REASONS FOR DECISION

IN THE MATTER OF an application by New Brunswick Power Corporation pursuant to subsection 103(1) of the *Electricity Act*, S.N.B. 2013, c.7, for approval of the schedules of the rates for the fiscal year commencing April 1, 2015.

(Matter No. 272)

October 28, 2015

NEW BRUNSWICK ENERGY AND UTILITIES BOARD

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NEW BRUNSWICK ENERGY AND UTILITIES BOARD:

Chairman:	Raymond Gorman, Q.C.
Vice-Chairperson:	François Beaulieu
Members:	Michael Costello
	Patrick Ervin
	John Patrick Herron
Counsel:	Ellen Desmond, Q.C.
Chief Clerk:	Kathleen Mitchell

APPLICANT:

New Brunswick Power Corporation:	John Furey

INTERVENERS:

Eastlink:	Natalie MacDonald
Enbridge Gas New Brunswick Inc.:	Patrick Hurley, Q.C.
F6 Networks Inc.:	Peter Zed, Q.C.
Gerard Daly	
Green Party of New Brunswick:	David Coon
Gregory Hickey	
J.D. Irving, Limited:	Gerald Lawson, Q.C.
New Clear Free Solutions:	Chris Rouse
North York Veneer Products Inc.:	Jennifer Leduc Allen
Public Intervener:	Heather Black
Rogers Communications Partnership:	Leslie Milton
Utilities Municipal:	Scott Stoll

A. Introduction

1. Procedural Background

[1] The Board issued a partial decision on this matter on September 28, 2015, in which it approved rates to take effect on October 1, 2015. The reasons for this decision are set out below.

[2] The New Brunswick Power Corporation (NB Power), in compliance with subsection 103(1) of the *Electricity Act*, S.N.B. 2013, c.7 (the Act), applied to the New Brunswick Energy and Utilities Board (Board) on November 21, 2014, for an order approving the schedules of rates it proposed to charge for its services for the fiscal year commencing on April 1, 2015.

[3] The Board posted on its website a Hearing Order and Notice of Pre-Hearing Conference (Notice) on November 27. The Notice was also published in the *Telegraph Journal*, the *Times & Transcript*, the *Daily Gleaner*, and *Acadie Nouvelle*.

[4] On November 28th, in accordance with the Order, NB Power placed a link on its website to the public documents regarding the application.

[5] At the Pre-Hearing Conference held on December 22, the hearing was scheduled to commence on June 15, 2015. A large volume of documentary evidence was filed by NB Power and four interveners: New Clear Free Solutions (NCFS), F6 Networks Inc. (F6N), Rogers Communications Partnership (Rogers), and the Public Intervener.

[6] The hearing took place from June 15 to June 19 in Fredericton, and from June 22 to June 26 in Saint John. Evidence and argument in relation to the general rate application were presented from June 15 to 22. The Board also held an additional public session on June 17.

[7] A discrete portion of the hearing, heard from June 23 to June 26, dealt with NB Power's proposed methodology and typical pole model to determine an attachment rate for poles owned by NB Power. The Board's decision concerning that aspect of the hearing will be issued separately, at a later date.

2. General Rate Application Hearing

[8] NB Power presented four witness panels at the general rate application phase of the hearing. Panel A consisted of Mr. Darren Murphy, Chief Financial Officer and Vice-President of Corporate Services, Mr. Neil Larlee, Director of Strategic Planning, and Mr. Jonathan Dobson, Director of Risk and Treasury. Panel A responded to questions in relation to NB Power's corporate policies, its integrated resource plan, the renewable energy standard, its strategic, financial and capital investment plan, energy efficiency and the Reduce and Shift Demand program.

[9] Panel B consisted of Mr. Murphy, Mr. Larlee, Ms. Angela Leaman, Director of Financial Planning, and Ms. Caroline Collyer, Director of Financial Reporting. Panel B responded to questions relating to the revenue requirement, accounting policies, rate schedules and policies, and its load forecast.

[10] Panel C consisted of Mr. Murphy, Mr. Dobson, and Mr. Steven Chan, Senior Engineer, Corporate Modelling. Panel C responded to questions relating to fuel and power purchases, generation, out-of-province revenue and NB Power's financial risk management policies.

[11] Panel D consisted of Dr. James Sustman, Vice-President in the Energy Portfolio Management Advisors group within Ventyx, an ABB company. Dr. Sustman, who prepared a report in support of the application, was qualified by the Board as an expert in the area of development and use of production cost models and simulations for electric utilities. He responded to questions in relation to the PROMOD technical audit and review.

[12] Mr. Chris Rouse appeared as a witness on behalf of NCFS and responded to questions in relation to the pre-filed evidence of NCFS.

[13] The Public Intervener, Ms. Black, retained Mr. John Athas, Principal Consultant and Treasurer of La Capra Associates, Inc. to review NB Power's application. Mr. Athas prepared and filed a report providing his opinion on the NB Power evidence. He was qualified by the Board as an expert in the area of utility regulation, specifically rate making, revenue requirements, resource planning, financial and risk analysis and strategic planning.

[14] In addition to the above interveners who presented evidence, there was active participation from Enbridge Gas New Brunswick Inc. (EGNB), Mr. Gregory Hickey, J.D. Irving, Limited (JDI), and Utilities Municipal.

3. General Public Session

[15] The Board scheduled a session in Fredericton on the evening of June 17, 2015 to receive comments from members of the general public in relation to NB Power's application. The option to file comments in writing was also open to those not wishing to attend the session in person. Notice of the public session was published in the same four daily news publications mentioned above.

[16] Presentations to the Board were made by Ms. Jennifer Leduc Allen (supplemented by written submission), Mr. Denis Robichaud on behalf of the Canadian Federation of Independent Business, Mr. Pat Hickey (supplemented by written submission), and Mr. Garth Hood.

B. Legislative Framework

[17] The Board's mandate governing the provision of the services provided by NB Power to consumers and to municipal distribution utilities is found under Part 6 (*Regulation of Electricity*), Division B (*Electricity Services*) of the Act.

[18] This is an application by NB Power under section 103 of the new Act, which was proclaimed and came into force in October, 2013. Although there have been applications from the former Distribution Corporation, the current application represents the first time since 1992 that NB Power has applied, as an integrated utility, for approval of its rates.

