

MANITOBA HYDRO
2015/16 & 2016/17 GENERAL RATE APPLICATION

FINANCIAL RESULTS & FORECASTS

INDEX

| | | | |
|----|---------|--|----|
| 11 | 5.0 | Overview | 1 |
| 12 | 5.1 | Summary of Financial Results & Forecast | 2 |
| 13 | 5.2 | General Consumers Revenue | 6 |
| 14 | 5.3 | Extraprovincial Revenue..... | 9 |
| 15 | 5.4 | Other Revenue | 13 |
| 16 | 5.5 | Operating, Maintenance & Administrative..... | 15 |
| 17 | 5.6 | Finance Expense | 19 |
| 18 | 5.7 | Depreciation & Amortization | 26 |
| 19 | 5.8 | Water Rentals & Assessments | 30 |
| 20 | 5.9 | Fuel & Power Purchased..... | 33 |
| 21 | 5.10 | Capital & Other Taxes | 36 |
| 22 | 5.11 | Corporate Allocation..... | 39 |
| 23 | 5.12 | Other Expenses | 41 |
| 24 | 5.13 | Non-Controlling Interest..... | 43 |
| 25 | 5.14 | Cost Saving Initiatives | 45 |
| 26 | 5.14.1 | Reduction of Operational Positions | 45 |
| 27 | 5.14.2 | Consolidation of Rural District Offices | 45 |
| 28 | 5.14.3 | Managing Contractor Costs in Various Projects..... | 46 |
| 29 | 5.14.4 | Review of the Gillam Redevelopment and Expansion Project (GREP)..... | 47 |
| 30 | 5.14.5 | Pointe du Bois Operations Spillway Cost Efficiencies..... | 47 |
| 31 | 5.14.6 | Implementation of Mobile Workforce Management | 48 |
| 32 | 5.14.7 | Asset Management Strategies | 49 |
| 33 | 5.14.8 | Technology Modernization Initiative for Better Capital Investment Decisions..... | 50 |
| 34 | 5.14.9 | Supply Change Management Initiatives | 50 |
| 35 | 5.14.10 | Records Centre Transition to Iron Mountain | 51 |
| 36 | 5.14.11 | Outage Management System..... | 51 |

1 ***Appendices***

- 2 5.1 Manitoba Hydro-Electric Board Annual Report Year Ended March 31, 2014
- 3 5.2 Manitoba Hydro-Electric Board Quarterly Report Ended June 30, 2014
- 4 5.3 Manitoba Hydro-Electric Board Quarterly Report Ended September 30, 2014
- 5 5.4 International Financial Reporting Standards Status Update Report
- 6 5.5 Operating, Maintenance, & Administrative Expense
- 7 5.6 Depreciation Rates & Depreciation Study
- 8 5.7 Net Impact of Accounting Policy & Estimate Changes

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MANITOBA HYDRO
2015/16 & 2016/17 GENERAL RATE APPLICATION

FINANCIAL RESULTS & FORECASTS

5.0 OVERVIEW

Tab 5 provides explanations of the actual and forecast revenues and expenses related to Manitoba Hydro's Electric operations for 2012/13 to 2016/17, and outlines the significant year over year changes. Section 5.1 provides a summary of Manitoba Hydro's financial results and forecasts for 2012/13 to 2016/17, and Sections 5.2 to 5.13 discuss the revenue and cost components for 2012/13 to 2016/17. Section 5.14 outlines a number of initiatives that Manitoba Hydro is undertaking to reduce costs and ease pressures on financial results and rates.

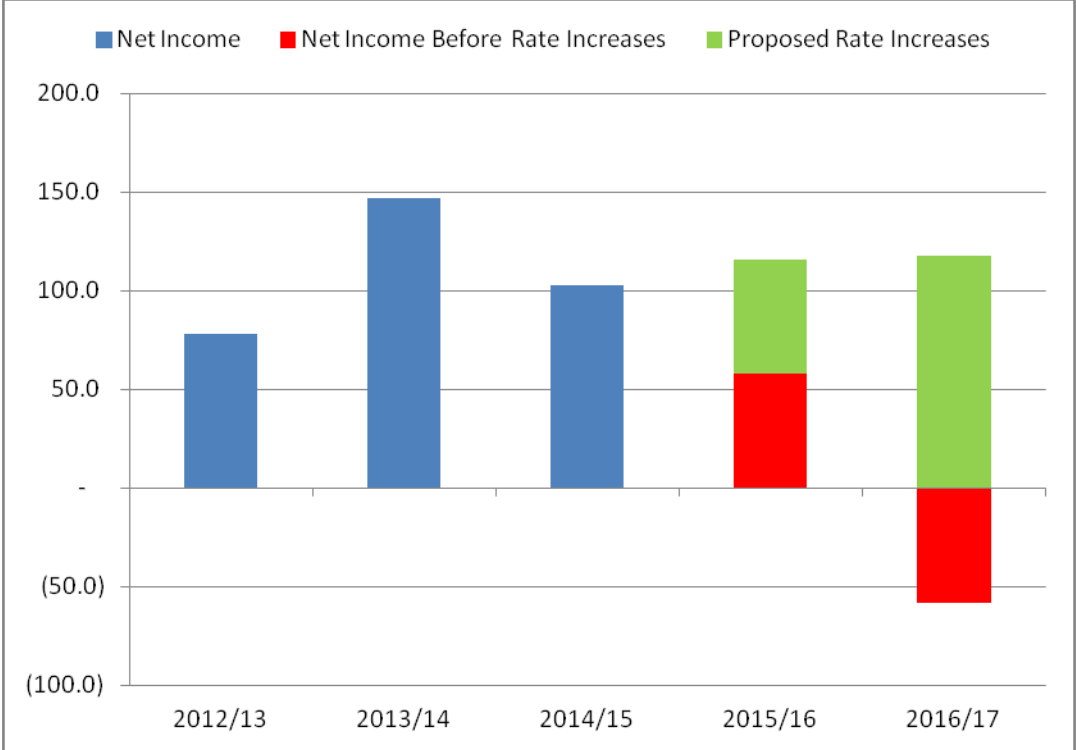
The key conclusions with respect to Tab 5 are:

1. The requirement for the proposed rate increases are primarily being driven by the increased finance expense, depreciation and amortization expense and capital taxes associated with investment in new assets and reinvestment in existing assets.
2. Manitoba Hydro is committed to effectively controlling its OM&A costs and has recently completed an extensive review of its staff compliment and is undertaking a number of initiatives across the Business Unit's to maintain OM&A cost increases at 1%, which is below inflationary levels (excluding accounting changes that impact OM&A).
3. While there are a number of prospective accounting changes being made for financial reporting purposes between 2014/15 and 2015/16 that will increase OM&A and decrease Depreciation and Amortization, these changes offset each other and are not driving the need for rate increases.

1 **5.1 SUMMARY OF FINANCIAL RESULTS & FORECAST**

2
3 Figure 5.1 provides a summary of actual and forecast net income for electric operations
4 (excluding subsidiary operations) for 2012/13 to 2016/17. For 2015/16 and 2016/17, the
5 red bars show Manitoba Hydro’s net income/loss without the proposed rate increases and
6 the green bars show the projected net income including the proposed rate increases.
7

8 **Figure 5.1 Net income**



1
2

The following schedule provides a breakdown of the Statement of Income.

MANITOBA HYDRO
STATEMENT OF INCOME

Schedule 5.1.0
(000's)

| | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| | Actual | Actual | Forecast | Forecast | Forecast |
| Revenue | | | | | |
| General Consumers | 1 341 011 | 1 424 126 | 1 436 742 | 1 454 388 | 1 460 247 |
| Bipole III Reserve | - | (18 826) | (29 997) | (32 360) | (33 773) |
| Extraprovincial | 352 633 | 439 182 | 408 892 | 434 157 | 449 738 |
| Other | 29 854 | 21 758 | 15 223 | 13 870 | 13 999 |
| Total Revenue Excluding rate increases | <u>\$ 1 723 497</u> | <u>\$ 1 866 241</u> | <u>\$ 1 830 860</u> | <u>\$ 1 870 055</u> | <u>\$ 1 890 211</u> |
| Expenses | | | | | |
| Operating, Maintenance and Administrative | 462 952 | 480 717 | 485 755 | 541 740 | 551 675 |
| Finance Expense | 452 367 | 435 402 | 494 852 | 510 423 | 547 520 |
| Depreciation and Amortization | 391 923 | 410 834 | 404 590 | 400 866 | 422 404 |
| Water Rentals and Assessments | 117 864 | 125 517 | 124 469 | 122 847 | 112 167 |
| Fuel and Power Purchased | 133 292 | 177 113 | 134 189 | 130 432 | 190 933 |
| Capital and Other Taxes | 86 399 | 96 750 | 99 170 | 107 156 | 120 534 |
| Corporate Allocation | 9 074 | 9 074 | 8 659 | 8 393 | 8 396 |
| Other Expenses | 4 750 | 6 294 | 2 311 | 2 355 | 2 402 |
| Total Expenses | <u>1 658 621</u> | <u>1 741 701</u> | <u>1 753 995</u> | <u>1 824 211</u> | <u>1 956 031</u> |
| Non-controlling Interest* | 13 160 | 22 005 | 25 452 | 12 126 | 7 580 |
| Net Income before rate increases | <u>\$ 78 036</u> | <u>\$ 146 545</u> | <u>\$ 102 317</u> | <u>\$ 57 970</u> | <u>\$ (58 241)</u> |
| Proposed Rate Increases (3.95% April 1, 2015 & 3.95% April 1, 2016) | | | | 57 377 | 117 638 |
| Net income including rate increases | <u>\$ 78 036</u> | <u>\$ 146 545</u> | <u>\$ 102 317</u> | <u>\$ 115 347</u> | <u>\$ 59 397</u> |
| Year over year \$ change | | \$ 68 509 | \$ (44 228) | \$ 13 030 | \$ (55 949) |

*Non-controlling interest represents NCN's share of the net income/loss from WPLP.

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2013/14 Actual vs. 2012/13 Actual

Net income from Electric operations increased in 2013/14 primarily as a result of higher extraprovincial revenue mainly due to increased generation from stations on the Nelson River due to higher flows, as well as higher general consumers revenue mainly due to colder winter weather, a rate increase and customer growth.

The increase in revenue was partially offset by an increase in fuel and power purchased primarily due to higher purchased volumes from the colder winter weather, an increase in depreciation and amortization expense attributable to new additions to plant and equipment coming into service, and an increase in operating, maintenance and

1 administrative expense (OM&A) primarily due to higher pension and benefit costs
2 related to changes in discount and mortality rates and greater employer contributions.
3

4 *2014/15 Forecast vs. 2013/14 Actual*

5 Net income from Electric operations is forecast to decrease in 2014/15 primarily as a
6 result of lower extraprovincial revenue from lower US sales volumes largely due to
7 transmission outages that restricted exports on the US transmission line during October
8 and November 2014 and an increase in finance expense due to higher net interest on debt
9 as assets go in-service and lower realized gains on the sinking fund and U.S. debt.

10
11 These reductions to net income are partially offset by lower fuel and power purchased
12 primarily due to lower purchased volumes due to the assumption of normal winter
13 weather and a year-over-year projected increase in hydraulic generation during the winter
14 period .

15
16 *2015/16 Forecast vs. 2014/15 Forecast*

17 Net income from Electric operations is forecast to increase in 2015/16 primarily as a
18 result of an increase in general consumers revenue mainly due to the proposed 3.95% rate
19 increase effective April 1, 2015, as well as an increase in extraprovincial revenue mainly
20 due to higher export prices.

21
22 The increase in revenue is partially offset by an increase in finance expense primarily due
23 to new long term debt issues to finance the Corporation's capital investment
24 requirements, as well as interest rates that are projected to rise to more normalized levels,
25 and increases in depreciation expense as a result of plant assets going into service. The
26 net impact of accounting policy changes as a result of the transition to IFRS results in an
27 overall reduction to net income. Please see Appendix 5.7 for additional information on
28 the impact of accounting policy and estimate changes.

29
30 *2016/17 Forecast vs. 2015/16 Forecast*

31 Net income from Electric operations is forecast to decrease in 2016/17 primarily as a
32 result of increases in the volumes of US off-peak purchases and increased thermal costs
33 due to the assumption of average water flows in 2016/17 compared to median water
34 flows in 2015/16 , an increase in finance expense primarily due to higher debt levels to
35 finance the Corporation's capital investment requirements as well as interest rates that are

1 projected to rise to more normalized levels and an increase in depreciation and
2 amortization as well as capital taxes primarily due to increased plant investment.

3
4 These reductions to net income are partially offset by an increase in general consumers
5 revenue mainly due to the proposed 3.95% rate increase effective April 1, 2016, as well
6 as an increase in extraprovincial revenue mainly due to a projected increase in export
7 prices for Dependable and Opportunity Sales in 2016/17.

8
9 The following sections review each component of the Statement of Income. A description
10 of each component, the year over year changes explanation and the detailed schedule is
11 provided.

