

MANITOBA HYDRO
2015 GENERAL RATE APPLICATION

FINAL ARGUMENT

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21		
22		

1
2
3 **MANITOBA HYDRO**
4 **2015 GENERAL RATE APPLICATION**

5 **FINAL ARGUMENT**

6
7 **1.0 INTRODUCTION**

8
9 **1.1. Background to Rate Requests**

10
11 Manitoba Hydro last filed a General Rate Application with the Public Utilities Board
12 (“PUB”) on June 15, 2012 for the 2012/13 & 2013/14 fiscal years, which resulted in
13 Order 43/13. This Order approved a 3.5% across-the-board general rate increase effective
14 May 1, 2013, and directed that the revenues from a 1.5% portion of the increase accrue to
15 an account to be utilized to mitigate the anticipated rate impacts when Bipole III is placed
16 into service. Order 43/13 also provided final approval for Manitoba Hydro to maintain in
17 its rates and revenues the 1% rate change that was previously approved by the PUB on an
18 interim basis and subsequently rolled back in Order 5/12, final approval of the 2.0%
19 interim rate increase granted in Orders 32/12 and 34/12 for April 1, 2012, and final
20 approval of the 2.4% interim rate increase granted in Orders 116/12 and 117/12 for
21 September 1, 2012.

22
23 On August 16, 2013, Manitoba Hydro filed its Business Case with the PUB with respect
24 to the Needs For and Alternatives To (“NFAT”) review of its Preferred Development
25 Plan. The review process with respect to the NFAT concluded on May 26, 2014. On June
26 20, 2014 the PUB issued its NFAT Report to the Province of Manitoba, which
27 recommended that Manitoba Hydro proceed with the construction of the Keeyask
28 Generating Station and the 750 megawatt U.S. Transmission Interconnection Project, but
29 recommended that the construction of the Conawapa Generating Station not be approved.
30 On July 2, 2014, the Province released the PUB’s NFAT Report, accepting all
31 recommendations.

32
33 On March 7, 2014, Manitoba Hydro applied to the PUB for approval of an interim
34 electricity rate increase of 3.95% effective April 1, 2014, applied on an across-the-board
35 basis to all customer classes.
36

1 On May 5, 2014, the PUB issued Order 49/14 approving, on an interim basis, a 2.75%
2 general rate increase, applied on an across-the-board basis to all customer classes,
3 effective May 1, 2014, and directed that the revenues from a 0.75% portion of the
4 increase are to accrue to the Deferral Account established in Order 43/13 to be utilized to
5 mitigate the anticipated rate impacts when Bipole III is placed into service. In Order
6 49/14, the PUB indicated that it varied Manitoba Hydro's request as it had not yet
7 finished its review of Manitoba Hydro's preferred Development Plan being examined in
8 the NFAT process at the time. The PUB approved an interim rate increase, subject to
9 confirmation in this GRA, in light of the requirements to invest in maintaining and
10 replacing aging infrastructure such that it continues to provide safe and reliable service.
11 The PUB also noted that Manitoba Hydro's price for electricity exports have continued to
12 decline, resulting in less revenue to offset the requirement for domestic rate increases.
13

14 Subsequent to the issuance of Order 49/14, Manitoba Hydro filed a letter requesting the
15 PUB to consider implementation of new Light Emitting Diode ("LED") rates for the Area
16 and Roadway Lighting class on an interim basis effective August 1, 2014. Manitoba
17 Hydro's request was approved by Order 79/14 issued on July 15, 2014.
18

19 **1.2. Approvals Sought in 2015 GRA**

20
21 Manitoba Hydro filed its 2015 General Rate Application ("GRA") on January 16 and 23,
22 2015. As outlined in the Letter of Application filed as Tab 1 of Manitoba Hydro's GRA,
23 and summarized by Mr. Rainkie in his direct evidence given on May 25, 2015 at
24 transcript page 255, Manitoba Hydro is requesting the following approvals as part of this
25 proceeding:
26

- 27 • Approval of rate schedules incorporating an across-the-board 3.95% rate increase to
28 all components of the rates for all customer classes for 2015/16, sufficient to generate
29 additional revenues of \$57 million on an annualized basis. The April 1, 2015 rate
30 increase, if approved, would result in a \$3.20 increase in the monthly bill of a
31 residential customer without electric space heat using 1,000 kilowatt-hours ("kWh")
32 per month, and a \$6.11 increase in the monthly bill for a residential customer with
33 electric space heat using 2,000 kWh per month.
- 34
35 • Final approval of Orders 49/14 and 51/14 which approved, on an interim basis, a
36 2.75% rate increase effective May 1, 2014 applied on an across-the-board basis, and

1 final approval of any other interim rate Orders issued subsequent to the filing of the
2 Application and prior to conclusion of this proceeding.

- 3
- 4 • Final approval of the Light Emitting Diode (“LED”) rates for the Area and Roadway
5 Lighting class approved on an interim basis in Order 79/14.
 - 6
 - 7 • Confirmation that the PUB accepts the rate approval process given proposed
8 modifications to the Terms and Conditions of Option 1 of the Surplus Energy
9 Program (“SEP”) as outlined in Tab 6 of this Application, that were approved on an
10 interim basis in Order 43/13.
 - 11
 - 12 • Confirmation that the PUB accepts the rate approval process given proposed
13 modifications to the Curtailable Rate Program (“CRP”), as outlined in Tab 6 of this
14 Application, that were approved on an interim basis in Order 43/13.
 - 15
 - 16 • Final approval of CRP ex parte Order 46/14 as well as any additional ex parte Orders
17 in respect of the CRP issued subsequent to the filing of this Application and prior to
18 the PUB’s Order in this matter.
 - 19
 - 20 • Final approval of Orders 116/12 and 117/12 that approved, on an interim basis, a
21 6.5% rate increase to the full cost portion of the General Service and Government
22 rates in the four remote communities served by diesel generation effective September
23 1, 2012, and final approval of diesel zone interim Orders 17/04, 46/04, 159/04,
24 176/06, 1/10, 134/10, 1/11 and 148/11, subject to confirmation that MKO has
25 provided the parties to the agreement with the required affidavits from representatives
26 of signatories to the agreement.
 - 27
 - 28 • Approval to rescind the Demand Side Management deferral account established
29 pursuant to Order 43/13 for the 2012/13 and 2013/14 fiscal years and on a go-forward
30 basis.
 - 31

32 In the Letter of Application, filed as Tab 1 of Manitoba Hydro’s GRA, Manitoba Hydro
33 also requested approval of a further 3.95% across-the-board rate increases to all
34 components of the rates for all customer classes effective April 1, 2016. In its Order
35 17/15 dated February 9, 2015, the PUB indicated that it did not intend to approve a rate
36 increase to be effective April 1, 2016 in the current proceeding. However, the PUB also

1 indicated that it may alter or review this decision if there are any new facts or material
2 changes in circumstances that arise during the current regulatory proceeding. In addition,
3 the PUB indicated that the forecast information for 2016/17, as filed by Manitoba Hydro,
4 will be reviewed by all parties during the hearing and that it will be open to provide
5 further direction, in its final GRA Order, as to any additional information to be filed and
6 considered before determining whether any process should be instituted for possible
7 April 1, 2016 interim rates.

8
9 Manitoba Hydro will address the approval of rates for 2016/17 in Section 14.2 of this
10 Argument.

11
12 In its Letter of Application, Manitoba Hydro also requested approval to implement Time-
13 of-Use Rates for the General Service Large customer class served at greater than 30
14 kilovolts (“kV”), effective April 1, 2016, including a change in the definition of the
15 billing demand. In Order 18/15, the PUB indicated it will review this request at the
16 upcoming Cost of Service review that is to be scheduled later in 2015.

17
18 Manitoba Hydro will outline at the end of this written argument, its final requests of the
19 PUB.

20 21 **1.3. Summary of Why Rate Increases are Needed**

22
23 Manitoba Hydro has a long history of providing safe, clean, reliable energy to Manitoba
24 communities, households and businesses; energy that has fueled prosperity and economic
25 growth in the province.

26
27 Manitoba Hydro also takes great pride in providing Manitobans with reliable service and
28 some of the lowest electricity rates in North America. Manitoba Hydro has maintained
29 stable rates through careful management of its assets, prudent spending on capital
30 projects, and by managing its operating and administrative costs.

31
32 Today, Manitoba Hydro must invest in the system that has served customers for decades
33 to ensure that it can continue to deliver safe, clean, reliable energy to Manitobans for
34 generations to come. This required investment will mean that rates will need to increase
35 gradually over the next decade to pay for these investments, and Manitoba Hydro
36 believes that the rate increases proposed in this General Rate Application carefully

1 balances the need for investment with the need to provide ratepayers with steady,
2 predictable rates.

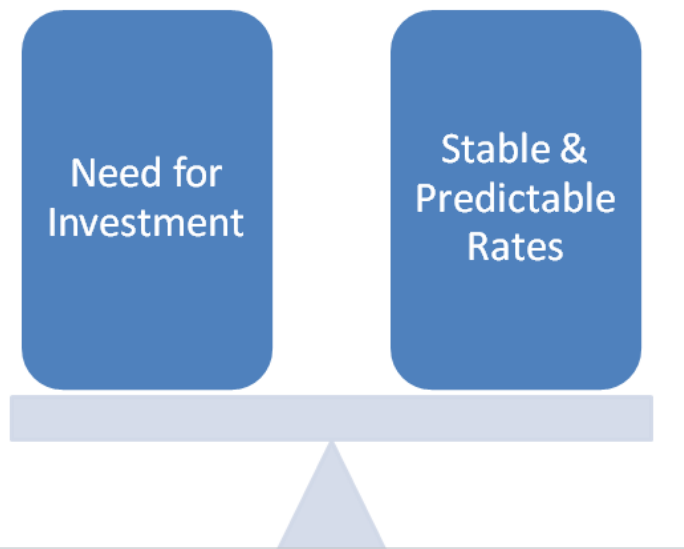
3
4 As outlined on pages 3 and 4 of Tab 2 of the Application and summarized by Mr. Rainkie
5 at transcript pages 239 to 241, the key reasons for the Application are:

- 6
7 1. Manitoba Hydro is entering a period of extensive capital investment to meet the
8 growing energy requirements of Manitoba, to replace aging utility assets and address
9 increased capacity needs on the system.
- 10
11 2. Manitoba Hydro's projected costs and associated revenue requirements are expected
12 to double in the next 10 years due to the investment in assets. This is the key factor
13 driving the need for rate increases.
- 14
15 3. Rate stability for customers is dependent on Manitoba Hydro maintaining its financial
16 strength. The required investment in assets will place pressure on Manitoba Hydro's
17 financial strength by deteriorating the financial results and key financial ratios.
- 18
19 4. Net Extraprovincial revenues have not been as strong as in previous years and it is
20 necessary to gradually increase rates over time to compensate for the reduction in net
21 extraprovincial revenue.
- 22
23 5. The proposed 3.95% rate increases are the minimum that are required to:
- 24
25 i. Maintain a reliable energy supply to Manitobans, to which they are accustomed,
26 and fund Power Smart Programs to assist customers in meeting their energy
27 needs;
- 28 ii. Promote long-term rate stability for customers and manage the deterioration in the
29 Corporation's financial strength during the period of extensive capital
30 investments; and,
- 31 iii. Maintain Manitoba Hydro's 2015/16 and 2016/17 net income and financial ratios
32 at acceptable levels.
- 33
34

1 **1.4. Balancing Need for Investment with Stable & Predictable Rates**
2

3 As explained by Mr. Rainkie in his direct evidence found at transcript page 241, the
4 required capital investment to meet the growing energy requirements of Manitoba, to
5 replace aging utility assets and address increased capacity needs on the system means that
6 rates will need to increase over the next decade to fund these investments. The challenge
7 for Manitoba Hydro is to balance this need for investment with the need to provide stable,
8 predictable rates for our customers.
9

10 **Figure 1- Balancing the Need for Investment with Stable and Predictable Rates**



11
12
13 Manitoba Hydro strongly believes that the proposed rate increases carefully balance the
14 need for investment and providing stable, predictable rates for its customers.
15

16 If Manitoba Hydro were to consider rate increases from strictly a financial point of view,
17 it would be requesting rate increases in the order of 5 1/2 to 6 percent. Manitoba Hydro
18 has maintained the projected 3.95% rate increases with consideration of customer
19 sensitivity to rate increases.
20

21 Manitoba Hydro is committed to effectively controlling its OM&A costs and managing
22 these costs below inflationary levels (excluding accounting changes that impact OM&A),
23 during a time of significant and increasing cost pressures. This will assist in maintaining
24 the 3.95% proposed rate increases.
25

1 **1.5. The Future is Now**
2

3 As noted in Section 1.3, Manitoba Hydro is entering a period of extensive investment and
4 re-investment in its infrastructure in order to:

- 5 1. Meet the growing energy needs of Manitoba families and businesses;
6 2. Replace aging utility assets that are approaching the end of their service lives; and
7 3. Address capacity issues and limitations on the existing system.
8

9 As discussed in Section 1.4, one of the challenges for Manitoba Hydro is to balance the
10 requirement of this investment with the need to provide stable and predictable rates for
11 customers.
12

13 Manitoba Hydro submits that it has met this challenge by putting forward a credible plan,
14 namely the proposed and indicative 3.95% rate increases, to manage the upcoming
15 investments and reinvestments in Manitoba Hydro's 's infrastructure, in order to continue
16 to provide safe, reliable service to customers while maintaining equilibrium with stable
17 and predictable rates for customers.
18

19 As noted by Ms Fernandes in Manitoba Hydro's closing submission at transcript page
20 4619:

21 *Other parties have based their positions on hope or denial. Hope is not a*
22 *plan. Denial is not a plan. Punishing Manitoba Hydro for perceptions of*
23 *past transgressions is not a plan.*

24

25 *Hoping that the future will be better, or that something will occur which*
26 *will drastically change Manitoba Hydro's projections and rate requests*
27 *isn't a plan. The future reality will not change before the next GRA. In*
28 *fact, postponing the rate increases will only put more pressure on*
29 *Manitoba Hydro, and on customers, as Manitoba Hydro will be required*
30 *to ask for higher than 3.95 percent rate increases.*

31 (Transcript page 4619)
32

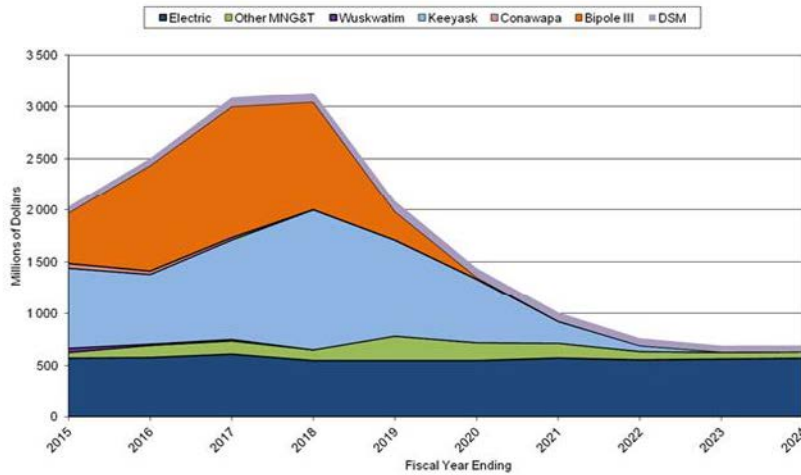
33 As noted in evidence and during closing submissions, major investments are occurring
34 today. Wuskwatim came into service at a cost of \$1.6 Billion, the Riel Station and Pointe
35 du Bois spillway rebuild came into service at \$800-\$900 million, and currently Manitoba
36 Hydro is investing \$500-600 million per year on sustaining capital. Before the in-service

1 of Keeyask and Bipole III, which is occurring in the next 3-4 years, Manitoba Hydro is
2 currently investing on behalf of customers.

3
4 Manitoba Hydro plans to invest \$2.5 billion in capital expenditures in 2015/16 and \$3
5 billion for the 2016/17. As it relates to net income, Manitoba Hydro would have losses as
6 early as 2016/17 of about \$58 million without the proposed rate increases and is
7 projecting losses of approximately \$900 million between 2019 and 2024. Manitoba
8 Hydro is projecting that net debt will increase from \$12 billion to \$16 billion in 2016/17
9 and to \$23 billion by 2023/24 even with the 3.95% rate increases. Manitoba Hydro is
10 already shouldering a significant amount of debt at current favourable rates.

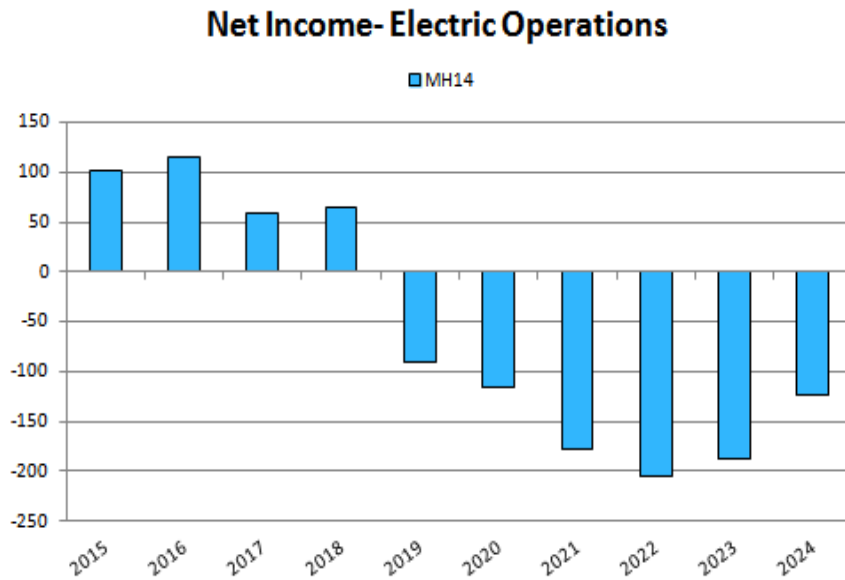
11
12 The following figures provide Manitoba Hydro's capital expenditure forecast, projected
13 net income/loss, and projected net debt levels over the next 10 years, which clearly
14 demonstrate the immediate requirement for the requested rate increases.

15
16 **Figure 2- Capital Expenditure Forecast (CEF14)**



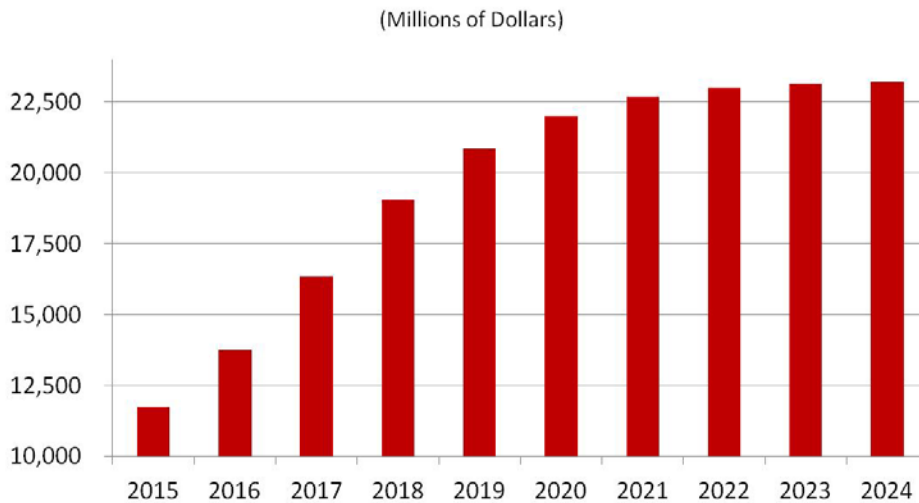
17
18

1 **Figure 3- Net Income/Loss with 3.95% Rate Increases**



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3
4

Figure 4- Net Debt with 3.95% Rate Increases



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12

Manitoba Hydro is not asking customers to prepay for something that will not benefit them. The required investments are significant and not something that can be easily deferred to future years. This is the reality facing Manitoba Hydro today. Manitoba Hydro must address this reality in order to maintain rate stability for customers. Intervenors have suggested that the PUB should wait to see if things will change in the future before making these significant investments. Manitoba Hydro submits that

1 employing such a “wait and see” approach disregards the current circumstances Manitoba
2 Hydro is now faced with. The future is now.