[19] Under section 103 of the Act, NB Power is required to apply to the Board for approval of its schedules of rates for the fiscal year which commences on April 1, 2015, and for each subsequent fiscal year. The application is required to include NB Power's projection of its load and revenue, its revenue requirement and its proposed rate schedules for the fiscal year. The Board is ultimately required to approve the rates that are applied for, if satisfied that they are just and reasonable, or fix other rates that it finds to be just and reasonable.

[20] Although there are additional aspects of the legislative framework that will be discussed in the sections below, it is useful to set out some of the key provisions of the Act that generally guide the Board:

> **103**(2) An application made by the Corporation under subsection (1) shall include, but not be limited to, the following:
>
> (*a*) the Corporation's projection of its load and revenue for the fiscal year to which the application relates;
>
> (*b*) the Corporation's revenue requirements for the fiscal year to which the application relates; and
>
> (*c*) the Corporation's schedules of rates it proposes to charge for the fiscal year to which the application relates.
>
> **103**(7) In approving or fixing just and reasonable rates, the Board shall base its order or decision on the Corporation's revenue requirements, taking into consideration
>
> (*a*) the policy set out in section 68,
>
> (*b*) the most recent integrated resource plan approved or deemed to be approved by the Executive Council under section 100,
>
> (*c*) the most recent strategic, financial and capital investment plan filed with the Board under section 101,
>
> (*d*) any requirements imposed by law on the Corporation that may be relevant to the application, including, without limitation, requirements regarding demand-side management and energy efficiency plans and renewable energy requirements,
>
> (*e*) any directive issued by the Executive Council under section 69 that may be relevant to the application, and
>
> (*f*) any policy established by a regulation made under paragraph 142(1)(f) that may be relevant to the application.
>
> **103**(8) In approving or fixing just and reasonable rates, the Board may take into consideration
>
> (*a*) accounting and financial policies of the Corporation,
>
> (*b*) matters of cost allocation and rate design,

(*c*) customer service related charges,

(*d*) the Corporation's demand-side management and energy efficiency plans, and

(*e*) any other factors that the Board considers relevant.

128 In an application under this Act or the regulations, the burden of proof is on the applicant.

131 Any order or decision of the Board made under this Act or the regulations is subject to any terms or conditions that the Board considers necessary in the public interest.

C. Load Forecast and Revenue Requirement

[21] The application includes NB Power's projections of load, revenue and its revenue requirement for the fiscal year 2015/16.

1. Load Forecast

[22] NB Power filed its load forecast for in-province customer requirements for the period 2015/16 to 2024/25. The load forecast is based on an analysis of past loads and trends, using data gathered through customer surveys and assessments of economic, demographic, technological and other factors affecting the utilization of electrical energy.

[23] The load forecast incorporates several key assumptions:

1. Average gross domestic product growth of 1.8 per cent for the forecast period.
2. Known major industrial additions and load changes based on account manager input and public announcements.
3. The addition of 2,500 new year-round residential customers in 2015/16, based on historical customer growth and population projection.
4. Normal weather, based on a weighted 30-year average temperature history.

5. Estimates of energy reductions from NB Power’s Reduce and Shift Demand program, as well as non-program driven energy conservation savings.

6. Penetration of electric space and water heating, and air conditioning, based on 2013 survey results.

[24] The Board finds that the methodology used by NB Power to produce its 2015/16 load forecast is appropriate, and is not biased in the direction of overestimating or underestimating the loads. The Board therefore accepts the load forecast, as filed.

[25] NB Power has made efforts to improve its forecasting models. In 2007, GDS Associates issued a load forecasting audit, which recommended nine action items. Five of the actions are completed, one is completed but ongoing, two are two-thirds completed, and one remains outstanding.

[26] The outstanding action item relates to a recommendation that NB Power assess the value of short-term forecasting models. NB Power agreed to participate in a working group to explore this or any other aspect relating to load forecasting. NB Power is to establish this working group and report on the status of the outstanding item in future rate applications.

2. Revenue Requirement

[27] NB Power submitted its projected revenue requirement totaling $1.74 billion (rounded) consisting of the following line items:

Items	Budgeted Revenue Requirement
a. Fuel and purchased power expense	$702.1 million
b. Operations, maintenance and administration	$440.3 million
c. Amortization and decommissioning	$263.8 million
d. Taxes	$37 million
e. Finance Charges	$134.4 million
f. Regulatory deferral	$71.9 million
g. Net earnings	$90.6 million
Total	$1,740.2 million

a. Fuel and Purchased Power Expense

[28] NB Power forecasts its fuel and purchased power expense to be $702.1 million for the 2015/16 test year (test year). This includes $184.7 million for fuel expenses including heavy fuel oil ($33.4 million), nuclear ($36.7 million), and imported coal and other ($114.5 million). Purchased power was forecast to be $517.5 million.

[29] NB Power relies on the PROMOD modeling/costing program to derive the fuel and purchased power costs. The program uses an economic dispatch of available generation resources and purchased power to arrive at the least cost energy price to meet NB Power's forecast energy obligations to in-province customers.

[30] The forecast of fuel and purchase power costs is dependent on the output results from the PROMOD simulations. Dr. James Sustman was engaged by NB Power to perform an independent technical audit of the simulation. It was Dr. Sustman's opinion that NB Power used sound engineering judgment and practice in identifying data sources for its simulations, preparing the PROMOD database, and executing the model run. He concluded that NB Power's calculation of its forecast of the energy-related components of its revenue requirement was reasonable.

[31] Given that fuel and purchased power expense determines 40% of the revenue requirement, the Board finds it prudent to monitor the variations in these costs on an ongoing basis. The Board orders NB Power to file all PROMOD simulation output reports with their relevant assumptions as they are completed.

[32] The fuel and purchased power costs are discussed below, as well as the Large Industrial Renewable Energy Purchase Program (LIREPP).

(i) Fuel Costs

[33] The Public Intervener, through the evidence of Mr. Athas, challenged the forecasted amount for heavy fuel oil. In his report, he stated that NB Power's hedged prices do not account for recent declines in the price of oil, and was of the opinion that "NB Power has not demonstrated in its evidence that the hedging is sufficiently effective to avoid any effect and thus it is reasonable to expect an impact at least equal to 2% reduction." (Ex. PI 1.01, p. 6 lines 4-6). A 2% decrease in the cost of heavy fuel oil would result in savings of approximately $668,000.