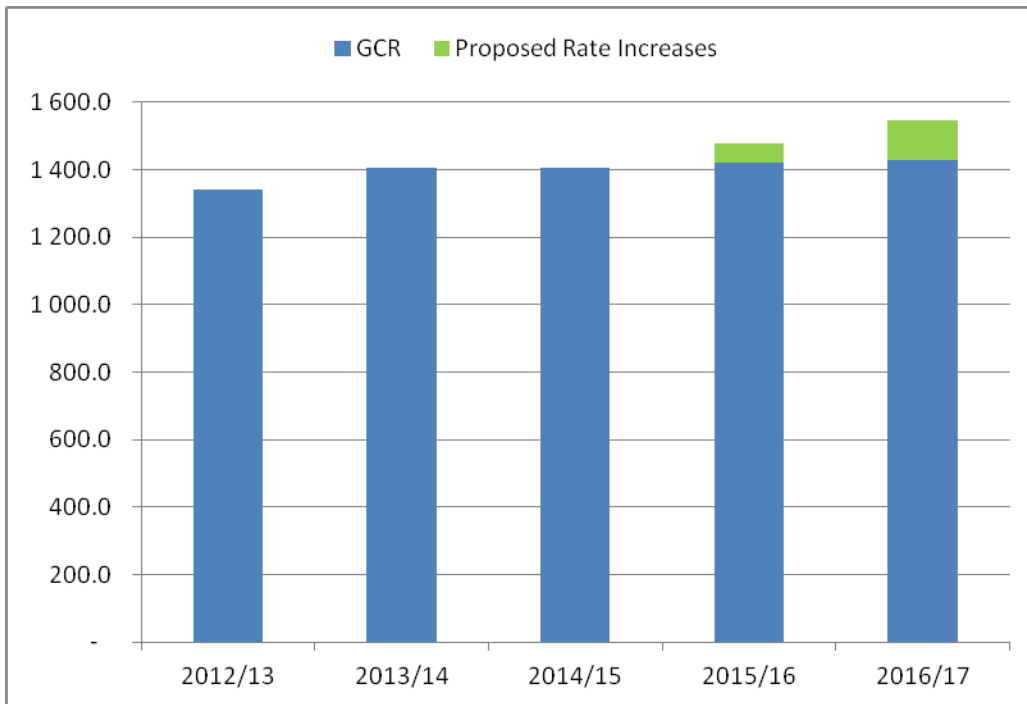
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1 **5.2 GENERAL CONSUMERS REVENUE**

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General consumers revenue (“GCR”) is comprised of electricity sales to Manitoba Hydro’s domestic customers as well as late payment charges. Customers are aggregated in two major rate classes – Residential and General Service (Commercial and Industrial customers and Area and Roadway Lighting). For 2015/16 and 2016/17, the blue bar in Figure 5.2 shows the GCR generated from existing rates and the green bar shows the additional revenues generated from the proposed rate increases.

10 **Figure 5.2 General Consumers Revenue**



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1 The following schedule provides a breakdown of GCR.

MANITOBA HYDRO **Schedule 5.1.1**
GENERAL CONSUMERS REVENUE **(000's)**

| | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| | Actual | Actual | Forecast | Forecast | Forecast |
| Residential | \$ 562 959 | \$ 614 156 | \$ 597 916 | \$ 605 105 | \$ 612 761 |
| General Service | 778 052 | 809 971 | 838 826 | 849 283 | 847 486 |
| Bipole III Reserve Account | | (18 826) | (29 997) | (32 360) | (33 773) |
| Total Revenue excluding rate increases | 1 341 011 | 1 405 301 | 1 406 745 | 1 422 028 | 1 426 474 |
| Additional General Consumers Revenue* | | | | 57 377 | 117 638 |
| Total Revenue including rate increases | \$ 1 341 011 | \$ 1 405 301 | \$ 1 406 745 | \$ 1 479 405 | \$ 1 544 112 |
| Year over year \$ change | | \$ 64 290 | \$ 1 444 | \$ 72 660 | \$ 64 707 |
| Year over year % change | | 4.8% | 0.1% | 5.2% | 4.4% |

2 * Additional General Consumers Revenue - 2015/16 and 2016/17 reflect rate increases of 3.95%

3 The Residential class is comprised of all housing types (single detached, duplexes,
4 triplexes, etc.) and also includes individual metered apartment blocks, seasonal cottages
5 and farm residences.

6
7 The General Service ("GS") class is comprised of commercial and industrial customers in
8 the General Service Small, Medium and Large rate categories as well as Area and
9 Roadway Lighting. Customers are classed as a GS Small if their connected load is less
10 than 200 kV.A and their transformation is owned by Manitoba Hydro. Customers classed
11 as GS Medium have connected loads which exceed 200 kV.A and whose transformation
12 is also owned by Manitoba Hydro. GS Large customers have loads which typically
13 exceed 2000 kV.A and who own their own transformation. The GS Large class is further
14 divided into three sub-classes based on the voltage used to serve the customer (750V-30
15 kV, 30 kV-100 kV and >100 kV). The Area and Roadway Lighting class is comprised of
16 all street lights and sentinel lights which may be publically or privately owned or rented.

17
18 The following sections highlight the year over year changes from 2012/13 through
19 2016/17:

20
21 *2013/14 Actual vs. 2012/13 Actual*

22 The 2013/14 increase is primarily due to higher consumption from colder winter weather,
23 a rate increase, as well as customer growth. The PUB approved a rate increase of 3.5%
24 effective May 1, 2013. The PUB directed that 2.0% of the 3.5% increase be included in

1 general revenue and that 1.5% be set aside to mitigate rate increases when Bipole III is
2 placed into service.

3
4 *2014/15 Forecast vs. 2013/14 Actual*

5 The forecast 2014/15 increase is primarily due to the 2.75% rate increase approved by the
6 PUB on an interim basis effective May 1, 2014. The PUB directed that 2.0% of the
7 2.75% increase be included in general revenue and 0.75% be set aside to mitigate rate
8 increases when Bipole III is placed into service. The revenue increase is partially offset
9 by the assumption of normal weather conditions for 2014/15.

10
11 *2015/16 Forecast vs. 2014/15 Forecast*

12 The forecast 2015/16 increase is primarily due to the additional revenue associated with
13 the proposed 3.95% rate increase effective April 1, 2015 as well as a 1.0% increase in
14 energy consumption primarily due to growth in the Residential and General Service
15 Large sectors.

16
17 *2016/17 Forecast vs. 2015/16 Forecast*

18 The forecast 2016/17 increase is primarily due to the additional revenue associated with
19 the proposed 3.95% rate increase effective April 1, 2016 as well as load growth in the
20 Residential sector. These increases are partially offset by a reduction in load in the
21 General Service sector due to a Top Consumer phasing out a significant portion of their
22 operation.

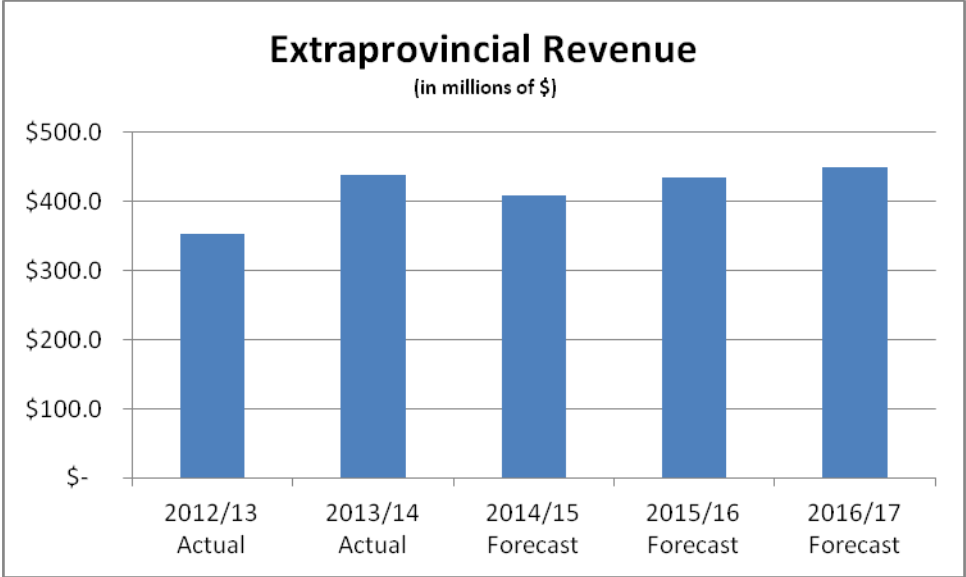
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1 **5.3 EXTRAPROVINCIAL REVENUE**

2
3 Extraprovincial Revenue includes revenues from Canadian and US export sales as well as
4 revenues from other associated export market activities such as merchant sales,
5 transmission credits and renewable energy certificates.
6

7 Forecast Extraprovincial Revenues for 2014/15 are based on current storage conditions
8 and expected inflows, assuming normal precipitation conditions for the remainder of the
9 fiscal year. Revenues for 2015/16 are based on storage conditions carried forward from
10 the prior fiscal year and median inflows. For the subsequent years, the projections are
11 determined by averaging the revenues using the full range of experienced flow
12 conditions.
13

14 **Figure 5.3 Extraprovincial Revenue**



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1 Please see the following schedule for a breakdown of Extraprovincial Revenue.

| MANITOBA HYDRO EXTRAPROVINCIAL REVENUE | Schedule 5.1.2 (000's) | | | | |
|---|-----------------------------------|-------------------|---------------------|---------------------|---------------------|
| | 2012/13 Actual | 2013/14 Actual | 2014/15 Forecast | 2015/16 Forecast | 2016/17 Forecast |
| Canadian Sales | 33 353 | 20 392 | 28 748 | 16 104 | 43 626 |
| Other Sales | 122 | (40) | (54) | - | - |
| Canadian | 33 475 | 20 352 | 28 694 | 16 104 | 43 626 |
| US Sales | 284 819 | 355 306 | 343 003 | 380 033 | 379 506 |
| Other Sales | 4 973 | 8 722 | 6 468 | 5 688 | 572 |
| Transmission Credits | 18 307 | 18 021 | 17 443 | 22 140 | 23 841 |
| Renewable Energy Certificates | 1 942 | 3 494 | 3 045 | 2 299 | 2 193 |
| US | 310 042 | 385 543 | 369 959 | 410 160 | 406 112 |
| Merchant (IESO & MISO)* | 9 116 | 33 287 | 10 239 | 7 893 | - |
| Total Extraprovincial Revenue | \$ 352 633 | \$ 439 182 | \$ 408 892 | \$ 434 157 | \$ 449 738 |
| Year over year \$ change | | \$ 86 549 | \$ (30 290) | \$ 25 265 | \$ 15 581 |
| Year over year % change | | 24.5% | -6.9% | 6.2% | 3.6% |

2 *IESO = Independent Electricity Systems Operator and MISO = Midcontinent Independent System Operator

3

4 Please see the following for a description of Extraprovincial Revenue components:

5

6 Canadian and US Sales include both Dependable and Opportunity Sales.

7

8 Dependable sales are export contracts sourced from Manitoba Hydro's dependable
9 energy resources. Dependable energy resources are energy supplies assumed to be
10 available in the event that the lowest recorded water supply conditions are repeated.
11 Dependable sales involve capacity and energy commitments, are negotiated at least one
12 year in advance of delivery, and have duration of greater than six months.

13

14 Sales not identified as Dependable are called Opportunity sales and can be sourced from
15 non-dependable resources or uncommitted dependable resources:

- 16 - Opportunity (Bilateral) – Sales negotiated with a purchasing party and
- 17 documented by contract or recorded exchange. The duration of delivery for these
- 18 sales generally does not exceed 6 months, and can be as short as one-hour.
- 19 Opportunity Bilateral sales can include the sale of capacity and/or energy.

- 1 - Opportunity (Day Ahead or Real Time Markets) – Export sales transactions in a
2 market operated by an independent system operator for the purchase and sale of
3 power related products for the next operating day ('Day Ahead') or during the
4 operating day ('Real Time').
5

6 Merchant transactions represent arbitrage opportunities and are unrelated to Manitoba
7 Hydro generation. These include physical purchases of power from one market for re-sale
8 to another market.
9

10 Other Sales include miscellaneous revenues derived from market activities such as the
11 sale of ancillary services into the Midcontinent Independent System Operator ("MISO")
12 market and congestion management with the Ontario market.
13

14 Transmission Credits refer to revenues received for the use of Manitoba Hydro's
15 transmission system. Manitoba Hydro's Open Access Transmission Tariff defines the fees
16 for use of its transmission system. The MISO administers collection of these fees on
17 behalf of Manitoba Hydro, which is why they are reported as US revenues.
18

19 Renewable Energy Certificates are revenues received mainly from the sale of
20 environmental attributes acquired by Manitoba Hydro through power purchase
21 agreements with wind generation suppliers in Manitoba.
22

23 The following sections highlight the year over year changes from 2012/13 through
24 2016/17:
25

26 *2013/14 Actual vs. 2012/13 Actual*

27 The 2013/14 increase reflects higher US sales volumes largely made possible by
28 increased generation from stations on the Nelson River due to higher flows. Hydraulic
29 generation was also higher in 2013/14 because the Wuskwatim Generating Station was in
30 service for the entire year. Export revenues were also favourably impacted by an increase
31 in merchant sales, higher market prices, and favourable foreign exchange rates on
32 revenues from US sales.
33

34 *2014/15 Forecast vs. 2013/14 Actual*

35 The 2014/15 forecast decrease reflects lower US sales volumes largely due to
36 transmission outages that restricted exports on the US transmission line during October
37 and November 2014. Merchant sales are projected to be lower as Manitoba Hydro does

1 not expect to have the same level of arbitrage opportunities between markets as was
2 experienced in 2013/14. These decreases were partially offset by higher foreign exchange
3 rates affecting revenues from US sales.
4

5 *2015/16 Forecast vs. 2014/15 Forecast*

6 The 2015/16 forecasted increase reflects higher export prices and a projected increase in
7 foreign exchange rates on US sales. This increase is partially offset by lower Canadian
8 sales volumes due to reduced participation in the IESO market and an expected decrease
9 in merchant sales projected for 2015/16 due to reduced arbitrage opportunities between
10 markets.
11