3
4 Manitoba Hydro’s plan is the only credible plan before the PUB which appropriately
5 addresses the realities now.
6

7 **1.6. Organization of Final Argument**

8
9 Manitoba Hydro’s Final Argument with respect its 2015 GRA is organized into the
10 following sections:

- 11 • Section 2.0- Manitoba Hydro’s Investment Drivers & Borrowing Requirements
 - 12 • Section 3.0- The Need for the Proposed Rate Increases
 - 13 • Section 4.0- Risks if Proposed Rate Increases are Not Granted
 - 14 • Section 5.0- Manitoba Hydro is Effectively Controlling its Costs to Maintain the
15 Projected 3.95% Rate Increases
 - 16 • Section 6.0- A Longer-Term Perspective to Rate-Setting is Beneficial to
17 Customers
 - 18 • Section 7.0- Manitoba Hydro has Appropriately Prioritized and Paced its
19 Sustaining Capital Expenditures
 - 20 • Section 8.0- Manitoba Hydro’s Accounting Policy Choices are Fair and Designed
21 to Minimize Customer Rate Impacts
 - 22 • Section 9.0- Manitoba Hydro’s Proposed Depreciation Changes are Appropriate
23 for Rate-Setting in a Hydro-Electric Utility
 - 24 • Section10.0- Demand Side Management Programs
 - 25 • Section 11.0- Manitoba Hydro Offers a Comprehensive and Integrated Suite of
26 Initiatives to Assist Low-Income Customers with Managing Their Electricity Bills
 - 27 • Section 12.0- Manitoba Hydro’s Rate Design Matters and Other Approvals
 - 28 • Section 13.0- Other Issues
 - 29 • Section 14.0- Conclusion
- 30
31

1 **2.0 MANITOBA HYDRO'S INVESTMENT DRIVERS & BORROWING**
2 **REQUIREMENTS**

3
4 Section 2.0 of the Argument will summarize Manitoba Hydro's vision to meet the future
5 energy needs of Manitobans and the associated capital investment and debt financing
6 requirements.

7
8 **2.1. Manitoba Hydro's Vision and Mission to Meet the Future Energy Needs of**
9 **Manitobans**

10
11 Manitoba Hydro's Corporate Strategic Plan ("CSP") is summarized in the following
12 figure and sets out the Corporation's vision and mission, and outlines seven key
13 objectives focused on meeting Manitobans' long-term energy needs and achieving
14 operational excellence in electric and gas operations.

15
16 **Figure 5- Manitoba Hydro's Corporate Strategic Plan**

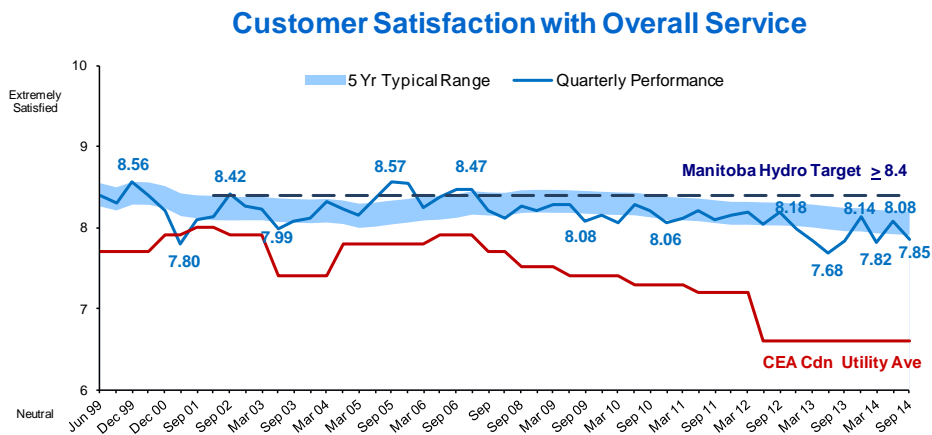


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19 It is important to begin with Manitoba Hydro's mission; the reason Manitoba Hydro
20 exists. Manitoba Hydro's mission in the CSP is as set forth in its legislative mandate. The
21 CSP is clear that Manitoba Hydro is committed to providing high system reliability.
22

On pages 7 through 13 of Tab 2 of the Application, Manitoba Hydro highlighted its commitment to providing customers value as demonstrated through the following measures:

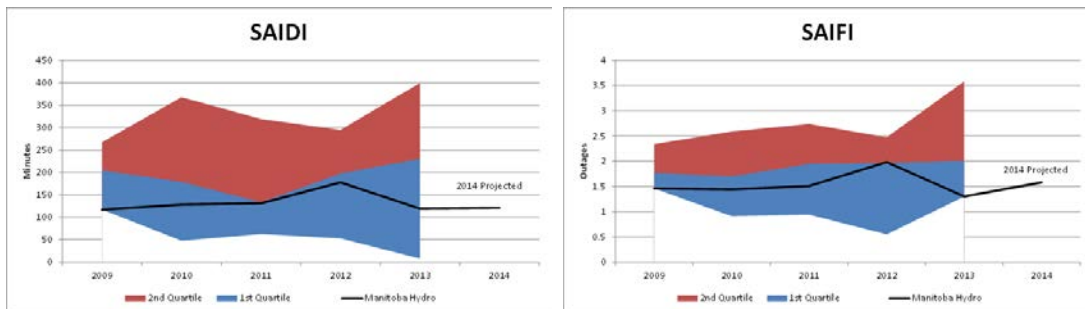
- Manitoba Hydro is a leader in customer satisfaction and continues to receive satisfaction ratings for customer service, corporation citizenship and corporate image components that are consistently higher than the national average for all Canadian electric utilities, as shown in the following figure;

Figure 6- Customer Satisfaction with Overall Service



- Manitoba Hydro provides high system reliability and has historically been in the first quartile of CEA member utilities as it relates to System Average Interruption Frequency Index (“SAIFI”), and the System Average Interruption Duration Index (“SAIDI”) reliability indicators, on a calendar year basis as follows;

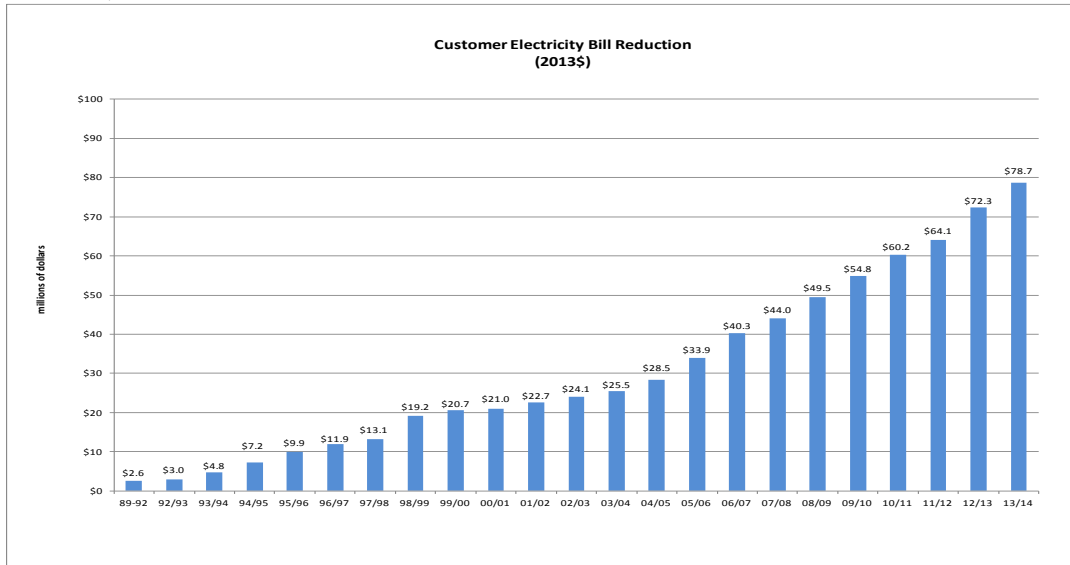
Figure 7- Manitoba Hydro SAIDI and SAIFI Indicator Compared to CEA Member Utilities



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- Manitoba Hydro is a leader in offering Power Smart programs that continue to be very successful in reducing customers' energy bills while contributing to a sustainable energy supply in Manitoba. As shown on Slide 12 of Mr. Rainkie's direct evidence presentation, cumulative reductions to customer electricity bills in 2012/13 were approximately \$712 million, with associated greenhouse gas reductions of approximately 1,695,000 tonnes of carbon dioxide; and,

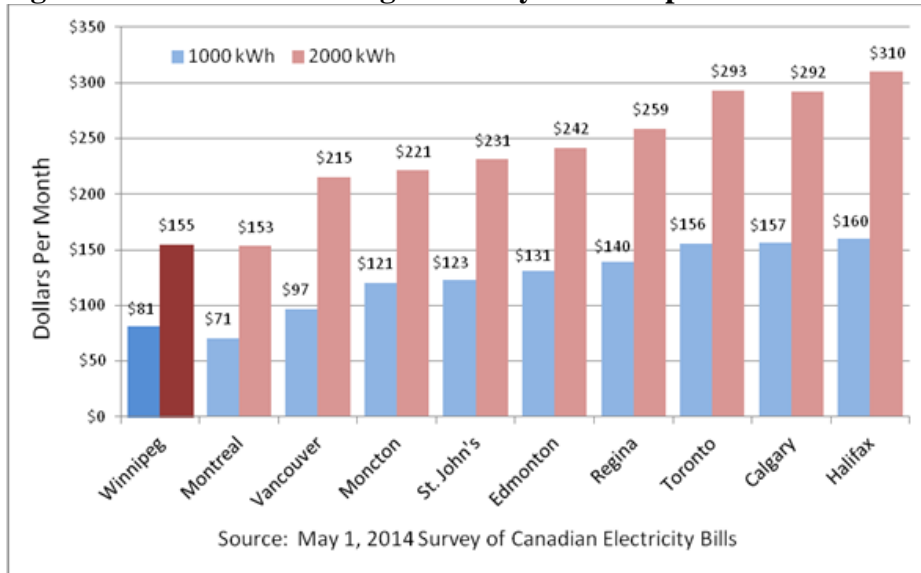
Figure 8- Annual Power Smart Savings—Customer Electricity Bill Reduction (\$ millions)



- Manitoba Hydro's domestic electricity rates are affordable for Manitoba families and support the competitiveness of Manitoba businesses, with a current weighted-average retail electricity price for all customer classes of 6.3 cents per kWh, among the lowest in North America. Manitobans enjoy a distinct advantage over most other Canadian jurisdictions with respect to the average monthly bills of residential customers, as shown in the figure below:

1

Figure 9- Residential Average Monthly Bill Comparison



2

3

4 Manitoba Hydro's CSP and Key Areas of Focus have been developed to ensure that the
5 Corporation can continue to provide customers with reliable service and stable rates into
6 the future.

