pandemic,[9] thereby causing the federal budget deficit to increase from 87 percent of Gross Domestic Product ("GDP") pre-pandemic to over 115 percent.[10] He also acknowledges that risk and Beta are constantly changing for companies and industries, yet he continues to use the same Beta coefficients for regulated utilities even though current market data indicate that investment risk has increased for the utility sector.

Dr. Booth devotes many pages of his Evidence to discussing economic and capital market conditions. Nevertheless, despite changes in interest rates, credit spreads, the outlook for inflation, the stage of the business cycle, market volatility, differing utility risk profiles and growth prospects, Dr. Booth's ROE recommendation for a benchmark utility in Canada has not changed over the past decade. He has consistently recommended a base ROE of 7.50 percent in each of the cases in which he has testified since August 2012.[11] All of the above factors, however, affect the cost of capital. No Canadian regulator that I am aware of has authorized any investor-owned Canadian electric or gas distributor an ROE as low as 7.5 percent.

7 Evidence of Laurence D. Booth, at 6.
8 Ibid, at 12.
9 Ibid, at 13-15.
10 Ibid, at 13 and 26-27.
11 This includes cases involving Nova Scotia Power Inc., FortisBC Energy, Inc., the Alberta Utilities Commission's Generic Cost of Capital, Hydro-Québec Distribution and Hydro-Québec Transmission, Maritime Electric Company Ltd., Liberty Gas New Brunswick, and Newfoundland Power.

Further, Dr. Booth seems to disregard current market data. He claims on page 2 that "Currently we are rapidly emerging from a serious recession caused by Covid 19", yet the most recent GDP report in Canada showed negative growth in Q2.

Q. Please provide a brief overview of Dr. Booth's capital structure recommendation.

A. Dr. Booth recommends a reduction in Newfoundland Power's common equity ratio from 45.0 percent to 40.0 percent, based on his view that the Company is a low risk utility that has consistently earned its authorized ROE over the past 30 years.[12] According to Dr. Booth, Newfoundland Power displays much lower volatility in earned ROE than a sample of U.S. electric holding companies.[13] Dr. Booth asserts that Newfoundland Power would be able to finance on reasonable terms with his recommended ROE of 7.50 percent and deemed equity ratio of 40.0 percent.[14]

Q. Which are the primary areas in which you and Dr. Booth disagree with regard to the capital structure for Newfoundland Power?

A. The following lists my key areas of disagreement with Dr. Booth:

- Dr. Booth's proposed reduction in Newfoundland Power's common equity ratio from 45.0 percent to 40.0 percent is not supported by any evidence that the Company's business risk has materially changed since the Board's decisions in the 2018 GRA or the 2015/2016 GRA. Dr. Booth does not assert that Newfoundland

12 Evidence of Laurence D. Booth, at 42.
13 Ibid, at 43-44.
14 Ibid, at 95.

Power's business risk has materially changed, so there is no reason for the Board to accept his recommendation to reduce the Company's deemed equity ratio.

- I have provided detailed evidence on Canadian and U.S. utilities and on Newfoundland Power demonstrating that the Company's business risk is similar today to the level at the time of the 2018 GRA filing. Dr. Booth, on the other hand, has provided neither a detailed risk assessment of other comparable Canadian and U.S. utilities, nor sufficient evidence regarding the change in Newfoundland Power's business or financial risk to support his proposed reduction in the common equity ratio.

- Dr. Booth has presented a "quantitative analysis" of the Company's business risk by examining the variability in earned ROE for Newfoundland Power as compared to a sample of U.S. electric utility holding companies. Dr. Booth's earned ROE analysis is conducted at the holding company level for the U.S. proxy group companies and at the operating utility level for Newfoundland Power. As such, Dr. Booth's quantitative analysis provides an inconsistent basis of comparison that cannot be relied upon to assess the relative business risk of Newfoundland Power.

- Dr. Booth fails to consider the small size of Newfoundland Power as a business risk factor. The Board has consistently found that the risk associated with Newfoundland Power's small size supports a strong common equity ratio. I have shown that Newfoundland Power is smaller than the operating utilities held by the proxy group and that investors and rating agencies consider small size and lack of geographic diversification as an important factor in assessing business risk.

- Dr. Booth presents an analysis that he claims shows that Newfoundland Power's interest coverage ratio is more than sufficient to maintain the Company's 'A' credit rating from Moody's and DBRS Morningstar. However, the Company's Moody's long-term issuer rating is Baa1, two notches lower than its issue rating because the Company provides extra security with issuance of mortgage bonds. Issuance of mortgage bonds is no longer typical for utilities, and signals that Newfoundland Power must offer this extra degree of security to elevate its rating and access capital markets on reasonable terms. Otherwise, there is no logical explanation for the Moody's ratings.

Q. How is the remainder of your Rebuttal Testimony organized?

A. In Section III, I discuss the use of U.S. data and proxy groups to estimate the cost of equity for a Canadian regulated utility; in Section IV, I discuss where Dr. Booth and I diverge with respect to the CAPM analysis; in Section V, I discuss areas of difference with Dr. Booth in his application of the DCF model; in Section VI, I discuss my differences with Dr. Booth regarding the relative risk of Newfoundland Power as compared to other investor-owned electric utilities in Canada and the U.S., and with his recommendation to reduce the common equity component of Newfoundland Power's capital structure. Finally, in Section VII I affirm my ROE and capital structure recommendations.

III. USE OF U.S. DATA AND PROXY GROUPS

Q. Please summarize Dr. Booth's Evidence regarding the use of U.S. data.

A. According to Dr. Booth, U.S. data must be adjusted to account for differences in relative risk between Canada and the U.S.[15] On page 87 of his Evidence, Dr. Booth argues that "although the principles of regulation are largely the same between the US and Canada, as is widely recognised the implementation is different." As support for his assertion, Dr. Booth cites two reports from Moody's published in 2005 and 2009 where the credit rating agency found that the regulatory risk of U.S. utilities was higher than that of utilities in most other countries including Canada. While he concedes that U.S. proxy groups and data can be used to estimate the cost of equity for a Canadian regulated utility, and while he agrees that "the principles of regulation are largely the same between the U.S. and Canada," he contends that "it is widely recognized that the implementation is different."[16] On page 92, Dr. Booth asserts that differences in tax treatment between Canada and the U.S. would cause most investors to "prefer to pay the lower tax rate and thus buy the Canadian utility, thereby segmenting the market for dividend paying shares." On page 93, Dr. Booth quotes the 2009 decision by the Board and then states: "The Decision is clear: it is not enough that U.S. utilities be used simply because there are not enough Canadian ones; comparables must be the same to be used without any adjustment." On page 94, Booth ultimately concludes: "I am not aware of any decision that has simply taken estimates from US companies or the US capital market and said that they are appropriate for use in Canada without

15 Evidence of Laurence D. Booth, at 90-94.
16 Ibid, at 87.

making any adjustments." Therefore, he concludes that an adjustment is necessary to U.S. data to account for differences in risk between the two countries.

Q. Do you agree with Dr. Booth's position on this issue?

A. No, I do not. In response to Dr. Booth's arguments, I observe that he has entirely ignored the September 2013 Moody's report, discussed at pages 40 of Concentric's Report, which reversed the rating agency's views in the 2005 and 2009 reports and found that the regulatory environment in the U.S. had improved significantly due primarily to the increased prevalence of cost recovery mechanisms and the corresponding reduction in regulatory lag. In his responses to NP-CA-045 and NP-CA-050, Dr. Booth stands by his view regarding the earlier Moody's reports, even though there is evidence that Moody's changed its view of U.S. utility regulation in the 2013 report. Likewise, equity analysts have reached similar conclusions. For example, a March 2019 report by equity analysts at Scotiabank indicated that they view the regulatory environments in Canada and the U.S. as being similar for regulated utilities. In explaining why they expect the valuations of Canadian and U.S. utilities to converge, Scotiabank observed:

> Historically, the Canadian utilities have traded at a discount to their mid-cap peers. We attribute this to the historical view that Canadian regulation was superior to U.S. regulation (we no longer have that view) as well as to strong earnings growth in part due to M&A.[17]

In response to Dr. Booth's claim that Canadian regulators have made adjustments to U.S. data and results, I agree that both the Newfoundland and Labrador Board of Commissioners and the BCUC have explicitly used a 0.50-1.0 percent downward

[17] Scotiabank Equity Research Spotlight, Energy Infrastructure, March 18, 2019, at 9.

adjustment in the past for estimates derived from U.S. utility proxy groups. However, these adjustments have not been consistently or recently applied. Although the BCUC made an explicit adjustment to U.S. ROE estimates in its 2009 Terasen Gas Decision[18], its subsequent decisions have not included an explicit adjustment to U.S. ROE estimates.[19] In the 2009 decision, the Newfoundland and Labrador Board did not accept the use of U.S. data with or without adjustment.[20] In 2013 and 2016, the Board accepted U.S. data, but required an adjustment to U.S. ROE estimates of between 50 and 100 basis points.[21] For all of the reasons stated above and in my initial Report, I believe it is appropriate to consider U.S. data without making an adjustment for differences between Canada and the U.S., because no such adjustment can be justified on a relative risk basis.

In our firm's work for Canadian companies assessing investments in U.S. utility companies, they are not applying a risk premium to U.S. companies nor are they willing to invest equity capital at the types of returns recommended by Dr. Booth. As broadly acknowledged in the application of cost of capital to regulated utilities, similar and comparable are the standards, not exactly the same.

Q. On page 90 of his Evidence, Dr. Booth criticizes your comparison of country risk for Canada and the U.S. Are you aware of other sources that support your

18 BCUC, Terasen Gas Inc., ROE and Capital Structure Decision, December 16, 2009 at p. 51.
19 See BCUC GCOC (Stage 1) Decision (May 10, 2013) and BCUC FortisBC Energy Inc., Application for its Common Equity Component and ROE for 2016 and Decision and Order G-129-16 (August 10, 2016).
20 See Newfoundland & Labrador Board of Commissioners of Public Utilities, Order No. P.U. 43(2009).
21 See Newfoundland & Labrador Board of Commissioners of Public Utilities, Order No. P.U. 13 (2013) at 31, Order No. P.U. 18(2016) at 29.

view that the country risk for Canada and the U.S. is similar and would not cause investors to require a materially different rate of return?

A. Yes, I am. In addition to the COFACE rankings presented in my Cost of Capital Report, another such measure is produced by The Economist Intelligence Unit, which rates Canada and the U.S. precisely the same from an overall country risk perspective (i.e., A) with AAA being the highest rating.[22] The Economist provides the following description of its country risk ratings:

> The Economist Intelligence Unit's Country Risk Service produces reports on 100 emerging markets and 20 OECD countries. These country-specific reports are complemented by this Risk ratings review, which analyses regional and global risk trends. The main focus of the ratings is on three risk categories to which clients can have direct exposure: sovereign risk, currency risk and banking sector risk. We also publish ratings for political risk and economic structure risk, as well as an overall country credit rating. The ratings are measured on a scale of 0-100. Higher scores indicate a higher level of risk. The scale is divided into ten overlapping bands: AAA, AA, A, BBB, BB, B, CCC, CC, C, D. In the Risk ratings review, ratings for a region are defined as the unweighted average of the ratings for all the countries being assessed in that region.[23]

Figure 3 summarizes the country risk ratings for Canada and the U.S. as of August 2021.

Figure 3: Country Risk Ratings

	Canada	U.S.
Sovereign Risk Rating	A	AA
Currency Risk Rating	A	A
Banking Sector Risk Rating	AA	A
Political Risk Rating	AAA	AA
Economic Structure Risk Rating	A	A
Overall Country Risk Rating	A	A

[22] The Economist Intelligence Unit, Country Risk Service, Risk Ratings Review, August 2021, at 30.
[23] Ibid, at 28.

This further supports my view that from an investor's perspective, Canada and the U.S. are highly comparable in a global context.

Q. On page 89 of his Evidence, Dr. Booth makes several observations about the generation ownership of your U.S. Electric proxy group. What is your response?

A. Dr. Booth comments on the fact that each of the companies in my U.S. Electric proxy group is a vertically-integrated electric utility. He notes that in my 2013 evidence for Hydro Quebec Distribution and Hydro Quebec Transmission, I found that there was a difference in authorized ROEs for integrated electric utilities as compared with T&D only companies. He also observes that six of the nine companies in my U.S. Electric proxy group own nuclear generation, which he asserts is higher risk.

With regard to his comments on generation ownership, I did not deliberately screen my U.S. Electric proxy group to only include companies that own regulated generation. Rather, none of the T&D utilities in the Value Line universe pass all of my screening criteria, so they were excluded from the proxy group on that basis.[24] While it is true that in 2013 there was a difference in authorized returns for integrated electric companies and T&D utilities of approximately 40 basis points, that differential has shrunk substantially to between 5 (median) and 15 (mean) basis points based on electric decisions since January 2020.

In response to Dr. Booth's comments on nuclear generation ownership, he is correct that six of the nine companies in my U.S. Electric proxy group own nuclear assets in

[24] The T&D utilities generally fail to pass my screens for percentage of regulated operating income and percentage of operating income from electric utility operations.

their generation portfolio. However, he is incorrect regarding the average percentage of nuclear generation being 43 percent; the average for the nine companies in my U.S. electric proxy group is 28.8 percent. Further, on a capacity (MW) basis, only Exelon Corp. has nuclear generation that accounts for more than 20 percent of its total generation. Three of the remaining eight companies own nuclear generation that accounts for approximately 17-18 percent, two companies own nuclear generation that accounts for 10 percent, and three companies do not own nuclear assets. Exelon Corp. has one of the lowest DCF results in my U.S. Electric proxy group at 6.23 percent, and if I were to exclude Exelon from that proxy group, the DCF results for the U.S. Electric proxy group would increase from 9.32 percent to 9.71 percent (not including flotation costs of 50 basis points).[25] If Exelon were excluded from my CAPM analysis, the results for the U.S. Electric proxy group would decrease from 10.41 percent to 10.35 percent (not including flotation costs). This would not have a meaningful impact on my results or recommendation. In addition, given investors' increased focus on climate change and ESG criteria from credit rating agencies, fossil fuel generation is now viewed as higher risk, while nuclear generation and renewable resources are seen part of the solution.

My conclusion is that the use of U.S. data and proxy groups without adjustment is appropriate and does not overstate the cost of equity for Newfoundland Power.

[25] I also note on Schedule 15 of Dr. Booth's Appendix D that Exelon has negative EPS growth and negative sustainable growth. Exelon should have been excluded from Dr. Booth's DCF analysis for that reason.