12 *2016/17 Forecast vs. 2015/16 Forecast*

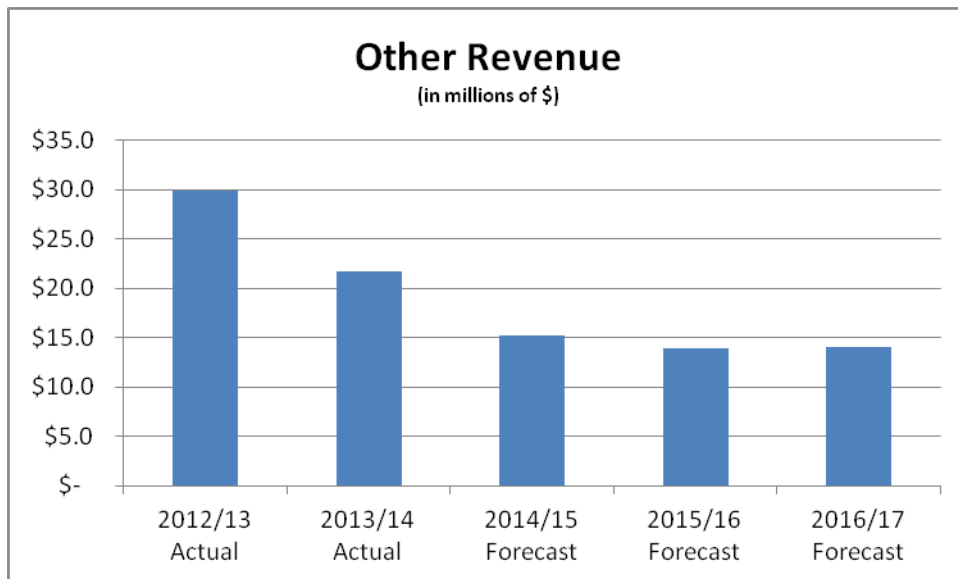
13 The 2016/17 forecasted increase is primarily due to an increase in prices of Dependable
14 and Opportunity Sales. There are also additional firm export contract sales effective in
15 2016/17, further increasing the total export revenue compared to 2015/16. This includes
16 the SaskPower 25-megawatt sale which is in effect for its first full year in 2016/17,
17 increasing Canadian sales over 2015/16.
18
19

1 **5.4 OTHER REVENUE**

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3 Other Revenue includes a variety of different revenue items, with the most significant
4 items being:

- 5 • Joint Use contracts representing the net rental revenue between Manitoba Hydro
6 and MTS, Cable TV and other utilities. Net revenue is the difference between
7 gross revenue (attachments on Manitoba Hydro property) and gross billings
8 (Manitoba Hydro attachments on external party property).
- 9 • Third party revenues where there is a provision of services for the use/rental of
10 Manitoba Hydro owned assets.
- 11 • Revenues received for work the Corporation undertakes on customer owned plant
12 on a fee-for-service basis.
- 13 • Electrical inspections performed by Manitoba Hydro on customer owned
14 facilities.
- 15 • Gains on sale of land to external parties. Gains are calculated as the sale price less
16 historical acquisition costs and costs of disposal.
- 17 • Miscellaneous Other Income which includes income items such as litigation
18 settlements, apprenticeship tax credits, etc.

19
20 **Figure 5.4 Other Revenue**



**MANITOBA HYDRO
OTHER REVENUE**

**Schedule 5.1.3
(000's)**

| | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 |
|---------------|----------------|----------------|-----------------|-----------------|-----------------|
| | Actual | Actual | Forecast | Forecast | Forecast |
| Other Revenue | \$ 29 854 | \$ 21 758 | \$ 15 223 | \$ 13 870 | \$ 13 999 |
| \$ Change | | \$ (8 096) | \$ (6 535) | \$ (1 353) | \$ 129 |
| % Change | | -27.1% | -30.0% | -8.9% | 0.9% |

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The following sections highlight the year over year changes from 2012/13 through 2016/17:

2013/14 Actual vs. 2012/13 Actual

The 2013/14 decrease is primarily due to a reduction in gains on sale of land compared to 2012/13 as well as a reduction goods and services sold to outside parties compared to 2012/13.

2014/15 Forecast vs. 2013/14 Actual

The 2014/15 forecast decrease is partially due to gains on sale of land that occurred in 2013/14 and are not expected in 2014/15. In addition, there is a reduction in the amount forecast for third party work on customer owned assets.

2015/16 Forecast vs. 2014/15 Forecast

No significant change.

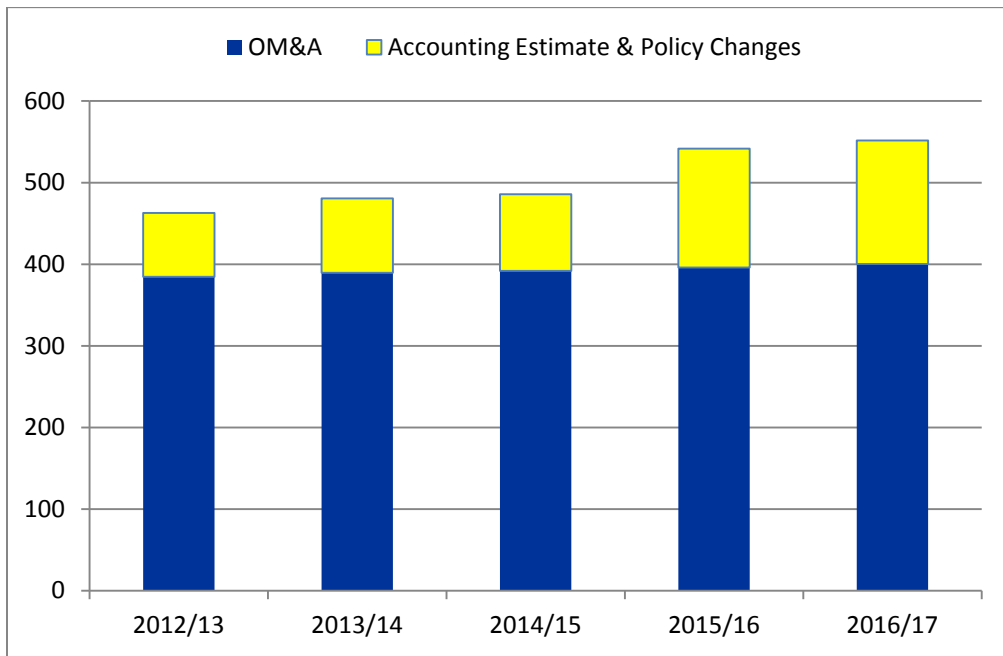
2016/17 Forecast vs. 2015/16 Forecast

No significant change.

1 **5.5 OPERATING, MAINTENANCE & ADMINISTRATIVE**

2
3 Operating, Maintenance & Administrative (OM&A) Expenses are comprised primarily of
4 labour and benefits, materials, contracted services, and overhead costs associated with
5 operating and maintaining all facilities of the Corporation and providing services to
6 customers. Figure 5.5 provides a summary of OM&A expenses indicating the impact of
7 accounting estimate and policy changes between 2012/13 and 2016/17, which are
8 represented in yellow.

9
10 **Figure 5.5 Operating, Maintenance & Administrative**



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1 The following table provides a breakdown of the OM&A expenses incorporating
2 accounting changes:

MANITOBA HYDRO Schedule 5.1.4
OPERATING, MAINTENANCE AND ADMINISTRATIVE COSTS (000's)

| (In thousands of \$) | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | Average Annual |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|----------------|
| | Actual | Actual | Forecast | Forecast | Forecast | % Inc/(Dec) |
| Wages & Salaries | \$ 466 165 | \$ 480 511 | \$ 502 692 | 524 552 | 533 997 | 3.5% |
| Overtime | 61 031 | 62 365 | 61 709 | 71 080 | 73 121 | 4.8% |
| Employee Benefits | 130 886 | 157 094 | 160 592 | 155 892 | 158 992 | 5.3% |
| Sub-Total | 658 082 | 699 970 | 724 993 | 751 523 | 766 109 | |
| Less: Labour & Benefits Charged to Capital | (215 491) | (234 510) | (256 588) | (282 335) | (287 969) | 7.6% |
| Labour & Benefits Charged to Operations* | 442 591 | 465 460 | 468 405 | 469 188 | 478 140 | 2.0% |
| Other Costs | | | | | | |
| Employee Safety & Training | 4 463 | 4 596 | 5 225 | 5 188 | 5 175 | 3.9% |
| Travel Expenses | 31 194 | 31 915 | 31 766 | 31 628 | 31 634 | 0.4% |
| Motor Vehicle | 29 516 | 29 670 | 29 682 | 29 699 | 29 699 | 0.2% |
| Materials & Tools | 24 806 | 27 920 | 26 700 | 26 090 | 26 090 | 1.5% |
| Consulting & Professional Fees | 10 817 | 14 657 | 14 349 | 12 395 | 12 237 | 4.6% |
| Construction & Maintenance Services | 16 259 | 16 775 | 19 364 | 18 580 | 18 580 | 3.6% |
| Building & Property Services | 25 644 | 28 978 | 27 738 | 27 297 | 27 297 | 1.8% |
| Equipment Maintenance & Rentals | 14 680 | 15 007 | 16 120 | 16 191 | 16 191 | 2.5% |
| Consumer Services | 5 050 | 5 277 | 5 323 | 5 323 | 5 323 | 1.3% |
| Computer Services | 849 | 678 | 985 | 1 020 | 1 019 | 7.2% |
| Collection Costs | 4 261 | 3 125 | 4 078 | 4 078 | 4 078 | 1.0% |
| Customer & Public Relations | 6 731 | 5 610 | 5 334 | 5 344 | 5 316 | -5.5% |
| Sponsored Memberships | 1 767 | 1 249 | 1 764 | 1 737 | 1 737 | 2.6% |
| Office & Administration | 13 874 | 14 724 | 15 722 | 15 721 | 15 717 | 3.2% |
| Communication Systems | 1 817 | 1 963 | 1 928 | 1 928 | 1 928 | 1.6% |
| Research & Development Costs | 3 372 | 2 195 | 2 747 | 2 747 | 2 747 | -2.4% |
| Miscellaneous Expense | 2 040 | 1 485 | 954 | 900 | 900 | -17.2% |
| Contingency Planning | - | - | 2 594 | 2 610 | 2 657 | |
| Operating Expense Recovery | (13 997) | (17 808) | (13 468) | (13 649) | (13 647) | 0.0% |
| Strategic Initiative Funding | | | 870 | 3 640 | 6 317 | |
| Sub-Total | 183 143 | 188 016 | 199 774 | 198 468 | 200 994 | |
| Less: Other Costs Charged to Capital | (29 327) | (31 503) | (33 329) | (34 647) | (34 818) | 4.4% |
| Other Costs Charged to Operations* | 153 815 | 156 513 | 166 444 | 163 821 | 166 177 | 2.0% |
| Total | 596 406 | 621 973 | 634 849 | 633 009 | 644 317 | 2.0% |
| Less: | | | | | | |
| Capitalized Overhead | (69 720) | (74 446) | (81 265) | (24 578) | (24 824) | -13.2% |
| Operating and Administration Charged to Centra | (63 735) | (66 810) | (67 829) | (66 691) | (67 818) | 1.6% |
| Electric OM&A, including Accounting Changes | 462 952 | 480 717 | 485 755 | 541 740 | 551 675 | 4.6% |
| Less: Accounting Changes | (78 345) | (91 155) | (93 858) | (145 644) | (151 345) | |
| Electric OM&A, excluding Accounting Changes | \$ 384 607 | \$ 389 562 | \$ 391 897 | \$ 396 096 | \$ 400 330 | 1.0% |
| Year over Year % Change, including Accounting Changes | | 3.8% | 1.0% | 11.5% | 1.8% | 4.6% |
| Year over Year % Change, excluding Accounting Changes | | 1.3% | 0.6% | 1.1% | 1.1% | 1.0% |

*Includes amounts capitalized through Overhead

3
4
5 The 4.6% average annual growth over the 5 year period is primarily a result of
6 accounting changes. These changes include an increase in pension and benefit costs

1 under CGAAP due to changes in the assumptions used to calculate these costs, such as
2 changes in the discount rate and mortality tables. IFRS changes commence in 2015/16
3 and primarily impact capitalized overhead costs, which are no longer eligible for
4 capitalization. While accounting changes under both CGAAP and IFRS have impacted
5 OM&A costs, this is fully offset by reductions to depreciation and amortization expense.
6 Please see Appendix 5.7 for more detailed information on the net impact of accounting
7 changes in IFF14.

8
9 The average annual growth rate, excluding accounting changes, is 1.0%. The growth of
10 1.0% reflects higher wages and salaries due to contract settlements, merit and progression
11 of approximately 3% to 4% annually, which is mainly offset by a concerted effort by
12 Manitoba Hydro on cost containment, as further discussed in Section 5.14.

13
14 The cost containment strategy focuses on a comprehensive management of staff positions
15 across all Business Units. The corporation continues to review work processes and
16 functions to identify opportunities for the elimination of work no longer deemed
17 essential, to consolidate similar functions where overlap may exist, and to implement
18 changes which reduce costs and increase efficiencies. This review has resulted in a
19 projected reduction of 300 operational EFTs which is discussed further in Appendix 5.5.

20
21 The following sections highlight the year over year changes from 2012/13 through
22 2016/17:

23
24 *2013/14 Actual vs. 2012/13 Actual*

25 The 2013/14 increase is primarily a result of accounting changes causing higher pension
26 and benefit costs driven by changes in estimates for the discount rate and mortality rates.

27
28 *2014/15 Forecast vs. 2013/14 Actual*

29 The 2014/15 forecast increase is a result of contract wage settlements, which is mainly
30 offset by the Corporation's cost containment initiatives.

31
32 *2015/16 Forecast vs. 2014/15 Forecast*

33 The 2015/16 forecast increase is primarily attributable to IFRS accounting changes
34 resulting in the requirement to expense \$55 million of costs no longer eligible for
35 capitalization. Excluding accounting changes, the forecasted increase in 2015/16 of 1.1%
36 is a result of contract wage settlements, which is mainly offset by the Corporation's cost
37 containment initiatives.