[34] Mr. Athas applied the 2% reduction to the overall fuel and purchase power cost, and not to the heavy fuel oil cost, resulting in his estimate of a $14 million decrease. This estimate was only meant to be illustrative, and confirmed that other factors, which could impact the fuel expense, were not considered in his illustration.

[35] NB Power explained in its testimony that the heavy fuel oil expense for the test year was based on the $89.11 per barrel price at which it acquired the fuel to fill the tanks at the Coleson Cove generation facility. It did not forecast a need for additional purchases during the test year and therefore did not see a need for building any variability in its forecast.

[36] The Board accepts the proposed fuel expense for the test year of $184.7 million. In coming to this conclusion, the Board notes that there were a number of factors that affected the fuel expense, such as the Point Lepreau Generating Station (PLGS) capacity factor, hydro-generation, purchased power prices, coal and pet coke prices, as well as foreign exchange.

(ii) Large Industrial Renewable Energy Purchase Program

[37] The LIREPP was raised as an issue during the hearing. Mr. Gregory Hickey argued that the LIREPP represented a subsidy to large industrial users, which must be paid for by the general rate payers. The net purchased power cost of the LIREPP to NB Power from January 2012 to March 2014 was $24.4 million. Mr. Hickey stated that the Board should reject NB Power's rate application until there is legislation to deal with this issue.

[38] Subsection 3(1.1) of the *Electricity from Renewable Resources Regulation – Electricity Act* (NB Reg. 2013-65) (Regulation) requires NB Power to ensure by December 31, 2020 that 40% of the total in-province electricity sales is electricity from renewable resources, which includes electricity generated by qualifying large industrial enterprises.

[39] In accordance with subsection 4(1) of the Regulation, NB Power is required to obtain electricity from qualifying large industrial enterprises in accordance with the LIREPP. Such purchases contribute to the overall renewable energy target set out in the Regulation of 40% of in-province kWh sales.

[40] The LIREPP is mandated by the Regulation, and there was no evidence or suggestion that the net purchases by NB Power are not in accordance with the regulated requirement. Accordingly, the Board will not disallow this expense.

(iii) Purchased Power

[41] NB Power has twelve power purchase agreements (PPAs) with third party generators. Generation PPAs include power generated by natural gas and renewable resources, including hydro, wind, and biomass.

[42] Certain PPAs provide NB Power with environmental attributes and assist in promoting regionally distributed generation in order to meet the renewable electricity target as set out in the Regulation.

[43] Mr. Hickey argued that NB Power is burdened by the PPAs. He contended that there is no need for all of the renewable power purchased under these agreements in order to meet NB Power's load obligations. He questioned the purchase of wind energy, when NB Power's generating facilities can produce energy at a cheaper rate.

[44] In his final argument, Mr. Hickey submitted that NB Power is paying more for purchased power than the alternative of self-generation. As mentioned earlier, however, NB Power is mandated by the Regulation to purchase electricity from renewable resources, which include electricity generated from solar, wind, hydroelectric, ocean-powered, biogas, biomass energies and sanitary landfill gas. There was no evidence or suggestion that the net purchases of electricity through PPAs are not in accordance with the regulated requirement.

[45] In his final argument, Mr. Rouse submitted that it is unreasonable to allow a PPA to be signed without Board approval, since it will affect the revenue requirement. However, the Act does not require NB Power to seek such approval.

[46] Pursuant to section 144 of the Act, any PPA entered by NB Power before the commencement of the Act is deemed to be prudent and reasonable.

[47] There was no evidence that challenged the prudence of any PPA that is not covered by section 144 of the Act. The Board therefore accepts the forecasted amount for purchased power of $517.5 million.

b. Operations, Maintenance and Administration (OM&A) Expense

[48] NB Power's proposed OM&A expense totals $440.3 million (rounded), comprised of 14 separate line items: (Ex. NBP 1.03, p. 15 (Table 2.1.2a))

Items	Budgeted OM&A Expense
1. Labour and benefits	$274.5 million
2. Material expense	$36 million
3. Hired services	$97.2 million
4. Travel	$4.9 million
5. Vehicles	$10.8 million
6. Equipment	$16.1 million
7. Communication	$5.5 million
8. Properties	$4.2 million
9. Insurance and claims	$10.7 million
10. Corporate costs	$18.1 million
11. Bad debt expense	$4.3 million
12. Internal services charged	($0.6) million
13. Allocation to capital	($53.1) million
14. Other future employee benefits	$11.8 million
Total	$440.3 million

[49] The Board heard evidence and argument in relation to three of the items, namely labour and benefits, hired services and corporate costs, which are discussed below. In addition, a cost reduction program, budgeted as a place holder within hired services, is discussed below under a separate heading.

(i) Labour and Benefits

[50] NB Power seeks to include the amount of $274.5 million as the labour and benefits expense. This represents an increase of $3 million from the previous year "…due to union and non-union increase assumptions and new positions offset by a reduction in expected overtime costs." (Ex. NBP 1.03, p. 18 lines 7-8)

[51] Dealing first with the increase assumptions, Mr. Furey explained that, of the $11.2 million increase in labour costs in the test year, approximately $8 million is largely attributed to wage increases. NB Power's explanation for the wage increases was that they follow the end of a government mandated wage freeze: "All NB Power non-bargaining employees have served the Government's wage freeze mandate. All bargaining employees have or will serve the wage freeze mandate as collective agreements are negotiated." (Ex. NBP 1.03, p. 16 lines 21-24). In essence, it is anticipated that these increases will either arise as a result of collective negotiations or following a period of no wage increase for non-unionized staff.

[52] The remaining $3 million is allocated to funding the 30 new positions in the test year, with benefits. NB Power confirmed that 30 new permanent positions were included in the 2015/16 budget. The details of those 30 positions are outlined in NB Power's evidence, and several of the positions have been created to assist with capital work.

[53] NB Power also confirms that the increase in labour cost is offset by reductions in overtime costs of approximately $8 million.

[54] While NB Power has explained the need for an increase in labour and benefits for the 2015/16 year, these costs must be closely monitored. Labour and benefits are a significant driver of costs and every effort must be made to ensure that efficiencies are gained, where possible. This cost item will be closely reviewed in future rate applications.

[55] For 2015/16, the Board accepts the labour and benefits expense as proposed.