IV. DR. BOOTH'S CAPM ANALYSIS

Q. Please summarize Dr. Booth's CAPM analysis and results.

A. Dr. Booth's simple CAPM is based on a forecasted long Canada bond yield of 3.07 percent, an equity risk premium between 5.00 percent and 6.00 percent, and Beta coefficients from 0.45 to 0.55. Dr. Booth then adjusts his CAPM analysis for the bond buying programs of central banks (80 basis points) and for credit spreads (15-30 basis points), and adds 50 basis points for flotation costs and financial flexibility. Dr. Booth's CAPM estimate ranges from 6.77 percent to 7.97 percent, with a midpoint of 7.37 percent.[26]

A. Prevalence of the CAPM

Q. Dr. Booth states on page 52 of his Evidence that the CAPM remains the "most important model used by a company in estimating their cost of equity capital." Do you agree?

A. No, I do not agree in the context of setting a regulated rate of return. Dr. Booth places primary reliance for this statement on a paper published in 2001 by Graham and Harvey. He also cites a 2011 article published by Baker, et. al. that surveyed small and large firms in Canada on this same question. The Graham and Harvey paper (2001) preceded the financial crisis and the prolonged period of unusually low interest rates that has occurred. I challenge whether the conclusions of this paper can reasonably be extrapolated to the present. Nonetheless, based on my review of the paper, it was written from the perspective of capital budgeting and for establishing discount rates

[26] Evidence of Laurence D. Booth, at 67.

for target investments. While I agree that the CAPM is used for this purpose because it is simple to use for corporate analysts, I see little parallel between establishing a discount rate for capital budgeting purposes (i.e., a project hurdle rate) and determining the investor required return for purposes of utility regulation. Neither article sheds any light on the extent to which the CAPM is used to set the regulatory rate of return in utility rate proceedings. In response to NP-CA-034, Dr. Booth confirms that he is not asserting that the CAPM is the most important model used for setting regulated returns for utilities in Canada or the U.S.

Q. Dr. Booth has previously testified that the reason why the CAPM is so widely used is because the model is "intuitively correct."[27] Do you agree?

A. Perhaps at the conceptual level, but intuitively correct does not mean that it produces reliable results under all market conditions and for all industries. As Dr. Booth acknowledges, it is often necessary to make significant adjustments to CAPM inputs and assumptions to arrive at reasonable results. The problems with the CAPM are illustrated by Dr. Booth's subjective adjustments of 80 basis points to the risk-free rate for the central bank's bond buying programs that have produced abnormally low current yields on long-term Canada bonds and 15-30 basis points for higher than average credit spreads. Even with these adjustments, Dr. Booth's CAPM still produces a mean return estimate of 7.37 percent, or approximately 100 basis points lower than the authorized ROE of any investor-owned utility in Canada. The CAPM can and

[27] See 2018 GRA of Newfoundland Power Inc., Evidence of Laurence D. Booth filed on behalf of the Government Appointed Consumer Advocate, September 25, 2018, at 36.

often does produce unreliable results, contrary to Dr. Booth's suggestion that it is intuitively correct.

Q. Have other experts expressed concern with the ability of the CAPM to produce reliable cost of equity estimates, particularly for low-beta companies, such as utilities?

A. Yes. In 2012, the BCUC retained a consultant to evaluate the various cost of capital methodologies. The report issued by the consultant listed a number of weaknesses with the CAPM when applied to utility regulation, including:

- "the CAPM will provide regulated entities with a reasonable return only if it is implemented accurately, and the analyst must take into account any unique circumstances that may bias the estimates";
- "the model is very sensitive to the estimates of the risk-free rate, Beta and MRP"; and
- "because the model was developed as a generic approach to determine the cost of capital for companies, it does not specifically take the regulatory context into account."[28]

The CAPM is known to be unreliable, particularly for low Beta firms such as utilities. The BCUC consultant discussed this in its report where it stated:

> Perhaps the most fundamental challenge to the CAPM has been the consistent empirical observation that the model does not explain stock performance well in a statistical sense. For example, low Beta stocks tend to have higher average returns than predicted by the CAPM, and high

[28] The Brattle Group, Survey of Cost of Capital Practices in Canada (May 31, 2012), at pp. 20-27.

> Beta stocks have lower average returns – that is, the empirical estimates seem to require a pivot of the SML around Beta = 1.0 from the traditional version of the CAPM.[29]

I have observed this CAPM weakness in my own evidence and agree with the BCUC's consultant that this is a fundamental challenge to the CAPM. On page 68 of his Evidence, Dr. Booth notes that the DCF model was extensively used in Canada to estimate fair returns for utilities before the mid-1990s when risk premium evidence became more important and many utilities were placed on automatic ROE adjustment mechanisms. Dr. Booth has previously expressed concerns with both the CAPM and DCF models, stating on page 52 of his Evidence in the 2018 GRA proceeding: "…while the DCF and CAPM estimates are consistent over long periods of time, they both have problems when used *mechanically* during periods of very high or low real Canada bond yields. The analysis also helps explain why DCF estimates fell out of favour in the 1990s while the validity of CAPM estimates has recently been questioned due to the low level of bond yields."[30] Nevertheless, Dr. Booth continues to rely primarily on the results of the CAPM to set his return recommendation, while using the DCF model only to test the reasonableness of his CAPM results. In doing so, Dr. Booth substitutes his personal judgment for each of the CAPM inputs, so in essence you are left with Dr. Booth's judgment on the cost of capital, which has not changed in the past decade.

[29] *Id.*, at 25.
[30] Evidence of Laurence D. Booth, September 25, 2018, at 52.

Q. Has Dr. Booth commented elsewhere on the types of companies for which the CAPM is best suited for estimating the cost of equity?

A. Yes. The Corporate Finance textbook co-authored by Dr. Booth explains that the CAPM is best suited for estimating the equity cost for companies with high growth rates and/or low dividends, such as technology companies. The textbook states:

> The previous section showed that the DCF model can be rearranged to estimate the investors' required return on a firm's common shares. However, we also discussed how the [DCF] model performs poorly when applied to growth stocks, which pay low dividends and/or display high growth rates. In these situations, it makes sense to rely more heavily on risk-based models. The most important risk-based model is the capital asset pricing model…[31]

Q. Do you agree with Dr. Booth's statement on page 52 of his 2018 Evidence that the DCF model fell out of favor with utility regulators in the mid-1990s?

A. No, I do not. There is simply no basis for this assertion. Several Canadian regulators have considered the results of the DCF model along with the CAPM to establish authorized returns for regulated electric and gas utilities. For example, the results of the Constant Growth and Multi-Stage DCF models have been considered in recent decisions, including by the Alberta Utilities Commission ("AUC") in its 2018 Generic Cost of Capital decision,[32] the BCUC in its 2016 decision involving FortisBC Energy, Inc.,[33] and the Ontario Energy Board ("OEB") in its 2009 Generic Cost of Capital decision.[34] In addition, the Gordon Growth form of the DCF model has been and

31 Laurence D. Booth and W. Sean Cleary, Introduction to Corporate Finance, 1st Edition (2008), at 793.
32 Alberta Utilities Commission, 2018 Generic Cost of Capital, Decision 22570-D01-2018, issued August 2, 2018, at Section 8.4 beginning on page 85.
33 British Columbia Utilities Commission, FortisBC Energy Inc., Decision and Order G-129-16, issued August 10, 2016, at 74-84.
34 Ontario Energy Board, 2009 Generic Cost of Capital, Decision EB-2009-0084, issued December 11, 2009, at 36 and 63.

remains the primary model relied upon by U.S. regulators.[35] For many years, it was a required submission by the FERC and it remains an important model for cost of capital determinations at the FERC. In the U.S., the CAPM is commonly used to corroborate the results of other analyses. The Corporate Finance textbook co-authored by Dr. Booth indicates that the Gordon Growth form of the DCF was specifically designed for use in public utility regulation and is well suited for that purpose. The textbook states:

> What has to be remembered is that Professor Gordon developed this model (the DDM) for use in public utility regulation where the allowed ROEs should be reasonable and we do not get the problem of rapid growth rates.[36]

and

> Although the DDM provides a great deal of insight into factors that affect the valuation of common shares, it is based on several assumptions that are not met by a large number of firms, especially in Canada. **In particular, it is best suited for companies that (1) pay dividends based on a stable dividend payout history that they want to maintain in the future; and (2) are growing at steady and sustainable rates. As such, the DDM works reasonably well for large corporations in mature industries with stable profits and an established dividend policy. In Canada, the banks and utility companies fit this profile, while in the United States, there are numerous NYSE-listed companies of this nature.** [37]

The DCF model remains an important, if not primary, model for utility cost of capital determinations.

---

35 This is supported by the Gordon and Makholm (NERA) paper, *Allowed Return on Equity in Canada and the United States, An Economic, Financial and Institutional Analysis* (February 2008), p. 20, where the authors state: "The most popular method used to determine the ROE among US regulatory commissions is to determine what future stream of common dividends investors expect on a case-by-case basis using discounted cash-flow (DCF) analysis."

36 Laurence Booth and W. Sean Cleary, Introduction to Corporate Finance, 1st Edition (2008), at 785.

37 *Id.*, at 269. [Emphasis added.]

Q. How does Dr. Booth's primary reliance on the CAPM results undermine his ability to provide a fair return estimate?

A. It is generally well-accepted among cost of capital practitioners and regulatory commissions that multiple methods for estimating the fair rate of return provide the best basis upon which to make a fair determination. Specifically, the OEB, when confronted with this issue in its Consultative Cost of Capital Process, stated:

> The Board agrees that the use of multiple tests to directly and indirectly estimate the ERP is a superior approach to informing its judgment than reliance on a single methodology. In particular, the Board is concerned that CAPM, as applied by Dr. Booth, does not adequately capture the inverse relationship between the ERP and the long Canada bond yield. As such, the Board does not accept the recommendation that it place overwhelming weight on a CAPM estimate in the determination of the initial ERP.[38]

Dr. Booth does provide DCF estimates for the broader market "as a whole" for Canada and the U.S., as well as a sample of U.S. electric utilities. He does not, however, perform a traditional DCF analysis for a proxy group of companies that were chosen based on their comparability to Newfoundland Power. Further, it is not evident that Dr. Booth places any weight on his DCF results other than to corroborate his CAPM analysis.

[38] Ontario Energy Board, EB-2009-0084, Report of the Board on the Cost of Capital for Ontario's Regulated Utilities (December 11, 2009), pp. 36-37.

Q. Is there academic support for the use of multiple methodologies to estimate the cost of equity?

A. Yes, there is. For example, in their college level finance text, Professors Eugene Brigham and Louis Gapenski discuss the value of using more than one model to estimate the cost of equity. They conclude:

> In practical work, *it is often best to use all three methods* – CAPM, bond yield plus risk premium, and DCF – and then apply judgment when the methods produce different results. People experienced in estimating equity capital costs recognize that both careful analysis and some very fine judgments are required.[39]

B. The Risk Free Rate

Q. Is it appropriate to use a forecast bond yield as the risk free rate in the CAPM analysis?

A. Yes. Dr. Booth and I both base our risk-free rate on forecasted bond yields. The difference is that I have used the three-year forecast from Consensus Economics, while Dr. Booth has used the 2.7 percent forecast from the federal government of Canada's budget and then adjusted it for bond buying programs of central banks and higher than average credit spreads. I have used a three-year forecast primarily to establish a forward-looking bond yield that anticipates changes in the long Canada bond over the next few years, while reflecting the long-term perspective of the utility shareholder. My forecast interest rates of 2.54 percent in Canada and 3.00 percent in the U.S., based on 2022-2024 forecast data from the Consensus Economics survey, are below the forecast that Dr. Booth has cited of 3.07 percent plus his adjustment of

[39] Eugene F. Brigham and Louis C. Gapenski, Financial Management Theory and Practice, Fourth Edition, at 256.

15-30 basis points for higher than average credit spreads and 80 basis points for bond buying programs. But Dr. Booth's use of a market risk premium based on historical return data and investor surveys and his judgmental approach to Beta more than offset his reasonable logic on interest rates.

Q. Does Dr. Booth comment on the risk of higher government bond yields and higher inflation?

A. Yes, he does. As support for using an interest rate forecast, Dr. Booth states on page 67 of his Evidence that he judges "current forecast LTC yields as still being anomalous." On page 24 of his Evidence, Dr. Booth writes that "neither short nor long term interest rates are currently being determined by private investors. Instead, and since the financial crisis, they have been determined by the actions of central banks supporting their government's active fiscal policy." On page 27, Booth concludes: "In the future, unless foreign and domestic buyers continue buying Cdn$ debt, either interest rates must increase or if the bank keeps buying the bonds there will be higher inflation."

C. The Market Risk Premium

Q. Dr. Booth's market risk premium estimate of 5.00 percent to 6.00 percent is based on Canadian capital market history dating back to 1924 and the Fernandez survey of market risk premiums.[40] Do you agree with Dr. Booth's approach to estimating the market risk premium?

A. No, I do not. The use of historical data to estimate the market risk premium is not appropriate under current market conditions when current interest rates are substantially lower than the Canadian government bond yields that were used to calculate the historical market risk premium used by Dr. Booth. For example, the average government bond yield used to calculate the historical market risk premium is 5.6 percent in Canada and 4.9 percent in the U.S., in contrast to the currently projected 2.1 to 2.3 percent bond yields today. As discussed in Concentric's Cost of Capital Report, and as shown by the Risk Premium analysis in Exhibit JMC-9 and Figure 27 of that Report, there is a well-established inverse relationship between interest rates and the market risk premium. That is, as interest rates increase (decrease), the market risk premium decreases (increases). Under such circumstances, the market risk premium should be higher than the long-term historical average to reflect the low interest rate environment.

Regarding the 2020 Fernandez survey cited by Dr. Booth, this is an email survey sent to more than 15,000 email addresses of finance and economics professors, analysts and managers of companies obtained from correspondence, papers and webs of companies and universities. Fernandez received 1,946 reportable responses with

[40] Evidence of Laurence D. Booth, at 56-59, and Appendix B to his evidence.

respect to the market risk premium for 81 countries. Respondents were asked about the risk-free rate and the market risk premium used to calculate the required return on equity in different countries. Although the Fernandez survey provides information on the number and range of responses concerning the level of the market risk premium for each country, it is not clear from the survey how the respondents derived the market risk premium in their response (e.g., the source for their information), nor does the survey establish for what purpose the respondents applied the market risk premium estimate. For Canada, the survey received 49 responses with a mean of 5.70 percent, a median of 5.50 percent, a maximum of 8.40 percent and a minimum of 4.20 percent.[41] The standard deviation of the responses was 0.90 percent, indicating that approximately two-thirds of responses were between 4.80 percent and 6.40 percent. In my view, the wide range of responses illustrates both the importance of alternate measures of the market risk premium and the general level of uncertainty regarding future returns.

