Newfoundland & Labrador

BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

IN THE MATTER OF A

GENERAL RATE APPLICATION
FOR 2014 AND 2015 TEST YEARS

FILED BY

NEWFOUNDLAND AND LABRADOR HYDRO

DECISION AND ORDER
OF THE BOARD

ORDER NO. P.U. 49(2016)

BEFORE:

Andy Wells
Chair and Chief Executive Officer

Darlene Whalen, P.Eng.
Vice-Chair

Dwanda Newman, LLB
Commissioner

James Oxford
Commissioner

NEWFOUNDLAND AND LABRADOR
BOARD OF COMMISSIONERS OF PUBLIC UTILITIES

AN ORDER OF THE BOARD

NO. P.U. 49(2016)

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

IN THE MATTER OF a general rate application filed by Newfoundland and Labrador Hydro on July 30, 2013; and

IN THE MATTER OF an amended general rate application filed by Newfoundland and Labrador Hydro on November 10, 2014.

BEFORE:

Andy Wells
Chair & Chief Executive Officer

Darlene Whalen, P. Eng
Vice-Chair

Dwanda Newman, LL.B.
Commissioner

James Oxford
Commissioner

TABLE OF CONTENTS

PART ONE: APPLICATION AND PROCEEDING

1.0 The Application

Newfoundland and Labrador Hydro ("Hydro") filed a general rate application (the "Application") with the Board of Commissioners of Public Utilities (the "Board") on July 30, 2013 requesting approval of, among other things, proposed rates to be effective January 1, 2014.

1.1 Proposals

In the Application Hydro proposed the Board approve:

(1) forecast 2013 test year costs (before return on rate base) of $445,639,000;
(2) pursuant to the directive to the Board, for purpose of calculating Hydro's return on rate base, the return on equity last approved by Order No. P.U. 13(2013) from Newfoundland Power's general rate application, of 8.80%;
(3) an allowed rate of return on forecast average rate base of 7.83%; and
(4) an allowable range of return on rate base of +/- 25 basis points.

In addition, the Application included proposals for the accounting and regulatory treatment of:

(1) Actuarial gains and losses on employee future benefits;
(2) Hydro's asset retirement obligations;
(3) Hydro's energy purchases;
(4) Conservation demand management costs; and
(5) Diesel fuel and purchased energy costs for Hydro's isolated systems.

The Application proposed a number of changes to customer rates for Island Interconnected, Island Isolated, Labrador Interconnected, Labrador Isolated and L'Anse au Loup system customers.

1.2 Notice and Pre-Hearing Conference

Notice of the Application and Pre-hearing Conference was published in newspapers throughout Newfoundland and Labrador beginning on August 17, 2013. The Pre-hearing Conference was held on September 12, 2013 in the Board's Hearing Room.

Following the Pre-hearing Conference the Board issued Procedural Order No. P.U. 28(2013) on September 18, 2013 which identified registered intervenors, established procedural rules and set the schedule for the proceeding. Registered intervenors for the proceeding were:

Intervenor		Represented by:
1.	Consumer Advocate Tom Johnson	Tom Johnson and Greg Kirby
2.	Corner Brook Pulp and Paper Limited, North Atlantic Refining Limited and Teck Resources (the “Industrial Customer Group”)	Paul Coxworthy and Dean Porter
3.	Innu Nation	Nancy Kleer and Senwung Luk
4.	Newfoundland Power Inc. (“Newfoundland Power”)	Liam O’Brien and Gerard Hayes
5.	Towns of Labrador City, Wabush Happy Valley-Goose Bay and North West River (“Towns of Labrador”)	Edward Hearn (replaced by Dennis Brown)
6.	Vale Newfoundland and Labrador Limited (“Vale”)	Tom O’Reilly and Denis Fleming
7.	Yvonne Jones, MP, Labrador[1]	

Hydro was represented by: Fred Cass, outside Counsel; Geoffrey Young and Tracey Pennell, in-house Counsel with Hydro. The Board was assisted by: Maureen Greene, Board Hearing Counsel; Jacqueline Glynn, Legal Counsel for the Board; and Cheryl Blundon, Board Secretary.

The hearing was scheduled to start on July 9, 2014.

1.3 Evidence

On April 25, 2014 pre-filed evidence was filed by the Board’s experts:

1. Grant Thornton LLP, the Board’s financial consultants, filed a report *Board of Commissioners of Public Utilities, Financial Consultants Report, Newfoundland and Labrador Hydro 2013 General Rate Application*, which presented Grant Thornton’s observations, findings and recommendations with respect to their financial analysis of the pre-filed evidence of Hydro.
2. Brad Rolph, Grant Thornton LLP, filed a report *Evaluating the Pricing Policy for Affiliate Common Services, Common Expenses and Corporate Services*, which reviewed the shared services arrangement between Hydro and Nalcor.
3. Dr. John Wilson, Economic Counsel, filed a report *Report to The Newfoundland and Labrador Board of Commissioners of Public Utilities on Cost Allocation and Rate Design Issues in the Newfoundland and Labrador Hydro July 30, 2013 General Rate Application.*

Pre-filed evidence was also filed on behalf of experts for the intervenors:

1. Douglas Bowman, April 25, 2014 (on behalf of the Consumer Advocate)
2. Larry Brockman, Brockman Consulting, April 25, 2014 (on behalf of Newfoundland Power)
3. Dr. James Feehan, April 25, 2014 (on behalf of the Towns of Labrador)
4. Melvin Dean, April 25, 2014 (on behalf of Vale)

[1] Yvonne Jones did not issue requests for information, file expert or pre-filed evidence, nor participate in the investigation process or the public hearing.

5. Patrick Bowman, InterGroup Consultants Ltd., April 28, 2014 (on behalf of the Industrial Customer Group)
6. Philip Raphals, Helios Centre, April 28, 2014 (on behalf of Innu Nation)

In addition 1617 Requests for Information ("RFIs") were issued and answered.

2.0 Amended Application

On June 6, 2014, one month before the scheduled start date of the public hearing, Hydro advised that it would be amending the Application to provide forecast information for 2014 and a 2015 test year. Hydro explained that revisions to the Application were necessary to update financial information to provide a more current and relevant basis for rate setting purposes. The Intervenors did not object to Hydro's proposal to amending the Application or the resulting postponement of the hearing. Hydro advised that it would file the amended application in the fall of 2014 and that it expected the hearing would now proceed in early 2015.

2.1 Proposals

On November 10, 2014 Hydro filed an Amended 2013 General Rate Application (the "Amended Application"). The Amended Application requested approval of:

1. Hydro's 2014 test year revenue requirement of $562,855,000 and Hydro's 2015 test year revenue requirement of $662,475,000;
2. Hydro's forecast average rate base for 2014 of $1,692,567,000 and Hydro's forecast average rate base for 2015 of $1,802,024,000;
3. Hydro's forecast capital structure for 2014 with a weighted average cost of capital of 7.32% and Hydro's forecast capital structure for 2015 with a weighted average cost of capital of 6.82%;
4. pursuant to Order in Council OC2009-063, for the purpose of calculating Hydro's return on rate base, the return on equity last approved by Order No. P.U. 13(2013), as a result of Newfoundland Power's general rate application, of 8.80% for 2014 and 2015;
5. an allowed rate of return on forecast average rate base of 7.12% for 2014 and 6.82% for 2015;
6. an allowable range of return on rate base of +/- 20 basis points;
7. Hydro's treatment to include actuarial gains and losses on employee future benefits of $1.6 million in the 2015 test year as part of Hydro's revenue requirement;
8. Hydro's treatment of asset retirement obligations to include depreciation and accretion expenses associated with asset retirement obligations of $3.1 million and $3.2 million for the 2014 and 2015 test years, respectively, in its revenue requirement;
9. an increase in the total generation credit for Newfoundland Power to 119,329 kW;
10. commencing January 1, 2014 the allocation of the rural deficit by system based upon revenue requirement;
11. the exclusion of its conservation and demand management ("CDM") costs as an expense in the determination of revenue requirement;
12. deferral and recovery mechanisms, including:
    a) Isolated Systems Supply Cost Variance Deferral Account
    b) Energy Supply Cost Variance Deferral Account

c) CDM Cost Deferral Account

d) Holyrood Conversion Rate Deferral Account;

13. the amortization and recovery of costs associated with the black start diesel generating units in Holyrood of $1.0 million per year for five years commencing in 2015;

14. the amortization and recovery of costs associated with extraordinary repairs of $0.2 million per year for five years commencing in 2015;

15. the amortization and recovery of external regulatory costs of $0.3 million per year for three years commencing in 2015;

16. the classification of wind energy purchases as 100% energy-related in the cost of service;

17. the inclusion of the 2015 forecast Holyrood capacity factor in the five-year average in setting the Holyrood capacity factor for cost of service purposes;

18. amortization of Capacity Related Supply Cost Variances over a five-year period commencing in the 2015 test year;

19. the treatment of Hydro's costs arising from Capacity Assistance Agreements as a production demand costs in the 2015 test year cost of service;

20. the proposed changes to the Rate Stabilization Plan (“RSP”) rules so that:

    a) the allocation of the load variation component be modified, effective September 1, 2013, such that the year-to-date net load variation for both Newfoundland Power and the Industrial customers is allocated among the customer groups based upon energy ratios;

    b) the RSP Surplus Credit Adjustment be implemented whereby the Industrial Customer RSP Surplus balance is used to phase-in base customer rates from January 1, 2015 to August 31, 2016;

    c) the updated Teck Resources RSP Adjustment rate be implemented to comply with Government direction to phase-in base rates in three equal annual percentages, to a reasonable degree;

    d) the December 31, 2014 Industrial Customer RSP balance be recovered over a two-year amortization period starting January 1, 2015;

    e) Section D (2.2), by which the Industrial Customers RSP Adjustment was suspended effective January 1, 2014, be removed;

    f) the Rural Labrador Interconnected Automatic Rate Adjustment, Section 1.3(b), be removed;

    g) Section E - Historical Plan Balance be removed;

21. rates for 2015 on an interim basis for Industrial customers effective January 1, 2015 in accordance with Order in Council OC-2013-089, as amended;

22. rates for 2015 on an interim basis for Newfoundland Power and Hydro Rural customers, effective February 1, 2015, with the revenue shortfall associated with delayed implementation to be recovered through a rate rider;

23. a) that the RSP credit balance be used, where appropriate, to offset the 2014 Revenue Deficiency attributable to the Island Interconnected system;

    b) that the portion of the 2014 Revenue Deficiency not recovered using the RSP credit balance be deferred for future recovery through a rate rider;

24. the Island Industrial wheeling rate of 0.443 cents/kWh;

25. the Labrador Transmission demand-related rate of $1.25 kW/month;

26. average system losses used in the calculation of the energy charge to Industrial customers for non-firm service of 3.47%;

27. the finalization of Hydro's 2014 existing rates for all customers;

28. the phase-in of Industrial customer rates by September 1, 2016;
29. the rules and regulations for service on a final basis for Corner Brook Pulp and Paper Limited;
30. the Rules and Regulations for service to all Hydro Rural customers;
31. the rates set out in Schedule B attached to the Amended Application;
32. the use of Hydro's most recent test year cost of service study, as opposed to a forecast cost of service study, for the purpose of its annual Key Performance Indicator (KPI) reports; and
33. such alternative, additional or further relief as the Board shall consider fit and proper in the circumstances.

2.2 Notice

Notice of the Amended Application was published in newspapers throughout Newfoundland and Labrador beginning on December 17, 2014.

The notice advised that further intervenor submissions would be accepted. On January 9, 2015 the Nunatsiavut Government filed an intervenor submission with the Board, providing notice of its intention to participate in Hydro's Amended Application proceeding. In Order No. P.U. 2(2015) the Board granted intervenor status in the proceeding to the Nunatsiavut Government, represented by Genevieve Dawson.

2.3 Evidence

Hydro amended a significant number of RFI responses which had already been filed to reflect its Amended Application proposals. In addition a further 715 RFIs were issued and answered, for a total of 2332 RFIs.

On June 1, 2015 additional pre-filed evidence was filed by the Board's experts:

1. Brad Rolph, Grant Thornton LLP, updated his report *Evaluating the Pricing Policy for Affiliate Common Services, Common Expenses and Corporate Services* ("Grant Thornton's Pricing Policy Evaluation Report").
2. Dr. John Wilson, Economic Counsel, updated his report *Report to The Newfoundland and Labrador Board of Commissioners of Public Utilities on Cost Allocation and Rate Design Issues in Newfoundland and Labrador Hydro November 10, 2014 Amended General Rate Application*.

On June 12, 2015 Grant Thornton LLP, filed a report *Board of Commissioners of Public Utilities, Financial Consultants Report, Newfoundland and Labrador Hydro 2013 Amended General Rate Application* ("Grant Thornton's Amended Application Review Report"), which presented Grant Thornton's observations, findings and recommendations with respect to their financial analysis of the Amended Application.

Updated pre-filed evidence to reflect the Amended Application was also filed on behalf of experts for the intervenors.[2]

[2] On June 15, 2015 the Board was advised that Dr. James Feehan would not be updating or revising his report of April 2014 on behalf of the Towns of Labrador.

1. Douglas Bowman, June 1, 2015, replacing his report of April 2014 (on behalf of the Consumer Advocate)
2. Patrick Bowman, June 4, 2015, updating and adjusting his report of April 2014 (on behalf of the Industrial Customer Group)
3. Larry Brockman, June 4, 2015, replacing his report of April 2014 (on behalf of Newfoundland Power)
4. Melvin Dean, June 4, 2015, replacing his report of April 2014 (on behalf of Vale)

Additional pre-filed evidence was filed on behalf of the intervenors:

1. Correspondence on various dates from Ian Gray, Jim Haynes, Chief Gregory Rich, Eric Coombs, and Phil Clarke (all on behalf of Innu Nation)
2. Larry Marks, Corner Brook Pulp and Paper Limited, September 4, 2015 (on behalf of the Industrial Customer Group)
3. Christopher Henderson, Lumos Energy, June 4, 2015, and Minister Darryl Shiwak, September 4, 2015 (on behalf of the Nunatsiavut Government)

2.4 Negotiations and Settlement Process

The schedule for the proceeding included a period for negotiation to enable and/or facilitate discussion between Hydro and the intervenors to determine what, if any, agreement might be reached. The parties were advised that there would be a settlement process. Board Hearing Counsel facilitated the discussions.

On August 14, 2015 a settlement agreement was filed with the Board (the "Settlement Agreement"). The Settlement Agreement addressed a range of issues, including revenue requirement, cost of service, deferral mechanisms, future reporting requirements and rate design issues for the Island Interconnected system. The Settlement Agreement was signed by Hydro, the Consumer Advocate, Newfoundland Power, the Industrial Customer Group and Vale. On August 24, 2015 Innu Nation filed correspondence indicating that the Settlement Agreement satisfied certain issues which Innu Nation had intended to address at the hearing.

Negotiations continued after the filing of the Settlement Agreement. On September 28, 2015 a supplemental settlement agreement was filed with the Board (the "Supplemental Settlement Agreement"). The Supplemental Settlement Agreement also addressed a range of issues, including cost of service, and rate design issues for the Island Interconnected system.

2.5 Public Hearing

The public hearing of the Amended Application began on September 9, 2015. Oral testimony was heard throughout September, October and November 2015.

During the hearing the following witnesses testified:

<u>On behalf of Hydro:</u>

Ed Martin	President and Chief Executive Officer, Hydro
Gerard McDonald	Vice-President, Human Resources, Organizational Effectiveness, Nalcor Energy (seconded to Hydro)

Michael Roberts	Vice-President, Human Resources, Organizational Effectiveness (acting), Nalcor
Robert Henderson	Vice-President, Hydro
Terry Gardiner	Manager, Engineering - Transmission and Distribution, Nalcor
Darren Moore	Manager, Transmission and Rural Operations, Hydro
Kevin Fagan	Manager, Rates and Regulation, Hydro
Paul Humphries	Vice-President, System Operations and Planning, Hydro
Robert Moulton	Manager, Generation and Rural Planning, Hydro
Paul Stratton	Senior Market Analyst, Hydro
Kevin Goulding	System Operations Engineering Manager, Hydro
Carla Russell	General Manager, Finance and Regulatory, Hydro
Scott Pelley	Corporate Treasurer, Nalcor
Carol Ann Lutz	Controller, Nalcor
Dawn Dalley	Vice-President, Corporate Relations and Customer Service, Nalcor
Barry Brophy	Energy Efficiency Manager, Hydro
Anthony Lye	Manager of Customer Service, Hydro
Robert Greneman	Lummus Consultants International Inc.

<u>On behalf of the Consumer Advocate:</u>

Douglas Bowman	Energy Consultant

<u>On behalf of the Industrial Customer Group:</u>

Patrick Bowman	InterGroup Consultants Ltd.

<u>On behalf of Innu Nation:</u>

Philip Raphals	Helios Centre

<u>On behalf of Newfoundland Power:</u>

Larry Brockman	Brockman Consulting

<u>On behalf of the Nunatsiavut Government:</u>

Christopher Henderson	Lumos Energy
Darryl Shiwak	Minister of Lands and Resources, Nunatsiavut Government

<u>On behalf of the Towns of Labrador:</u>

Dr. James Feehan	Economist

<u>On behalf of Vale:</u>

Melvin Dean	Electrical Engineer

<u>On behalf of the Board:</u>

Brad Rolph	Grant Thornton, LLP

Interested persons and organizations were also given the opportunity to participate by submitting a letter of comment or making an oral presentation to the Board. On December 3, 2015 Lisa Dempster, MHA Cartwright-L'Anse au Clair, presented a submission on behalf of the residents of Labrador who live in communities served under the Labrador Isolated rate class.[3] In addition the Board received several written comments. The Board expresses its appreciation to those who took the time to participate in the proceeding.

2.6 Final Submissions

Written submissions were filed by Hydro and the parties on December 23, 2015.[4] Hydro filed a written reply on January 14, 2015. Final oral submissions were presented on January 25, 2016.[5] On February 3, 2016 the Consumer Advocate filed comments in reply to authorities filed by Hydro during oral submissions.

PART TWO: REGULATORY FRAMEWORK

3.0 Legislation and Role of the Board

The Board is an independent, quasi-judicial body established under Provincial legislation to regulate public utilities in the Province. Regulation is designed to ensure consumers receive safe and reliable electricity at rates that are reasonable while allowing the utility to earn a fair return on its investment in supplying the electrical service. Regulation strives to strike an equitable balance between the interests of consumers and the utility.

The Board's authority is derived from its statutory powers and responsibilities as set out in the *Public Utilities Act* (the *"Act"*) and the *Electrical Power Control Act, 1994* (the "*EPCA*").

The *Act* sets out the structure of the Board and defines its powers. The Board has responsibility for the general supervision of public utilities in the Province, and approves rates, capital expenditures and other aspects of the business of public utilities.

The *EPCA* mandates the Board to make rate decisions that are reasonable and not unjustly discriminatory. The legislation provides that the utilities are permitted to earn a just and reasonable financial return while maintaining a sound credit rating in the financial markets of the world. The legislation calls for the most efficient production, transmission and distribution of power that will afford consumers the lowest possible cost electricity consistent with equitable and reliable service.

4.0 Government Directives

4.1 Hydro's General Rate Application

On April 4, 2013 Government directed Hydro to file its general rate application based on a 2013 test year in the determination of electricity rates for customers.[6]

On October 30, 2014 Government rescinded its direction in relation to a 2013 test year.[7]

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[3] The written submission was filed by Lisa Dempster, MHA, Cartwright-L'Anse au Clair and Randy Edmunds, MHA, Torngat Mountains.
[4] Vale and Innu Nation filed their written submissions on December 21, 2015.
[5] The Towns of Labrador and the Nunatsiavut Government did not present oral submissions.
[6] OC2013-091 and OC2013-089 directed the Board similarly.
[7] OC2014-319

4.2 Hydro's Return on Rate Base, Rural Assets in Rate Base and Capital Structure

On March 17, 2009 Government provided direction to the Board in relation to policies to adopt for future general rate applications of Hydro, commencing with the first general rate application after January 1, 2009. In OC2009-063 Government directed the Board as follows:

1. In calculating the return on rate base for Hydro the Board is to set the same target return on equity as was most recently set for Newfoundland Power through a general rate application or calculated through the Newfoundland Power Automatic Adjustment Mechanism.
2. Hydro is entitled to earn annually, a rate of return equal to the weighted average cost of capital, as ordered from time to time, on the entire rate base as fixed and determined by the Board, including amounts used solely for the provision of service to its rural customers.
3. The capital structure approved for Hydro should be permitted to have a maximum proportion of equity as was most recently approved for Newfoundland Power.

4.3 Rate Stabilization Plan Rules and Industrial Customer Rates

On April 19, 2011 in OC2011-116 Government directed the Board to defer the consideration of all matters currently before the Board pertaining to Industrial customer rates and rate adjustments and to consider those matters in the context of the general rate application process.

On April 4, 2013 Government provided further direction in OC2013-089, as amended by OC2013-207, in relation to Industrial Customer rates:

1. Effective September 1, 2013 Island Industrial Customer (IC) rates will no longer be frozen.
2. New IC rates will be phased in over a period of three years commencing September 1, 2013.
3. Effective September 1, 2013 all Island Industrial customers, with the exception of Teck Resources (Teck), will be subject to the same standard industrial rate, equivalent to the existing base rate but excluding the Rate Stabilization Plan (RSP) adjustment currently in place.
4. Teck's rate increase will be phased in, to a reasonable degree, in three equal annual percentage increases.
5. Funding of $49 million will be drawn from the January 1, 2007 to August 31, 2013 accumulated Load Variation component of the RSP (RSP Surplus) and will be credited to the IC RSP on August 31, 2013 for the IC rate phase-in.
6. The remaining balance of the RSP Surplus will be transferred to Newfoundland Power's RSP.
7. The shortfall in Newfoundland and Labrador Hydro's (Hydro) revenues from the IC due to the IC rate phase in period will be funded from the IC RSP.
8. Effective January 1, 2014 the IC rates will be subject to Rate Stabilization Plan rate changes in accordance with the Board approved methodology.
9. During Hydro's General Rate Application (GRA) process, Hydro will file with the Board an RSP Surplus refund plan which shall be in the form of direct payments or rebates to rate payers (other than the ICs) and not in the form of an electricity rate adjustment.

4.4 Subsidization of Rural Rates

The rates for Hydro's rural customers are subject to longstanding policy direction from Government.[8] OC2003-347 continued the policy that directs the Board to set rates for Hydro's Isolated customers such that: i) first block "lifeline rates" are continued for domestic residential customers, ii) fish plants in diesel areas are charged Island Interconnected rates, iii) churches and community halls in diesel areas are charged diesel domestic rates, and iv) there is a preferential electricity rate for provincial government facilities, including schools, health facilities and government agencies, in rural isolated diesel serviced communities and for the Burgeo school and library. This directive also provides for the implementation of a demand-energy rate structure for general service customers in diesel areas and requires that the rural deficit be financed through electricity rates charged to Newfoundland Power and Hydro's Labrador Interconnected customers, excluding Industrial customers.

On July 5, 2007 Government issued OC2007-304 which provided for the establishment of a policy resulting in the implementation of an energy rebate to offset the costs of the monthly basic customer charge and lifeline block (or equivalent) of energy consumption for Hydro's Labrador rural isolated diesel customers and Labrador Straits/L'Anse-au-Loup areas residential electricity customers. This policy makes these customers' costs for the basic customer charge and the lifeline energy block equivalent to Hydro's residential Happy Valley-Goose Bay Labrador Interconnected electricity customers' costs.

Over the period 2006 to 2016 Government issued a series of directives (OC2006-512, OC2008-365, OC2009-390, OC2010-322, OC2012-329, OC2014-372, OC2015-300 and OC2016-104) which, together, deferred the approved rate increases for non-government customers on isolated systems to January 1, 2017. Government funded the revenue requirement impacts of these deferred rate increases over this period.

PART THREE: RELATED APPLICATIONS AND OTHER MATTERS

5.0 Related Applications

5.1 Rate Stabilization Plan

On July 30, 2013, concurrent with the filing of the Application, Hydro filed an application with the Board to give effect to the direction of Government with respect to the RSP rules and the Industrial Customer rates (the "RSP Application").

On August 30, 2013, to ensure compliance with the government direction, the Board issued Order No. P.U. 26(2013) and ordered that Hydro credit $49 million to the Island Industrial customers' RSP as of August 31, 2013 and transfer the remaining balance of the accumulated load variation component to the credit of the Newfoundland Power RSP. All Island Industrial customer rates were made interim at existing rates as of September 1, 2013.

Hydro and the intervenors filed written submissions on the RSP application on September 23, 2013. In Order No. P.U. 29(2013) the Board ordered that:

[8] Copies of the relevant Orders in Council referred to in this section are provided in PUB-NLH-383.

1. Island Industrial customer rates and Newfoundland Power rates from January 1, 2008 to August 31, 2013 be approved on a final basis.
2. Island Industrial customer rates and Newfoundland Power rates be made interim at existing rates, except that an RSP adjustment rate of (1.111) cents was approved for Teck Resources Limited, as of September 1, 2013.
3. The accumulated load variation on August 31, 2013 for both the Island Industrial Customers and Newfoundland Power be segregated.
4. Issues in relation to the phase-in of rates, and funding thereof, for the Island Industrial customers as well as changes to the allocation of the load variation should be addressed in the general rate application.

In Order No. P.U. 40(2013) the Board suspended the operation of the January 1 RSP adjustment for the Industrial customers until further order of the Board.

In Order No. P.U. 35(2015) the Board, in anticipation of the Amended Application being finalized in the first half of 2016, did not approve changes to the RSP rules to provide for the transfer of the actual balance in the Industrial Customer RSP Surplus at August 31, 2016.

On August 10, 2016 Hydro advised the Board that, in its view, no action was required on September 1, 2016. Hydro explained that in the circumstances the Industrial customer rates were reasonable for the remainder of 2016. Hydro proposed that the conclusion of the Industrial Customer RSP Surplus should be addressed at the time of implementation of new Industrial customer base rates resulting from the conclusion of the Amended Application in late 2016 or early 2017. The Industrial Customer Group and Vale supported Hydro’s position but the Consumer Advocate and Newfoundland Power did not.

The Board advised on August 25, 2016 that it was satisfied that the Government direction did not require the phase-in of the Industrial customer rates to be completed on September 1, 2016 and that existing interim rates were reasonable in the circumstances. The Board noted that Hydro advised that, based on its forecast, the Industrial Customer RSP Surplus held sufficient funds to continue existing rates until 2017. Further the Board stated that Hydro could file an application to revise rates for these customers should circumstances change.

5.2 Rate Stabilization Plan Surplus Refund

On October 31, 2013, as directed by Government[9], Hydro filed an application with supporting evidence for approval of the refund of the remaining balance in the Load Variation component of the RSP (the “RSP Refund Application”). The accumulated amount from January 1, 2007 to August 31, 2013 was $112.6 million.

In the RSP Refund Application Hydro requested an Order of the Board approving:

1. the Newfoundland Power RSP Surplus refund be paid to Newfoundland Power, and to those rural customers whose rates are based on the rates charged by Newfoundland Power;

[9] OC2013-91 directed Hydro to file a RSP surplus refund plan during its General Rate Application. Hydro’s cover letter attached with its Application stated that an RSP surplus refund plan would be filed during the general rate application process.

2. the Newfoundland Power RSP Surplus be refunded to Newfoundland Power customers on their April 2014 electricity bills and be based on their total energy consumption on bills issued during the period January 2013 to December 2013;
3. Hydro's Rural customers, whose rates are based on Newfoundland Power rates, receive a similar refund on their April 2014 electricity bills based on their total energy consumption on bills issued during the period January 2013 to December 2013;
4. the refund to Rural customers be funded from the Newfoundland Power RSP Surplus; and
5. any net refund to Newfoundland Power’s customers and Hydro's customers be in the form of a credit to each customer's account.

On April 9, 2014 the Board issued Order No. P.U. 9(2014) which ordered that the Newfoundland Power RSP Surplus shall be refunded to all rate payers, with the exception of the Industrial customers, in the form of direct payment or rebate and in a manner to be approved by the Board.[10] The Consumer Advocate appealed this decision to the Court of Appeal of Newfoundland and Labrador.

At the Court of Appeal, the Consumer Advocate and Hydro argued that customers who had paid into the RSP and created the surplus were the only customers who should receive a portion of the refund. Newfoundland Power argued that, because some of Hydro’s customers had in effect been subsidized by Newfoundland Power customers, the refund should be restricted to Newfoundland Power customers only. The Court of Appeal overturned the decision of the Board and interpreted the Order in Council:

> such that the refund in the form of a rebate is to be made to Newfoundland Power’s customers and to Hydro’s island grid customers. For other issues, this matter is referred back to the PUB for its consideration.[11, 12]

On June 30, 2016 Newfoundland Power filed an application with the Board for approval of a plan to refund a portion of the RSP surplus, which was approved in Order No. P.U. 35(2016) issued on September 2, 2016. On July 12, 2016 Hydro filed a similar application with the Board, which was approved in Order No. P.U. 36(2016) issued on September 7, 2016. Both utilities indicated that the initial round of refunds to customers should take place 4-5 months following Board approval.

5.3 Interim Regulatory Relief

Hydro filed several applications to the Board for interim rate relief and deferral mechanisms following the filing of the general rate application in July 2013.

On November 18, 2013 Hydro filed an application for approval of interim rate and changes to the RSP rules for certain customers to be effective on January 1, 2014. In Order No. P.U.

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[10] On February 27, 2014 the Board advised the parties that the issue of the HST treatment of the proposed refund must be resolved before the matter could be concluded. The Board determined that it could address the issue of which customers were entitled to the refund in advance of the HST ruling.

[11] *Newfoundland and Labrador (Consumer Advocate)* v. *Newfoundland and Labrador Public Utilities Board*, 2015 NLCA 24.

[12] The Court of Appeal decision (page 13, paragraph 51) actually excludes a small group of customers, Island Isolated customers and Labrador Isolated customers, whose rates are based upon Newfoundland Power rates and who would have contributed to the RSP.

40(2013) the Board found that interim rates could not realistically be put in place for January 1, 2014 and stated that the application raised complex and comprehensive issues which should be addressed before interim rates are established. The Board acknowledged the urgent nature of the request and stated that its process would address the issues and concerns raised by the parties while reflecting the urgency of the matter. The Board approved changes to the RSP rules to suspend the operation of the January 1 RSP adjustment for Island Industrial customers.

On February 11, 2014 Hydro filed an amended application for interim rate relief, which was revised on March 5, 2014.[13] In Order No. P.U. 13(2014), issued on April 24, 2014, the Board stated:

> Hydro filed its first application for interim rate relief some five months ago in November of 2013. Since then Hydro has filed two additional applications, one as a supplementary application which was subsequently withdrawn, and a further application amending the November, application. The Amended Interim Rate Application contained significant changes to Hydro's proposed rates for several customer groups as did several of Hydro's responses to information requests. In particular, since the filing of the application in November Hydro has made substantive changes to its proposals in relation to the Island and Labrador Isolated systems, the Labrador Interconnected system and the Island Interconnected system. The fact that Hydro's proposals changed throughout the matter has made it difficult to assess Hydro's position and the impacts on customers, especially in light of the complexities associated with the Rate Stabilization Plan.
>
> Unfortunately there continues to be considerable ambiguity in Hydro's proposals even after the filing of the Amended Interim Rate Application, the responses to the information requests and the final submissions. In particular, the Board finds that Hydro's proposals and the evidence are ambiguous in respect of Island Industrial customer rates and the rates for Newfoundland Power and therefore Hydro's customers whose rates are based on Newfoundland Power customers rates.

The Board dismissed the application for interim relief but stated that it was open for Hydro "to file another application which contains clear and unambiguous proposals supported with comprehensive and consistent evidence."

On May 12, 2014 Hydro again filed an application for interim relief. Hydro proposed: (i) to transfer $29.4 million from the credit balance in the Hydraulic Production Variation component of the RSP to be recognized as revenue in 2014, and (ii) changes to Island Industrial customer rates for 2014 on an interim basis. Hydro did not amend this application when it advised on June 6, 2014 that it would be filing an amended general rate application. The Board found in Order No. P.U. 39(2014) that Hydro had failed to provide an evidentiary basis to justify the proposed revenue transfer and that it was not appropriate to set aside the proposed revenue shortfall in a deferral account. The Board found that, without Hydro's amended general rate application, it had little basis upon which to assess Hydro's proposals for interim rates and, therefore, did not approve the changes to the Island Industrial customer rates.

The Amended Application filed on November 10, 2014 requested interim relief for 2014. Subsequent to the filing of the Amended Application, Hydro filed an application for approval of a deferral account in the amount of $45.9 million to address a 2014 revenue deficiency and to use

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[13] This amended application followed the withdrawal of a supplemental application filed by Hydro on January 17, 2014.

the credit balance in the RSP Hydraulic Production Variance Account to provide recovery of the 2014 revenue deficiency. In Order No. P.U. 58(2014), issued on December 24, 2014, the Board stated:

> While Hydro's general rate application has been ongoing since 2013 the revisions set out in the amended application filed on November 10, 2014 are significant. Hydro proposes, for the first time, a 2014 test year revenue requirement and recovery based on a 2014 cost of service study. The amount Hydro proposes to recover of $45.9 million reflects Hydro's forecast expenses and revenues for 2014 and an increased rate of return. The Board believes that there has been insufficient opportunity to assess these proposals and potential issues and impacts. The Board acknowledges Hydro's concern about potential negative financial consequences in 2014 but the Board must also fully test the proposals to ensure that the interests of consumers are protected and that rates are reasonable and not unjustly discriminatory. Nevertheless the Board is concerned that if approval for a deferral account is not granted before December 31, 2014 the Board's jurisdiction to make a determination in 2015 with respect to Hydro's proposed 2014 revenue requirement may be limited. While Hydro's proposals raise issues which, as a result of the late filing of the application, cannot be properly addressed at this time, the Board finds that approval in 2014 of a deferral account to segregate an amount associated with the 2014 revenue requirement is necessary to ensure that the Board retains jurisdiction with respect to Hydro's 2014 revenue requirement. Given the extraordinary circumstances, the Board will grant approval to establish a deferral account in relation to Hydro's proposed 2014 revenue requirement.

The Board approved the creation of a deferral account in the amount of $45.9 million but did not approve recovery of the amount, in full or part, or any use of the RSP Hydraulic Production Variance Account balance.

On December 24, 2014 the Board directed Hydro to file an application setting out its proposals for interim rates for Newfoundland Power and the Island Industrial customers to be effective March 1, 2015. Hydro filed its application on January 28, 2015. In Order No. P.U. 14(2015), issued on May 8, 2015, the Board stated:

> The Board has significant concerns in relation to the interim implementation of the extensive changes proposed in the Interim Rate Application. Hydro has not demonstrated that it is necessary or appropriate to reflect these proposals in interim rates established in advance of the conclusion of the general rate application. The Board will not approve the Interim Rate Application as proposed but instead will consider whether Hydro has demonstrated that base rates should be increased to provide interim revenue relief in advance of the conclusion of the general rate application.

The Board accepted that Hydro required interim revenue relief and approved interim rate increases to be effective July 1, 2015. Hydro was ordered to re-file a proposed Schedule of Rates, Tolls and Charges and RSP rules to reflect the findings of the Board. Interim rates for Newfoundland Power and Government Diesel customers were approved in Order No. P.U. 17(2015). On June 26, 2015 revised interim Industrial customer rates were approved in Order No. P.U. 21(2015).

On July 10, 2015 Hydro applied for a 2015 cost deferral account in the amount of $20 million to reduce its 2015 net income deficiency. On November 12, 2015 Hydro filed an amended application seeking a deferral in the amount of $60.5 million. In Order No. P.U. 36(2015), issued on December 22, 2015, the Board approved, among other things, the creation of a deferral account in the amount of $30.2 million in relation to Hydro's proposed 2015 revenue requirement with a final determination on recovery of this amount to be determined by the Board. With reference to the deferral account, the Board stated:

> The Board shares the concerns expressed by Newfoundland Power as to whether Hydro's proposal for a 2015 cost deferral is in accordance with sound public utility practice. As the Board has stated in the past, and as set out by the Court of Appeal, the setting of a rate of return is, to the extent practicable, to be done prospectively. There is no entitlement to a rate of return but rather the management of the utility must manage its business effectively to earn the return which is approved in a general rate application process. This same concern was identified by the Board in Order No. P.U. 58(2014) relating to the proposed 2014 revenue deficiency deferral of $45.9 million.

On December 8, 2015, in Order No. P.U. 35(2015), the Board approved a further 3.7% increase in Industrial customer rates to be effective January 1, 2016. The Board noted that there would be no impact on the amount paid by customers as the proposed increase would be fully offset by RSP Surplus adjustments.[14]

6.0 Other Matters

6.1 Prudence Review

On February 27, 2015 the Board advised that it would be undertaking a prudence review of certain Hydro projects and expenditures. In addition to the intervenors in the Amended Application Danny Dumaresque filed for limited intervenor status in the general rate application for the purposes of the prudence review.

On April 26, 2016 the Board issued Order No. P.U. 13(2016) setting out its determinations on the prudence review of certain projects and expenditures. The Board ordered that Hydro will not recover capital or operating expenses in the 2014 revenue requirement and/or the 2015 test year costs associated with:

1. overhauls of the Sunnyside B1L03 and Holyrood B1L17 breakers associated with imprudence
2. the portion of the Sunnyside Terminal Station equipment repairs and replacement associated with imprudence
3. the Western Avalon T5 tap changer replacement and transformer repairs associated with imprudence
4. extraordinary transformer and breaker repairs in 2014 and 2015 associated with imprudence
5. additional supply costs associated with the 2014 failure of Holyrood breaker B1L17 and the resulting outage of Holyrood Unit 1 associated with imprudence
6. certain expenses related to professional services-consulting fees, salary transfers, and overtime associated with imprudence and the Board's investigation into the January 2014 outages
7. Holyrood Unit 1 turbine failure in 2013

[14] Order No. P.U. 35(2015)

The Board also ordered that Hydro will not recover in the 2014 revenue requirement $500,000 associated with its imprudence in managing black start capability at Holyrood.
The Board allowed the capital and operating costs associated with the following projects to be included in the 2014 revenue requirement calculation and/or the 2015 test year costs:

1. Labrador City terminal station capacity upgrade project (costs above approved budget)
2. procurement and installation of the new 100 MW combustion turbine at Holyrood
3. restoration of the Black Tickle plant in 2012
4. Holyrood forced-draft fan repair and replacement

Hydro was ordered to create a separate account to transfer professional services-consulting fees, salary transfers and overtime costs for 2014, 2015 and subsequent years relating to Phase Two of the Board's investigation into the January 2014 outages, with the recovery of the costs to be addressed in a subsequent order of the Board following a further application by Hydro.

On May 25, 2016 Hydro filed a compliance application setting out a revised 2014 revenue requirement and revenue deficiency calculation, a revised 2015 test year revenue requirement and revenue deficiency calculation, and supporting documentation reflecting the prudence findings of the Board. Grant Thornton reviewed Hydro's prudence compliance application to confirm that the adjustments proposed by Hydro were in accordance with the Board's order and subsequent direction. Grant Thornton filed a report *Board of Commissioners of Public Utilities Financial Consultants Report – Newfoundland and Labrador Hydro P.U. 13(2016) Prudence Review – Compliance Application* ("Grant Thornton's Prudence Compliance Report") dated August 30, 2016. Grant Thornton stated that they did not identify any significant issues or indications that Hydro's prudence compliance filing was incorrect or noncompliant with Order No. P.U. 13(2016) or other relevant Board Orders.

The parties, including Hydro, were provided the opportunity to submit comments on Grant Thornton's Prudence Compliance Report. Hydro submitted limited comments on the Sunnyside Terminal Equipment project. Newfoundland Power, the Industrial Customer Group and Vale indicated that they had no comments on the report. The Board did not receive any comments from the Consumer Advocate or Mr. Dumaresque.

6.2 Natuashish Stated Case

On August 12, 2015 the Board requested a statement from Innu Nation clearly outlining what remedy Innu Nation may be seeking in respect of electrical services to Natuashish. Innu Nation advised that its requested remedy would include:[15]

1. A declaration that Hydro's Amended Application, in classifying its services in Natuashish as belonging to an unregulated business unit, is incompatible with provincial electrical policy.
2. An order to Hydro to provide electricity services in Natuashish as a community within the Labrador Isolated System, and to include the cost of providing these services in an updated cost of service study, with concomitant updates to the rural deficit.

[15] Letter to the Board dated August 19, 2015.

3. An order that the rates for which Hydro applies for in the Amended Application are not approved until the Board approves a new cost of service study by Hydro, in which Natuashish electricity users are included as customers within the Labrador Isolated System.

On August 26, 2015 Hydro filed a submission with the Board stating that:

1. the relief requested by the Innu Nation is not grounded in the *Public Utilities Act*, RSNL 1990 Chapter P-47 (the "*Act*"); and
2. the relief requested is not a practical necessity nor is it provided to the Board by necessary implication flowing from its statutorily derived jurisdiction.

On August 26, 2015 Innu Nation filed a reply to Hydro's submission.

On September 4, 2015 the Board advised the parties that the issues relating to service in Natuashish would be addressed in a separate proceeding and would not form part of the evidence to be presented in the hearing of the Amended Application.

On February 25, 2016 a stated case was filed by the Board with the Court of Appeal of Newfoundland and Labrador for the opinion of the Honourable Court of Appeal upon the following question of law:

> Whether the Board of Commissioners of Public Utilities has jurisdiction pursuant to the *Act* to make the following orders relating to the provision of electrical services in Natuashish, NL:
>
> (i) A declaration that NL Hydro's current classification of its Natuashish operations as one of its "non-regulated business units" is incompatible with provincial electrical policy under the *Act* and the *Electrical Power Control Act, 1994;* or,
>
> (ii) An order requiring NL Hydro to provide regulated electrical services in Natuashish, NL; or
>
> (iii) An order requiring NL Hydro to acquire title to the Natuashish electrical assets from the Mushuau Innu First Nation.

This matter is scheduled to be argued before the Court of Appeal on December 7 and 8, 2016.

PART FOUR: BOARD DECISIONS

7.0 Settlement Agreements

The Settlement Agreement, dated August 14, 2015, and the Supplemental Settlement Agreement dated September 28, 2015 (the "Settlement Agreements") set out the agreement of Hydro, the Consumer Advocate, Newfoundland Power, the Industrial Customer Group and Vale with respect to certain issues on the Island Interconnected system.[16] Pursuant to the terms of the Settlement Agreements the individual agreements of the parties are not intended to be severable and the parties recommended that the Board make its determination on the agreed upon issues in accordance with the Settlement Agreements. The parties also agreed that the examination and

[16] Since the settlements concerned issues related to the Island Interconnected system the intervenors from Labrador did not participate.

cross-examination of any witnesses would be limited to questions necessary to explain or to clarify the provisions of the Settlement Agreements. Issues not agreed upon would be determined by the Board based on the full record of the hearing.

In considering the Settlement Agreements the Board must be satisfied that the proposals represent an equitable and practical balance between Hydro's requirement to deliver reasonable least cost electricity to customers and the ongoing financial integrity of Hydro, consistent with the province's regulatory policy framework. The Board recognizes that, through the negotiation process, compromises were made to arrive at the consensus outlined in the Settlement Agreements. The Board notes that the negotiation process was comprehensive and involved the experts of the parties where necessary. The negotiations also followed the exchange of expert reports and approximately 2300 RFIs. Based on a review of the terms of the Settlement Agreements, as well as the relevant evidence and submissions on the record, the Board is satisfied that the Settlement Agreements should be accepted as filed. Hydro will be required to reflect these Settlement Agreements in its revised proposals arising from this Decision and Order.

Appreciation is extended to the parties and their counsel, as well as Board Hearing Counsel, in arriving at the Settlement Agreements.

The recommendations set out in the Settlement Agreement and the Supplemental Settlement Agreement are accepted. Hydro will be required to reflect the impacts of these agreements in the revised proposals arising from this Decision and Order.

8.0 Prudence Review

In Order No. P.U. 13(2016) the Board set out its determinations on the prudence review of certain projects and expenditures and directed Hydro to file, in accordance with the subsequent direction of the Board, a revised 2014 revenue requirement and revenue deficiency calculation, a revised 2015 test year revenue requirement and revenue deficiency calculation, and supporting documentation reflecting the findings of the Board in this Decision and Order.

Hydro filed a compliance application in accordance with the Board's order on May 25, 2015.

Grant Thornton's review of Hydro's compliance application confirmed that the adjustments proposed by Hydro were in accordance with the Board's order and subsequent direction. The impacts of the Board's prudence findings on the 2014 and 2015 revenue requirements are shown below:[17]

[17] Grant Thornton's Prudence Compliance Report, Tables 1 and 2.