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2016/17 Forecast vs. 2015/16 Forecast

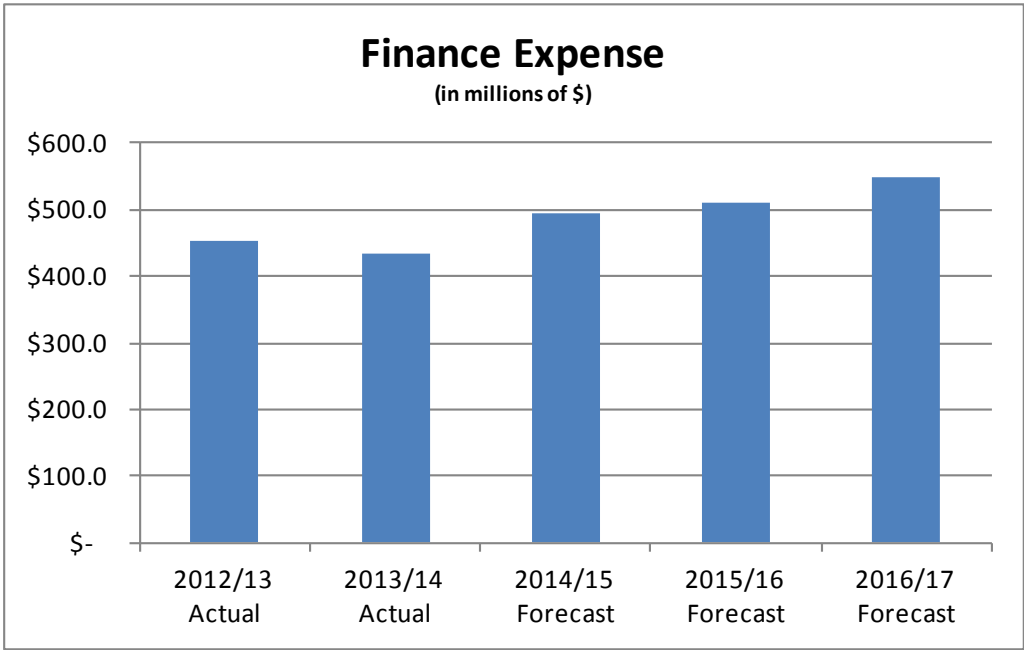
The 2016/17 forecast increase is primarily attributable to higher pension costs due to an increase in interest on the obligation and higher pensionable earnings. Excluding accounting changes, the forecasted increase in 2016/17 of 1.1% is the result of expected escalation in wages and salaries, mainly offset by the Corporation’s cost containment initiatives.

Appendix 5.5 provides additional comprehensive information on Equivalent Full Time positions (“EFTs”), OM&A costs by category and Business Unit.

1 **5.6 FINANCE EXPENSE**

2
3 Finance expense consists of costs associated with the Corporation’s financing activities.
4 The largest component of finance expense is gross interest expense on the Corporation’s
5 debt portfolio. Finance expense is also affected or partially offset by a number of other
6 components including: the debt guarantee fee; the amortization of discounts, premiums &
7 transaction costs; the income or gains associated with the sinking fund and foreign
8 exchange; and interest capitalized for capital projects under construction.
9

10 **Figure 5.6 Finance Expense**



11
12

1 The following schedule provides for a breakdown of Finance Expense.

**MANITOBA HYDRO
FINANCE EXPENSE**

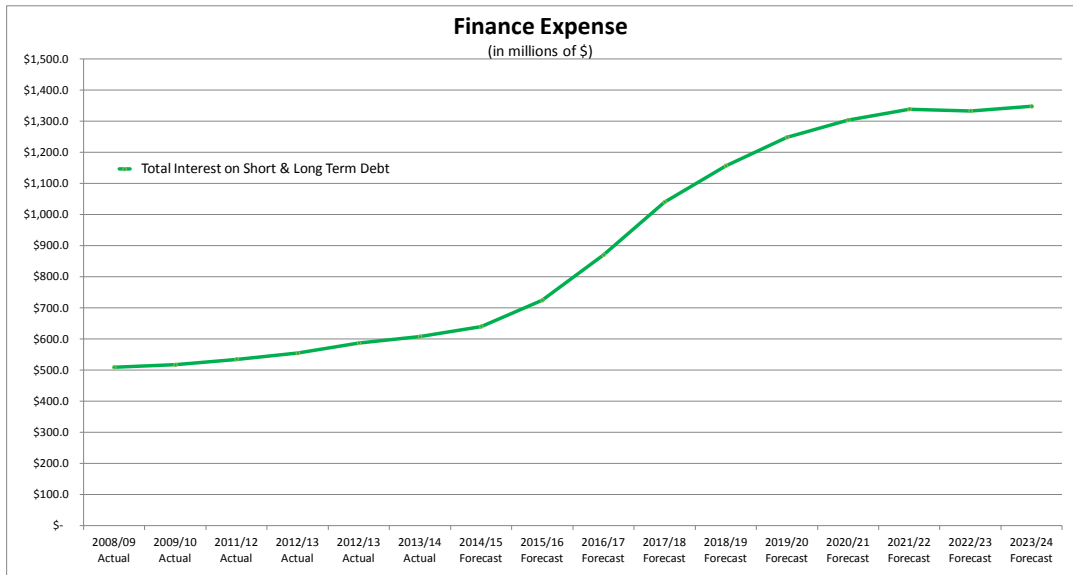
Schedule 5.1.5
(000's)

| | 2012/13 Actual | 2013/14 Actual | 2014/15 Forecast | 2015/16 Forecast | 2016/17 Forecast |
|---|-------------------|-------------------|---------------------|---------------------|---------------------|
| Interest on Short & Long-Term Debt | | | | | |
| Gross Interest | \$ 515,176 | \$ 528,490 | \$ 553,625 | \$ 626,681 | \$ 755,717 |
| Provincial Guarantee Fee | 90,432 | 96,228 | 105,079 | 118,087 | 139,830 |
| Amortization of (Premiums), Discounts, and Transaction Costs | 121 | 1,752 | 2,832 | 2,812 | 2,212 |
| Intercompany Interest Receivable | (18,544) | (18,671) | (21,089) | (23,059) | (27,185) |
| Total Interest on Short & Long Term Debt | 587,185 | 607,799 | 640,447 | 724,521 | 870,574 |
| Interest Allocated to Construction | (137,904) | (139,542) | (145,615) | (206,840) | (315,634) |
| Interest Earned on Sinking Fund | (9,957) | (24,475) | (14) | (2,234) | (8,703) |
| Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges | 2,058 | (19,326) | (10,982) | (16,830) | (10,649) |
| Revaluation of Dual Currency Bonds | 2,984 | 2,372 | 935 | 1,028 | 1,083 |
| Corporate Allocation | (19,129) | (19,129) | (18,685) | (18,543) | (18,543) |
| Other Amortization | 27,128 | 27,703 | 28,766 | 29,321 | 29,393 |
| Total Finance Expense | \$ 452,367 | \$ 435,402 | \$ 494,852 | \$ 510,423 | \$ 547,521 |
| Year over year \$ change | | \$ (16,965) | \$ 59,450 | \$ 15,571 | \$ 37,098 |
| Year over year % change | | -3.8% | 13.7% | 3.1% | 7.3% |

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Manitoba Hydro is forecasting that in the next 10 years it will be necessary to fund the vast majority of its capital expenditures through debt financing. When combined with debt refinancing requirements, the total debt requirements for Manitoba Hydro's electric operations in the next five-year period will peak at levels in excess of \$3 billion per year. These total forecast debt financing requirements are unprecedented in Manitoba Hydro's history. For finance expense, the total interest on short & long term debt is shown as the green line on the following figure:

Figure 5.7 Total Interest on Short-term & Long-term Debt



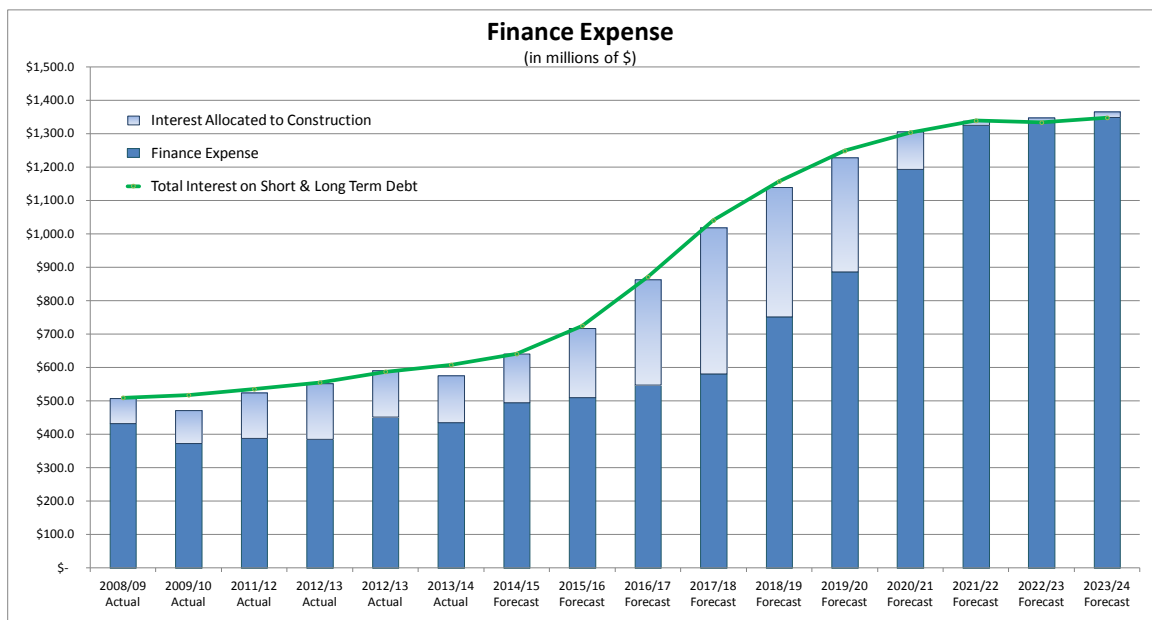
1 The components within this category are as follows:

- 2 • Gross Interest is the interest paid on Canadian and US dollar debt.
- 3 • The Provincial Guarantee Fee (PGF) is an annual fee payable to the Province of
4 Manitoba in exchange for the guarantee of the Corporation's debt (with the
5 exception of Manitoba Hydro-Electric Board Bonds) and is calculated using a rate
6 of 1% multiplied by the applicable outstanding debt at March 31st of the previous
7 fiscal year.
- 8 • The Amortization of Premiums, Discounts and Transaction Costs, arising from
9 actual debt issuance on the existing debt portfolio are amortized over the term of
10 the debt.
- 11 • The Intercompany Interest Receivable is primarily from the interest received from
12 Manitoba Hydro's subsidiary, Centra Gas Manitoba Inc. ("Centra"), on the short
13 and long term debt advances made to Centra from Manitoba Hydro. Interest rates
14 for advances to Centra are based on the associated cost of financing that was
15 incurred by Manitoba Hydro.

16
17 The actual and forecasted level of total interest on short & long term debt generally
18 follows the growth in the size of the total debt portfolio financing the expansion of the
19 Corporation's net capital assets. Commencing with 2015/16, the gross interest and PGF
20 levels will begin to rise sharply in accordance with the escalation in capital financing,
21 until 2021/21 when the overall levels flatten as capital investments subside.

22
23 The Interest Allocated to Construction is the interest capitalized during the construction
24 of a project, which is a reduction to finance expense and a charge to the capital project.
25 The interest associated with a capital project is not included in finance expense until the
26 project is placed into service. As shown in the following figure, the interest allocated to
27 construction (lightly shaded blue bars) is the primary factor that reduces the level of total
28 interest on short & long term debt (green line) to arrive at net finance expense (dark blue
29 bars) on the financial statements.
30

1 **Figure 5.8 Finance Expense and Interest Allocated to Construction**



2
3
4 Consequently, during periods of intensive capital construction, the net finance expense,
5 and hence the revenue requirement, is temporarily shielded from the full weight of the
6 gross finance expense by the interest allocated to construction. By 2021/22, as the level
7 of capital investments subside, the net finance expense closely approaches the total
8 interest on short and long term debt of over \$1.3 billion per year.

9
10 In addition to the interest allocated to construction, there are a number of other
11 components within finance expense as follows:

- 12
13
- The Interest Earned on Sinking Fund is primarily the interest recognized on Canadian and US sinking fund investments/ cash.
 - The Realized Foreign Exchange (Gains) or Losses on Debt in Cash Flow Hedges, arising from the difference between the historic and market exchange rates on US dollar debt, are recorded in Finance Expense when hedged export revenues are realized.
 - The Revaluation of Dual Currency Bonds is primarily a measure of the quarterly change in present value of the USD interest payments as translated into Canadian currency at the exchange rate prevailing at the balance sheet date.
 - The Corporate Allocation amount includes the interest on the Centra acquisition debt and the related Provincial Guarantee Fee. This amount is included in the
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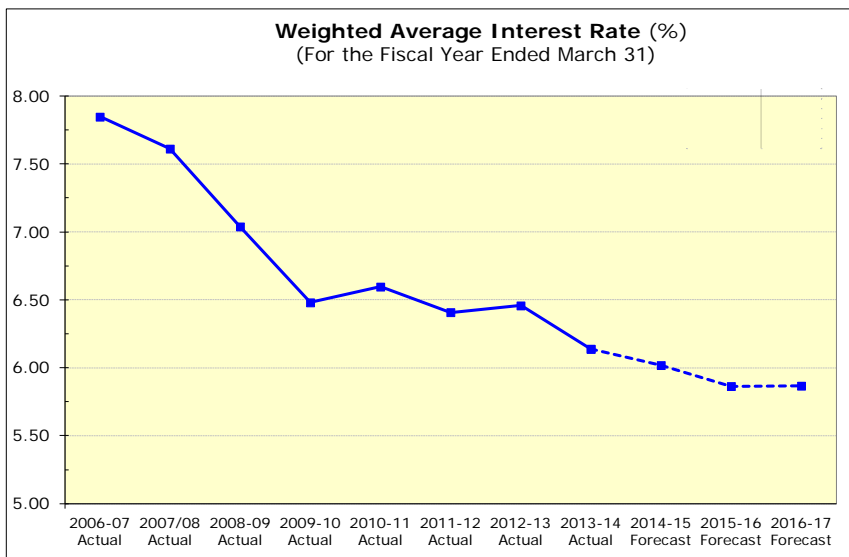
Corporate Allocation in Section 5.11.

- Other Amortization is primarily the amortization of the Winnipeg Hydro obligation and First Nations settlements.