It is also important to consider the current market context. As explained in Concentric's Cost of Capital Report, I have incorporated a forward-looking analysis that reflects the inverse relationship between the market risk premium and the current level of interest rates, as well as a market risk premium that equally weights the projected and historical market risk premium in Canada and the U.S. equally with a historical derivation. My analyses shows that the current market risk premium is above

[41] Dr. Fernandez published an updated version of his Market Risk Premium survey in June 2021. For Canada, the survey received 38 responses with a mean of 5.6 percent, a median of 5.5 percent, a maximum of 9.2 percent, and a minimum of 3.5 percent.

my estimate of 8.18 percent, as indicated by my forward-looking MRP of 9.41 percent for Canada and 10.53 percent for the U.S, which are based on estimates from experienced analysts and not a survey.[42] The FERC relies exclusively on a forward-looking market risk premium in the CAPM analysis and does not even consider a historical MRP. My approach to calculating the forward-looking MRP is consistent with FERC's methodology of using the Constant Growth DCF model to estimate the total return for the broad market and then subtracting the risk-free rate. In addition, the Minnesota Department of Commerce (which serves as Staff for the Minnesota Public Utilities Commission) also uses a forward-looking MRP in its CAPM analysis which is based on the projected EPS growth rate for the S&P 500 Index published by State Street.[43] Dr. Booth often argues that the total market return should be calculated using a Multi-Stage DCF model, and yet on page 71 of his Evidence he states that "the constant growth version of the DCF model is most appropriate for the market as a whole."

Q. Dr. Booth attempts to justify the reasonableness of his market risk premium by providing market return estimates from various investment banks.[44] How do these projected equity returns compare to the actual returns that investors received?

A. Dr. Booth states on page 56 of his Evidence that "usually the critical element of a fair return is the overall return on the equity market, since utilities are simply a subset of

42 Concentric Cost of Capital Report for Newfoundland Power Inc., May 27, 2021, at 45, Figure 25.
43 Minnesota Public Utilities Commission, Docket No. G008/GR-19-524, Direct Testimony and Attachments of Craig M. Addonizio, on behalf of the Minnesota Department of Commerce, In the Matter of the Application of Centerpoint Energy Resources Corp., d/b/a Centerpoint Energy Minnesota Gas, for Authority to Increase Natural Gas Rates in Minnesota, filed July 15, 2020, at 39.
44 Evidence of Laurence D. Booth, at 62-64.

the equity market." He cites several reports from investment firms including a January 2016 report from TD Economics that projects the total return for the S&P 500 as 4.5 percent for the period from 2015-2025. While Dr. Booth likes to argue that investors are overly-optimistic, this report demonstrates that investors can also be overly pessimistic. In response to NP-CA-037, Dr. Booth declined to provide the U.S. equity returns since 2016. As shown below, the actual annual returns for the S&P 500 Index in these four years were as follows:

2017	21.83%
2018	-4.38%
2019	31.49%
2020	18.40%

These annual returns suggest that the expected returns in TD Economics' 2016 report were substantially understated, and that market risk premiums based on these types of projections would have been similarly understated.

Q. Please summarize Dr. Booth's concerns with your forward-looking market risk premium in both Canada and the U.S.

A. Dr. Booth refers to the compounded annual return for the broad market as being about 10 percent,[45] and he contends that my forward-looking market risk premium for Canada and the U.S. are "not accepted by Canadian finance professionals"[46] based on the results of the Fernandez survey and serve to bring up the historical market risk premium estimates. He also challenges whether there is an inverse relationship

45 Evidence of Dr. Laurence D. Booth, at 83.
46 Ibid, at 58.

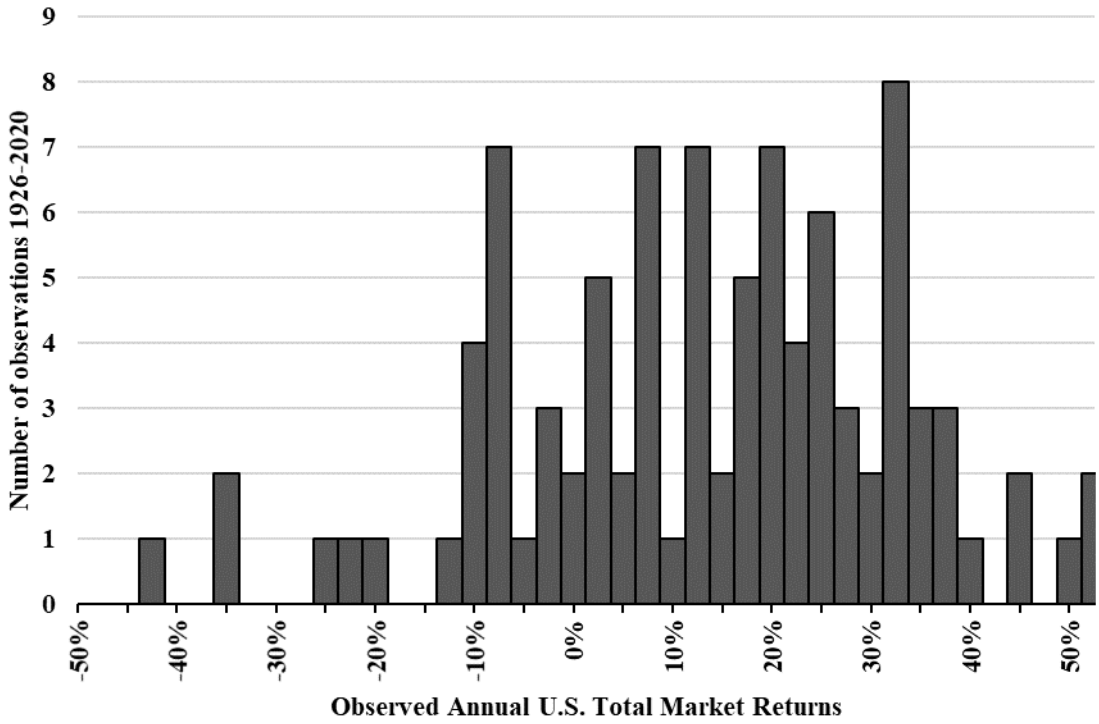
between interest rates and the market risk premium,[47] and he concludes there is no evidence of an inverse relationship in the last 10 years either in Canada or the U.S.[48] For these reasons, Dr. Booth suggests that the total market return used in my forward-looking MRP calculation is not reasonable.

Q. What is your response to Dr. Booth on these points?

A. Dr. Booth's reference to a compounded annual return of 10 percent obscures the wide distribution in realized equity returns from year to year. I have analyzed the annual performance of the S&P 500 Index from 1926-2020 and the TSX Index from 1924-2020. As shown in Figure 4, the actual return on the S&P 500 Index has exceeded 13.53 percent (the estimated total market return as shown in Exhibit JMC-7) in 52 percent (49 out of 95) of the years from 1926-2020. In calculating his DCF growth rate for the U.S., Dr. Booth observes that the earned ROE for the S&P 500 has been 14.0 percent, which is generally consistent with the estimated total market return used in Exhibit JMC-7 to calculate the forward-looking market risk premium for the U.S. These data demonstrate that actual total returns greater than 13.53 percent for the broad market are not uncommon.

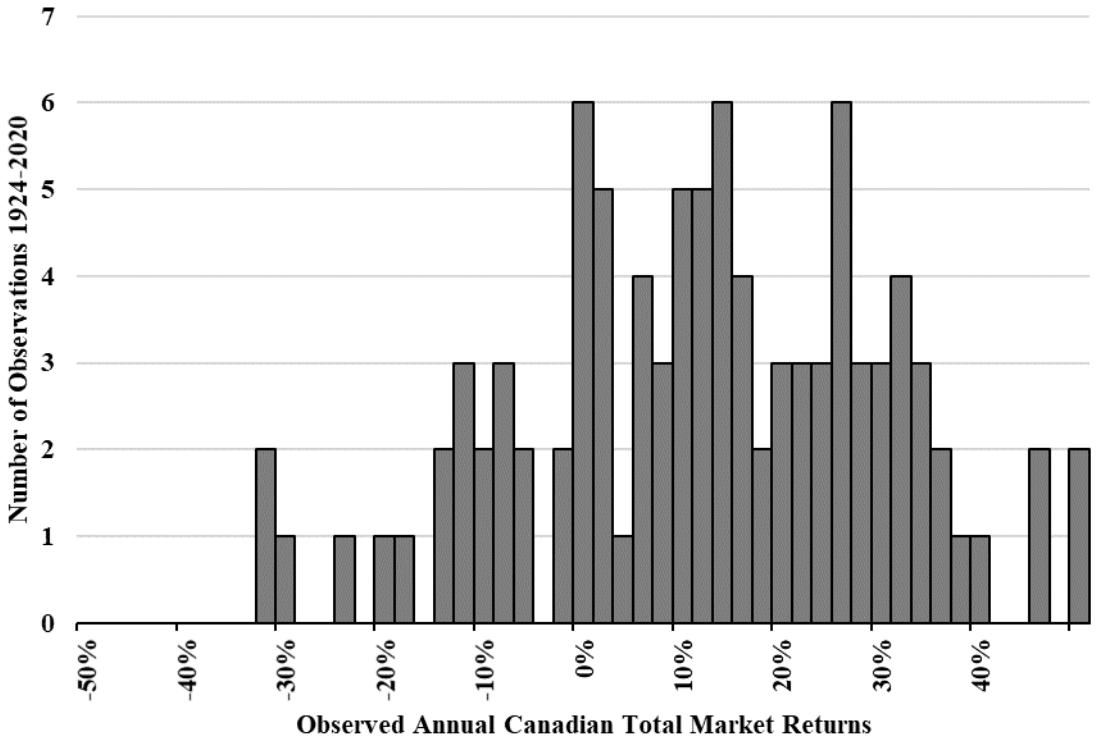
47 Ibid, at 58.
48 Ibid, at 59.

Figure 4: Total Returns of S&P 500 Index – 1926-2020



Similarly, as shown in Figure 5, the actual return on the TSX Index has exceeded 11.95 percent (the estimated total market return as shown in Exhibit JMC-6) in 49 percent (48 out of 97) of the years from 1924-2020.

Figure 5: Total Returns of TSX Index – 1924-2020



In response to Dr. Booth's argument concerning the inverse relationship between interest rates and the equity risk premium, my Risk Premium analysis in Exhibit JMC-9 demonstrates that there has been an inverse relationship between Treasury bond yields and the equity risk premium that U.S. regulators have awarded to electric utilities in more than 800 rate case decisions since 1992. As such, I disagree with Dr. Booth's assertion that there is no evidence of an inverse relationship.

D. Beta

Q. What accounts for the differences between your Beta estimates of 0.90 for the Canadian proxy group, 0.91 for the U.S. Electric proxy group and 0.88 for the North American proxy group, and Dr. Booth's range of Beta estimates from 0.45 to 0.55?

A. The difference is due to Dr. Booth's dismissal of the widely-accepted adjustment methodology employed by most providers of Beta for financial analysis, which is to adjust utility Betas toward the market average of 1.0, as well as Dr. Booth's reliance on his own personal judgment rather than on current market data. Dr. Booth argues that utility Betas regress toward their grand mean, which he estimates to be 0.50 relying on a paper published in 1990 for his basis. In my experience, Dr. Booth has never wavered on his judgment pertaining to utility Betas despite the market evidence. This is not a reasonable or reliable basis for determining an important input to the CAPM model, which is a market-based model and should not be based on substitution of personal judgment.

In addition, Dr. Booth's Betas are understated due to his dismissal of the widely-accepted Blume adjustment methodology employed by most providers of Beta for financial analysis, which is to adjust utility Betas toward the market average of 1.0.[49] Dr. Booth argues that utility Betas regress toward their grand mean, which he estimates

[49] Commonly referred to as the "Blume Adjustment" for papers written by Marshall Blume documenting evidence of autoregressive properties of Beta towards the market average of 1.0. *See* Marshall E. Blume, On the Assessment of Risk, The Journal of Finance, Vol. XXVI, No. 1 (March 1971) and Marshall E. Blume, Betas And Their Regression Tendencies, The Journal of Finance, Vol. XXX, No. 3 (June 1975), where Blume found that there was strong evidence that Beta regressed toward the market mean, and that tendency was strongest in the case of the lowest risk portfolios.

to be 0.50, relying on the work of Gombola and Kahl (published in 1990) for his conclusions.[50] Gombola and Kahl found that utility Betas required adjustment, such as is performed by Value Line, Merrill Lynch, Bloomberg and others, but that the adjustment should not be toward the market mean of 1.0, but instead to the grand mean of the utility Beta.

Q. Does Dr. Blume's Beta adjustment methodology support adjusting Beta to the long-term average Beta of the industry sector being studied instead of the market mean of 1.0?

A. No. In this study, Dr. Blume found that all Betas, both low and high, revert towards the market mean of 1.0 over time.

Q. Does Dr. Blume's study disprove the argument that Beta should be adjusted toward the long-term utility average Beta?

A. Absolutely, yes. Dr. Blume specifically studied four groups of Betas, ranging from a very low Beta group (averaging 0.50, similar to the utility industry) to a very high Beta group. Dr. Blume found that his adjustment best predicted future Betas for each of the four risk groups over the next seven years. Dr. Blume found that a low Beta portfolio that averaged 0.50 migrated towards the grand mean of all Betas of 1.0 approximately in accordance with the Blume formula. The study makes obvious that Betas migrate towards 1.0 and do indeed exceed their long-term unadjusted averages. Given that the purpose of estimating the CAPM relying on these Beta estimates is to estimate the forward-looking cost of capital, it is important to reflect a forward view

[50] Evidence of Laurence D. Booth, at 60.

of Beta and its tendency to migrate towards the market mean over time, which is not limited to the long-term historic average of the industry Beta.

Q. Have academic theorists cited additional intuitive support for adjusting utility Betas towards the market mean of 1.0?

A. Yes. In addition to compensating for the negatively biased error terms for low Betas, it has also been found that "raw" Beta tends to underestimate the risk of utilities due to the inability to recognize interest rate risk in the calculation of Beta for interest-rate sensitive firms.[51] As indicated on page 6 of Appendix C to his Evidence, Dr. Booth agrees that "Betas vary inversely with their interest sensitivity" and that "as interest rates increase back to normal levels, I would expect their Betas to increase as they trade less on their bond values and more as regular equities." This limitation and the negatively biased error terms for low Beta firms are two factors that are not reflected in a Beta adjustment toward the long-term average of utility Betas, and as a result, Dr. Booth's suggested method understates the Beta estimate.

Q. What do you conclude on the appropriateness of adjusting utility Beta toward the market mean of 1.0?

A. I agree with the adjustment methodology employed by the premier Beta providers (i.e., Value Line, Bloomberg, Merrill Lynch) that the appropriate Beta adjustment (especially for utility stocks) is toward the market mean of 1.0. Further, I am not aware of a single U.S. state or federal regulatory jurisdiction that takes exception to the use of this adjustment methodology. I have only encountered this discussion around Beta

[51] Roger A. Morin, Ph. D., New Regulatory Finance, Public Utilities Reports, Inc., (2006), at 74.

adjustment methodology in Canadian regulatory proceedings where intervenors, such as Dr. Booth, have challenged the widely accepted findings of the Blume study.