(ii) Hired Services

[56] Hired services contracts supplement and support NB Power's regular workforce and represent the second largest component of the OM&A expense. These hired services contracts include specialized and technical services, non-routine activities, and other contracts to meet peak and seasonal requirements.

[57] The proposed budget for hired services is $97.2 million. Although there are some component increases, the proposed budget represents an overall decrease of $42 million from the 2014/15 forecast. Continuous improvement opportunities identified by NB Power (discussed under the heading "Cost Reductions" below) accounts for $10 million of this decrease. The balance of the decrease is due to reduced PLGS outage maintenance support and the impact of Post Tropical Storm Arthur in 2014/15.

[58] Two aspects of hired services are discussed below, namely Vegetation Management and Cost Reductions.

- **Vegetation Management**

[59] Vegetation management, one component of hired services, is budgeted to increase by $1 million to $6.9 million.

[60] In its Annual Report 2013-2014, and in a review of Post Tropical Storm Arthur, NB Power stressed its commitment to investing more in vegetation management, including a commitment to spend $8 million in 2015/16. Ms. Leaman explained that hired services represents $6.9 million of the commitment. The Board is aware that many New Brunswickers faced hardships related to the power outages due to the effects of recent major weather events. The Board sees this investment as necessary to mitigate impacts of severe weather events. The Board accepts that the proposed budget is reasonable and reflects NB Power's commitment to vegetation management.

- **Cost Reductions**

[61] NB Power indicated that the OM&A hired services budget includes $10 million in permanent cost reductions, described as a "place holder" in its budget, in addition to approximately $30 million in savings achieved from its cost reduction initiatives since

2011. NB Power's 10-Year Plan from 2016 to 2025 (10-Year Plan) also forecasts an additional $15 million in cost savings in 2016/17. The savings would include areas other than hired services or other OM&A expenses, and are mainly based on a corporate-wide Lean Six Sigma black belt review initiative.

[62] NB Power produced a list of 36 black belt projects that were expected, as a high level estimate, to produce savings of $12.8 million on an annualized basis, excluding three projects for which expected savings were yet to be determined.

[63] Mr. Murphy, in cross-examination, expressed a high degree of confidence that the $10 million in savings will be achieved, although not necessarily all from the listed projects. Mr. Murphy also indicated that the list of projects represents a "snapshot" and that some projects fall off the list and other projects may be added.

[64] The 10-Year Plan does not estimate cost savings beyond 2016/17. Mr. Murphy acknowledged that future 10-year plans could project longer term estimates, if NB Power can determine its capacity to sustain continuous cost improvements.

[65] In Ms. Black's submission, the $10 million cost savings estimate is "unduly conservative" and longer term cost reduction estimates in its 10-year plans should be included to reflect NB Power's obligation to its rate payers to focus on continuous improvement.

[66] After considering the evidence on this issue, the Board concludes that the $10 million place holder for cost reductions is understated. The Board recognizes that the list of black belt projects, totaling $12.8 million, represents a snapshot of evolving projects, and that there may be additional savings opportunities outside of that list. Considering also the estimate of additional permanent savings of $15 million in 2016/17, cost savings of $13 million are reasonably achievable in the test year.

[67] Accordingly, the OM&A budget place holder should reflect $13 million, instead of $10 million.

[68] The Board also considers that long term cost reduction estimates are relevant for inclusion in NB Power's 10-year plans and under subsection 101(2) of the Act, orders NB Power to include such information in future plans.

[69] As a result of the foregoing, the Board reduces the hired services budget by $3 million and approves the amount of $94.2 million.

(iii) Corporate Costs

[70] NB Power's corporate costs of $18.1 million include dues and memberships, regulatory and environmental fees, training, and corporate business expense. The corporate business expenses represent $2.2 million of this total. Of that amount, approximately $984,000 is allocated as "Riverbank restoration (Tobique First Nation) contribution".

[71] NB Power had given an undertaking to seek permission to disclose a memorandum of understanding (MOU) with respect to the Riverbank restoration item, but later indicated that NB Power is not a party to the MOU, which is between the Government of New Brunswick and the Tobique First Nation. The government instructed NB Power not to provide a copy of the MOU. Mr. Furey agreed that Board Counsel should nevertheless be permitted to examine the witness panel to provide details about the item.

[72] Upon questioning, Mr. Murphy stated that NB Power was directed by government to "incur certain costs" and to "carry out certain works" (Transcript, p. 905 line 9; p. 906 lines 4-5), as part of ongoing discussions related to the original construction of hydro facilities in the area. He acknowledged that there was no contractual obligation made by NB Power to do so.

[73] Mr. Murphy was asked by the Board panel to explain why that payment should be included in the revenue requirement. He replied that:

> These negotiations relate to the original construction of the facility and I think the operations of that facility are important to the revenue requirement. These discussions are moving, I guess, that dispute along and as an important part of our overall generation mix, it's important that we continue to have free access to that facility. It's important that we are able to operate that facility to the advantage of our generation and keeping rates low. So to that extent I think these costs are, if they continue to allow us to do exactly that, are appropriate for the revenue requirement. (Transcript, p. 907 line 19 to p. 908 line 5)

[74] The Board finds that there is insufficient evidence to support the inclusion of this portion of NB Power's corporate business expense, especially in light of the fact that the Board

was not permitted to examine the MOU, and that there is no contractual obligation for NB Power to make the payment.

[75] The Board therefore disallows the amount of $1 million (rounded) as a corporate cost.

(iv) OM&A Conclusion

[76] The Board accepts the amount of $436.3 million for OM&A expense, representing reductions of $4 million from the proposed amount, as indicated above.

c. Amortization and Decommissioning

[77] Amortization and decommissioning (A&D) expenses are forecast to be $263.8 million for the test year, an increase of $17.7 million over the 2014/15 forecast. The increase is due to an accounting conversion to International Financial Reporting Standards (IFRS), the capitalization of the Eel River HVDC Station refurbishment and other increases.

[78] The test year A&D forecast was challenged by Mr. Athas in evidence filed on behalf of the Public Intervener. He asserted that these expenses were over-budgeted in the years 2013/14 and 2012/13 by $16 million and $29.1 million, respectively. Mr. Athas viewed the test year forecast as a continuation of this trend.

[79] In cross-examination by Mr. Furey, Mr. Athas acknowledged that the variances for the years 2011/12 and 2010/11 indicated actual A&D expenses that exceeded budget by $39.2 million and $8.4 million, respectively. This data was not considered in his report.