While the forecasted increases in net finance expense primarily arise as capital assets go in-service and net finance expense is no longer reduced by the associated interest allocated to construction, gross interest expense arising from debt obligations will be affected by changing interest rates for new and refinanced debt requirements, as well as the debt portfolio's floating rate debt. Changing interest rates will also have a counterbalancing impact upon the interest capitalization rate used to derive the interest allocated to construction.

The low interest rate environment over the past few years has provided the opportunity for Manitoba Hydro to secure stable, low cost funding such that the weighted average interest rate on the debt portfolio has decreased. As shown on the following figure, since 2006/07, the debt portfolio's net weighted average interest rate has decreased by nearly 2.0%. It is anticipated that this positive trend will continue until leveling off in 2016/17.

Figure 5.9 Weighted Average Interest Rate



Although economic forecasts during the last few years have generally called for a quicker economic recovery and correspondingly higher interest rates, on an actual basis, the strength and pace of a recovery has been subdued. Manitoba Hydro will continue to

1 monitor the financial markets, along with gathering the views of external economic
2 forecasters in order to obtain the range and consensus forecast of their opinions.

3
4 The adverse interest rate risk associated with rising interest rates can be minimized
5 through a series of actions such as:

- 6 a) reducing the level of variable (or floating) rate debt within the debt portfolio;
- 7 b) taking advantage of the historically low interest rate environment for long
8 bonds by securing long term fixed rate financing as required; and
- 9 c) enhancing the stability of the debt portfolio by extending the weighted
10 average term to maturity.

11
12 See the Debt Management Strategy in Appendix 3.7 for additional information regarding
13 the Corporation's debt financing requirements and strategies.

14
15 It is also important to recognize that changes in the interest rate environment arising from
16 macro-economic conditions may affect other aspects of Manitoba Hydro's operations and
17 financial performance. For example, low interest rates may be correlated with low extra-
18 provincial energy prices.

19
20 From a liquidity risk perspective, the significant differential between the Corporation's
21 interest cash flow obligations (approximated by the green total interest on short & long
22 term debt) and the accounting net finance expense contribution to revenue requirement
23 (dark blue bars) will place additional pressure upon the Corporation's cash flow and
24 interest coverage ratios.

25
26 In order to mitigate the foreign currency exchange risk on export revenues denominated
27 in United States dollars (USD), Manitoba Hydro maintains a natural hedge with USD
28 cash flows, including finance expense cash flows from US denominated debt. For
29 example, to the extent that the underlying USD inflows and outflows are in balance,
30 while a strengthening US dollar will increase the translation of US export revenues into
31 Canadian dollars (CAD), this change will be offset by increases in the translation of US
32 dollar expenses (such as US dollar interest expense) into CAD.

33
34

1 The following sections highlight the year-over-year changes from 2012/13 through
2 2016/17:

3
4 *2013/14 Actual vs. 2012/13 Actual*

5 The decrease was primarily due to lower interest rates, higher realized foreign exchange
6 gains on U.S. debt and higher recognized gains on the sale of U.S. sinking fund
7 investments. This was partially offset by higher volumes of long term debt to finance
8 capital expenditures and a weaker Canadian dollar.

9
10 *2014/15 Forecast vs. 2013/14 Actual; 2015/16 Forecast vs. 2014/15 Forecast; and*
11 *2016/17 Forecast vs. 2015/16 Forecast*

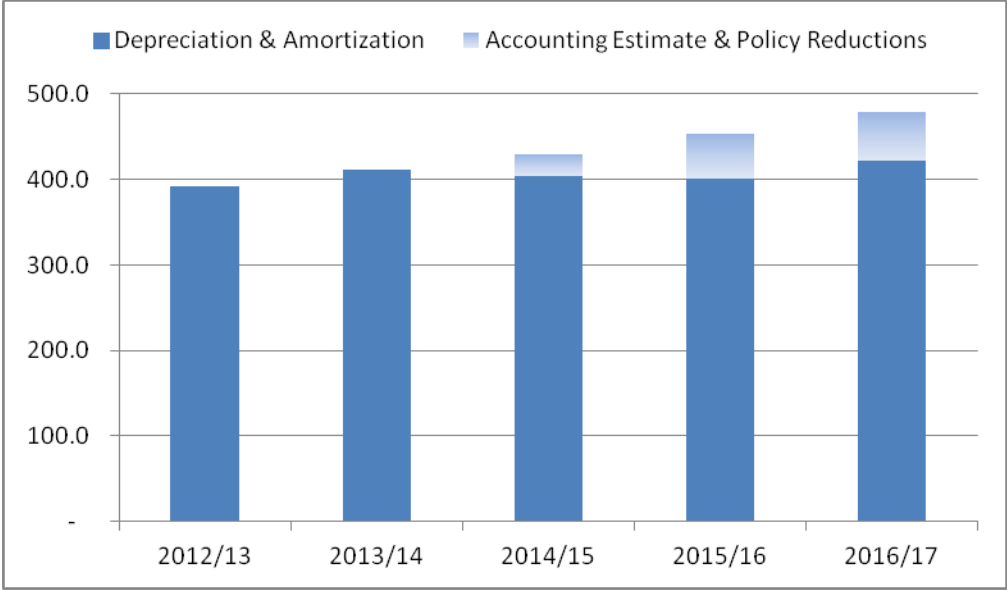
12 Gross interest expense increases during the forecast years, primarily due to new long term
13 debt issued in finance the Corporation's capital investments as well as interest rates that
14 are projected to rise to more normalized levels by the final forecast year. As a partial
15 offset, any interest associated with funding capital projects under construction is
16 capitalized, thereby reducing total finance expense.

1 **5.7 DEPRECIATION & AMORTIZATION**

2
3 Depreciation and Amortization expenses are calculated using a straight line remaining
4 life basis. The asset categories include: Generation, Transmission, Distribution, and Other
5 (General Equipment, Communication Equipment, Buildings, and Vehicles). Also
6 included is the amortization of non-refundable customer contributions, regulated assets
7 and intangible assets.

8
9 Figure 5.10 below shows the lower depreciation and amortization expense reflecting the
10 change in estimate as a result of adjustments in asset service lives, removal of negative
11 salvage from depreciation rates and the impact of the change in depreciation
12 methodology.

13
14 **Figure 5.10 Depreciation & Amortization**



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1 Please see the following schedule for a breakdown of Depreciation and Amortization.

MANITOBA HYDRO **Schedule 5.1.6**
DEPRECIATION AND AMORTIZATION EXPENSE **(000's)**

| | 2012/13 Actual | 2013/14 Actual | 2014/15 Forecast | 2015/16 Forecast | 2016/17 Forecast |
|---|-------------------|-------------------|---------------------|---------------------|---------------------|
| Generation | | | | | |
| Hydraulic Generating Stations | 80 110 | 82 678 | 92 953 | 92 265 | 96 041 |
| Thermal Generating Stations | 15 415 | 15 562 | 15 770 | 15 755 | 15 856 |
| Demand Side Management | 28 217 | 30 262 | 31 576 | 34 957 | 37 501 |
| Diesel Generating Stations | 1 457 | 1 757 | 2 342 | 2 557 | 2 111 |
| Wuskwatim | 16 179 | 26 688 | 26 651 | 26 984 | 27 082 |
| Amortization of Contributions | (841) | (868) | (1 049) | (1 146) | (1 146) |
| | <u>\$ 140 537</u> | <u>\$ 156 079</u> | <u>\$ 168 244</u> | <u>\$ 171 373</u> | <u>\$ 177 446</u> |
| Transmission | | | | | |
| Transmission | 14 571 | 16 644 | 15 929 | 13 369 | 14 367 |
| Amortization of Contributions | (1 358) | (3 204) | (3 051) | (3 054) | (3 059) |
| | <u>\$ 13 213</u> | <u>\$ 13 440</u> | <u>\$ 12 879</u> | <u>\$ 10 315</u> | <u>\$ 11 308</u> |
| Stations | | | | | |
| Substations | 82 493 | 86 122 | 87 617 | 85 735 | 90 177 |
| Transformers | 1 806 | 1 940 | 1 627 | 1 597 | 1 828 |
| Amortization of Contributions | (1 247) | (4 457) | (4 402) | (4 402) | (4 402) |
| | <u>\$ 83 052</u> | <u>\$ 83 605</u> | <u>\$ 84 842</u> | <u>\$ 82 930</u> | <u>\$ 87 603</u> |
| Distribution | | | | | |
| Subtransmission Lines | 6 271 | 6 629 | 7 376 | 6 948 | 7 401 |
| Distribution Lines | 58 170 | 61 337 | 60 509 | 56 989 | 60 951 |
| Meters & Transformers | 4 273 | 4 260 | 2 848 | 3 281 | 3 404 |
| Amortization of Contributions | (5 084) | (5 476) | (5 699) | (6 409) | (7 009) |
| | <u>\$ 63 630</u> | <u>\$ 66 750</u> | <u>\$ 65 034</u> | <u>\$ 60 809</u> | <u>\$ 64 747</u> |
| Other | | | | | |
| Communications | 19 192 | 21 307 | 16 819 | 17 765 | 18 206 |
| Motor Vehicles | 10 954 | 11 573 | 10 154 | 11 819 | 12 226 |
| Structures & Improvements | 7 947 | 8 066 | 7 928 | 8 800 | 9 557 |
| General Equipment | 25 806 | 23 255 | 16 627 | 16 780 | 16 797 |
| Computer Development | 20 582 | 19 667 | 17 687 | 18 487 | 20 816 |
| Conawapa | - | - | - | - | 7 711 |
| Affordable Energy Fund | 5 406 | 4 410 | 5 270 | 4 290 | 1 509 |
| Miscellaneous | 3 550 | 4 628 | 1 701 | 2 652 | 3 269 |
| Corporate Allocation | (1 946) | (1 946) | (1 974) | (1 850) | (1 853) |
| Target Adjustment | - | - | (621) | (3 305) | (6 938) |
| | <u>\$ 91 491</u> | <u>\$ 90 960</u> | <u>\$ 73 591</u> | <u>\$ 75 439</u> | <u>\$ 81 300</u> |
| Total D&A Expense Including Accounting Changes | <u>\$ 391 923</u> | <u>\$ 410 834</u> | <u>\$ 404 590</u> | <u>\$ 400 866</u> | <u>\$ 422 404</u> |
| Add: Accounting Policy & Estimate Changes | - | - | 24 923 | 52 685 | 57 159 |
| Total D&A Expense Excluding Accounting Changes | <u>\$ 391 923</u> | <u>\$ 410 834</u> | <u>\$ 429 512</u> | <u>\$ 453 551</u> | <u>\$ 479 563</u> |
| Year over year % change Including Accounting Changes | | 4.8% | -1.5% | -0.9% | 5.4% |
| Year over year % change Excluding Accounting Changes | | 4.8% | 4.5% | 5.6% | 5.7% |

2

1 The following sections highlight the year over year changes from 2012/13 through
2 2016/17:

3
4 *2013/14 Actual vs. 2012/13 Actual*

5 The 2013/14 increase is primarily due to new additions to plant and equipment coming
6 into service, including the Wuskwatim Generating Station which was fully in-service
7 during the 2013/14 fiscal year.

8
9 *2014/15 Forecast vs. 2013/14 Actual*

10 Fiscal 2014/15 reflects an increase in depreciation expense as a result of \$1.7 billion in
11 assets going into service. Of the \$1.7 billion in additions, approximately \$1.0 billion is
12 comprised of new generation and transmission projects including the Pointe du Bois
13 Spillway Replacement (\$477 million), the Riel 230/500 KV Station (\$329 million), and
14 Bipole III Converter Station (\$123 million), with \$576 million comprised of sustaining
15 capital investments.

16
17 The increase in depreciation expense as a result of plant additions is more than offset by
18 the impact of new depreciation rates implemented by Manitoba Hydro. The new
19 depreciation rates were determined as part of Manitoba Hydro's most recent depreciation
20 study and reflect new service life estimates effective April 1, 2014.

21
22 Please see Appendix 5.6 for a discussion of the depreciation study and the associated
23 depreciation rates and for correspondence from Gannett Fleming, Inc. setting out the
24 depreciation rates to be used under GAAP and IFRS.

25
26 *2015/16 Forecast vs. 2014/15 Forecast*

27 Similar to the results reflected in the 2014/15 forecast, depreciation continues to increase
28 as result of \$833 million in plant assets going into service in the 2015/16 fiscal period.
29 The majority of the assets forecast to go into service are comprised of sustaining capital
30 investments of \$593 million.

31
32 Overall depreciation decreases as a result of changes implemented by Manitoba Hydro in
33 order to comply with the financial reporting requirements of IFRS. These changes
34 include the removal of the provision for asset retirement costs from depreciation rates, the
35 removal of administrative overhead from inclusion in the cost of capital projects, and the
36 change in method of depreciation. The removal of the provision for asset retirement

1 costs and the removal of administrative overhead from the cost of capital projects
2 resulted in a decrease in depreciation expense totaling \$60 million that was partially
3 offset by a \$36 million increase caused by the change in method of depreciation.
4

5 *2016/17 Forecast vs. 2015/16 Forecast*

6 The \$21 million increase forecasted in 2016/17 is the result of \$0.9 billion of assets going
7 into service in fiscal 2016/17 (comprised of \$692 million in sustaining capital
8 investments), as well as the projected commencement of the amortization of deferred
9 Conawapa project costs. For purposes of MH14, it is assumed that the deferred
10 Conawapa costs are treated as a rate-regulated asset beginning in 2016/17.
11
12

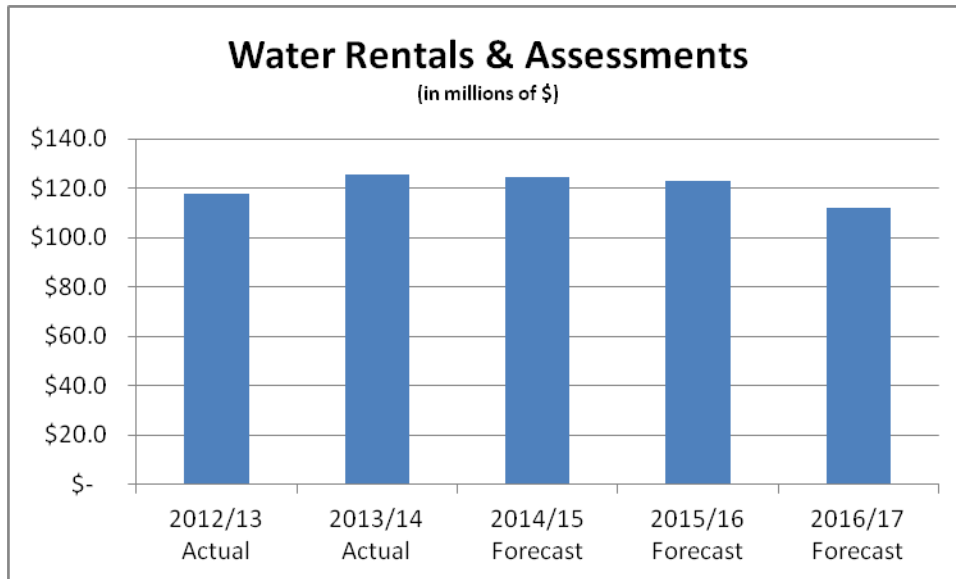
1 **5.8 WATER RENTALS & ASSESSMENTS**

2

3 Pursuant to *The Water Power Act*, water rentals are paid to the Province for the use of
4 water resources for hydroelectric generation. Assessments include amounts paid for water
5 usage pursuant to *The Water Rights Act*, Lake of the Woods Control Board and Lac Seul
6 Operating Costs, National Energy Board (NEB) assessments, and membership fees for
7 MISO and other industry associations. Land rentals are annual payments for the use of
8 Manitoba Crown lands used for water power purposes, as set out in Manitoba Hydro's
9 Water Power Act licenses.