Q. Please discuss your experience in Canada with regard to Beta.

A. I am aware that Canadian regulators have considered the issue of Beta adjustments in a broad number of cases where CAPM evidence has been presented. Commissions do not always articulate their judgments regarding the specific adjustments they have accepted, but I am not aware of any Commission that has relied upon "raw" Betas. In my experience, the Value Line and Bloomberg methodologies are widely accepted and utilized by financial analysts, investors, corporations, and broadly accepted by U.S. regulatory commissions. The Brattle Group summarized this widely-adopted methodology in its 2012 report for the BCUC:

> Beta estimates are provided by many data services for Canadian, American and other traded companies. The most common methodology to estimate Betas is to use the most recent five years of weekly or monthly return data. These Betas may then be adjusted towards one as an adjustment for sampling reversion that was first identified by Professor Marshall Blume (1971, 1975).[52]

A book published by Brattle in 2017 updates and further elaborates on the empirical challenges of the CAPM model and potential solutions in the context of regulated industries. Numerous academic studies and papers are cited that demonstrate that realized market returns for low beta industries (such as utilities) are underestimated by the CAPM, and conversely for high beta industries. The use of adjusted betas or the Empirical CAPM, which adds a new parameter, alpha, to account for this

[52] The Brattle Group, Survey of Cost of Capital Practices in Canada, Prepared for the British Columbia Utilities Commission, May 31, 2012, at 15-28.

underestimation (for low beta stocks) are cited as typical solutions. In terms of beta measurement periods and frequency, the authors conclude:

> The choices for the interval for the return data and the length of the beta estimation window involve trade-offs between obtaining more observations through the choice of a longer window and/or more frequent return data, ensuring that no structural change has occurred during the estimation window, and avoiding problems due to insufficient trading activity.
>
> …..
>
> Balancing these considerations, economists typically recommend estimating beta using daily, weekly or monthly returns over the most recent 2-5 year period, with weekly being the more common, except if there are reasons to think that the industry might be subject to recent changes in systematic risk so that the use of a more recent data window is desirable. In this case, estimating beta based on daily returns of liquid shares may give a better estimate of the future beta.[53]

Most recently, another consultant was retained by the BCUC to evaluate the various ROE methodologies and model inputs in advance of the current Generic Cost of Capital process. Dr. Lesser submitted his report in August 2021. With regard to the Beta used in the CAPM analysis, Dr. Lesser notes: "One potential problem with using raw beta values – in addition to determining the appropriate time period, data frequency, and so forth – is that estimating the allowed ROE for a utility is a forward-looking exercise."[54] For that reason, Dr. Lesser supports the use of adjusted Betas as follows:

> Because regulators establishing the allowed ROE for a regulated utility are basing that allowed ROE on expected market conditions over an indefinite future, adjusted beta values are typically considered to be more

[53] *Risk and Return for Regulated Industries*, Villadsen, Vilbert, Harris and Kolbe, Academic Press – Elsevier, 2017, pp. 74 and 76.

[54] Dr. Jonathan A. Lesser, Regulated Utility Cost of Capital: Theory and Canadian Practice, August 4, 2021, at 42.

> appropriate when applying the CAPM. One reason is that estimated raw beta values can be negative.[55]

In addition, Concentric submitted a full cost of capital analysis in the consultation on Cost of Capital conducted by the OEB in 2009 that led to a reset of the ROE and the current formula for Ontario's gas and electric distributors and transmitters. Concentric's CAPM analysis included the standard Blume adjusted Betas from Bloomberg and Value Line, just as I have utilized in this proceeding. In its decision, the OEB took no issue with Concentric's use of Betas adjusted toward the market mean.

Q. Have there been recent studies on the use of Betas by academics and practitioners?

A. Yes. In addition to his market risk premium survey, Dr. Fernandez also has conducted a series of surveys on the use of Betas by finance professors. His survey, most recently updated in May 2019, was sent via email to approximately 8,000 finance and economics professors with email addresses "obtained from previous correspondence, papers, and webs of the universities." The survey sought to understand whether professors use Beta to calculate the required return to equity, and "how the number was justified." Dr. Fernandez published the most recent update to his series of Beta surveys in May 2019.[56]

[55] Ibid.

[56] "*Betas used by Professors: a survey with 2,500 answers*", updated May 28, 2019. Dr. Fernandez's original survey was conducted in 2009, when he received 2,510 responses from professors in 65 countries, of which 1,791 used Betas (22 percent of the sampled group). Fernandez has since reported updates in 2010, 2013, 2014, 2015, and 2017.

In the Survey, Dr. Fernandez noted a variety of problems with measuring Beta, and summarized them as follows:

The problems of the Betas calculated with historical data are well known:

1. They change considerably from one day to the next.
2. They depend very much on which stock index is used as the market reference.
3. They depend very much on the historical period (5 years, 3 years…) used.
4. They depend on what returns (monthly, yearly…) are used to calculate them.
5. Very often we do not know if the Beta of one company is lower or higher than the Beta of another.
6. Calculated Betas have little correlation with stock returns.
7. Beta = 1 has a higher correlation with stock returns than calculated Betas for many companies
8. The correlation coefficients of the regressions used to calculate the Betas are very small.
9. The relative magnitude of Betas often makes very little sense: companies with high risk often have lower calculated Betas than companies with lower risk.

Based on Dr. Fernandez's conclusions, I summarize a few key points that might assist the Board in addressing the issue of adjusted Beta:

- Historic Betas alone are poor measures of a stock's valuation.
- Based on correlations of the annual stock returns (1989-2008) of the Dow Jones companies measured against the S&P 500, Fernandez finds: "Beta = 1.0 works better than calculated Betas! Not surprisingly, Adjusted Betas (0.67 calculated Beta

+ 0.33) have higher correlation than calculated Betas. But Adjusted Betas have lower correlation than Beta = 1."[57]

- Low Beta is an indicator of "low portfolio risk," but not an indicator of "low business risk" and indeed it is often the companies with high risk that have the lower calculated Betas.

The Fernandez survey and analysis indicates that at a minimum, historic calculated Betas should be adjusted to the market mean of 1.0 to better reflect actual returns, because he found that the market return Beta of 1.0 provided the highest correlation to actual returns. This suggests the appropriate calculation of Beta is between my adjusted Beta at the low end and the market mean of 1.0 at the high end.

While I have not relied on either Fernandez survey (market risk premium or Beta) for my recommendations, these conclusions certainly suggest care must be exercised in the use of the CAPM. Fernandez opines on the inability to find a common Beta for a given company for all investors:

> It would imply that the CAPM does not work. It may be because the required return is affected by other factors, besides the co-variance of the company's return with the market return, the risk-free rate and the market risk premium; it also may be because, due to the heterogeneity of investors, it does not make sense talking about a "market portfolio"; it also may be because the distribution of expected returns changes with time (and it can change in a different way for different investors)."

We need only look to Dr. Booth's table of Betas for a sample of three Canadian utilities on page 12 of Appendix C (which range from 0.06 for Fortis to 0.55 for Canadian

[57] Ibid, at 8.

Utilities) and for six U.S. electric utilities on page 13 of Appendix C (which range from 0.19 for Pinnacle West to 0.67 for ALLETE), to see the wide dispersion of Beta coefficient across regulated utility companies. At a minimum, historic Betas must be adjusted to reflect actual returns and stock valuations in the marketplace.

Q. Please detail your concern with Dr. Booth's use of Beta coefficients that are based on his personal judgment rather than actual market data.

A. Rather than relying on actual market data that is available to investors, Dr. Booth prefers to employ Beta coefficients within a range from 0.45 to 0.55 based on his own personal judgment. Dr. Booth has consistently used this range over the past decade even though he indicates in Appendix C that firm/industry risk relative to the broader market changes over time and that Beta coefficients tend to vary with the level of interest rates. The importance of using current market data has been highlighted in the past 18 months, when Beta coefficients reported by Value Line and Bloomberg have increased substantially for regulated utilities because those companies have traded more like the broader market rather than serving as safe haven for investors during periods of economic downturn. It is never appropriate to hold Beta constant, as Dr. Booth proposes, but this is especially important when the fundamental relationship between the utility industry and the broader market has changed to the extent it has in recent months. Contrary to Dr. Booth's Evidence that refers to utilities as "low risk defensive stocks,"[58] Figure 6 shows that Beta coefficients for my Canadian, U.S.

[58] Evidence of Laurence D. Booth, at 59.

Electric, and North American proxy group companies have increased substantially as compared to January 2020.

Figure 6: Comparison of Beta Coefficients

	January 2020	March 2021	September 2021
Value Line Beta - Canadian	0.75	0.83	0.85
Bloomberg Beta - Canadian	0.81	0.90	0.90
Value Line Beta – U.S. Electric	0.59	0.90	0.91
Bloomberg Beta – U.S. Electric	0.54	0.91	0.91
Value Line Beta – North American	0.58	0.89	0.90
Bloomberg Beta – North American	0.59	0.88	0.88

Further, Dr. Booth observes on page 60 of his Evidence that since 2000 their stock market risk (beta) has declined with interest rates, but that should change as interest rates increase and utilities become less attractive. If Dr. Booth believes this is true, one would think that his betas would be both market-based and adjusted over time. Dr. Booth's summary dismissal of recent market data is highlighted on page 10 of his Appendix C where he opines: "Unfortunately a quick look at the companies in Schedule 11 reveals that the sample is much reduced: the Telcos are no longer rate of return regulated, while most of the pipelines and utilities have disappeared or substantially changed. However, I have long judged the equilibrium utility beta to be about 0.50, partly based on this early work and partly on the estimates in Schedule 1 adjusted for the impact of interest rate risk."

In NP-CA-061, Dr. Booth was asked to provide the source data used to create the beta estimates in the tables on pages 12 and 13 of his Appendix C. Dr. Booth provided two attachments, one for U.S. electric utilities and another for U.S. gas utilities and Canadian regulated utilities. For U.S. electric utilities, Dr. Booth provides month-end beta values from December 1966 through December 2020 for a sample of 11 electric utility companies. For Canadian regulated utilities, Dr. Booth provides similar beta values from 1993 through 2020 for a sample of eight companies. Dr. Booth does not specify the source of the betas provided in his response, nor does he indicate whether they are monthly or weekly betas, or if they are calculated over 2 years or 5 years. I note the wide dispersion of beta values for each individual company. For example, nine of the 11 companies had negative beta values at some point during this period (as low as -0.37 for Eversource), while eight of the 11 companies had beta values exceeding 1.0 at some point during this period (as high as 1.48 for Pinnacle West). These data demonstrate the large variability in betas for regulated utilities and do not suggest that beta is a static input to the CAPM, as Dr. Booth has suggested.

By dismissing both recent market data and conventional adjustments to raw betas, Dr. Booth provides no reasonable basis for estimating the current cost of capital for utilities.

Q. If you had used raw Betas instead of Blume adjusted Betas for your Canadian and U.S. proxy group companies, what were the raw betas as of March 2021, when your ROE analyses were conducted?

A. The average raw Beta coefficient from Bloomberg as of March 31, 2021 for my Canadian proxy group was 0.85 and for my U.S. Electric proxy group was 0.87. Even

these raw betas are significantly higher than the 0.45 to 0.55 range that Dr. Booth has used. There is simply no reasonable basis for using Betas as low as those suggested by Dr. Booth for estimating the cost of capital.

Q. In response to a discovery request questioning Dr. Booth's assertion that Mr. Coyne uses Bank of America Merrill Lynch ("BAML") as a source of betas, is he correct in either his original assertion or follow-up response?

A. No. In his discovery response, Dr. Booth responds: "Apologies the adjective "normally" should have been inserted after Mr. Coyne. Dr. Booth is very happy to see that Mr. Coyne no longer uses BAML betas and hopes this practise continues." (NP-CA-060).

Dr. Booth is incorrect, Mr. Coyne has not "normally" or ever, to his recollection, used BAML as a source for betas.

E. Adjusted CAPM

Q. Has Dr. Booth adequately adjusted his CAPM analysis to reflect current market conditions?

A. No, he has not. Dr. Booth notes that the low interest rate environment has been heavily influenced by central banks rather than bond yields being set by private investors.[59] He also notes that interest rate conditions are "anomalous,"[60] and that the results of models used to estimate the cost of equity are affected by these market conditions. While Dr. Booth has used a projected risk-free rate of 3.07 percent to which he adds 15-30 basis points for credit spreads and 80 basis points for bond

[59] Evidence of Laurence D. Booth, at 24.
[60] Ibid, at 67.

buying programs of central banks, his other inputs to the CAPM analysis are based on a historical market risk premium and a judgment-based estimate of Betas for Canadian regulated utilities generally.

Although Dr. Booth recognizes that the low interest rate environment of recent years is also affecting the calculation of Beta coefficients and the equity risk premium, he has not made any adjustment to either input in his CAPM analysis. By continuing to use the same inputs and assumptions in his CAPM analysis, regardless of the conditions in the economy or capital markets, it is not surprising that Dr. Booth's adjusted CAPM results are consistently within a range from 6.70 percent to 8.00 percent. Given that there has not been an authorized ROE for a Canadian investor-owned electric or gas utility below 8.30 percent since at least 2000, it would be reasonable for Dr. Booth to question the inputs and assumptions of his CAPM analysis and to place more weight on alternative methodologies to estimate the cost of equity.

V. DR. BOOTH'S DCF ANALYSIS

Q. Please describe Dr. Booth's DCF analyses.

A. On page 68 of his Evidence, Dr. Booth refers to the DCF model as "the basic method used for valuing companies by professional investors and corporate executives." On pages 5-7 of Appendix D to his Evidence, Dr. Booth performs two DCF calculations for the broad Canadian market. The first is based on historic GDP growth from 1961-2020 of 3.00 percent and the Bank of Canada's operating band for inflation of 2.00 percent to derive an average growth rate of 5.06 percent. He then multiplies this growth rate by the dividend yield on the TSX Index at the end of December 2020 of 3.00 percent to arrive at a DCF estimate of 8.21 percent. Dr. Booth provides a second

DCF analysis for the Canadian market using the median dividend payout ratio of corporate Canada of 42 percent and the median earned ROE for Corporate Canada of 9.83 percent, which produces a sustainable growth rate of 5.70 percent and a DCF return estimate of 8.87 percent. On pages 8-9 of Appendix D, Dr. Booth performs a similar analysis on the S&P 500 in the U.S. using sustainable growth rates and median dividend payout ratios and arrives at an equity cost estimate of 9.09 percent. Dr. Booth also performs a DCF analysis on a group of 14 U.S. electric utilities based on forecast earnings growth rates and sustainable growth rates. As shown in Schedule 15 of Appendix D, Dr. Booth's DCF analysis of a U.S. electric group produces ROE estimates of 8.62 percent (mean) and 8.95 percent (median) using EPS growth and 5.85 percent (mean) and 6.04 percent (median) using sustainable growth. In his response to NP-CA-063, Dr. Booth acknowledges that Pinnacle West was included twice in Schedule 15, and that when the error is corrected, the median ROE using projected EPS growth increases to 9.11 percent from 8.95 percent.[61] These DCF estimates do not include an adjustment for flotation costs and financial flexibility. If flotation costs of 50 bps were added to the DCF results for the U.S. electric utilities in Schedule 15, the ROE estimates would be 9.12 percent (mean) and 9.61 percent (median) using EPS growth rates.