[80] NB Power’s rebuttal evidence provides an explanation for the variances to budget encountered over the past number of fiscal years. NB Power argues that the favorable variances for 2013/14 and 2012/13 do not have any bearing on the test year, but acknowledges that the implementation of IFRS will bring annual variances associated with changes to discount rates used in relation to asset retirements.

[81] The Board has carefully reviewed the evidence regarding the amortization and decommissioning expenses of $263.8 million. The variances were sufficiently explained as being caused by a conversion to IFRS, among other things. There were no other interveners who questioned these expenses.

[82] The Board finds the forecast to be reasonable and approves the amortization and decommissioning expenses, as submitted.

d. Taxes

[83] NB Power pays property taxes, utility tax, and right-of-way tax. These are budgeted at $37 million. These amounts are consistent with those incurred in the previous two years.

[84] The Board is satisfied that the amount for taxes is reasonable, and it is approved.

e. Finance Charges

[85] NB Power forecasts $134.4 million as its net revenue requirement for finance charges. These include an interest expense, a legislated debt management fee paid to the government of New Brunswick, and foreign exchange losses. There are offsetting credits for earnings from investments and for interest charged to capital projects. The net amount represents an increase of $27.4 million over the previous year. NB Power attributes this primarily to a forecasted reduction in foreign exchange gains and a reduction in interest earned on investments, partially offset by a reduction in interest on debt.

[86] On questioning by the Board panel as to whether there would be any benefit to negotiating lower finance rates, Mr. Murphy indicated that NB Power concluded that there was no economic value in refinancing current debt, because of penalties and other factors.

[87] The Board finds the proposed finance charges are reasonable and accepts them, as submitted.

f. Regulatory Deferrals

[88] There are two regulatory deferral adjustments to earnings, as follows:

- Regulatory deferral adjustment – Point Lepreau Generating Station; and
- Regulatory deferral adjustment – lawsuit settlement with PDVSA.

(i) Point Lepreau Generating Station (PLGS) Deferral

[89] NB Power's proposed revenue requirement includes $70.2 million as a regulatory deferral cost relating to the refurbishment outage of the PLGS. The deferral account was established under section 143.1 of the previous *Electricity Act*, S.N.B. 2003, c. E-4.6. Subsections 139(4) and 139(5) of the current Act requires the Board to ensure that the balance of the deferral account, plus any financing costs, is recovered by NB Power over the operating life of the PLGS, and is reflected in rates. The Act deems the deferral to be part of the revenue requirement.

[90] In an earlier decision, the Board determined that the deferral account would be amortized on a levelized basis over a projected operating life of 27 years and would incur financing costs at a rate equivalent to NB Power's long term debt. The Board noted, however, that any of these factors could be reassessed by the Board, as circumstances may warrant. (Board Decisions, Matter No. 171, dated March 13, 2013 and January 13, 2014)

[91] In its decision of March 13, 2013, the Board concluded that it has ongoing jurisdiction to consider the appropriateness of the estimated life span during each rate case presented by NB Power, or if it deems it appropriate, from time to time in separate proceedings ordered by the Board. In compliance with the Board's decision, NB Power files an annual report which includes an updated version of Appendix C of the decision of March 13, which includes forecasted capacity factors. The latest report is for the fiscal year ending March 31, 2015.

[92] The Board notes that the early performance of the PLGS has not met the forecasted capacity factors found in Appendix C of the decision. A continuation of this trend could affect its projected operating life. The Board will continue to monitor these performance measures, and will review, whenever necessary, the appropriateness of the estimated life span of the refurbished PLGS.

[93] The Board has reviewed the evidence and finds that the amount for inclusion in the revenue requirement is reasonable. The Board therefore accepts its inclusion, as filed.

(ii) PDVSA Settlement Deferral

[94] In a 2007 decision, the Board approved the establishment of a deferral account to pass on the benefits of a settlement of a lawsuit involving Petroleos De Venezuela, S.A. (PDVSA). The regulatory deferral reflects NB Power's obligation to pass the settlement's net benefits on to the customers by reducing future rates. The Board approves the amount of $1.7 million as the appropriate adjustment to the revenue requirement.

g. Net Earnings

[95] NB Power's proposed revenue requirement includes the amount of $90.6 million as net earnings. This would constitute the "reasonable return" portion of its revenue requirement, if so determined by the Board. The proposed amount, in the absence of any other adjustments to the revenue requirement or other rate considerations, would require the proposed uniform rate increase of 2% for the test year.

(i) NB Power Evidence and Arguments

[96] NB Power characterizes the regulatory framework as a "modified cost of service" model, in that its proposed return for the test year is driven by a key strategic objective to reduce its overall debt by $1 billion and achieve an 80/20 debt to equity ratio by 2021, as set out in the 10-Year Plan.

[97] NB Power's rationale for the 2021 goal is two-fold. First, NB Power submits that it must build an "equity cushion" in order to deal with negative contingencies while maintaining rate stability. Second, the 10-Year Plan forecasts relatively low capital spending in the first six years, followed by very high investments, most notably as a result of the Mactaquac Hydro Generating Station nearing the end of its life. Building equity by paying down debt during the initial years will, in NB Power's submission, help to maintain stable rates over the longer term.

[98] NB Power submits that the Board must use the "modern approach" in its interpretation of the Act, when determining the question of just and reasonable rates. Referring to cases from the New Brunswick Court of Appeal, the Supreme Court of Canada, and a leading text on statutory interpretation, the principle is that the words of a statute are to be read in

their entire context, harmoniously with the scheme and object of the statute and the intention of the legislature.

[99] Using this approach, NB Power submits that the Act supports the "modified" regulatory approach referred to above. The legislative context is focused on the Board's requirement to base its rate decision on NB Power's revenue requirement for the test year, taking into consideration subsection 103(7) of the Act, and in particular paragraphs 103(7)(*a*) (Government policy under section 68); 103(7)(*b*) (Integrated Resource Plan); and 103(7)(*c*) (the 10-Year Plan).