2014 Revenue Requirement Impact

Application Disallowances Ref #		Operating 2014TY ('000s)	Capital/Rate Base 2014TY ('000s)	Total Adjustment 2014TY ('000s)
Sch 4	Overhauls of the Sunnyside B1L03 and Holyrood B1L17 breakers	$ -	$ 24.4	$ 24.4
Sch 5	Sunnyside Terminal Station	425.0	99.9	524.9
Sch 6	Western Avalon T5 Tap Changer	-	55.0	55.0
Sch 7	Extraordinary Maintenance	903.0	-	903.0
Sch 8	Additional supply costs associated with the 2014 failure of Holyrood breaker B1L17 and the resulting outage of Holyrood Unit 1	-	50.6	50.6
Sch 9	Professional Services -Phase One	2,801.0	-	2,801.1
Sch 11	Holyrood Unit 1 Failure 2013	-	1,138.6	1,138.6
Sch 12	Black Start Capability at Holyrood	500.0	-	500.0
Sch 10	Professional Services -Phase Two	126.0	(4.5)	121.5
		$ 4,755.0	**$ 1,364.0**	**$ 6,119.1**

2015 Revenue Requirement Impact

Application Disallowances Ref #		Operating 2015TY ('000s)	Capital/Rate Base 2015TY ('000s)	Total Adjustment 2015TY ('000s)
Sch 4	Overhauls of the Sunnyside B1L03 and Holyrood B1L17 breakers	$ -	$ 105.6	$ 105.6
Sch 5	Sunnyside Terminal Station	-	371.9	371.9
Sch 6	Western Avalon T5 Tap Changer	-	138.4	138.4
Sch 7	Extraordinary Maintenance	(208.0)	283.0	75.0
Sch 8	Additional supply costs associated with the 2014 failure of Holyrood breaker B1L17 and the resulting outage of Holyrood Unit 1	-	371.7	371.7
Sch 9	Professional Services -Phase One	854.0	-	854.0
Sch 11	Holyrood Unit 1 Failure 2013	-	1,070.3	1,070.3
Sch 12	Black Start Capability at Holyrood	-	-	-
Sch 10	Professional Services -Phase Two	146.0	(13.6)	132.4
		$ 792.0	**$ 2,327.3**	**$ 3,119.3**

Grant Thornton did not identify any significant issues to indicate that Hydro's prudence compliance filing was incorrect or not in compliance with Order No. P.U. 13(2016) or other relevant Board orders. Some calculation errors and understatements/overstatements were identified but these were not material and, in almost all cases, were to the benefit of ratepayers.

Grant Thornton raised one issue regarding Hydro's treatment of the excess insurance proceeds with respect to the Sunnyside Terminal Equipment project:

> Hydro has recorded a regulatory asset based on the 2014 test year loss on disposal of $425,000 associated with the Sunnyside Terminal Equipment project. However, since the loss on disposal in the test year was offset with insurance proceeds, setting up the new regulatory asset has resulted in an overall reduction to the 2014 test year revenue requirement.[18]

[18] Grant Thornton's Prudence Compliance Report, page 2

Grant Thornton noted that Order No. P.U. 13(2012) directs Hydro to "record net insurance proceeds associated with capital projects of $50,000 or more as an offset against the cost of capital assets and as a reduction in the rate base value of these assets." While Hydro's treatment of the 2014 and 2015 operating expenditures for the Sunnyside Terminal Equipment and the setup of a regulatory asset based on the 2014 test year loss on disposal is in compliance with Order No. P.U. 13(2016), Grant Thornton recommended that the treatment of the excess insurance proceeds within the 2014 test year revenue requirement be clarified.[19]

In its response to Grant Thornton's report Hydro stated:

> Hydro would like to clarify that the result of Hydro's treatment of the insurance proceeds in the Compliance Filing reduces Hydro's 2014 revenue requirement, which is to the benefit of ratepayers. In the event that the Board disagrees with Hydro's interpretation of the Board's direction and Hydro's subsequent treatment of any insurance proceeds, Hydro's 2014 revenue requirement per the Compliance filing will increase by $425,000.[20]

The Board notes that no intervenor commented or raised any issues with respect to Hydro's prudence compliance application or Grant Thornton's findings. Other than to provide clarification on the impact of its treatment of the insurance proceeds on revenue requirement, Hydro provided no other comment on Grant Thornton's findings. The Board confirms that, in normal circumstances, net insurance proceeds associated with capital projects of $50,000 or more would be recorded as an offset against the cost of capital assets and as a reduction in the rate base value of the assets. However, the Board accepts the approach proposed by Hydro in this case as it is to the benefit of rate payers. The Board is satisfied that in the current circumstances Hydro's prudence compliance filing should be accepted as filed for the purpose of calculating the 2014 and 2015 revenue requirements.

Hydro's prudence compliance filing is accepted as being in accordance with Order No. P.U. 13(2016). Hydro will be required to reflect the impacts of the prudence disallowances in the revised proposals arising from this Decision and Order.

9.0 Capital Structure and Return

9.1 Capital Structure

Hydro's regulated capital structure for rate making purposes consists of net regulated debt, regulated equity, asset retirement obligations and employee future benefits.[21] The weighted average cost of capital is calculated from the proportionate cost of these components of Hydro's capital structure. The Amended Application proposed a forecast regulated capital structure for the 2015 test year of 74.8% debt and 20.7% equity, with a weighted average cost of capital of 6.82%.[22] As noted by Hydro, while this is an improvement over historical levels, the percentage of debt in the regulated capital structure is still high relative to other crown utilities.

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[19] Grant Thornton's Prudence Compliance Report, page 9

[20] Hydro's September 21, 2016 response to Grant Thornton's Prudence Compliance Report.

[21] Hydro's regulated capital structure includes a portion of Hydro's asset retirement obligations and employee future benefits which Hydro recovers from ratepayers in advance of those funds being used to settle the liabilities in the future. These amounts are included in the regulated capital structure at zero cost.

[22] Amended Application, Vol. I, pages 3.24-3.26

Several initiatives since 2007 were highlighted by Hydro as contributing to the improvement in its regulated capital structure, including a $100 million equity injection by Government through Nalcor in 2009 and changes to the dividend policy aimed at maintaining debt at approximately 75% of the regulated capital structure. In addition OC2009-063 provides that the regulated capital structure of Hydro should be permitted to have a maximum proportion of equity as was most recently approved for Newfoundland Power. In Order No. P.U. 18(2016) the Board approved a common equity component in Newfoundland Power's capital structure not to exceed 45% for rate making purposes.

The issue of Hydro's forecast capital structure for rate setting was not contested during the proceeding but has been a significant issue in the past. In previous decisions the Board has supported and encouraged initiatives to improve Hydro's regulated capital structure, which can lead to enhanced financial stability and performance and lower overall costs for rate payers. The demonstrated improvement in Hydro's debt to capital ratio since 2007 is a positive step in this direction.

A common equity component in Hydro's capital structure for rate setting purposes not to exceed 45% is accepted. The forecast capital structure proposed by Hydro for rate setting purposes is accepted, subject to any adjustments required as a result of the Board's findings in this Decision and Order.

9.2 Return on Equity

The Amended Application proposed, pursuant to OC2009-063, approval of a return on equity of 8.80% for the purpose of calculating Hydro's return on rate base.[23] The Order in Council directs that commencing with Hydro's first general rate application after January 1, 2009 the Board should, in calculating the return on rate base for Hydro, set the same target return on equity as was most recently set for Newfoundland Power.

The return on equity proposed by Hydro is based on the return approved for Newfoundland Power for rate setting purposes on April 17, 2013 in Order No. P.U. 13(2013). The parties did not challenge the proposed return on equity for 2015 but argued it should not be accepted for 2014. The issue of the target return on equity for 2014 is discussed in Section 13.1.

The Board believes that the Order in Council directs that Hydro's return be based on the most recently established Newfoundland Power return at the time of calculation of the rate base. Based on its reading of the Order in Council the Board is satisfied that the target return on equity that should be used for the calculation of the return on rate base for the 2015 test year should be 8.8%, the same return that was in place for Newfoundland Power at that time.

The target return on equity to be used in calculating the allowed rate of return on rate base for 2015 shall be 8.8%.

[23] Amended Application, Vol. I, page 8

9.3 Return on Equity Adjustments

The Amended Application did not propose subsequent adjustments to the return which is established for Hydro as a result of this Decision and Order to reflect subsequently approved changes to Newfoundland Power's target return on equity.

Newfoundland Power argued that, to ensure that the Order in Council is given full effect, it would be reasonable for Hydro's target rate of return on equity to be changed by way of an automatic adjustment mechanism in the event that Newfoundland Power's target rate is changed.[24]

Newfoundland Power noted that Hydro conceded that such an order would be within the jurisdiction of the Board.[25] Newfoundland Power submitted:

> So, we can provide very little guidance on the actual intent of Government in that regard, other than to say if you read the OC as assuming that the intention is to make their same – is to provide for the same rate making ROE for both utilities, it would appear that an adjustment of Hydro's rate making ROE should occur when there's a change to Newfoundland Power's ROE. An adjustment mechanism would provide for that.[26]

The Consumer Advocate submitted that the fairest and most reasonable approach is to adjust Hydro's return on equity following the setting of Newfoundland Power's return, either through a Newfoundland Power general rate application or through the use of an automatic adjustment formula.[27] The Consumer Advocate explained that this would mean that Hydro's return would reflect what the Board most recently approved as a fair and reasonable return on equity after a full analysis or by operation of an approved formula. The Consumer Advocate noted that Hydro allowed that it would be reasonable to change Hydro's return on equity once Newfoundland Power had completed a general rate application.[28] The Consumer Advocate submitted that the Order in Council does not mandate that Hydro's return only be adjusted after a general rate application and that it does not limit the Board's ability to establish an adjustment mechanism.[29] He stated:

> Certainly that approach would much better ensure that Hydro's return on equity tracked the ROE most recently set for Newfoundland Power, which seems to be at the heart of the issue in the Order in Council. I think it would be far better. We have a case now on the immediate horizon with Newfoundland Power, and certainly from a policy standpoint, it certainly makes sense to have an adjustment so we don't get the two returns being out of step, seeing that the province has entered the field on this matter.[30]

The Consumer Advocate recommended that the Board order Hydro to propose a process and a mechanism for the Board's approval to adjust Hydro's target return on equity.

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[24] Newfoundland Power's Submission, page E-5
[25] Transcript, November 16, 2015, pages 71/20 to 73/10
[26] Transcript, January 25, 2016, page 75/10-20
[27] Consumer Advocate's Submission, page 34
[28] Transcript, November 18, 2015, page 173/21-24
[29] Transcript, January 25, 2016, pages 95/21 to 96/5
[30] Ibid., page 96/10-22

The Industrial Customer Group stated that the language of the Order in Council cannot reasonably be interpreted to constrain the Board with respect to using rate adjustment mechanisms which have always been available to address changes between general rate applications. Further the Industrial Customer Group stated:

> So based on that interpretation, I would say that there is no legal impediment in the Order in Council to this Board adopting a mechanism for automatic change of the rate of return based on any change in Newfoundland Power's rate of return that might occur between Hydro GRAs. The Order in Council does not prohibit that. Whether that's a good idea or not, we haven't seen a model in terms of how that type of mechanism would work.[31]

Hydro submitted that future changes to Hydro's target return on equity should be implemented only in a general rate application. According to Hydro this would avoid the implementation of new rates solely to give effect to a change in the return on equity and would mean that the outcome of return on equity changes could be implemented together with other impacts of a general rate application decision. Hydro further argued that this approach is consistent with the language of the OC2009-063 which sets out policies to be adopted by the Board "for all future General Rate Applications" by Hydro:

> So, the Order in Council itself, in my submission, is telling us that the provision with regard to Hydro's ROE is to be adopted in all future general rate applications. It's not telling us that there should be some adjustment mechanism in between GRAs for Hydro. It is certainly not saying that at all.[32]

The Board notes that the language of the Order in Council does not specifically address the issue of changes to Hydro's target return on equity outside of a general rate application by Hydro. However, the Board believes that a purposeful reading would be consistent with Hydro's target return on equity changing when Newfoundland Power's changes. If Hydro's target return on equity is to be based on Newfoundland Power's, it would be reasonable to change the return if there is a change to Newfoundland Power's return. Without such an adjustment, Hydro's target return may not be the same as Newfoundland Power's return and may in fact not be a fair return in the circumstances. It is possible that the return established for Hydro in a general rate application could be in place for some time given the potential timing of the filing and conclusion of future general rate applications by the two utilities. The Board notes that Hydro is scheduled to file its next general rate application in 2017 for 2018 test year rates and Newfoundland Power is currently scheduled to file its next general rate application in 2018 for 2019 test year rates.

The Board finds that the Order in Council does not restrict adjustments to the return between general rate applications and that a purposeful reading would support maintaining the same return for Hydro as is established for Newfoundland Power. The Board has in the past used an automatic adjustment formula to adjust Newfoundland Power's return where appropriate between general rate applications. The Board believes that Hydro's target return on equity should be subject to an adjustment process in the years between general rate applications so that it continues to be the same as Newfoundland Power's. The Board will direct Hydro to file a proposal in relation to how such an adjustment should be implemented.

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[31] Transcript, January 25, 2016, pages 114/21 to 115/1-6
[32] Ibid., page 18/10-17

During this general rate application proceeding Newfoundland Power filed a general rate application seeking new rates for 2016. The hearing of Newfoundland Power's general rate application concluded with the issuance of Order No. P.U. 18(2016) on June 8, 2016. In this order a new target return on equity for ratemaking purposes of 8.5% was established for Newfoundland Power based on a 2016 test year.

The Board has found that the target return on rate base for Hydro should be adjusted as Newfoundland Power's target return changes between general rate applications. The Board believes that the same approach should be taken if Newfoundland Power's return changes during a Hydro general rate application. The target return on equity to be used when calculating the rate of return on rate base in 2016 should be 8.5% to reflect the target return set for Newfoundland Power for 2016.

The target return on equity to be used in calculating the allowed rate of return on rate base for rate setting purposes beginning in 2016 shall be 8.5%.

Hydro will be required to file a proposal in relation to an adjustment mechanism for its target return on equity to reflect any future changes to Newfoundland Power's approved target return on equity.

9.4 Range of Return on Rate Base

The Amended Application proposed an increase in the allowable range of return on rate base from ± 15 bps. to ± 20 bps. This change is based on changes in Hydro's capital structure and the new approach to setting target return on equity. Hydro provided a report from its consultant in support of this proposal.[33] This proposal was accepted in the Settlement Agreements.[34]

The Board approved an allowable range of return on rate base of ± 15 bps in Order No. P.U. 8(2007) based on the information which was provided at the time. Based on the evidence and the Settlement Agreements the Board accepts that in the current circumstances an allowable range of return on rate base of ± 20 bps is appropriate.

A range of rate of return on rate base of ± 20 bps is accepted.

10.0 Forecasting Methodologies and Assumptions

Hydro relied on a number of forecasting assumptions in preparing its 2015 test year operating budget to be included in its revenue requirement. These assumptions related to customer load forecasts, expected hydraulic/thermal production, power purchases, fuel prices, and other expenses. The methodologies used by Hydro to forecast operating loads and production can have a significant impact on the test year forecast, which impacts the amount of fuel to be purchased.

10.1 Settled Issues

As part of the Settlement Agreements the parties agreed that the methodology used by Hydro to estimate its average annual hydroelectric production should be approved and the 2015 hydraulic

[33] Amended Application, Vol. II, Exhibit 6
[34] Settlement Agreement, August 14, 2015, page 2

production calculation forecast of 4,604 GWh should be approved for all purposes, including the calculation of No. 6 fuel expenses for the 2015 test year and the RSP.

The Board has reviewed the evidence and, based on the Settlement Agreements, accepts the methodology used by Hydro for its hydraulic production forecasts.

The outstanding forecasting methodology issues canvassed during the hearing included whether the 2015 test year industrial load forecast to be used for setting rates should be adjusted and the appropriate 2015 test year conversion factor for Holyrood. While the forecast fuel prices to be used in determining the 2015 test year revenue requirement was not a contested issue during the hearing the fuel prices used and the resulting costs form a significant portion of the total revenue requirement and are also discussed in this section.

10.2 Load Forecasts

Hydro's load forecasts on the Island Interconnected system for 2014 and 2015 were based on direct input from the Industrial customers and Newfoundland Power, with the total load requirement determined from an analysis of overall system losses and demand diversity.[35] The load forecasts for Hydro's rural systems are based on Hydro's own forecasts. These forecasts are used to determine forecast fuel costs for the test year and the revenue requirement to be recovered from customers in rates.

The 2015 test year load forecast for the Island Interconnected system, as compared to the 2007 test year, is shown below:

Hydro Load Forecasts[36]
Island Interconnected System (GWh)

	2007 Test Year	2015 Test Year
Newfoundland Power	4,925.8	5,924.1
Industrial Customers	930.2	621.4
Rural and Losses	588.4	689.6
Total Island Interconnected	6,444.4	7,235.1

For the 2015 test year Hydro is forecasting a 12.3% increase in load requirements over the 2007 test year, primarily due to the Utility load increase partially offset by a decrease in industrial loads. Teck Resources was expected to no longer require power and energy from Hydro beginning in 2015. Hydro explained that customer peak demands exhibit the same general growth pattern as energy requirements and that the peak demand requirements for 2015 reflect both weather normalization and expected growth.[37]

On the Labrador Interconnected system Hydro provides energy to its Rural and Industrial customers through recall power from CF(L)Co. The forecast electricity requirements on the system to be supplied by Hydro are shown below:

[35] Amended Application, Vol. I, page 2.59
[36] Ibid., Vol. I, page 2.60
[37] Ibid., Vol. I, page 2.61

Hydro Load Forecasts[38] Labrador Interconnected System (GWh)		
	2007 Test Year	**2015 Test Year**
Hydro Rural	505.5	688.1
CFB Goose Bay	77.4	10.2
IOCC	312.5	148.2
Wabush Mines and Losses	115.6	59.4
Total Labrador Interconnected	1,011.0	906.0

For the 2015 test year Hydro's electricity delivery requirements on the Labrador Interconnected system were forecast to decrease 10.4% from the 2007 test year. Hydro explains that this is due to lower energy requirements from Hydro to IOCC, partially offset by higher Hydro rural requirements associated with normalized weather, community load growth and load associated with the addition of the Muskrat Falls construction site.

The Consumer Advocate expressed concern with Hydro's 2015 test year load forecast to be used for setting rates for 2016, noting:

- energy sales for Industrial customers are forecast to increase in 2016 by 25.2% and in 2017 by 40.6% over levels assumed in the 2015 test year
- Newfoundland Power energy sales are only forecast to increase by 2.06% in 2016 and by 2.2% in 2017
- energy sales for the Rural Customer class are forecast to decrease by 0.6% and 5.3% in those years

Since the proposed rates in the Amended Application were based on a 2015 test year that will not be in effect in 2015 and not before the second half of 2016 the Consumer Advocate submitted that the "rates derived in the 2015 test year based on 2015 forecast loads cannot be considered just and reasonable".[39] The Consumer Advocate's expert, Douglas Bowman, expressed the opinion that the Industrial load should be normalized in the cost of service to reflect the higher forecast loads for Vale and Praxair during the 2015-2017 period.

The Consumer Advocate also noted that Vale's load forecast is reduced from the levels forecast in the Amended Application, and that the reduction had consequences for Hydro since it spent money to serve load that would not materialize. As a result the Consumer Advocate suggested that Hydro has at least 50 MW more capacity than needed. The Consumer Advocate argued that this will have a negative impact on Hydro customers, and that the capacity assistance agreement with Vale should be scrutinized since it was driven in large part by Vale's own erroneous forecast. The Consumer Advocate submitted that both Vale and Corner Brook Pulp and Paper should not be allowed future cost recovery under their respective agreements, and recommended that the Board order Hydro to file a report identifying all costs associated with the over-forecasting of load for Vale and suggesting means for saving harmless Hydro's customers. The Consumer Advocate also suggested that the timing of the report should enable termination of the

[38] Includes electricity requirements from Hydro only. IOC and Wabush Mines total load forecasts set out in the Amended Application also include energy from Twinco (Amended Application, Vol. I, page 2.11 and Table 2.16).
[39] Consumer Advocate's Submission, page 27

Vale and Corner Brook Pulp and Paper Supplemental Capacity Assistance Agreements prior to the 2016/17 winter period.[40]

The Industrial Customer Group challenged the Consumer Advocate's position that the 2015 load forecast was not appropriate for use in the 2015 test year due to the expected load growth for Vale and Praxair in 2016 and 2017. Patrick Bowman, the Industrial Customer Group's expert, explained that the problem with normalizing the load was that it attempted to allocate costs to Vale and Praxair where there was no existing load.[41] According to Mr. Bowman, costs should not be allocated to a class before there is a load to pay for it since it is an attempt to capture what will come in the future and put it into today's rates.[42] The focus should be on whether the rate that is being put in place reasonably represents what it would be in 2016 and 2017, considering the load, and if the rates are not changing dramatically, then nothing needs to be changed.[43,44] The Industrial Customer Group submitted that Hydro's evidence in Undertaking #44 (Rev. 1) shows that a cost of service study based on a 2015 test year would generate the appropriate increase in Hydro revenue from the Industrial customer class load as forecast in 2016 and 2017, as well as generating fair rates throughout the period. The Consumer Advocate's proposed approach would result in over recovery from Industrial customers in both the 2015 test year and in 2016 and 2017.[45]

The Industrial Customer Group also explained that Hydro provided updated load information late in the hearing, which materially changed the Industrial customer load forecast. According to the Industrial Customer Group the effect of the material reductions in the Industrial load essentially eliminated the factual basis for the Consumer Advocate's normalization proposal since it was based on the premise that the 2016 and 2017 industrial loads would exceed the 2015 test year loads and require consideration in sharing of the test year cost of service. Since the updated 2016 and 2017 industrial loads are expected to be below the 2015 test year level, the Industrial Customer Group argued that the Consumer Advocate's issue with the load forecasts no longer exists.[46]

Vale supported Hydro's position on this issue, stating that the loads reflected in the amended 2015 test year properly reflected rates as potential load growth occurs. Vale also referred to Undertaking #44 (Rev. 1) which, in their view, demonstrated how using a normalized load with the 2017 forecast demand and energy would lead to abnormal results.

Hydro disagreed with the Consumer Advocate's recommendation that the Board adjust the 2015 test year to reflect loads during the 2015 to 2017 period. According to Hydro:

> The analysis provided in Undertaking No. 44 indicates that normalization to reflect higher future loads in the allocation of the 2015 Test Year revenue requirement will result in reflecting the future cost of serving IIC load in current rates. Allocation of a higher proportion of costs to IIC based on the 2017 forecast will have the effect of materially

[40] Consumer Advocate's Submission, page 29
[41] Transcript, October 1, 2015, page 31/4-8
[42] Ibid., page 34/16-20
[43] Transcript, September 30, 2015, page 132/1-8
[44] Industrial Customer Group's Submission, page 22
[45] Ibid., page 20
[46] Ibid., page 24

> increasing the rates to be charged IIC and result in rates that over-recover the cost of serving IIC.[47]

Hydro argued that normalization is only warranted when the test year rates are anomalous and normalization will address the anomaly, and normalization is not warranted simply because there is the presence of increased forecast load beyond 2015 for the Industrial customers. Hydro submitted that the Industrial customer load forecast used in the 2015 test year, which included Vale and Praxair as high load factor customers, is appropriate for establishing reasonable rates.[48]

Board Findings

The Board is not satisfied that the 2015 test year load forecast to be used in the cost of service study should be adjusted to account for future expected load growth of the Industrial customers. The 2015 test year load normalization scenario undertaken by Hydro in Undertaking #44 (Rev. 1) shows that allocation of a higher proportion of costs to Industrial customers based on a 2017 forecast would materially increase the energy charge for Industrial customers and result in an over-recovery of the cost of serving the Industrial customers in both the test year and in future years.[49] This is not, in the Board's view, consistent with the principles of cost-of-service rate making since, in theory, the Industrial customers would be paying for future costs in current rates. The Board also notes that Hydro's analysis of the normalization impact on proposed rates for the Industrial customers, using the forecasted increased load of Vale and Praxair, showed there is minimal change in the unit demand costs as a result of the higher demand units used to compute the unit cost.[50]

With respect to the Consumer Advocate's claim that Vale had provided an erroneous forecast and therefore should not be allowed cost recovery under its capacity agreement, the Board finds no evidence on the record to support this. As a result the Board will not order Hydro to file the report as requested by the Consumer Advocate.

The 2015 test year customer load forecasts are accepted.

10.3 Fuel Price Forecasts

There was a considerable reduction in fuel costs in the period following the filing of the Amended Application. During the proceeding Hydro provided an update to its forecast price of No. 6 and No. 2 fuels to be used in the 2015 test year fuel cost forecast, as shown below:[51]

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[47] Hydro's Submission, Rev. 1, page 78
[48] Ibid.
[49] Transcript, October 5, 2015, pages 99/25 to 100/6
[50] Undertaking #41
[51] Letter to Board dated October 28, 2015 providing update on 2015 test year fuel costs (Information #50)

	Amended Application	Updated
Holyrood Thermal Generating Station (No. 6 fuel)	$93.32/bbl	$64.41/bbl
Isolated Systems (No. 2 fuel)	$1.10/litre	$1.01/litre
Purchases[52]	$0.1357/kWh	$0.1181/kWh

The revised forecast No. 6 fuel cost reflects a 2016 forecast fuel price of $69.40/bbl ($Cdn) and the forecast 2015 year-end average inventory cost of $55.35/bbl ($Cdn).[53]

No issues were raised by the intervenors with the updated forecast fuel price for No. 6 or No. 2 fuels.

Hydro's updated fuel price forecasts to be used in calculating the 2015 test year revenue requirement are accepted.

10.4 Holyrood Fuel Conversion Factor

The forecast of fuel consumption at the Holyrood Thermal Generating Station and the associated production costs is affected by the energy conversion factor for a barrel of No. 6 fuel. In the Amended Application Hydro proposed to reduce its fuel to energy conversion rate for No. 6 fuel from 630 kWh/bbl, as set for the 2007 test year, to 607 kWh/bbl. Actual fuel conversion rates have been below 630 kWh/bbl every year since 2007, as shown below.[54]

Holyrood Fuel Conversion Performance 2009 – 2015							
	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Forecast
Fuel Consumption ('000 bbls)	1,534.7	1,363.2	1,469.2	1,428.3	1,611.0	2,251.2	2,624.4
Actual Fuel Conversion Rate (kWh/bbl)	612	589	603	599	594	584	607
2007 TY Fuel Conversion Rate (kWh/bbl)	630	630	630	630	630	630	630

Hydro explained that the decline in fuel conversion performance in recent years was due to changes external to the operation of Holyrood. Reduced system loads, higher energy purchases and higher levels of hydraulic generation have resulted in lower production requirements at Holyrood.[55] This lower production combined with a lower fuel heating content since 2009 associated with the switch to 0.7% sulfur content fuel resulted in lower actual fuel conversion rates than forecast in 2007. The additional production costs due to the lower fuel conversion rates compared to the 2007 test year level have ranged from $2.4 million in 2009 to $8.8 million for 2014 and have been borne by Hydro.[56] In the Amended Application Hydro proposed that a

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[52] The cost of power purchases on the isolated systems is also updated since power purchase contracts are linked to No. 2 fuel cost.
[53] Information #50
[54] NP-NLH-330
[55] Amended Application, Vol. I, page 2.74
[56] Ibid., page 2.75, Table 2.21

deferral account be established to capture the variances between the 2015 test year fuel conversion rate and the actual conversion rate.

The methodology used to forecast the fuel conversion factor for the 2015 test year was also changed from previous approaches to be more reflective of expected future operating conditions. The 2015 test year forecast was derived from a five-year regression analysis using June 2009 to May 2014 actuals for unit average monthly gross loading, adjusted for fuel heating content. The resulting gross efficiency of 650 kWh/bbl was adjusted downward by a station service factor of 6.61% of gross generation, or 43 kWh/bbl, to give a 2015 test year forecast fuel conversion rate of 607 kWh/bbl. The station service factor was based on average experience over the period June 2009 to May 2014. Hydro explained that the higher 2015 test year fuel conversion rate compared to the actual rates for 2010-2014 is due to anticipated higher production requirements and a reduction in minimum operating time, which will be enabled by the new combustion turbine at Holyrood. However improvements in the fuel heating content are not expected.[57]

The Industrial Customer Group's expert Patrick Bowman expressed the opinion that Hydro's forecast fuel conversion rate of 650 kWh/bbl is credible, even though the data is limited for recent low sulphur fuel content at the 2015 test year average unit loading of 117.3 MW. However, according to Mr. Bowman, the station service estimate of 43 kWh/bbl is not consistent with current and expected operating levels. Mr. Bowman explained that Hydro used station service estimates based on recent lower loadings, rather than estimates for projected loading, and suggested the station service loading is 7 kWh/bbl too high because of this. Mr. Bowman also noted that the 43 kWh/bbl does not include the impact of capital improvements at Holyrood which could lower station service loads. One example highlighted was the variable forced fan project completed in 2014/15 which was projected to reduce station service load by 8 kWh/bbl. As a result Mr. Bowman recommended that the forecast station service load be reduced by 15 kWh/bbl, which would result in a conversion factor of 622 kWh/bbl.[58] The Industrial Customer Group submitted that this approach should be accepted by the Board.

Newfoundland Power submitted that there is no credible evidence to indicate the current fuel conversion rate of 630 kWh/bbl used for rate making purposes is unreasonable. According to Newfoundland Power the evidence suggests that Holyrood production will increase significantly in the test period which generally means an increase in fuel conversion factor. In addition there is no evidence to show that Hydro will not be able to obtain a higher heat content No. 6 fuel. Newfoundland Power also noted that Hydro has not commissioned a study to assess the impact of average gross loading per unit or any factor on Holyrood efficiency. With regards to the regression analysis completed by Hydro to arrive at the gross loading Newfoundland Power noted that the analysis is evidence only of the conversion factor experienced historically and that the impact of operational and maintenance issues in 2013 and 2014 on Holyrood efficiency is unclear. If the Board is satisfied that an adjustment to the Holyrood conversion factor is warranted then Newfoundland Power suggested that the recommendation by the Industrial Customer Group's cost of service witness of 622 kWh/bbl be used.[59]

The Consumer Advocate submitted that Hydro has not established that its proposed test year conversion factor is reasonable and pointed to the evidence of Mr. Bowman on behalf of the

[57] Amended Application, Vol. I, pages 2.75/19 to 2.76/3
[58] Transcript, September 30, 2015, page 163/2-4
[59] Newfoundland Power's Submission, page C19

Industrial Customer Group. He suggested that Mr. Bowman's recommendation of 622 kWh/bbl appears to be conservative and recommended that the conversion factor remain at 630 kWh/bbl or in the alternative no lower than 622 kWh/bbl as proposed by Mr. Bowman.[60]

Hydro pointed out that it has not achieved the fuel conversion rate of 630 kWh/bbl since 2007 and has not exceeded 612 kWh/bb since 2009. Hydro also suggested that Mr. Bowman's adjustment of +8 kWh/bbl for the impact of new capital improvements is overstated and that +4 kWh/bbl would be more appropriate since the average loading for the test year is higher. Hydro submitted that the proposed fuel conversion factor of 607 kWh/bbl for the 2015 test year is appropriate for setting rates in 2016, and that the historical conversion rate shows that there is a greater risk of achieving a lower conversion rate than a higher one.[61]

In its rebuttal Hydro argued that there is no evidence to support a change in the Holyrood conversion factor and noted that Newfoundland Power has not provided support for holding the conversion factor constant other than its inclusion in the 2007 test year. Hydro argued that the evidence in this proceeding provides minimal, if any, evidence to support the continued use of 630 kWh/bbl as the 2015 test year conversion factor.[62]

Board Findings

The conversion factor to be used in determining the test year revenue requirement affects the calculation of test year fuel requirements at the Holyrood Thermal Generating Station, and hence the costs to be recovered from customers in fuel expense. Hydro's evidence is that the average actual conversion rate for 2007-2014 has been 602 kWh/bbl and that it has not exceeded 612 kWh/bbl since 2009.[63] This achieved conversion rate reflects the actual operating conditions for that period, including the reduction in system loads, higher energy purchases and higher levels of hydraulic production. Actual fuel conversion rates for 2012, 2013 and 2014 have been below 600 kWh/bbl. Hydro explained that the higher forecast conversion rate of 607 kWh/bbl for the 2015 test year is due to higher production requirements and higher average unit output levels at Holyrood.

According to Hydro it was necessary to use a different methodology to forecast the 2015 test year conversion factor because of the financial impact of the low conversion rate achieved in recent years. The Board accepts that the factors contributing to the lower conversion rate were, to a large extent, outside Hydro's control. However, in the normal course, the fuel conversion rate would have been adjusted as part of a general rate application in the intervening period, which may have mitigated somewhat the negative financial impact. Notwithstanding, the Board accepts that the use of the weighted averaging methodology used in the past to forecast the conversion factor may not reflect the expected operating conditions for the 2015 test year. The use of a forward regression model which accounts for expected operating conditions and factors is, in the Board's view, a reasonable approach. No party took issue with the methodology change or the methodology itself.

The Board notes that no party took issue with Hydro's estimation of a gross efficiency factor of 650 kWh/bbl, calculated using the regression model. However issues were raised with respect to

[60] Consumer Advocate's Submission, page 19
[61] Hydro's Submission, Rev. 1, page 48
[62] Hydro's Rebuttal, page 15
[63] Hydro's Submission, Rev. 1, pages 86

the adjustments applied to this gross efficiency number to arrive at the final 2015 test year conversion factor of 607 kWh/bbl. Hydro reduced the gross efficiency by 43 kWh/bbl (6.6% of 650 kWh/bbl) to account for station service. Patrick Bowman expressed the opinion that this number was too high and is not consistent with expected operating levels. His percentage analysis for a higher test year loading suggested that the station service should be 36 kWh/bbl (5.85% of 650 kWh/bbl). The Board agrees with Mr. Bowman's recommendation on the basis that it reflects Hydro's forecast 2015 test year operating conditions.

The Board also agrees that the identified station service savings from capital improvements associated with the installation of variable frequency drives of the forced draft fans should be included in the station service adjustment. This project was justified in part on the basis of reduced station service loading and these efficiency benefits should flow through to customers. The estimated savings for 2015 were set out in NP-NLH-191 (Rev. 1) as 8 kWh/bbl. Mr. Goulding, Hydro's witness, suggested during testimony that the actual savings would be in the range of 4-8 kWh/bbl and Hydro submitted that the reduction should be 4 kWh/bbl. The Board accepts Hydro's evidence that the capital improvements will result in an improvement in efficiency of 4 kWh/bbl and that the station service adjustment should be reduced by that amount.

On the basis of the evidence the Board is satisfied that Hydro's estimate of station service adjustment should be decreased by 11 kWh/bbl to account for the expected operating conditions and the recent efficiency improvements. This will result in a reduction of 32 kWh/bbl (43 kwh/bbl – 11 kWh/bbl), to give a conversion factor of 618 kWh/bbl.

A conversion factor of 618 kWh/bbl for No. 6 fuel for the Holyrood Thermal Generating Station is accepted for the 2015 test year.

11.0 2015 Test Year Costs

Hydro's proposed revenue requirement to be used for setting customer rates is based on its forecast costs for a 2015 test year. The test year revenue requirement consists of Hydro's return on rate base plus the reasonable costs forecast to be incurred in the provision of electrical service, which include operating expenses, fuels, power purchases, depreciation and interest.

In the Amended Application Hydro proposed a 2015 test year revenue requirement of $662.5 million, compared to $431 million determined for the 2007 test year, an increase of $231.5 million. As discussed in Section 10.3, Hydro provided updated evidence during the proceeding with respect to fuel costs, resulting in a decrease in the proposed 2015 test year revenue requirement of approximately $78 million.[64] The breakdown of the proposed 2015 test year revenue requirement by cost category is shown below:

[64] See Information #50; Adjusted 2015 test year revenue requirement for rate setting confirmed in Hydro's Submission, Rev. 1, page 109.

Proposed 2015 Test Year Revenue Requirement ($000)			
	2007 Test Year	2015 Test Year	Increase (Decrease)
Operating and Maintenance	93.4	138.2	44.8
Fuel	148.4	192.4	44.0
Power Purchases	38.3	62.9	24.6
Depreciation and Other	40.2	68.7	28.6
Return on Equity	8.0	33.2	25.3
Interest	102.7	89.3	(13.5)
Total Revenue Requirement	431.0	584.7	153.8

The total 2015 test year costs, excluding return, proposed to be recovered in customer rates is $551.5 million. The following sections address Hydro's proposals for these costs and the Board's findings.

11.1 Settled Issues

Several issues with respect to the 2015 test year expenses were addressed in the Settlement Agreements. The Settlement Agreements provided:

1. The Board should approve the proposed accounting treatment to include actuarial gains and losses in employee future benefits in the 2015 test year.
2. The Board should approve the proposal to include depreciation and accretion expenses associated with asset retirement obligations with the amounts reduced from $3.1 million and $3.2 million for the 2014 and 2015 test years, respectively, as proposed in the Amended Application, to $2.6 million and $2.6 million respectively.
3. The methodology used to determine depreciation expense in the 2015 test year is appropriate.
4. The Board should approve the proposed conservation and demand management recovery adjustment.

In Order No. P.U. 36(2015) the Board approved the creation of a deferral account in relation to Hydro's proposed 2015 test year revenue requirement. As part of this approval the Board accepted the settlement proposals related to employee future benefits, asset retirement obligations, and 2015 conservation and demand management costs. As discussed in Section 7.0 the Board has accepted the recommendations of the Settlement Agreements, including the appropriateness of the methodology used to determine depreciation expense.

11.2 Costing and Recovery of Affiliate Transactions

As a fully owned subsidiary of Nalcor, Hydro operates as a regulated utility within the framework of a shared services model in Nalcor's matrix organizational structure. The functions and departments that share services across entities include the leadership team, legal services, internal audit, project engineering and technical services, environmental services, labour relations, financial planning, risk and insurance, and finance and supply chain management.[65]

Hydro stated that it recognizes its obligation to ensure that costs associated with non-regulated activities are clearly separated and that Hydro's regulated customers pay only for those costs required to meet their electricity requirements. Hydro outlined the principles which form the basis of the cost based recovery methodologies adopted by the Nalcor companies, and governed by the Intercompany Transaction Costing Guidelines:

- They must be fair and reasonable and there must be a causal relationship between the provision of a service and the cost.
- There must be a reasonable degree of accuracy reflected in the allocated charges for the provision of the services between the entities.
- The methodology should be acceptable in a regulatory framework and should be consistent with industry standards and practices.[66]

The Intercompany Transaction Costing Guidelines apply to both intracompany and intercompany transactions, which means that they apply to transactions between regulated and non-regulated Hydro as well as to transactions between Nalcor and the other lines of business. The Intercompany Transaction Costing Guidelines are based on the principle of cost based recovery and there is no profit component.[67]

Brad Rolph of Grant Thornton evaluated the reasonableness of the methods used by Hydro and its affiliates to determine the amounts charged by and to Hydro for services rendered or arranged by Hydro for the benefit of its affiliates or by its affiliates for the benefit of Hydro. In his report, Mr. Rolph reviewed the common services, common expenses and corporate services covered by the Intercompany Transaction Costing Guidelines to assess the "reasonableness of the methods used by Hydro and its affiliates to determine the amounts charged by and to Hydro."[68] Mr. Rolph found the Intercompany Transaction Costing policies to be reasonable with two exceptions: i) the common services charge which Hydro recovers from its affiliates may not be fully burdened, and ii) if a mark-up is or should be charged on the cost of rendering a service to Nalcor or one of its energy projects involving private interests.

With respect to the issue of mark-up, clarification was sought from Hydro to determine which of Nalcor's other lines of business were allocated an amount for common services. Hydro did not provide the requested information, indicating that this information was not relevant to the understanding of the issue. Mr. Rolph explained during testimony that this information was important for transparency reasons, since it could help ensure that Hydro was implementing its affiliated pricing policy properly, and ensure that there was no inappropriate subsidy created at the expense of Hydro and its customers by not having a mark-up on costs.[69] Mr. Rolph also recommended that Hydro be required to report its inter-company transactions to the Board through an annual review, which would entail providing a description of all services rendered,

[65] Amended Application, Vol. II, Exhibit 8, page 6-9
[66] Amended Application, Vol. I, pages 3.38/28 to 3.39/12
[67] Amended Application, Vol. II, Exhibit 8, page 2
[68] Grant Thornton's Pricing Policy Evaluation Report, page 1
[69] Transcript, October 19, 2015, pages 18/1 to 19/6

the cost charged back to and from the affiliates, the amounts involved, and the methods used for determining those amounts.[70]

Newfoundland Power referenced Mr. Rolph's concerns and Hydro's acknowledgement that the common services charges that Hydro recovered from its affiliates were not fully burdened. Newfoundland Power argued that the manner in which Hydro's core shared services costs were allocated was not consistent with least cost principles, pointing out that all of the personnel providing core shared services for Nalcor's lines of business were Hydro employees. According to Newfoundland Power, since those costs were allocated based on the total full-time equivalents ('FTEs") of the Nalcor group, more of the costs of common services were allocated to regulated Hydro. Newfoundland Power proposed that, if those FTEs were allocated as if the employees were home based in Nalcor, Hydro's 2015 test year revenue requirement would be lower by approximately $882,000, which would be a more equitable approach for ratepayers. As a result, Newfoundland Power submitted that the 2015 test year revenue requirement should be reduced by $114,000 to correct the understatement of common services charges and further reduced by $882,000 to reflect a more equitable allocation of common services costs.[71]

The Consumer Advocate argued that the evidence indicated that, had Nalcor and Hydro decided to employ those who performed common services outside of Hydro and within Nalcor, the cost to ratepayers would have been reduced by approximately $900,000. The Consumer Advocate submitted that, if Hydro continues to be part of a common services model, the model must be shown to be least cost to Hydro. He recommended that the Board order Hydro to adjust the 2015 test year revenue requirement by the amount of savings that could accrue to Hydro if common services employees were in the employ of Nalcor, instead of Hydro, based upon updated 2015 test year figures. The Consumer Advocate also submitted that the Board should order Hydro to adjust its revenue requirements in the amounts of $144,851 in the 2014 test year and $114,851 for the 2015 test year to reflect the fact that Hydro had not fully burdened common services charges.[72]

According to the Consumer Advocate Hydro should also be required to include a mark-up for revenue requirement purposes in respect of services that it provides to Nalcor and related businesses. He argued that the fact that Nalcor and Hydro are government owned does not equate to them being "non-profit" entities, and they should seek to earn a return on their shareholders' investment. Hydro's customers should also not be disadvantaged relative to Newfoundland Power's customers, who benefit from a mark-up when services are provided to Fortis, simply because Hydro is government-owned. The Consumer Advocate recommended that the mark-up be no less than 57% since that was the mark-up previously used for charges for external billings on wage rates.[73]

The Industrial Customer Group questioned the reasons for the wide discrepancies in the time charged in to Hydro by various Nalcor officers between the actual and forecasted amounts for 2014, 2015 and the forecasted and budgeted amounts for 2016. According to the Industrial Customer Group, the evidence demonstrates that the allocation of Nalcor officer time to Hydro, and vice versa, is a subjective and arbitrary exercise. The Industrial Customer Group believes that there is insufficient incentive for Nalcor and Hydro to provide reasonably transparent and

[70] Transcript, October 19, 2015, page 27/10-22
[71] Newfoundland Power's Submission, pages C-23 to C24
[72] Consumer Advocate's Submission, page 40
[73] Ibid., page 41

detailed guidance to its officers and employees on timekeeping. They submitted that, although there may be some benefits to Hydro and its customers in using the matrix model, there is also a responsibility on Hydro to be reasonably rigorous and vigilant that Hydro and its customers are not bearing any cost burden of non-regulated projects.[74]

The Industrial Customer Group also referenced OC2013-343 related to the Muskrat Falls Project Exemption Order, which directed that costs from that project were not to be included in Hydro's cost of service calculation or to be recovered by Hydro in rates. The Industrial Customer Group submitted that, in order to provide a more transparent and efficient review of these issues in the next general rate application, the Board should direct Hydro to develop a more detailed policy in respect of what work is properly charged to Hydro and by whom in respect of all aspects of the integration of Hydro's Isolated Island System with Muskrat Falls generation and the Labrador-Island and Maritime Links.[75]

Hydro submitted that, through the sharing of resources, it has been able to recover the costs of those resources from its affiliates, thereby lowering the overall cost of providing electrical service. According to Hydro the provision of shared services at cost facilitates the sharing of services and supports the optimal and most efficient use of resources, which is why it does not charge a mark-up on intercompany transactions. Hydro's position is that this benefit accrues to ratepayers through the Admin Fee, which it stated was $5.6 million in 2014 and $5.7 million in the 2015 test year. Hydro also submitted that there was a net benefit of $9.1 million from the initial transfer of staff from Hydro to Nalcor. Hydro submitted that, rather than employing its own dedicated full-time resources to provide those services, it has demonstrated significant benefits to ratepayers from the Admin Fee, and that its customers benefit from the sharing of services with Nalcor.[76]

Hydro referenced the independent third party review by Deloitte of its processes and procedures used to recover costs among affiliates, which was filed with the Board, which concluded that Nalcor's methodologies and practices were fair and reasonable and in line with other utilities and that Nalcor appeared committed to identifying and removing (via allocations) all costs not relevant to regulated operations.[77]

Hydro argued that Newfoundland Power's recommendation to base all drivers associated with common services in the parent company, regardless of their location and the nature of services provided, fails to adhere to the intent of the allocation process to share costs in a reasonable and fair manner. Hydro submitted that it chose to implement an approach that was identified as acceptable and reasonable and that its method was reviewed by two independent consultants who found it to be reasonable.[78] Hydro acknowledged Grant Thornton's comment that the common services related to the administration fee might not be fully burdened and, in response, provided evidence indicating that the impact of calculating a fully burdened administration fee is an additional $105,820 in the 2014 test year and $114,851 in the 2015 test year.[79]

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[74] Industrial Customer Group's Submission, pages 44-50
[75] Ibid., pages 51-52
[76] Hydro's Submission, Rev. 1, pages 32-35
[77] Hydro's Submission, Rev. 1, page 33
[78] Hydro's Rebuttal, pages 12-13
[79] Undertaking #151

Board Findings

This is the first general rate application since Hydro became part of the existing Nalcor company structure. Previously Hydro was essentially a stand-alone utility and inter-affiliate transactions were limited, involving mostly CFLCo. In previous Orders related to Newfoundland Power, which is part of the Fortis Group of Companies, the Board has expressed its view of the principles that should govern inter-corporate transactions, specifically that these transactions must be fully transparent, prudent and provide demonstrable benefits to the utility and its ratepayers. The Board has also acknowledged that the benefits to the utility and its customers of inter-corporate relationships may be hard to quantify, and stated that these transactions "should only be entered into insofar as they do not compromise the operational or managerial integrity of the utility."[80]

In its response to PUB-NLH-140 Hydro provided the factors that, in its view, should be considered in determining whether there is subsidization of the unregulated operations of Nalcor by Hydro's regulated operations:

- whether there is an appropriate intercompany costing policy in place
- whether the intercompany guidelines, procedures and processes will accomplish stated goals
- whether guidelines, procedures and practices are further reflected in proper allocation factors and billing rates, as well as systematic time reporting and comprehensive charging to appropriate entities
- reviewing periodic reporting of intercompany costs and reviewing intercompany transactions

The Board notes Hydro's response to CA-NLH-082 in which it stated that it recognized the merits of the rules and principles that the Board established for Newfoundland Power's inter-corporate transactions when developing the Intercompany Transaction Costing Guidelines. However, Hydro pointed out in the same response that it also considered the significant differences with both the corporate structure and magnitude of Nalcor's intercompany transactions, versus Newfoundland Power, when developing its costing guidelines. Hydro also explained that Nalcor does not charge profit on services shared between entities since provision of services at cost facilitates the sharing of resources using the matrix organizational structure.[81] Notwithstanding the different corporate structures for Newfoundland Power and Hydro within the parent group, in the Board's view each utility must be able to demonstrate the net benefits to rate payers of any inter-corporate arrangements where the utility provides services to its affiliates. Since the last general rate application Hydro has undergone significant structural changes which, in the Board's view, makes it difficult to evaluate directly whether the resulting cost structure using shared services is least-cost compared to Hydro's operation as a stand-alone utility.