Q. Please comment on the results of Dr. Booth's various DCF analyses.

A. The mean results produced by Dr. Booth's DCF analysis using forecast EPS growth rates for a sample of U.S. electric utilities (as shown in Schedule 15) are similar to those

[61] It is interesting to note that the sustainable growth rate calculation for Pinnacle West and PNW are also not the same in the filed version of Schedule 15 to Appendix D.

in Concentric's Cost of Capital Report, if we were to add 50 basis points for flotation costs to his DCF results. The other DCF analyses provided by Dr. Booth are based on historical economic growth rates and do not provide a forward-looking estimate of the cost of equity for his target market segment or Newfoundland Power. For example, it is not reasonable to estimate the cost of equity for Newfoundland Power based on historical GDP growth in Canada plus a current dividend yield because this does not reflect the specific business and financial risk that Newfoundland Power faces in raising equity capital. If Dr. Booth had used projected EPS growth rates for the broader market in Canada and the U.S., his DCF estimates would be substantially higher, as shown in Exhibits JMC-6 and JMC-7 to Concentric's Report. In that context, a DCF estimate for regulated utilities of 9.00 to 10.00 percent is more reasonable, if not somewhat conservative, as shown in Exhibit JMC-4 to Concentric's Report where the mean DCF estimates are 9.82 percent for the U.S. Electric proxy group, 10.02 for the North American proxy group and 12.47 percent for the Canadian proxy group. In summary, Dr. Booth's historical economic data and sustainable growth rates shed little light on the forward-looking cost of equity for Newfoundland Power.

A. Earnings Growth Rates

Q. Please summarize Dr. Booth's Evidence regarding earnings growth rates in the DCF model.

A. On pages 9-13 of Appendix D of Dr. Booth's Evidence, he suggests that DCF estimates for individual companies are not as reliable as for the broad market, and that analyst's earnings growth rates suffer from "optimism bias". According to Dr. Booth,

based on analysts' five-year analyst forecast EPS growth rates, the DCF estimates for the 14 electric utilities in his sample range from 2.74 percent to 10.78 percent, with a median value of 8.95 percent. Dr. Booth expresses several concerns with these DCF estimates. First, he contends that these companies are "clearly lower risk than the overall market."[62] Second, Dr. Booth asserts that the average and median growth rates are both over 5.0 percent, which is higher than most estimates of long-term GDP growth in the U.S.[63]

Q. Do you share Dr. Booth's concern that analysts' projected EPS growth rates are biased upwards?

A. No, I do not share Dr. Booth's concern with "optimism bias" for several reasons. Contrary to Dr. Booth's Evidence on pages 70 and 84 where he questions whether U.S. utilities can grow faster than U.S. GDP over the long run, Figure 19 of my Report demonstrates that the projected EPS growth rates for the companies in my Canadian proxy group are lower than the historical EPS and DPS growth rates for these same companies over the past 10 years. The projected EPS growth rates for the companies in my U.S. Electric and North American proxy groups are just 32 basis points and 2 basis points higher, respectively, than the historical EPS growth rates for these companies over the past 10 years. Further, on average, the projected EPS growth rate for all three proxy groups is lower than the average historical EPS and DPS growth rates for these proxy companies. In addition, historical and projected EPS growth rates are higher than projected GDP growth, demonstrating that GDP does not serve

62 Evidence of Laurence D. Booth, Appendix D, at 10.
63 Ibid.

as a cap on earnings growth for regulated utilities. Based on that analysis, I disagree with Dr. Booth that "it is extremely difficult to justify U.S. utilities growing at rates higher than the US GDP growth rate as is implied in the use of analyst growth forecasts."[64] As my analysis demonstrates, the relationships between projected and historical EPS and DPS growth rates and the projected GDP growth rates indicate that the projected analyst EPS growth rates are entirely reasonable by historic standards.

Second, industry analysts are experts on the companies they follow; they understand the risks attendant to investing in the various utilities within their coverage universe; they receive earnings guidance from the utilities themselves; and they have the opportunity to speak with utility management. Further, given the consensus that utility operating income is generally stable, and their business models are well understood with high quality financial reporting, it is reasonable to expect that forecast EPS growth rates for utilities are more reliable than for companies in many other sectors.

In addition, equity analysts do not have an incentive to provide overly-optimistic research reports because much of this reporting is utilized by institutional clients such as pension funds or mutual funds, and credibility is very important in maintaining that business relationship. Clients expect forecasting accuracy in the reports of equity analysts. If compensation were based on the revenue an analyst generates for his employer, then that metric would decline for an analyst whose reports were consistently incorrect. *The Wall Street Journal* publishes an annual ranking of the best

[64] Evidence of Dr. Laurence D. Booth, at 84.

equity analysts in each industry. Inclusion on this prestigious list is very important for both the analyst and the firm for which he or she works. There is ample evidence to support the conclusion that earnings estimates for utilities are reasonably accurate, and accordingly are relied upon by utility investors.

Q. Have you developed an alternative DCF analysis that reasonably addresses any concerns that may exist over optimism bias?

A. Yes. Although I see no reason to believe that optimism bias exists in the analyst growth rate estimates used in my Constant Growth DCF analysis, I have also provided a Multi-Stage DCF analysis which mitigates the potential for analyst bias and concerns about whether the analyst growth rate could be sustained in perpetuity. Dr. Booth calls into question whether the Multi-Stage DCF model mitigates analyst bias, noting that short-term EPS growth rates are still used in the first stage.[65] However, according to Dr. Booth's Corporate Finance text, use of the two-stage DCF model mitigates concerns about analyst bias. The textbook states:

> Finally, an important source of information regarding company growth, particularly for the near term, can be found in analyst estimates. Investors are often especially interested in "consensus" estimates, because market values reflect these estimates. However, a word of caution is in order: analysts have been shown to be biased—that is, they tend to be overly optimistic—in part because their major source of information is frequently the company itself. Research by Easton and Sommers has put the "optimism" bias in analysts' growth forecasts at an average of 2.84 percent. **As a result, analyst forecasts tend to be used with the two-stage growth model (discussed in the next section) to mitigate this optimism.**[66]

[65] Evidence of Laurence D. Booth, at 70.

[66] Laurence D. Booth and W. Sean Cleary, Introduction to Corporate Finance, 3rd Edition (2013), at 260. [Emphasis added.]

My Multi-Stage DCF model uses analyst growth rates for the first 5 years of the model. The remaining years reflect projected GDP growth or the transition to GDP growth. I have relied on the Multi-Stage DCF results in combination with the Constant Growth DCF, CAPM and Risk Premium results in reaching my ROE estimate for Newfoundland Power.

B. Sustainable Growth Rates

Q. In Schedule 15 of Appendix D to Dr. Booth's Evidence, he calculates a DCF estimate for a sample of U.S. electric utilities, many of which are in my U.S. Electric proxy group, using sustainable growth rates. Do you agree that sustainable growth rates appropriately capture the expected growth of a regulated utility?

A. Not as applied by Dr. Booth. The full form of the "sustainable growth" model is premised on the proposition that a firm's growth is a function of its expected earnings, and the extent to which it retains earnings to invest in the enterprise. In the sustainable growth formula, this is commonly referred to as the product of "b x r", where "b" is the retention ratio, or the portion of net income not paid in dividends, and "r" is the expected ROE on the portion of net income that is retained within the Company as a means for future growth. In the fullest form of the sustainable growth formula, new equity issuances, or what are commonly known as externally generated funds, are also considered. This is shown as the product of "s x v", where "s" represents the growth in shares outstanding, and "v" is that portion of the market/book ratio that exceeds unity. This methodology is recognized as a common approach to calculating the sustainable growth rate.

Dr. Booth has relied upon the simplest form of the sustainable growth model, projecting growth only as a function of internally generated funds. The "b x r" method fails to account for future equity issuances, and no sustainable growth formula considers debt leverage as a source of future growth for an entity. Failure to consider the potential for debt and equity issuances as a source of future growth understates the firm's growth potential under this model.

Q. Do other regulators rely on sustainable growth rates in the DCF model?

A. No, they do not. I am not aware of any Canadian regulatory jurisdiction that uses sustainable growth rates in the DCF model. The BCUC explicitly rejected Dr. Booth's use of sustainable growth rates in 2016, stating: "Therefore, the Panel finds that no weight can be placed on Dr. Booth's sustainable growth rate model for the US proxy group as it is not based on a more robust and comprehensive version of this model."[67] In the U.S., the FERC moved away from its use of sustainable growth rates in its DCF methodology to be applied in public utility rate cases in 2014.[68] In summary, the FERC adopted the same two-step DCF methodology it has employed in gas and oil pipeline rate proceedings since the mid-1990s, which relies on a combination of projected analyst EPS growth rates and GDP growth estimates, as I have used in my Multi-Stage DCF analysis.

67 British Columbia Utilities Commission, FortisBC Energy Inc., Decision and Order G-129-16, issued August 10, 2016, at 83.

68 *See* FERC Order 531 at https://www.ferc.gov/sites/default/files/2020-04/E-7_2.pdf

Q. Have any academics recognized the shortcomings of the sustainable growth approach?

A. Yes, they have. Dr. Roger Morin noted his concerns with reflecting sustainable growth rates in the DCF analysis, indicating:

> In summary, there are three proxies for the expected growth component of the DCF model: historical growth rates, analysts' forecasts, and the sustainable growth method. Criteria in choosing among the three proxies should include ease of use, ease of understanding, theoretical and mathematical correctness, and empirical validation. The latter two are crucial. The method should be logically valid and consistent, and should possess an adequate track record in predicting and explaining security value. The retention growth method is the weakest of the three proxies on both conceptual and empirical grounds. The research in this area has shown that the first two growth proxies do a better job of explaining variations in market valuations (M/B and P/E ratios) and are more highly correlated to measures of value than is the retention growth proxy.[69]

Q. Do you have other concerns with the reasonableness of Dr. Booth's sustainable growth rate calculation?

A. Yes, I do. Dr. Booth indicates that he pulled data for his retention growth rate calculation on August 11, 2021 from Yahoo! Finance, which reports data from S&P Capital IQ. I have several concerns with how Dr. Booth has calculated his sustainable growth rates. First, it appears that Dr. Booth's calculation of the retention ratio is based on spot data for EPS and DPS on August 11, 2021. This is not appropriate and can lead to unreasonable results. For example, Dr. Booth uses a negative retention ratio for Duke Energy and Exelon, and retention ratios of 9.0 percent for Portland General, 13.0 percent for Southern Company, 15.0 percent for OGE Energy and 19.0 percent for ALLETE Inc. The retention ratio for regulated utilities (which is the

[69] Roger A Morin, "New Regulatory Finance", Public Utilities Reports, Inc. 2006, at 307.

inverse of the dividend payout ratio) is typically between 30 and 40 percent of earnings. Second, Dr. Booth multiplies the retention ratio by the most recent reported ROE for each company rather than the long-term projected ROE. Once again, the reported ROE in the most recent period may deviate substantially from the long-term average for either the individual company or the industry as a whole. Based on these questionable input assumptions, Dr. Booth derives negative sustainable growth rates for Duke Energy and Exelon Corp. and ROE estimates as low as 0.81 percent for Duke Energy, 1.74 percent for Exelon Corp, 3.85 percent for Portland General and 4.53 percent for ALLETE Inc. Such returns clearly do not reflect the risk associated with owning common equity and are not comparable to allowed ROEs for other regulated electric utilities in either Canada or the U.S. Therefore, these returns do not satisfy the Fair Return Standard and should be rejected. Yet, Dr. Booth uses this DCF analysis to support his view that his CAPM results are reasonable. In addition, Dr. Booth's sustainable growth rates are calculated by multiplying the retention ratio by the historical earned ROE (i.e., internally-generated growth, or "b x r"). This ignores future investments to provide service to customers and the corresponding growth in shares outstanding for each company (i.e., externally-generated growth, or "s x v").

Q. If Dr. Booth is concerned that analysts' projected EPS growth rates are overly optimistic, what growth rates could he have considered in his DCF analysis other than sustainable growth?

A. While I do not share Dr. Booth's concern with optimism bias in EPS growth rates from equity analysts, and although I view projected EPS growth rates as the most appropriate indicator of future growth in the DCF model, Dr. Booth could also have

considered dividend growth rates from Value Line for the electric utility companies in his U.S. sample in Schedule 15. Value Line does not receive any compensation associated with buy or sell recommendations. As shown in Rebuttal Exhibit JMC-1, the average DPS growth rate for my proxy group of U.S. electric utility companies is 5.11 percent, or 17 basis points higher than the 4.94 percent EPS growth rate from Value Line. Duke Energy is the only company in my U.S. Electric proxy group with a materially lower DPS growth rate from Value Line. If I were to include Value Line's projected DPS growth rate in my Constant Growth DCF analysis for the U.S. Electric proxy group, it would reduce the mean ROE estimate from 9.32 percent to 9.31 percent, which is still well above Dr. Booth's ROE recommendation of 7.50 percent.

Q. On page 44 of his Evidence, Dr. Booth comments on the high current valuations of electric utilities. How do these high valuations affect the results of the DCF model?

A. Dr. Booth references the relatively high valuations of electric utilities, citing their average market-to-book ("M/B") ratios of 1.93 over the past 10 years as compared to what he considers the M/B ratio for a fairly regulated utility of 1.15. He implies that these high valuations are an indication that utilities' equity returns are set above their cost of capital. Dr. Booth, however, does not consider the effect of these high valuations on the results of the DCF model, in particular the dividend yield component.