7

8 **2.2. Manitoba Hydro is Entering a Period of Extensive Capital Investment in Major**
9 **New Generation and Transmission Projects**

10

11 As discussed in Section 2.2.1 of Manitoba Hydro's Application, Manitoba Hydro is
12 entering a period of extensive capital investment and re-investment in its infrastructure,
13 to meet the growing energy needs of Manitoba, to replace aging utility assets, and to meet
14 its mandate to provide reliable service to all customers by addressing the capacity
15 constraints on the system. These are the main reasons driving the need for Manitoba
16 Hydro's rate increases.

17

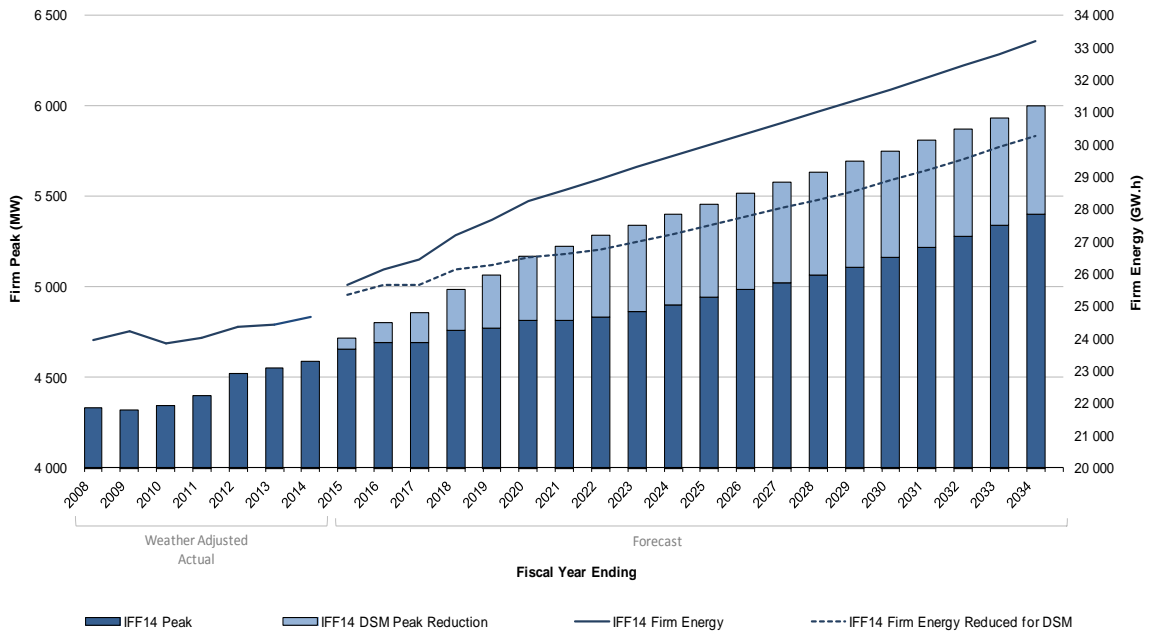
18 **2.2.1. Keeyask Generating Station**

19

20 As shown in the following figure, even with load reductions from Power Smart
21 investment, demand for electricity in Manitoba is continuing to grow due to increases in
22 population, higher average energy usage and industrial and commercial customer
23 expansion.

24

1 **Figure 10- Forecast Load Growth Before and After Impact of DSM**



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The Keeyask Generating station project will provide renewable hydroelectricity to meet future demand in Manitoba and in export markets, and is being developed in partnership between Manitoba Hydro and four Manitoba First Nations: Tataskweyak Cree Nation, War Lake First Nation, York Factory First Nation, and Fox Lake Cree Nation, working together as the KHLF. Construction will include a generating station, Keeyask infrastructure project, and generation outlet transmission.


The provincial government approved the Keeyask Generating Station and issuance of an Environment Act licence that permitted construction to begin in the summer of 2014. Work began in July 2014, as scheduled, with the construction of the powerhouse cofferdam, rock excavation, and building of the camp that would house approximately 2,000 people that will be on site to execute the construction. The Keeyask Control budget is \$6.5 billion and the work completed to date has been completed within budget.

Mr. Bowen confirmed at transcript page 727 that the major procurement is complete with just over 90% of the contracts already awarded. Mr. Bowen also discussed at transcript pages 728-729 that although there are still many risks, generally, Manitoba Hydro is on track.

1 **Figure 11- Keeyask Generating Station Control Budget & Timeline**

Keeyask Project

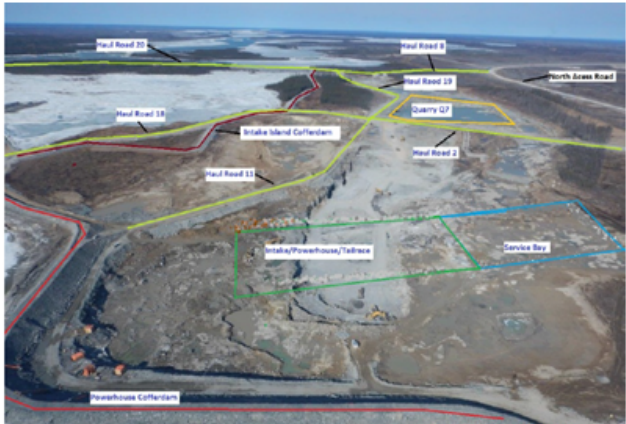
- Estimated cost = \$6.5 B
- Date approved = July 2014
- Construction start = July 16, 2014
- First Unit In Service Date = November 2019
- Partnership between Manitoba Hydro and the four Keeyask Cree Nations
- Consists of:
 - Keeyask Generating Station
 - Keeyask Infrastructure
 - Keeyask Generation Outlet Transmission



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Figure 12- Keeyask Upcoming Work over the Next Year

- Efforts focused to support May 2016 first concrete
- Complete Spillway Cofferdam
- Rock excavation – Intake/Powerhouse ongoing and start spillway excavation
- Continue South Access Road construction
- Continue Main Camp Expansion
- Continue G.O.T. line Construction



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1 **2.2.2. Bipole III Reliability Project**
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3 The Bipole III Reliability Project will improve overall system reliability and
4 dependability, and is needed to ensure that Manitoba Hydro can continue to provide safe,
5 clean and reliable energy to all Manitobans.
6

7 In the presentation marked as MH Exhibit #57, Dr. Swatek summarized the compelling
8 reasons why the Bipole III Reliability Project is required in light of the challenges
9 Manitoba Hydro is currently experiencing on its existing system and the immediate risks
10 that need to be addressed. At transcript page 2108, Dr. Swatek explains that 70% of
11 Manitoba Hydro's total generating capacity is carried over two lines that run side by side
12 for approximately 900 kilometers, namely Bipoles I & II, with all of the capacity from
13 those lines terminating at the Dorsey converter station. If Manitoba Hydro were to
14 experience a catastrophic outage that would result in Bipole I and II transmission tower
15 failures, it would face long restoration times in order to get that capacity back. As
16 explained by Dr. Swatek, at transcript page 2112 "...if an F5 tornado were to hit
17 something like the Dorsey Converter Station, which is such an incredible hub of power in
18 Manitoba, we wouldestimate outages ranging from.....several months to up to three
19 years, depending on the extent of the damage".
20

21 To date, the Corporation has experienced significant losses due to wind storms and
22 tornado events, so the risk of a catastrophic loss occurring is real, and Manitoba Hydro
23 needs to plan for these risks in order to ensure a reliable supply of power for Manitoba.
24 The Bipole III Reliability Project will reduce the risks posed to the Bipole I and II
25 common corridor and reduce the dependency on the Dorsey Converter Station.
26

27 The Bipole III Reliability Project received an environmental license in August 2013 to
28 proceed with construction of the project components including the Keewatinohk
29 converter station and construction camp, HVDC transmission line and and Riel converter
30 station. Manitoba Hydro began construction in September 2013, and to date has tendered
31 or awarded approximately 70% of the major contracts, as indicated at transcript page 735.
32

33 The Bipole III Reliability Project control budget is \$4.65 billion and was established in
34 the Fall of 2014 based upon the technical solutions for the LCC technology, as proposed
35 by the vendors. In MH Exhibit #86, Manitoba Hydro provided the outline of the timing
36 from when bids were received, what had to occur before a new budget was prepared and


1 approved by the Manitoba Hydro-Electric Board (“MHEB”). As noted in the Exhibit,
2 detailed technical reviews and clarification were required over many months to confirm
3 that the proposed solutions would meet certain key criteria for Manitoba Hydro’s HVDC
4 system. Detailed technical and schedule reviews were required to confirm the proposals
5 met Manitoba Hydro’s requirements and in-service dates. These detailed reviews were
6 required as Manitoba Hydro must follow a stringent procurement process to ensure
7 fairness to bidders, without which, bidders could have a claim against Manitoba Hydro.

8
9 Once Manitoba Hydro fully define and estimated the remaining work for BiPole III,
10 including all other parts and contracts related to the Converter Stations, Transmission
11 Line and Collector Lines, including the estimate of the synchronous condenser costs,
12 Manitoba Hydro was in a position to set a new control budget for Bipole III.