The primary concern raised by the intervenors related to the method used to allocate common costs between Hydro and Nalcor. As noted by Hydro there are many options to recover costs through the Admin Fee. The Board notes that the methodology chosen by Hydro to allocate shared services was reviewed by both Deloitte and Touche and Mr. Rolph of Grant Thornton and

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[80] Order No. P.U. 32(2007)
[81] CA-NLH-083

found to be reasonable. The Board also notes that changes in Hydro's corporate structure and governance during and since this proceeding may result in changes to the manner and level of intercompany charges.[82] The Board accepts the allocation methodology for common costs for the 2015 test year revenue requirement but expects that, in its next general rate application, Hydro will address any impact of the intervening changes in organizational structure on intercompany charges and policies governing cost recoveries of such charges. The Board notes Hydro's acknowledgment of the deficiency in fully burdening the Admin Fee and will require an adjustment of $115,000 for the 2015 test year based on Undertaking #151.

In the Board's view much of the concern in this proceeding surrounding intercompany charges related to issues of transparency associated with the level and recovery of these charges. The Board finds these concerns to be justified based on the evidence provided in this proceeding. The evidence does not demonstrate systematic time reporting by Hydro's executives. One of the factors cited by Hydro in the consideration of whether there is subsidization of the unregulated operations was systematic time reporting. The Board believes that a more detailed accounting of the intercompany activity between regulated and unregulated operations as part of Hydro's ongoing reporting to the Board will be beneficial to all stakeholders. Hydro currently provides separate financial statements for regulated and unregulated activities in both its quarterly and annual reports without details of intercompany activity. As part of its annual financial reviews Grant Thornton examines the specific expenses and operations compared to previous years, the methodologies relating to allocation of costs between regulated and unregulated operations and how costs are allocated between shared services. The Board accepts Mr. Rolph's recommendation that Hydro be required to report its inter-company transactions to the Board annually, including a description of all services rendered, the costs charged back to and from the affiliates, the amounts involved and the methods used for determining these amounts. The Board will require Hydro to propose guidelines for this intercompany charges report, with reporting to begin in 2017.

Hydro will be required to reduce the proposed 2015 test year intercompany charges by $115,000 to account for fully burdened costs in the Admin Fee.

Hydro will be required to file on or before March 31, 2017 a proposal in relation to annual reporting, starting in 2017, of its intercompany activity, including a description of all services rendered, the cost charged back to and from the affiliates, the amounts involved and the methods used for determining these amounts.

11.3 Operating Expenses

The Amended Application proposed the inclusion of $138.2 million in the 2015 revenue requirement for operating expenses, which is $40.5 million higher than 2007 actual.[83] Operating expenses include salaries and benefits, system equipment maintenance and other costs.

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[82] On June 15, 2016 Nalcor announced via a news release that Hydro will become a separate business unit to ensure a distinct separation from unregulated activities, and also the appointment of a dedicated president for Hydro.

[83] Amended Application, Vol. I, page 2.32

Operating Expense by Cost Category ($millions)						
Cost Category	2007 Actual	2013 Actual	2014 Test Year	2014TY vs. 2007A Change	2015 Test Year	2015TY vs. 2007A Change
Salaries and Benefits	58.3	73.3	78.0	19.7	85.8	27.5
System Equipment Maintenance	23.1	21.4	22.4	(0.7)	26.3	3.2
Other Operating Expenses	19.2	21.8	29.6	10.4	28.6	9.4
Total Operating Expenses Before Other Cost Recoveries	**100.6**	**116.5**	**130.0**	**29.4**	**140.7**	**40.1**
Other Cost Recoveries	(2.9)	(4.7)	(3.9)	(1.0)	(2.5)	0.4
Total Operating Expenses	**97.7**	**111.8**	**126.1**	**28.4**	**138.2**	**40.5**

11.3.1 Salaries and Benefits

The Amended Application proposed the inclusion of $85.8 million in the 2015 revenue requirement for salaries and benefits costs, which is $27.5 million higher than 2007 actuals of $58.3 million. Salary costs include overtime and capital labour costs, and benefits costs include fringe benefits, employee future benefits and group insurance.

Salary and Benefit Expenses ($millions)						
Cost Type	2007 Actual	2013 Actual	2014 Test Year	2014TY vs. 2007A Change	2015 Test Year	2015TY vs. 2007A Change
Salaries	49.5	66.6	73.2	23.7	77.9	28.4
Overtime	6.2	12.3	12.2	6.0	10.1	3.9
Gross Salaries	55.7	78.9	85.4	29.7	88.0	32.3
Capital Labour Costs	(11.3)	(20.2)	(22.0)	(10.7)	(22.6)	(11.3)
Total Salaries	44.4	58.7	63.4	19.0	65.4	21.0
Fringe Benefits	6.5	8.4	8.8	2.4	12.5	6.1
Employee Future Benefits	5.9	6.8	6.8	0.9	8.4	2.5
Group Insurance	2.2	2.4	2.5	0.3	2.6	0.4
Total Benefits	14.5	17.6	18.1	3.6	23.5	9.0
Total Salaries and Benefits, before cost recoveries	58.9	76.3	81.5	22.6	88.9	30.0
Cost Recoveries	(0.6)	(3.0)	(3.5)	(2.9)	(3.1)	(2.5)
Total Salaries and Benefits, net of Cost Recoveries	**58.3**	**73.3**	**78.0**	**19.7**	**85.8**	**27.5**

The Amended Application proposed 2015 test year salary costs of $77.9 million, which is $28.4 million higher than 2007 actuals of $49.5 million. The Amended Application explained that the primary drivers of this increase included cost of living increases of $20.2 million. In addition an increase in full time equivalent ("FTE") positions is associated with $8.6 million of the increased salary costs.[84]

[84] Amended Application, Vol.1, page 2.33

The proposed overtime costs for the 2015 test year are $10.1 million.[85] This is $3.9 million higher than 2007 actuals after consideration of capitalized overtime, and $2.1 million less than the proposed 2014 test year overtime. The Amended Application stated that overtime costs are necessary to provide least cost reliable service, and these costs vary based on circumstances such as weather or equipment emergencies, labour shortages and capital project requirements.[86]

The 2015 test year salaries and overtime reflect the proposed capitalized salaries, which are the internal labour and overtime costs associated with Hydro's capital projects. The proposed capitalized salaries in the amount of $22.6 million is $11.3 million higher than 2007 actual which, according to the Amended Application, is related to salary increases and growth in the capital program.[87]

The Amended Application proposed 2015 fringe benefits costs of $12.5 million, which are $6.1 million higher than 2007 actuals.[88] Fringe benefits include Canada Pension Plan, Employment Insurance, Public Service Pension Plan and Workers Compensation premiums and contributions. The Amended Application noted increases in these costs are associated with salary increases and increases in the required contributions/premiums.

The proposed employee future benefits costs in the amount of $8.4 million are $2.5 million higher than 2007 actuals and include actuarial losses of $1.6 million.[89] Employee future benefits costs relate to severance payments upon retirement and health benefits provided to retirees on a cost-shared basis.

The proposed group insurance costs of $2.6 million are $0.4 million higher in the 2015 test year than 2007 actuals mainly due to higher employee salaries and associated life insurance premiums and claim experience.[90] Group Insurance benefits include health, dental, life insurance, and accidental death and dismemberment coverage.

Submissions

The Consumer Advocate argued that Hydro has the burden of demonstrating that the costs to be recovered are appropriate to ensure safe, reliable and least cost electricity. The Consumer Advocate noted:[91]

- Gross salaries increased by 43.3% on an inflation adjusted based from $55.7 million in 2007 to $86.0 million in 2015 test year.
- Home based FTEs increased to 903 in 2015 test year from 865 in 2014 and 813 in 2013.
- Average salary per net FTE increased from $59,453 in 2007 to $84,704 in the 2015 test year.
- Non-union salaries increased on average by 6.3% per year over the period 2007 to 2015 test year, with a total cumulative increase of 56.9%.

[85] Amended Application, Vol. I, page 2.35
[86] Ibid.
[87] Ibid., page 2.36
[88] Ibid., page 2.37
[89] Ibid.
[90] Ibid.
[91] Consumer Advocate's Submission, pages 21-22

The Consumer Advocate further noted that, while non-union salaries increased 56.9% over the period, the increase in the average index in the province was 36%.[92] According to the Consumer Advocate Hydro is not in a position to state whether it has reasonable labour productivity.

In relation to the proposed level of FTEs the Consumer Advocate submitted that the vacancy allowance of 40 FTEs reflected in the proposed salaries costs is too low. The Consumer Advocate noted that Hydro's vacancy experience in 2012, 2013 and 2014 shows that Hydro has vacancies in the low 50s. The Consumer Advocate noted that Mr. McDonald testified that 40 FTEs is an appropriate test year vacancy allowance for the longer term despite the fact that the vacancy forecast as of July 2015 was 65 FTEs and the company's acknowledgment that it did not expect to achieve the 40 FTE target by the end of the year. The Consumer Advocate recommended that the Board order Hydro to use 65 vacancies since rates are being set for a 2015 test year. In the alternative the Consumer Advocate submitted that a vacancy factor no lower than the low 50s be used, given Hydro's actual experience and also the fact that, with an increased level of FTEs over historical levels, Hydro can reasonably expect to experience a greater number of leaves which will impact the vacancy rate.[93]

In relation to benefits the Consumer Advocate submitted that Hydro did not demonstrate that customers are receiving adequate credit for the fact that rates are supporting an increasingly rare defined benefit pension plan as well as retiring allowances. The Consumer Advocate recommended that the Board order Hydro in its next general rate application to file an expert analysis of its total compensation package compared to Atlantic Canada utilities.[94]

Newfoundland Power stated that Hydro is obligated under the *EPCA* to manage and operate its facilities in a manner that results in power being delivered to customers at the lowest possible cost consistent with reliable service.[95] Newfoundland Power submitted that the $88.9 million in salaries and fringe benefits (net of capitalized labour and overtime, before cost recoveries) sought to be recovered from ratepayers is unreasonable. In particular, Newfoundland Power referenced Hydro's recent vacancy levels for 2012, 2013 and 2014 of 52, 51 and 52 FTEs, and submitted that the 2015 revenue requirement should be reduced by $2.1 million to reflect the 65 FTE vacancies actually expected in the 2015 test year. Newfoundland Power argued that Hydro's claim that it will maintain a workforce within 40 FTE vacancies for the 2015 test year is not consistent with past experience or the evidence. Further, Newfoundland Power argued that Hydro did not prove that lower human resources costs due to higher vacancies would be offset by increased overtime and consultant costs.[96]

Vale submitted that Hydro's payroll costs have been increasing at a level well above inflation with an increase in the number of FTEs and the net cost per FTE. According to Vale Hydro's vacancy level is underestimated by 25 vacancies and salary costs are overstated by $1,270,560. Vale argued that Hydro did not demonstrate that there is a direct correlation between the increased vacancies/lower salary costs and an increase in overtime, contractor labor and consultants. Vale argued that, at a minimum, the 2015 test year revenue requirement should be reduced by $1 million for salary costs.[97]

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[92] Consumer Advocate's Submission, page 23
[93] Ibid., pages 25-26
[94] Ibid., page 24
[95] Newfoundland Power's Submission, page C-32
[96] Ibid., pages C-21 to C-22; Transcript, January 25, 2016, pages 49/24 to 50/12
[97] Vale's Submission, pages 12-13

Hydro submitted that its salary and benefits expense reflects prudent management decisions concerning staffing levels and its commitment to offer competitive compensation packages necessary to recruit and retain a highly skilled workforce. Hydro explained that in 2006 it determined that it needed to focus on recruitment and retention of skilled employees in light of a number of factors including: the number of anticipated retirements, changing labour force demographics, and stable or declining participation in the trades and engineering occupations. Hydro noted that, over the period 2007 to August 31, 2014, there were 238 retirements from Hydro and that, between 2014 and 2022, 40% of its current workforce was anticipated to be eligible for retirement.[98] Hydro stated:

> Hydro's forecast costs for salary and benefits reflect a need for Hydro to offer a compensation package that takes into account the labour market in the Province. As well, it has been necessary for Hydro to address differentials in the wages that it offers, as compared to NP and other Atlantic Canada utilities. These wage differentials arose primarily because of the government's previous wage restraints that were applied to Hydro.[99]

Hydro submitted that the labour market in the province experienced salary increases beyond inflation over the years from 2007 to 2015, with the average weekly earnings in the province escalating by 35% over that period. Hydro noted that the 2015 wage rate for a line worker was $38.17 at Hydro, $39.10 at Newfoundland Power, and $38.42 for the Atlantic Canada utility average. Hydro cited a number of areas where it was conservative in adopting the recommendations of its consultants in relation to changes which would tend to increase salary costs.[100]

In relation to the vacancy allowance reflected in the proposed salaries and benefits costs, Hydro submitted that 40 FTEs is the correct number for the long term and that the $3.3 million allowance included in the 2015 test year is appropriate. Hydro argued that the test years demonstrate an inverse relationship between the vacancy allowance and the amount spent on overtime and labour, and that the vacancy savings are more than offset by increased overtime and consulting costs.[101]

According to Hydro there are a number of pressures on overtime costs, including aging assets and the need to get generation back up when there are problems with these assets, growth in demand on the system, the need to complete capital projects within tight timelines, and the need to minimize impacts on the power system. Hydro stated that it made a productivity commitment by constraining overtime costs in and beyond the 2015 test year through efforts such as improved efficiency in the planning, scheduling and execution of work and the redeployment of resources in certain key areas.[102]

Hydro submitted that there is no added benefit to the Consumer Advocate's suggestion that Hydro be required to file an analysis of its total compensation package, stating:

> Hydro has filed in evidence both expert and internal analysis which demonstrate that Hydro's employee compensation package is competitive and consistent with Atlantic

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[98] Hydro's Submission, Rev. 1, pages 25-27
[99] Ibid., page 27
[100] Ibid., page 28
[101] Hydro's Rebuttal, page 17; Undertaking #146
[102] Hydro's Submission, Rev. 1, pages 29-31

> Canadian Utilities in each of the major salary and benefit categories including; salaries and benefits, group insurance and retirement benefits.[103]

Hydro noted that since 2007 its operating labour costs have increased by just 0.01 cents per kWh on an inflation adjusted basis.

Board Findings

Salaries and benefits costs are the largest part of Hydro's controllable costs. The Board accepts that inflationary pressures and a tight labour market, especially in relation to the trades and engineering, resulted in significant upward pressure on salaries in the eight years since Hydro's last general rate application. While it is reasonable to expect that salaries and benefits will increase over time, the size of the increases reflected in the proposed salaries and benefits costs is concerning. The proposed 2015 salaries and benefits costs are 48% higher than 2007 levels and gross salaries increased by 43.3% on an inflation adjusted basis.[104] Approximately $20.0 million of the $28.4 million increase in salaries from 2007 to the 2015 test year is associated with wage increases.[105] Over the period 2007 to 2015 Hydro's average salary increased from $59,453 to a forecast of $84,704,[106] with non-union salaries increasing by 56.9%.[107] Wage levels were determined annually within the Human Resources and Organizational Effectiveness Department based on annual reviews and relativity to the results of the collective agreement.[108] Regular economic adjustments were applied annually, with special adjustments in 2007, 2008 and 2010.[109] Average weekly earnings in the Province increased 35% over the period.[110] Based on the evidence the increases in salaries appear to be beyond the level of inflation and beyond the level of wage increases experienced in the Province over the period.

The increase in salary costs is also driven by the significant increase in the level of FTEs. The 2015 test year salary costs is based on 895 operating FTEs, an increase of 82 over the 2013 actual.[111] Hydro explained that the planned increase was driven by the capital program and asset management requirements, and changes in the finance department.[112] The Board notes that Hydro's budgeted FTEs were stable over the period 2011 to 2013, fluctuating around 863, the same level budgeted in 2007. The actual FTEs were more variable and were also substantially lower. Notably in 2012 and 2013, the actual FTEs were only 811 and 813 respectively.

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[103] Hydro's Rebuttal, page 13
[104] NP-NLH-314
[105] Amended Application, Vol. I, page 2.33
[106] Grant Thornton's Amended Application Review Report, page 68
[107] CA-NLH-234, Rev. 1
[108] PUB-NLH-029, page 1; PUB-NLH-372
[109] PUB-NLH-372; PUB-NLH-028; CA-NLH-105
[110] Hydro's Submission, Rev. 1, page 28
[111] Amended Application, Vol. I, page 2.24; NP-NLH-310
[112] NP-NLH-092, Rev. 3, page 4

Budget FTEs and Actual FTEs[113] 2007 to 2013							
	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Budget FTEs	863	839	841	847	864	863	864
Actual FTEs	833	807	823	831	824	811	813

The 2014 test year forecast FTEs was 861 but the actual was 833, the same actual reported in 2007.[114] The 2015 test year forecast of 895 is 34 higher than the 2014 forecast and 62 higher than the 2014 actual. While some increase in FTEs over the years since the last test year would be reasonable in the circumstances, the evidence does not justify the magnitude of the increase proposed in 2015.

Hydro's matrix organizational structure and the number and breadth of changes to Hydro's management and structure since 2007 complicate the evaluation of the reasonableness of the proposed salary and benefits costs. There were significant changes to Hydro's organizational structure between 2008 to 2010 and again in 2012.[115] Further changes were also announced during and since the hearing, including an announcement on June 15, 2016 that Hydro would be separated from Nalcor in a restructuring plan to have clear separation of the regulated business from the unregulated operations.[116] Hydro has the burden to demonstrate that the salaries and benefits are reasonable within the context of its organizational structure and its mandate for the provision of least cost reliable service. Hydro stated that operating labour costs have increased by just 0.01¢/kWh on an inflation-adjusted basis since 2007, from 0.83¢/delivered kWh in 2007 to 0.84¢/delivered kWh in the 2015 test year.[117] The Board notes that Grant Thornton calculated that the cost per kWh related to salaries and benefits was 0.0138¢/kWh based on 2013 actual and this was forecast to increase to 0.0145¢/kWh in 2015.[118] While these metrics can be informative to show trends over a number of years and as a comparator to other utilities they do not, on their own, demonstrate reasonableness.

The Board acknowledges the upward pressure on Hydro's salaries and benefits costs since 2007. Nevertheless it is Hydro's responsibility to manage these costs with a view to the provision of least cost reliable service. Given the significant increase in salaries and benefits costs it is incumbent on Hydro to demonstrate that all reasonable steps were taken to manage these costs. Hydro provided evidence in relation to how the budget for salaries and benefits costs was developed. Managers were responsible in relation to cost controls and finding efficiencies, and developed budgets using the established budget guidelines and the salary estimates provided by Human Resources and Organizational Effectiveness.[119] It appears that executive oversight of the budget was focused to a large degree on areas where the budget exceeded inflation.[120] Hydro did not demonstrate that systematic reviews and controls were in place to manage these significant and increasing costs or that there was meaningful and strategic oversight by the executive. The Board finds that Hydro failed to demonstrate that these costs were established in a rigorous process which involved a substantive review of requirements and consideration of the available

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[113] NP-NLH-310
[114] Amended Application, Vol. I, page 2.24; NP-NLH-310
[115] PUB-NLH-316
[116] Nalcor's June 15, 2016 media release
[117] CA-NLH-328, page 2
[118] Grant Thornton's Amended Application Review Report, page 62
[119] Transcript, September 23, 2015, pages 137/14 to 142/25; Undertaking #4
[120] Transcript, September 10, 2015, pages 138/6 to 139/7

opportunities to achieve savings and cost reductions. Hydro did not provide evidence demonstrating reasonable controls on salaries and benefits costs.

While the management of Hydro has the discretion to determine its organizational structure, wage levels and the number of FTEs, only those costs which are demonstrated to be reasonable and necessary in the provision of least cost reliable service can be recovered from customers. The Board does not accept that the proposed 2015 salaries and benefits costs are reasonable and necessary in the circumstances. To account for wage increases and levels of FTEs which have not been justified to be reasonable and necessary the Board will disallow a portion of these costs. The Board notes that wage increases were associated with approximately $20.0 million of the increase in salaries. Aside from the rise in salaries, the increasing level of FTEs is associated with another approximate $8.0 million increase. The Board believes that a disallowance of $4.0 million of the proposed 2015 salaries and benefits costs is reasonable in the circumstances.

Vacancy Allowance

The 2015 test year salaries and benefits costs reflects a vacancy allowance of $3.34 million, which is based on a vacancy level of 40 FTEs. Hydro's actual vacancy level over recent years has been consistently over 50 FTEs and the expected vacancy level in 2015 was 65 FTEs.[121] Hydro argued that the vacancy rates were higher over the last few years due to extraordinary factors and that 40 FTEs is the correct number for the long term. The Board believes that the vacancy allowance should reflect reasonable expectations and, based on the actual vacancies in recent years, and it is not reasonable to expect a vacancy rate of 40 FTEs in the period that the rates established in this Order will be in place. Further the Board does not accept Hydro's argument that a higher vacancy rate should be assumed to reflect the additional costs incurred to manage vacancies, including overtime and labour costs. Hydro did not provide sufficient evidence to establish this relationship and to allow for a determination of the amount of the additional costs apart from other factors. The Board believes that each of these costs are distinct aspects of the forecast salary costs and should be addressed independently. Based on the level of the vacancy rates over recent years and the level of FTEs the Board is satisfied that the salaries and benefits expense should be reduced to reflect a vacancy allowance based on 55 FTEs.

Short-Term Incentive Payments

The proposed 2015 salaries and benefits costs include approximately $0.4 million related to short-term incentive payments.[122] Hydro explained that:

> The short-term incentive payments and re-earnable cash payment are a part of employees' overall compensation package. These incentives are employment costs Hydro incurs to attract, motivate, and retain employees and are provided to influence performance in key areas that contribute to business success.[123]

The Board accepts that the costs of an incentive plan may be reasonable and prudent costs which should be reflected in rates where it is shown that the plan provides a demonstrable benefit to ratepayers. In this case the Board believes that the plan targets for members of the executive did

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[121] Hydro's vacancy rate was 52 in 2012, 51 in 2013 and 52 in 2014 (see NP-NLH-310). As of July 2015 the actual number of vacancies forecasted for 2015 was 65 FTEs (Transcript, September 16, 2015, page 180/7-8).
[122] Undertaking 3(b), Rev. 1; PUB-NLH-456
[123] PUB-NLH-356

not place enough emphasis on reliability and further that customer satisfaction was not adequately reflected. Further the Board is concerned that the financial performance of both Hydro and Nalcor are given significant weight in the incentive plan. In Order No. P.U. 18(2016) the Board stated that customers should not be required to pay all of the costs associated with incentives related to the financial performance of Newfoundland Power. The Board believes the same is true for Hydro's plan and further that Nalcor's financial performance should not be given any weight. The Board finds that Hydro has not demonstrated that the proposed short-term incentive plan is reasonable and appropriate in the circumstances, or that it provides a demonstrable benefit to rate payers. The Board concludes that the costs of this plan should not be reflected in the 2015 test year revenue requirement. Before the costs of any such plan are reflected in rates Hydro will have to demonstrate that the plan provides incentives for the provision of least-cost reliable power and provides a demonstrable benefit to rate payers.

Pension Plan and Retiring Allowances

Hydro's defined benefit pension plan and retiring allowances were raised by the Consumer Advocate.[124] The defined benefit pension plan offered by Hydro is the same plan that is offered to public servants in the Province. In addition the public service is entitled to severance payments, similar to the retirement payments made by Hydro. The Board accepts that in the circumstances it is reasonable for Hydro to offer these benefits to its employees.

Conclusions - Salaries and Benefits

The Board finds that the proposed 2015 salaries and benefits costs are not reasonable in the circumstances. The Board notes that there were no issues raised with respect to the proposed 2015 overtime, group insurance, cost recoveries and capitalized salaries and that proposed 2015 employee future benefits was the subject of the Settlement Agreements which has been accepted by the Board.[125]

Hydro will be required to revise the proposed 2015 test year salaries and benefits costs to reflect:

1) **a disallowance of $4.0 million**
2) **a vacancy allowance of 55 full time equivalents**
3) **the removal of the costs associated with the short-term incentive program.**

11.3.2 System Equipment Maintenance

The Amended Application proposed 2015 test year system equipment maintenance costs of $26.3 million, $3.2 million higher than 2007 actual costs. The primary reason for the increase relates to an increase in Transmission and Rural Operations system equipment maintenance costs of $7.3 million, offset by a reduction in Generation system equipment maintenance costs of $4.1 million.[126]

The intervenors did not make any specific comments in relation to system equipment maintenance costs.

[124] Consumer Advocate's Submission, page 24
[125] Settlement Agreement, page 2
[126] Amended Application, Vol. I, page 2.38

Hydro submitted that the proposed increase in system equipment maintenance costs is justified based on Hydro assuming responsibility for costs previously incurred by Twinco, by new demands imposed by the newly installed Holyrood combustion turbine, and by increased preventative and corrective maintenance, including vegetation management.[127] Hydro stated that it must balance costs and reliability, and that as its assets age the pace of operating and maintenance expenditures will inevitably increase.[128]

Board Findings

The Board has reviewed the evidence filed with respect to system equipment maintenance costs, including Grant Thornton's detailed review.[129] The Board acknowledges the relationship between maintenance and reliability and finds that the increase in system equipment maintenance costs in 2015 is in keeping with historical levels considering Hydro's aging assets, its operational experience with respect to vegetation management and the additional responsibilities associated with the Twinco assets and the new Holyrood combustion turbine. The Board accepts the proposed 2015 system equipment maintenance costs.

11.3.3 Other Operating Costs

The Amended Application proposed 2015 test year other operating costs of $28.6 million, which is $9.4 million higher than 2007 actuals.[130] These costs include professional services, miscellaneous, travel, equipment rentals, insurance, transportation, office supplies and building rentals.

Other Operating Expenses ($millions)

Cost Type	2007 Actual	2013 Actual	2014 Test Year	2014TY - 2007A Change	2015 Test Year	2015TY - 2007A Change
Professional Services	3.8	4.3	10.6	6.8	8.4	4.6
Miscellaneous	4.2	4.7	5.2	1.0	5.2	1.0
Travel	2.9	3.2	3.6	0.7	3.6	0.7
Equipment Rentals	1.1	1.8	1.8	0.7	3.0	1.9
Insurance	1.7	2.4	2.7	1.0	2.6	0.9
Transportation	2.0	2.1	2.4	0.4	2.2	0.2
Office Supplies	2.3	2.2	2.2	(0.1)	2.5	0.2
Building Rental	1.2	1.1	1.1	(0.1)	1.1	(0.1)
Total Other Operating Expenses	**19.2**	**21.8**	**29.6**	**10.4**	**28.6**	**9.4**

The proposed professional services costs of $8.4 million are $4.6 million higher than 2007 actual costs of $3.8 million.[131] This increase is primarily related to increases in consulting costs of $3.4 million, and general rate application and Board related costs of $1.7 million.[132] The consulting

[127] Hydro's Submission, Rev. 1, page 35
[128] Hydro's Rebuttal, page 1
[129] Grant Thornton's Amended Application Review Report, pages 75-80
[130] Amended Application, Vol. I, page 2.38
[131] Amended Application, Vol. I, page 2.39
[132] Ibid., pages 2.40 and 2.41

costs increases were associated with an increase of $1.0 million due to regulatory studies and filings, $0.9 million associated with environmental work and safety and health related programs, $0.7 million in condition assessments, $0.3 million related to CDM programs (offset in cost recoveries) and $0.3 million in engineering related activities.[133] The general rate application and Board related costs increases were associated with an increased volume of applications and regulatory activity, including $0.3 million related to the amortization of $1.0 million for hearing costs.[134]

The proposed miscellaneous expenses of $5.2 million which include training, payroll and municipal taxes are $1.0 million higher than 2007 actual which was primarily caused by higher municipal and employer payroll taxes.[135]

The proposed travel expenses of $3.6 million are $0.7 million higher than 2007 actual, primarily related to increased travel fares.[136]

The proposed equipment rentals expenses of $3.0 million are $1.9 million higher than 2007 actual. These costs are comprised of telecommunications and computer bandwidth costs in addition to equipment rental costs. One of the primary drivers of this increase is $1.0 million in costs related to the black start diesel units in Holyrood.[137]

The 2015 insurance costs of $2.6 million are $0.9 million higher than 2007 actual, primarily associated with property coverage due to loss ratio, overall value increase and industry rate increase.[138]

Newfoundland Power submitted that Hydro did not establish that general rate application and Board related costs in excess of $1.5 million annually are reasonable. Newfoundland Power noted that from 2007 to 2014 Hydro's annual general rate application and Board related costs averaged $1.5 million. Newfoundland Power also noted that the actual costs in 2012 and 2013, years in which Hydro prepared and filed a general rate application, were $1.8 and $1.2, respectively. Newfoundland Power submitted that the proposed 2015 general rate application and Board related costs should be reduced from $2.3 million, including the $0.3 million deferral of general rate application costs, to $1.5 million.[139]

Vale submitted that the evidence demonstrates that Hydro's budgeting process results in an overestimation of some of Hydro's test year expenses. For example, Vale argued that the 2015 test year office supply costs of $2.8 million are overstated by at least $0.2 million. Vale noted that the actual office supply costs have never been higher than $2.6 million and were overestimated in 2014 by approximately $0.2 million.[140] Vale also noted that the proposed travel costs are $3.7 million while these costs have never been higher than $3.3 million, and that increased vacancies can reduce travel costs. Vale acknowledged that the forecast travel costs at the time of the hearing supported the increase in travel costs but argued that this increase is

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133 Ibid., page 2.40
134 Ibid., pages 2.40, 3.21 and 3.22
135 Ibid., page 2.41
136 Ibid., page 2.41
137 Ibid., pages 2.41, 3.21 and 3.22
138 Ibid., page 2.42
139 Newfoundland Power's Submission, pages C-25 and C-26
140 Vale's Submission, page 13

concerning from a budgeting and efficiency perspective. Vale also noted that the 2015 test year consultants fees were $3.4 million higher than 2007 and $2.6 million higher than 2013 actuals and that the general rate application costs follow a similar pattern.[141]

Hydro submitted that professional services costs reflect increases in regulatory activity, asset assessments and the development of operations, maintenance and retirement plans tailored to Hydro's aging asset portfolio. Hydro noted that the higher consulting costs are driven in part by the requirement for condition assessments to verify the timing of overhauls and replacements and the need to evaluate the extent to which Hydro's operating and maintenance activities should be adjusted or modified to take into account the condition of assets. Hydro further submitted that the 2015 test year revenue requirement includes $0.3 million in external general rate application costs, reflecting the recovery of these costs over a three-year period as agreed in the Settlement Agreements. Hydro explained that this is in addition to the $1.0 million included in the 2014 revenue requirement. Hydro proposed that the Board approve an update to the 2015 test year general rate application costs to permit recovery of the actual costs incurred. Hydro noted that the timing of the general rate application was determined primarily by Government's direction and argued that it is quite likely that the cost of one application in seven years may compare favorably to the costs of one application every three years. Hydro submitted that the busy regulatory calendar for 2016 supports the level of regulatory costs included in the 2015 test year.[142]

Board Findings

The Board has reviewed the evidence filed by Hydro and is satisfied that, except as discussed below, the proposed other costs are reasonable considering the impact of inflation, the growing level of FTEs, Hydro's aging assets and the growing capital program.

Professional Services

Professional services costs consist of a number of items, including consultants and general rate application and Board related costs. The Board notes that, based on its prudence review findings in Order No. P.U. 13(2016), Hydro will not be allowed to recover certain professional services expenses related to the Board's investigation into the January 2014 outages. The 2015 revenue requirement impact is estimated to be $1.0 million.[143]

The increase in consulting costs is primarily associated with regulatory studies, environmental work and safety and health related programs, and condition assessments. The Board acknowledges that, given Hydro's aging assets and increasing capital program, it is reasonable to expect increases in these costs. The Board is satisfied that the consultant costs as adjusted are reasonable in the circumstances.

The 2015 test year revenue requirement includes general rate application and Board related costs of $2.3 million. This includes $0.3 million related to the amortization of the forecast general rate application and Board related costs of $1.0 million. Hydro has asked for recovery of the actual general rate application costs incurred in 2015. The Board believes that Hydro's approach to this

[141] Vale's Submission, page 14
[142] Hydro's Submission, Rev. 1, pages 39-41
[143] Grant Thornton's Prudence Compliance Report, page 5

general rate application, including the significant time between filings, contributed to much higher than normal general rate application costs over the course of this proceeding. In particular Hydro advised, just one month before the scheduled hearing, that it planned to amend the application, resulting in the cancellation of the hearing. The Amended Application, which was filed nearly six months later, set out two different test years, and requested unprecedented relief with respect to 2014. Further Hydro filed multiple applications for interim relief over the course of this proceeding. In addition this proceeding was complicated by the prudence review arising from the outages of January 2014, which were found to have been substantially caused by Hydro. Given the way Hydro managed the general rate application process the Board does not accept Hydro's proposals in relation to these costs. The Board will allow Hydro to recover $750,000 in general rate application costs. In accordance with the Settlement Agreements, this amount will be recovered over a three-year period beginning in 2015.[144]

In addition, the proposed general rate application and Board related costs of $2.3 million are higher than 2007 actuals and higher than the normal levels of approximately $1.5 million as noted by Newfoundland Power. The Board believes that the proposed costs do not reasonably reflect historical spending levels, or a cost-effective and responsible approach to regulatory matters. The Board finds that the general rate application and Board related costs included in the 2015 revenue requirement should be reduced to $1.75 million, including the hearing costs amortization.

Office Supplies

The proposed office supplies expense of $2.5 million is $0.2 million higher than 2007 actual. The Board acknowledges Vale's argument that the office expense is overstated but has reviewed the proposed 2015 office supplies expense and accepts it as reasonable in the circumstances.

Travel

The proposed travel costs of $3.6 million include travel expenses, conference costs and relocation expenses and are $0.7 million higher than 2007 actual.[145] The Amended Application states that the increase in costs was primarily related to increased travel fares.[146] Based on the evidence the Board finds that Hydro has failed to justify the proposed 2015 test year travel expense. There was little evidence provided in relation to the increased travel fares. In addition the evidence suggests that this expense can be affected by the number of employees,[147] and the Board has determined that the proposed level of FTEs was not reasonable. The Board will disallow $0.5 million of the proposed 2015 travel expenses.

Equipment Rentals

The 2015 proposed equipment rentals expense of $3.0 million is $1.9 million higher than 2007 actual. One of the primary drivers of the increase is related to the costs associated with the black start diesel units in Holyrood. The total cost of the lease for this equipment was $5.2 million over the period January 2014 to June 30, 2015. Hydro proposed to defer and amortize these costs over a five-year period beginning in 2015, resulting in a net amortization expense in the 2015 test year

[144] Settlement Agreement, page 4
[145] Transcript, November 18, 2015, page 12/22-25
[146] Amended Application, Vol. I, page 2.41
[147] Transcript, November 18, 2015, page 13/1-14

of $1.0 million.[148] While issues were raised in relation to the prudence of Hydro's actions in relation to black start at Holyrood, the Board found in Order No. P.U. 13(2016) that these diesel units are used and useful and that recovery of the costs associated with these units should be allowed.[149] The Board accepts that the proposed equipment rental expenses are reasonable.

Hydro's proposed amortization, over a five-year period beginning in 2015, of the costs associated with the Holyrood black start diesels in the amount of $5.2 million is accepted.

Hydro will be permitted to amortize, over a three-year period beginning in 2015, general rate application costs for 2015 in the amount of $750,000.

Hydro will be required to revise the proposed 2015 test year other operating costs to reflect:

1) **general rate application and Board related costs of $1.75 million, including the amortization of the general rate application costs**
2) **a reduction of $0.5 million for travel costs.**

11.3.4 Productivity Allowance

In Order No. P.U. 7(2002-2003) the Board ordered that a productivity allowance of $2.0 million should be applied to Hydro's other operating costs. Several intervenors argued that a productivity allowance should be applied in this case as well.

The Consumer Advocate argued that Hydro did not meet its onus to bring forward performance measures which clearly demonstrate the efficiency of its operations. The Consumer Advocate noted that Hydro had not sought outside assistance in relation to identifying more efficient work execution practices and that Hydro's performance contracts put very little emphasis on maintaining cost controls. According to the Consumer Advocate: "the lack of an overall, focused and directed effort to identify efficiencies within Hydro has deprived Hydro's customers of meaningful potential test year savings and efficiencies."[150]

The Consumer Advocate submitted that to provide Hydro with an incentive to become more efficient, the Board should order a productivity allowance of at least $3.5 million after other adjustments to the 2015 test year revenue requirement. The Consumer Advocate calculated this adjustment as the current equivalent of the $2.0 million productivity allowance ordered by the Board for Hydro in 2002.[151]

Newfoundland Power argued that the evidence in the proceeding is not consistent with Hydro's position that it has exercised reasonable control over its controllable costs. Newfoundland Power further stated that Hydro does not have specific programs directed towards efficiency improvement and that Hydro did not provide evidence of performance measures that demonstrate the efficiency of its operations.[152] Newfoundland Power argued that the Board would have to consider whether or not the management structure at Hydro had an effect on the efficiencies of

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[148] Amended Application, Vol. I, pages 2.41, 3.21 and 3.22
[149] Order No. P.U. 13(2016), page 71
[150] Consumer Advocate's Submission, page 26
[151] Ibid.
[152] Newfoundland Power's Submission, page C-32

the operation from a cost perspective.[153] Newfoundland Power pointed out that Hydro's evidence on lines of authority and accountability lacked clarity and submitted that this lack of clarity, coupled with the major increases in Hydro's costs and worsening service reliability, indicated that management performance should continue to be a focus of the Board's regulatory supervision.[154] While Newfoundland Power agreed with Hydro that the Board's jurisdiction does not include directing Hydro with respect to its corporate structure, the Board can impose a productivity allowance if it is satisfied that Hydro is not operating efficiently.[155] Newfoundland Power submitted that the evidence before the Board justifies the imposition of a productivity allowance similar to the one imposed in Order No. P.U. 7(2002-2003). Newfoundland Power calculated that a 1% productivity allowance would equal $1.38 million, a 2% allowance would be $2.76 million and a 3% allowance would be $4.15 million.[156]

Vale noted the Board's statement in 2002 that the onus is on Hydro to bring forward performance measures which clearly demonstrate the efficiency of its operations and concluded that Hydro has failed to demonstrate such efficiencies. Vale stated, that despite increasing costs, Hydro has not initiated an adequate number of efficiency initiatives. Vale submitted that, rather than dealing with efficiency on a line by line basis, the Board should reflect a productivity allowance in the 2015 test year. Vale references the $2.0 million adjustment ordered in 2002, and suggests a $4.0 million productivity allowance for the 2015 test year.[157]

Hydro explained that cost control is a central element of Hydro's culture and that it permeates activities throughout the organization and is not something to be relegated to specified individuals or directives.[158] Hydro cited a number of cost control initiatives, including those intended to minimize the rural deficit, and noted the proposed reduction in overtime expenses in 2015 from historic levels.[159] Hydro stated that the evidence sets out specific areas where additional efficiencies have been achieved, including the shared services model and changes to work planning and scheduling. Hydro stated that, by instituting a shared services model, it has improved productivity and efficiency to the benefit of customers. Hydro estimated benefits in the amount of $9.1 million from the initial transfer of staff from Hydro to Nalcor and further noted that it recovered $5.7 million in the 2015 test year through the Admin Fee for the provision of services to Nalcor affiliates.[160] Hydro submitted that it has demonstrated a corporate culture that emphasizes cost consciousness and efficient operations, and stated:

> A productivity allowance is not warranted because Hydro has achieved meaningful productivity gains. Inflation provides an implicit productivity allowance as the 2015 test year is being used to set rates for 2016.[161]

Board Findings

The Board shares the concerns expressed by the intervenors in relation to the efficiency of Hydro's operations. While Hydro suggested that productivity is built into the budget when

[153] Transcript, January 25, 2016, page 28/16-20
[154] Newfoundland Power's Submission, page B-6
[155] Transcript, January 25, 2016, pages 29/2 to 75/25
[156] Newfoundland Power's Submission, page C-33
[157] Vale's Submission, pages 14-15
[158] Hydro's Submission, Rev. 1, page 58
[159] Ibid., page 62
[160] Ibid., page 35
[161] Ibid., page 57

prepared by the manager, the budget guidelines do not set this out and further do not provide guidance as to the approach that is to be taken to build in productivity.[162] The Board notes that the annual budget guidelines do not reference productivity objectives, efficiency measures or cost reduction initiatives.[163] Based on the evidence it appears that the budgets were built up from previous years, using the new salaries provided by the Human Resources and Organizational Effectiveness Department and the previous year's costs plus an escalation factor. In addition the budget was presented to the executive by way of a power point presentation which focused on areas exceeding the established escalation factor.[164] The evidence does not demonstrate that the managers were challenged to find ways of reducing costs or that there were systematic efforts to improve productivity or implement efficiencies.