One of the assumptions of the DCF model is that the price-to-earnings ("P/E") ratio will remain constant in perpetuity. However, given the high valuations of electric utilities compared to historical levels, and the markets' expectation for higher interest

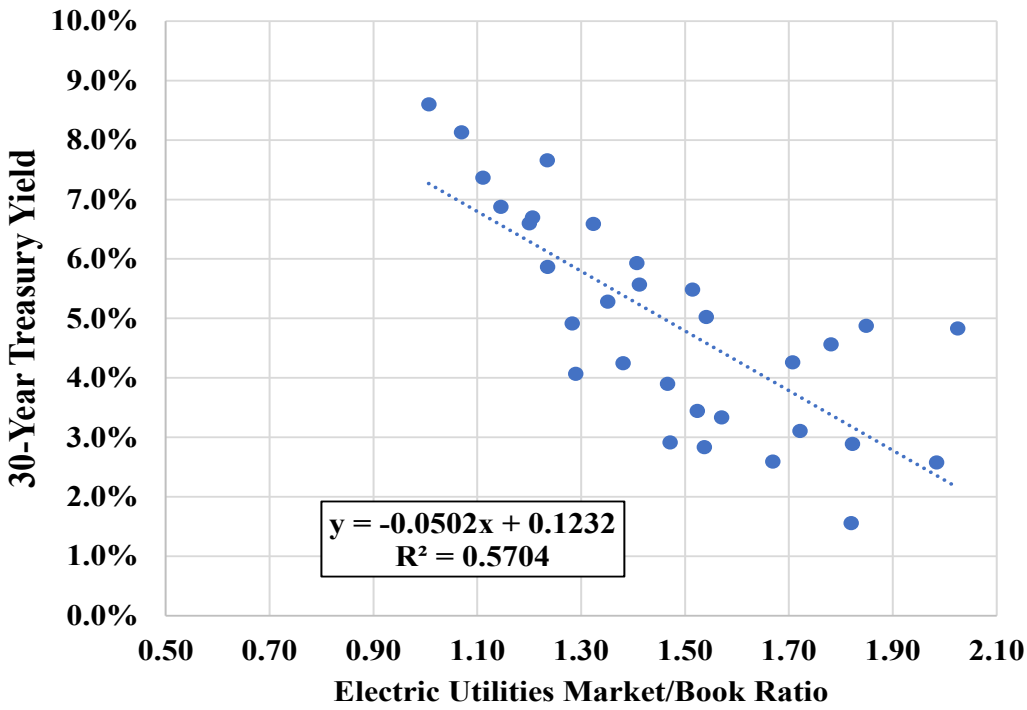
rates, those high P/E ratios (and M/B ratios) may not be sustainable over the long run. In my experience, EPS growth rates for electric utilities have generally been in the 5.0 percent to 6.0 percent range over the past decade, even as utility share prices have increased while government bond yields have been pressed to near record low levels. This indicates that investors are paying more for a dollar of earnings from electric utilities than they did 10 years ago. As the economy recovers and monetary policy moves toward a more neutral stance, interest rates are expected to increase from current levels. This is expected to place pressure on the high valuations for electric utilities. As a result, my conclusion is that the DCF model is understating the forward-looking cost of equity for regulated utilities because the dividend yield component of the model is based on average historical stock prices that are not sustainable.

In NP-CA-056 and NP-CA-057, Dr. Booth was asked to provide the source data for Schedules 3 and 4 in electronic format. In his response to NP-CA-056(a), Dr. Booth indicated that the data in those schedules was taken directly from a Morningstar report, and he provided a sample report for Duke Energy. The Morningstar reports for the remaining twelve companies listed on Schedules 3 and 4 were provided on November 8, 2021. I have been unable to replicate the M/B ratios shown in Schedule 4.

In response to Dr. Booth's comments that high M/B ratios are a sign that authorized ROEs for regulated utilities are higher than the investor required cost of equity, I performed an analysis that examines the correlation between government bond yields and the M/B ratios for electric utilities since 1990, using data provided by Bloomberg. As shown in Figure 7, the R^2 for this analysis is approximately 0.57, indicating a relatively strong linear relationship between M/B ratios and interest rates. This

relationship demonstrates that utility M/B ratios have increased not because authorized returns were higher than the true cost of equity, but because interest rates on government bonds have steadily declined for the past three decades. Low interest rates are favorable for capital-intensive industries such as utilities, while rising interest rates are not.

Figure 7: Market-to-Book Ratios and Interest Rates



Q. What are your conclusions regarding Dr. Booth's DCF analysis?

A. Dr. Booth's DCF analysis has limited value because much of the analysis is based on historical economic data and sustainable growth rates rather than forward-looking EPS growth rates for a proxy group of comparable risk to Newfoundland Power. Dr. Booth's DCF analysis based on sustainable growth rates does not produce reliable ROE estimates because his method of calculating those sustainable growth rates only

considers internally-funded growth and not externally-funded growth and his calculation is based on historical data rather than projected data. The results of his DCF analysis using sustainable growth rates (i.e., 5.85 percent (mean) and 6.04 percent (median)) are substantially below any authorized ROE for an investor-owned gas or electric utility in Canada. The only DCF analysis that Dr. Booth presents using forecast EPS growth rates for a sample of U.S. electric utilities produces ROE estimates of 8.62 percent (mean) and 8.96 percent (median), not including 50 bps for flotation costs. Only these DCF results using projected EPS growth rates should be given any weight by the Board.

VI. RISK ANALYSIS AND CAPITAL STRUCTURE RECOMMENDATION

Q. What is Dr. Booth's rationale for his recommendation to reduce Newfoundland Power's deemed equity ratio from 45.0 percent to 40.0 percent?

A. Dr. Booth compares Newfoundland Power's deemed equity ratio and authorized ROE to other Fortis subsidiaries in Canada. On page 97 of his Evidence, Dr. Booth states: "If the Board continues to regard NP as an average risk Canadian T&D utility, then the average for Fortis' Canadian utilities ignoring NP is 3.51%. At the current allowed ROE of 8.5% that means a 41% common equity ratio or at the current allowed 45% common equity ratio an allowed ROE of 7.8%. Anything else indicates that the Board does not actually regard NP as an average risk Canadian utility." Dr. Booth concludes: "The fact is that NP is an outlier in having a higher equity charge in its revenue requirement than these other Fortis utilities and if they are not comparators which Canadian utilities are?" On page 98, in discussing his recommendation, Booth states: "However, using the current 8.5% allowed ROE and simply reducing the common

equity ratio to 40% is the more pressing concern as it is the common equity ratio that is out of line with comparable Canadian T&D utilities."

Q. Does Dr. Booth assert that Newfoundland Power's business risk has decreased since the 2018 GRA when the Board found that the Company's deemed equity ratio of 45.0 percent remained just and reasonable?

A. No, he does not. On page 51 of his Evidence, Dr. Booth states: "As it is, **I agree with the company's assessment (CA-NP-022) that the business risks have not materially changed since 2018** and Newfoundland Power's business risks also continue to be defined by long standing factors."

Q. Has Dr. Booth presented any persuasive evidence supporting his recommendation to reduce the Company's common equity ratio from 45.0 percent to 40.0 percent?

A. No, he has not. Although Dr. Booth recognizes that Newfoundland Power's business risk has not materially changed since the 2018 GRA, he nevertheless recommends a reduction in the Company's common equity ratio from 45.0 percent to 40.0 percent. As support for his position, Dr. Booth refers to the deemed equity ratios and authorized returns for other Canadian utilities, particularly other Fortis subsidiaries. Dr. Booth has presented no evidence regarding the business risk of Newfoundland Power relative to those other Canadian utilities, nor has he challenged the Board's long-standing view that Newfoundland Power is an average risk utility. Rather, Dr. Booth argues that "if the Board continues to assess Newfoundland Power as an average risk Canadian utility, then it should regulate it as such and allow only an average

common equity ratio."[70] This, however, ignores the Board's previous Decisions that have consistently found that the business risk (in particular the small size and lack of geographic diversification) of Newfoundland Power supports an equity ratio of 45.0 percent. He has not provided any persuasive evidence to support his recommendation that the Board should change its longstanding view that the business risk profile of Newfoundland Power supports the Company's common equity ratio of 45.0 percent, not Dr. Booth's recommendation of 40.0 percent. Moreover, it is not appropriate to only compare Newfoundland Power to other Fortis subsidiaries in Canada, because the Company is competing for capital in a global market (including the U.S.) and must offer a comparable risk-adjusted return to investors.

Q. Please summarize Dr. Booth's Evidence as it relates to business risk for regulated utilities in general.

A. Dr. Booth testifies that the underlying business risk for regulated utilities is low since they are normally regulated because they are natural monopolies, which by definition means that they have market power.[71] He also comments that business risk has both a short and longer run dimension. In particular, he identifies short-run risks as O&M expenditures and rate design features (credit risk of customer, commodity charges in rates, how much revenue is recovered in fixed vs. variable rates).[72] Dr. Booth claims that utilities can be shielded from almost all of these risks by forward test years, rate design and the use of deferral accounts.[73] He identifies the longer-term risks as bypass

70 Evidence of Laurence D. Booth, at 2.
71 Ibid, at 41.
72 Ibid.
73 Ibid.

risk, capital recovery risk, and technological risk. Dr. Booth again claims that the regulator has tools to manage each of these risks.[74]

Q. Did Dr. Booth assess how these short and longer run risk factors affect Newfoundland Power in particular?

A. No, he did not. Dr. Booth has not offered any fundamental analysis of Newfoundland Power's risks on a stand-alone basis or in relation to other Canadian or U.S. electric or gas distributors. For example, in his response to NP-CA-017, Dr. Booth confirmed that he has not compared Newfoundland Power's deferral and variance accounts to those of a peer group of companies.

Q. How does Dr. Booth support his assertion that Newfoundland Power has very low business risk?

A. Dr. Booth contends that Newfoundland Power can be shielded from almost all short-term risks by rate design and the use of deferral accounts.[75] Dr. Booth states: "There is limited need to assess the value of its individual deferral accounts in minimising short run risk since the effect can be observed simply by comparing its actual earned ROE with that allowed."[76] Further, Dr. Booth comments that Newfoundland Power is allowed to earn up to 0.50 percent above the authorized ROE of 8.50 percent before the earnings sharing mechanism operates. As such, he asserts that "the Board's true allowed ROE is what it allows NP plus 0.50%."[77] Dr. Booth's definition of a "true allowed ROE" apparently includes the range approved by the Board, but he does not

74 Ibid, at 46-47.
75 Ibid, at 41-42.
76 Ibid, at 42.
77 Ibid, at 42-43.

consider the earnings upside of other Canadian utilities in his comparisons, as noted previously in this Rebuttal. On page 45 of his Evidence, Dr. Booth concludes his analysis of the Company's business risk by stating: "However, as shown from NP's demonstrated ability to earn its allowed ROE, these risks have so far never materialised."

Q. Do you agree with Dr. Booth that Newfoundland Power's ability to consistently earn its allowed ROE is evidence of the Company's low business risk going forward?

A. No, I do not. First, under the regulatory compact, a regulated utility has an *opportunity* to earn its allowed ROE, not a guarantee. Second, the fact that Newfoundland Power has historically been able to earn its allowed ROE in most years through efficient and economical management does not tell us anything about the future. Nor should the company be penalized for doing so. Lastly, Dr. Booth suggests that Newfoundland Power has no short-term risk because of its ability to accurately forecast demand. However, even assuming that the proposed rate mitigation plan is approved and goes into effect, wholesale electricity prices from Newfoundland and Labrador Hydro are expected to increase by approximately 10 percent to 14.7 cents/kWh. This increase in electricity prices is likely to affect demand for residential and commercial customers of Newfoundland Power, who may consider alternative fuel sources or increase conservation efforts. On page 48 of his Evidence, Dr. Booth criticizes the lack of a demand elasticity study, but this misses the broader point that higher prices inevitably lead to lower demand; it's only a matter of the degree. In addition, the rating agencies have expressed concern that the Board may continue to seek ways to mitigate future

rate shock for customers, which could mean it is more difficult for Newfoundland Power to recover its costs and earn its allowed ROE.

Q. Have other regulators considered, and rejected, Dr. Booth's arguments pertaining to the ability to earn the allowed ROE as evidence of a Company's business risk going forward?

A. Yes. The BCUC, in its most recent cost of capital decision for FortisBC, heard this argument and rejected it, summarizing:

> The impact of short-term risk on overall risk, and whether a short-term risk if never realized over a period of time should be considered a long-term risk and evaluated as such was raised by the parties. Specifically, this issue related to FEI's history of achieving actual earnings higher than its allowed ROE and whether the risk of not earning the allowed ROE should be considered a risk at all when viewed in the context of FEI's historical ROE performance.
>
> Mr. Coyne explains that business and financial risks also have a time dimension and both long and short-term risks are considered by investors and affect a utility's business risk profile. He describes short-term risks as those that will reverse and resolve themselves within a one to two year period through either the normal ebb or flow of earnings or through regulatory relief as a utility's short-term risk. Examples of these could include weather events or financial market disruptions. By contrast, longer term risks are those characterized by a business profile shift where mitigation is not foreseeable. Included among his examples of long-term risk is the risk of stranded assets because of market share losses or changes in environmental policies with a substantial impact on operational profitability.
>
> Dr. Booth describes the ability to earn the allowed ROE, reflecting a return on capital, as short-run risk. The return of capital is a long-run risk reflecting the utility's ability to recover its investment in plant and equipment. Dr. Booth asserts however, that to have any impact, long-term risks must eventually become short-term risks and states that: "To all intents and purposes FEI's shareholders have not suffered any losses or experienced any risk." Further, when such serious risks do arise, Canadian utilities typically come before the regulator for a reallocation of costs. Further, AMPC/BCOAPO, with reference to the earning of ROE, explain neither they nor Dr. Booth take issue with FEI's position that the

> ability to earn ROE in a particular test year represents short term risk. However, they contend that year after year "FEI continues to face very little short-run risk, such that this pattern of consistent overearning is clearly a long-term phenomenon" and pose the question as to how many years of persistent over-earning does it take for a utility witness to accept the limited risk faced by utility investors.
>
> ….
>
> The Panel does not agree with CEC's assertion that equity investors are concerned primarily with immediate risk and current ROE performance as they can alter their investment when rewards fail to match the immediate risk. While investors certainly consider a risk which has recently occurred, they must be equally concerned about the future prospects of an investment. Further, while it is true investors may sell a particular investment; it would be imprudent of an investor to fail to consider the future prospects of an investment and any potential future risks which may occur.
>
> The Panel accepts FEI's argument that risk is prospective. In the Panel's view, the risk of earning ROE does not disappear in any given test year because of a utility's success in achieving it in prior years. However, this does not mean that an investor does not consider historical performance when choosing to make an investment but in doing so must accept that there is no certainty that past performance will be repeated in the future.[78]

Q. On pages 43-44 of his Evidence, Dr. Booth compares the authorized ROE and deemed equity of Newfoundland Power to Canadian electricity distributors, particularly those owned by Fortis. Do you have any comments on this analysis?