10

11 **Figure 5.11 Water Rentals & Assessments**



12

13

14

1 Please see the following schedule for a breakdown of Water Rentals and Assessments.
2

| MANITOBA HYDRO WATER RENTALS AND ASSESSMENTS | Schedule 5.1.7 (000's) | | | | |
|---|-----------------------------------|-------------------|---------------------|---------------------|---------------------|
| | 2012/13 Actual | 2013/14 Actual | 2014/15 Forecast | 2015/16 Forecast | 2016/17 Forecast |
| Water Rentals | \$ 110 440 | \$ 117 907 | \$ 117 417 | \$ 115 049 | \$ 103 902 |
| Assessments & Land Rentals | 7 424 | 7 610 | 7 052 | 7 798 | 8 265 |
| Total Water Rentals and Assessments | \$ 117 864 | \$ 125 517 | \$ 124 469 | \$ 122 847 | \$ 112 167 |
| Year over year \$ change | | \$ 7 653 | \$ (1 047) | \$ (1 622) | \$ (10 680) |
| Year over year % change | | 6.5% | -0.8% | -1.3% | -8.7% |

3
4
5 The following sections highlight the year over year changes from 2012/13 through
6 2016/17:

7
8 *2013/14 Actual vs. 2012/13 Actual*

9 The 2013/14 increase is primarily due to increased water rentals due to an increase in
10 hydraulic generation along the Nelson River as a result of higher system inflows
11 compared to 2012/13. Also, the Wuskwatim Generating Station was in service for the
12 entire year which contributed to the increase in the total water rental cost for 2013/14.

13
14 *2014/15 Forecast vs. 2013/14 Actual*

15 The 2014/15 forecast decrease reflects lower hydraulic generation largely due to
16 transmission outages that restricted exports on the US transmission line during October
17 and November 2014.

18
19 *2015/16 Forecast vs. 2014/15 Forecast*

20 The 2015/16 forecast decrease reflects lower hydraulic generation due to assumed
21 median inflow conditions as compared to above average inflow conditions that occurred
22 in 2014/15. Although lower than 2014/15, hydraulic generation is still expected to be
23 above average due to significant carry over storage from 2014/15. The decrease in water
24 rentals is expected to be partially offset by higher membership fees and assessments due
25 to an increase in NEB charges.

26
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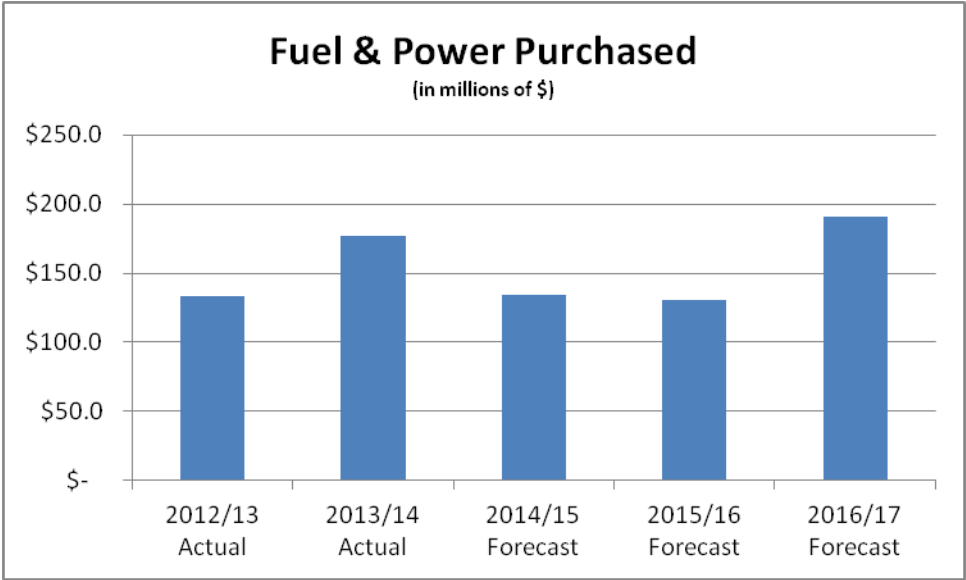
1 *2016/17 Forecast vs. 2015/16 Forecast*

2 The 2016/17 forecast decrease reflects lower water rentals due to lower hydraulic
3 generation based on the assumption of average historic water flow conditions. Hydraulic
4 generation, and therefore water rentals, is expected to be higher in 2015/16 primarily
5 because of carry forward storage from the prior year.

1 **5.9 FUEL & POWER PURCHASED**

2
3 Fuel & Power Purchased includes costs of fuel for thermal generation facilities, costs for
4 purchased energy, and other miscellaneous costs associated with export and import
5 market activities and system operation. In 2014/15, over 99% of electricity forecast to be
6 generated by Manitoba Hydro is from its 15 hydraulic generating stations and less than
7 1% from its two thermal generation stations and four remote diesel generation facilities.
8 In addition, Manitoba Hydro purchases wind power from the independently-owned St.
9 Leon and St. Joseph wind farms. Manitoba Hydro also imports electricity depending on
10 the operating and economic circumstances.
11

12 **Figure 5.12 Fuel & Power Purchased**



13
14
15

1 Please see the following schedule for a breakdown of Fuel & Power Purchased.

MANITOBA HYDRO **Schedule 5.1.8**
FUEL AND POWER PURCHASED **(000's)**

| | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 |
|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | Actual | Actual | Forecast | Forecast | Forecast |
| Thermal Fuel | | | | | |
| Coal | \$ 3 305 | \$ 4 886 | \$ 3 566 | \$ 3 086 | \$ 6 329 |
| Natural Gas & Other | 9 012 | 9 183 | 9 262 | 10 574 | 21 542 |
| Power Purchased | 70 965 | 98 104 | 70 996 | 73 651 | 115 049 |
| Merchant Purchases | 5 366 | 18 863 | 7 407 | 5 705 | - |
| Transmission Charges | 44 644 | 46 078 | 42 958 | 37 416 | 48 013 |
| Total Fuel and Power Purchased | \$ 133 292 | \$ 177 113 | \$ 134 189 | \$ 130 432 | \$ 190 933 |
| Year over year \$ change | | \$ 43 821 | \$ (42 925) | \$ (3 757) | \$ 60 501 |
| Year over year % change | | 32.9% | -24.2% | -2.8% | 46.4% |

2
3
4 Please see the following for a description of Fuel & Power Purchased components:

5
6 Coal purchases refers to the charge for coal consumed as the principal fuel for Brandon
7 Unit 5 for the purpose of generating electricity under restricted operations.

8
9 Natural Gas & Other includes natural gas, oil and diesel requirements for Brandon and
10 Selkirk, and diesel for remote locations for the purpose of generating electricity.

11
12 Power Purchased includes purchases of electrical energy from wind farms in Manitoba as
13 well as from external Canadian and US suppliers.

14
15 Merchant purchases represent arbitrage opportunities and are unrelated to Manitoba
16 Hydro generation. These include physical purchases of power from one market for re-sale
17 to another market.

18
19 Transmission Charges relate primarily to reservation fees for use of transmission
20 facilities for imports or exports, or for merchant transactions.

21
22

1 The following sections highlight the year over year changes from 2012/13 through
2 2016/17:

3
4 *2013/14 Actual vs. 2012/13 Actual*

5 The 2013/14 increase was primarily the result of higher purchased volumes due to colder
6 weather during the winter of 2013/14. Merchant purchases were also higher in 2013/14
7 due to increased arbitrage opportunities between markets.

8
9 *2014/15 Forecast vs. 2013/14 Actual*

10 The 2014/15 forecast decrease is primarily the result of lower purchased volumes due to
11 the assumption of normal weather and a year-over-year projected increase in hydraulic
12 generation during the winter period. Merchant purchases are also projected to be lower in
13 2014/15 as Manitoba Hydro does not expect to have the same level of arbitrage
14 opportunities between markets as was experienced in 2013/14. Transmission charges are
15 also projected to be lower largely because of 100 MW of transmission service expiring in
16 the third quarter of 2014/15.

17
18 *2015/16 Forecast vs. 2014/15 Forecast*

19 The 2015/16 forecast decrease is the result of reduced merchant purchases due to less
20 arbitrage opportunities forecast for 2015/16. Transmission charges are also reduced
21 because of a 100 MW transmission service that expired towards the end of 2014/15, with
22 the effect being fully realized in 2015/16. These reductions are partially offset by an
23 increase in off-peak imports as a consequence of reduced hydraulic generation.

24
25 *2016/17 Forecast vs. 2015/16 Forecast*

26 The 2016/17 forecast increase is primarily due to increases in the volumes of US off-peak
27 purchases and increased thermal costs. These increases are largely because the 2016/17
28 forecast reflects average purchases and costs based on the full range of historic flows
29 with consideration for drought included, whereas 2015/16 is based on hydraulic
30 generation from median inflows coupled with above average carry forward storage from
31 2014/15. Transmission charges are projected to increase due to 200 MW of new
32 transmission service as of November 1, 2016.

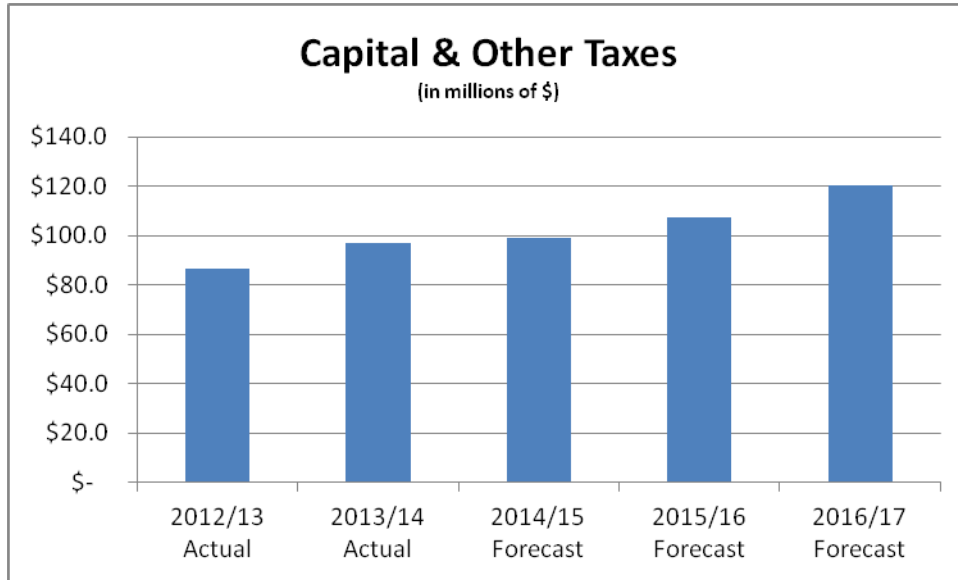
33

1 **5.10 CAPITAL & OTHER TAXES**

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5
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7

Capital and Other Taxes is comprised of payments made to the Province of Manitoba for capital and payroll taxes as well as grants in lieu of taxes (“grants in lieu”), and business and property taxes paid to the various municipalities in Manitoba.

Figure 5.13 Capital & Other Taxes



8
9
10
11

The following schedule provides a breakdown of Capital and Other Taxes.

**MANITOBA HYDRO
CAPITAL AND OTHER TAXES**

**Schedule 5.1.9
(000's)**

| | 2012/13 Actual | 2013/14 Actual | 2014/15 Forecast | 2015/16 Forecast | 2016/17 Forecast |
|--|-------------------|-------------------|---------------------|---------------------|---------------------|
| Capital Tax | \$ 54 948 | \$ 59 780 | \$ 63 605 | \$ 70 408 | \$ 82 726 |
| Grants in Lieu of Taxes | 13 115 | 13 851 | 14 383 | 14 807 | 15 245 |
| Payroll Tax | 10 767 | 11 039 | 11 517 | 11 933 | 12 172 |
| Business & Property Tax | 1 174 | 1 152 | 1 165 | 1 168 | 1 197 |
| Other Municipal Payments | 6 395 | 7 612 | 8 500 | 8 840 | 9 194 |
| GST Reassessment on City Tax | - | 3 316 | - | - | - |
| Total Capital & Other Taxes | \$ 86 399 | \$ 96 750 | \$ 99 170 | \$ 107 156 | \$ 120 534 |
| Year over year \$ change | | \$ 10 351 | \$ 2 420 | \$ 7 986 | \$ 13 378 |
| Year over year % change | | 12.0% | 2.5% | 8.1% | 12.5% |

12
13

1 The following provides a description of Capital & Other Tax components:

2
3 The Corporation pays capital tax to the Province of Manitoba at a rate of 0.5% and is
4 applied to the taxable capital of the company.