The Board notes the response of Mr. Henderson when asked if he could point to an area of operating costs where there has been a reduction:

> I can't point to a specific number or anything. Because of the capital program changing – growing capital program, there is, I'll say, a growth in that area, so it's difficult to isolate out the improvements, but those improvements are beginning to take hold and the expectation is that we will see ongoing benefits in that. For the test year, in particular, what we did is we put in a requirement of less overtime to really drive that out, to put that into the budget – that's one area where we expect to see gains is the overtime, and we did put into the test year a reduction in overtime to basically commit to that benefit.[165]

Other Hydro witnesses were unable to point to additional specific measures in relation to productivity.[166]

Despite the fact that Hydro failed to demonstrate reasonable efficiency measures the Board believes that a productivity allowance may not be appropriate in the circumstances. A productivity allowance is intended to provide an incentive to manage costs and find efficiencies. There would be no effective opportunity for Hydro to find efficiencies given that it is now late in 2016 and that Hydro is expected to file a general rate application in 2017 for 2018 test year rates. The Board has made significant disallowances with respect to the proposed 2015 test year revenue requirement related to a number of specific costs, including salaries and benefits, professional services and travel expenses. The Board is satisfied that, given these disallowances and the timing of Hydro's next general rate application, a productivity allowance is not necessary or appropriate in the circumstances. However, the Board expects Hydro to implement improved processes in relation to identifying, establishing and documenting efficiency measures before the filing of its next general rate application. In the absence of such evidence the Board may consider further disallowances as well as a productivity allowance.

11.4 Fuel Costs

Hydro proposes a total of $190.4 million in direct fuel costs to be included in the 2015 test year revenue requirement. This amount includes $169.0 million in No. 6 fuel costs (net of RSP

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[162] Transcript, November 16, 2015, pages 158/10 to 159/20
[163] Undertaking #4, Rev. 1
[164] Transcript, September 23, 2015, pages 161/25 to 166/4
[165] Transcript, September 22, 2015, pages 91/14 to 92/3
[166] Transcript, November 17, 2015, page 139; Transcript, September 17, 2015, pages 21/25 to 23/23

deferral) and $21.4 million for diesel and gas turbine fuels.[167] This proposed fuel cost is based on the updated forecast 2016 cost of fuel filed by Hydro during the proceeding.[168] Hydro submitted that the cost of $64.41 per barrel for No. 6 fuel should be used when setting rates that come into effect in 2016 as this price reflects Hydro's most recent forecast cost.

The Board has accepted the forecast for the Holyrood energy requirement on which the 2015 test year quantity of No. 6 fuel to be consumed is based. No intervenors objected to the use of the updated fuel price projection in determining the 2015 test year No. 6 fuel costs, or to the total proposed fuel costs. The Board accepts the updated fuel costs proposed by Hydro in the 2015 test year revenue requirement.

11.5 Power Purchases

Hydro proposes $57.4 million in 2015 test year costs for power purchases. This includes purchases from Nalcor Exploits and Star Lake, wind energy, Corner Brook Pulp and Paper Limited cogeneration, and Rattle Brook, as well as the costs associated with the capacity assistance agreements with Corner Brook Pulp and Paper and Vale. The addition of wind and Exploits power accounts for the increase in this expense relative to the 2007 test year.[169]

The primary concern raised with respect to these costs related to the capacity assistance agreements. Hydro currently has two capacity assistance agreements with Corner Brook Pulp and Paper.[170] The first allows Hydro to request up to 60 MW capacity assistance during winter peak demand periods by both reducing its firm demand supplied by Hydro (9 MW), and by providing 51 MW capacity to Hydro's system from its hydraulic generation facilities. A supplemental capacity agreement with Corner Brook Pulp and Paper provides for an additional net capacity assistance of approximately 22 MW through a further interruption by Corner Brook Pulp and Paper of its operating load that is normally provided by its own hydro generating facilities.[171] Hydro also has a similar capacity agreement with Vale to provide up to 15.8 MW of capacity support from its local diesel generation at Hydro's request. Hydro has included an amount of $2.1 million in the 2015 test year costs associated with the total fixed fees to be paid to Corner Brook Pulp and Paper ($1,680,000) and Vale ($442,000) under these agreements. The agreements expire on March 31, 2018 with early termination provisions.

The Consumer Advocate submitted that these capacity assistance agreements are no longer necessary based on lower load forecasts than anticipated in the Amended Application for 2016 and beyond. He pointed to Mr. Humphries' testimony which indicated that Vale's load is now forecast to be in the range of 25 MW lower in 2016 and about 30 MW lower in 2017.[172] He noted that Newfoundland Power's load is also forecast to be 20 to 25 MW lower in the 2017/2018 timeframe. The Consumer Advocate submitted that this means that Hydro will have at least 50 MW more capacity than needed, and that the capacity assistance agreement with Vale was driven in large part by its own erroneous forecast. He submitted that Vale should "not be

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[167] Hydro's Submission, Rev. 1, page 44, Table 1
[168] The Amended Application proposed a 2015 test year fuel price of $93.32 Cdn per barrel for No. 6 fuel; the updated 2016 price is $64.41 Cdn per barrel as filed on October 28, 2015, which is reflected in the updated forecast costs proposed.
[169] Amended Application, Vol. I, Schedule VI; Hydro's Submission, Rev. 1, page 49
[170] These agreements were provided in PUB-NLH-461.
[171] CA-NLH-296, PUB-NLH-461 and PUB-NLH-462
[172] Transcript, October 21, 2015, page 32/6-25

rewarded with a capacity assistance agreement, resulting in a reduction on its electricity bill of $442,400 annually" as a result of a misleading forecast.[173] The need for the supplemental capacity assistance agreement with Corner Brook Pulp and Paper with an annual payment of $616,000 was also questioned. The Consumer Advocate noted the termination provisions of the agreements and stated:

> …Hydro should not be allowed future cost recovery for the Vale and CBPP Supplemental capacity assistance agreements. Further the Consumer Advocate recommends that the Board order Hydro to file a report identifying all costs associated with the significant over-forecasting of load at Vale and suggest a means for saving harmless the small customers of the Province. The timing of this report should enable termination of the Vale and CBPP Supplemental Capacity Assistance Agreements prior to the 2016/17 winter period.[174]

Hydro submitted that the Consumer Advocate's assertions are "both incorrect and inconsistent with the evidence and with the provision of reliable service to customers."[175] According to Hydro the capacity assistance agreements allow for greater reliability of service and are necessary, and have been accepted by the Board as prudent. Hydro noted that capacity assistance under the agreements was called upon three times during the winter of 2014-2015 and that, on March 4, 2015, up to 70.8 MW of capacity was provided by both Corner Brook Pulp and Paper and Vale.[176]

Board Findings

The Board is not persuaded that the costs associated with the Vale and the Corner Brook capacity assistance agreements should be denied for future recovery as suggested by the Consumer Advocate. These agreements will provide additional capacity to the Island Interconnected system during the winter months up to at least March 2018. Concerns about capacity on the Island Interconnected system up to the interconnection with Muskrat Falls have been raised even with these agreements in place. The Board is satisfied that these agreements should be maintained and the associated costs should be allowed.

The Board also notes that, as indicated by Hydro in its response to CA-NLH-315, the rate design review to be completed following the marginal cost study and cost of service methodology review will include a review of the requirement for capacity assistance agreements similar to the existing agreements with Corner Brook Pulp and Paper and Vale, as well as the curtailable credit provided in the Utility rate to Newfoundland Power.

11.6 Depreciation

The 2015 test year revenue requirement includes $63.8 million in forecast depreciation expense, an increase of $25.0 million in 2015 over the 2007 test year expense. Hydro explains that the increase is due to growth in Hydro's capital program. Hydro's depreciation methodology was approved by the Board in Order No. P.U. 40(2012).[177] The parties to the Settlement Agreements

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[173] Consumer Advocate's Submission, page 28/28-29
[174] Ibid., page 29/17-22
[175] Hydro's Rebuttal, page 18
[176] Ibid., page 18
[177] In Order No. P.U. 40(2012) the Board ordered Hydro to adopt the straight line method of depreciation for all its assets, with group accounting methods using average service life procedure and applied on a remaining life basis, as

agreed that Hydro's proposed depreciation methodology used to determine depreciation expense in the 2015 test year is appropriate.

Grant Thornton reviewed the rates of depreciation incorporated in the 2015 test year depreciation expense forecast to ensure compliance with the approved methodology and Order No. P.U. 40(2012) and found no significant discrepancies. The Board notes that the 2015 test year depreciation expense will have to be adjusted to account for the prudence findings in Order No. P.U. 13(2016). Apart from the impact of the prudence findings, no other specific issues were raised with respect to the proposed depreciation expense.

11.7 Interest

The Amended Application proposes $89.3 million in interest costs for the 2015 test year, a decrease of $13.5 million since the 2007 test year. The interest costs include interest expenses associated with short-term and long-term debt, RSP interest, amortization of foreign exchange losses, the debt guarantee fee, interest on sinking fund and interest capitalized during construction.[178]

Interest costs on debt are directly affected by prevailing rates in both the short-term and long-term markets, depending on Hydro's borrowing needs. Hydro explained that, because its outstanding bond issues have fixed interest rates, prevailing market rates for longer-term issues will only impact interest expense and the cost of embedded debt to the extent that new debt is issued. A delay in long term borrowing from April 1, 2015 to December 1, 2015 reduced interest costs by $10.8 million, partially offset by an increase in short-term interest costs for 2015 of $1.7 million.[179]

The interest capitalized during construction for 2015 was also forecast to be lower by $7.3 million due to the postponement of the Labrador West transmission line capital project.

Two issues were raised with respect to Hydro's 2015 interest costs: i) Hydro's obligation to pay the debt guarantee fee, and apportionment of the fee, and ii) RSP interest accruals. These issues are discussed below.

11.7.1 Debt Guarantee Fee

The Amended Application proposes to include $4.4 million in the 2015 test year revenue requirement to reflect the debt guarantee fee paid by Hydro to Government, pursuant to an Order in Council.[180] Hydro has paid a fee to Government for the guarantee of Hydro's outstanding debt for most of the last 20 years, with the amount of the fee based on 1% of its outstanding debt obligations. Government waived this fee from 2008 to 2011 as a means of temporarily improving Hydro's net income and in 2011 directed that the fee be reinstated at a market rate.[181] Market analysis conducted in 2010 and 2013 suggested a debt guarantee fee in the range of 25-50 basis

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outlined in the updated Gannett Fleming Depreciation Study filed with the Board on December 3, 2012 and December 17, 2012, following settlement discussions between Hydro, the Consumer Advocate and the Industrial Customers and a public hearing.

[178] Amended Application, Vol. I, Finance, Schedule 1, page 10

[179] Undertaking #55, Attachment 2, page 2

[180] Amended Application, Vol. I, page 3.32

[181] OC 2011-218 set out the requirement to pay the fee and the basis on which the payment is to be calculated.

points (bps). The Amended Application noted that the amount proposed for 2015 is $7.5 million lower than the fee would be using the previous methodology.[182]

Newfoundland Power argued that, given the repeal of the legislative requirement to pay a debt guarantee fee, the Order in Council directing payment of the fee is ultra vires and is therefore unenforceable. According to Newfoundland Power, Hydro is not legally obliged to pay the fee and therefore the 2015 test year revenue requirement should be reduced by $4.4 million. If the Board is satisfied that a payment of a guarantee fee is in the interests of ratepayers, Newfoundland Power suggested the Board should be mindful that the fee is paid to a related party. Newfoundland Power argued that the proposed fee was not shown to be reasonable and noted Grant Thornton's evidence that the fee should reflect an equal sharing of the cost savings between Hydro and the province and a more reasonable yield range. Newfoundland Power argued that, if the Board determines that the guarantee fee benefits customers, the amount recovered from customers should be reduced by $2.6 million.[183]

The Consumer Advocate argued that Hydro did not establish the reasonableness of the proposed guarantee fee and that it should not be included in the 2015 test year revenue requirement. According to the Consumer Advocate the guarantee fee should not be included in rates until a proper legislative basis exists for its payment and an equitable methodology is determined to apportion the benefits of the guarantee. The Consumer Advocate noted that Hydro accepted that there is no legislative obligation for rate payers to pay the costs of a debt guarantee fee, and objected to the inclusion of the fee in rates in the absence of a legislative basis mandating payment. The Consumer Advocate concluded that Hydro has not established that the proposal is least cost.[184]

The Industrial Customer Group submitted that Hydro has not met its onus in demonstrating that the proposed guarantee fee is reasonable and consistent with the provision of least cost service. The Industrial Customer Group argued that the best evidence of a more equitable apportionment of the benefit of the guarantee fee suggests a reduction of $2.6 million in the amount included in the proposed 2015 test year revenue requirement.[185]

Vale argued that Hydro has not provided evidence that it is required to pay the fee and that the guarantee fee should not be included in Hydro's recoverable revenue requirement. Vale stated that the only valid justification for the fee is that it lowers Hydro's borrowing costs. Vale argued that the Government-directed return on equity is support for refusal of recovery of the guarantee fee. Further, according to Vale, the $100 million equity contribution by Government, which has a $5.8 million effect on the revenue requirement, serves to enhance Hydro's financial stability. Vale argued that passing the cost of all three of these measures onto customers has not been justified. Vale noted Grant Thornton's evidence and submitted that the amount of the fee should be removed from the 2015 test year revenue requirement and Hydro should be required to provide an analysis addressing the issues raised before recovery in a future year.

Hydro submitted that paying the guarantee fee is justified on the basis of a stated Government policy as set out in OC2011-218 and because the fee is a fair exchange for the benefits the debt

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[182] Amended Application, Vol. I, page 3.32
[183] Newfoundland Power's Submission, pages C-28 to C-29; Undertaking #139
[184] Consumer Advocate's Submission, pages 29-31
[185] Industrial Customer Group's Submission, page 16

guarantee provides to Hydro's customers through credit market access.[186] Hydro submitted that the argument regarding Hydro's legal obligation to pay the debt guarantee fee is relevant only to the extent that the Board has authority over rate recovery and that the Board should exercise its authority to allow recovery as it has consistently done in the past. Hydro stated:

> Hydro has always included its debt guarantee fee payments in its revenue requirement. The Board always has permitted rate recovery, while acknowledging the debt guarantee's "fundamental importance" and "key role" in Hydro's overall financial condition and specific ability to access capital markets.[187]

Hydro noted the evidence of Mr. Pelly, Nalcor's Corporate Treasurer, that the Board should grant recovery of the debt guarantee fee because of the guarantee's continuing importance to credit market access.

In relation to the amount of the fee, Hydro sees no reason for apportionment. Hydro noted that government-owned utilities across Canada benefit from the creditworthiness of their respective governments, by either obtaining a debt guarantee which is recovered through rates (Quebec), or by borrowing directly from their provincial governments (British Columbia, Ontario and Manitoba). Hydro argued that governments and those with government guarantees can access capital markets when others cannot and can do so on more flexible terms. Hydro argued that Grant Thornton's view that 50 basis points is too high does not recognize the value of enhanced market access and increased flexibility, and implies that the period examined captured all market conditions. Hydro argued that the Board has consistently recognized that the guarantee provides value to ratepayers and, while the benefits have not changed, the cost of the guarantee has fallen substantially with the new approach to calculating the fee.[188]

Board Findings

Historically, the debt guarantee fee was paid by Hydro as directed by the Lieutenant Governor in Council pursuant to section 32 of the *Hydro Corporation Act* (1990), which required it to "pay annually to the Minister of Finance a fee in respect of loans guaranteed under Act." The *Hydro Corporation Act (1990)* was repealed with the passing of the *Hydro Corporations Act, 2007 SNL 2007 Ch. H-17* and the section pertaining to Hydro's statutory requirement to pay the debt guarantee fee was not carried forward. Hydro now pays the guarantee fee pursuant to OC 2011-218 which directs, pursuant to sections 21 to 25 of the *Hydro Corporations Act, 2007*, a debt guarantee fee on the balance of the Hydro's debt guaranteed by the Province. The intervenors argued that the legislation no longer requires the payment of a fee and, in the absence of this requirement, the Board should not approve the inclusion of a guarantee fee in the revenue requirement. While the change in the legislative provisions may remove the legislative requirement for the payment of the fee, the Board must still consider whether the proposed guarantee fee is a reasonable cost which should be included in the revenue requirement to be recovered from customers.

The Board has in the past accepted the essential role that the Government guarantee plays in Hydro's ability to maintain a sound credit rating in the financial markets of the world and to

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[186] Hydro's Submission, page 53
[187] Ibid., page 52
[188] Ibid., pages 54-55

borrow at reasonable rates.[189] While Hydro's debt ratio has recently improved somewhat it does not approach the level normally associated with stand-alone status.[190] The evidence shows that Hydro's DBRS long-term debt rating of "A" continues to be a flow through of the rating of the province.[191] In the circumstances the Board continues to believe that the Government guarantee plays a key role in supporting Hydro's ability to maintain a sound credit rating and access to capital at reasonable rates. The Board is satisfied that the guarantee serves to support least cost reliable service by increasing access to and flexibility in financing of Hydro's operating and capital requirements at reasonable rates. The Board finds that the Government guarantee provides a benefit to ratepayers and therefore it is appropriate to include an amount in the 2015 test year revenue requirement which reflects the reasonable costs and benefits associated with the guarantee.

Hydro proposed a 2015 test year guarantee fee of $4.4 million. This fee is based on the analysis of Hydro's capital market advisors in 2008, 2010 and 2013, suggesting a fee of 25 to 50 basis points of the balance of Hydro's debt guaranteed by the Province.[192] The Board notes that the comparison with other provinces provided by Hydro shows that a similar guarantee is commonly provided, sometimes with no fee and where there is a fee it may be as high as 1%.[193]

The determination of what would constitute a reasonable guarantee fee is not straightforward since Hydro does not have a stand-alone credit rating and further the guarantor, Government, is a related party. During the hearing Mr. Pelley agreed that one of the issues before the Board is to determine the reasonable fee to be recovered from rate payers given that the debt guarantee is a service provided to Hydro by the Province.[194] The Board notes that Grant Thornton set out a number of potential issues with the proposed guarantee fee. First, there are concerns regarding whether the proxy companies are in fact comparable to Hydro and whether any adjustments to the analysis are required. Secondly, the "cost savings" are not apportioned and, according to Grant Thornton, payment of the entire "cost savings" associated with the debt guarantee back to the guarantor eliminates the incentive for the guarantee. In addition, the average difference on long-term debt yields range from 35.6 bps to 47.8 bps. Apportioning the benefits of the guarantee would lower these ranges, bringing into question whether the 50 bps guarantee fee paid by Hydro on long-term debt is reasonable.[195]

The Board agrees with the Consumer Advocate, Newfoundland Power, the Industrial Customer Group and Vale that Hydro has not met the onus of demonstrating that the proposed debt guarantee fee to be included in the 2015 test year revenue requirement is reasonable and consistent with providing least cost service to Hydro's customers. While the proposed fee is substantially lower than the fee which was paid in the past, the Board is not satisfied that in the circumstances it is reasonable to include all of the estimated cost savings associated with the guarantee in the revenue requirement. The Board believes that the amount reflected in rates

[189] Order No. P.U. 7(2001-2002), page 35; Order No. P.U. 14(2004), page 29
[190] At the time of Order No. P.U. 14(2004) Hydro had a debt ratio of over 80% whereas Hydro currently targets a debt ratio of 75% (Amended Application, Vol. I, page 3.34).
[191] Amended Application, Vol. I, page 3.35
[192] IC-NLH-115, PUB-NLH-059 and PUB-NLH-061
[193] PUB-NLH-061, Attachment 1, page 2. British Columbia charges a nominal fee, Manitoba charges a fee of 1%, Quebec and Ontario both charge 50 basis points, New Brunswick currently charges .6489 of 1%, based on specific annual revenue requirement, and Saskatchewan, Prince Edward Island, and Alberta charge no fee, with limited exceptions.
[194] Transcript, November 19, 2015, pages 16-22
[195] Grant Thornton's Amended Application Review Report, page 20

should reflect a more equitable methodology to apportion the benefit between Hydro and the Government. According to Hydro a 50/50 apportionment of the calculated cost savings would reduce the $4.4 million included in the 2015 test year revenue requirement by approximately $2.6 million.[196] The Board finds, based on the evidence, that it is reasonable to include a guarantee fee in the 2015 test year revenue requirement based on a 50/50 apportionment of the calculated cost savings.

Hydro will be required to revise the amount of the 2015 test year debt guarantee fee to reflect a 50/50 apportionment of the calculated cost savings.

11.7.2 RSP Interest

Hydro accrues interest in its RSP accounts at its weighted average cost of capital. The RSP interest included in the 2015 test year costs is $12.4 million.[197] The Industrial Customer Group submitted that refinancing of the current significant balances in Newfoundland Power's RSP Surplus once it is paid out to customers will result in a lower long-term cost of debt, with interest savings of approximately $5 million.[198] While acknowledging that the amounts are now not scheduled to be paid out until 2016, the Industrial Customer Group submitted:

> Hydro has had the option (since before 2015) of transferring these amounts out of the RSP (a high cost location to host large payables) to an alternative short-term mechanism, and financing this amount with low cost capital such as promissory notes thereby reducing the costs for Return on Rate Base in 2015 (and the amount of interested credited to the refundable amounts). The revenue requirement for 2015 should not be adversely affected by a Return on Rate Base that is approximately $5 million higher than required due to delays in seeking lower cost financing or in paying these amounts out to NP customers.[199]

Hydro submitted that this issue is premature, as a Board decision concerning disposition of the RSP balances has not been made.[200]

The Board agrees that, at the time of final submissions, the disposition of the RSP balances was uncertain. While the Board has since issued its decisions on the disposition of the RSP Surplus balances the utilities are still in the process of issuing refunds and it is not certain how much, if any, of the RSP balances will be refunded by the end of 2016. The refund process is complex and the timing of the completion of the refund process uncertain. Newfoundland Power is responsible for the largest share of the refund balances. In these circumstances the Board is not satisfied that there should be an adjustment to Hydro's 2015 test year interest costs on the basis of lost opportunity to seek lower cost financing for these outstanding RSP balances.

11.8 Amortizations of Deferred Charges

Hydro has a number of deferral accounts with cost recovery amounts already included or proposed to be included in the 2015 test year revenue requirement. As of December 31, 2015 Hydro's rate base will include a forecast balance of $77.5 million associated with these deferred

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[196] Undertaking #139
[197] Amended Application, Vol. I, Finance, Schedule 1, page 10
[198] Industrial Customer Group's Submission, page 16
[199] Industrial Customer Group's Submission, page 18/8-14
[200] Hydro's Submission, Rev. 1, page 52

charges. These include costs for foreign exchange losses realized, general rate application costs, Holyrood black start diesels and extraordinary repairs. In addition Hydro has, with Board approval, deferred costs associated with its CDM expenditures from 2009 to 2014. A new CDM Cost Deferral Account and recovery mechanism/rate rider has been proposed for this balance, as discussed in Section 17.3. The proposed deferrals in relation to the general rate application costs and the Holyrood black start diesels are addressed in Section 11.3.3. The deferred recovery for realized foreign exchange losses was put in place as a result of Government directive in 2002 and results in an annual recovery of $2.157 million each year. The amortization will continue until 2041 and is included in the 2015 test year costs.

In the Amended Application Hydro proposes to defer and amortize over a five-year period $1.2 million of 2015 costs associated with work related to extraordinary repairs of air-blast circuit breakers and transformers. This work follows from the Board's interim findings in its May 2014 report related to its investigation of outages in January 2014. These expenditures were addressed as part of the Board's prudency review. In Order No. P.U. 13(2016) the Board disallowed 2015 capital and/or operating expenses above threshold amounts for extraordinary transformer and breaker repairs associated with imprudence. Hydro's prudence review compliance application shows the net impact on the 2015 test year revenue requirement is a reduction of $75,000, which is recorded against the 2015 cost deferral approved in Order No. P.U. 36(2015).

Hydro's proposal to defer and amortize, over a five-year period beginning in 2015, the 2015 costs of extraordinary transformer and breaker repairs not associated with imprudence is accepted.

11.9 Conclusion 2015 Test Year Costs

The Board concludes that the proposed 2015 test year revenue requirement should be adjusted to reflect the findings of the Board in this Decision and Order, including the reductions and disallowances in relation to intercompany charges, salaries and benefits, other operating costs, and the prudence review.

Hydro will be required to file a revised 2015 test year revenue requirement for the purpose of setting rates to reflect the findings of the Board in this Decision and Order.

12.0 2015 Test Year Average Rate Base and Return on Rate Base

Hydro's rate base is comprised of its investment in capital assets in use, unamortized balances of deferred charges, fuel inventory, materials and supplies inventory and cash working capital allowance. In the Amended Application Hydro provided details of the rate base elements from 2007 to 2015. The average rate base for 2015 was forecast to be $1,802.0 million.[201] This compares to an average rate base in 2007 of $1,483.5 million, with the increase primarily attributed to an increase in capital assets.

Hydro also noted that its calculation of rate base for 2015 includes a number of capital projects that were subject to a prudence review by the Board. The Board issued its findings on prudence for these projects in Order No. P.U. 13(2016), as discussed in Section 8.0. These findings will impact the calculation of the forecast average rate base and return on rate base for 2015.

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[201] Amended Application, Vol. 1, Schedule 1, page 5 of 11

During the proceeding several intervenors identified concerns with Hydro's forecast 2015 rate base including:

- the inclusion of specific capital assets as in service in 2014 and capital budget underspending
- overstatement of the allowance for fuel inventory, deferred charges and interest capitalized during construction

These issues and the Board's findings are set out below.

12.1 Capital Assets in Rate Base

Hydro's calculation of its 2015 forecast average rate base includes the impact of a carry forward of the in-service dates for the new Holyrood combustion turbine and other capital assets that were originally scheduled to go into service in 2014 but actually went into service in 2015. The value of the capital assets that did not go into service in 2014 as expected was $148.0 million. This amount includes $110 million associated with the new Holyrood combustion turbine and an amount of $38.0 million carried forward to 2015 associated with other incomplete capital projects.[202]

The Consumer Advocate submitted that Hydro is departing from normal rate setting principles in requesting that the assets that were not in service at the end of 2014 be treated as if they were for the purposes of the calculation of the 2015 test year forecast rate base and revenue requirement for rate setting purposes. He submitted there is no expert testimony or regulatory precedent to support this approach, and that no other costs for 2016 are being tested. According to the Consumer Advocate Hydro's approach amounts to "single expense category ratemaking." The Consumer Advocate submitted that the Board should order Hydro to maintain the 2015 test year rate base presented without adjustment for the assets that were not in service at the end of 2014.[203]

In addition to the reduction for delayed in-service of the Holyrood Combustion Turbine, Newfoundland Power argued that a further reduction in the opening balance of Hydro's 2015 forecast average rate base calculation is required to account for remaining incomplete capital projects. Newfoundland Power also submitted that Hydro's capital expenditures have been under budget by an average of 15% between 2009 and 2013 and that Hydro's evidence that all planned additions and carryovers from 2014 will be in service in 2015 is not consistent with its recent experience. Newfoundland Power suggested that a 15% reduction in the forecast plant in-service for 2015 would more accurately reflect Hydro's historical completion of capital work.[204]

Hydro disagreed with the positions of the Consumer Advocate and Newfoundland Power:

> The fact that the in-service dates of certain capital assets carried over from 2014 to 2015 should not impact Hydro's opportunity to begin recovering these costs in 2016. Further Hydro undertook a very significant amount of capital spending in 2014 and 2015 to place the Holyrood CT and other used and useful assets into service, and Hydro should not be

[202] Undertaking #153 lists the projects carried forward into 2015.
[203] Consumer Advocate's Submission, page 31
[204] Newfoundland Power's Submission, page C-5

> financially disadvantaged by the exclusion of this in-service capital for purposes of rate setting.[205]

According to Hydro, if the impact of the delayed capital additions is not included in the 2015 test year for rate setting, Hydro's return on rate base will be below the lower end of the target range.

Hydro also submitted that there is no basis for using a historical trend to further reduce the rate base opening balance and that the forecast for the cumulated 2014 and 2015 test year is an under spending of less than 1%. Hydro also noted that only 50% of the additions to plant in-service are included in rate base because it is assumed they are in service for half the year, even though they will be in service for the full year in 2016. According to Hydro reducing the capital assets in service for the 2015 test year would further limit its opportunity to earn a reasonable return in 2016.[206]

Board Findings

The Board agrees that, in normal circumstances, the forecast rate base calculations for the test year would include forecast opening and closing balances reflecting assets expected to be in service at that time. However, as discussed previously, the Board does not consider this Amended Application and the associated proceeding to be normal. The application process has spanned a number of years and rate changes are not proposed until 2016. In that period Hydro has, with the approval of the Board, undertaken significant capital expenditures necessary for the continued reliability of supply for the Island Interconnected system. These assets are considered used and useful in the provision of service and the Board agrees that Hydro should not be denied the opportunity to recover these costs. The Board notes that Hydro has excluded the impact of these assets in rate base calculations for the purpose of the 2014 and 2015 revenue deficiencies.

The Board is not satisfied that it would be appropriate to reduce the 2015 test year forecast plant in-service by 15% to reflect historical completion of work as proposed by Newfoundland Power. The Board acknowledges that Hydro has underspent on its approved capital budgets for the 2006 to 2014 period, as shown in NP-NLH-016 (Rev. 2). Newfoundland Power's proposal would see the Board reducing the additions to the 2015 forecast plant in service by 15% to reflect this historical underspending. However the Board is not satisfied that this direct link between underspending and plant in-service can be made. In response to Undertaking #158 Hydro explained that total plant in service is used for rate setting purposes rather than capital expenditures. According to Hydro:

> The forecast additions to plant in service in comparison to the cumulative 2014 and 2015 Test Years is an underspend of less than 1%. Hydro does not propose to make the corresponding adjustment for rate setting purposes for 2016 given that the forecast assets in service in 2015 are consistent with the 2015 Test Year, all of the 2015 additions which were tested in the Hearing and will be in-service for a full year in 2016, the planned growth in Hydro's capital program and the impact on return on rate base forecasted for 2016 as outlined in PUB-NLH-487.[207]

[205] Hydro's Submission, Rev. 1, page 22
[206] Hydro's Rebuttal, page 14
[207] Undertaking #158

The Board accepts this explanation and is satisfied that the proposed 2015 test year rate base, adjusted to reflect the impacts of the Board's findings in this Decision and Order and the 2014 delayed in-service assets for the full year as proposed by Hydro, is reasonable. The Board will address the 2015 rate base to be used for the calculation of the 2015 revenue deficiency calculation in Section 13.4. The Board also notes that the forecast average 2015 rate base will also have to be adjusted to reflect the prudence compliance filing.

Hydro's proposal to reflect the full-year impact of 2014 delayed in-service assets in its 2015 test year average rate base for the purpose of setting rates beginning in 2016 is accepted.

12.2 Rate Base Allowances

Newfoundland Power recommended adjustments to the forecast rate base allowances for fuel inventory, deferred charges and cash working capital. No issues were raised with respect to the materials and supplies allowance; the remaining allowances are discussed below.

i) Fuel Inventory

Hydro's calculation of the 2015 forecast rate base includes an allowance for fuel inventory of $66.6 million, compared to $27.5 million in the 2007 test year. The fuel inventory is comprised of a thirteen-month average of No. 6 fuel, diesel, and gas turbine fuel. Hydro explained that the increase is associated with an increase in the average purchase price of No. 6 fuel and higher fuel storage levels at Holyrood.[208]

Newfoundland Power noted that the fuel inventory forecast is 30.8% higher than proposed in the original Application and that fuel prices are significantly lower in 2015 than forecast by Hydro. According to Newfoundland Power the evidence does not support a No. 6 fuel inventory forecast above $40 million, which is the average forecast monthly inventory costs for fuels based on the lower fuel price in Hydro's 2015 Interim Rates Application. Newfoundland Power submitted that Hydro's 2015 average rate base should be reduced by $19 million.[209]

In Section 11.4 the Board accepted Hydro's updated fuel price projections for 2015 test year revenue requirement. The Board will require Hydro to adjust its fuel inventory calculation in the 2015 forecast average rate base to reflect the updated fuel prices.

Hydro will be required to adjust its fuel inventory allowance in the 2015 forecast rate base to reflect the findings of the Board in relation to the 2015 test year fuel price forecasts.

ii) Deferred Charges

Hydro's calculation of its 2015 forecast rate base includes an allowance for forecast deferred charges of $77.5 million. These amounts relate to amortizations for expenses that, with the Board's approval, are amortized over periods ranging from three to 27 years. The charges relate to: i) CDM costs, ii) hearing costs, iii) foreign exchange losses, iv) Holyrood black start diesels, v) extraordinary repairs related to air blast circuit breakers, and vi) additional supply costs incurred in January 2014 related to outages.

[208] Amended Application, Vol. I, page 3.20
[209] Newfoundland Power's Submission, page C-9

Newfoundland Power submitted that the closing rate base balances for 2014 and 2015 should be adjusted to reflect the overstated charges associated with capital and deferred cost consequences arising from Hydro's imprudence. These charges relate to extraordinary repairs and additional supply cost deferrals.[210]

The Consumer Advocate submitted that Hydro should not be allowed recovery of costs that have been identified by the Board as imprudently incurred and supported adjustment of Hydro's revenue requirement to reflect the exclusion of costs for projects and programs found to be imprudent.

Vale submitted that the deferred charges for the costs associated with the Holyrood black start diesels should not be allowed on the basis that Hydro based its decision to defer these costs partially on the fact that the new Holyrood combustion turbine would fulfill this role, which Vale stated was confirmed during the hearing. Vale also submitted that the amounts included in the deferred charges for extraordinary repairs and supply costs should be adjusted on the basis of the prudency review and Liberty's findings, and that Hydro should also not be permitted to recover the full amount of the costs related to the general rate application hearing on the basis that the costs increased because of Hydro's delay in filing its general application and its decision to amend and change the test years in July 2014.[211]

The Board has already addressed the 2015 test year amortizations associated with CDM costs, hearing costs, Holyrood black start diesels, extraordinary repairs, and the foreign exchange losses. The additional supply costs are addressed in Section 13.2.

The Board notes that, as a result of its findings in this Decision and Order, including acceptance of Hydro's prudence compliance filing, Hydro will be required to file a revised calculation of its 2015 test year forecast average rate base. This will address the primary concerns raised by the intervenors with respect to the deferred charges included in rate base. No further adjustment is required by the Board at this time.

iii) Cash Working Capital Allowance

Hydro's calculation of its 2015 forecast rate base includes an allowance for cash working capital of $7.0 million, which is the amount intended to bridge the gap between the time expenditures are made to provide service and the time payment is received for the service.

Newfoundland Power submitted that, according to Grant Thornton, Hydro has included the interest capitalized during construction associated with the proposed Western Labrador transmission system project, which has been suspended, in "work in progress" for 2015. In NP-NLH-309 Hydro included the interest capitalized during construction in the rate base for 2015. Newfoundland Power submitted that, if this is the case, the amount should be removed from rate base and Hydro's test year revenue requirement reduced accordingly.[212]

[210] Newfoundland Power's Submission, page C-11
[211] Vale's Submission , pages 17-19
[212] Newfoundland Power's Submission, page C-13

Hydro explained that it has excluded total “work in progress” and the corresponding interest during construction on “work in progress” assets from rate base for rate setting purposes and so no adjustment is necessary to Hydro’s 2015 rate base and revenue requirement.[213]

Based on Grant Thornton’s review and Hydro’s response the Board is satisfied that the cash working capital allowance is appropriately calculated. As the “work in progress” and associated interest during construction is excluded from the 2015 forecast average rate base, no further adjustment is necessary.

12.3 Forecast Rate Base and Rate of Return on Rate Base for 2015

As a result of the Board’s findings in this Decision and Order, including the acceptance of Hydro’s prudence compliance filing, Hydro will be required to file a revised calculation of its 2015 test year forecast average rate base to be used for rate setting beginning in 2016.

The Amended Application also proposed a rate of return on forecast average rate base of 6.82% for 2015. The proposed 2015 rate of return on rate base reflects a target return on equity of 8.8%. As discussed in Section 9.3 the Board has determined that a target return on equity of 8.5% should be used in calculating the rate of return on rate base for 2016. This finding was based on a purposeful reading of OC2009-063 to maintain the same target return on equity for Hydro as was established for Newfoundland Power in Order No. P.U. 18(2016). As a result of the findings of the Board in this Decision and Order Hydro will be required to file a revised rate of return on average rate base for the 2015 test year for rate setting purposes reflecting a target return on equity of 8.5%.

Hydro will be required to file a revised 2015 test year forecast average rate base and rate of return on rate base for rate setting purposes to reflect the findings of the Board in this Decision and Order, including a target return on equity of 8.5%.

13.0 2014 and 2015 Revenue Deficiencies

13.1 2014 Revenue Deficiency

The Amended Application submitted that the 2014 revenue from existing rates was not sufficient to cover the cost of supplying electricity to customers, and proposed the deferral and recovery a 2014 revenue deficiency of $45.9 million associated with an increase in Hydro’s revenue requirement since 2007.[214]

Hydro filed an application on November 28, 2014 seeking approval of this revenue deficiency. Hydro stated that the proposal for recovery of the forecast revenue deficiency in 2014 was to provide Hydro interim revenue relief in 2014 and to maintain the Board's ability to test 2014 test year costs to determine the final 2014 test year revenue requirement during the hearing of the general rate application in 2015.[215] The Board approved the deferral of the 2014 revenue deficiency in the amount of $45.9 million and set aside the issue of whether Hydro should have recovery of this deferral.[216] The Board explained at the time that there was insufficient

[213] Hydro’s Rebuttal, page 14
[214] Amended Application, Vol. I, pages 3.6 to 3.7
[215] Interim Cost Recovery Application, pages 4-5
[216] Order No. P.U. 58(2014)

opportunity to assess the reasonableness of the amounts and potential issues and impacts and there was no certainty as to recovery of all or any part of the deferral.

The issue of whether Hydro was entitled to recover of this 2014 revenue deficiency under the existing regulatory framework and, if so, the amount of any recovery to be allowed, was raised during the hearing.

13.1.1 Entitlement to Recovery of 2014 Revenue Deficiency

Newfoundland Power stated that it is difficult to understand how the deferred recovery of a revenue deficiency from a prior year would not be a retroactive adjustment of the actions of management.[217] Newfoundland Power submitted that approval of the recovery of the full amount of the 2014 revenue deficiency would effectively amount to a guarantee of Hydro's 2014 rate of return and would not be consistent with the regulative and corrective nature of the Board. Newfoundland Power referred to the Court of Appeal decision:

> Although the utility is "entitled" by s. 80 of the Act to have the Board determine a just and reasonable rate return based on appropriate predictive techniques and methodologies, it is not "entitled" in the sense of being guaranteed, to that rate of return.[218]

Newfoundland Power submitted that Hydro is proposing to recover a prior year's revenue deficiency as if it were a cost deferral and there is no precedent for the type of relief proposed by Hydro in this jurisdiction.[219] Newfoundland Power stated:

> A revenue deficiency is not a cost and the Board has determined that in its –in Order No. P.U. 36 (2015). It's a net financial result of a year of utility operations, not a cost. It's difficult to see how treating it as a cost would amount to anything but retroactive adjustment of the actions of management.[220]

According to Newfoundland Power Hydro took the financial risk to proceed in a way that does not accord with generally accepted regulatory principles.[221]

Newfoundland Power also stated that it was not aware of any accepted practice for using a test year for any purpose other than setting rates:[222]

> Hydro's proposal to put 2014 forward as a test year doesn't conform with any definition of a test year or any generally accepted usage of a test year familiar to Newfoundland Power. The fact that it's called a test year doesn't necessarily make it a test year. So whether it's based on historical data or forecast data or a combination of both, it doesn't conform with the notion of prospective rate making.[223]

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[217] Newfoundland Power's Submission, pages D-6 to D-7
[218] Newfoundland (Board of Commissioners of Public Utilities), Re (1998), 164 Nfld and P.E.I.R.60, paragraph 31
[219] Transcript, January 25, 2016, page 57/6-21
[220] Ibid., pages 57/22 to 58/4
[221] Ibid., page 59/8-14
[222] Transcript, January 25, 2016, page 52/4-8
[223] Transcript, January 25, 2016, page 56/15-24

Newfoundland Power noted that Hydro has acknowledged that presenting a 2014 test year as the basis for recovery of a revenue deficiency, not for the purpose of setting rates, is a departure from normal regulatory practice.[224]

The Consumer Advocate submitted that Hydro's application to recover a 2014 revenue deficiency contravenes several aspects of a future test-year regulatory regime. According to the Consumer Advocate an important feature of the future test-year regulatory model is that revenue requirement is based on a forecast of costs. The Consumer Advocate submitted that Hydro's application was extremely late relative to the generally accepted time frame for future test-year applications and that the revenue requirement "forecast" is clearly not consistent with the standard practice for rate setting purposes in the context of a future test-year rate-setting regime.[225] The Consumer Advocate stated that it is key to differentiate between a test year and a rate year when considering accepted regulatory practice relating to the use of test years.[226] The Consumer Advocate stated:

> The concept of filing revenue requirement and rate applications on a timely basis is so deeply embedded in generally accepted regulatory practice that most regulators do not consider an explicit policy statement to be necessary. It is well understood by all participants in a regulatory processes, except it seems, Hydro, that rates and revenue requirements must be set on a prospective basis and that this requires costs to be filed in advance of the rate year. To do otherwise would undermine the accountability of management to manage within a budget that it commits to in advance.[227]

The Consumer Advocate argued that allowing Hydro to recover 2014 costs undermines the principle of a test year regime, whether historic, future or current, that a utility be incented to manage its costs within a pre-approved revenue requirement. The Consumer Advocate stated:

> Utilities must make proper use of test years; otherwise, the principles of utility accountability, and incentives will be undermined, and these principles matter because if we don't adhere to them, they disappear.[228]

The Consumer Advocate acknowledged that a retrospective review of costs may be warranted if a company's financial integrity was at risk but noted that Hydro has not claimed that its credit worthiness or that of the province is at risk.[229]

The Consumer Advocate argued there is no precedent in this jurisdiction of using a test year to recover a deficiency nor could Hydro point to any such practice from other jurisdictions, and that Hydro bears the onus of showing that using a 2014 test year to collect a 2014 revenue deficiency is in line with regulatory practice. [230] The Consumer Advocate stated:

> The company in our respectful submission demonstrates a profound misunderstanding of the prospective nature of the rate setting regime when it suggests that the Board has a statutory duty to allow Hydro to recover a revenue deficiency that was not identified on a timely basis.