[100] In relation to Government policy under section 68, NB Power points to the phrase "a just and reasonable return, in the context of the Corporation's objective to earn sufficient income to achieve a capital structure of at least 20% equity" in paragraph 68(*a*)(ii) of the Act. In its submission, NB Power states that the absence of *on equity* following the phrase *reasonable return* modifies the standard regulatory model, and substitutes a broader component of *return* by its reference to the 20% equity target. NB Power submits that "…the legislature no longer intended return on equity to be a consideration in determination of NB Power's revenue requirements." NB Power also pointed out that the policy of low and stable rates in paragraph 68(*c*) of the Act has "specific implications" in relation to the achievement of the 20% equity goal. (NBP written argument, paras. 16 and 22)

[101] Concerning the Integrated Resource Plan (IRP) and the 10-Year Plan, NB Power submits that its requirements under sections 100 and 101 of the Act and the corresponding requirement for the Board to consider the IRP and the 10-Year Plan are intended to provide the Board with detailed information and contextual background in relation to the achievement of NB Power's equity target, and the time frame for doing so, while achieving the government policy goal of low and stable rates. In its submission, these provisions permit the Board to assess the reasonableness of the proposed rates for the test year, in the context of a long term strategy.

[102] Against this contextual background, NB Power submits that a uniform 2% rate increase, which would incorporate the allowance of the proposed net earnings, provides for just and reasonable rates. NB Power points to the projected capital expenditures in the 10-Year Plan of $1.3 billion in the first six years, versus $2.9 billion in the last four years. The proposed rate increase would begin the process under the 10-Year Plan to achieve

the equity target while providing low, stable and predictable rates from year to year in accordance with the policy in paragraph 68(*c*) of the Act.

[103] NB Power also points to the risk that a failure to achieve the 20% equity target by 2021 may limit the ability to take on a level of debt that might be required for the best option to address plans for the Mactaquac Dam. In answering a question from the Board panel, Mr. Murphy testified:

> That is NB Power's opinion that if we are not successful in reducing our debt by the amounts portrayed in our 10 year plan, then some of those options as they become more expensive and -- you know, the options are listed there. Those become more and more cost prohibitive. And at some point, it would not be practical for NB Power to borrow those kinds of funds. And expect to pass those on to customers. So that would be -- you know, that is one of the real concerns that NB Power has ensuring that all options are available so that we can make the right decision. (Transcript, p. 855 lines 18 to p. 856 line 4)

(ii) Intervener Evidence and Arguments

[104] Several interveners provided comments on NB Power's proposed net earnings or the proposed 2% uniform rate increase.

[105] Mr. Rouse, on behalf of NCFS, generally supported the rate increase. He submitted, however, that the increase not apply to the full extent, or at all, to customer classes comprising small industrial and small business enterprises. In Mr. Rouse's estimation, the current cost allocation and rate design methodology result in such customers paying substantially more than their cost of service.

[106] Mr. Lawson, counsel for JDI, argued that the 2021 time frame to achieve the 20% equity target is "an aggressive objective" and encouraged the Board to consider extending the period from six years to closer to 10 years. In his submission, this would result in increases of less than 2%. He points out that the 10-Year Plan aims beyond the minimum 20% equity target after 2021, so by retaining the 20% target beyond that point, NB Power's capital spending requirements may still be met. Mr. Lawson also submitted that, in the event that the Board disallows any significant expenses in the proposed revenue requirement, the percentage increase in rates should be reduced accordingly.

[107] Utilities Municipal, represented by Mr. Stoll, did not oppose the proposed 2% rate increase. He agreed that a return on equity measure for the proposed net earnings would not be appropriate at this time, but he does not view the legislation as precluding that possibility, once NB Power achieves an appropriate capital structure. Mr. Stoll submitted that the interaction of sections 103 and 68 of the Act presents challenges of competing objectives, but also provides "…an opportunity and a freedom for the Board to consider the various objectives and considerations within the context of a specific application and to weigh those considerations differently as the context evolves." (Transcript, p. 1088 line 25 to p. 1089 line 5)

[108] Mr. Stoll suggested that the succession of rate applications will be an "evolving process", and what may be acceptable in the current application may not be acceptable in the future. He emphasized the need to have a framework to enable the Board to understand the evolving context in future years, including sensitivity analysis around NB Power forecasts. He cited, as an example, providing an analysis of the impact on the Mactaquac Dam options if the debt reduction plan were to be delayed or accelerated. Mr. Stoll also suggested that an important goal, which "hasn't really received a lot of attention" should be to find the most efficient equity ratio objective for NB Power: "Not just necessarily find a 20 percent or something more than 20, but to hit an optimal capital structure." (Transcript, p. 1093, lines 8-9 and lines 12-14)

[109] The Public Intervener submitted the evidence of Mr. Athas. In the opinion of Mr. Athas, the expert witness on behalf of the Public Intervener, the requested 2% rate increase is not necessary, based on his proposed exclusion of certain projected OM&A and other costs. Mr. Athas concluded that such exclusions would still permit NB Power to retire $90 million in debt. Although this implies that Mr. Athas views NB Power's proposed net earnings as reasonable, he indicated that these earnings yielded an "excessive" return on equity.

[110] In her final argument, Ms. Black confirmed her opposition to the proposed 2% rate increase, but agreed that the Board's approach to setting just and reasonable rates must take into account NB Power's debt reduction targets. Ms. Black also agreed that the measure of a reasonable return is no longer based on industry-standard return on equity measures, but rather, based on the context of debt reduction and rate payer interests. In her view however, the Board's principal focus should be on the "single test year" revenue requirement, to retain year over year discipline in terms of NB Power's ongoing need to

maintain cost management efforts. Without such a focus, Ms. Black argued that there is a risk that NB Power could become too complacent with its cost-cutting measures and too conservative in its forecasts, leading to an over-reliance on high rates of return to achieve its long term goal. Ms. Black suggested that future 10-year plans should incorporate cost reduction targets, to avoid such over-reliance.

[111] Mr. Furey's rebuttal argument addressed Ms. Black's concern by pointing out that NB Power is required to apply for approval of rates every year, giving the Board the opportunity to continue to assess the reasonableness of the request for each test year. He acknowledged that Mr. Stoll's suggestion for ongoing sensitivity analysis could be a useful component of future 10-year plans, and that the Board has the clear authority to require additional information in subsequent plans.