5
6 The Corporation pays grants in lieu on its land and buildings. The amount of grants in
7 lieu paid is determined based on property valuations and municipal and school division
8 mill rates, similar to the manner in which property taxes are determined for other tax
9 payers in Manitoba.

10
11 Payroll tax is based on a tax rate of 2.15% which is applied to the Corporation's gross
12 payroll. A portion of the payroll taxes paid is allocated to Centra based on the relative
13 percentage of activity charges to gas programs.

14
15 Business taxes are paid with respect to commercial space occupied by the company in
16 both leased and owned properties. The Corporation pays property taxes to the landlords
17 of leased premises as part of the required lease payments.

18
19 The Corporation also makes other municipal payments with respect to the town of Gillam
20 and the Frontier School Division.

21
22 The Canada Revenue Agency ("CRA") performed an audit with respect to an issue
23 regarding GST being charged to customers. It was determined that the GST should be
24 applied to the City of Winnipeg tax charged to customers. In 2013/14 the Corporation
25 was assessed, and accrued for, past taxes not collected from customers in the amount of
26 \$3.3 million.

27
28 The following sections highlight the year over year changes from 2012/13 through
29 2016/17:

30
31 *2013/14 Actual vs. 2012/13 Actual*

32 The 2013/14 increase is higher than expected partially due to the inclusion of the \$3.3
33 million Canada Revenue Agency GST audit reassessment. The remainder of the increase
34 is largely driven by the increase in provincial capital tax which is linked to increasing
35 debt levels to fund capital investments. Other municipal payments have also increased at

1 a rate higher than inflation due to increased funding requirements relating to the town of
2 Gillam.

3
4 *2014/15 Forecast vs. 2013/14 Actual*

5 The forecast 2014/15 increase is primarily due to higher capital taxes. Going forward, all
6 years will be impacted by capital taxes increasing at greater than the rate of inflation due
7 to higher capital investment increasing debt levels. Other municipal payments relating to
8 the town of Gillam also continue to increase due to operational funding needs.

9
10 *2015/16 Forecast vs. 2014/15 Forecast*

11 Capital tax is higher due to increased capital spending for Keeyask, Bipole III and aging
12 infrastructure. All other items are forecast to generally increase in line with inflation.

13
14 *2016/17 Forecast vs. 2015/16 Forecast*

15 Capital tax is higher due to increased capital spending for Keeyask, Bipole III and aging
16 infrastructure. All other items are forecast to generally increase in line with inflation.

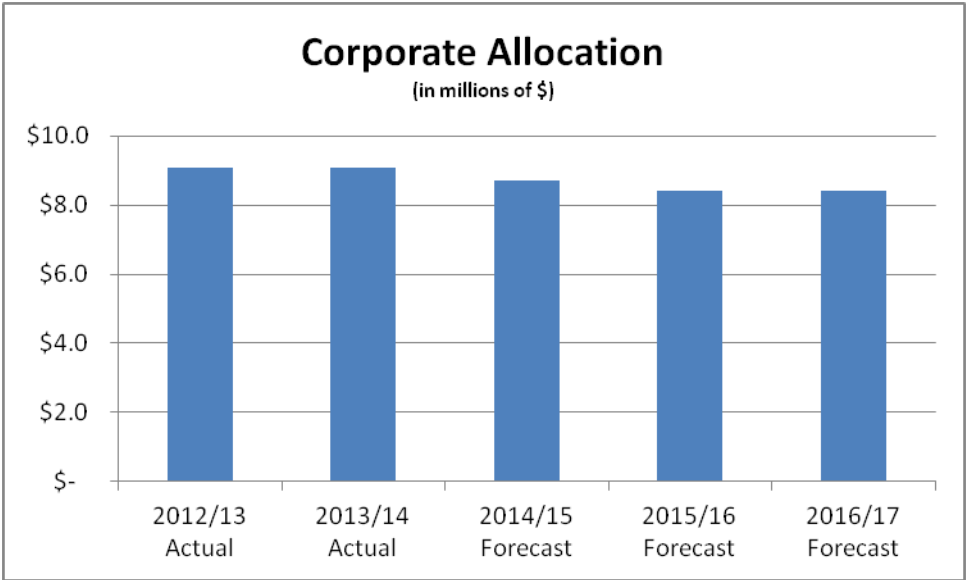
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18

1 **5.11 CORPORATE ALLOCATION**

2
3 Corporate Allocation includes Manitoba Hydro Electric operations' share of the
4 acquisition costs relating to Centra. The total annual acquisition cost of Centra includes
5 the interest and provincial guarantee fee ("PGF") on the acquisition debt, and the
6 amortization of the acquisition and integration costs. The total ranges from \$20 to \$21
7 million annually. Of this amount, \$12 million is charged to the natural gas operations.
8 The remainder is charged to Electric operations.

9

10 **Figure 5.14 Corporate Allocation**



11
12
13

1 Please see the following schedule for a breakdown of Corporate Allocation.
2

MANITOBA HYDRO **5.1.10**
CORPORATE ALLOCATION **(000's)**

| | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| | Actual | Actual | Forecast | Forecast | Forecast |
| Corporate Allocation Electric | | | | | |
| Interest on Acquisition Debt | \$ 16 628 | \$ 16 628 | \$ 16 185 | \$ 16 043 | \$ 16 043 |
| Provincial Guarantee Fee on Acquisition Debt | 2 500 | 2 500 | 2 500 | 2 500 | 2 500 |
| Finance Expense Corporate Allocation | 19 128 | 19 128 | 18 685 | 18 543 | 18 543 |
| Corporate Allocation - Depreciation | 1 946 | 1 946 | 1 974 | 1 850 | 1 853 |
| | 21 074 | 21 074 | 20 659 | 20 393 | 20 396 |
| Less: Allocation to Centra Gas | (12 000) | (12 000) | (12 000) | (12 000) | (12 000) |
| Total Corporate Allocation (Electric) | \$ 9 074 | \$ 9 074 | \$ 8 659 | \$ 8 393 | \$ 8 396 |
| Year over year \$ change | | \$ - | \$ (415) | \$ (266) | \$ 3 |
| Year over year % change | | 0.0% | -4.6% | -3.1% | 0.0% |

3
4
5 The following sections highlight the year over year changes from 2012/13 through
6 2016/17.

7
8 *2013/14 Actual vs. 2012/13 Actual*

9 No significant change.

10
11 *2014/15 Forecast vs. 2013/14 Actual*

12 The 2014/15 forecast decrease is primarily due to lower interest rates from refinancing
13 the Centra acquisition debt.

14
15 *2014/15 Forecast vs. 2015/16 Forecast*

16 The 2015/16 forecast decrease is primarily due to a full year of lower interest rates from
17 the previous year's refinancing.

18
19 *2016/17 Forecast vs. 2015/16 Forecast*

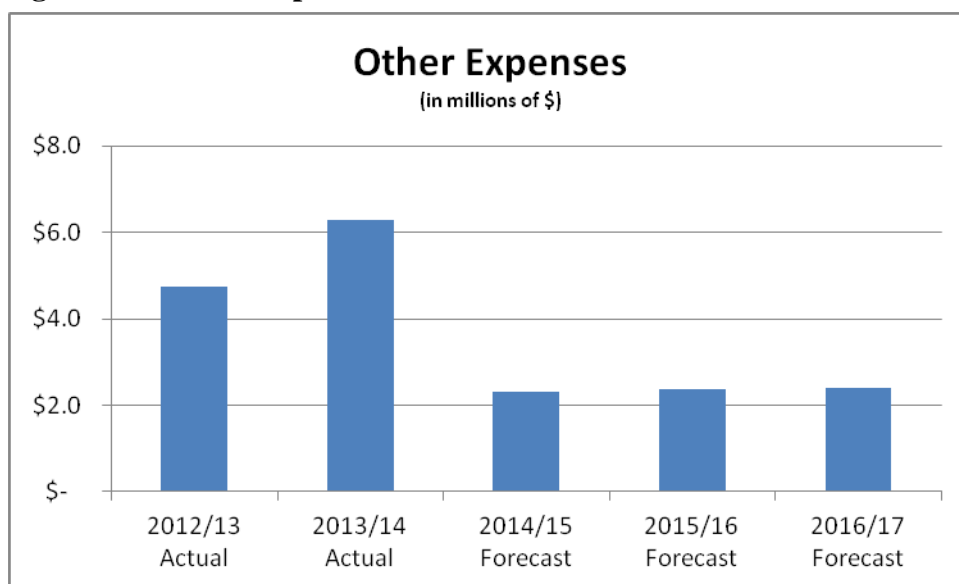
20 No significant change.
21
22

1 **5.12 OTHER EXPENSES**

2
3
4
5
6

Other expenses include costs associated with the provision of work on customer owned plant and other miscellaneous expenditures.

Figure 5.15 Other Expenses



7
8

**MANTOBA HYDRO
OTHER EXPENSES**

**Schedule 5.1.11
(000's)**

| | 2012/13 Actual | 2013/14 Actual | 2014/15 Forecast | 2015/16 Forecast | 2016/17 Forecast |
|----------------|-------------------|-------------------|---------------------|---------------------|---------------------|
| Other Expenses | \$ 4 750 | \$ 6 294 | \$ 2 311 | \$ 2 355 | \$ 2 402 |
| \$ Change | | \$ 1 544 | \$ (3 983) | \$ 44 | \$ 47 |
| % Change | | 32.5% | -63.3% | 1.9% | 2.0% |

9
10
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18

The following sections highlight the year over year changes from 2012/13 through 2016/17:

2013/14 Actual vs. 2012/13 Actual

The 2013/14 increase is primarily the result of a one-time write off of property, plant and equipment under construction.

1 *2014/15 Forecast vs. 2013/14 Actual*

2 The decrease in expenses results from the one-time write-off in 2013/14.

3

4 *2015/16 Forecast vs. 2014/15 Forecast*

5 No significant change.

6

7 *2016/17 Forecast vs. 2015/16 Forecast*

8 No significant change.

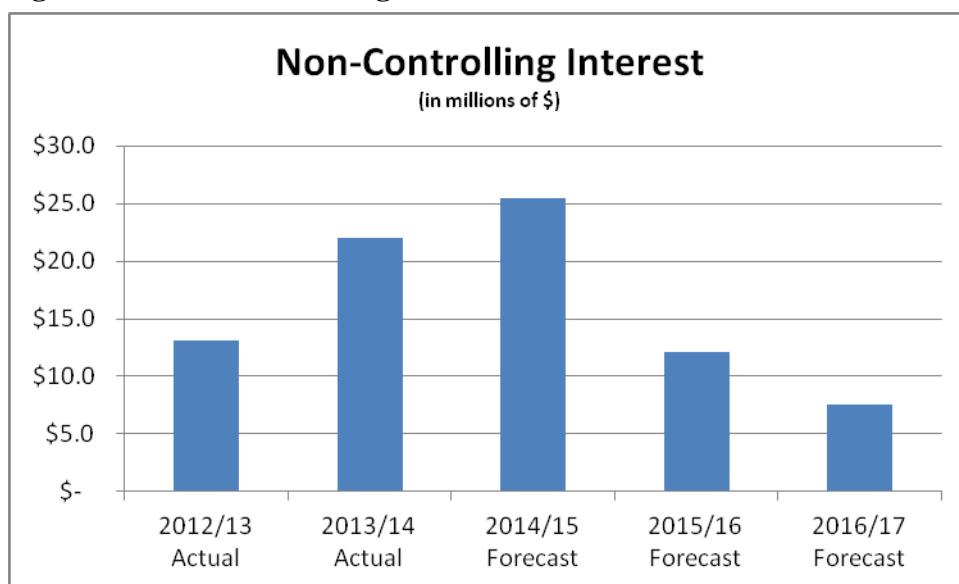
9

1 **5.13 NON-CONTROLLING INTEREST**

2
3 The Wuskwatim Power Limited Partnership (“WPLP”) has two limited partners,
4 Manitoba Hydro and Taskinigahp Power Corporation (“TPC”) which is beneficially
5 owned by Nisichawayasihk Cree Nation (“NCN”) and a General Partner which is a
6 wholly-owned subsidiary of Manitoba Hydro. NCN may acquire up to a 33% interest in
7 WPLP. The generating station and associated transmission was placed into service during
8 the 2012/13 year. Manitoba Hydro will operate and maintain the Wuskwatim generating
9 station and purchase all of the output under the power purchase agreement with WPLP.

10
11 Manitoba Hydro’s income statement includes all of the WPLP revenues and expenses.
12 TPC’s 33% portion of the operating results of the WPLP is recorded as non-controlling
13 interest in the consolidated statement of income.

14
15 **Figure 5.16 Non-Controlling Interest**



16
17 **MANITOBA HYDRO
NON-CONTROLLING INTEREST**

**Schedule 5.1.12
(000's)**

| | 2012/13 Actual | 2013/14 Actual | 2014/15 Forecast | 2015/16 Forecast | 2016/17 Forecast |
|--------------------------|-------------------|-------------------|---------------------|---------------------|---------------------|
| Non-controlling Interest | \$ 13 160 | \$ 22 005 | \$ 25 452 | \$ 12 126 | \$ 7 580 |
| \$ Change | | \$ 8 845 | \$ 3 447 | \$ (13 326) | \$ (4 546) |
| % Change | | 67.2% | 15.7% | -52.4% | -37.5% |

1 The following sections highlight the year over year changes from 2012/13 through
2 2016/17:

3
4 *2013/14 Actual vs. 2012/13 Actual*

5 The 2013/14 increase reflects the first full year of operations for the WPLP as the first of
6 three units at the Wuskwatim generating station entered commercial service in June 2012.

7
8 *2014/15 Forecast vs. 2013/14 Actual*

9 The 2014/15 forecast increase results from the projection of lower revenues due to
10 reduced forecast volumes and lower projected export prices and higher finance expense
11 than recorded in 2013/14.