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[224] Newfoundland Power's Submission, page D-4
[225] Consumer Advocate's Submission, page 7
[226] Transcript, January 25, 2016, page 79/21-22
[227] Ibid,, pages 88/24-25 and 89/1-13
[228] Ibid., page 86/16-21
[229] Consumer Advocate's Submission, page 10/4-11
[230] Ibid., page 15; Transcript, January 25, 2016, page 87/2-17

> The regulatory reality is quite the opposite. To allow the company to recover a revenue deficiency for 2014 that was not disclosed to the Board until November of that year, would not only deviate from the principle of determining revenue requirements on a prospective basis, but in doing so set a precedent that would open the door to allowing cost recovery not on the basis of a before the fact determination of a reasonable revenue requirement, but instead to give utilities a licence to spend freely first, then justify past spending, rather than to submit to a review of the prudence of their budget plans in advance.[231]

The Industrial Customer Group submitted that, as recognized by the Court of Appeal, the entitlement of a utility to earn a rate of return does not guarantee that level of return but is an entitlement to have the Board make a prospective estimate of a reasonable rate of return based on a full consideration of available evidence for the purpose of setting rates.[232] The Industrial Customer Group submitted that forecast costs should be used whenever practicable but that it is not an absolute that actual costs could never be used. The Industrial Customer Group stated:

> The Island Industrial Group would not go so far as to say, however, that in no case could the type of relief that Hydro is seeking ever be granted. Hydro has not made the case for it in this particular circumstance, but can a test year never be used for the purpose for which it's seeking it; the Island Industrial Customers would not go that far, and when we say that, we say that referring to the reference in the stated case to the Board having large discretion, broad discretion, and methodologies.[233]

The Industrial Customer Group stated that Hydro is not guaranteed a return and submitted:

> I think the starting point for the Board is has Hydro demonstrated by the evidence that it will not be earning a just and reasonable return in 2014, and I think the test for that has been referred to, is the return that's going to be earned by Hydro in 2014, if there's no change by way of addressing it by providing the relief, is it going to be a return which undermines its financial integrity. That's the first question, and I would concur with the submissions of my learned friends that there's been no evidence presented by Hydro that if its return in 2014, if it's not allowed, this revenue deficiency that it's seeking for 2014, that its financial integrity will be undermined.[234]

Vale submitted that it is important that the Board set a high threshold for Hydro to meet on the issue of recovery of prior year revenue deficiencies from current or future customers as it creates the potential for inequity. Vale submitted that at a minimum Hydro should be required to establish that the recovery of past revenue deficiencies is consistent with sound regulatory practice.[235]

Hydro submitted that, consistent with the opportunity to earn a just and reasonable return on its rate base, a public utility is entitled to recover revenue deficiencies caused by delayed implementation of rate changes that have been applied for by the utility.[236] Hydro stated:

> As recognized in the Stated Case, the Board has wide discretion to act "as appropriate and necessary" to effect its statutory mandate and the policies of the province. Hydro submits

[231] Transcript, January 25, 2016, pages 89/14 to 90/10
[232] Ibid., page 104/8-17
[233] Ibid., page 108/6-18
[234] Ibid., pages 105/11 to 106/3
[235] Vale's Submission, pages 19-20
[236] Hydro's Rebuttal, page 10

> that denying recovery of the 2014 Revenue Deficiency is tantamount to denying Hydro its statutory entitlement to the opportunity to earn annually a just and reasonable return on its rate base. Consistent with the performance of its statutory duties, it is incumbent upon the Board to use its discretion to act as necessary and appropriate to effect recovery of Hydro's 2014 Revenue Deficiency, consistent with ensuring Hydro's customers "obtain adequate service at reasonable rates.[237]

Hydro acknowledged that the 2014 test year is not fully forecast but stated that fully forecasted future test years is not required by statute nor necessary for the purpose of testing costs to confirm a revenue deficiency amount. Hydro noted that the *EPCA* specifies that rates should be established wherever practicable on forecast costs but explained that a future test year for recovering a deficit in 2014 was not feasible given the filing date of November 2014.[238] Hydro presented regulatory authorities to support its position.[239]

Hydro argued that, when proceedings are lengthy such that rates will become effective later than proposed, the Board can utilize deferral accounts and interim orders as regulatory tools to deal with a retrospective application.[240] Hydro stated:

> So, when the Board makes the final determination on the merits about the 2014 and 2015 revenue deficiencies now at the conclusion of the case, the existence of the deferrals that the Board created gives it the full power, in my submission, to allow or not allow recovery of the 2014-2015 deficiencies, up to the limits of the deferral that were established by the Board.
>
> So, in my submission quite apart from the issue of a test year, it's the Board's interim orders and its deferrals that become the key tools when the Board makes its final determination on the merits with respect to the 2014 and 2015 revenue deficiencies.[241]

Hydro noted that it filed the general rate application in 2013 for a 2013 test year with rates proposed for January 1, 2014 and that, due to cost pressures emerging in 2014, this application was amended but it was not abandoned. Hydro stated:

> In my submission, Mr. Chair, and panel members, there is only one general rate application here and it always has been only one general rate application. Yes, it was amended, but it is a general rate application first filed in 2013.[242]

Hydro further stated:

> If there was ever any suggestion that the amendment would disentitle Hydro to relief in respect to 2014, Hydro would not have done it, it would have proceeded with the back to back applications. Hydro's very intent was to address these emerging cost pressures in 2014.[243]

[237] Hydro's Rebuttal, page 11/9-15
[238] Ibid., page 11/17-23
[239] Transcript, January 25, 2016, pages 9-14
[240] Ibid., page 7/11-17
[241] Ibid., pages 8/15-25 to 9/1-5
[242] Ibid., page 139/1-7
[243] Ibid., page 135/4-11

Hydro submitted that each rate application is unique and that it is up to the Board to decide whether the costs are justified.[244]

Board Findings

The *EPCA* provides that the Board shall implement the power policy of the province, including that:

> (a) the rates to be charged, either generally or under specific contracts, for the supply of power within the province
> (i) should be reasonable and not unjustly discriminatory,
> (ii) should be established, wherever practicable, based on forecast costs for that supply of power for 1 or more years,
> (iii) should provide sufficient revenue to the producer or retailer of the power to enable it to earn a just and reasonable return as construed under the Public Utilities Act so that it is able to achieve and maintain a sound credit rating in the financial markets of the world, and….

The regulatory framework in this jurisdiction contemplates that utilities file general rate applications based on forecast costs well in advance of the test year. This allows a full testing of the forecast costs and the timely implementation of rates. Nevertheless the Board has a broad discretion to take alternative regulatory approaches where necessary and appropriate in the circumstances.[245] The broad discretion of the Board has been confirmed by the Court of Appeal which has stated:

> The Board has a broad discretion, and hence a large jurisdiction, in its choice of the methodologies and approaches to be adopted to achieve the purposes of the legislation and to implement provincial power policy.[246]

In particular, the Court has acknowledged the Board's broad discretion with respect to deferral accounts and interim rates.[247] These tools have been used by the Board in exceptional cases such as where there has been a delay in the implementation of rates beyond the proposed effective date.[248]

The Board understands the position of the parties that the recovery of the "revenue deficiency" for 2014 should be not be approved. A general rate application filed late in the test year proposing approval of a revenue deficiency to recover the test year revenue requirement is outside of normal regulatory practice and would not be approved in normal circumstances. However, the Board acknowledges that the approach that Hydro took was responsive to the unusual circumstances that it found itself in. In April 2013 Government directed Hydro to file a general rate application with a 2013 test year. Hydro filed this application in July 2013. As the matter progressed Hydro determined that it was necessary to amend the application to provide a more current and relevant basis for rate setting. It is notable that the intervenors did not object to the proposed amendment or the resulting delay. The Board notes Hydro's submission that the

[244] Ibid., page 136/15-19
[245] Section 118 of the *Act*.
[246] Newfoundland (Board of Commissioners of Public Utilities), Re (1998), 164 Nfld and P.E.I.R.60, paragraph 36.
[247] Newfoundland and Labrador Hydro v. Newfoundland and Labrador (Board of Commissioners of Public Utilities) (2012), 323 Nfld and P.E.I.R.127,(A)
[248] Order Nos. P.U. 13(2013) and Order No. P.U. 18(2016)

very purpose of filing the Amended Application was to address emerging cost pressures in 2014. Throughout this proceeding, Hydro has consistently sought relief for 2014. In the application filed in July 2013 new rates were proposed effective January 1, 2014. The first interim relief application also proposed new rates effective January 1, 2014. Thereafter Hydro filed three further applications for interim relief for 2014. The Board accepts that Hydro determined that it required relief for 2014 and by the fall of 2014 Hydro found itself in a difficult situation with limited options. It likely seemed impractical if not impossible to file an application proposing the implementation of new rates for 2014 by the time the Amended Application was filed in November.

In considering the circumstances of this case, the Board must balance the interests of the utility with the interests of rate payers in accordance with the legislation as well as generally accepted regulatory principles. The Court of Appeal has stated:

> It must always be remembered that, as has been emphasized throughout this opinion, the Board is charged with balancing the competing interests of the utility and the consumers of the service it provides. Neither set of interests can be emphasized in complete disregard of the interests of the other. Thus, in choosing to exercise a particular power within the Board's jurisdiction, the Board must always be mindful of whether, in so acting, it will be furthering the objectives and policies of the legislation and doing so in a manner that amounts to a reasonable balance between the competing interests involved.[249]

It is notable that Hydro has, from the initial filing of the general rate application in July 2013, sought relief for 2014. Hydro applied for new rates effective January 1, 2014 and when this became impractical it sought approval of a revenue deficiency for 2014. Hydro's rates were interim throughout 2014 and a deferral account was approved for the proposed 2014 revenue deficiency. In approving this deferral account the Board commented that there was insufficient time to assess Hydro's proposals and the evidence, and deferred the issue of recovery of all or part of the deferral. The Board finds that the evidence shows that the 2014 revenue from existing rates was insufficient to address the increase in Hydro's revenue requirement since its last general rate application in 2007. In the extraordinary circumstances of this case, and considering the interests of both the utility and ratepayers, the Board is satisfied that it is appropriate in the circumstances to grant relief to Hydro in relation to 2014. The Board will allow recovery with respect to 2014 and will assess the proposed 2014 test year revenue requirement to determine the amount of the deferred 2014 revenue deficiency that will be recovered by Hydro.

Hydro will be permitted recovery with respect to the 2014 revenue deficiency in an amount to be determined based on the findings of the Board in this Decision and Order.

13.1.2 Determination of the 2014 Revenue Deficiency

The Amended Application proposed that the 2014 revenue deficiency to be recovered from customers be based on the difference between the forecast 2014 revenue based on existing rates and the tested 2014 revenue requirement which is determined by the Board.[250] The proposed 2014 revenue requirement increased by $131.8 million from 2007, primarily as a result of

[249] Newfoundland (Board of Commissioners of Public Utilities), Re (1998), 164 Nfld and P.E.I.R.60, paragraph 144
[250] Amended Application, Vol. I, page 4.20

inflation, fuel price increases, higher power purchase costs, depreciation costs related to Hydro's aging infrastructure and a higher return on equity.[251]

Proposed 2014 Test Year Revenue Requirement[252] ($000)			
	2007 Test Year	2014 Test Year	Increase (Decrease)
Operating and Maintenance	93.4	126.1	32.7
Fuel	148.4	191.8	43.4
Power Purchases	38.3	66.7	28.4
Depreciation and Other	40.2	58.0	17.8
Return on Equity	8.0	30.5	22.5
Interest	102.7	89.7	(13.0)
Total Revenue Requirement	431.0	562.8	131.8

Newfoundland Power submitted that, if the Board were to consider allowing recovery of a 2014 revenue deficiency, the evidence does not support recovery from customers of all the costs comprising the proposed 2014 revenue deficiency. Newfoundland Power argued that the proposed target return on equity of 8.8% is based on an Order in Council that is not applicable to 2014, since 2014 is not a year in which new rates are being set by the Board. Newfoundland Power stated that the Order in Council does not specifically provide that it is intended to take effect prior to the year for which new rates are proposed. Newfoundland Power stated that the Order in Council refers to the filing of a general rate application and makes no mention of a revenue deficiency which leads to the conclusion that the intent was that Hydro would be entitled to the return when it applied for a change in rates.[253] Newfoundland Power agreed with Vale that Hydro's application to recover its stated 2014 revenue deficiency is a separate application filed coincident with its general rate application.[254] Newfoundland Power submitted that, to the extent that Hydro is entitled to recovery, it is limited to a return on equity equal to its marginal cost of debt as previously approved by the Board.[255]

Newfoundland Power also argued that adjustments should be made to the revenue deficiency in relation to: i) rate base items for overstated plant in service, prudence disallowances, rate base allowances, ii) the Holyrood conversion factor, iii) operating costs related to prudence disallowances, overstated human resource costs, intercompany charges, hearing costs, iv) other costs related to the debt guarantee fee and asset retirement obligations, and v) the return on equity. Newfoundland Power calculated that approximately \$64 to \$67 million in 2014 test year costs are not appropriate, which it argued more than offsets Hydro's proposed 2014 revenue deficiency.[256]

The Consumer Advocate submitted that many of the costs included in Hydro's application are not appropriate to recognize for purposes of determining its 2014 revenue deficiency,

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[251] Amended Application, Vol. I, page 3.8
[252] Ibid., page 3.7, Table 3.1
[253] Newfoundland Power's Submission, pages D-3 to D-4
[254] Transcript, January 25, 2016, page 72/14-23
[255] Ibid., pages 74/25 to 75/4
[256] Newfoundland Power's Submission, page D-7 to D-21

specifically the costs arising from imprudence and costs attributable to a return on equity of 8.8%. The Consumer Advocate submitted that owing to the imprudence of Hydro actions relating to the outage events of 2013 and 2014, the Board should deny Hydro recovery of as much as $31.2 million of the 2014 costs upon which it based its 2014 revenue deficiency.[257]

The Consumer Advocate agreed with Newfoundland Power and Vale that the Order in Council is not applicable to the 2014 revenue deficiency since 2014 is not a year in which new rates are being set by the Board. [258] The Consumer Advocate argued:

> So to read the directive as mandating that Newfoundland Power's return be applied in respect of 2014, a year for which Hydro did not apply for new rates on a prospective basis, would not be reading the term "general rate application', as used in the Order in Council in its ordinary sense, nor would it be reading the Order in Council harmoniously with the scheme of our legislation. Our legislation sets rates on a prospective basis and as the Court of Appeal said in it the stated case, Hydro must manage its business so as to minimize the risks and maximize its opportunities for a just and reasonable return. Hydro is not guaranteed to earn the established return. To read the Order in Council as mandating that Hydro be entitled to return in a year where it has not sought rates on a prospective basis, and in a year where it is putting forward a current year forecast to ground relief in that very year is to change our framework.[259]

The Consumer Advocate argued that the allowed return on equity would be excessive if the utility's financial risk is reduced because its revenue requirement is based on actual costs for part of the year.[260]

Vale submitted that, if the Board finds that recovery of a 2014 revenue deficiency is appropriate to ensure the financial integrity of Hydro, the amount requested is not reasonable. Vale submitted that certain costs should not be included in the 2014 test year revenue requirement, including: i) costs associated with imprudent actions of Hydro, ii) general rate application and Board costs in 2014 of $3.5 million; iii) the difference between the test-year vacancy rate of 20 FTEs and the actual vacancy rate of 52 FTEs; iv) costs associated with the new Holyrood combustion turbine; understatement of common services costs; and v) the debt guarantee fee. Vale argued that the Order in Council only applies to a general rate application, not to revenue deficiency relief, and that Hydro is not entitled to an 8.8% return on a deficiency application. In Vale's opinion the 2014 revenue deficiency application was not a general rate application and, therefore, the Order in Council does not apply.[261] Vale also argued that Hydro has not provided evidence to support its position that a return on equity of 8.8% to calculate its 2014 revenue deficiency is required.[262]

Hydro submitted that it is clear from the record that its 2014 test year costs have been thoroughly tested.[263] In relation to the return on equity Hydro submitted that the Order in Council specifically says that it commences with the first general rate application and the first general rate application after January 1, 2009 was made in 2013.[264] Hydro also proposed to adjust the

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[257] Consumer Advocate's Submission, pages 15-16
[258] Transcript, January 25, 2016, pages 93/24 to 94/3
[259] Ibid., pages 94/22 to 95/19
[260] Consumer Advocate's Submission, page 10/24-27
[261] Transcript, January 25, 2016, page 125/2-7
[262] Vale's Submission, pages 20-22
[263] Hydro's Rebuttal, page 11
[264] Transcript, January 25, 2016, page 17/6-10

2014 revenue deficiency to take into account subsequent changes to rate base to account for assets that were expected to be placed in-service during 2014 but were not.[265]

Board Findings

The Board has reviewed the proposed 2014 test year revenue requirement for reasonableness for purposes of determining the amount that will be recovered of the $45.9 million revenue deficiency deferral approved in Order No. P.U. 58(2014).

As already discussed the circumstances in relation to the proposed 2014 test year are unusual. Normally a test year is based on forecast costs and the Board's assessment of reasonableness is based on evidence in relation to these forecasts. In this case, because the Board is assessing the reasonableness of 2014 forecast costs in 2016, the test year forecasts can also be viewed in the context of the actuals which were made available during the proceeding.[266] The Board acknowledges that Hydro cannot take measures now in 2016 to reduce the 2014 actual costs. Nevertheless the Board must test the 2014 test year costs to ensure that only reasonable costs are flowed through to rate payers. As explained by the Court of Appeal the Board's supervision of the reasonableness of operating costs is essential to effective regulation.[267] Even where a general rate application proceeds into or beyond the test year the Board must assess the reasonableness of the proposed costs. The Court has stated:

> When the issue becomes a retrospective examination of actual expenses as compared with what was projected and determined to be reasonable and prudent, there ought, similarly, to be caution exercised before determining that an expense was improperly incurred.[268]

The Board has reviewed the reasonableness of the proposed 2014 revenue requirement balancing the interests of the utility, bearing in mind that these expenses have already been incurred, and the interests of rate payers who will be responsible for these costs. Despite the unusual circumstances the Board has, to the extent practical, approached its assessment of the 2014 test year consistent with the usual approach of assessing the forecast revenue requirement for reasonableness. The forecast costs were assessed in the context of all of the evidence, including the actuals, to determine the reasonableness of the 2014 test year revenue requirement. The issues arising from the Board's assessment of the 2014 test year revenue requirement are addressed below.

i) Settled Issues

The Settlement Agreements recommended:

> The Board should approve the proposal to include depreciation and accretion expenses associated with asset retirement obligations with the amounts reduced from $3.1 million

[265] Hydro's Submission, Rev. 1, page 22; Undertaking #48. The forecast 2014 rate base was approximately $239 million whereas the actual rate base was $91 million, with the largest difference being the delay in the completion of the installation of the new 100 MW combustion turbine at Holyrood.
[266] NP-NLH-307, Rev. 1
[267] Newfoundland (Board of Commissioners of Public Utilities), Re (1998), 164 Nfld and P.E.I.R.60, paragraph 117
[268] Newfoundland (Board of Commissioners of Public Utilities), Re (1998), 164 Nfld and P.E.I.R.60, paragraph 121

and $3.2 million for the 2014 and 2015 test years, respectively, as proposed in the Amended Application, to $2.6 million and $2.6 million respectively.[269]

In Order No. P.U. 36(2015) the Board approved the creation of a deferral account in relation to Hydro's proposed 2015 test year revenue requirement. As part of this approval the Board accepted the settlement proposals related to asset retirement obligations for 2015. As discussed in Section 7.0 the Board has accepted the recommendations in the Settlement Agreements.

ii) Costing and Recovery of Affiliated Transactions

The Board found in Section 11.2 that the proposed intercompany charges in the 2015 test year revenue requirement should be reduced by $115,000. The Board finds that, for the same reasons, the proposed 2014 test year revenue requirement should be reduced by $106,000 to account for fully burdened costs in the Admin Fee.[270]

Hydro will be required to reduce the proposed 2014 test year intercompany charges by $106,000 to account for fully burdened costs in the Admin Fee.

iii) Salaries and Benefits

The Amended Application proposed to include total salary and benefits costs for 2014 of $78 million, net of cost recoveries, in the 2014 test year revenue requirement, which is $19.7 million higher than 2007 actual costs of $58.3 million.

As noted earlier in Section 11.3.1 salaries and benefits costs are the largest part of Hydro's controllable costs. The Board accepted that inflationary pressures, a tight labour market and Hydro's aging assets and growing capital program resulted in significant upward pressure on salaries and benefits costs since the last general rate application in 2007. However, the Board noted that the significant increases in salary and benefits costs were well above inflation and beyond the level of the average wage increases in the province. In addition the level of FTEs rose significantly in the 2014 and 2015 test years from previous years. The Board also found that Hydro failed to demonstrate that all reasonable steps were taken to manage the salaries and benefits costs. The Board disallowed $4.0 million of the proposed 2015 salaries and benefits costs.

The proposed 2014 salaries and benefits costs reflect lower wage increases and numbers of FTEs than proposed for the 2015 test year. Nevertheless the proposed increases in salaries and benefits costs are significant, rising from approximately $58.3 million in 2007 to $78.0 million in 2014. Gross payroll costs increased by 7.2% in 2014 from 2013.[271] Further, the proposed 2014 salaries and benefits costs reflected a forecast of 861 FTEs which is higher than the actual FTEs in 2012 and 2013 of 811 and 813, respectively.[272] In addition, the proposed 2014 salaries costs include overtime costs of $12.2 million which are $6.0 million higher than 2007 actual.[273] It should be noted however that recovery of overtime costs will be reduced somewhat for the disallowances

[269] Settlement Agreement, page 2
[270] Undertaking #151
[271] Grant Thornton's Amended Application Review Report, page 63
[272] NP-NLH-310
[273] Amended Application, Vol. I, page 2.33.

associated with the January 2014 outages.[274] Hydro explained that overtime was driven by incremental work requirements identified as a result of the January 2014 outages as well as emergency call-outs, and the overall increase in capital overtime is related to an increase in Hydro's capital program and higher salary costs.[275] The Board notes that overtime increased steadily from 2007 and jumped to $12.3 million in 2013 from $10.6 million in 2012.[276] The Board notes that Hydro made a productivity commitment for the 2015 test year and proposed overtime costs of $10.0 million.[277] Hydro explained its efforts to control overtime costs including improved efficiency in the planning, scheduling and execution of work and the redeployment of resources.[278] Hydro did not explain why these measures were not in place for 2014, and Hydro did not provide evidence demonstrating that it has made any systemic efforts to control its rising overtime costs.

As already discussed, the circumstances of this case are somewhat unusual in that the 2014 test year forecasts can be viewed in the context of the actuals for 2014. While the Board will not substitute actual for test year, the Board has considered actuals to determine the reasonableness of the forecast costs. Actual salaries and benefits costs were $80.0 million, $2.0 million higher than the 2014 test year forecast.[279] Actual overtime was $16.6, $4.4 million higher than forecast.[280] Actual FTEs in 2014 were 833, 28 lower than forecast.[281] The Board acknowledges that Hydro incurred these costs in 2014 and that it cannot now take measures to reduce these costs. Nevertheless customers should not be responsible for unreasonable costs even where the general rate application proceeds into or beyond the test year. As discussed earlier, the proposed 2014 costs must be shown to be reasonable.

The Board has reviewed the proposed 2014 salaries and benefits costs and finds that they are not reasonable in the circumstances. The Board notes the significant increase in gross salaries and the number of FTEs as well as the increase in wage levels beyond the level of inflation since 2007. The Board believes that Hydro failed to demonstrate that the proposed wage increases and level of FTEs were reasonable and necessary in the circumstances. Further the Board finds that, as in 2015, Hydro failed to establish that it made reasonable efforts in 2014 to manage and control the increasing salaries and benefits costs. Specifically, the Board notes the high levels of overtime proposed in 2014 and that Hydro did not address the measures, if any, which were taken to manage these costs. The Board will not allow recovery of all of the proposed salaries and benefits on the basis that the evidence failed to demonstrate that the proposed 2014 salaries and benefits are reasonable and necessary in the circumstances. The Board finds that Hydro has failed to justify the total proposed salary and benefits of $78.0 million and the increase of approximately $19.7 million since 2007. The Board believes that, given the lower levels of wage increases and number of FTEs proposed for 2014 compared to those in 2015, and considering the actual costs, the 2014 salaries and benefits costs disallowance should be smaller than the $4.0 million disallowance for 2015. The Board believes that a disallowance of $2.0 in relation to the proposed 2014 salaries and benefits costs is reasonable in the circumstances.

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[274] Grant Thornton's Prudence Compliance Report, pages 7, 10 and 15
[275] Amended Application, Vol. I, page 2.35. Capitalized overtime was $5.4 million, $3.7 million higher than 2007 actuals.
[276] Grant Thornton's Amended Application Review Report, pages 63 and 64
[277] Hydro's Submission, Rev. 1, page 29
[278] Hydro's Rebuttal, page 13
[279] NP-NLH-307, Rev. 1, Attachment 1, page 9
[280] Ibid.
[281] NP-NLH-310

Vacancy Allowance

The evidence sets out that the proposed 2014 salaries costs reflect a vacancy allowance of $3.27 million, based on 40 full time equivalent ("FTE") positions.[282] Hydro subsequently stated that the 2014 test year includes a vacancy adjustment of 20 FTEs which is estimated to be the equivalent of $1.7 million, though with consideration of extraordinary factors the 2014 vacancy allowance would be normalized to less than 40.[283] The Board finds that the evidence is unclear as to the amount of the vacancy allowance reflected in the 2014 salary costs. The Board notes that the actual vacancy rate was 52 in 2014, 51 in 2013 and 52 in 2012.[284] As discussed earlier the Board found that Hydro failed to demonstrate in relation to the 2015 test year that 40 FTEs is the correct number for the long term. The Board determined that a vacancy allowance of 55 FTEs should be used for 2015. Based on the actual vacancy rates in recent years, including 2014, and the forecasts level of FTEs the Board finds that the vacancy allowance reflected in the 2014 salary costs should be based on a vacancy rate of 52 FTEs.

Short Term Incentive Program

The Board notes that the forecast 2014 salaries and benefits costs include approximately $0.3 million related to short-term incentive payments.[285] As already discussed the Board found that Hydro failed to demonstrate that its incentive plan is reasonable and appropriate in the circumstances and further that these costs should be removed from the 2015 revenue requirement. The short term incentive plan was also in place in 2014 and the Board has the same concerns in relation to this program and the inclusion of the associated costs in the 2014 forecast salaries and benefits costs. The Board finds that the costs of this plan should not be reflected in the 2014 test year revenue requirement for purposes of calculating the 2014 revenue deficiency.

Hydro will be required to revise the proposed 2014 test year salaries and benefits costs to reflect:

1) **a disallowance of $2.0 million**
2) **a vacancy allowance of 52 full time equivalents**
3) **the removal of the costs associated with the short-term incentive program.**

iv) Other Operating Costs

Professional Services

The Amended Application proposed 2014 professional services costs of $10.6 million, which are $6.8 million higher than 2007 actual of $3.8 million and $2.2 million higher than proposed in the 2015 test year.[286] As discussed earlier the Board accepts that, given Hydro's aging assets and increasing capital program, it is reasonable to expect increases in consultants' costs. The Board notes that these costs will be reduced by disallowances associated with the prudence review.[287] In particular Hydro will not be allowed to recover certain professional services expenses related

[282] CA-NLH-104, Rev. 1, page 3
[283] Hydro's Submission, Rev. 1, page 31; Undertaking #145; Transcript, September 16, 2015, pages 176/18 to 177/24
[284] NP-NLH-310; Undertaking #145
[285] PUB-NLH-304, Rev. 1
[286] Amended Application, Vol. I, page 2.39
[287] Order No. P.U. 13(2016)

to the Board's investigation into the January 2014 outages, which results in an estimated $2.9 million deduction in the 2014 revenue requirement.[288] The Board accepts that the proposed consultants' costs as adjusted are reasonable.

The 2014 professional services costs also include general rate application and Board related costs in the amount of $3.5 million, which is $2.9 million higher than 2007, associated with an increased volume of applications and regulatory activity.[289] Similar to the Board's findings in relation to these costs in 2015 the Board believes that the proposed expenses do not reasonably reflect historical spending levels or a cost effective and responsible approach to regulatory matters. The Board will allow $2.5 million in general rate application and Board related costs for 2014.

Travel

The Amended Application proposed 2014 travel costs of $3.6 million, the same amount proposed for 2015. The Board disallowed $0.5 million of the $3.6 million in 2015 forecast travel costs. The actual travel expenses were $3.2 million in 2014, $3.3 million in 2013, and over the period 2007 to 2012 actual travel costs were less than $3.0 million per year. The Board notes that the travel costs can be impacted by the level of FTEs and the actual level of FTEs in 2014 was 833 compared to the 2014 test year of 861, and was much higher than the actual level in both 2012 and 2013. The Board believes that the proposed 2014 travel costs should be reduced by $0.5 million.

Hydro will be required to revise the proposed 2014 test year other operating costs to reflect:

1) general rate application and Board related costs of $2.5 million

2) a reduction of $0.5 million for travel costs.

v) Fuel Costs

The Amended Application sets out 2014 test year fuel costs of $191.8 million, which are $43.4 million higher than the 2007 test year costs of $148.4 million.[290]

The 2014 test year fuel costs include the forecast cost of No. 6 fuel burned at the Holyrood Thermal Generating Station in the amount of $255.8 million. These fuel costs are offset by $81.9 million in relation to the forecast operation of the RSP.[291] The test year forecast cost of No. 6 fuel takes into account a number of factors including: the forecast price of fuel, the estimated energy to be generated using thermal production at Holyrood, and the forecast fuel conversion factor at Holyrood.[292] The forecast average price of No. 6 fuel in the 2014 test year was $109.59/bbl compared to the 2007 test year average price of $55.47/bbl.[293] The forecast fuel conversion factor was 588 kWh/bbl compared to the 2007 test year conversion factor of 630

[288] Grant Thornton's Prudence Compliance Report, page 5
[289] Amended Application, Vol. I, page 2.39
[290] Ibid., pages 3.11 and 3.12
[291] Ibid., page 3.12. Also offset is the $10.0 million in additional supply costs deferred in Order No. P.U. 56 (2014).
[292] Grant Thornton's Amended Application Report, page 48
[293] Amended Application, Vol. I, page 3.12

kWh/bbl. In addition the number of barrels forecast to be used at Holyrood in 2014 was lower than the 2007 test year.[294]

Actual No. 6 fuel costs for 2014 were $244.3 million, $11.5 million lower than forecast, and the actual RSP adjustment was $76.2 million, $5.7 million lower than forecast.[295] The actual generation from Holyrood was 57.7 GWh lower than forecast in the 2014 test year and the actual average consumption price was $108.54/bbl, which is lower than the average price forecast in the 2014 test year of $109.59/bbl.[296] The actual Holyrood conversion factor in 2014 was 584 kWh/bbl compared to the forecast of 588 kWh/bbl.[297]

In normal circumstances, rates are established in a general rate application based on forecast fuel costs using the forecast price of No. 6 fuel, the forecast conversion rate and forecast thermal production. In subsequent years the RSP adjustment reflects the actual average price of No. 6 fuel in the year as well as the actual thermal energy generated in the year. The actual operation of the RSP in 2014 was different than forecast for the test year as it reflected the actual price of No. 6 fuel, the actual thermal production at Holyrood in 2014 and the 2007 test year conversion factor of 630 kWh/bbl. In accordance with the normal operation of the RSP, an adjustment was approved for Newfoundland Power effective July 1, 2015.[298] The operation of the Industrial Customer's RSP in 2014 was affected by the direction of Government.[299] Pursuant to Board Orders the Industrial Customer RSP balance at December 31, 2014 was fully offset by the RSP Surplus.[300] In this case, given that the RSP has already operated for 2014 based on a 2007 test year and will not be restated, the pass through of the actual costs as compared to the 2014 test year will not occur.

No adjustment was proposed to reflect actual fuel costs or the actual operation of the RSP for 2014. The Board believes that, for the purpose of the calculation of the 2014 revenue deficiency, the forecast No. 6 fuel costs should be adjusted to reflect the actual operation of the RSP in 2014 and the pass through of No. 6 fuel costs. The No. 6 fuel costs included in the 2014 test year for purposes of calculating the 2014 revenue deficiency should be adjusted to reflect the actual 2014 No. 6 fuel price, the actual thermal energy generated at Holyrood and the forecast Holyrood conversion factor of 588 kWh/bbl. This forecast is in the range of the actual 2014 and 2013 conversion rates of 584 kWh/bbl and 594 kWh/bbl respectively and the Board accepts that it should be used for purposes of calculating the 2014 test year fuel costs.[301]

In light of the complexities of the operation of the RSP the Board acknowledges that there may be other considerations arising with this approach that may need to be addressed. The Board therefore will direct Hydro to revise its proposals consistent with the Board's findings, addressing other consequential changes which may need to be considered in the circumstances.

[294] Ibid, page 3.12
[295] Grant Thornton's Amended Application Review Report, page 47
[296] Ibid., page 48
[297] Ibid., pages 48 and 124
[298] Order Nos. P.U. 14(2015), P.U. 17(2015) and P.U. 21(2015)
[299] OC 2013-090 and OC 2013-091
[300] Order Nos. P.U. 26(2013), P.U. 29(2013), P.U. 40(2013), P.U. 14(2015), P.U. 17(2015) and P.U. 21(2015)
[301] Grant Thornton's Amended Application Review Report, page 49 and 124

Hydro will be required to file revised proposals to reflect the Board's findings in relation to the use of actual No. 6 fuel costs in the 2014 test year revenue requirement for the purpose of calculating the 2014 revenue deficiency.

The Board is satisfied that the remaining 2014 test year fuel costs are reasonable.

vi) Debt Guarantee Fee

The Amended Application proposed to include $3.7 million in the 2014 test year revenue requirement to reflect the debt guarantee fee paid by Hydro to Government, pursuant to a direction from the Lieutenant Governor in Council.[302] As discussed in Section 11.7.1 the Board has determined for purposes of the 2015 revenue requirement that the debt guarantee fee should reflect a more equitable methodology to apportion the benefit of the guarantee between Hydro and Government. The Board found that it is reasonable to include an amount for the guarantee fee which reflects a 50/50 sharing of the benefits of the guarantee. The Board believes that the same approach should be taken in the relation to the debt guarantee fee included in the 2014 test year revenue requirement, and will require Hydro to revise the 2014 revenue requirement to reflect an amount for the debt guarantee fee calculated on this basis.

Hydro will be required to revise the amount of the 2014 test year debt guarantee fee to reflect a 50/50 apportionment of the calculated cost savings.

vii) Conclusion 2014 Revenue Deficiency

The Board concludes that the proposed 2014 revenue requirement for purposes of calculating the 2014 revenue deficiency should be adjusted to reflect the findings of the Board in this Decision and Order, including the reductions and disallowances in relation to intercompany charges, salaries and benefits, other operating costs, and the findings of the Board in the prudence review. The Board notes that no issues were raised in relation to the 2014 test year load forecast and it is accepted by the Board.

Hydro will be required to file a revised 2014 test year revenue requirement for the purpose of determining the 2014 revenue deficiency to reflect the findings of the Board in this Decision and Order.

13.2 Deferral and Recovery of 2014 Additional Supply Costs

In Order No. P.U. 56(2014) the Board approved the deferral of $9,650,000 associated with additional capacity related costs incurred by Hydro in the first quarter of 2014. In the Amended Application Hydro proposed these costs be deferred and recovered over a five-year period beginning in 2015. The proposed five-year amortization would increase the fuel cost by $2 million over each of the five years.[303]

These expenditures were addressed as part of the Board's prudence review. In Order No. P.U. 13(2016) the Board disallowed the capital and/or operating expenses associated with additional supply costs associated with the 2014 failure of the Holyrood breaker B1L17 and the resulting

[302] Amended Application, Vol. I, page 3.32
[303] Amended Application, Vol. I, page 3.12, Table 3.3

outage of Holyrood Unit 1 associated with imprudence. The amount of the fuel cost to be recovered is reduced by approximately $1.4 million as a result of the Board's prudence findings.[304] The additional supply costs reflected in the deferral account should be adjusted to reflect this update and the amount associated with imprudence.

Hydro proposed to defer these costs over a five-year period beginning in 2015, with approximately $2 million included in the 2015 test year. The Board acknowledges that an extraordinary cost outside of a test year is often the subject of an application to defer and recover the costs over a five to seven-year period. However the circumstances of this case are unusual, in that the costs were incurred in a test year which is the subject of an ongoing general rate application. In addition another deferral has been approved in relation to the 2014 revenue deficiency in the amount of $45.9 million. Hydro has proposed to recover this deferral through an offset of the credit balance in the RSP, with the portion not covered by the RSP balance recovered in a rate rider. In the Board's view the additional supply costs relate to the provision of service in 2014 and, provide no long-term benefit beyond 2014. The Board believes that Hydro should address whether, in the circumstances, the recovery of the additional supply costs should be considered together with the 2014 revenue deficiency. In its revised proposals Hydro should address how the 2014 additional supply costs should be recovered in the context of the recovery of the 2014 revenue deficiency and the findings of the Board in this Decision and Order.

Hydro will be required to file a proposal for the recovery of the 2014 additional supply costs not associated with imprudence as part of its revised proposals arising from this Decision and Order.

13.3 2014 Rate Base and Rate of Return on Rate Base for 2014 Revenue Deficiency

Hydro requested approval of an adjusted forecast average rate base for 2014 of $1,618,867,000.[305] Hydro's calculation of the forecast 2014 rate base includes the new Holyrood combustion turbine and other capital assets that were originally scheduled to go into service in 2014 but actually went into service in 2015. Hydro proposed that the 2014 year-ending balance and the 2014 average rate base be adjusted accordingly for the purposes of calculating the 2014 revenue deficiency.[306] Hydro estimated this would reduce the 2014 average rate base by $73.7 million and the 2014 revenue requirement by $2.1 million, with a corresponding reduction in return on rate base.[307]

The Board agrees with Hydro's proposed adjustment to the 2014 average rate base to reflect the actual plant additions, particularly in light of the impact of these delayed in-service additions on the average rate base and revenue requirement for 2014. The Board also notes that the 2014 rate base will have to be adjusted to reflect the prudence review findings and the impacts of the Board's finding in this Decision and Order

As discussed in Section 9.2, the Amended Application proposed, pursuant to OC2009-063, approval of a return on equity of 8.80% for 2014 for the purpose of calculating Hydro's return on rate base. Consistent with the Order in Council the target return on equity proposed by Hydro is based on the return approved for Newfoundland Power in Order No. P.U. 13(2013), issued on

[304] Grant Thornton's Prudence Compliance Report, page 13
[305] Hydro's Submission, Rev. 1, page 111
[306] Undertaking #148
[307] PUB-NLH-487, Rev. 1; Undertaking #150

April 17, 2013. Several parties argued that the Order in Council does not apply for 2014 as 2014 is not a year in which rates are being set.

The Order in Council states that it commences with Hydro' first general rate application after January 1, 2009. It does not state that it commences when Hydro applies for new rates. The Board finds that Hydro's July 2013 application was such an application, proposing new rates for 2014 based on a 2013 test year. The Amended Application proposed a 2014 test year revenue requirement for the purpose of a 2014 revenue deficiency and new rates for 2015 based on a 2015 test year revenue requirement. As discussed in Section 13.1.1 the Board will allow recovery with respect to the 2014 revenue deficiency. As a part of the determination of the 2014 revenue requirement and deficiency the target return on equity to be used for purposes of calculating the return on rate base must be addressed. The Order in Council states that, in calculating Hydro's return on rate base, the return on equity established for Newfoundland Power is to be used. The Board believes that a purposeful reading of the language of the Order in Council requires that the same target return on equity established for Newfoundland Power be used in calculating the 2014 return on rate base for Hydro. The Board will accept a target return on equity of 8.8% for purposes of calculating the rate of return on rate base to be included in Hydro's 2014 test year revenue requirement for purposes of calculating the 2014 revenue deficiency.[308]

Hydro's proposed reduction to the 2014 test year revenue requirement for the purpose of determining the 2014 revenue deficiency to reflect the impact of the delayed in-service of 2014 capital projects is accepted.

Hydro will be required to file a revised 2014 test year forecast average rate base and rate of return on rate base for the purpose of calculating the 2014 revenue deficiency reflecting the delayed in-service of 2014 capital additions as well as the findings of the Board in this Decision and Order, including a target return on equity of 8.8%.

13.4 2015 Revenue Deficiency

The Amended Application proposed the implementation of rates on an interim basis effective on January 1, 2015 for Industrial customers and February 1, 2015 for Newfoundland Power and retail customers, with the revenue shortfall associated with the delayed implementation of rates to be recovered through a rate rider.[309] Revised interim rates were approved effective July 1, 2015.[310] On December 22, 2015 a 2015 revenue deficiency of $30.2 million was approved with the issue of recovery to be addressed later.

The proposed 2015 revenue deficiency is based on a 2015 test year revenue requirement of $662.5 million.[311] Hydro submitted that for purposes of determining the 2015 revenue deficiency an adjusted 2015 test year revenue requirement of $579.6 million be approved.[312] This amount reflects reductions to the proposed 2015 test year revenue requirement of:

[308] Order No. P.U. 14(2013)
[309] Amended Application, Vol. I, pages 1.6 and 4.20
[310] Order No. P.U. 14(2015)
[311] Amended Application, Vol. I, page 3.10
[312] Hydro's Submission, Rev. 1, page 109

i) $75.9 million in relation to No. 6 fuel cost savings based on a test year No. 6 fuel cost of $64.41 per barrel;
ii) $5.1 million in relation to the impact of adjustments to reflect delayed in-service dates of 2014 capital projects in the 2015 rate base opening balance; and
iii) $1.9 million in relation to isolated supply costs savings.

Unlike the proposed 2014 revenue deficiency, the intervenors did not object to Hydro's recovery of a 2015 revenue deficiency in principle. Newfoundland Power stated:

> So, what do you do with 2015? Well, 2015 is a little bit different scenario in that it is a proper test year. It's filed as a test year. It's filed for the purposes of setting rates, for setting rates in a future period. And the fact that rates have not ultimately been set in 2015 is a result of regulatory lag, albeit the lag may partially due to the lateness in filing the Amended Application, but in any event, there's lag there. We had a lengthy hearing. And the Board has, in the past, allowed cost deferral recoveries when there's been a delay in rate implementation. Usually rates are implemented in the year or the recovery in the year, but in this particular case, rates won't come into effect until 2016. So, in this particular case, it was certainly open to the Board to create a deferral account, which it did, subject to the final determination of revenue requirement.[313]

The Consumer Advocate repeated the comments of Newfoundland Power to the effect that the Amended Application properly used a forward looking test year of 2015 and applied for 2015 rates on a prospective basis.[314]

Hydro submitted that the merits of the 2015 revenue deficiency are to be addressed at the conclusion of the hearing and the existence of the deferral gives the Board full power to do as its sees appropriate.[315]

Board Findings

The 2015 revenue requirement for purpose of setting rates has already been addressed by the Board but the proposed 2015 revenue deficiency must also be determined. The Board believes that it is appropriate in the circumstances to use the 2015 revenue requirement as the starting point for determining the 2015 revenue deficiency. The 2015 revenue requirement must be reviewed and adjusted where appropriate, to reflect certain issues which are unique to the calculation of the 2015 revenue deficiency.

The Board has reviewed the 2015 revenue requirement and in particular the Board's findings in relation to Hydro's operating costs as discussed in Section 11.3. While the Board acknowledges that Hydro cannot now take measures to reduce operating costs in 2015, as discussed in Section 13.1.2 these costs must nevertheless be shown to be reasonable. The Board has reviewed the reasonableness of the 2015 revenue requirement including the disallowances in relation to the salaries and benefits costs, professional services costs, travel costs and the debt guarantee fee. The Board is satisfied that these disallowances should be reflected in the 2015 revenue requirement for purposes of determining the 2015 revenue deficiency. In making this determination the Board has balanced the interests of the utility, bearing in mind that these

[313] Transcript, January 25, 2016, pages 61/14 to 62/10
[314] Transcript, January 25, 2016, page 91/2-12
[315] Ibid., page 9/5-14

expenses have already been incurred, and considered the interests of ratepayers who will be responsible for these costs.

The Board notes that Hydro proposed approval of an adjusted 2015 revenue requirement $579.6 million for purposes of determining the 2015 revenue deficiency to reflect two adjustments related to fuel costs and one adjustment related to rate base. The proposed adjustments related to the updated price of fuel were accepted by the Board to be reflected in the 2015 revenue requirement for the purpose of rate setting. The Board accepts that these updated fuel costs should also be reflected in the 2015 test year revenue requirement for the purpose of determining the 2015 revenue deficiency.

Hydro also proposed an adjustment of $5.1 million to the 2015 revenue requirement for the purpose of determining the 2015 revenue deficiency to reflect the impact of delayed in-service dates of 2014 capital projects. The proposed forecast average rate base for the 2015 test year for the purpose of determining the 2015 revenue deficiency was reduced by $73.7 million to reflect the impact of adjustments for the delayed in-service dates of 2014 capital projects until 2015.[316] Hydro explained that the 2014 additions to plant in-service were less than expected reflecting the delay in the in-service date of the Holyrood combustion turbine and the carry-over of other capital projects.[317]

As already discussed Hydro will be required to reflect the impact of the operating and capital/rate base prudence disallowances on the 2015 revenue requirement for purposes of determining the 2015 revenue deficiency. The Board concludes that the 2015 test year revenue requirement for the purpose of calculating the 2015 revenue deficiency should be revised to reflect the findings of the Board in this Decision and Order, including the disallowances in relation to the prudence review.

As a result of the Board's findings in this Decision and Order, including acceptance of Hydro's prudence compliance filing, Hydro will be required to file a revised calculation of the 2015 test year forecast average rate base for the purpose of calculating the 2015 revenue deficiency as well as a revised rate of return on rate base.

The proposed 2015 return on rate base included in the revenue requirement reflects a target return on equity of 8.8%.[318] As discussed in Section 9.2 the Board found that a target return on equity of 8.8% should be used for 2015. This finding was based on the direction of Government and the order of the Board setting out a target return on equity for Newfoundland Power.[319] In 2015 Newfoundland Power's target return on equity was 8.8%.[320] The Board accepts a target return on equity of 8.8% for use in the calculation of the rate of return on rate base to be included in the 2015 revenue requirement for purposes of the 2015 revenue deficiency. This approach maintains the same target return on equity for both Hydro and Newfoundland Power for 2015.