13
14 **Figure 13- Bipole III Reliability Project**

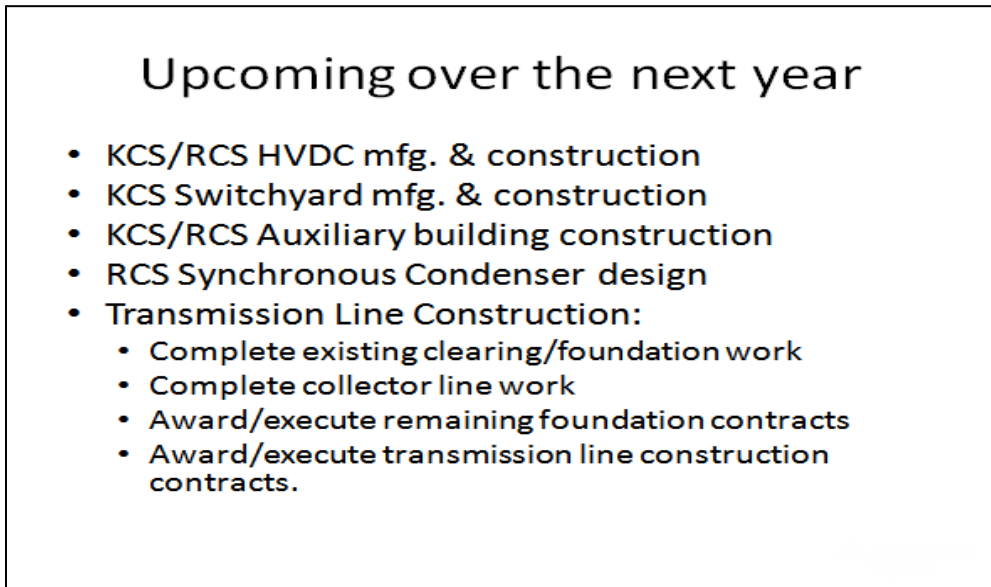
Bipole III Project

- Environmental Act Licence Received August 14, 2013
- Construction started September 2013
- Budget = \$4.65 B/ July 2018 ISD
- Consists of:
 - Keewatinohk Converter Station
 - 80 Km North East of Gillam Manitoba
 - Keewatinohk Construction Camp
 - 600 man construction camp
 - HVDC Transmission Line
 - ~1400 km transmission line
 - Riel Converter Station
 - Rural Municipality of Springfield
 - 2 Ground Electrodes



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Figure 14- Bipole III Upcoming Work over the Next Year



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2.2.3. New US Transmission Line

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The Manitoba–Minnesota Transmission Project includes the construction of a 500 kilovolt (“KV”) AC transmission line from the Dorsey converter station to the US border. The Great Northern Transmission Line (“GNTL”) is the US portion of the new 500 kV interconnection to the US (to Duluth Minnesota). Details of the GNTL project were reviewed during the hearing, including its current regulatory status in the US, the forecast of capital and operating costs, accounting treatment, the project phasing and timing and the business relationship between Manitoba Hydro and Minnesota Power.

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At transcript page 1884, Mr. Cormie discussed the benefits associated with the GNTL, including deferring generation in Manitoba and providing greater system reliability associated with additional import capability, and expanding Manitoba Hydro’s market access into Minnesota and Wisconsin.

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Mr. Cormie explained at transcript pages 1096-1099, that Manitoba Hydro will own the Canadian portion of the line, and plans to assign the ownership rights of its subsidiary (6690271 Manitoba Ltd.) to Minnesota Power just prior to the commencement of construction, in order to avoid US income tax risk to Manitoba Hydro’s US export revenues, while maintaining the right to use the line for imports and exports.

1 As discussed by Mr. Cormie at transcript page 705, Manitoba Hydro's current
2 engineering studies have indicated that rather than having an import and export capability
3 of 750 megawatts as discussed during the NFAT, the GNTL will now have 883
4 megawatts as its export capability and 683 megawatts for its import capability.
5

6 Mr. Cormie explained at transcript page 1099-1102 that that Manitoba Hydro's share of
7 the capital costs of the GNTL has increased from 66% to 72% as a result of the increase
8 in the export capability of the line, as Minnesota Power only requires 250 MW of the
9 line, consistent with their 250MW export contract with Manitoba Hydro.
10

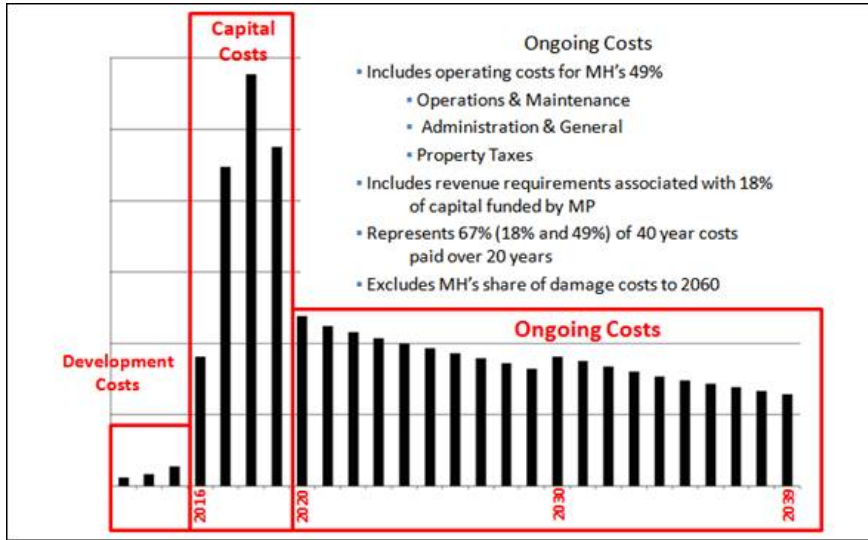
11 As discussed at transcript pages 1873-1877 and 1899-1903, during the operating phase of
12 the project from 2020 to 2040, Manitoba Hydro would pay 67% of the 40 year operating
13 costs. From 2040 to 2060, Manitoba Hydro's only costs would be 67% of any insurable
14 damage costs. Thereafter all the costs will be borne by Minnesota Power.
15

16 The following figures summarize the funding timeline for the operating and capital cost
17 associated with the GNTL line:
18

19 **Figure 15- GNTL Funding Timeline**

- **2014 to 2016**
 - MH Subsidiary and MP share development costs
 - MH Subsidiary pays 54%, MP pays 46%
- **Just Prior to Construction**
 - MH Subsidiary assigns ownership rights to MP
- **2016 to 2020 - Construction Period**
 - MH Subsidiary pays 54% of construction costs as capital contribution
- **2020 to 2040 - First 20 years of operation**
 - MH pays 49% of ongoing operating costs, and
 - MH pays revenue requirements for 18% of capital funded by MP
 - MH pays 67% of transmission line damage costs deemed insurable damage
- **2040 to 2060 - Second 20 years of operation**
 - MH only costs are 67% of line damage costs deemed insurable damage

1 **Figure 16- GNTL Operating and Capital Costs**



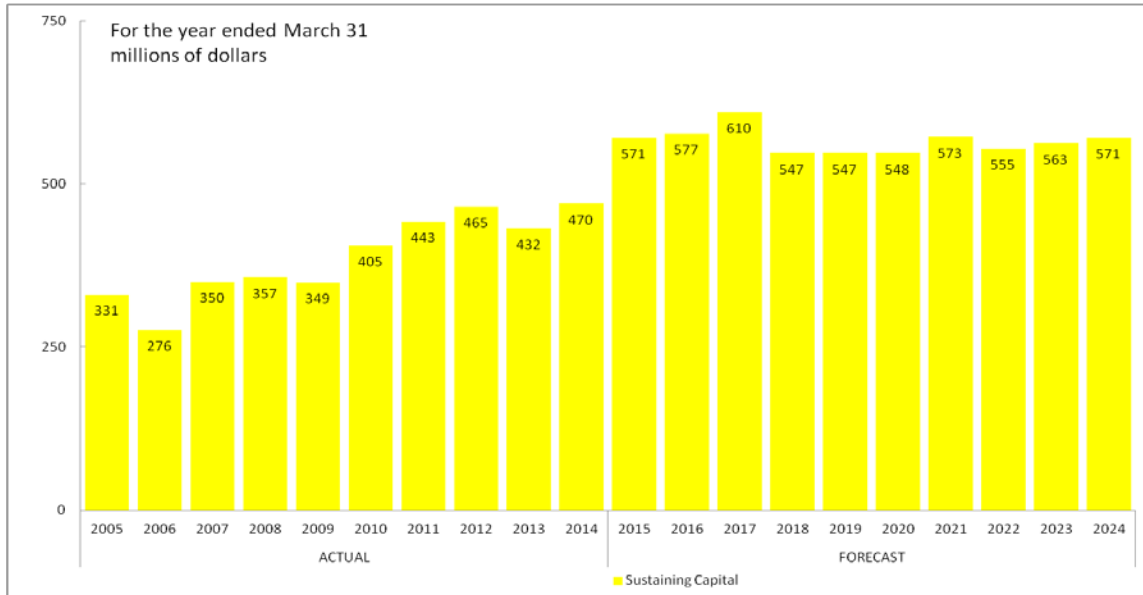
2
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4 **2.3. Manitoba Hydro's Sustaining Capital Expenditures are Necessary to Provide**
5 **Safe & Reliable Service to Customers**
6

7 As described in Tab 4, at page 10 of 26, of the Application, sustaining capital includes
8 items identified in CEF 14 as either Major or Base capital expenditures and consists of
9 additions, improvements and replacements of existing infrastructure.
10

11 In the previous ten years, Manitoba Hydro has been gradually increasing its sustaining
12 capital investments as shown in the figure below. In order to maintain reliability and
13 address anticipated load and customer growth, Manitoba Hydro will need to increase its
14 sustaining capital expenditures over previous levels in order to maintain safe and reliable
15 service, as shown in the figure below. The magnitude of this investment is approaching a
16 total of \$5.7 billion by 2024 and is broad-based with significant capital investment
17 requirements in the operational areas of generation, transmission and distribution. Over
18 the ten year period through to 2024, approximately \$400 million of additional investment
19 for sustaining capital has been projected from CEF13 to CEF14 and over \$1,100 million
20 from CEF12 to CEF14.
21

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Figure 17- Sustaining Capital Expenditures (CEF14)



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2.3.1. Increases in Sustaining Capital Expenditures are Addressing Aging Infrastructure & System Capacity Needs

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As outlined in Manitoba Hydro’s Rebuttal Evidence, Section 3.0, page 11 of 47, the need for the Corporation’s investment in infrastructure is driven primarily by increased system capacity requirements and a requirement to replace its aging electric assets at accelerated rates.

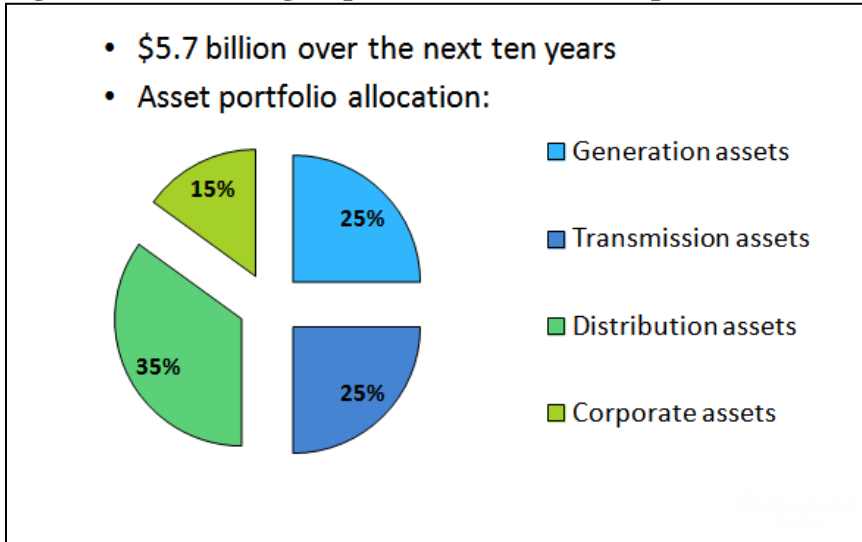
Manitoba Hydro prioritizes its investment in sustaining capital through a framework that is guided by Manitoba Hydro objectives including safety, energy conservation, Aboriginal relationships, financial strength, customer value, workforce management and the environment. The complexities of this prioritization process were outlined by Ms Bauerlein, starting at transcript page 852, and include the need to maintain the financial strength of the corporation, to withstand the risks inherent in Manitoba Hydro’s operations and to provide customers with long term rate stability.