A. First, Dr. Booth has not included comparable risk U.S. utilities in his comparison even though there is evidence that companies such as Newfoundland Power are competing for capital in global financial markets, not just in Canada. Second, as mentioned previously, Dr. Booth has not conducted a comparative risk assessment to these

[78] BCUC Decision and Order G-129-16, August 10, 2016 at 10-11.

utilities that would support such a comparison. Third, Dr. Booth's recommended equity ratio and ROE would result in the lowest return for any Canadian or U.S. utility. Finally, this entire line of reasoning is surprising given Dr. Booth's statement on page 95 of his Evidence: "I do not normally recommend that regulators follow other regulators since the process is circular."

Q. Please summarize Dr. Booth's comparison of the variability of the earned ROE of Newfoundland Power to a group of U.S. utility holding companies.

A. Dr. Booth measures the standard deviation of the annual earned ROE of Newfoundland Power and a sample of U.S. utility holding companies over the period from 2011-2020. On pages 43-44, Dr. Booth reports that the average earned ROE for U.S. holding companies has been 8.55 percent within a range from 6.25 percent to 10.88 percent, while Newfoundland Power's average earned ROE over the same period has been 8.96 percent. He finds that the variability in Newfoundland Power's annual earned ROE is 0.13 percent, or approximately 1/3 of the lowest risk U.S. utility.[79] The results of Dr. Booth's analysis are summarized in Schedule 3 of his Evidence.

Q. Do you have any concerns with this analysis?

A. Yes, I have several concerns with Dr. Booth's earned ROE analysis. First, his ROE variance analysis was conducted at the holding company level for the U.S. proxy group companies and at the operating utility level for Newfoundland Power. As such, Dr. Booth's analysis provides an inconsistent basis of comparison. Second, Dr. Booth's

[79] Evidence of Laurence D. Booth, at 43-44.

earned ROE analysis covers the period from 2011-2020, which has seen significant changes in the industry, including retail competition in some jurisdictions, divestiture of generation assets, and significant industry consolidation through mergers and acquisitions. For this reason, comparison of the variability of earned ROEs over a 10-year period would most likely be distorted. Dr. Booth acknowledges on pages 43-44 of his Evidence that "much of the variability in the earned ROEs is probably stemming from holding company M&A activity rather than operating results," and that the utility holding company is "undeniably riskier" than the operating company. Further, in NP-CA-056(a), Dr. Booth was asked to provide the source and the source data used to prepare Schedule 3 in electronic format. In response, Dr. Booth provided an equity analyst report from Morningstar for Duke Energy Inc., which is one of the 13 U.S. electric utility companies in Schedule 3. In addition, Dr. Booth provided an Excel spreadsheet that has two columns, labeled EPS and DPS, with values from 1967 through 2017. The source of this data is not specified, and it is not clear how the data was used in preparing Schedule 3. In any event, Dr. Booth has not provided his source data or the calculations that he performed to analyze the variability of the earned ROE for Newfoundland Power and the group of electric utilities in Schedule 3.

Q. What is your conclusion regarding Dr. Booth's earned ROE analysis?

A. My conclusion is that comparing the earnings variability of U.S. electric utility *holding* companies to that of Newfoundland Power from 2011-2020 provides little insight into the relative risk of these entities. Dr. Booth's use of holding company data for these purposes also masks what may be occurring at the individual utility level and does not provide a valid base of comparison to Newfoundland Power.

Q. Does Dr. Booth take into consideration the small size of Newfoundland Power in his risk assessment?

A. No. As discussed in my Cost of Capital Report, the Board has previously found that the small size of Newfoundland Power is one of the key factors supporting the Company's common equity ratio of 45.0 percent.[80] This finding has been used to support a strong common equity ratio for Newfoundland Power. Furthermore, the small size of Newfoundland Power actually has had a negative effect on the Company's borrowing costs because Newfoundland Power's bond issuances are typically in the range of $75 million, whereas Canadian debt markets generally require a minimum issuance amount of $100 million, and $200 million to reach the liquid stage of the market.[81] The size of Newfoundland Power's debt offerings contributes to liquidity constraints in placing the debt and in higher price differentials against Canadian long bonds.

In addition, the small size of Newfoundland Power magnifies other business risks, including the weak economic conditions and demographic trends in Newfoundland and Labrador, the risk associated with higher electricity supply costs and the risk of customers switching to an alternative fuel supply. In summary, the small size of Newfoundland Power does not support Dr. Booth's recommendation to reduce the Company's common equity ratio.

80 Concentric Cost of Capital Report, at 58.
81 Ibid, at 60-61.

Q. Please summarize Dr. Booth's evidence regarding the economy in Newfoundland and Labrador relative to the remainder of Canada.

A. Dr. Booth acknowledges the small size and lack of economic diversification in Newfoundland and Labrador and the magnitude of the Provincial government's budget deficit and the effect that has had on borrowing costs for the province. On page 36-39 of his Evidence, Dr. Booth discusses the economic environment in Newfoundland and Labrador and explains that "[t]here is no question that the province's fiscal position is not as strong as in 2016 or even 2018, as it seems to have reverted to pre 2007." He ultimately concludes that, "[w]hether this affects the risk of Newfoundland Power, however, is questionable." However, he also observes that the Province has the third highest net income per capita in Canada, which he suggests is an indicator of relative economic strength.

Q. Has Dr. Booth accounted for the weak economic outlook and negative demographic trends for Newfoundland and Labrador relative to Canada generally?

A. No, he does not. In spite of recognizing the small size and economic weakness of Newfoundland and Labrador as compared to Canada overall, Dr. Booth recommends an ROE of 7.50 percent for Newfoundland Power, based primarily on the very low range established by his CAPM analysis. As Dr. Booth notes, the province is very small and lacks the economic diversification of many other provinces in Canada. These factors affect the business risk of Newfoundland Power and make the Company riskier from the perspective of investors and credit rating agencies than companies that operate in larger, more economically diverse service territories. Against this economic

backdrop, it is reasonable to conclude that Newfoundland Power's business risk is higher than other Canadian utilities. Nevertheless, Newfoundland Power must continue to invest in its distribution and transmission system so that it can continue to provide safe and reliable service and meet service quality and customer satisfaction standards. Further, Dr. Booth recognizes the challenges presented by the magnitude of the Provincial government's budget deficit, but then questions whether this affects the business risk of Newfoundland Power. In my view, both the near-term and longer-term economic outlook for Newfoundland and Labrador contribute to the higher business risk of Newfoundland Power, and support continuation of the Company's 45.0 percent deemed equity ratio.

Q. Is there additional evidence with respect to the long-term economic outlook for Newfoundland and Labrador?

A. Yes, since the filing of Concentric's Cost of Capital Report in May 2021, the Conference Board of Canada has published its long-term economic outlook for the Province in August 2021. According to the Conference Board's report, which covers the period through 2040, the long-term economic outlook for Newfoundland and Labrador is characterized as "grim." The Conference Board provides the following overview:

> A combination of declines in population and oil production will lead to miniscule growth over the long term in Newfoundland and Labrador. In fact, real GDP growth will turn negative beyond 2030.
>
> Since 2013, net provincial migration has generally been negative. And the trend will continue through the long term, as the grim economic situation causes residents to relocate to other provinces. This will contribute to the anticipated negative growth in the province's labour force through the long term.

> The province's provincial debt is close to $50 billion and, on a per capita basis, is the highest in the country. It will be extremely challenging for Newfoundland and Labrador to lower massive debt levels given our view that gains in government revenue will be restrained by sluggish economic growth over the long term.[82]

In addition, the October 2021 DBRS Morningstar credit report for Newfoundland Power also cites the "weak provincial economic conditions with high dependence on volatile commodity prices" as a credit challenge for the Company "because it could significantly affect the affordability for Newfoundland Power's customers."[83]

Q. On pages 46-47 of his Evidence, Dr. Booth argues that in order for higher electricity prices to affect Newfoundland Power's business risk they must cause higher costs to its remaining customers, similar to the "death spiral" that has occurred with the TransCanada mainline. What is your response?

A. As discussed on pages 65-66 of Concentric's Report, both Moody's and DBRS Morningstar have expressed concern with the risk for Newfoundland Power due to higher supply costs, and how those supply costs might impact customer demand for electricity and timely cost recovery for the Company. Moody's has indicated that Newfoundland Power's "credit profile is negatively impacted by the risk of future cost recovery." In October 2021, DBRS Morningstar reiterated that it "considers the biggest challenge Newfoundland Power faces to be the potential rate shock for ratepayers from the Muskrat Falls project." While noting that "on July 28, 2021, the government of Newfoundland and Labrador and the Government of Canada announced an agreement in principle for the financial restructuring of the Muskrat

[82] The Conference Board of Canada, "Recovery Will Come From Away," Newfoundland and Labrador's 20-Year Outlook, August 30, 2021, at 3.
[83] DBRS Morningstar, Newfoundland Power Inc. Rating Report, October 19, 2021, at 1.

Falls project," DBRS Morningstar indicated that although it "views this as a positive development, the uncertainty on future rates remains." DBRS Morningstar stated that it "will continue to monitor the situation and treat a potential rate shock as an event risk."[84]

I also disagree with Dr. Booth that Newfoundland Power's business risk can only be considered to have increased due to higher electricity prices from Muskrat Falls if those higher prices lead to a "death spiral." If a portion of the Company's customers seek alternative fuel sources, and with the Provincial government taking steps to mitigate rate shock, then the business risk of Newfoundland Power would arguably be higher than it was absent Muskrat Falls.

Finally, under the Fair Return Standard, the cost of equity must be set according to the three-pronged test of capital attraction, comparability of returns, and financial integrity. This standard is designed to determine a fair return to the shareholder for its invested capital and is not a lever to be used to mitigate rate impacts.

Q. Does your risk assessment find that the Muskrat Falls project has caused an increase in Newfoundland Power's business risk since 2018?

A. No, it does not. The risk analysis in Concentric's Cost of Capital Report anticipated that a rate mitigation plan would be put forth to limit the impact on customer rate of the Muskrat Falls project even though the specific details of that plan were unknown at the time my Report was filed with the Board. Nevertheless, the conclusion on page 66 of my Report was that: "Given the delays and increased cost of the Muskrat Falls

[84] Ibid.

hydroelectric project, the power supply risk for Newfoundland Power remains elevated, similar to the circumstances at the time of the 2015 and 2018 GRA filings." Further, the reliability risk associated with the Muskrat Falls project is also a consideration that has not yet been resolved.

Q. Do you agree with Dr. Booth's characterization of the views of Canadian regulatory boards on the importance of long-term vs. short-term risks?

A. No. In his Evidence (on page 46) and in his response to the PUB on this issue (PUB-CA-009 and 010) Dr. Booth dismisses what he terms "speculative" long-term risks until they impact the test year or very near term. He draws upon a decision from the OEB and concludes "Essentially the OEB is simply stating that it deals with problems as they arise, which is the regulatory dynamic in Canada to protect the utility, and will not address 'speculative risks'" (PUB-CA-008).

My experience is that Canadian boards consider both short term and long term risks in their assessments of the basis for cost of capital proceedings. The OEB decision, cited by Dr. Booth, was addressing the narrow question of whether Enbridge's risks had changed sufficiently from its last decision to warrant a reconsideration of its equity ratio. Just prior to Dr. Booth's citation, the Board states: "In this proceeding, the Board's task in assessing the change in risk is to examine how risk has changed from the time the issue was previously decided in EB-2006-0034."

As outlined previously in this Rebuttal evidence, I believe the approach articulated by the BCUC is more representative of regulatory commissions, and investors, in considering both short-term and long-term risks when determining the required cost of capital. The BCUC sums its view this way:

> While investors certainly consider a risk which has recently occurred, they must be equally concerned about the future prospects of an investment. Further, while it is true investors may sell a particular investment; it would be imprudent of an investor to fail to consider the future prospects of an investment and any potential future risks which may occur.[85]

It stands to reason that an investor in assets with useful lives up to 50 years or longer would consider both short-term and long-term risks, whether or not they have materialized in the current period.

Q. On page 95 of his Evidence, Dr. Booth claims that Newfoundland Power would still be able to finance on reasonable terms if the Company's deemed equity ratio were reduced from 45.0 percent to 40.0 percent. Please comment.

A. As a preliminary matter, Newfoundland Power has a long-term issuer rating of Baa1 from Moody's, not 'A2' as Dr. Booth asserts. The 'A2' rating is an issue rating for First Mortgage Bonds ("FMB") that are secured by Company assets. This pledge of security enables the FMB to receive a rating two notches higher than Newfoundland Power's issuer rating. I do not agree with Dr. Booth that Newfoundland Power has a higher credit rating than other electric and gas utilities in Canada. On page 97 of his Evidence, Dr. Booth argues that an average risk utility like Newfoundland Power has a higher than average bond rating "mainly due to the generous financial parameters allowed NP by the Board." However, Dr. Booth is incorrectly comparing the issue rating of Newfoundland Power to the long-term issuer rating (which is what I use to screen my proxy group companies) of other Canadian utilities. As explained above, the issue rating for Newfoundland Power is higher because the Company issues FMBs, not unsecured debt. Further, my research indicates that Newfoundland Power is one

[85] BCUC Decision and Order G-129-16, August 10, 2016 at p.11.

of two regulated utilities in Canada to have issued FMBs in the past 20 years, and both are small electric utility companies. Dr. Booth, in response to NP-CA-052 argues "As far as the investor is concerned it is the issue rating that is important in their risk assessment since they buy the issue not the issuer." What's missing from this perspective is that Newfoundland Power is offering additional security to its bond investors secured by its assets, which other utilities have not offered. This benefits ratepayers, but comes with a lien on the Company's assets.

As support for his assertion, Dr. Booth refers to an analysis performed by the Alberta Utilities Commission, which evaluates whether the authorized ROE and capital structure the AUC is considering would allow the regulated utilities in that province to achieve a certain credit rating. On page 95 of his Evidence, Dr. Booth states: "The AUC normally has a summary table making sure that the utilities it regulates meet the requirements of some form of an A bond rating." Using the AUC table, Dr. Booth indicates on page 95 of his Evidence that Newfoundland Power would have a coverage ratio of 2.9 with its current 8.5 percent ROE and 45.0 percent equity ratio. Dr. Booth, however, does not indicate what Newfoundland Power's coverage ratio would be using his recommended ROE of 7.5 percent and his equity ratio of 40.0 percent, or whether that coverage ratio would be sufficient to achieve or maintain an A bond rating.

In response to Dr. Booth's comments regarding whether a deemed equity ratio of 40.0 percent or lower would allow Newfoundland Power to maintain its current credit rating, I note that both Moody's and Morningstar DBRS consider both business and financial risk when they assign a credit rating. The fact that Newfoundland Power's

credit metrics (i.e., financial risk) may support a higher rating implies that the rating agencies believe that the Company has higher than average business risk, which would explain why Newfoundland Power is assigned a Baa1 rating by Moody's instead of a higher rating consistent with the Company's financial risk and credit metrics. In addition, while bond ratings are one important consideration for investors, equity investors tend to be more concerned with earnings growth rates, valuation multiples (such as the P/E ratio), the economic outlook for the Company's service territory, and the regulatory environment in which the Company operates. In order to meet the Fair Return Standard, an equity return must do more than achieve a specified bond rating.