Hydro's proposed reduction to the 2015 test year revenue requirement for the purpose of determining the 2015 revenue deficiency to reflect the impact of the delayed in-service of 2014 capital projects is accepted.

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[316] Hydro's Submission, Rev. 1, page 111
[317] Ibid., pages 22-23
[318] Hydro's Submissions, Rev. 1, page 109
[319] OC2009-063
[320] Order No. P.U. 13(2013)

Hydro will be required to file a revised 2015 test year revenue requirement for the purpose of determining the 2015 revenue deficiency to reflect the findings of the Board in this Decision and Order.

Hydro will be required to file a revised 2015 test year forecast average rate base and rate of return on rate base for the purpose of calculating the 2015 revenue deficiency, reflecting the delayed in-service of 2014 capital additions as well as the findings of the Board in this Decision and Order, including a target return on equity of 8.8%.

14.0 Rural Deficit

14.1 Magnitude/Management of Rural Deficit

In 2015 the rural deficit for all of Hydro's rural Interconnected and Isolated systems[321] was approximately $64.1 million. The revenue generated from rates in these systems does not fully offset the cost of providing service to these customers. The amount of the rural deficit attributable to each system for the years 2007 to 2015 is shown below:[322]

Rural Deficit by Rural Deficit Area ($000s)

	2007	2008	2009	2010	2011	2012	2013	2014 Test Year	2015 Test Year
Island Interconnected	15,953	16,106	13,086	15,569	19,496	17,345	16,582	26,065	25,655
Island Isolated	6,472	7,035	7,306	6,791	7,640	7,222	7,233	7,976	8,312
Labrador Isolated	18,323	22,379	17,801	19,252	23,067	23,179	23,867	27,291	27,453
L'Anse au Loup	1,986	2,987	1,958	1,967	3,140	3,037	3,196	4,027	3,563
CFB Revenue Credit	(2,860)	(4,051)	(979)	(3,418)	(3,972)	(1,524)	(327)	(743)	(913)
Total	**39,874**	**44,456**	**39,172**	**40,161**	**49,371**	**49,259**	**50,551**	**64,616**	**64,070**

The contribution of each system to recovery of the rural deficit for the 2015 test year is shown below:[323]

Rate Class	**Proportion of Rural Deficit**
Island Interconnected	0.67
Island Isolated	0.16
Labrador Isolated	0.24
L'Anse Au Loup	0.45

Pursuant to Government direction the cost of the rural deficit is paid by Newfoundland Power customers and Hydro's Labrador Interconnected customers. Hydro stated that the cost of the

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[321] Hydro serves 23,700 rural interconnected customers located in approximately 180 communities on the South Coast, Northeast Coast and along the Great Northern Peninsula. Hydro serves approximately 4,400 customers, including L'Anse Au Loup, in over 40 communities throughout coastal Newfoundland and Labrador, using 21 isolated diesel generating and distribution systems. Fifteen of these systems are located in Labrador and six are on the island of Newfoundland.

[322] CA-NLH-099, Rev. 1. Government departments in rural deficit areas are charged rates to recover the full cost of service and do not contribute to the rural deficit amount.

[323] Amended Application, Vol. II, Exhibit 13, Schedule 1.2, pages 1-6

rural deficit adds 13% to the bills of these customers.[324, 325] The Consumer Advocate and the Nunatsiavut Government raised concerns about the increasing level of the deficit, and Hydro's efforts in the areas of conservation and demand management (CDM).

The Consumer Advocate noted that, despite the increasing rural deficit and the fact that most isolated customers do not qualify for the provincial programs, there was no targeting of isolated systems for energy efficiency initiatives until 2012, three years after the provincial "takeCharge" program was implemented.[326] The Consumer Advocate acknowledged that a directed effort has now been taken to target isolated customers in energy efficiency programming and that, since 2012, Hydro has achieved 87% of its target for energy savings. However, the Consumer Advocate expressed concern as to whether Hydro is setting targets that are ambitious enough.[327]

The Consumer Advocate also noted that the performance contracts for both Dawn Dalley, Vice President, Corporate Relations and Customer Service and Rob Henderson, Vice-President, Hydro, contain no explicit targets for meeting CDM outcomes.[328, 329] He suggested the spending levels for CDM initiatives in rural systems were extremely modest and connected this to the lack of incentives in the performance contracts of key personnel who have influence over CDM delivery and outcomes.

The Nunatsiavut Government provided comprehensive and detailed evidence related to managing costs on rural systems. Darryl Shiwak, Nunatsiavut's Minister of Lands and Natural Resources, testified about current and future energy needs and the socioeconomic conditions in Nunatsiavut communities, particularly energy affordability. Chris Henderson of Lumos Energy, Nunatsiavut's clean energy advisor, provided direct evidence about Nunatsiavut's energy needs and resources and opportunities to reduce energy consumption and energy costs. Mr. Henderson noted the modest energy efficiency efforts by Hydro to date and suggested a whole systems approach to energy conservation in Nunatsiavut:

> So there's opportunity both for conservation with holistic approach community-wise and building-wise, building on takeCharge as a start and go further. Two, it's an opportunity to look at renewable energy because renewable energy technologies are becoming more effective and more cost effective. Thirdly, it's an opportunity to look at innovation in systems because there are supports, including a partnership with the Federal Government. Those are opportunities we believe should be part of the system for Nunatsiavut that do have an impact on rate payers over the medium to long term and also home owners in the region and businesses.[330]

According to the Nunatsiavut Government Hydro has not taken active steps to pursue cost reduction strategies through more aggressive conservation measures and alternative energy sources. It was noted that there are two energy conservation initiatives offered: (i) the takeCHARGE initiative, sponsored by Hydro and Newfoundland Power and available to all eligible Hydro and Newfoundland Power customers throughout the province, and (ii) the Isolated Systems Energy Efficiency Program, available to isolated communities on the diesel systems.

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[324] Based on Hydro's proposed allocation methodology which has been accepted by the Board.
[325] Amended Application, Vol. II, Exhibit 13, Schedule 1.2, pages 2 and 6
[326] take Charge programs are geared to customers with electric heat.
[327] Undertaking #187; Consumer Advocate's Submission, page 47
[328] Undertaking #189
[329] Undertaking #2
[330] Transcript, November 30, 2015, page 43/20 to 44/9

The Nunatsiavut Government pointed out that the Isolated Systems Energy Efficiency Program is more accessible to the residents of Nunatsiavut. However, the program does not address areas of homes where heat loss is greatest such as attics, basements and windows. It was also noted that a major setback with the program was the amount of mold and mildew found when implementing some of the water heater and pipe wrapping initiatives as well as ventilation problems identified with some homes. This resulted in parts of the program not being implemented.[331]

The Nunatsiavut Government stated that it is dedicated to exploring alternative energy sources as a means of lowering the cost of supplying energy to Nunatsiavut. It has committed its efforts to developing an Energy Security Plan, which includes several high priority sustainable demonstration energy projects for 2015-16 related to bio-heating and integration of wind and solar energy with diesel systems. Longer-term projects include demand side management and the establishment of the Nunatsiavut Sustainable Energy Infrastructure Fund (NSEIF).[332] The Nunatsiavut Government requested the Board to direct Hydro to:

- study and preferably implement an energy conservation plan based on the whole system approach;
- study and file a report with respect to the new diesel generation technology; and
- file, no later than 2016, a report outlining its five-year strategic plan with respect to alternative energy sources in Nunatsiavut, including a description, timing and cost of the plan to be implemented by Hydro.

Hydro stated that the increase in the rural deficit since 2007 has resulted primarily from fuel costs rather than from increases in controllable costs, which have remained relatively consistent from year to year, despite increasing wages and general inflationary pressure on material supply costs and other costs. Hydro noted that, when the impact of fuel costs and the equity return established by Government directive is removed, the rural deficit has been relatively consistent year over year. Hydro also noted that, while the absolute dollar amount of the rural deficit has grown since 2007, evidence provided by Newfoundland Power makes it clear that the rural deficit allocated to Newfoundland Power was a greater percentage of its total revenue requirement in 2002 than in 2007 or 2015.[333, 334]

Hydro stated that it continues its efforts to reduce the rural deficit by promoting energy efficiency in isolated communities. The initiatives taken by Hydro to control the overall amount of the rural deficit are summarized in its Rural Deficit Annual Report of March 2015.[335] Hydro also stated that, given its mandate to provide least-cost, safe and reliable power to all its customers, it strives to manage the cost of serving rural customers with a view to providing reliable service while minimizing the amount of the rural deficit. Hydro submitted that the reduction in the rural deficit is not quantifiable for many of the initiatives that have been

[331] Nunatsiavut Government's Submission, pages 15-17
[332] Nunatsiavut Government's Submission, pages 23-24
[333] Hydro's Submission, Rev. 1, page 94
[334] In 2002 Newfoundland Power's allocation of the rural deficit as a percentage of its total revenue requirement was slightly more than 15.5%, while in 2007 it was approximately 11.5% under the proposed methodology it will be approximately 11.8% of Newfoundland Power's total 2015 revenue requirement.
[335] Information #8

implemented by Hydro. For initiatives that can be quantified, Hydro estimated the 2015 test year total savings to exceed $2 million.[336]

Hydro noted that Mr. Henderson's report has generated a Nunatsiavut energy security plan, which will be made available to Government, the Board, and interested stakeholders. Hydro stated that the Board must give consideration to its regulatory framework when considering the Nunatsiavut Government's submissions.[337]

Board Findings

Cost of service regulation is founded on the principle of fairness and is intended to ensure that customers pay the costs associated with the service they receive. In Order No. P.U. 7(2002-2003), the first general rate application order for Hydro under full regulation, the Board acknowledged that cross-subsidization among ratepayers is common but stated:

> The Board acknowledges the burden the rural deficit places on subsidizing ratepayers and is concerned with the potential for increasing levels of subsidization. The Board notes that rising costs, and hence higher subsidies, may place an even greater burden on ratepayers who have no ability to control these costs but are responsible for paying them.[338]

In the context of the increasing level of the rural deficit, particularly in recent years, the issue of the level of cross-subsidization becomes more relevant. Since the costs associated with the rural deficit are transferred to customers of Newfoundland Power and those on the Labrador Interconnected system, these customers pay higher rates than their cost of service, without the ability to respond to the higher price signal as they have no ability to control the costs associated with the rural deficit. As the level of the rural deficit increases the amount of subsidy required also increases.

In terms of options to address the increasing magnitude of the subsidy the Board notes its statutory obligations to implement the power policy of the Province as set out in the *EPCA* and also its responsibility to ensure that rates to be charged are reasonable and not unjustly discriminatory. The Board's comments in Order No. P.U. 7(2002-2003) remain relevant:

> Depending on the level of the subsidy paid by one customer to support equitable rates for another customer, rates may be judged unreasonable and discriminatory to the subsidizing customer. The alternative, commensurate with reducing this subsidy, would be to change rate design to shift additional costs to rural customers. This reallocation, it could be argued, may not provide reasonable or non-discriminatory rates to rural customers. Under these circumstances, the only effective means of implementing the provincial power policy is to transfer some or all of the rural deficit to NLH or its shareholder, Government.[339]

Under the existing direction from Government the rural deficit is required to be allocated between Newfoundland Power and the Labrador Interconnected system. In this circumstance the Board's responsibility must extend to ensuring that all reasonable efforts are being taken by Hydro and its rural customers to minimize costs on the rural systems so that the subsidizing customers are paying the lowest possible costs for the rural deficit. The Board acknowledges the

[336] Hydro's Submission, Rev. 1, page 101
[337] Hydro's Submission, Rev. 1, page 102
[338] Order No. P.U. 7(2002-2003), page 126
[339] Order No. P.U. 7(2002-2003), page 126

CDM and energy efficiency efforts undertaken by Hydro to control and/or reduce these costs in the past.

While the Board accepts that there may be additional opportunities for energy savings for customers on its rural systems the costs associated with any new initiative will be recovered from all customers, including those subsidizing the rural deficit. This requires that evaluation of future projects be considered in the context of least-cost principles and fairness to all customers. The Board is satisfied that Hydro's approach to CDM and energy efficiency on its rural systems is appropriate and aligns with utility and customer interests. The Board also acknowledges the work and efforts of the Nunatsiavut Government in developing an Energy Security Plan. The Board looks forward to receiving and reviewing a copy of the plan when it is made available. The Board encourages Hydro to work co-operatively with the Nunatsiavut Government and the parties in relation to least-cost options that may be identified for lowering the cost of supplying energy to Nunatsiavut.

14.2 Identification of the Rural Subsidy on Customer Bills

In pre-filed evidence filed on behalf of the Towns of Labrador Dr. James Feehan expressed the opinion that most customers are likely unaware that they are compelled to pay for the rural deficit. He stated that there should be separate explicit entries on their electricity bills so customers can see what they are compelled to pay. Dr. Feehan submitted that this practice would inform future public policy debates about the allocation of the rural deficit.[340]

The Consumer Advocate submitted that all customers should be informed about the existence and the amount of the subsidy on their bills. The Consumer Advocate noted that rebates on the provincial portion of the Harmonized Sales Tax were shown on customers' bills throughout the province and that subsidy information in relation to the "Lab Coast Electricity Rebate" is included on customer bills. He stated that the fact that the rural deficit is being paid by other ratepayers instead of Government should have no bearing upon its disclosure on bills.[341]

Hydro recommended that the Board proceed cautiously in considering the addition of a line item on customer bills demonstrating the impact of the rural deficit. Hydro stated that a decision to communicate information about which customers pay for the rural deficit and which customers benefit from it could result in an approach to customer communications that is selective, unpopular and, potentially, provocative and even misleading. According to Hydro some element of cross-subsidization is inherent in all rates simply because it is not practicable to attempt to isolate the precise costs of serving each individual customer. Hydro stated that, if a cost of service study was completed for Newfoundland Power's more rural regions, the result would be a fairly large rural subsidy being received by rural customers on Newfoundland Power's own system, representing cross-subsidization of Newfoundland Power's rural customers.[342]

Hydro noted that a proposal in 1996 to introduce a rural surcharge on the bills of Newfoundland Power customers was opposed by all intervenors, received considerable attention in the media, and was unpopular with customers. Hydro referred to the testimony in this proceeding of Kevin Fagan, in which he described his experience from the 1995 Rural Rate Inquiry. In that inquiry

[340] Dr. James Feehan, Pre-filed Evidence, page 11
[341] Consumer Advocate's Submission, page 55
[342] Hydro's Submission, Rev. 1, page 96

customers in some of Hydro's rural areas were offended by the notion that, although their resources have been used to support the rest of the Province, there was perceived to be a need to highlight that their electricity rates are subsidized. Hydro also stated that the information may potentially be confusing to customers and could have the potential to pit neighbouring communities against one another. Hydro submitted that, if the Board decides that information should be communicated about the customers who pay the rural deficit and the customers who benefit from it, consideration should be given to framing a message that conveys a perception of fairness to all parties. Research with focus groups would be advisable to ensure no unforeseen consequences of this action.[343]

Board Findings

The Board notes that the suggestion to include information on customer's bills relating to the rural deficit was presented by the Towns of Labrador. The Consumer Advocate supported the proposal. Hydro identified concerns with the proposal and stated more work would be advisable before the information is communicated to customers.

The Board acknowledges the position of the Towns of Labrador that customers are informed of the breakdown of the amounts on their electricity bills and that, to be consistent, customers should also be informed of the amount they pay towards the rural deficit. However, the Board also acknowledges and agrees that the proposal has a number of implications that should be carefully considered before a decision on whether to accept the proposal is made. In particular the proposal could potentially impact Newfoundland Power, since it is their customers who pay the significant share of the rural deficit and the billings to those customers would have to be changed. In addition, there may be other options available to provide information on the rural deficit to customers, both those who receive the subsidy and those who pay it.

The Board believes that more information is required before a decision can be made on whether to direct Hydro and Newfoundland Power to reflect information in relation to the rural subsidy on customer billings. It would be helpful to have information from Hydro on: practices in other jurisdictions; other options to address transparency concerns; what, if any, information customers would like to have on their bills in this circumstance; and any other concerns or potential issues that may arise. Input from Newfoundland Power would also be helpful in this regard. The Board will therefore direct Hydro to file a report on the identification of the rural subsidy on customers' bills with its next general rate application.

Hydro will be required to provide a report with its next general rate application in relation to the identification of the rural subsidy on customers' bills, addressing: i) practices in other jurisdictions, ii) other options to address transparency concerns, iii) what, if any, information customers would like to have on their bills in this circumstance, and iv) any other concerns or potential issues and options to address these.

14.3 Consumer Advocate's Proposal to Use Hydro's Return to Offset the Rural Deficit

The Consumer Advocate stated that his preferred method for payment of the rural deficit would be for the Board to direct a portion of Hydro's return toward payment of the rural subsidy. He

[343] Hydro's Submission, Rev. 1, pages 96- 97

submitted that the current level of the operating deficit on rural systems "has become far out of hand, and now presents the Board with a dilemma in that it is being forced to approve rates that clearly cannot be judged to be reasonable and non-discriminatory."[344] He acknowledged that Government's direction with respect to the target return on equity might limit the Board's jurisdiction, and also that the Board has not been inclined in the past to adjust Hydro's return on equity for this purpose.[345] He requested that the Board exercise its power pursuant to section 83 of the *Act* to recommend that the legislature amend the *EPCA* so that Newfoundland Power customers and Labrador Interconnected customers are not required to subsidize the cost of power provided to rural customers in the Province. He also requested that the Board state a case to the Court of Appeal for an opinion as to whether or not the Board has the necessary jurisdiction, for rate setting purposes, to direct a portion of the prescribed return on equity towards the rural deficit.[346]

Innu Nation supported the Consumer Advocate's proposal to allocate some of the rural deficit burden to Hydro's return on equity, insofar as this would be in the Board's jurisdiction.[347]

Hydro submitted that the Consumer Advocate's proposal cannot be reconciled with Government directives and the intentions implicit in them, stating:

> First, it would restrict Hydro's recovery of the Rural Deficit from NP and from its Labrador Interconnected Customers (which is contrary to paragraph (v) of OC2003-347). Second, it would also amount to Government contributing toward the Rural Deficit since the funds would come from reduced earnings to which Government is entitled as Hydro's shareholder.[348]

Hydro submitted:

> The policy of Government inherent in these directives to the Board is clear and unambiguous. Hydro is to collect its costs, including those amounts identified as the rural deficit and a return on the associated rural assets, from its customers. An order requiring Hydro to reduce its return on equity to alleviate the rural deficit impacts would be clearly contrary to these directives. There is no serious question of law or jurisdiction to be stated to the Court of Appeal here. The matter is answered in full by referring to these directives. A reduction of Hydro's return as a means of reducing the rural deficit allocation to Hydro's customers is clearly contrary to the directives to the Board set out in OC2003-347 and OC2009-063.[349]

Board Findings

The Board acknowledges, as it has in the past, that the funding of the rural deficit imposes a cost on certain customers that is not part of the cost of the provision of service to those customers. As noted above the level of this subsidy to be recovered has increased significantly in recent years such that it now comprises almost 10% of the revenue proposed to be recovered in rates in the

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[344] Consumer Advocate's Submission, page 54
[345] In Order No. P.U. 7(2002-2003) at pages 126-127 the Board addressed the issue of the reasonableness and perceived discriminatory nature of the rates arising from Government policy respecting the rural rate subsidy.
[346] Consumer Advocate's Submission, page 55
[347] Innu Nation's Submission, page 23
[348] Hydro's Submission, Rev. 1, page 17
[349] Hydro's Rebuttal, page 22

Amended Application. However, this continues to be a matter of social policy as directed by Government and the Board's jurisdiction is limited in this regard. The ability of Government to issue directives to the Board is clearly set out in legislation and the Board must implement these directives as set out. Government direction requires that the cost of the rural deficit be paid by Newfoundland Power and Labrador Interconnected customers and further that Hydro's allowed return on rate base be calculated based on the same target return on equity allowed for Newfoundland Power.

15.0 Cost of Service

The costs incurred by Hydro associated with the provision of electrical service are recovered from its customers based on a cost of service methodology. The cost of service methodology establishes how test year costs are allocated to each customer class to be recovered in rates. The existing methodology was approved by the Board in 1993 following a generic cost of service hearing.

In the Amended Application Hydro used the existing cost of service methodology for cost allocation. Cost of service approaches were proposed for two new cost items (wind purchases and capacity agreements) in addition to changes to the rural deficit allocation and the Holyrood capacity factor which, according to Hydro, are required due to changing circumstances.

15.1 Settled Issues

Several cost of service issues identified by the intervenors in their respective issues lists were addressed during the settlement negotiations. The Settlement Agreements set out that Hydro's cost of service study filed in this proceeding is in general compliance with Board Orders regarding the use of embedded cost of service studies as a guide in determining the revenue requirement to be applied to each customer class. The Settlement Agreements also set out an agreement on the majority of the cost of service methodologies in Exhibit 13 (2015 Test Year Cost of Service) with respect to functionalization, classification and allocation, specifically:

i) the treatment of the curtailable load of Newfoundland Power
ii) the classification of wind energy purchases as 100% energy related
iii) the classification of all Holyrood fuel costs to energy
iv) Newfoundland Power's load forecast
v) the specific assignment of the frequency converter to Corner Brook Pulp and Paper (CBPP) Limited
vi) the capacity factor for the Holyrood Thermal Generating Station be calculated based on a historical five-year period from 2010 to 2014 inclusive
vii) a generation credit be included in the Utility Rate for Newfoundland Power of 119,329 kW applied in the same manner as in the last approved 2007 cost of service study to reduce Newfoundland Power's peak demand for cost allocation purposes
viii) the costs associated with Hydro's capacity assistance agreements with Vale and Corner Brook Pulp and Paper Limited be treated as demand-related.

In Order No. P.U. 47(2014) the Board approved an application from Hydro for a revised interim Utility rate to Newfoundland Power to reflect the inclusion of a curtailable load credit in the calculation of billing demand for Newfoundland Power for the 2014-2015 winter season. This interim rate was continued effective December 1, 2015 in Order No. P.U. 9(2016) on the basis that it conformed to the Settlement Agreements.

The Settlement Agreements also provided for a number of studies and reports related to cost of service to be filed by Hydro with the Board prior to the implementation of rates reflecting the costs of the Labrador-Island Interconnection. Hydro agreed to provide:

i) a marginal cost study no later than December 31, 2015
ii) a cost of service methodology report no later than March 31, 2016
iii) a report on the RSP and supply cost recovery mechanism no later than June 15, 2016

The Settlement Agreements also recommended that a generic cost of service hearing should be held following the filing of the reports set out above, and set out the agreed scope of a cost of service methodology review to be completed in 2016:

> The Cost of Service Methodology Review to be completed in 2016 will include a review of: (i) all matters related to the functionalization, classification and allocation of transmission and generation assets and power purchases (including the determination whether assets are specifically assigned and the allocation of costs to specifically assigned assets) and (ii) the approach to CDM cost allocation and recovery.[350]

The generation credit agreement between Hydro and Corner Brook Pulp and Paper Limited, which was approved on a pilot basis in Order No. P.U. 4(2012), was also recommended to be continued on a pilot basis at this time, to be reviewed in the cost of service generic hearing.

The following cost of service methodology issues were identified as being outstanding and requiring adjudication by the Board:

i) the use of the 2015 load forecast for rate setting purposes
ii) the methodology for determining the test year operating and maintenance (O&M) costs to be recovered through specifically assigned charges to Industrial Customers
iii) the allocation methodology for the Rural Deficit.

In compliance with the terms of the Settlement Agreements, Hydro filed the required reports related to cost of service. These reports were circulated to the parties to the general rate application. The Cost of Service Methodology Review Report assumed that the supply costs from the Muskrat Falls project would be reflected in the 2019 costs for the full year. In June 2016 it was announced that the Muskrat Falls project is behind schedule and full commissioning is now not expected until 2020. On July 28, 2016 Hydro filed a letter to address the delay in the inclusion of Muskrat Falls project costs in the cost of service, and proposed to delay the planned cost of service methodology hearing until after the next general rate application to be filed by March 31, 2017. Hydro stated:

> It is anticipated that the delay in the MF project schedule will require Hydro to file an application in 2019 to provide the opportunity to recover the supply costs resulting from the commissioning of the MF project. Therefore Hydro believes that a cost of service methodology hearing can be held in early 2018 to provide an opportunity to reflect methodology changes in Hydro's 2019 filing to recover costs related to the MF project.

[350] Supplemental Settlement Agreement, page 3

Hydro committed to engaging with the parties in advance of filing the March 31, 2017 general rate application on the cost of service approach to be used in its application, particularly with respect to the outstanding issues related to the generation credit agreement between Hydro and Corner Brook Pulp and Paper, the methodology for assignment of specifically assigned assets and the allocation of associated costs to those assets, and the approach to CDM cost allocation and recovery. All parties suggested that it was reasonable to delay the cost of service methodology review in the circumstances, with some conditions. By letter to Hydro and the parties dated September 9, 2016 the Board advised:

> The Board acknowledges that there are cost of service issues that will need to be addressed as part of Hydro's next general rate application, including issues related to the methodology for calculating specifically assigned charges. The Board believes that these issues can be addressed in the usual course apart from the full cost of service methodology review which will be required prior to inclusion of Muskrat Falls project costs in Hydro's cost of service. In terms of the timing of the cost of service methodology review, the Board agrees it is premature to establish at [sic] plan at this time but to ensure that the review proceeds in an orderly fashion Hydro should advise as to its plans for the review when it files its next general rate application.

The issue of the use of the proposed 2015 load forecast for rate setting was discussed in Section 10.2. The Board sets out the evidence and its findings on the issues of specifically assigned O&M costs and the allocation of the rural deficit below.

15.2 Specifically Assigned Operating and Maintenance Costs

Under the existing cost of service methodology the cost of capital assets that are used solely for the provision of service to a single customer are functionalized as specifically assigned, and the costs are recovered from that single customer. These costs include operating and maintenance (O&M) costs, depreciation and return on the specifically assigned assets. The specifically assigned charges only recover the O&M cost for customers that paid a contribution for 100% of the capital investment.[351] Consistent with the existing approved cost of service methodology, in the 2015 test year cost of service study direct O&M costs are classified and allocated based on the original cost of the plant in service, which is accounted for using the in-service year dollars. Administrative and general operating and maintenance expenses are classified and allocated based on a series of calculations using plant in-service and direct operating and maintenance costs.[352]

The basis used by Hydro to calculate the specifically assigned O&M charges to the Industrial Customers related to certain in-service transmission assets was contested by the Industrial Customer Group and Vale. Vale submitted that the current method of calculating specifically assigned charges, which is based on original plant in-service costs, is unjustly discriminatory as it creates inequity for new industrial customers.[353] Through its witness Mel Dean, Vale proposed an alternate approach which indexes the original plant in-service costs to present day dollars and then prorates O&M costs using the indexed amounts. Vale referenced V-NLH-083 Rev. 1, which recalculated the O&M charges using Mel Dean's proposed approach and showed that the O&M expense allocated to Vale would decrease approximately $291,000 per year. Vale also pointed to

[351] Amended Application, Vol. 1, page 4.28
[352] Hydro's Submission, Rev. 1, page 75
[353] Vale's Submission, page 6

the evidence of Kevin Fagan of Hydro and Patrick Bowman on behalf of the Industrial Customer Group, who both supported this revised approach as an equitable and reasonable way to calculate this charge. Vale submitted that the proposed change should be approved and implemented in this proceeding, in advance of the upcoming cost of service methodology hearing:

> …Hydro's revised calculations respect the basic premise that assets primarily for the use of a customer should be specifically assigned to that customer. This principle goes back to at least 1978 and is not being changed in this GRA. Second the concept of pro-rating Hydro's operating and maintenance costs based on the cost of the plant in service is also not being changed. The only variance, as pointed out by Mr. Dean, is that the costs are indexed so that the pro-rating is fair and equitable.[354]

The Industrial Customer Group also objected to the increase in O&M charges assigned to the Corner Brook Pulp and Paper frequency converter. According to the Industrial Customer Group Hydro proposes an increase in the O&M charge to Corner Brook Pulp and Paper from $140,000 to $328,000, an increase of 134%, while the increase to NARL is 12% and the increase to Teck is 22%. The Industrial Customer Group referenced the opinion of their expert that the evidence did not support the proposed substantial increase to Corner Brook Pulp and Paper's O&M costs. They also pointed out that Hydro's evidence confirmed that it did not budget staff positions or supplies directly to the Corner Brook Pulp and Paper frequency converter, and that the maintenance positions for the frequency converter are included within the business unit for the terminal stations. The Industrial Customer Group also noted that Hydro's evidence confirmed that there were no changes in the maintenance staff FTEs in the terminal station business unit, only increases related to general wage increases.[355]

The Industrial Customer Group submitted that the Board should not consider the proposed increase to the O&M charges relating to the Corner Brook Pulp and Paper frequency converter unless Hydro provides sufficient evidence to justify the requested increase. The Industrial Customer Group argued that Hydro failed to substantiate the reasonableness of any increase to the O&M charges in the range it proposed or any increase beyond simple inflation, which would amount to roughly a 17% increase.[356] The Industrial Customer Group also submitted that they had not been provided sufficient information by Hydro regarding "how the O&M charge would be calculated or applied to them to allow them to anticipate (and plan for) an increase in the O&M component of the S.A.C. to the magnitude of that sought in the Application."[357] If the Board does agree that an increase in the O&M charge for the frequency converter is warranted the Industrial Customer Group submitted that the approach proposed by Mr. Dean on behalf of Vale should be used to allocate the O&M charges in the specifically assigned charges for each Industrial customer.[358]

Newfoundland Power noted that Hydro's existing methodology, which is based on original cost of plant in service, has been the approved methodology for many years, and that the evidence does not support any change. According to Newfoundland Power the evidence shows Vale was informed and understood the methodology to be used for the allocating specifically O&M expenses and accepted the assignment of all transmission and terminal plant serving its Long

[354] Vale's Submission, page 6-7
[355] Industrial Customer Group's Submission, pages 27-29
[356] Ibid., page 35/8-11
[357] Ibid., page 30/1-5
[358] Ibid., page 42/6-11

Harbour facility on that basis. Newfoundland Power submitted that it would be appropriate for the Board to consider any changes to the allocation of specifically assigned O&M charges after completion of Hydro's embedded cost and rate design reviews, which are underway.[359]

The Consumer Advocate argued that Vale's proposal to reduce its O&M costs should be rejected on the basis that no evidence has been provided to show that Hydro's methodology proposed in the Amended Application to calculate these costs is out of line with that in other jurisdictions or is unfair, or that Mr. Dean's proposed methodology is in line with regulatory practice elsewhere. The Consumer Advocate submitted that Vale's proposed methodology would transfer significant costs from Vale to other customers without evidence that Vale is being unfairly treated, and that any further study of this issue, if required, should be undertaken as part of the cost of service study to be performed in 2016.[360]

Hydro acknowledged that its current methodology in allocating O&M costs may not be ideal, and referred to the alternate approach presented during the hearing by Vale in which current dollars are used as a basis to reallocate the direct transmission O&M expense calculated in the 2015 test year cost of service study between specifically assigned charges and common. Hydro applied this approach based on the 2015 test year cost of service study, which resulted in the transfer of approximately $600,000 of O&M costs from specifically assigned costs to common costs. Hydro submitted that the 2015 test year cost of service study reflecting the use of indexed asset costs for the purpose of allocation of O&M costs to specifically assigned assets it provided in Undertaking #45.1 reflects a fairer result and should be adopted for the cost of service methodology in the current Application. According to Hydro, this approach is comparable to the method used by Newfoundland Power in determining the amount of O&M costs reflected in the cost factors that apply in determining contributions in aid of construction from customers for distribution line extensions, which are approved annually by the Board. Hydro also submitted that the scheduled 2016 cost of service methodology review will allow a more comprehensive review of the overall approach to determining specifically assigned charges to the Industrial Customers.[361]

Board Findings

The Board is not satisfied there is sufficient evidence to determine at this time that the alternate approach proposed by Vale should be approved for assigning O&M costs in specifically assigned charges. Hydro acknowledged that its current methodology to allocate the O&M costs to specifically assigned charges may not be ideal and accepted in its submission the alternative approach proposed by Mr. Dean to use indexed asset costs. Hydro claimed this approach will produce a fairer result but, other than providing calculations of the impact of the alternate proposed approach, did not provide evidence on whether there are other approaches that could be used which may produce "fairer" results. The Board accepts that the alternate approach produces a lower O&M charge to be recovered from Industrial customers, which could be judged as fairer, but this alternate method results in the transfer of $600,000 from specifically assigned charges to common costs, which means that all Hydro customers will pay towards those costs. One could argue this is an unfair result for other customers who will now pay costs they would not have otherwise under Hydro's initial proposal. Other possible approaches were referenced in the

[359] Newfoundland Power's Submission, page F-5
[360] Consumer Advocate's Submission, page 60
[361] Hydro's Submission, Rev. 1, pages 76-77

evidence and during testimony, including an asset by asset review for assignment of O&M costs or direct billing of O&M costs based on customer agreement.[362]

The Board acknowledges that the existing allocation methodology for O&M costs would result in increases in the specifically assigned charges for the 2015 test year to be recovered from Industrial customers. The Board also accepts the concerns expressed by both the Industrial Customer Group, Vale and Hydro that the existing allocation methodology for these costs may not be ideal. Hydro appeared to accept the proposal put forth by Mr. Dean, which will transfer significant costs to Newfoundland Power, during the hearing without a full consideration of alternate approaches, if any. Hydro also acknowledged that the methodology proposed by Mr. Dean has not been adopted in another jurisdiction for Industrial customers. There also appeared to be a great deal of frustration on the part of both the Industrial Customer Group and Vale surrounding the calculation of the O&M costs and how these costs are passed on, particularly with respect to the O&M charges for the frequency converter. In the Board's view the lack of a clear communication line between Hydro and the Industrial customers contributed to these issues.

The Board's concern is to ensure that all customers pay only those costs they are responsible for, and that these costs are transparent and understood by customers. While Mr. Dean's approach may reduce the O&M costs assigned to Industrial customers, there is no evidence as to whether these costs should be transferred to common costs, and hence to Newfoundland Power. The cost of service methodology review, which was to be done in 2016, would have allowed for a full review of the overall approach that should be taken to determine specifically assigned charges but this review has now been delayed to an uncertain date. This delay means there will not be an opportunity, in advance of the next general rate application, to fully assess the fairness of the proposed methodology or whether another methodology should be considered.

The Board will not accept the suggested changes to the methodology to allocate O&M costs to specifically assigned charges as it is not satisfied, based on the evidence, that this proposal is fair or reasonable to all customers. Hydro should address this issue more fully in its upcoming general rate application to be filed in 2017, providing supporting documentation on available alternatives and the impacts of each, and information on practices in other jurisdictions if applicable. The Board acknowledges the concern expressed with respect to the increase in the O&M charge assigned to the Corner Brook Pulp and Paper frequency converter but is satisfied, based on evidence, that the proposed charge should be accepted. The Board also expects Hydro to document improvements in communication and coordination with the Island Industrial customers with respect to this issue as part of its proposed Account Management Framework.

Hydro's proposed change to the methodology for the allocation of O&M costs in specifically assigned charges is not accepted. Hydro will be required to continue to use its existing methodology to allocate the proposed O&M costs in specifically assigned charges to Industrial customers on the Island Interconnected system.

15.3 Allocation of Rural Deficit

OC2003-347, issued under the authority of section 5.1 of the *EPCA*, requires the rural deficit to be recovered from Newfoundland Power's customers and Labrador Interconnected system

[362] Transcript, October 1, 2016, pages 50-51; Transcript, October 6, 2016, pages 66-67

customers. Section 3a)iii) of the *EPCA* as well as OC2003-347 specifically exempts the Industrial customers from having to fund the rural deficit. No direction has been provided to the Board on the methodology to be used to allocate the rural deficit between the two customer classes.

The Board last considered the methodology to be used to allocate the rural deficit at the 1992 generic cost of service methodology hearing. In its report to Government following that proceeding the Board recommended that the methodology proposed by its consultant, George Baker, be accepted for allocating the rural deficit. This methodology was based on a mini cost of service which attempted to compensate for the inequities in the other methods proposed by intervenors in the proceeding by increasing the unit costs equally in the two interconnected systems. The Labrador Interconnected customers were not included in the rural deficit recovery until 2002, as there was no rate proceeding to implement the approved cost of service methodology for the period 1993 to 2001.

As a result of Order No. P.U. 7(2002-2003) 87.1% of the 2002 rural deficit was allocated to Newfoundland Power and 12.7% to the Labrador Interconnected system.[363] This resulted in approximately $5.0 million being allocated to the Labrador Interconnected system, with this initial allocation largely offset by the assignment of a revenue credit of $3.7 million for secondary energy sales to CFB Goose Bay. The net effect was a revenue to cost ratio of 1.12 for the Labrador Interconnected system. This compared, at that time, to a 1.18 revenue to cost ratio for Newfoundland Power. The Board also ruled that the revenue credit for secondary energy sales be applied to reduce the rural deficit rather than applied as a credit against the cost of serving the Labrador Interconnected system, and that Hydro propose a plan to implement this change, considering the potential large customer impacts, at its next rate hearing in combination with a plan to implement uniform rates for Labrador City, Happy Valley-Goose Bay and Wabush. In Order No. P.U. 14(2004) the Board approved a five-year plan by Hydro to implement uniform rates for Labrador Interconnected customers, which also included the phase-in of the application of the secondary revenue credit to the rural deficit. This phase-in was completed in 2011 and the current general rate application is the first hearing before the Board in which the secondary energy credit is fully credited to the rural deficit.[364]

Hydro initially proposed that the rural deficit be allocated in the 2013 test year cost of service to Newfoundland Power and to the Labrador Interconnected customers according to the existing approved methodology. This resulted in a proposed increase in rates of 28.1% for Labrador Interconnected customers of 28.1% and 2.1% for Newfoundland Power customers.[365] In the Amended Application Hydro proposed a change in the methodology, based on the RFIs and evidence filed by the intervenors and a review of the fairness of the existing methodology to Labrador Interconnected customers. Hydro proposed that, commencing January 1, 2014, the forecast rural deficit be allocated to each interconnected system based on revenue requirement. Under the new methodology the rate increase would be 2.1% for Labrador Interconnected customers and approximately 2.8% for Newfoundland Power customers.[366]

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[363] Hydro's compliance application arising from Order No. P.U. 7(2002-2003) showed the 2007 rural deficit as $38.8 million.
[364] CA-NLH-166, Rev. 3, pages 1-2
[365] PUB-NLH-391
[366] Amended Application, Vol. I, page 4.7/18-22

Although Hydro recommended the use of the revenue requirement method, it stated that the use of the number of customers method as an allocator of the rural deficit would also eliminate the average cost difference per customer, but this would normally require a further allocation by rate class considering customer usage characteristics and allocated on forecast revenue.[367]

Grant Thornton provided a breakdown of the allocation of the rural deficit between Newfoundland Power and the Labrador Interconnected system for the existing and recommended methodology and the cost per customer under each.

2015 Allocation of the Rural Deficit – Existing Versus Proposed Methodology[368]

Customer Class	**Existing** (Note 1)		**Proposed** (Note 2)	
	Rural Deficit	**% Allocation**	**Rural Deficit**	**% Allocation**
Newfoundland Power	$ 56,877,694	88.17%	$ 61,662,195	96.24%
Labrador Interconnected	7,628,070	11.83%	2,408,108	3.76%
	$ 64,505,764	100.00%	$ 64,070,303	100.00%

Note 1: As per Schedule 1.2 (Page 1 of 6) of the 2015 Cost of Service updated in accordance with NP-NLH-321.

Note 2: As per Schedule 1.2 (Page 1 of 6) of the 2015 Cost of Service filed by Newfoundland Hydro.

Cost per Customer – Existing versus Proposed Methodology[369]

		Existing (Note 1)			**Proposed** (Note 2)		
Class of Customer	**# of Cust.**	**% Allocation**	**Rural Deficit**	**Cost/Cust.**	**% Allocation**	**Rural Deficit**	**Cost/Cust.**
Newfoundland Power	260,771	88.17%	$ 56,493,728	$ 216.64	96.24%	$ 61,662,195	$ 236.46
Labrador Interconnected	11,600	11.83%	7,576,575	$ 653.15	3.76%	2,408,108	$ 207.60
	272,371		$ 64,070,303			$ 64,070,303	

Note 1: Calculated as per PUB-NLH-393, Attachment 1.

Note 2: Proposed Methodology calculated above is based on the Revenue Requirement Method.

The Consumer Advocate noted the agreement of the experts, with the exception of Mr. Brockman, with Hydro’s belief that the current methodology does not provide a reasonable sharing of the rural deficit between Newfoundland Power customers and Labrador Interconnected customers.[370] He also pointed out that the operating deficit for supply to rural areas in Quebec and British Columbia is 1 percent, for Manitoba and Ontario is about 0.1 percent of revenue from electricity sales, and for Newfoundland and Labrador based on rates proposed in

[367] Ibid., pages 4.10/9 to 4.11/6

[368] Grant Thornton Amended Application Review Report, Table 99

[369] Ibid., Table 100

[370] Consumer Advocate’s Submission, pages 52/29 to 53/6.

the Amended Application is 9.7 percent of revenue from electricity sales. He stated that this situation now presents the Board with a dilemma in that it is being forced to approve rates that cannot be judged to be reasonable and non-discriminatory.[371, 372]

In pre-filed evidence Douglas Bowman, the Consumer Advocate's expert, stated that while it is important that the subsidy be transparent and based on accepted cost of service principles, the size of the rural deficit and minimization of the impact on the price signal must also be considered. Mr. Bowman pointed out that, although most rate design experts favour cost-based rates, once it is accepted that the rural deficit must be collected from the subsidizing customer (i.e., Newfoundland Power and the Labrador Interconnected customers), then a guiding principle is that the deficit be applied in a manner that least distorts the price signal. According to Mr. Bowman the least amount of distortion of the price signal is obtained by allocation on the basis of revenue requirement (revenue to cost ratio of 1.15 for both Newfoundland Power and the Labrador Interconnected customers), while the current rural deficit allocation methodology results in the greatest distortion of the price signal (revenue to cost ratio ranging from 1.37 to 1.63, depending on the customer class, for the Labrador Interconnected customer and 1.14 for Newfoundland Power) when compared to the other methodologies proposed at the 1993 review.