As discussed in the response to COALITION/MH I-11(a), targets for sustaining capital are allocated to the major asset categories with careful consideration for risk as well as current and future resource demands. On an ongoing basis, approved capital targets are reviewed to assess whether a reallocation of funds is required in order to prioritize and

1 optimize overall corporate value changes in business, financial and economic
2 assumptions as well as operational risk factors.

3
4 The following chart shows the allocation of sustaining capital investments among the
5 operational areas of generation, transmission, distribution and corporate infrastructure.

6
7 **Figure 18- Sustaining Capital Investments: Corporate Allocation**



8
9
10 The portfolio of projects within an asset category are evaluated against a common set of
11 risk criteria with consideration for asset condition and maximizing economic value. Risk
12 factors include public and employee safety, impacts of reliability and capacity on system
13 operations, customer requirements including load growth and environmental impacts.
14 The evaluation of risk considers both the consequence and the probability of occurrence,
15 recognizing that a project may be impacted by multiple risk factors.

16
17 Advancement and deferral of capital projects occurs throughout the year to address
18 changing priorities while managing within approved funding levels. Review and
19 monitoring of project performance is an integral step in order to manage project scope,
20 timing and budget and allows the Corporation to address shifting priorities to effectively
21 manage risk while balancing resource and customer demands. Capital performance
22 monitoring and control occurs at all levels, from individual project management to
23 review and analysis by senior management of the overall capital portfolio.

24

1 While the overall framework for capital prioritization is consistently applied across the
2 Corporation, the risk management tools and prioritization processes are customized to
3 address the specific characteristics and risks associated with the varied asset categories
4 within each area.

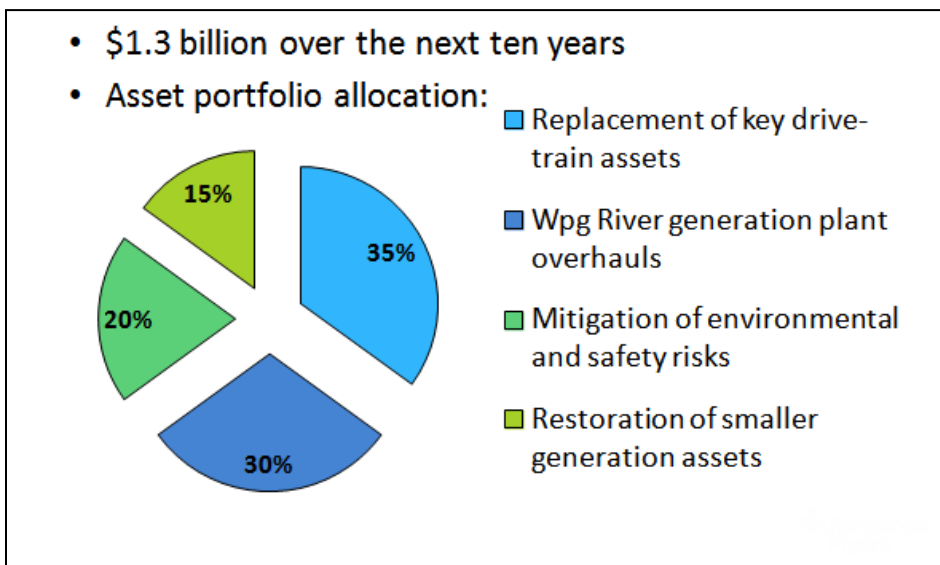
5
6 Manitoba Hydro has provided a great deal of evidence regarding where the expenditures
7 will go. Ms. Bauerlein explained in great detail at transcript pages 846-851 the sustaining
8 capital investments required for generation, transmission and distribution assets.

9
10 **2.3.2. Generation Assets Investments**

11
12 Over the next ten (10) years, Manitoba Hydro plans to invest approximately \$1.3 billion
13 in its generation assets or about \$130-\$140 million per year, with 35% replacing the
14 drivetrain assets that are those critical assets that directly contribute to a unit's ability to
15 generate power. Thirty percent (30%) will be invested in overhauling generation stations
16 along the Winnipeg River, 20% will be required for management and mitigation of
17 environmental and safety risk, and the remaining 15% will be used toward restoration
18 efforts to ensure continued, reliable operation of smaller generation assets.

19
20 The allocation of the sustaining capital investment in generation assets is shown in the
21 figure below.

22
23 **Figure 19- Sustaining Capital Investments: Generation Assets**

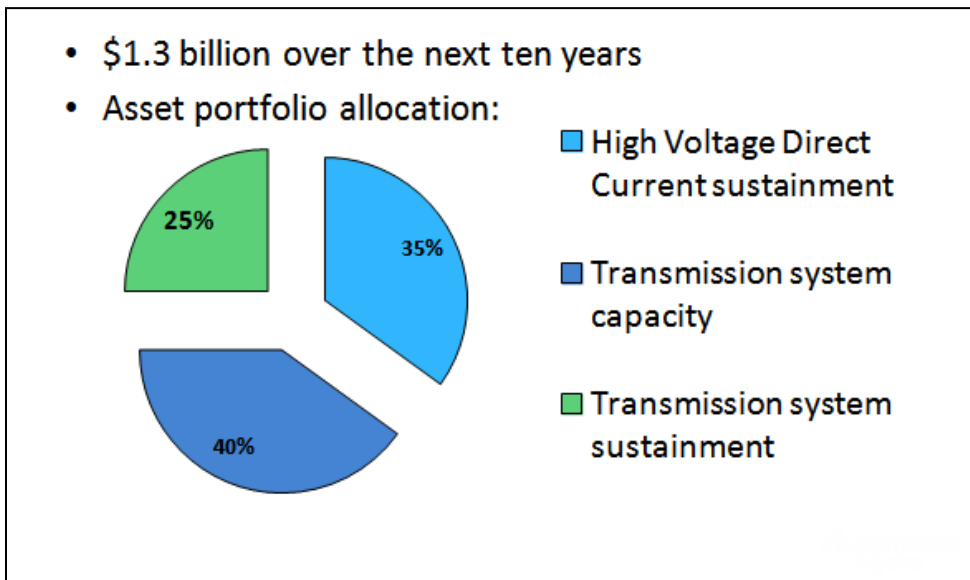


1 **2.3.3. Transmission Assets Investments**

2
3 Manitoba Hydro's investment in transmission assets is projected to be approximately
4 \$1.3 billion over the next ten (10) years, or \$125-\$150 million per year. Approximately
5 40% of this investment will be used to address transmission capacity issues in areas such
6 as the City of Winnipeg, Lake Winnipeg East, Morden, Winkler and Brandon, where
7 customer load is increasing. Thirty-five percent (35%) will be used to renew aging
8 HVDC assets that are critical to supplying power to Manitobans and export customers,
9 with the remainder being used to replace Bipole valve groups.

10
11 The allocation of sustaining capital investment in transmission assets is shown in the
12 figure below.

13
14 **Figure 20- Sustaining Capital Investments: Transmission Asset**



15
16
17 **2.3.4. Distribution Assets Investments**

18
19 Manitoba Hydro is projecting to invest approximately \$2.2 billion in distribution assets
20 over the next ten (10) years, or \$200-\$270 million per year. Thirty percent (30%) of that
21 investment will address capacity issues, a third of which will be used to increase
22 electrical capacity in the City of Winnipeg. As discussed at transcript page 849,
23 approximately 38% of the distribution stations in urban Winnipeg are loaded beyond their
24 maximum rating and there are no practical load transfer opportunities between stations to

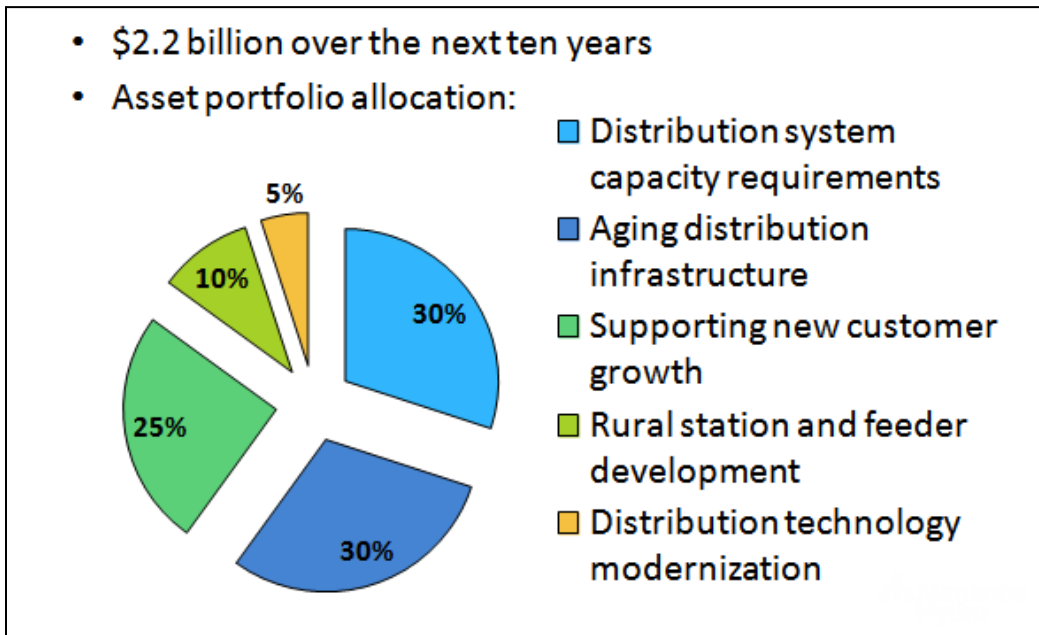
1 accommodate additional electricity demand within the City of Winnipeg. These stations
2 include Madison, St. Vital, Dawson Road, and Adelaide.