12
13 *2015/16 Forecast vs. 2014/15 Forecast & 2016/17 Forecast vs. 2015/16 Forecast*

14 Manitoba Hydro and NCN have reached an agreement in principle with respect to the
15 majority of terms within the Wuskwatim Project Development Agreement (PDA). The
16 parties are still reviewing and negotiating the final terms of the PDA. The draft terms
17 contained in the PDA related to the power purchase agreement between Manitoba Hydro
18 and the WPLP improve the financial results of the partnership and as a result, reduce the
19 loss that is allocated to TCP through non-controlling interest.

20
21

1 **5.14 COST SAVING INITIATIVES**

2
3 Manitoba Hydro continues to undertake a number of initiatives that are intended to result
4 in both operating and capital cost savings, ultimately improving financial results and
5 easing pressures on rates. These initiatives support the Corporation's commitment to
6 manage its OM&A expenditures below inflationary levels and support Manitoba Hydro's
7 debt management strategy by reducing capital investment resulting in lower overall debt
8 & depreciation requirements.

9
10 OM&A cost increases have been limited to 1% per year up to 2021/22 (excluding
11 accounting changes and the increases associated with new major generation and
12 transmission projects coming into service). After 2021/22, OM&A is projected to rise at
13 the same level as inflation, despite the increasing cost pressures facing the Corporation
14 from investments required for infrastructure renewal and increased capacity.

15
16 The following describes some of the key ongoing initiatives being undertaken by the
17 corporation to manage its overall operating and capital expenditures.

18
19 **5.14.1 Reduction of Operational Positions**

20 Over the forecast period (2014/15 through 2016/17), Manitoba Hydro has committed to a
21 reduction of approximately 300 operational positions and a commitment to hold non-
22 labor costs below inflation, where possible. Manitoba Hydro intends to leverage its
23 current attrition rate of approximately 300 staff per year by analyzing work processes and
24 functions to identify opportunities for elimination, consolidation or technology
25 enhancements that will result in staff reductions and efficiencies while still maintaining
26 service levels. The reductions will vary across the corporation and are dependent upon
27 the review of the many varied processes and functions unique to each area.

28
29 **5.14.2 Consolidation of Rural District Offices**

30 This initiative entails the closure of 24 rural district offices and their consolidation into
31 the existing 20 Customer Service Centres. This effort is expected to enhance customer
32 service through improved field crew deployment from the recently implemented Mobile
33 Workforce Management System, improve system reliability by increasing distribution
34 maintenance efforts and economize on customer-based administrative tasks.

35

1 Consolidation of the rural district offices is expected to yield a reduction in operating
2 costs of approximately \$2 million per year and result in the avoidance of future facility
3 upgrade expenditures of \$50 million and potential sales revenue of vacated properties.
4 The first stage of facilities closures began in January 2014. The timing of this initiative is
5 a result of declining district office traffic, increased customer demand for on-line services
6 and increased customer requests at the previously established customer service centre
7 hubs. This initiative is expected to maintain or improve outage response times.

8
9 Opportunities are also being derived in the centralizing of administrative work processes
10 at Customer Service Centres. Amalgamating district staff into the larger Customer
11 Service Centres has enabled Manitoba Hydro to create a more specialized and flexible
12 workforce that is better equipped to respond to service disruptions. The Corporation also
13 continues to monitor service levels and explore opportunities to optimize customer
14 service, particularly in the areas of self-service and web-based outage information.

15 16 **5.14.3 Managing Contractor Costs in Various Projects**

17 The management of costs for capital projects involves proactively managing the
18 schedule, scope and risks to the project. Manitoba Hydro has put in place industry
19 standard project controls such as frequent schedule and cost monitoring with a focus on
20 understanding the past and current costs. Manitoba Hydro is implementing a number of
21 strategies throughout the lifecycle of major projects such as Bipole III and Keeyask.

22
23 For the procurement process, Manitoba Hydro has generally been following a multi-stage
24 process where proponents are initially prequalified on their ability to complete the
25 construction work, with pre-qualified proponents then competing largely on price to
26 maximize competitiveness of the process and determine the successful proponent. In
27 some instances, the work is awarded as a fixed price and pre-qualified proponents have
28 input into finalization of contractual terms during the proposal phase, which balances risk
29 between Manitoba Hydro and the proponents and reduces the overall uncertainty in the
30 bids. The result was that proponents were able to reduce the amount of risk dollars
31 carried in their bids, reducing overall bid price. In some instances, Manitoba Hydro
32 informed all proponents that commercial and technical alternatives that may offer cost
33 savings while still meeting the requirements of the contract would be considered resulting
34 in noticeable cost savings.

35
36

1 **5.14.4 Review of the Gillam Redevelopment and Expansion Project (GREP)**

2 Manitoba Hydro undertook a review of the Gillam Redevelopment and Expansion Project
3 (GREP) which involved assessing changing business requirements and developing a
4 strategy that reflected these changes while applying the most current northern community
5 design practices.
6

7 The revised community development plan incorporated a number of modifications
8 including: eliminating expansion of infrastructure while strengthening community
9 through enhanced centralized amenities, eliminating further expansion of new
10 retail/commercial space, cancelling construction of a new 75 single detached unit
11 housing subdivision substantially reducing the number of additional residential sub-
12 divisions and new housing units, limiting/eliminating expansion of the existing trailer
13 court sub-division, and cancelling construction of a new Wellness Centre.
14

15 In place of these developments, Manitoba Hydro's current plan is to expand mid-density
16 housing within existing infrastructure, and upgrade and enhance recreation and leisure
17 facilities in the Town Centre. The result of this assessment and strategy is a community
18 plan with amenities intended to attract and retain Manitoba Hydro staff in Gillam and a
19 cost savings of approximately \$100 million.
20

21 **5.14.5 Pointe du Bois Operations Spillway Cost Efficiencies**

22 The Pointe du Bois Spillway Project was initiated to update the original spillway in order
23 to meet current dam safety guidelines. The new spillway was placed into service in
24 August 2014. River control has been a continuous challenge for Pointe du Bois
25 Operations over the years due to constant river fluctuation.
26

27 The requirement to melt ice off the gates was a manual and very labour intensive process,
28 requiring a crew of almost nine staff to operate the boilers. In addition, the original
29 spillway was not designed to handle the pressure of shifting or expanding ice, and term
30 employees were required to monitor ice thickness and cut trenches in front of the
31 spillway structure.
32

33 As a result of the spillway replacement, Manitoba Hydro will see a reduction in OM&A
34 costs. The in-service of the new spillway will result in an immediate and permanent
35 reduction of approximately 1 EFT. In addition, the requirement for utility staff to be on
36 call at all times has been eliminated with the ability to remotely control the river. Finally,

1 the new spillway eliminates the need for boiler operation for melting ice and as a result
2 the 9 positions held by Power Engineers have been deemed redundant.

3
4 It is estimated the Pointe du Bois spillway replacement will result in approximately \$1
5 million in cost savings. In addition, the Pointe du Bois spillway structure replacement has
6 resulted in a safer working environment for employees, through the ability to remote
7 control operation.

8 9 **5.14.6 Implementation of Mobile Workforce Management**

10 Manitoba Hydro has implemented a new mobile workforce management system to
11 effectively manage field activities for both the electric and natural gas businesses. This
12 technology permits the planning, scheduling and dispatching of work orders in an
13 optimized manner to derive cost efficiencies and timely service to customers. Rather than
14 organizing work using geographic specific paper systems, field labour crews are now
15 managed through a scheduling/dispatch centre with the ability to deploy field crews to
16 emergency and urgent customer requests at the same time as improving the throughput of
17 pre-scheduled maintenance work.

18
19 Work assignments are now sent to field laptop units electronically where activity details
20 are entered in real time as the work progresses. Customer information and maintenance
21 history are also readily available to field crews and electronic drawings can be retrieved
22 within the vehicle. These field units are also equipped with GPS systems to identify the
23 work locations of all crews.

24
25 The benefits of this initiative to customers include an improved ability to schedule
26 appointments with shorter wait times and in precise time slots, improved timeliness of
27 work flow, and the ability to track work orders. The system is also intended to result in
28 faster response times in the event of emergencies. The implementation of mobile
29 workforce management continues to permit the reduction of positions. To date 16
30 administrative positions have been eliminated and approximately four more positions
31 each year for the next two years are identified for reduction. Field crew productivity
32 savings are also expected due to reduced travel time and standardized matching of skills
33 to job tasks, as well as the ability to complete greater volumes of maintenance work
34 without increasing internal staffing requirements.

35

1 Adherence to stringent maintenance schedules is one way to prolong the life of Manitoba
2 Hydro's aging and deteriorating distribution assets. Mobile workforce management has
3 allowed Manitoba Hydro to meet its prescribed facility maintenance requirements, which
4 in turn has helped to modestly relieve some pressure on advancing capital funding to
5 replace distribution assets and also maintain existing levels of electric service reliability.
6

7 **5.14.7 Asset Management Strategies**

8 Manitoba Hydro is facing cost pressures associated with an aging electric infrastructure.
9 In an ongoing effort to reduce expenditures, the Corporation has been undertaking a
10 number of strategies to reduce overall costs on the electric system equipment while
11 properly managing risk. The following initiatives have been implemented to continually
12 improve the Corporation's asset management strategies.
13

14 Further optimization of maintenance programs based on equipment condition,
15 performance and reliability assessments has been completed. A more detailed
16 understanding of the overall condition of major system equipment groups has allowed
17 Manitoba Hydro to strategically increase maintenance intervals on some equipment in
18 relatively good condition. Manitoba Hydro will continue to monitor the overall condition
19 of its major system equipment to ensure that the correct balance between maintenance
20 and equipment replacement costs and reliability is achieved.
21

22 Enhanced condition assessments and economic analysis have been implemented to better
23 determine the economic end of life of equipment or equipment groups. This strategy is
24 expected to reduce life cycle costs as well as reduce overall system maintenance costs by
25 undertaking equipment replacements at the optimum time considering cost and risk. A
26 number of programs have been established for some asset types to fund replacements
27 where condition assessments and economic analysis justify proactive replacements.
28

29 Various software systems that support asset management processes have been enhanced
30 or replaced with more effective solutions. For example, the Corporation is presently
31 implementing an integrated Enterprise Asset Management system that supports asset
32 management processes at the corporate level, starting initially with the generation,
33 HVDC, protection and communication assets. These types of systems will assist in
34 minimizing equipment failures and also avoid decreases in system availability by
35 ensuring all work is completed in an optimal fashion, and information is recorded to
36 support asset management analysis processes. The Corporation has also implemented

1 reporting enhancements for operating performance and equipment condition analysis,
2 which further strengthens the capital planning process.

3 4 **5.14.8 Technology Modernization Initiative for Better Capital Investment Decisions**

5 Manitoba Hydro has been working with an external party to evaluate how it can advance
6 its business activities through the use of smarter grid technologies. It is believed that
7 investing today in smarter distribution equipment and information technology will
8 provide economic benefit through enhanced capital improvements to Manitoba Hydro's
9 distribution network over the decades to come.

10
11 The expected outcome of this detailed investigative partnership is that the Corporation
12 will be in a far better position to maintain or improve system reliability, manage localized
13 capacity constraints, operate more safely and efficiently, enhance customer service and
14 better manage utility infrastructure with evolving customer load expectations. Other
15 benefits that can be expected include a reduction in field operating costs when responding
16 to outages and enhanced customer knowledge toward greater demand-side management
17 efficiencies.

18
19 This investment in technology would allow the Corporation to gain a greater
20 understanding of where capacity constraints and reliability issues specifically reside and
21 prioritize its capital investments in areas that are both critically important and urgent.

22 23 **5.14.9 Supply Change Management Initiatives**

24 The Corporation is undertaking a number of supply change management initiatives
25 intended to realize savings on goods and services purchased, reduce or avoid operating
26 costs, reduce working capital, reduce capital expenditures on vehicle acquisitions, and
27 reduce costs associated with fuel expenditures and external repairs and maintenance. A
28 number of these initiatives started in 2014/15, while some are scheduled to begin in
29 2015/16 and 2016/17.

30
31 The supply chain management initiatives include implementing stronger category
32 management (procurement) practices; improving inventory management processes;
33 optimizing material distribution networks; improving governance for critical spares
34 inventory; improving forecasting and planning for inventory management; optimizing
35 Manitoba Hydro's vehicle fleet; and, improving the repair, maintenance and fuel supply
36 network for fleet vehicles.

1 **5.14.10 Records Centre Transition to Iron Mountain**

2 Manitoba Hydro is contracting out to a third party service provider the processing and
3 storing of the Corporation's physical records, which is currently managed by the Internal
4 Records Centre. This initiative will deliver cost savings and improve service levels. A
5 third party provider is able to provide a more secure environment for the Corporation's
6 physical records.

7
8 As a result of the transition of the Records Centre to a third party provider, there will be a
9 reduction of two EFTs, who are being redeployed to other areas of the Corporation to fill
10 existing vacancies. In addition, this initiative will result in the availability of over 4,600
11 ft² of space to relocate work groups currently located outside of 820 Taylor Avenue.
12 Moreover, service levels will improve with accessibility to physical records 24/7 rather
13 than during Manitoba Hydro regular business hours.

14
15 **5.14.11 Outage Management System**

16 The implementation of Manitoba Hydro's outage management system is considered one
17 of many steps toward modernizing the Corporation's distribution grid. Manitoba Hydro
18 is continually undertaking efforts and implementing changes in its operations in order to
19 leverage technology and continue to provide reliable customer service with improved
20 labour productivity.

21
22 One of these initiatives includes the replacement of Manitoba Hydro's trouble call
23 response system with an Outage Management System. The new system will improve
24 Manitoba Hydro's ability to respond to and restore unplanned outages.

25
26 These cost containment measures have assisted the Corporation in maintaining projected
27 annual rate increases at 3.95%, despite the Corporation facing significant and increasing
28 cost pressures. This is consistent with the expectations of the PUB in Order 43/13,
29 wherein it recommended that Manitoba Hydro control OM&A costs increases below
30 inflation.