Newfoundland Power stated that there is no truly fair way to allocate the Rural Deficit, as the costs are not causally related to the customers funding it. Newfoundland Power pointed out that Hydro proposes to change the existing Unit Cost Method to a method that purports to be rooted in a "fairness assessment" which evaluates fairness on the basis of whether the customers of Newfoundland Power and Hydro's customers on the Labrador Interconnected system pay the same amount on a per customer basis. According to Newfoundland Power the revenue requirement method proposed by Hydro, which was considered and rejected by the Board in the 1993 Generic Cost of Service report, would result in a change in the amount allocated to Newfoundland Power in the 2015 test year from $56.9 million to $61.7 million. It referred to the evidence of its expert, Mr. Brockman, who also testified in the 1992 hearing, that none of the essential underpinnings of the Board's 1993 recommendation have changed.[373]

Newfoundland Power stated that, under the existing method, the Labrador Interconnected system customers pay more, on a per customer basis, than Newfoundland Power largely as a result of the higher per customer energy consumption on the Labrador Interconnected system. Newfoundland Power pointed out that Labrador Interconnected customers would have paid more, on a per customer basis, had Hydro implemented the Board's recommendation prior to 2001. Newfoundland Power stated that the Board clearly understood that the methodologies considered could have varying impacts but indicated in its report that matters of impact could be dealt with by rate design. In determining whether or not the allocation methodology should be changed Newfoundland Power stated that it is important for the Board to consider the circumstances of the funding parties and the fact that Newfoundland Power relies on a combination of hydroelectric and more costly thermal energy to supply customers, while Labrador Interconnected customer have the benefit of hydroelectric energy as their sole source of energy. According to Newfoundland Power, it would be burdened with a higher portion of the rural

[371] As discussed in Section 14.0 the Consumer Advocate's position is that a portion of Hydro's return should be directed towards payment of the rural deficit.
[372] Consumer Advocate's Submission, page 54
[373] Newfoundland Power's Submission, page F2

deficit because it already pays higher rates on a per kWh basis due to the mix of supply sources serving its customers.[374]

Newfoundland Power also expressed concern regarding the timing of revisiting this issue as interconnection with Labrador is imminent and could result in uniform rates for customers of the two interconnected systems. Any alteration in methodology in the short-term may result in "taking the Labrador Interconnected rates in the wrong direction." Newfoundland Power submitted that Hydro's proposal to modify the rural deficit allocation methodology should be denied and the portion of the rural deficit proposed to be allocated to Newfoundland Power should be adjusted downward accordingly. Newfoundland Power proposed that, once the major reviews planned by Hydro are completed, the Board will have more current information on marginal costs on the electricity system and will have a better evidentiary basis for reconsideration of the rural deficit allocation methodology. Newfoundland Power also proposed that should the Board determine it is appropriate to limit the rate impact on customers of the Labrador Interconnected system associated with the rural deficit in the interim the Board could, instead of changing the allocation methodology, determine an appropriate cap for the overall rate increase to Labrador Interconnected customers.[375]

Innu Nation acknowledged that the proper way to allocate the rural deficit is a difficult problem to solve and agreed with Mr. Brockman that there is no ideal way of allocating the costs of the rural deficit and no perfect way of doing it so that everyone would agree. Innu Nation pointed out that the increase in the magnitude of the rural deficit is especially relevant in this proceeding because it will be the first time that Hydro will be allowed to earn a return on equity on its rural assets, as per the terms of OC2009-063. According to Innu Nation, since there is no way to allocate the rural deficit so that the cost of the deficit is borne by the users who cause the cost, it is a mechanism of cross-subsidy between rate payers in different systems and cannot conform perfectly to the principle of allocation of costs by causation, a principle of fairness. Therefore, Innu Nation claims there is no way for the allocation of the rural deficit to be "fair".[376]

Innu Nation submitted that the existing method is no longer an appropriate allocation method to use since the result would be an increase in rates on the Labrador Interconnected system of 28.1 percent, while the rates of Newfoundland Power customers would increase by 2.1 percent.[377] Innu Nation supported either the number of customers allocation method, or the equal revenue to cost ratio allocation method, both of which are acceptable to Hydro. Innu Nation noted that there was consensus among the experts who gave evidence on the matter that fairness was an important criterion, and referred to a statement of the Board in 1993 that: "[f]airness cannot be assessed as due to the method used but instead we must assess fairness on the basis of the result, a shared burden among the classes of customers that is fair to all and not discriminatory."[378]

Innu Nation submitted that the Board should rely on the comparison of revenue to cost ratios between Newfoundland Power and Labrador Interconnected customers as a way of evaluating the fairness of rural deficit allocation methods and that the methodology proposed by Hydro is reasonable. It stated that if this comparison is an appropriate way to evaluate fairness then the existing allocation method is unfair in view of the revenue to cost ratio of 1.12 for

[374] Ibid., page F2 – F3
[375] Newfoundland Power's Submission, page F3 – F4
[376] Innu Nation's Submission, page 3
[377] Ibid., page 5
[378] Ibid., page 8

Newfoundland Power customers and of 1.42 for Labrador Interconnected customers. Innu Nation submitted that this discrepancy between the revenue to cost ratios for these two customer groups cannot be easily justified.[379] Innu Nation also stressed the importance of efficient price signals, which depend on a price for a service which reflects the costs of providing that service, and noted that a greater divergence of rates from costs further distorts the price signal.[380]

Innu Nation also noted that changes to the rates of Labrador Interconnected customers affect Labrador Isolated rates since the two are linked through the Northern Strategic Plan, which subsidizes the First Block of consumption for Labrador Isolated communities, bringing down their rates to the Labrador Interconnected rates. Innu Nation pointed out that this means that an increase to the Labrador Interconnected rates would flow through to affect Labrador Isolated rates. If the existing allocation method is maintained, Innu Nation noted that Labrador Isolated customers would see an increase in their rates by about 24 percent, but that these rate increases would not flow through to decrease the revenue requirement of the electrical system, but would instead flow back to government coffers in the form of a decreased Northern Strategic Plan subsidy.[381] Innu Nation concluded the existing method for rural deficit allocation should be abandoned by the Board and that either the number of customers approach or the revenue requirement approach should be substituted for the current method. However, between the two, Innu Nation preferred the number of customers approach because of its simplicity, transparency and apparent equality in how it treats customers.

The Towns of Labrador requested that the Board accept the allocation methodology as proposed by Hydro in the Amended Application. Dr. Feehan, the expert witness for the Towns, provided an overview of the process by which the allocation of the rural deficit currently takes place which, he stated, demonstrates that Rural Labrador Interconnected customers persistently bear a disproportionate share of the rural deficit. According to Dr. Feehan the existing formula for allocating the deficit is complex, would not be readily understood, results in an outcome that is persistently and substantially to the disadvantage of the Rural Labrador Interconnected customers, and is not done in a transparent fashion. He noted that, while the allocation of the rural deficit is provincial government policy, its lack of transparency and the formula for sharing it between the two paying groups are not legislated policy. He suggested a more equitable formula be developed that would be readily understandable to those that pay. Dr. Feehan proposed four alternatives that in his view were more equitable and transparent, including a fixed amount per customer, a fixed amount per MWh, and two combinations of these.[382]

The Industrial Customer Group, Vale and the Nunatsiavut Government made no comment on the rural deficit allocation.

Hydro submitted that fair cost apportionment and the end result are the regulatory principles that should be considered by the Board in assessing the fairness of the rural deficit allocation methodology. According to Hydro, since the Board has been provided no legislative direction on the rural deficit allocation methodology (other than the exemption from funding by the Island Industrial Customers), the Board is required to adhere to sound utility practice in its determination of a fair approach to the apportionment of the rural deficit with the objective of

[379] Ibid., pages 11-12
[380] Ibid., page 8
[381] Ibid, page 20
[382] Dr. James Feehan, Pre-filed Evidence, page 7/6-11

achieving an end result which must be fair, just and reasonable from the perspective of both the consumer and utility. Hydro submitted that this is not currently the case for customers on the Labrador Interconnected system.

Hydro submitted that, commencing January 1, 2014, the rural deficit be allocated by system based on revenue requirement, which gives consideration both to the lower rates and higher usage of Labrador Interconnected customers. According to Hydro, the impact of the proposed methodology is that the rural deficit will comprise 8 percent of customer charges from Newfoundland Power's customers and 12 percent of charges to retail customers on the Labrador Interconnected System. On an absolute dollar basis Newfoundland Power individual customers will pay, on average, $236.46, while Labrador Interconnected customers will pay, on average, $207.60 per customer, but on the basis of percentage of revenue requirement the impact will be higher for Labrador Interconnected customers. The difference in dollar value per customer reflects 14 percent higher average cost to serve Newfoundland Power's customers and Hydro submitted that this is a fair overall result and is more reasonable than the outcome of the existing methodology.[383]

Board Findings

The payment of the rural deficit by customers of Newfoundland Power and customers on the Labrador Interconnected system is established by Government policy. The Board's only discretion in this case is how the total rural deficit is divided between these customer classes. In its 1993 Generic Cost of Service Methodology report the Board addressed the issue of fairness in assigning costs to customers who have not caused those costs:

> The rural deficit is created based on the electrical consumption of customers in rural areas, predominantly isolated areas. There is little any of the subsidizing customers can do to affect (upwards or downwards) the level of this deficit. Consequently each customer's consumption pattern, load pattern or demand has no bearing on the deficit. Therefore as stated there is no cause and effect relationship upon which to fairly allocate the deficit. Justification cannot be found for allocation methods solely on the basis of demand, solely on the basis of energy or on some combination of both. Fairness cannot be assessed as due to the method used but instead we must assess fairness on the basis of the result, a shared burden among the classes of customers that is fair to all and not discriminatory.

In this proceeding most parties, with the exception of Newfoundland Power, argued that the impact on customers should be considered when allocating the rural deficit. There was general agreement that traditional cost of service principles do not apply in the case of the rural deficit allocation, and that the magnitude of the rural deficit and distortion of the price signal (revenue to cost ratio) to those customers paying the rural deficit are important considerations.

The forecast rural deficit for the 2015 test year has more than doubled since 2002 to just over $64 million. In addition use of the secondary revenue credit for energy sales to offset the impact of the allocation of the rural deficit to Labrador Interconnected customers was eliminated as of 2011. This revenue credit is now fully credited towards the rural deficit, which reduces the costs to be recovered from all customers. Under the existing methodology Newfoundland Power will be assigned 88.17% of the rural deficit in 2015, or $56.5 million, while Labrador Interconnected customers will be allocated $7.6 million. However the impacts on a per customer basis show that

[383] Hydro's Submission, Rev. 1, page 71/6-17

the annual cost per customer on the Labrador Interconnected system is $653 compared to $216 for Newfoundland Power.

The Board accepts that the existing methodology may be viewed as unfair based on the impacts on customers. A customer on the Labrador Interconnected system would pay three times more than a Newfoundland Power customer towards the rural deficit. The revenue requirement method proposed by Hydro would result in a higher proportion of the rural deficit being allocated to Newfoundland Power (approximately $5 million more). However the per customer costs for Newfoundland Power increase by $20 to $236 while the per customer costs for the Labrador Interconnected system decrease by $446 to $207. The revenue requirement method appears to result in a more equitable allocation of the rural deficit on a per customer basis than the existing methodology. The revenue requirement method also results in a lower distortion of the price signal to customers than the existing methodology.

The Board acknowledges Newfoundland Power's submission that any changes to the rural deficit allocation methodology should wait until the marginal cost study and cost of service reviews are completed, when there may be a better evidentiary basis. However the Board is satisfied that there is sufficient evidence to make a decision at this time on the allocation methodology for the rural deficit and that it is in the best interests of customers to do so, especially in light of the proposed delay of these studies since the conclusion of the hearing. The Board expects that Hydro will address the rural deficit allocation methodology in its cost of service report and all parties will have further opportunity to provide input as part of the review of that report.

Hydro's proposal to use the revenue requirement method to allocate the rural deficit between Newfoundland Power and the Labrador Interconnected system as of January 1, 2014 is accepted.

Hydro will be required to file updated test year cost of service studies to reflect the findings of the Board in this Decision and Order, for 2014 and 2015.

16.0 Rates, Rules and Regulations

16.1 Settled Issues

The Amended Application does not propose material changes in rate design for Hydro's customers. The Settlement Agreements reflect the current rate design for Newfoundland Power and the Industrial customers pending conclusion of the studies on marginal cost and cost of service as well as the rate designs and supply cost mechanisms. The specific rate issues agreed to include:

1. The continuation of the current rate design for Industrial customers as proposed in the Amended Application.
2. The inclusion of an industrial wheeling rate with the specific rate to be calculated in accordance with the methodology proposed in the Amended Application.
3. The Utility Rate for Newfoundland Power will include:
   i) a demand charge of $4.75 per kW of billing demand; and
   ii) an end block energy rate determined based on the 2015 test year No. 6 fuel price divided by the 2015 test year Holyrood conversion factor (both to be determined by the Board).

4. The approved 2015 test year revenue requirement not recovered through the demand charge and the end-block energy charge in Newfoundland Power's rate will be used to compute the first block energy charge.
5. The wholesale rate to Newfoundland Power will include a curtailable load credit as proposed in the Amended Application.

The outstanding issues with respect to rates include:

1. The continuation of the load variation component in the RSP
2. The disposition of the RSP load variation component balance that accumulated for the period September 1, 2013 to December 31, 2014
3. The proposed Labrador Industrial Transmission Rate
4. Uniform rates for Labrador Interconnected customers
5. The deferred rate increases proposed to apply to Hydro Rural customers on Isolated systems
6. Average system losses for the energy charge to Industrial customers for non-firm services

These issues and the Board's findings are set out below.

16.2 RSP Load Variation Component

In the Amended Application Hydro proposed that the existing load variation component be maintained. This component allows Hydro to recover the net loss on sales growth to the Industrial customers due to the generation from Holyrood needed to serve the load growth between test years. Hydro estimates it will be able to recover approximately $42 million in fuel costs needed to serve the increased load requirement of the Industrial customers that will not be recovered through base rates.[384]

The Industrial Customer Group's expert Patrick Bowman suggested that the load variation component be eliminated but acknowledged that the best time to do this may be at the time of Labrador interconnection. The Industrial Customer Group did not address this issue in final submission and no other intervenors took a position.

Hydro submitted that it is not appropriate to eliminate the RSP load variation component prior to the implementation of a new Industrial customer rate design that permits reasonable recovery of the marginal cost to provide service to the Industrial customers.

Board Findings

The Board finds little evidentiary reason or support for the elimination of the RSP load variation component at this time. The Board notes that the Settlement Agreements provide for a review of all components of the RSP in addition to a review of the rate design for Industrial customers. In the Board's view the continuation of the RSP load variation component is most appropriately considered in the context of a comprehensive review of the RSP components as well as the Industrial customer rate design.

[384] Undertaking #44 provides the forecast load growth for Island Industrial customers and the forecast RSP load component transfers.

Hydro's proposal to continue the existing load variation component of the RSP is accepted.

16.3 Disposition of the Balance in the RSP Load Variation Component

In the Amended Application Hydro proposed to change the RSP rules related to the load variation component to reflect an energy allocation approach instead of the present approach which allocates load variation costs to the customer group that caused the load variation. There is a balance in the load variation component of the RSP as of December 31, 2014 of approximately $33 million credit to customers. This balance was segregated in the RSP pending disposition by the Board in accordance with the Order in Council.[385] Hydro proposed to allocate this balance based on an energy ratio allocation effective September 1, 2013. This would result in an allocation of approximately $31 million to Newfoundland Power and approximately $2 million to the Industrial customers.

In the Settlement Agreements it was agreed that, if the load variation component is maintained as an element of the RSP, then year-to-date net load variations would be allocated among customer groups based on energy ratios, with the effective date to be determined by the Board. This is consistent with the approach proposed by Hydro in the Amended Application. The Board has found above that it is appropriate to continue the inclusion of the RSP load variation component.

Newfoundland Power supported Hydro's proposed approach stating that "there is no principled basis or evidence supporting the allocation of the segregated balance in the Load Variation Component of the RSP on any basis other than the customer energy ratio approach."[386]

The Consumer Advocate recommended that the Board transfer the balance in the Industrial customer load variation of the RSP that has accumulated from September 1, 2013 to the account of Newfoundland Power's RSP. According to the Consumer Advocate:

> While this amount is far less than the cross-subsidy transferred to the Island Industrial Customers through Order No. P.U. 26(2013), an Order transferring the balance from the Island Industrial Customers RSP account to Newfoundland Power's RSP account, although symbolic, would at least allow the Board to recognize the violation of cost of service and rate design principles that arose as a result of OC2013-089.[387]

The Industrial Customer Group submitted that the Consumer Advocate's proposal would "retroactively adjust the respective amounts credited to the Island Industrial Customers' RSP and Newfoundland Power's RSP, and would be in plain violation of the Government's direction."[388]

Hydro submitted that it is appropriate that the RSP rules related to the allocation of the load variation component be modified such that the year-to-date net load variation for both Newfoundland Power and the Industrial customers is allocated among the customer groups based on energy ratios effective September 1, 2013.[389]

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[385] Order No. P.U. 29(2013)
[386] Newfoundland Power's Submission, page F7
[387] Consumer Advocate's Submission, page 51
[388] Industrial Customer Group's Submission, page 26
[389] Hydro's Submission, Rev. 1, page 81

Board Findings

The Board accepts Hydro's proposal that the year-to-date load variations should be allocated on the basis of energy ratios. This was agreed in the Settlement Agreements and the Board sees no reason to vary this. With respect to the Consumer Advocate's submission, the Board agrees with the Industrial Customer Group that the proposed transfer of any balance in the Industrial Customer's load variation component that has accumulated since September 1, 2013 to the Newfoundland Power account would be contrary to the expressed direction of Government in OC2013-089.

Hydro's proposed modification of the RSP rules to reflect an energy allocation approach is accepted, such that the allocation of the year-to-date net load variations in the RSP load variation component between Newfoundland Power and the Industrial customers effective September 1, 2013 will be based on energy ratios.

16.4 Labrador Industrial Transmission Rate

In December 2012 Government introduced a series of legislative amendments establishing a new electricity rate policy for Industrial customers on the Labrador Interconnected system. This legislation set out that the transmission component of Labrador Industrial rates be fully regulated by the Board beginning in 2015.[390]

The Amended Application proposed that the Labrador Transmission demand-related rate be set at $1.25 kW/month. Hydro requested that this rate be implemented on an interim basis effective January 1, 2015. On December 24, 2014 the Board issued Order No. P.U. 57(2014) approving the proposed demand rate on an interim basis effective January 1, 2015, pending further review and subsequent Order of the Board with respect to the interim or final rate to be charged. In relation to the design of the rate the Amended Application explained that the Labrador Industrial transmission revenue requirement was isolated in accordance with the approved cost of service functionalization and the transmission costs were classified as 100% demand related, consistent with approved classification methodology. The transmission demand-related costs were then allocated based on the approved single coincident peak allocation method between the Labrador Industrial customers and Rural customers.[391]

Innu Nation argued that the Labrador Industrial transmission rate should not receive final approval until a policy has been established on the allocation of network upgrade costs in a way that protects existing customers. According to Innu Nation, approval of the Labrador Industrial transmission rate has the potential to increase costs to be borne by existing industrial and domestic customers on the Labrador Interconnected system as a result of the costs caused by the new customers. Innu Nation stated that approval of the proposed rate could signal to potential industrial customers that network upgrade costs for new entrants may be passed on to existing customers. Innu Nation referenced Mr. Raphals' evidence relating to the potential additional cost to existing customers and the need to expand the current methodology to reflect new industrial customers entering the system.[392]

[390] Amended Application, Vol. I, page 4.47
[391] Ibid., page 4.48
[392] Innu Nation's Submission, page 24

In oral argument Innu Nation reiterated its position that if there are no new customers then the rate proposed is not a problem as customers pay according to the firm demand they require. The problem arises when a new customers enters. Innu Nation submitted that refinement is necessary to the proposed rate; however, it would be acceptable for the Board to approve the rate provisionally until the next general rate application. Counsel for Innu Nation concluded:

> Now we understand that Hydro is due to enter a new GRA process in the not too distant future, and that's why we submitted that it would be acceptable for the Board to approve the rate as applied for by Hydro only provisionally until the next GRA, so that in the short time between the approval of these rates and the next GRA, there is a risk of a new entrant coming into the market and imposing their cost on existing customers, but that risk would not be so great, given the short time frame until the next GRA. So we submit that until Hydro submits a rate that does take into account the potential risk to existing customers, the Board can ask Hydro to submit a rate that does protect existing customers or to conduct a hearing to fully assess what kind of rate would be required to achieve that objective, but until those steps are made, that the approval of the transmission rate be only provisional, and that Hydro's amendment to its transmission rate that it is proposing to make some time in January, 2016, also be only approved provisionally until there is fuller information on the impacts of a transmission rate on existing customers.[393]

Hydro submitted that the proposed demand charge is calculated based on the portion of the transmission revenue requirement determined in accordance to the Board approved cost of service functionalization, classification and allocation methods. Hydro noted that the Billing Demand definition in the proposed Labrador Industrial transmission rate does not address the treatment of Labrador Industrial interruptible load and advised that it would be filing an application in January 2016 to address this issue. According to Hydro this would not impact the calculation of proposed firm transmission demand charge based on the 2015 test year costs.

In reply to Innu Nation's submission Hydro acknowledged that it does not disagree in principle with the nature of the issues raised and that the nature of the rate is perhaps too simplistic and doesn't consider some of the factors that may be faced in the future. Hydro noted that, at present, the costs in the Labrador transmission system are fairly linear and simple. Hydro recognized that, as circumstances change, the issues will have to be reviewed and at that time consideration will be given to incorporating some of the principles outlined by Innu Nation. Counsel for Hydro concluded:

> I think it's just premature, but we don't disagree in principle with the nature of the issues he's raised, and, in fact, we look forward to dealing with Mr. Luk and other customer groups in the Labrador Interconnected System when that time comes, and I do expect that time will come in the next few years because things will obviously become more complex in that regard as the system changes.[394]

On January 29, 2016 Hydro applied to the Board to amend the interim Labrador Industrial Transmission Rate so that the billing demand would be equal to the greater of: (i) the customer's Power on Order; (ii) the actual monthly demand in the current month; and (iii) their maximum demand in the calendar year less their interruptible demand. In Order No. P.U. 15(2016) the Board approved the application on an interim basis.

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[393] Transcript, January 25, 2016 pages 131/5 to 132/7
[394] Ibid., page 140

Board Findings

The Board accepts that there may be issues which need to be addressed with respect to the allocation of Labrador transmissions costs, particularly the costs associated with a new customer on this system. The Board notes Mr. Raphals' evidence that the federal regulator in the United States, FERC, developed a transmission upgrade policy based on the principle that transmission investments required by participants in the competitive market must not impose new costs on existing rate payers.[395] Hydro did not disagree in principle with Innu Nation but suggested that it may be premature to raise these issues now, although they may have to be addressed sometime in the future.

The Board is satisfied that the proposed Labrador Industrial Transmission Rate is reasonable and appropriate in the current circumstances and that it should be approved on a final basis for existing customers. The Board notes that a review of Hydro's cost of service methodology is pending, which may be an appropriate time to address these issues. In the meantime, if a new customer enters the system Hydro will be required to make application to the Board for approval of rates.

Hydro's proposed interim Labrador Industrial Transmission Rate will be approved on a final basis for existing customers. Hydro will be required to file a revised rate sheet to reflect that this rate is available to existing customers only.

16.5 Uniform Rates for Labrador Interconnected Customers

In Order No. P.U. 7(2002-2003) the Board directed Hydro to develop a five-year plan to phase in uniform rates for customers on the Labrador Interconnected system as part of its next general rate application. In Order No. P.U. 8(2007) the Board accepted a proposal from Hydro in relation to the phase-in of uniform rates for Hydro's Labrador Interconnected customers over the years 2008-2011. In Order No. P.U. 33(2010) the Board approved Hydro's proposed rates, rules and regulations for certain Labrador Interconnected customers, effective January 1, 2011, to complete the approved phase-in of uniform rates.

In the Amended Application Hydro proposed the continuation of uniform rates for all customers on this system. Innu Nation submitted that the Board should consider a rate rider for customers in Labrador West to recover additional costs associated with the Labrador City distribution upgrade. Mr. Raphals, Innu Nation's witness on this issue, stated:

> Given the magnitude of these costs, the fact that the benefits of the project are unambiguously limited to Labrador West and that socio-economic conditions in that region are substantially superior to those in Labrador East, which will derive no benefit from the project, I recommend that the Board consider assigning those costs to Labrador West. Of the various regulatory mechanisms available, a rate rider seems to the simplest to apply.[396]

Hydro submitted that this proposal effectively requests the Board to reverse its decision on uniform rates which was only recently implemented. According to Hydro the application of uniform rates on the Labrador Interconnected system is consistent with the single cost of service study for this system.

[395] Pre-Filed Evidence Mr. Raphals, pages 51-54
[396] Pre-Filed Evidence Mr. Raphals, page 71

Board Findings

Innu Nation requested that the Board apply a rate rider to customers in Labrador West to cover the costs associated with the Labrador City distribution upgrade project. If accepted this would be a departure for the Board, which has in the past assigned all common costs within a single system to be shared among all customers. There would have to be a compelling reason for the Board to deviate from its accepted practice. The Board notes Mr. Raphals' testimony during the hearing where he acknowledged that a decision to "carve up territories based on distribution costs" would be an exceptional measure.[397] The claim that customers in one part of a system will derive no benefit from a project in another part of the system is not, in and of itself, reason to deviate from the generally accepted cost of service principle that customers on a system pay the same rates. The nature of rate making under cost of service regulation is that cross-subsidization is inevitable; the costs of the system as a whole are allocated between all the customers on the system. This is the case for all customers within each of Hydro's systems, and for rate payers on the Island Interconnected system served by Newfoundland Power. Consideration of the socio-economic conditions of some rate payers within a single system on the system is not a factor that is considered in cost of service regulation.

Based on the evidence the Board is not persuaded that the costs associated with the Labrador City distribution project should be assigned a basis other than proposed in the cost of service for the Labrador Interconnected system. The Board also notes Mr. Raphals acknowledgement that the dramatic rate increases proposed for the Labrador Interconnected system were a factor in his recommendation.[398] The change in the methodology for allocation of the rural deficit accepted by the Board earlier will significantly reduce the proposed rate increase for customers on the Labrador Interconnected system. The Board will not approve a rate rider for Labrador Interconnected customers in Labrador West to recover costs associated with the Labrador City distribution upgrade project.

16.6 Implementation of Deferred Rate Increases for Hydro Rural Customers

The Amended Application proposed rate increases for Hydro Rural non-Government Domestic and General Service customers on isolated systems that are higher than the average increase proposed for the Hydro Rural Interconnected customers. Hydro explained that these higher than average increases result from the combined impact of i) the 2015 test year forecast change in rates for Island Interconnected customers, and ii) the increase in rates to implement the 2007 rate change that was deferred as a result of Government directives.[399]

The rates for the non-lifeline portion of the Domestic energy rate and small and large general service diesel rates were proposed to increase by 15% in 2007 to reflect the increased costs of fuel since the previous general rate application. As a result of OC2006-512 and subsequent directions from Government this rate increase has yet to be implemented. The most recent direction provides for the implementation in 2016 of rates that would have come into effect but for the Government directives.

[397] Transcript, September 29, 2015, page 37
[398] Ibid.
[399] Amended Application, Vol. I, page 4-41

Hydro's proposal to implement rate increases for Hydro Rural non-Government Domestic and General Service customers on isolated systems that are higher than the average increase proposed for the Hydro Rural Interconnected customers as being in accordance with Government directive (OC2016-104) is accepted.

16.7 Average System Losses for Energy Charges Non-Firm Service

In the Amended Application Hydro proposed to retain the previously approved calculation for the energy charge to Industrial customers for non-firm service with an update to the loss factors. The loss factor has been updated from 2.68%, which was based on the five-year period ending in 2005, to 3.47%, which is based on the five-year period ending in 2013.

No issues were identified with Hydro's proposal to adjust the system losses in the calculation of the energy charge for non-firm service. The Board will accept Hydro's proposal.

Hydro's proposal to adjust the average system losses used in the calculation of the energy charge to Industrial customers for non-firm service to 3.47% is accepted.

16.8 RSP Rule Changes

In the Amended Application Hydro proposed the following amendments to the RSP rules:

1. Removal of Section D(2.2), by which the Industrial Customer RSP was suspended effective January 1, 2014.
2. Removal of Section 1.3(b), as well as references to the December 6, 2006 Government directive, as there is no further Rural Labrador Interconnected Automatic Rate Adjustment.
3. Removal of Section E – Historical Plan Balance as it no longer exists.

The Board notes that no intervenor objected to these amendments, which are essentially updates to the RSP Rules to reflect changing circumstances. The Board will approve these changes as proposed.

Hydro's proposed changes to the RSP rules are accepted.

16.9 Changes to Rules and Regulations

In the Amended Application Hydro proposed the following changes in its Rules and Regulations:

1. Section 1(a)(iii) be revised to include the words "and Labrador" in the definition of the word "Board"
2. Section 2. Classes of Service be revised to include Island Interconnected L'Anse au Loup class 1.1S – Domestic Seasonal and delete Island Interconnected – L'Anse au Loup class 2.2 General Service; Island and Labrador Diesel Areas be revised to include 1.2DS – Domestic Seasonal Diesel – Non-Government; remove Happy Valley Goose Bay Interconnected Area and Labrador City/Wabush Interconnected Area classes; add Labrador Interconnected classes
3. Section 7(f) be amended to agree with Section 7(f) of Newfoundland Power's Rules and Regulations, for consistency between the utilities

4. Section 9(k) be revised to change the reference to "Happy Valley Goose Bay, Labrador City and Wabush service areas" to "Labrador Interconnected service area"
5. Section 10(d) be amended to agree with Section 10(d) of Newfoundland Power's Rules and Regulations, for consistency between the utilities

The Board notes that no intervenor objected to these amendments, which are essentially updates to the Rules and Regulations to reflect changing circumstances and consistency with Newfoundland Power's Rules and Regulations. The Board will accept these changes as proposed.

Hydro's proposed changes to the Rules and Regulations are accepted.

The phase-in of Industrial customer rates and the use of the Industrial Customer RSP Surplus, in accordance with Government direction, should be addressed by Hydro in its revised proposals.

Hydro will be required to file a proposal for the finalization of Industrial customer rates to reflect the findings of the Board in this Decision and Order.

Hydro will be required to file a revised Schedule of Rates, Rules and Regulations and revised RSP Rules to reflect to the findings of the Board in this Decision and Order.

17.0 Proposed Deferral and Recovery Mechanisms

The Amended Application proposed approval of several new accounts to defer variances from forecast of certain supply related costs and conservation and demand management costs:

- an Isolated Systems Supply Cost Variance Deferral Account
- an Energy Supply Cost Variance Deferral Account
- a Conservation and Demand Management Cost Deferral Account

In addition the Amended Application noted that Hydro would be proposing to implement a deferred recovery mechanism for fuel cost variances resulting from variances from the Holyrood fuel conversion factor. Additional evidence was filed on January 14, 2015 in relation to the proposed Holyrood Fuel Conversion Deferral Account.

17.1 Isolated Systems Supply Cost Variance Deferral Account

The proposed Isolated Systems Supply Cost Variance Deferral Account would provide an opportunity for Hydro to recover the cost of supplying the Isolated systems. The proposed account would be credited or charged with the difference between the test year price and the actual cost of fuel and purchases on Hydro's Isolated systems for actual supply. According to the Amended Application there has been upward pressure on diesel fuel and certain power purchase prices over the past several years, with a year over year average price variance of more than 50%, which has exposed Hydro to material risk. Over the period 2007 to 2013 the reported Isolated systems supply cost variance ranged from \$0.3 million to approximately \$6 million, negatively impacting Hydro's financial results each year. Hydro proposed a cost variance threshold of ± \$500,000, so that only variances outside the range would be reflected, with variances within the range born by Hydro. An application for the disposition of the balance in the account would be filed by Hydro no later than March 1 each year.[400]

The Consumer Advocate opposed the approval of the Isolated Systems Supply Cost Variance Deferral Account. According to the Consumer Advocate neither of the three proposed supply cost related deferral accounts should be approved as approval would shift all of the risks of cost variances away from Hydro and onto its customers:

> Presently, customers pay Hydro to manage these supply cost risks. To take away any financial incentive from Hydro by allowing it to become (subject only to the proposed limited deadbands) financially indifferent to these risks at the same time as Hydro's cost of equity is increasing dramatically is an unjustified double burden.[401]

The Consumer Advocate argued that the approval could potentially increase the chances of Hydro postponing its next general rate application since it will become financially insensitive to these cost variances.[402]

Newfoundland Power supported the approval of the Isolated Systems Supply Cost Deferral Account, noting the evidence of volatility in the price of diesel fuel over the last several years. Newfoundland Power submitted that such variances may be characterized as uncontrollable.[403]

Vale did not oppose the proposed Isolated Systems Supply Cost Deferral Account, noting that it is not affected by this account.[404]

Hydro submitted that the primary cost of supplying customers on its Isolated systems is diesel fuel and the price of this commodity is based on market factors beyond its control. Hydro stated that since its last general rate application there has been significant volatility in the price of diesel fuel. Hydro argued that the level of risk has been material, is beyond management's control and is appropriate to be dealt with through the proposed deferral account.[405] Hydro submitted that the ± $500,000 cost variance threshold along with the threshold in the proposed Energy Supply Cost Variance Deferral Account is a sufficient incentive to manage these supply costs in a given year.[406] Hydro argued that recovery of supply costs through deferral mechanisms is common practice in regulatory jurisdictions across Canada and noted that the Board has approved supply cost related deferrals for both Hydro and Newfoundland Power. Hydro noted the evidence in relation to supply deferrals for Canadian utilities with a higher approved equity returns, specifically referencing the British Columbia Utilities Commission's approval of a deferral account for supply cost variances after setting an equity return comparable to an investor-owned utility.[407]

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[400] Amended Application, Vol. I, page 3.47
[401] Consumer Advocate's Submission, page 34.
[402] Ibid., pages 33-34
[403] Newfoundland Power's Submission, page E-3
[404] Vale's Submission, pages 20 and 23
[405] Hydro's Submission, Rev. 1, pages 85-86
[406] Ibid., page 93
[407] Ibid., pages 84-85

Board Findings

The approval of supply related cost deferral and recovery mechanisms is common practice in regulatory jurisdictions across Canada. Both Hydro and Newfoundland Power have such mechanisms. Hydro's RSP provides for the deferral and recovery of variances associated with production at the Holyrood thermal generating station, including fuel price, hydrology and load. Newfoundland Power also has a Rate Stabilization Account. In addition over the years numerous other deferral accounts have been approved for both utilities.

In appropriate circumstances deferral accounts are sound regulatory tools to address earnings volatility associated with certain costs outside of the utility's control. In the Board's view deferral accounts can contribute to a stable and predictable regulatory environment to the benefit of both the utility and its customers. A financially strong utility which is not unduly burdened by significant costs outside of its control will have access to necessary financing at reasonable costs and will be in the best position to provide safe and adequate reliable service at the lowest possible rates.

The proposed Isolated Systems Supply Cost Variance Deferral Account would provide for the deferral of variances associated with supply produced and purchased on Hydro's Isolated systems. The Board notes that Newfoundland Power supports approval of this account and, other than the Consumer Advocate, the other parties do not oppose approval of this account. The Consumer Advocate argued that the proposed deferral accounts shift the risk of variances away from Hydro to customers and such risk shifting should be reflected in the utility's return. The Board notes the testimony of Mr. Martin in this proceeding to the effect that the volatility has reached the point that it is not reasonable and the impact was not acceptable in terms of the company's financial position.[408] The Board does not agree that approval of the proposed supply cost related deferral accounts would unreasonably shift the risk of variances from Hydro to customers.

The Board accepts Hydro's evidence that there is significant volatility in the price of diesel fuel on its Isolated systems which is beyond Hydro's control and that the risk is material. Further, the cost variance threshold provides that only variances greater than $500,000 will be reflected. Further, Hydro will apply annually for disposition.

The Board notes that the circumstances in this case are somewhat unusual in that the balance in the proposed account may not be recoverable from the customers who are responsible for these costs as a result of a number of Government directions which limit the rates which can be charged to the Isolated systems. In a test year if there is a revenue shortfall associated with the provision of service to these customers it is reflected in the rates charged to other customers. However, currently between test years the shortfall is not recovered from customers. Approval of this account would permit Hydro to defer any shortfall each year between general rate applications and apply for recovery.

In the circumstances, the Board believes that the deferral account should be approved effective January 1, 2015 but recovery of the balance in the account should be addressed in the annual application for disposition of the balance in the account. Whether Hydro will have recovery of all, or any part of, the balances in this account and/or how the balances will be collected, and

[408] Transcript, September 15, 2015, pages 39/4 to 40/6

from which customers, would be addressed at that time. To permit full consideration of all of the issues Hydro should revise the account language to provide that Hydro is required to file with its application a detailed report setting out the efforts made during the year to minimize the costs on the Isolated systems and how any variance would be collected/refunded and from which customers.

Hydro will be required to file revised account language for the Isolated Systems Supply Cost Variance Deferral Account to reflect that Hydro is required to file a detailed report with the annual application for disposition of the balance.

17.2 Energy Supply Cost Variance Deferral Account

The proposed Energy Supply Cost Variance Deferral Account would capture annual energy supply cost variations on the Island Interconnected system. The proposed account would apply to diesel and gas turbine generation, and power purchases from wind generation, Corner Brook Pulp and Paper cogeneration and hydraulic generation. It would exclude energy supply costs or savings resulting from the variance in kWh based on the cost of generation at Holyrood thermal generating station. According to the Amended Application variances both in quantity and price in supply costs result when diesel and/or gas turbine production vary from the test year assumptions. Variances in the quantity of other sources of supply can cause significant volatility in the amount of fuel burned at Holyrood from year to year. The Amended Application noted that there is a material difference between the price of power purchases and the 2015 Holyrood fuel cost, and that each of the various power purchase agreements, except the Exploits agreement, have a fixed and variable component. As with the Isolated Systems Supply Cost Variance Deferral Account, Hydro proposed a cost variance threshold of ± $500,000 and that an application be filed by March 1 each year for the disposition of the balance in the account.[409]

The Consumer Advocate opposed the approval of the Energy Supply Cost Variance Deferral Account as well as the other two supply cost related deferral accounts on the basis that it would shift all of the risks of cost variances away from Hydro and onto customers.[410]

Newfoundland Power did not support the account as proposed but argued that, due to the apparent cost volatility associated with the operation of the new Holyrood combustion turbine, Hydro should be permitted to recover these costs to the extent they are reasonable. Newfoundland Power agreed with Hydro that the Holyrood combustion turbine is critical to the system and that there should not be a disincentive to its prudent use for system reliability. In terms of the other supply costs proposed to be reflected in the account, Newfoundland Power argued that the evidence revealed no volatility in the price for any of Hydro's proposed power purchases. Newfoundland Power noted that the variance in Hydro's 2015 cost deferral application related to gas turbine usage and that the other energy supply costs were essentially tracking in line with forecast. Newfoundland Power also noted that the long term contracts in relation to wind and Corner Brook Pulp and Paper cogeneration have fixed components aside from changes in the consumer price index. Newfoundland Power argued that increases in the price of hydraulic purchases from Exploits, which is owned by a related party, should not be recovered by Hydro without a review for reasonableness. Newfoundland Power further argued

[409] Amended Application, page 3.50/1-5; Finance, Schedule VII
[410] Consumer Advocate's Submission, pages 32 and 34

that the evidence did not demonstrate that the volatility in the volume of purchases is so great as to justify insulating Hydro from any forecast risk.[411]

The Industrial Customer Group opposed the approval of this account, arguing that price variability in the power purchase agreements arises only from a Consumer Price Index escalator, which was not shown to be a material or unstable factor beyond Hydro's forecasting ability. Further, according to the Industrial Customer Group, there is no reasonable expectation of variability in the price paid by Hydro to Nalcor for Exploits power since it is expected that the price will continue to be fixed at 4 cents per kilowatt-hour through 2016, at which time the transfer of Exploits hydraulic generation assets to Hydro is expected. The Industrial Customer Group also noted uncertainty as to how the deferral account would work when the Exploits assets are purchased. The Industrial Customer Group referenced the pre-filed testimony of InterGroup that variations in the price of power purchased by Hydro do not fall into the category of material, uncontrollable, set-by-external forces, such as commodity markets for fuel and weather for hydrology. The Industrial Customer Group argued that there are a number of uncertainties and questions as to how this new account would operate in conjunction with the RSP. According to the Industrial Customer Group the evidence undermines confidence in the RSP as currently designed as providing a transparent mechanism to understand how Hydro is managing its energy supply portfolio. The Industrial Customer Group questioned whether the new pattern of usage of the Holyrood combustion turbine is appropriate and whether Hydro's customers should be at risk. The Industrial Customer Group argued that the issues can only be fully considered in the context of the proposed 2016 RSP review and, until that review is completed, and for the 2015 test year, this account should not be approved.[412]

Vale opposed the approval of the Energy Supply Cost Variance Deferral Account, arguing that it has the potential to remove the incentive from Hydro to operate its business in the most efficient manner. Vale also submitted that approval of this account has the potential to increase the time between general rate applications as it would insulate Hydro from changing conditions. Vale expressed concern that the Board will have no ability to reflect the approval of the account in Hydro's return on equity, which is automatically set at Newfoundland Power's allowed equity return. Vale argued that, unless the Board establishes that Hydro has demonstrated that the current proposed wording for this account protects customers in all potential scenarios, the Board should refuse the request for this account.[413]

Hydro argued that without this account it would be financially disadvantaged by variances beyond its control as a result of providing greater reliability of service to customers and economically optimizing the Holyrood combustion turbine in conjunction with the Holyrood thermal generating station. According to Hydro without the proposed account, higher costs resulting from increased generation at the new Holyrood combustion turbine would be borne by Hydro with no opportunity to recover the additional costs. Hydro submitted that this scenario creates a financial disincentive for Hydro to operate the Holyrood combustion turbine in excess of the forecast test year levels, regardless of whether it would result in more reliable service to customers. In addition in certain circumstances net fuel savings can result where a unit at the Holyrood thermal generating station is brought offline and the Holyrood combustion turbine is used only at peak times. Hydro explained that, without the proposed account, the Holyrood

[411] Newfoundland Power's Submission, page E2
[412] Industrial Customer Group's Submission, pages 4-10
[413] Vale's Submission, pages 22-23

thermal generating station savings would accrue inside the RSP and flow through to customers but the additional costs associated with the operation of the new Holyrood combustion turbine would be borne by Hydro. Hydro argued that approval of this account would ensure Hydro is financially incentivized to provide least cost service to customers on a system wide basis, not just from specific supply sources. Hydro explained that the Energy Supply Cost Variance Deferral Account has been specifically designed to ensure harmonization with the RSP.[414] Further Hydro argued that waiting until completion of the RSP review would mean that Hydro would not have a reasonable opportunity to recover material increases in prudently incurred Holyrood combustion turbine fuel costs that are incurred to provide reliable service. Hydro argued that the combined cost variance thresholds in the deferral accounts provide an adequate incentive to manage supply costs.[415]

Board Findings

As discussed above the Board continues to believe in the value of deferral accounts and has found that the proposed supply cost related deferral accounts do not, together, unreasonably shift risk from Hydro to customers. The proposed Energy Supply Cost Variance Deferral Account would provide for the deferral of variances associated with Island Interconnected system diesel and gas turbine production, and power purchases related to hydraulic generation, wind generation, and Corner Brook Pulp and Paper cogeneration.

The Board notes the concerns expressed by the Industrial Customer Group in relation to how the proposed Energy Supply Cost Variance Deferral Account would operate in the context of the existing RSP. Hydro proposes that the new deferral account be held separate from the RSP on the basis of the significant expected changes in system costs with Muskrat Falls and associated transmission and the full review of the RSP that Hydro planned for 2016.[416] Mr. Fagan further explained that the RSP is complicated and for purposes of transparency this account was presented as a single item so that it could be reviewed.[417] The Board accepts Hydro's explanation that the Energy Supply Cost Variance Deferral Account was specifically designed to ensure harmonization with the RSP and notes that Hydro provided evidence as to how the two accounts would operate.[418] The Board is satisfied that, in the short term, if there are any issues with regard to the operation of the two accounts these issues can be identified and addressed in the process associated with the annual application for disposition of the balance in the account.

It was also argued that this account should not be approved because it would remove the incentive for Hydro to operate its facilities efficiently, Hydro argued, however, that approval would incent efficient operation on the basis that it would avoid the current financial preference for Holyrood thermal generation. While the RSP provides for the deferral and recovery of cost variances associated with the operation of the Holyrood thermal generating station, there is currently no mechanism to defer cost variances associated with other sources of supply on the Island Interconnected system. In particular, the RSP does not permit flow through of variances in costs associated with production at the new Holyrood combustion turbine. The Board also notes

[414] NP-NLH-351 and Undertaking #171
[415] Hydro's Reply Submission, pages 16-17
[416] CA-NLH-312
[417] Transcript, October 6, 2015, pages 93/25 to 94/13
[418] NP-NLH-35; Undertaking #171

that based on the evidence filed in the amended 2015 cost deferral application, the forecast 2015 cost variance in relation to the gas turbine was over $7 million.[419]

The Board accepts that production from the Holyrood combustion turbine, like the Holyrood thermal generating station, is essential to the reliable and adequate supply of power on the Island Interconnected system. Variances in both volume and price associated with the Holyrood combustion turbine can be significant, material in relation to Hydro's earnings, and outside of Hydro's control. The Board accepts that deferral of the variances associated with the operation of the new Holyrood combustion turbine should be approved as they can be material and are largely outside of Hydro's control. The Board also accepts Hydro's evidence that there is significant volatility in the price of diesel fuel on its Isolated systems which is beyond Hydro's control and that the risk is material. The cost variance threshold provides that only variances greater than $500,000 will be reflected, and Hydro must apply annually for disposition.

While Newfoundland Power argued that variances for sources other than the new Holyrood combustion turbine should not be reflected in this account, the Board notes that these other sources of supply are essential to supply on the Island Interconnected system and are directly related to production at the Holyrood thermal generating station. In addition variances in the costs associated with these sources are most often the result of factors outside of Hydro's control such as load, commodity prices and hydrology. However the Board agrees that the evidence does not establish that there is volatility in the price of the power purchases and that it is not clear that the price is completely outside of Hydro's control, given that it is established by contract in one case with a related party. As such the Board finds that the account should not provide for the deferral and recovery of variances in the price of the power purchases.