3
4 Aging distribution assets will require 30% of this investment, 10% will be for rural
5 station and feeder development to address rural capacity issues (including Steinbach,
6 Winkler, Selkirk, Thompson and Brandon), and the remaining 5% will be used for
7 distribution technology modernization.

8
9 A full 25% of the investment will be allocated to connect new customers to the electric
10 grid in accordance with Manitoba Hydro's mandatory legislative obligation to supply
11 power.

12
13 The allocation of sustaining capital investment in distribution assets is shown in the
14 figure below.

15
16 **Figure 21- Sustaining Capital Investments: Distribution Assets**



17
18

2.3.5. Other Canadian Utilities are Experiencing the Need for Rate Increases due to the Need to Replace & Refurbish Aging Utility Assets

As the PUB heard in evidence throughout the hearing, it is recognized that other Canadian utilities are also encountering the need to replace and refurbish aging utility assets, which will place upward pressure on electricity rates across most jurisdictions in the coming years. The independent Conference Board of Canada estimates that the total investment in electricity infrastructure in Canada over the next 20 years is expected to be approximately \$350 billion dollars.

Manitoba Hydro provided the PUB with information regarding the rate increases that is occurring in other jurisdictions. As can be seen in the following charts, Manitoba Hydro is not alone in needing to address the required investment in its electrical system through higher rate increases. The need to invest and re-invest in infrastructure is often cited as one of the key reasons for rate increases in other jurisdictions. Often these increases in other jurisdictions are typically higher than the 3.95% that Manitoba Hydro is projecting, and is certainly well above the level of inflation, as illustrated in the headlines below.

Figure 22- Rate Increases Proposals in Other Jurisdictions

Rates in other Canadian provinces must also rise in the coming years to fund the re-investment in electricity infrastructure

SaskPower Investing for the future

Investing in our infrastructure also opens the door to future possibilities. Learn more about the work we're doing. We applied for a multi-year rate increase to help our industrial customers with their business planning and enable our residential customers to budget household expenses in advance. As a result of our application, the government has announced:
Approval of a 5.5 per cent average rate increase, effective Jan. 1, 2014;
Approval of a 3 per cent average rate increase, effective Jan. 1, 2015 (reduced from original request of 5 per cent); and
Denial of an increase for 2016 at this time.

BC Hydro rates to increase 28 per cent over 5 years

"Our rates are still among the lowest in North America," says BC Hydro CEO Charles Reid

CBC News Posted: Nov 26, 2013 10:53 AM PT | Last Updated: Nov 26, 2013 7:54 PM PT

Energy Minister Bill Bennett and BC Hydro CEO Charles Reid announced a 28 per cent electricity rate hike over five years, with a nine per cent jump coming April 1, 2014.

In a press conference in Victoria this morning, Bennett and Reid said the rate hikes were part of a 10-year plan to keep rates as low as possible, while still allowing BC Hydro to invest in infrastructure and future power projects.

Ontario hydro bills to rise 42% in 5 years

BY ANTONELLA ARTUSO, QUEEN'S PARK BUREAU CHIEF
FIRST POSTED: MONDAY, DECEMBER 02, 2013 01:43 PM EST | UPDATED: MONDAY, DECEMBER 02, 2013 03:47 PM EST

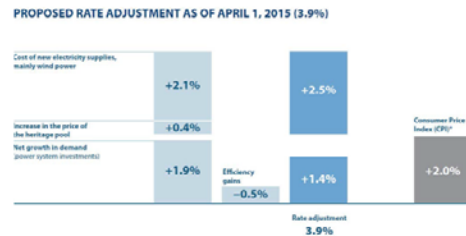
TORONTO - Ontario hydro bills are headed up, up, up.

The Liberal government's new long-term energy plan shows that the average monthly residential bill of \$125 will rise to \$178 within five years — a 42% increase.

Hydro bills are expected to dip slightly in 2019 to \$177 a month, and then rise again until 2022 when they'll hit \$193 a month.

A second decrease in prices is forecast for 2023-24 and then the trend for prices is onward and upward for the foreseeable future.

Hydro-Québec filed an application for a 3.9% rate increase



While Manitoba Hydro will be required to gradually increase rates to pay for its increased investment in generation, transmission and distribution infrastructure, the electrical rate

1 advantage enjoyed by energy consumers in Manitoba over those in most other
2 jurisdictions is expected to continue.

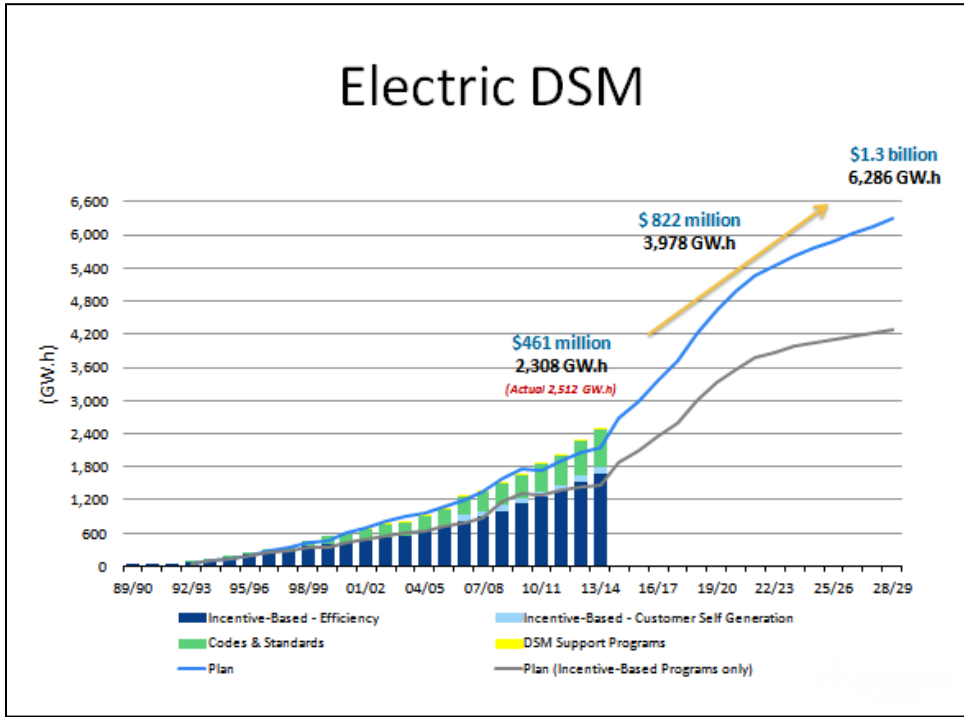
3
4 **2.4. Increased Investment in DSM Programs to Assist Customers in Managing**
5 **Electricity Bills**

6
7 As outlined in Manitoba Hydro's CSP, Demand Side Management ("DSM") is one of the
8 key areas of focus for the Corporation, and plays a significant role in supporting a
9 number of other key objectives including customer value, financial strength, aboriginal
10 relations and protecting the environment. Manitoba Hydro's DSM initiative involves all
11 activities to achieve the energy savings targeted within the DSM plan, and similar to
12 other long life resource options, involves making a significant investment, taking a long
13 term perspective and having broad and coordinated efforts over this period.

14
15 DSM at Manitoba Hydro plays two important roles within the Corporation: to assist
16 customers in managing their bills and to assist in meeting the future energy needs of the
17 Province. As shown in the figure below, Manitoba Hydro is committed to significantly
18 higher levels of investment in DSM programs on behalf of customers, and the proposed
19 and indicative rate increases are necessary in part to allow Manitoba Hydro to continue to
20 fund Power Smart programs to assist customers in meeting their energy needs in a cost
21 effective manner.

22

1 **Figure 23- Electric DSM**



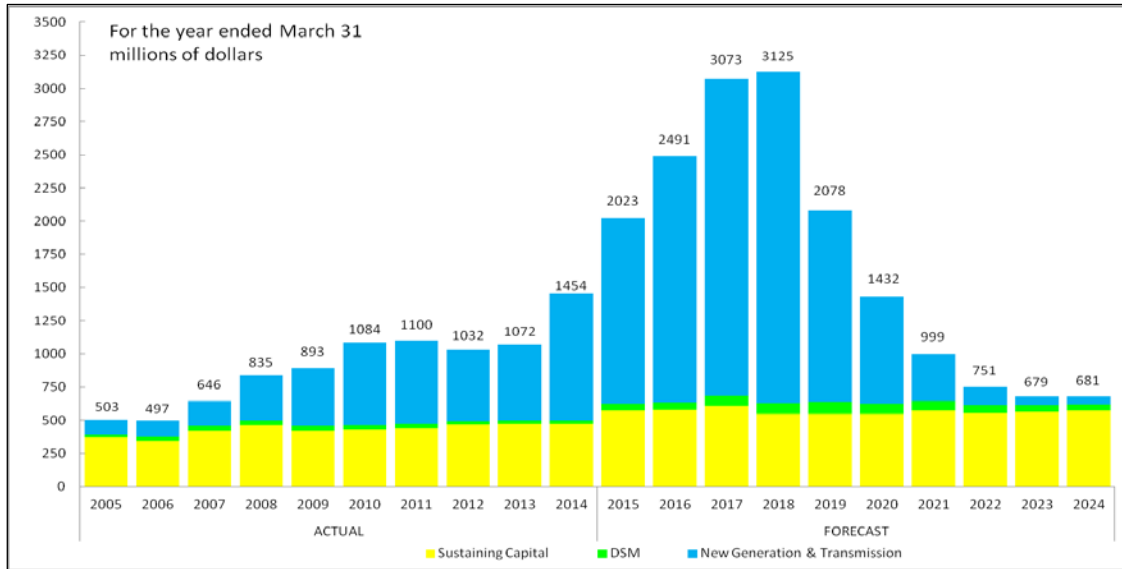
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2.5. Manitoba Hydro's Investment Requirements will Lead to Unprecedented Levels of Debt Financing

Manitoba Hydro has shown that the level of Manitoba Hydro's sustaining and capital investments in the next 10 year period will be significantly higher than in the past ten (10) years. With the Keeyask Generating Station and the Bipole III Reliability Project coming into service in the next 3-4 years, Manitoba Hydro's capital investment will peak at approximately \$3.1 billion just before the in-service of Bipole III in 2018, which includes sustaining capital expenditures at approximately \$600 million each year on a forecast basis (transcript page 270-271). These are unprecedented levels in Manitoba Hydro's history.