(iii) Board Analysis

[112] A key principle governing the interpretation of the Act is that any of its provisions, to use the wording of the Court of Appeal of New Brunswick in *Hawkes (Committee of) v. Nolais, [2002] N.B.J. No. 388*, "…must therefore be read contextually and in a manner that is harmonious with the scheme that the Legislature intended to put in place." The challenge is in finding the proper balance among a number of statutory and regulatory objectives, in order to arrive at a determination that best serves the public interest.

[113] Section 1 of the Act defines "revenue requirements" as follows:

> "revenue requirements" means the annual amount of revenue required to cover projected operation, maintenance and administrative expenses, amortization expenses, taxes, interest and other financing expenses and a reasonable return.

[114] The term "reasonable return", as used in the above definition, and in paragraph 68(*a*)(ii) of the Act, is not defined. In contrast, the definition of "*transmission* revenue requirements", includes a transmitter's "reasonable return *on equity*" [emphasis added]. Further, the previous *Electricity Act* (S.N.B. 2003, c. E-4.6) defined "revenue requirements" as including "a reasonable return *on equity*" [emphasis added]. That term applied to the former Distribution Corporation and the Transmission Corporation.

[115] The use of *return* rather than *return on equity* in the current definition of "revenue requirements" indicates that the Board's consideration of a reasonable return cannot be entirely assessed in terms of NB Power's equity position. The Board's consideration of whether the proposed revenue requirement is reasonable includes a range of factors, including those enumerated in subsections 103(7) and 103(8) of the Act. In other words, the legislation is enabling and provides greater flexibility.

[116] The Board recognizes the current state of NB Power's capital structure as a significant factor. Based on the 10-Year Plan, the forecast for the fiscal year 2015/16 is 93% debt and 7% equity. The declared Government policy in section 68 of the Act is that rates should provide sufficient revenue to earn a return to achieve a capital structure of at least 20% equity. The capital structure goal must in turn be considered by the Board in the context of all of the other factors listed in subsection 103(7) of the Act, including the 10-Year Plan and the IRP.

[117] The Board concludes that, for the purposes of this application, it will not apply return on equity principles to determine a reasonable return. Return on equity remains as a potential measure in future applications, as circumstances evolve.

[118] No party disagreed with NB Power's long term objective of attaining at least a 20% equity ratio by paying down its debt from earnings, and the need to prepare for significant capital spending in the foreseeable future. The parties had differing views as to how this should be achieved.

[119] Mr. Rouse's suggestion that a 2% rate increase not apply to two customer classes does not appear to be an objection to the proposed return. This is, however, a rate allocation and structure issue yet to be determined as part of NB Power's cost allocation hearing process.

[120] The Public Intervener, while opposing the proposed 2% increase for the test year, does not oppose the 10-Year Plan debt reduction goal. Rather, the concern is that there is a risk that rate payers will bear an undue portion of the burden in achieving the goal, in the absence of a "single test year" model approach.

[121] On this point, the Board agrees that NB Power must be prepared to show, in each application, that it continues to drive towards efficiencies that will reduce costs, and keep

rates low, stable and predictable. This is consistent with the policies set out in section 68 of the Act. This must be assessed by the Board however, in the broader context of NB Power's longer term objectives. It is not a matter of choosing between a test year versus long term considerations. The issue of a reasonable return will be considered in each rate application.

[122] Mr. Lawson advocated extending the time frame for the attainment of 20% equity beyond 2021, thereby reducing the proposed return for the test year. The 10-Year Plan projects that NB Power's equity ratio will increase from 21% in fiscal 2020-21 to 30% in 2024-25. Although this appears to provide NB Power with some degree of flexibility in its plans to improve its equity ratio, the Board did not receive any form of a sensitivity analysis to assess the impact of an extension scenario. A sensitivity analysis in future rate applications would provide the Board with a clear understanding of the impacts of deferring the achievement of the 20% equity goal beyond 2021.

[123] Until a sensitivity analysis of the potential impacts of extending the time frame for achieving the 20% equity goal is considered, the Board is not in a position to address Mr. Lawson's suggestion. The 10-Year Plan, which includes the proposed net income requirement for the test year, is currently aimed at reducing net debt by $1 billion to achieve a 20% equity ratio by 2021. The Board is not prepared to delay this process at the outset without a clear understanding of the impacts.

[124] The Board requires that NB Power provide, in the next rate application, a comprehensive sensitivity analysis of the impacts of deferring the achievement of the 20% equity goal beyond 2021. In addition, NB Power is directed to provide evidence in its next rate application that addresses an appropriate capital structure for the long term.

[125] Having considered the legislative requirements, and all of the evidence and arguments of the parties, the Board accepts the amount of $90.6 million as a just and reasonable return for the test year. This return permits NB Power to continue to reduce its debt and to build its equity ratio in order to prepare for expected increases in capital spending several years from now.

[126] The Board recognizes the challenges faced by NB Power, and by extension, its rate payers. They are well articulated in the 10-Year Plan and the IRP. The plans for addressing these challenges are also addressed in these documents. Sections 100 and 101

of the Act make provisions for these documents to evolve over time, and include provisions that allow the Board to require additional information to be included.

[127] Future rate applications will continue to be assessed by the Board based on the most current evidence available, including updated 10-year plans. The Board will be considering any additional information that it may require under sections 100 and 101 of the Act.

D. Other

1. Reduce and Shift Demand Program

[128] One of the objectives in NB Power's 10-Year Plan is to pursue a strategy of reducing and shifting in-province demand for electricity that will defer the need for new investments in generation and optimize the system to capture operating and fuel savings. This is referred to as the Reduce and Shift Demand (RASD) program.

[129] The program will invest in technology, educate customers and incent consumption that is aimed at reducing and shifting demand for electricity, thus deferring the next major generation investment.

[130] A key issue faced by NB Power is its projection that, starting in 2027, it will have insufficient generation capacity to meet customer demand requirements. Two broad approaches to deal with this issue are to invest in new generation assets and power purchase agreements, or alternatively, invest in demand-side techniques and technologies to lower demand, particularly in peak periods.

[131] The three major streams of the RASD program are (a) conservation and energy efficiency efforts that will help customers mitigate the effect of future rate increases; (b) smart grid investments in advanced infrastructure management capabilities and information and communication technologies; and (c) improvements to operating processes and core capabilities that will improve the utility's ability to manage current and future infrastructure. RASD initiatives will also assist NB Power in achieving its requirements under the *Electricity from Renewable Resources Regulation – Electricity Act*.