The Board believes that the Energy Supply Cost Variance Deferral Account should be approved effective January 1, 2015 but will require that the language of the account should be amended with respect to power purchases variances to reflect variances in volume but not price. In addition, the Board finds that the proposed account language is not sufficiently specific as to identify the supply sources which are to be reflected in the variances. The Board believes that the language of the account should clearly set out how it is to operate and will require Hydro to file revised language.

Hydro will be required to file revised account language for the Energy Supply Cost Variance Deferral Account to remove variances associated with the price of power purchases and to clearly set out the supply sources.

17.3 Conservation Demand Management (CDM) Cost Deferral and Recovery

Hydro and Newfoundland Power have undertaken joint customer energy conservation initiatives since 2009. The Board has approved the deferral of Hydro's annual costs associated with these activities each year for the period 2009-2014. The balance of these deferred costs as December 31, 2014 was forecast to be $6,254,000.[420]

In the Amended Application Hydro proposes a CDM Cost Recovery Deferral Account to be recovered over a discrete seven-year period. This account will recover the existing balance plus

[419] Amended 2015 Cost Deferral Application, November 12, 2015, page 10
[420] Grant Thornton's Amended Application Review Report, page 116

the annual CDM costs to be incurred over the seven-year period. Hydro proposes to recover the balances over a discrete seven-year period, such that for the initial year the CDM Cost Recovery Adjustment will recover 1/7th of the CDM Cost Deferral Account balance as of December 31 of the previous year. In each subsequent year the CDM Cost Recovery Adjustment will recover the sum of the individual amounts for the previous year representing 1/7th of the transfer to the CDM Cost Deferral Account for the previous year and amortizations carried forward.[421]

The amortization for the CDM Cost Deferral Account is not included in the 2015 test year revenue requirement but instead will be recovered through rate riders for Newfoundland Power and the Industrial customers. This proposal is based on the recommendation of Hydro's consultant to account for the variation in amounts of CDM costs incurred from year to year. As part of the Settlement Agreement it was agreed:

1. Hydro's proposal to defer and amortize annual customer energy conservation program costs, commencing in 2015, over a discrete seven-year period in a Conservation and Demand Management (CDM) Cost Deferral Account should be approved.
2. Hydro's proposed CDM recovery adjustment should be approved to provide for recovery of costs charged annually to the CDM Cost Deferral Account.

The Board accepts the Settlement Agreements with respect to the CDM Cost Deferral Account and the CDM Cost Recovery Adjustment.

Hydro's proposal to defer annual customer energy conservation program costs commencing in 2015 in a CDM Cost Deferral Account, and the proposed recovery of the existing balance of deferred CDM costs as of December 31, 2014 plus the annual costs over a seven-year period through the CDM Cost Recovery Adjustment, is accepted, effective January 1, 2016.

17.4 Holyrood Conversion Rate Deferral Account

The proposed Holyrood Conversion Rate Deferral Account is intended to stabilize costs related to the Holyrood fuel conversion rate. The proposed language provides for the deferral of costs incurred by Hydro resulting from variations from the test year forecast associated with the Holyrood conversion rate. As with the Energy Supply Cost Variance Deferral Account and the Isolated Systems Supply Cost Variance Deferral Account an application would be required by March 1 each year for disposition of the balance in the account. Unlike the other supply cost related deferral accounts, the proposed language of the Holyrood Conversion Rate Deferral Account did not set out any cost variance threshold, so that all variances would be captured by the account.[422]

The Consumer Advocate opposed the approval of this account on the same basis as the other two proposed supply cost related deferral accounts, arguing that approval would shift all of the risks of cost variances away from Hydro and onto its customers.[423]

[421] Ibid., page 117
[422] Amended Application, Vol. I, Finance, Schedule IX
[423] Consumer Advocate's Submission, page 34

Newfoundland Power also opposed approval of the Holyrood Conversion Rate Deferral Account at this time. Newfoundland Power stated that Hydro's evidence did not establish that there would be sufficient future volatility in the Holyrood conversion rate to justify protection from inaccurate forecasting. Newfoundland Power also argued that Hydro did not provide evidence to establish that the factors that could influence the fuel conversion rate are beyond its control. Newfoundland Power stated that the deferral account could remove the financial incentive to operate the plant as efficiently as possible.[424]

Vale supported the creation of the Holyrood Conversion Rate Deferral Account on the basis of the uncertainty of the accuracy of the Holyrood Fuel conversion rate.[425]

Hydro argued that the Holyrood Conversion Rate Deferral Account provides a reasonable balance between the interests of the utility and the ratepayer since it ensures that neither party will be unfairly disadvantaged regardless of the Holyrood conversion rate.[426] Hydro noted that it incurred additional fuel costs of over $3.5 million a year from 2010 to 2014 as a result of variances associated with the fuel conversion rate. Hydro noted Patrick Bowman's evidence that this account would be acceptable for the current hearing given the transitional role of Holyrood. Further Hydro noted Mr. Henderson's testimony with respect to the impact of changes in the heat content of fuel on the conversion rate and Hydro's costs since these variances are not flowed through to customers.[427] Hydro submitted that if approved, the deferral account would provide it with the appropriate financial incentive to operate Holyrood on a least cost basis.[428]

Board Findings

As discussed above the Board continues to believe in the value of deferral accounts and has found that the proposed supply cost related deferral accounts do not, together, unreasonably shift risk from Hydro to customers. The proposed Holyrood Conversion Rate Deferral Account would provide for the deferral of variances associated with the Holyrood thermal generating station conversion rate which can be affected by hydrology, load, fuel heat content and the operating characteristics of the plant. Generally higher production will improve the conversion rate and result in fuel savings, and, conversely, lower production will reduce the conversion rate and result in higher fuel costs.

The Board accepts that the evidence demonstrates that there have been material variances associated with the Holyrood conversion rate. The actual fuel conversion rates for the years 2009 to 2014 show significant annual volatility being as high as 612 kWh/bbl and as low as 588 kWh/bbl. The Board notes that the difference in the most recent estimate of the Holyrood conversion rate of 597 kWh/bbl and the conversion rate forecast in the 2015 test year of 607 kWh/bbl would result in a $2.4 million revenue shortfall.[429] In the circumstances the Board accepts that variances associated with the Holyrood conversion rate may be material, particularly given the new supply sources recently added to the system and the fact that the Holyrood thermal generating station is an aging asset. While the Board accepts that Hydro does have some control over the Holyrood conversion rate there are many other factors in operating the Island

[424] Newfoundland Power's Submission, page E-4
[425] Vale's Submission, page 23
[426] Hydro's Rebuttal, page 15
[427] Hydro's Submission, Rev. 1, page 87-88
[428] Hydro's Rebuttal, page 15
[429] Hydro's Submission, Rev. 1, page 87

Interconnected system which can impact the Holyrood conversion rate which are outside of Hydro's control, for example load and changes in the heat content of the fuel.

The Board does not accept that approval of this account would remove Hydro's financial incentive to manage its facilities efficiently. The RSP already permits the flow through of significant variances in the costs of supply on the Island Interconnected system and approval of variances associated with the Holyrood conversion rate would provide recovery for reasonably incurred costs associated with the efficient operation of Hydro's facilities on the Island Interconnected system. The Board believes that a deferral account should be approved in relation to variances associated with the Holyrood conversion rate, effective January 1, 2015.

The Board notes that the proposed language of the Holyrood Conversion Rate Deferral Account does not include a cost variance threshold. Both the proposed Energy Supply Cost Variance Deferral Account and Isolated Systems Supply Cost Variance Deferral Account include a threshold so that only variances in excess of ± $500,000 are charged to the account. Ms. Russell explained that Hydro did not propose a cost variance threshold for the Holyrood Conversion Rate Deferral Account because Hydro "….feels the one million dollars of risk on supply costs, for the provision of electricity is reasonable."[430] The Board believes that, to provide for the deferral and recovery of only significant variances and to reflect the fact that some aspects of the Holyrood conversion rate are within Hydro's control, there should be a cost variance threshold of ± $500,000 for the Holyrood Conversion Rate Deferral Account.

Hydro will be required to file revised account language for the Holyrood Conversion Rate Deferral Account to include a cost variance threshold of ± $500,000.

18.0 Other Issues

18.1 Customer Service Strategy

On September 30, 2014 Hydro filed with the Board a report *Customer Service Strategic Roadmap 2015-2017*, which was entered on the record for this proceeding in response to CA-NLH-322. As part of the Settlement Agreements it was agreed that Hydro's "Customer Service Strategic Roadmap 2015-2017" reflected appropriate customer service improvement objectives, but did not preclude additional customer service improvements being raised during the hearing of the Application or being considered by the Board.[431]

The Consumer Advocate raised a number of concerns with respect to Hydro's customer satisfaction targets and results achieved, noting that in 2013 Hydro did not set a target for customer satisfaction or undertake customer satisfaction surveys.[432] According to the Consumer Advocate Hydro has "lowered the bar for itself", and has a stated objective of maintaining an 80% customer satisfaction rating over the next five years. He also expressed concern that performance contracts for responsible employees and executives contain no targets for customer satisfaction. The Consumer Advocate recommended that:

> ...the Board order Hydro to file annually with the Board and provide to the parties its key performance measures and results, identifying those areas requiring improvement and

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[430] Transcript, November 17, 2015, page 75/23-25
[431] Settlement Agreement, page 4
[432] Consumer Advocate's Submission, page 45

> establishing targets for areas requiring improvement taking into consideration Hydro's historical performance and its performance relative to peers in the annual Peer Group Report. The Indicators should include customer satisfaction, broken down by category as identified above, reliability measures, and other financial-related indicators that are already being reported in the Peer Group Report. The Board should review and approve the report, and once approved, Hydro should undertake to match its internal performance contracts with the performance indicators identified as needing improvement. In this manner, Hydro management objectives will be better aligned with the needs of its customers.[433]

The Consumer Advocate also recommended that the reporting of customer satisfaction results should include satisfaction levels in key areas, and that the Board should monitor Hydro's progress in its Customer Service Strategic Roadmap with results posted on Hydro's website.
In its submission Hydro noted the agreement with respect to the Customer Service Strategic Roadmap. Hydro did not comment on the Consumer Advocate's recommendation in its Rebuttal.

Board Findings

Hydro's Customer Service Strategic Roadmap identifies the near-term priorities and specific customer service initiatives for each of 2015, 2016 and 2017. Hydro plans to measure its ongoing progress in meeting the identified goals and initiatives through the collection of various metrics. The strategy also sets out a number of "next steps" that were to be taken, including the setup of committees, resourcing and reporting requirements.

The Board agrees that the Customer Service Strategic Roadmap reflects appropriate customer service improvement objectives. The Board also agrees that Hydro's progress in this area should be monitored. Given the level and nature of the specific initiatives identified by Hydro for each of 2015, 2016 and 2017 and also the fact that Hydro is due to file its next general rate application by March 31, 2017, the Board believes that it would be appropriate to request an update at that time of progress in meeting the specific goals and objectives set out in the Customer Service Strategic Roadmap. This report should also identify appropriate KPIs and benchmarks against which customer service should be measured and reported.

Hydro will be required to file with its next general rate application a report setting out the status of progress in meeting the goals and objectives in the Customer Service Strategic Roadmap for the period 2015-2017, as well as identification of appropriate KPIs and benchmarks against which customer service should be measured and reported.

18.2 Conservation and Demand Management

The Consumer Advocate raised concerns relating to the CDM programs and targets set by Hydro. The Consumer Advocate submitted:

> …that the Board order Hydro to undertake a study in conjunction with Newfoundland Power with the goal of ramping up CDM initiatives. This study is timely in light of the significant change in marginal costs brought on by the new regime with Muskrat Falls and associated transmission. The trend is increasing electricity rates in the Province, so it is important that

[433] Consumer Advocate's Submission, page 46

> customers be given the opportunity to gain a measure of control over their electricity bills through CDM initiatives.[434]

No other intervenors made specific submissions on Hydro's CDM programs or targets.[435] Hydro did not comment on the Consumer Advocate's recommendation in its Rebuttal.

Board Findings

The Board notes that Hydro and Newfoundland Power have worked together to implement customer energy conservation programs since 2009. Hydro and Newfoundland Power recently reassessed the programs and developed a new plan as set out in a report, *Five-Year Energy Conservation Plan: 2016-2020,* which was presented to the Board in Newfoundland Power's general rate application. In Order No. P.U. 18(2016), the Board stated:

> In developing its updated Conservation Potential Study, Newfoundland Power worked jointly with Hydro to ensure consultation with interested parties and stakeholders. Throughout the process, workshops were held with residential and commercial customers, trade allies, retail partners, and government and non-government agencies. The utilities also made a joint presentation to the Board. These efforts ensured that all parties were aware of and had opportunities to contribute to the Five-year Conservation Plan: 2016-2020. Newfoundland Power also reports to the Board on its conservation and demand performance annually.[436]

The Board stated that it was satisfied that the approach to CDM taken by the utilities was appropriate. The Board expects that a similar process will be followed to update the joint Conservation Plan for the next five-year period, 2021-2025, allowing customers and the Consumer Advocate opportunity to comment on CDM programs and initiatives. The Board is not persuaded that further direction is required at this time for further study or increased CDM initiatives as proposed by the Consumer Advocate.

18.3 Communication with Industrial Customers

The Industrial Customer Group and Vale both raised concerns with Hydro's communication with its Industrial customers, particularly with respect to the calculation of specifically assigned charges. Hydro confirmed during the hearing that direct accountability for communications with the Industrial customers was with the Systems Operations Group.[437]

Liberty addressed this issue in its Phase One Final Report related to the investigation of the 2014 outages. Liberty found that Hydro: i) did not have a key accounts service team dedicated to serving the industrial customers, ii) communicated with industrial customers through the System Operations Department, iii) did not track its daily communications with industrial customers, and iv) did not survey those customers for customer satisfaction as it did with its other customers. Liberty recommended that Hydro's Customer Service Department develop a key account management team tasked with relationship building, communications, and supporting energy

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[434] Consumer Advocate's Submission, page 47

[435] In Section 14.1 the Board has outlined the comprehensive submission of the Nunatsiavut Government with respect to energy costs on Isolated systems in Labrador and the need for energy efficiency and conservation measures directed at these systems.

[436] Order No. P.U. 18(2016), page 46

[437] Transcript, September 24, 2015, page 166/1-3; Transcript, October 21, 2015, page 157/11-20

management needs. Liberty also recommended that Hydro conduct customer research to better understand its largest customers.[438]

Both the Industrial Customer Group and Vale attributed their issues and concerns with the O&M charges for specifically assigned assets primarily to a lack of clear, detailed communication from Hydro. The Industrial Customer Group stated that Hydro failed to provide them with sufficient information regarding how the O&M charge would be calculated or applied to them to allow them to anticipate and plan for the substantial proposed increase in the O&M component of the specifically assigned assets.[439]

Several Hydro witnesses confirmed during the hearing that Hydro is considering creating one point of contact dedicated to Industrial customers who would manage their accounts, respond to their needs and arrange for the appropriate Hydro employees to meet with them to address their needs when required.[440] Anthony Lye, Manager of Customer Service, outlined how Hydro has developed an Account Management Framework that looked at how it would set up a single point of contact for its customers, including the Industrial customers, and indicated that Hydro aimed to implement this framework in 2016.[441] According to Mr. Lye, the framework was in draft form and would be finalized once Hydro gathered all the data from an in-depth survey sent to key customers related to account management priorities.[442] Hydro provided a copy of the Account Management Framework during the proceeding.[443]

Vale supported Hydro's plan to enhance the communication system with Industrial customers in early 2016. As a result, Vale asked the Board to direct Hydro to improve its communications with the Industrial customers, and to fully explain the concept and calculations involved with the specific allocated charge, as well as the estimated amount of the specific allocated charge, for both a new customer and when a significant capital expenditure is made on a specific asset.[444]

The Industrial Customer Group stated that they had been asking for Hydro to designate a single point of contact for Industrial customers in order to provide more clarity and transparency for issues such as the calculation of O&M charges for specifically assigned assets and noted that, although Hydro hoped to appoint a single point of contact for the beginning of 2016, it confirmed at the hearing that it had not yet done so.[445]

Hydro did not address this issue in its Reply Submission.

Board Findings

The Board notes that the issue of communication with Industrial customers was identified by Liberty in its interim report of April 2014, and again in the form of formal recommendations in its final report in late December 2014.[446] The evidence at the hearing was that Hydro has taken

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[438] Information #25
[439] Industrial Customer Group's Submission, page 30
[440] Mr. Henderson, Transcript, September 24, 2015, pages 177/1 to 178/9; Mr. Goulding: Transcript, October 21, 2015, page 164/7-23
[441] Transcript, November 23, 2015, pages 18/13 to 19/17
[442] Transcript, November 24, 2015, pages 77-79
[443] Undertaking #191
[444] Vale's Submission, pages 11-12
[445] Industrial Customer Group's Submission, pages 33 and 35
[446] Information #25 and #26

action in the form of a draft Account Management Framework but it does not appear that progress had been made on establishing clear communication lines in the form of account representatives at the time of the hearing, over 18 months since it was first raised by Liberty.

In the Board's opinion the establishment of a key account representative for each Industrial customer is an important step, along with the other actions identified in the Account Management Framework. It is not clear from the record as to the final timeline for the implementation by Hydro of its Account Management Framework and the Board has no information as to whether the framework has been implemented to date. The Board will request from Hydro an update as to the status and timelines of this initiative.

Hydro will be required to provide a report by January 13, 2017 as to the status of the implementation of its Account Management Framework, including the designation of key account representatives for Industrial customers.

18.4 Reporting on Key Performance Indicators (KPIs)

In Order No. P.U. 14(2004) the Board ordered Hydro to file, as part of its annual report to the Board, a report outlining, among other things, appropriate historic, current and forecast comparisons of reliability, operating, financial and other key targeted outcomes/measures, including specific KPIs set out in Order. No. P.U. 14(2004). These KPIs included: i) corporate operating, maintenance and administrative expense (OM&A) per MWh generated, ii) generation OM&A per MW installed capacity; iii) generation OM&A per transmission circuit km, and iv) distribution OM&A per distribution circuit km. Hydro has filed these reports since 2004.

In the Application Hydro proposed to discontinue the requirement to report functionally oriented (e.g. generation, transmission) financial KPIs on a forecast basis. According to Hydro these KPIs require a forecast cost of service study which is usually only done as part of a general rate application and are typically part of the annual budgeting process. According to Hydro these forecast cost of service studies are a significant undertaking in terms of effort and cost. In the Amended Application, in response to the pre-filed evidence of the Consumer Advocate's witness Douglas Bowman, Hydro proposed to continue to report these KPIs as part of its annual report based on the most recent test year cost of service study. [447]

The Settlement Agreements accepted Hydro's proposal to continue to report functionally oriented KPIs based on the most recent test year cost of service study and not on a forecast basis. The Board believes that the continued provision of these KPIs is necessary for performance monitoring and accepts the agreement with respect to the reporting of functionally oriented KPIs.

Hydro's proposal to continue to provide functionally oriented KPIs based on the most recent test year cost of service study in its annual reporting to the Board is accepted.

[447] Amended Application, Vol. I, page 4.52

18.5 2013 Average Rate Base

In this proceeding Hydro requested approval of its average rate base for 2013 of $1,548,371,000.[448]

In Order No. P.U. 27(2014) the Board disallowed the expenditures related to fire restoration at the Black Tickle diesel plant in the 2012 rate base on the basis that sufficient evidence was not provided by Hydro to demonstrate that the amount of the expenditures were reasonable and necessary and lowest possible cost consistent with least cost provision of service.[449] Hydro was advised that it could propose to include both 2012 and 2013 expenditures related to the Black Tickle fire restoration project in the 2013 rate base, providing evidence demonstrating that the expenditures were reasonable and necessary in the circumstances.

The Black Tickle fire restoration project was reviewed as part of the Board's prudence review. In Order No. P.U. 13(2016) the Board found that the expenditures related to the Black Tickle fire restoration project were prudent.

The Board notes that Hydro did not request approval of the 2013 rate base in its Amended Application but did request it in its submission. Approval of the rate base is required. Hydro will be directed to refile its calculation of the 2013 rate base incorporating the findings of the Board in this Decision and Order.

Hydro will be required to file for the approval of the Board its proposed 2013 average rate base, reflecting the findings of the Board in this Decision and Order.

19.0 Costs

The Industrial Customer Group, Vale, the Towns of Labrador and the Nunatsiavut Government all requested an award of costs be made by the Board for their respective participation in the general rate application.

The Industrial Customer Group submitted that their inquiries in relation to many of the issues raised by Hydro were essential to ensuring a complete record was before the Board. The Industrial Customer Group also submitted that the evidence of their experts was "both necessary and instructive and reasonably required to both allow the IIC Group to fully comprehend and manage the voluminous evidence presented, and to illustrate the concerns of the IIC Group."[450]

Vale requested an award of costs on both the original and Amended Application on the same basis as any award of costs is made in favour of the Consumer Advocate and/or the Industrial Customer Group. Vale justified its request for a cost award on the basis that it will be the single largest industrial customer of Hydro and that its interests are discrete from those of the Industrial Customer Group, particularly with respect to recovery of past deficiencies through future rate riders or calculation of specifically assigned charges. Vale also submitted that Hydro, and not its customers, should bear a significant portion of the costs of the general rate application.

[448] Hydro's Submission, Rev. 1, page 110. The 2013 average rate base is set out in the Amended Application, Schedule 1, page 5 of 11.
[449] Grant Thornton's Amended Application Review Report, page 30, stated that the amount which was not approved was $1,374,000 in gross expenditures.
[450] Industrial Customer Group's Submission, page 53

According to Vale Hydro's decisions with respect to the delay between filings and amending the application just before the hearing was to commence, as well as filing of answers to undertakings and revised RFIs after the conclusion of the hearing "has increased the time and cost associated with preparing these submissions."[451]

The Nunatsiavut Government submitted that an award of costs in its favour is justified on the basis of concerns with the rising cost of energy to the people of Nunatsiavut, the distinct issues, particularly reliability, associated with the isolated systems on the coast of Labrador, and the necessity of making representations concerning conservation and alternative energy sources. The Nunatsiavut Government submitted that it participated reasonably to ensure safe and reasonable service at just and reasonable rates and that it participated only when necessary to advance the issues of the people of Nunatsiavut.[452]

The Towns of Labrador requested an award of costs but did not include any submissions on its request for costs.
Innu Nation did not specifically request an award of costs but did include itemized invoices of costs with its submission.

Hydro submitted that the Board should award only reasonable costs and, as in other jurisdictions, should consider the nature of the customers the intervenors represent. Hydro also submitted that it should be allowed to recover those costs from customers. Hydro's position is that "interventions should be conducted in a least cost manner to ensure efficient and effective regulatory proceedings and any award of costs should be reflective of those principles."[453] Hydro suggested that guidance from other jurisdictions might be useful and pointed to cost rules used by the Alberta Utility Commission, which it filed as part its Rebuttal.

As set out in Section 90(1) of the *Act* an award of costs for any proceeding shall be in the discretion of the Board. The Board will make its determination on any claim for costs based on the intervenor's contribution to this proceeding and the resulting impact on the Board's ability to discharge its legislative responsibilities in considering the Amended Application. The Board will also consider whether there was a distinct interest in the application proposals that justified the intervention and costs.

The Board notes that there are still substantive issues to be addressed as a result of this Decision and Order. Hydro will be directed to file revised proposals incorporating the findings of the Board, and the intervenors will have the opportunity to review and comment on these proposals. The impact on customer rates will not be known until these revised proposals have been accepted by the Board and Hydro files its final rates for approval. In these circumstances the Board finds that any award of costs should be made following the conclusion of this matter.

The intervenors will be given the opportunity to apply for an award of cost, with supporting documentation, at the conclusion of this proceeding.

[451] Vale's Submission, page 24
[452] Nunatsiavut Submission, page 31
[453] Hydro's Rebuttal, page 23

PART FIVE: RATE IMPLEMENTATION

20.0 Revenue Deficiencies

In Order Nos. P.U. 58(2014) and P.U. 36(2015) the Board approved the deferral of revenue deficiencies for 2014 and 2015 in the amount of $45.9 million and $30.2 million respectively. As a result of the Board's findings in this Decision and Order, the 2014 and 2015 revenue requirement and average rate base will have to be adjusted. In addition the Board has approved a further deferral in the amount of $9.65 million related to additional supply costs in 2014. As discussed in Section 13.2 a decision in relation to the recovery of this deferral will be made based on a proposal to be filed by Hydro. Delayed implementation of customer rates beyond January 1, 2016 may contribute to a further revenue deficiency for 2016.[454] The amount and approach to recovery of this deficiency will also have to be addressed.

Hydro submitted that it would present proposals for the recovery of the 2014 revenue deficiency, the 2015 revenue deficiency and the forecast 2016 revenue deficiency in its compliance application.[455] Options identified by Hydro to deal with the recovery of these revenue deficiencies include a rate rider or cost recovery amortization to be applied to future rates, or the use of existing credit balances in the RSP to offset the deficiencies.[456] Hydro proposed that the 2015 year-end credit balances in the RSP load variation component and the hydraulic variation component be used to limit the amount of revenue deficiency that will be recovered through rates from customers, and that any amounts not recovered through the RSP credit balances be recovered through future rates, either through a rate rider or cost recovery amortization included in revenue requirement. The portion of the revenue deficiency attributable to Labrador Interconnected customers would be recovered through future rates as these customers are not part of the RSP. Hydro argued that the use of the RSP credit balances would be consistent with intergenerational equity in that it would match funds already recovered from customers to costs that have already been incurred to provide service to those customers. Hydro pointed to the agreement of experts for the intervenors with the use of the RSP credit balances in this manner as support for this position.

The Board is satisfied that it may be appropriate to use existing credit balances in the RSP to offset the revenue deficiencies that are found to be reasonable, necessary and prudently incurred. The Board agrees with Hydro that this option is consistent with intergenerational equity. However, the evidence is not clear as to the balances in the RSP which are available to be used or the amount that Hydro proposes to offset against the revenue deficiencies. In addition it is not clear what portion of these balances should be used to ensure that the RSP will continue as an effective mechanism for smoothing material fluctuations in the costs of supply. The Board also notes that the 2015 end-of-year RSP balances will have to be adjusted to reflect the Board's findings with respect to the 2015 test year inputs for fuel costs, hydrology, load and customer rates, as well as other findings of the Board in this Decision and Order. The RSP balances must also be allocated between Newfoundland Power and the Industrial customers to determine the amount available to each customer class for revenue deficiency offset. Hydro's revised proposals should clearly set out the available balances in the RSP, the proposed amounts to be used, and whether the remaining RSP balances are reasonable in the context of the purpose of the RSP.

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[454] Hydro's Submission, Rev. 1, page 103
[455] Ibid., page 103
[456] Ibid., page 104; Amended Application, Vol. I, page 4.18

In addition the impact of Hydro's proposals on customers must also be considered. Approximately $85.0 million has been deferred to date and, while the amount to be recovered by Hydro will be adjusted in accordance with the findings of the Board in this Decision and Order, the amount to be recovered may be significant. The Board is concerned about the impact of the recovery of these deficiencies on customers, especially given the potential for a further deficiency with respect to 2016. In addition the Board notes the potential for significant rate impacts for customers on the Labrador Interconnected systems as these customers do not participate in the RSP and therefore will not have the opportunity to benefit from the use of RSP balances to offset the revenue deficiency recovery. The Board believes that the impacts on customer rates should be addressed before a rate rider or other recovery mechanism is approved. In particular, Hydro's revised proposals should address these concerns and, if appropriate, suggest proposals to mitigate any rate impacts that might be seen to be not reasonable in the circumstances.

The Board is not in a position at this time to make a final determination on the amount of the RSP credit balance to be applied against the revenue deficiencies or the rate riders that will be approved. In the Board's view this determination is better made in the context of a full consideration of the impacts on customers of the entirety of the findings of the Board, and with additional information in relation to relevant considerations associated with the amount of the RSP balances proposed to be offset. To assist the Board in considering this issue Hydro should file: i) a revised calculation of the revenue deficiencies, ii) a revised calculation of the available balances in the RSP, iii) a proposed plan for the recovery of the revenue deficiencies, including the 2014 additional supply costs deferral, and setting out rate impacts. Hydro should include with its proposal information in relation to various approaches in terms of the impact of the RSP balances and rate riders. In particular Hydro should reflect the use of 25%, 50%, 75% and 100% of the available RSP balances to offset the revenue deficiency amounts.

Hydro will be required to file a proposal for the recovery of the 2014 and 2015 revenue deficiencies including the 2014 additional supply cost deferral, with supporting documentation, reflecting the findings of the Board in this Decision and Order. Further if Hydro is seeking recovery for a 2016 revenue deficiency this should also be reflected in its proposal.

21.0 Next Steps

In this Decision and Order the Board has made a number of significant findings that impact Hydro's proposals in the Amended Application, particularly with respect to the 2015 test year revenue requirement for rate setting, as well as the amount and recovery of the 2014 and 2015 revenue deficiencies and the prudence review findings. In addition issues may arise as a consequence of the Board's findings which may require further determinations or directions by the Board. As a result Hydro will be required to file revised proposals for the 2015 test year revenue requirement and rate base for rate setting, and revised proposals in relation to the 2014 and 2015 revenue deficiencies for approval of the Board before final rates can be approved. The intervenors will be given the opportunity to comment on Hydro's revised proposals and the Board's financial consultants and staff will assist in the review of the revised proposals to ensure compliance with the Board's findings and Order.

The Board acknowledges that timely implementation of final rates is important, especially given that interim rates have been in place for some time and that Hydro has agreed to file its next general rate application before March 31, 2017. The Board believes that the approach to be taken for the filing of Hydro’s revised proposals should prioritize the timely implementation of new rates. In the circumstances the Board will not set out specific dates or requirements in relation to next steps for the implementation of final rates. Board staff will work with Hydro to determine the process and timelines for the filing of Hydro’s revised proposals to provide for the timely conclusion of this proceeding.

Hydro will be required to file its next general rate application no later than March 31, 2017 for rates based on a 2018 test year.

PART SIX: SUMMARY OF BOARD FINDINGS

1. The recommendations set out in the Settlement Agreement and the Supplemental Settlement Agreement are accepted. Hydro will be required to reflect the impacts of these agreements in the revised proposals arising from this Decision and Order.

2. Hydro’s prudence compliance filing is accepted as being in accordance with Order No. P.U. 13(2016). Hydro will be required to reflect the impacts of the prudence disallowances in the revised proposals arising from this Decision and Order.

3. A common equity component in Hydro’s capital structure for rate setting purposes not to exceed 45% is accepted. The forecast capital structure proposed by Hydro for rate setting purposes is accepted, subject to any adjustments required as a result of the Board’s findings in this Decision and Order.

4. The target return on equity to be used in calculating the allowed rate of return on rate base for 2015 shall be 8.8%.

5. The target return on equity to be used in calculating the allowed rate of return on rate base for rate setting purposes beginning in 2016 shall be 8.5%.

6. Hydro will be required to file a proposal in relation to an adjustment mechanism for its target return on equity to reflect any future changes to Newfoundland Power’s approved target return on equity.

7. A range of rate of return on rate base of ± 20 bps is accepted.

8. The 2015 test year customer load forecasts are accepted.

9. Hydro’s updated fuel price forecasts to be used in calculating the 2015 test year revenue requirement are accepted.

10. A conversion factor of 618 kWh/bbl for No. 6 fuel for the Holyrood Thermal Generating Station is accepted for the 2015 test year.

11. Hydro will be required to reduce the proposed 2015 test year intercompany charges by $115,000 to account for fully burdened costs in the Admin Fee.

12. Hydro will be required to file on or before March 31, 2017 a proposal in relation to annual reporting, starting in 2017, of its intercompany activity, including a description of all services rendered, the cost charged back to and from the affiliates, the amounts involved and the methods used for determining these amounts.

13. Hydro will be required to revise the proposed 2015 test year salaries and benefits costs to reflect:
    1) a disallowance of $4.0 million
    2) a vacancy allowance of 55 full time equivalents
    3) the removal of the costs associated with the short-term incentive program.

14. Hydro's proposed amortization, over a five-year period beginning in 2015, of the costs associated with the Holyrood black start diesels in the amount of $5.2 million is accepted.

15. Hydro will be permitted to, amortize over a three-year period beginning in 2015, general rate application costs for 2015 in the amount of $750,000.

16. Hydro will be required to revise the proposed 2015 test year other operating costs to reflect:
    1) general rate application and Board related costs of $1.75 million, including the amortization of the general rate application costs
    2) a reduction of $0.5 million for travel costs.

17. Hydro will be required to revise the amount of the 2015 test year debt guarantee fee to reflect a 50/50 apportionment of the calculated cost savings.

18. Hydro's proposal to defer and amortize, over a five-year period beginning in 2015, the 2015 costs of extraordinary transformer and breaker repairs not associated with imprudence is accepted.

19. Hydro will be required to file a revised 2015 test year revenue requirement for the purpose of setting rates to reflect the findings of the Board in this Decision and Order.

20. Hydro's proposal to reflect the full-year impact of 2014 delayed in-service assets in its 2015 test year average rate base for the purpose of setting rates beginning in 2016 is accepted.

21. Hydro will be required to adjust its fuel inventory allowance in the 2015 forecast rate base to reflect the findings of the Board in relation to the 2015 test year fuel price forecasts.

22. Hydro will be required to file a revised 2015 test year forecast average rate base and rate of return on rate base for rate setting purposes to reflect the findings of the Board in this Decision and Order, including a target return on equity of 8.5%.

23. Hydro will be permitted recovery with respect to the 2014 revenue deficiency in an amount to be determined based on the findings of the Board in this Decision and Order.

24. Hydro will be required to reduce the proposed 2014 test year intercompany charges by $106,000 to account for fully burdened costs in the Admin Fee.

25. Hydro will be required to revise the proposed 2014 test year salaries and benefits costs to reflect:
    1) a disallowance of $2.0 million
    2) a vacancy allowance of 52 full time equivalents
    3) the removal of the costs associated with the short-term incentive program.

26. Hydro will be required to revise the proposed 2014 test year other operating costs to reflect:
    1) general rate application and Board related costs of $2.5 million
    2) a reduction of $0.5 million for travel costs.

27. Hydro will be required to file revised proposals to reflect the Board's findings in relation to the use of actual No. 6 fuel costs in the 2014 test year revenue requirement for the purpose of calculating the 2014 revenue deficiency.

28. Hydro will be required to revise the amount of the 2014 test year debt guarantee fee to reflect a 50/50 apportionment of the calculated cost savings.

29. Hydro will be required to file a revised 2014 test year revenue requirement for the purpose of determining the 2014 revenue deficiency to reflect the findings of the Board in this Decision and Order.

30. Hydro will be required to file a proposal for the recovery of the 2014 additional supply costs not associated with imprudence as part of its revised proposals arising from this Decision and Order.

31. Hydro's proposed reduction to the 2014 test year revenue requirement for the purpose of determining the 2014 revenue deficiency to reflect the impact of the delayed in-service of 2014 capital projects is accepted.

32. Hydro will be required to file a revised 2014 test year forecast average rate base and rate of return on rate base for the purpose of calculating the 2014 revenue deficiency reflecting the delayed in-service of 2014 capital additions as well as the findings of the Board in this Decision and Order, including a target return on equity of 8.8%.

33. Hydro's proposed reduction to the 2015 test year revenue requirement for the purpose of determining the 2015 revenue deficiency to reflect the impact of the delayed in-service of 2014 capital projects is accepted.

34. Hydro will be required to file a revised 2015 test year revenue requirement for the purpose of determining the 2015 revenue deficiency to reflect the findings of the Board in this Decision and Order.

35. Hydro will be required to file a revised 2015 test year forecast average rate base and rate of return on rate base for the purpose of calculating the 2015 revenue deficiency, reflecting the delayed in-service of 2014 capital additions as well as the findings of the Board in this Decision and Order, including a target return on equity of 8.8%.

36. Hydro will be required to provide a report with its next general rate application in relation to the identification of the rural subsidy on customers' bills, addressing: i) practices in other jurisdictions, ii) other options to address transparency concerns, iii) what, if any, information customers would like to have on their bills in this circumstance, and iv) any other concerns or potential issues and options to address these.

37. Hydro's proposed change to the methodology for the allocation of O&M costs in specifically assigned charges is not accepted. Hydro will be required to continue to use its existing methodology to allocate the proposed O&M costs in specifically assigned charges to Industrial customers on the Island Interconnected system.

38. Hydro's proposal to use the revenue requirement method to allocate the rural deficit between Newfoundland Power and the Labrador Interconnected system as of January 1, 2014 is accepted.

39. Hydro will be required to file updated test year cost of service studies to reflect the findings of the Board in this Decision and Order, for 2014 and 2015.

40. Hydro's proposal to continue the existing load variation component of the RSP is accepted.

41. Hydro's proposed modification of the RSP rules to reflect an energy allocation approach is accepted, such that the allocation of the year-to-date net load variations in the RSP load variation component between Newfoundland Power and the Industrial customers effective September 1, 2013 will be based on energy ratios.

42. Hydro's proposed interim Labrador Industrial Transmission Rate will be approved on a final basis for existing customers. Hydro will be required to file a revised rate sheet to reflect that this rate is available to existing customers only.

43. Hydro's proposal to implement rate increases for Hydro Rural non-Government Domestic and General Service customers on isolated systems that are higher than the average increase proposed for the Hydro Rural Interconnected customers as being in accordance with Government directive (OC2016-104) is accepted.

44. Hydro's proposal to adjust the average system losses used in the calculation of the energy charge to Industrial customers for non-firm service to 3.47% is accepted.

45. Hydro's proposed changes to the RSP rules are accepted.

46. Hydro's proposed changes to the Rules and Regulations are accepted.

47. Hydro will be required to file a proposal for the finalization of Industrial customer rates to reflect the findings of the Board in this Decision and Order.

48. Hydro will be required to file a revised Schedule of Rates, Rules and Regulations and revised RSP Rules to reflect to the findings of the Board in this Decision and Order.

49. Hydro will be required to file revised account language for the Isolated Systems Supply Cost Variance Deferral Account to reflect that Hydro is required to file a detailed report with the annual application for disposition of the balance.

50. Hydro will be required to file revised account language for the Energy Supply Cost Variance Deferral Account to remove variances associated with the price of power purchases and to clearly set out the supply sources.

51. Hydro's proposal to defer annual customer energy conservation program costs commencing in 2015 in a CDM Cost Deferral Account, and the proposed recovery of the existing balance of deferred CDM costs as of December 31, 2014 plus the annual costs over a seven-year period through the CDM Cost Recovery Adjustment is accepted, effective January 1, 2016.

52. Hydro will be required to file revised account language for the Holyrood Conversion Rate Deferral Account to include a cost variance threshold of $\pm$ \$500,000.

53. Hydro will be required to file with its next general rate application a report setting out the status of progress in meeting the goals and objectives set in the Customer Service Strategic Roadmap for the period 2015-2017, as well as identification of appropriate KPIs and benchmarks against which customer service should be measured and reported.

54. Hydro will be required to provide a report by January 13, 2017 as to the status of the implementation of its Account Management Framework, including the designation of key account representatives for Industrial customers.

55. Hydro's proposal to continue to provide functionally oriented KPIs based on the most recent test year cost of service study in its annual reporting to the Board is accepted.

56. Hydro will be required to file for the approval of the Board its proposed 2013 average rate base, reflecting the findings of the Board in this Decision and Order.

57. The intervenors will be given the opportunity to apply for an award of cost, with supporting documentation, at the conclusion of this proceeding.

58. Hydro will be required to file a proposal for the recovery of the 2014 and 2015 revenue deficiencies including the 2014 additional supply cost deferral, with supporting documentation, reflecting the findings of the Board in this Decision and Order. Further if Hydro is seeking recovery for a 2016 revenue deficiency this should also be reflected in its proposal.

59. Hydro will be required to file its next general rate application no later than March 31, 2017 for rates based on a 2018 test year.

PART SEVEN: BOARD ORDER

IT IS THEREFORE ORDERED:

PRUDENCE REVIEW

1. Hydro's prudence compliance filing arising from Order No. P.U. 13(2016) is accepted and shall be incorporated in the revised proposals to be filed as a result of this Decision and Order.

SETTLEMENT AGREEMENTS

2. The Settlement Agreement and the Supplemental Settlement Agreement are accepted and shall be incorporated in the revised proposals to be filed as a result of this Decision and Order.

COST OF CAPITAL AND RETURN ON EQUITY

3. The return on equity to be used in calculating the allowed rate of return on rate base for 2014 and 2015 for the purpose of calculating the 2014 and 2015 revenue deficiencies shall be 8.8%.

4. The return on equity to be used in calculating the allowed rate of return on rate base for rate setting purposes, beginning in 2016, shall be 8.5%.

5. Hydro shall, with its next general rate application and no later than June 30, 2017, file a proposal in relation to an adjustment mechanism for its target return on equity, in accordance with the findings of the Board in this Decision and Order.

REVENUE REQUIREMENT

6. Hydro shall file, for approval of the Board, a revised revenue requirement for the 2015 test year for rate setting purposes, incorporating the findings of the Board in this Decision and Order.

RATE BASE AND RETURN ON RATE BASE

7. Hydro shall file, for approval of the Board, a revised 2013 rate base, incorporating the findings of the Board in this Decision and Order.

8. Hydro shall file, for approval of the Board, a revised forecast average rate base for 2014, incorporating the findings of the Board in this Decision and Order.

9. Hydro shall file, for approval of the Board, a revised forecast average rate base and rate of return on rate base for the 2015 test year for rate setting purposes, incorporating the findings of the Board in this Decision and Order.

10. Hydro shall file a revised excess earnings account definition to reflect a range of rate of return on rate base of ± 20 basis points.

RECOVERY OF 2014 AND 2015 REVENUE DEFICIENCIES

11. Hydro shall file a revised calculation of the 2014 and 2015 deficiencies setting out revised calculations of the revenue requirement, rate base and rate of return on rate base for each year, and incorporating the findings of the Board in this Decision and Order.

12. Hydro shall file a proposal for the recovery of the 2014 and 2015 revenue deficiencies, and the 2014 additional supply costs deferral, by customer class, incorporating the findings of the Board in this Decision and Order.

COST OF SERVICE

13. Hydro shall file updated test year cost of service studies, incorporating the findings of the Board in this Decision and Order, for 2014 and 2015.

DEFERRAL AND RECOVERY MECHANISMS

14. Hydro shall file revised definitions for the Isolated Systems Supply Cost Variance Deferral Account, the Energy Supply Cost Variance Deferral Account and the Holyrood Conversion Rate Deferral Account, in accordance with the findings of the Board in this Decision and Order.

15. Hydro's proposal to defer and recover annual customer energy conservation program costs beginning in 2016 is approved, in accordance with the findings of the Board in this Decision and Order.

16. Hydro's proposal to amortize, over a five-year period beginning in 2015, the costs associated with:

- **a. the Holyrood Black Start diesels, in the amount of $5.2 million; and**
- **b. extraordinary transformer and breaker repairs not associated with imprudence**

is approved.

17. Hydro will be allowed to amortize, over a three-year period beginning in 2015, general rate application costs for 2015 in the amount of $750,000.

RATES, RULES AND REGULATIONS

18. Hydro shall file, for the approval of the Board, a revised Schedule of Rates, Rules and Regulations, and revised RSP Rules, incorporating the findings of the Board in this Decision and Order.

19. Hydro shall file a proposal for the finalization of Industrial customer rates, incorporating the findings of the Board in this Decision and Order.

OTHER MATTERS

20. Hydro shall file on or before March 31, 2017 a proposal in relation to annual reporting of intercompany activity, starting in 2017, in accordance with the findings of the Board in this Decision and Order.

21. Hydro shall file a report by January 13, 2017 in relation to its Account Management Framework, in accordance with the findings of the Board in this Decision and Order.

22. Hydro shall file with its next general rate application a report in relation to its Customer Service Strategic Roadmap, in accordance with the findings of the Board in this Decision and Order.

23. Hydro shall file a report with its next general rate application in relation to the identification of the rural subsidy on customers' bills, in accordance with the findings of the Board in this Decision and Order.

24. Hydro shall file its next general rate application no later than March 31, 2017 for rates based on a 2018 test year.

HEARING COSTS

25. Hydro shall pay the expenses of the Board associated with this matter, including the expenses of the Consumer Advocate incurred by the Board pursuant to section 117 of the Act.

26. Leave is granted to the intervenors to apply for an award of costs within 30 days of the Order of the Board establishing final rates in this matter.

DATED at St. John's, Newfoundland and Labrador this 1st day of December, 2016.

Andy Wells
Chair & Chief Executive Officer

Darlene Whalen, P.Eng.
Vice-Chair

Dwanda Newman, LL.B.
Commissioner

James Oxford
Commissioner

Cheryl Blundon
Board Secretary

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