Q. In his response to NP-CA-054, Dr. Booth asserts that it is doubtful that there would be an immediate reaction from rating agencies if the Board were to adopt his ROE and capital structure recommendations. Are you aware of any recent instances where a reduction in the authorized equity ratio has resulted in a downgrade to the utility's credit rating?

A. Yes, the New York Public Service Commission recently approved a settlement agreement for Central Hudson Electric and Gas Company ("Central Hudson"), another Fortis subsidiary, which included a reduction in that company's authorized equity ratio from 50.0 percent to 48.0 percent and an increase in the authorized ROE from 8.80 percent to 9.00 percent. Moody's subsequently downgraded the credit rating of Central Hudson on September 22, 2021 from A3 to Baa1, citing the lower equity ratio as a primary factor in the rating downgrade. This report is provided as Rebuttal Exhibit JMC-2. Moody's explained the rationale for the downgrade as follows:

> Several factors incorporated in the proposal will contribute to the weakness in financial metrics including growth in regulatory assets combined with a reduction in regulatory liabilities and a reduction in equity capital from 50% to 48% over the next 3 years and a large ongoing capital program. These factors are only partially offset by an increase in the allowed ROE to 9%.[86]

Moody's also commented on how the New York PSC's decision affected their view of the regulatory environment in New York, stating:

> While we don't believe that Central Hudson has been a significant target of such actions, these efforts undermine the consistency and predictability of the state's regulatory framework, an important credit consideration.[87]

This Moody's report on Central Hudson highlights the importance of a regulatory environment that supports the utility's ability to maintain its financial strength and ability to access capital under a variety of economic and financial market conditions.

Q. Do you have any concluding comments on Dr. Booth's recommendation to reduce the common equity ratio of Newfoundland Power?

A. Yes. Dr. Booth's comparisons to other Canadian utilities are unsupported by any meaningful comparison of relative risk. Further, in summing his argument on page 98, he selectively introduces comparisons to BC and Ontario gas utilities, without acknowledging the higher equity ratios for electric distributors in both jurisdictions. He also cites a return reportedly allowed by the AUC to Fortis BC, but the AUC does not regulate Fortis BC. None of these comparisons provides a reasonable basis for determining Newfoundland Power's equity ratio.

---

86 Moody's Investors Service, "Rating Action – Moody's downgrades Central Hudson Gas & Electric to Baa1; stable outlook, September 22, 2021, at 1.

87 Ibid.

In previous GRA filings, the Consumer Advocate has made a similar recommendation to reduce the Company's common equity ratio. The Consumer Advocate has typically proposed that this change in capital structure be accomplished by issuing preferred shares or by substituting the cost rate for preferred shares for the 5.00 percent of common equity. Dr. Booth characterizes this as a "book-keeping exercise." The Board has rejected this proposal on several previous occasions.

Q. What are the implications of deeming 5.0 percent of Newfoundland Power's capital structure as preferred shares?

A. If the Board were to modify Newfoundland Power's deemed capital structure to include 5.0 percent preferred shares, the Company would essentially be earning a debt return on those preferred shares and it would effectively result in a reduction in Newfoundland Power's authorized ROE. Deeming 5.0 percent of Newfoundland Power's capital structure as preferred shares effectively reduces Dr. Booth's recommendation to an authorized ROE of approximately 7.2 percent on 40.0 percent common equity. Further, from a practical perspective, this is not a viable option for Newfoundland Power because essentially there is no market for preferred shares in Canada, and most utilities in Canada no longer issue preferred shares. In summary, Dr. Booth's recommendation to reduce the equity ratio in the capital structure has been rejected by the Board previously, and the Board should reiterate that decision in this proceeding.

VII. CONCLUSIONS AND RECOMMENDATION

Q. What is your conclusion regarding a reasonable and appropriate cost of equity and equity ratio for Newfoundland Power?

A. I affirm my recommendations from my initial Report. Based on my analysis, a just and reasonable ROE for Newfoundland Power is 9.80 percent on 45.0 percent common equity.

Q. Does this conclude your Prepared Rebuttal Testimony?

A. Yes, it does.

90-DAY CONSTANT GROWTH DCF -- U.S. ELECTRIC PROXY GROUP

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]
Company	Ticker	Annualized Dividend	Stock Price	Dividend Yield	Expected Dividend Yield	Zacks EPS Growth	SNL EPS Growth	Value Line EPS Growth	First Call Growth	Value Line DPS Growth	Average Growth Rate	Low DCF ROE	Mean DCF ROE	High DCF ROE
Alliant Energy Corporation	LNT	$1.61	$50.46	3.19%	3.28%	5.80%	5.75%	5.50%	5.70%	6.00%	5.75%	8.78%	9.03%	9.08%
American Electric Power Company, Inc.	AEP	$2.96	$81.45	3.63%	3.74%	5.70%	6.00%	6.50%	6.15%	5.50%	5.97%	9.44%	9.71%	10.25%
Duke Energy Corporation	DUK	$3.86	$91.43	4.22%	4.32%	5.20%	5.00%	5.00%	4.99%	2.50%	4.54%	9.32%	8.86%	9.53%
Entergy Corporation	ETR	$3.80	$97.41	3.90%	3.99%	5.10%	5.75%	3.00%	5.50%	4.50%	4.77%	6.96%	8.76%	9.76%
Exelon Corporation	EXC	$1.53	$42.00	3.64%	3.70%	2.30%	1.31%	4.00%	Negative	5.50%	3.28%	4.98%	6.98%	7.72%
Evergy, Inc.	EVRG	$2.14	$55.11	3.88%	4.01%	5.90%	6.50%	8.00%	5.65%	5.50%	6.31%	9.64%	10.32%	12.04%
OGE Energy Corporation	OGE	$1.61	$31.79	5.06%	5.16%	4.40%	2.70%	4.00%	3.80%	4.50%	3.88%	7.83%	9.04%	9.58%
Pinnacle West Capital Corporation	PNW	$3.32	$78.49	4.23%	4.32%	3.40%	5.00%	4.50%	3.50%	6.00%	4.48%	7.70%	8.80%	9.34%
Portland General Electric Company	POR	$1.63	$43.11	3.78%	3.94%	13.40%	4.85%	4.00%	13.40%	6.00%	8.33%	7.86%	12.27%	17.43%
MEAN				3.95%	4.05%	5.69%	4.76%	4.94%	6.09%	5.11%	5.26%	8.06%	9.31%	10.53%
Flotation Costs [14]												0.50%	0.50%	0.50%
												8.56%	9.81%	11.03%

Notes:
[1] Source: Bloomberg Professional
[2] Source: Bloomberg Professional, 90-day average as of March 31, 2021
[3] Equals [1] / [2]
[4] Equals [3] x (1 + 0.5 x [10])
[5] Source: Zacks at March 31, 2021
[6] Source: SNL Financial Median Long-Term EPS Growth Rate as of March 31, 2021
[7] Source: Value Line
[8] Yahoo! Finance as of March 31, 2021
[9] Source: Value Line
[10] Equals Average([5], [6], [7], [8], [9])
[11] Equals [3] x (1 + 0.5 x Minimum([5], [6], [7], [8], [9])) + Minimum([5], [6], [7], [8], [9])
[12] Equals [4] + [10]
[13] Equals [3] x (1 + 0.5 x Maximum([5], [6], [7], [8], [9])) + Maximum([5], [6], [7], [8], [9])
[14] The Board allows 50 bps flotation adjustment for equity issuance costs, administrative costs, impact of underpricing, potential for dilution, and equity cushion for investors.

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's downgrades Central Hudson Gas & Electric to Baa1; stable outlook

22 Sep 2021

Approximately $350 million of debt securities downgraded

Toronto, September 22, 2021 -- Moody's Investors Service ("Moody's") today downgraded the ratings of Central Hudson Gas & Electric Corporation (Central Hudson), including its senior unsecured rating to Baa1 from A3. The outlook is stable. See a complete list of rating actions at the end of this release.

RATINGS RATIONALE

"The downgrade of Central Hudson reflects the projected weakness in financial metrics, including its cash flow from operations pre-working capital (CFO pre-W/C) to debt ratio that we forecast to be in the 13-16% range over the next few years," said Gavin MacFarlane, Vice President/Senior Credit Officer. "Moody's expects financial CFO pre-W/C to debt to decline from the current 16.4% level, and the 18% to 19% ratio exhibited in 2018 and 2019 and remain below that level for the next several years."

On August 24th, the company filed a joint proposal [1] with the New York Public Service Commission (NYPSC) that would establish rates for the period 1 July 2021 to 30 June 2024. Several factors incorporated in the proposal will contribute to the weakness in financial metrics including growth in regulatory assets combined with a reduction in regulatory liabilities and a reduction in equity capital from 50% to 48% over the next 3 years and a large ongoing capital program. These factors are only partially offset by an increase in the allowed ROE to 9%. A clear driver of the joint proposal is to limit rate increases for customers, however this may cause rate pressure to build in future years. We expect the rate settlement to be approved by the NYPSC with only minor modifications if any.

As a result, the CFO pre-W/C to debt ratio continue to decline from previous levels while political intervention into utility finances has increased. Over the past two years, across the New York regulated electric and gas utility sector, we have observed an increase in gubernatorial rhetoric, regulatory investigations, and legislative proposals that risk higher financial penalties for utility underperformance and challenges to utility franchise rights. While we don't believe that Central Hudson has been a significant target of such actions, these efforts undermine the consistency and predictability of the state's regulatory framework, an important credit consideration. The legislative and judicial underpinnings of the New York utility regulatory environment could also be adversely affected if punitive laws are passed. We note that a new governor recently took office, although it remains too early to tell what the impact that change will have.

Central Hudson's Baa1 rating reflects the low business risk of its regulated electric and gas transmission and distribution (T&D) operations. It also captures the historically credit supportive relationship it has maintained with its regulator to date and the suite of timely cost recovery mechanisms in place that drive underlying earnings and cash flow. Offsetting these positive attributes is the pressure on financial metrics resulting from higher capital expenditures, a reduction in operating cash flow following the passage of federal tax reform and declining revenue and cash flow from the above mentioned reduction in regulatory liability balances and growth in regulatory assets resulting from its proposed rate settlement. We expect this to lead to a sustained deterioration in the company's CFO pre-WC to debt ratio to a range of 13-16%. Central Hudson's credit quality also incorporates several ringfencing provisions designed to protect the utility from contagion risk from its parent Fortis Inc. (Fortis, Baa3 stable).

Outlook

The stable outlook is based on Moody's expectation that CFO pre-WC to debt will be sustained in the range of 13-16% over the next few years and that political intervention into the regulatory process will not lead to an additional deterioration in the utility's financial performance.

FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

Factors that could lead to an upgrade

Central Hudson's ratings could be upgraded if we forecast CFO pre-W/C to debt will be sustained above 18%. We could also upgrade the ratings if there is an improvement in the political and regulatory environment the company faces.

Factors that could lead to a downgrade

Central Hudson's ratings could be downgraded if CFO pre-WC to is sustained below 14%. We could also downgrade the ratings if the New York regulatory and political environment become incrementally more challenging or there is a further deterioration in the stability and predictability of regulatory decisions.

Central Hudson is a regulated electric and natural gas T&D utility, serving approximately 300,000 electric and 80,000 natural gas customers in the mid-Hudson valley region of New York State and is regulated by the New York Public Service Commission. Central Hudson is an indirectly held, wholly-owned subsidiary of Fortis Inc., a diversified electric and gas utility holding company based in Canada.

Downgrades:

..Issuer: Central Hudson Gas & Electric Corporation

.... Issuer Rating, Downgraded to Baa1 from A3

....Senior Unsecured Regular Bond/Debenture, Downgraded to Baa1 from A3

....Underlying Senior Unsecured Regular Bond/Debenture, Downgraded to Baa1 from A3

..Issuer: New York State Energy Research & Dev. Auth.

....Senior Unsecured Revenue Bonds, Downgraded to Baa1 from A3

....Underlying Senior Unsecured Revenue Bonds, Downgraded to Baa1 from A3

Outlook Actions:

..Issuer: Central Hudson Gas & Electric Corporation

....Outlook, Changed To Stable From Negative

The principal methodology used in these ratings was Regulated Electric and Gas Utilities published in June 2017 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1072530 . Alternatively, please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found at: https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_79004.

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

For any affected securities or rated entities receiving direct credit support from the primary entity(ies) of this credit rating action, and whose ratings may change as a result of this credit rating action, the associated

regulatory disclosures will be those of the guarantor entity. Exceptions to this approach exist for the following disclosures, if applicable to jurisdiction: Ancillary Services, Disclosure to rated entity, Disclosure from rated entity.

The ratings been disclosed to the rated entity or its designated agent(s) and issued with no amendment resulting from that disclosure.

These ratings are solicited. Please refer to Moody's Policy for Designating and Assigning Unsolicited Credit Ratings available on its website www.moodys.com.

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Moody's general principles for assessing environmental, social and governance (ESG) risks in our credit analysis can be found at http://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1288435 .

The Global Scale Credit Rating on this Credit Rating Announcement was issued by one of Moody's affiliates outside the EU and is endorsed by Moody's Deutschland GmbH, An der Welle 5, Frankfurt am Main 60322, Germany, in accordance with Art.4 paragraph 3 of the Regulation (EC) No 1060/2009 on Credit Rating Agencies. Further information on the EU endorsement status and on the Moody's office that issued the credit rating is available on www.moodys.com.

The Global Scale Credit Rating on this Credit Rating Announcement was issued by one of Moody's affiliates outside the UK and is endorsed by Moody's Investors Service Limited, One Canada Square, Canary Wharf, London E14 5FA under the law applicable to credit rating agencies in the UK. Further information on the UK endorsement status and on the Moody's office that issued the credit rating is available on www.moodys.com.

REFERENCES/CITATIONS

[1] dps.ny.gov; Cases 20-E-0428, 20-G-0429 and 20-M-0134

Please see www.moodys.com for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

Please see the ratings tab on the issuer/entity page on www.moodys.com for additional regulatory disclosures for each credit rating.

Gavin MacFarlane
VP - Senior Credit Officer
Infrastructure Finance Group
Moody's Canada Inc.
70 York Street
Suite 1400
Toronto, ON M5J 1S9
Canada
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Michael G. Haggarty
Associate Managing Director
Infrastructure Finance Group
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

Releasing Office:
Moody's Canada Inc.
70 York Street
Suite 1400
Toronto, ON M5J 1S9
Canada
JOURNALISTS: 1 212 553 0376
Client Service: 1 212 553 1653

MOODY'S
INVESTORS SERVICE

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from $1,000 to approximately $5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.