[132] NB Power's projected benefit of the RASD program is $927 million, attributable to the deferral or elimination of two combustion turbines and other projects, and fuel and purchased power savings. The required program investment is $487 million, providing a net benefit of $440 million, on a net present value basis over a 25 year period.

[133] Mr. Larlee testified that NB Power is currently unable to provide the overall savings achieved to date under the RASD program. In terms of savings due to capacity reductions, Mr. Larlee explained that the value is in the deferral of future projects, which have not yet been realized.

[134] Mr. Lawson, in his final submission, stressed the need for the Board to ensure that RASD program spending, and the benefits derived from it, be monitored on an annual basis. This was echoed in the final argument of Mr. Hurley.

[135] The projected RASD investment of $487 million represents a significant cost, albeit over an extended time frame. It is critical that the Board is able to monitor the progress of the RASD program, in order to be satisfied that it results in significant long term cost savings.

[136] NB Power is directed to develop measures which will provide meaningful information, in order to allow the Board to assess the program spending and the benefits derived from it. A report on the progress of the RASD program shall be submitted to the Board with future general rate applications.

[137] In assessing the RASD program spending, the Board recognizes that NB Power is required to apply to the Board for approval of any capital project that meets the thresholds set out in section 107 of the Act. Accordingly, NB Power is directed to provide, with each rate application, a detailed breakdown of the non-capital and capital expenditures under the RASD program.

2. Financial Risk Management Policies

a. New Brunswick Energy Marketing Corporation

[138] In a decision regarding the financial risk management policies of New Brunswick Energy Marketing Corporation (Marketing Corporation), the Board required a report of the

budgeted and actual export margins (with variances), to be filed with the current application. A report on compliance by Marketing Corporation was also required. (Board Decision, Matter No. 251 dated October 24, 2014, p. 10)

[139] In compliance with the Board's order, the requested information was filed, indicating that there were no instances of breaches of, deviations from or exemptions from the approved policies. The evidence also indicated that no internal audits had yet been performed, but that an audit was expected to be completed in the 2015/16 year.

[140] NCFS requested the Board to order third party audits relating to the effectiveness of, and compliance with, the Marketing Corporation financial risk management policies. The Board has already dealt with this issue in its October 2014 decision in relation to Marketing Corporation and decided that external audits would be provided in due course. The Board provides further directions in relation to this issue in the following section.

b. NB Power

[141] There is no provision in the Act which specifically requires NB Power to file its financial risk management policies. In its earlier decision, the Board concluded that it has the jurisdiction under section 103 of the Act to review and approve the financial risk management policies of NB Power, and ordered it to file such policies with supporting evidence as part of this application. (Board Decision, *supra*, p. 3)

[142] NB Power filed its financial risk management policies, requesting the Board's approval. Its financial risk management framework consists of the following: (a) Financial Risk Management Framework Policy, (b) Commodity Price & Foreign Exchange / Interest Rate Risk Policy, (c) Credit Risk Management Policy, and (d) Operational Risk Policy. These policies are annually reviewed and approved by NB Power's Board of Directors. NB Power's evidence is that they are generally consistent with those policies of Marketing Corporation that were approved by the Board in its decision of October 2014, with some explained variances. The NB Power framework does not include a market risk policy, as it applies only to Marketing Corporation functions.

[143] The Board has reviewed NB Power's financial risk policies together with the evidence and the submissions of the parties. The policies are consistent with the policies applicable

to Marketing Corporation, previously approved by the Board. Any variations are justified and uncontested.

[144] Based on the foregoing, the Board approves NB Power's Financial Risk Management Policies, as submitted.

[145] NCFS suggested that the Board should require a third party opinion as to the effectiveness of NB Power's framework and an external compliance audit, to be completed before the next rate application. Mr. Rouse further submitted in final argument that the Board should not approve the financial risk management policies until they are audited.

[146] The Board agrees that external audits should be performed consistent with the external audits that are contemplated to be performed for Marketing Corporation. The Board orders NB Power to submit a proposal by May 1, 2016, for the scope and timing of an external audit to measure compliance and effectiveness of both NB Power and NB Marketing Corporation's financial risk management policies.

E. Minimum Filing Requirements

[147] Minimum filing requirements (MFRs) improve the efficiency of the regulatory process. It assists in reducing the number of questions during the hearing process, which minimizes the time and cost of a hearing. NB Power indicated that it would be willing to engage in a process to define MFRs.

[148] Board staff will prepare a preliminary list of MFRs and initiate the formation of an advisory group to recommend comprehensive MFRs to the Board prior to the general rate application for the fiscal year 2017/18.

F. Approval of Rate Schedules and Effective Date

[149] The Board issued an interim decision on September 10, which reduced NB Power's proposed revenue requirement by $4 million. NB Power was directed to reduce its revenue requirement accordingly, recalculate the necessary rates, and refile this information with the Board.

[150] NB Power complied with the above directive and submitted revised rates. The Board is satisfied that the revised rates are just and reasonable, and are approved.

[151] In its partial decision, the Board set October 1, 2015 as the time at which the rates were to take effect. NB Power has filed updated schedules of rates with the Board, in compliance with subsection 103(6) of the Act.

G. Future Rate Applications

[152] Subsection 103(1) of the Act requires NB Power to make an application annually to the Board for the approval of schedules of rates it proposes to charge for its services, for the fiscal year which commenced on April 1, 2015 and for each subsequent fiscal year.

[153] When filing an application, NB Power may request a date for when new rates in the future are to take effect. However, new rates are not effective until after the Board has issued a decision. Subject to any order of the Board, NB Power bears the risk of any delay in the implementation of new rates.

[154] The proposed revenue requirement in NB Power's application was set out on an annualized basis (from April 1, 2015 to March 31, 2016). The new rates, however, were requested for July 1, 2015, thus seeking to recover the entire increase in revenue requirement over a 9-month period.

[155] It is standard regulatory practice to approve rates for a test year that are designed to collect a utility's revenue requirement over an entire test year, and not, in effect, to approve accelerated rates in later months due to the fact that rate approval comes at some point into the test year. In the future, proposed rates shall be calculated based on a full test year recovery period.

Dated in Saint John, New Brunswick, this 28th day of October, 2015.

Raymond Gorman, Q.C.
Chairman

François Beaulieu
Vice-Chairperson

Michael Costello
Member

Patrick Ervin
Member

John Patrick Herron
Member