1

Figure 24- Electricity Capital Expenditures (CEF14)



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2.5.1. Cash Flow from Operations will be Insufficient to Fund Capital Expenditures

5

6

Manitoba Hydro explained during evidence that as a Crown-owned utility, Manitoba Hydro does not have access to share capital as a source of funds and must rely on a combination of internally generated cash from operations and debt financing in order to fund its capital investment program.

10

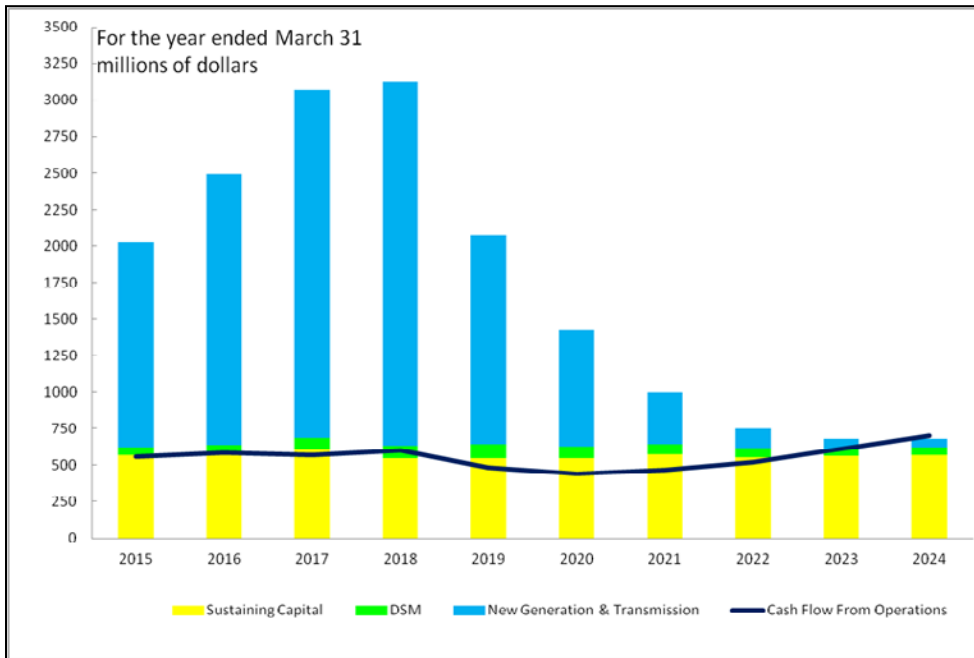
11

Manitoba Hydro showed the PUB the following figure which depicts the capital investment requirements for the next 10 years along with the forecasted cash-flow from operations, including the proposed and indicative 3.95% rate increases. Manitoba Hydro has historically targeted to fund sustaining capital expenditures with cash flow from operations. This chart indicates that the cash that is projected to be generated from operations is just sufficient in 4 of the 10 years to fund sustaining capital expenditures. From 2019 to 2022, Manitoba Hydro is projecting that it will be required to borrow funds to finance sustaining capital expenditures.

18

19

1 **Figure 25- Electricity Capital Expenditures and Cash Flow From Operations with**
2 **3.95% Rate Increases**



3
4

5 **2.5.2. Investment Requirements will Lead to Unprecedented Levels of Debt Financing**

6

7 In evidence, Manitoba Hydro explained that even with the proposed and indicative rate
8 increases, the amount of financing that would be required beyond cash from operations
9 will lead to unprecedented levels of debt financing with total debt requirements,
10 including debt refinancing, peaking at levels in excess of \$3 billion in 2017/18, as
11 illustrated in the following figure.

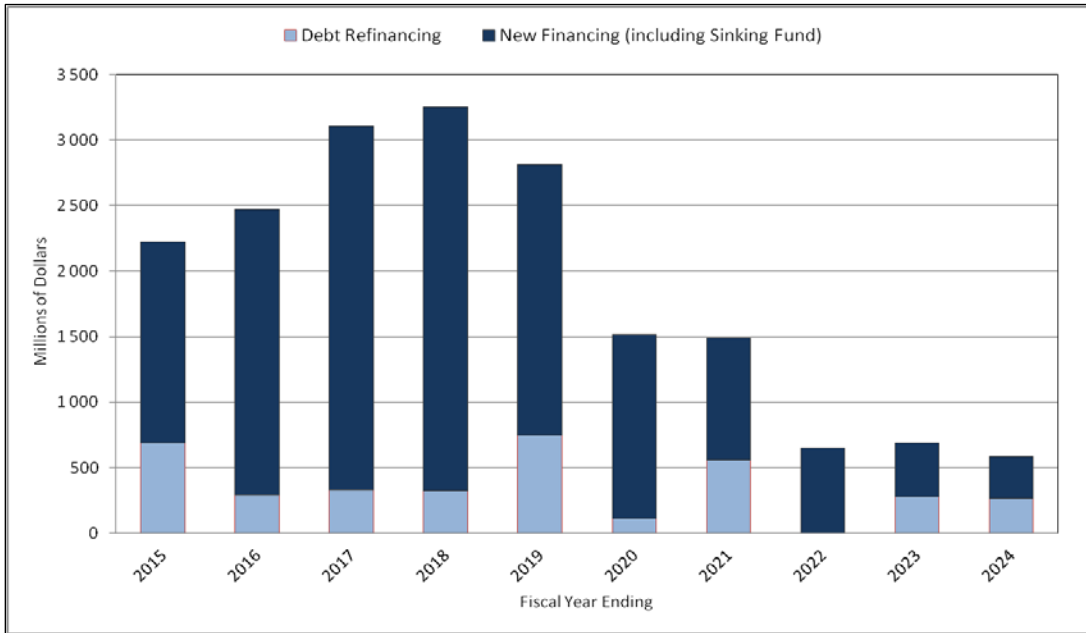
12

13 As noted in Manitoba Hydro’s oral closing argument, this figure is a reminder that
14 Manitoba Hydro has debt refinancing which is occurring in addition to the new debt
15 being taken on. It is therefore critical that Manitoba Hydro maintains access to low cost
16 financing during the period of intensive capital investments as customers pay for
17 financing through rates.

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Figure 26- Projected Electric Operations Borrowing Requirements with 3.95% Rate Increases



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The proposed and indicative rate increases are necessary to stabilize Manitoba Hydro's cash flow from operations to the minimum level to fund the majority of sustaining capital expenditures thereby avoiding: higher levels of debt; higher cash flow requirements to pay the interest on the incremental debt; higher interest expense; and higher customer rates, all to the benefit of the customer.

1 **3.0 THE NEED FOR THE PROPOSED RATE INCREASES**

2
3 Section 3.0 of the Argument summarizes the increases in Manitoba Hydro’s revenue
4 requirement as a result of the investments and debt financing requirement outlined in
5 Section 2.0 and explains why the proposed and indicative rate increases are necessary to
6 maintain the Corporation’s financial health and rate stability for customers.

7
8 **3.1. Revenue Requirements are Driven by Assets Being Placed in Service**

9
10 As a result of the capital intensive nature of Manitoba Hydro’s business, approximately
11 two-thirds of the overall revenue requirement of the Corporation is made up of carrying
12 costs (finance expense, depreciation & capital taxes) of the assets that are used to provide
13 service to customers, along with the operating and maintenance costs of these assets.
14 Once these assets are placed into service, the associated carrying costs form part of the
15 Corporation’s revenue requirements.

16
17 As noted during evidence and during Manitoba Hydro’s oral closing submission, the
18 Wuskwatim Generating Station was placed into service commencing in 2012/13 and was
19 fully in-service in 2013/14 at \$1.6 billion.

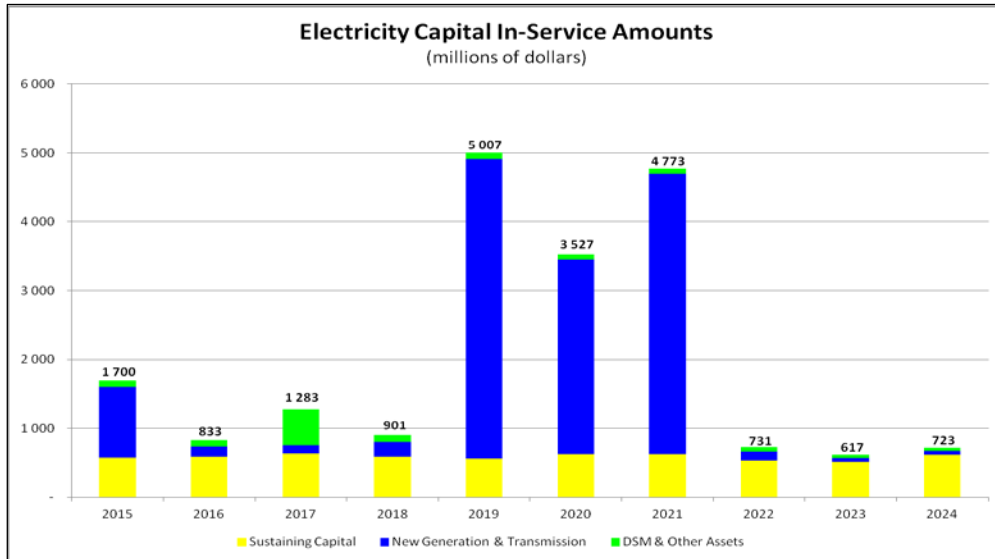
20
21 Manitoba Hydro also discussed (as shown in the figure below), that approximately \$3.8
22 billion of electrical assets are projected to be placed in service in the test years between
23 2014/15 and 2016/17, the most significant of which relate to the Pointe du Bois spillway
24 (\$0.6 billion), Riel Station (\$0.3 billion), sustaining capital expenditures (\$1.8 billion)
25 and DSM expenditures (\$0.2 billion). These investments are the key drivers for the
26 proposed rate increases in this Application. These expenditures are occurring today.

27
28 Total electricity capital in-service over the ten (10) years of the IFF, after Bipole III
29 comes into service in 2018, and the Keeyask Generating Station comes into service in
30 2019, reaches approximately \$20.1 billion by 2023/24. In this 10 year period,
31 approximately \$5.9 billion of sustaining capital expenditures and \$0.7 billion of DSM
32 expenditures will be placed into service or commence amortization.

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Figure 27- Electricity Capital In-Service Amounts (CEF14)



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4 **3.2. Carrying Costs on Electric Assets are Expected to Double in the Next 10 Years**

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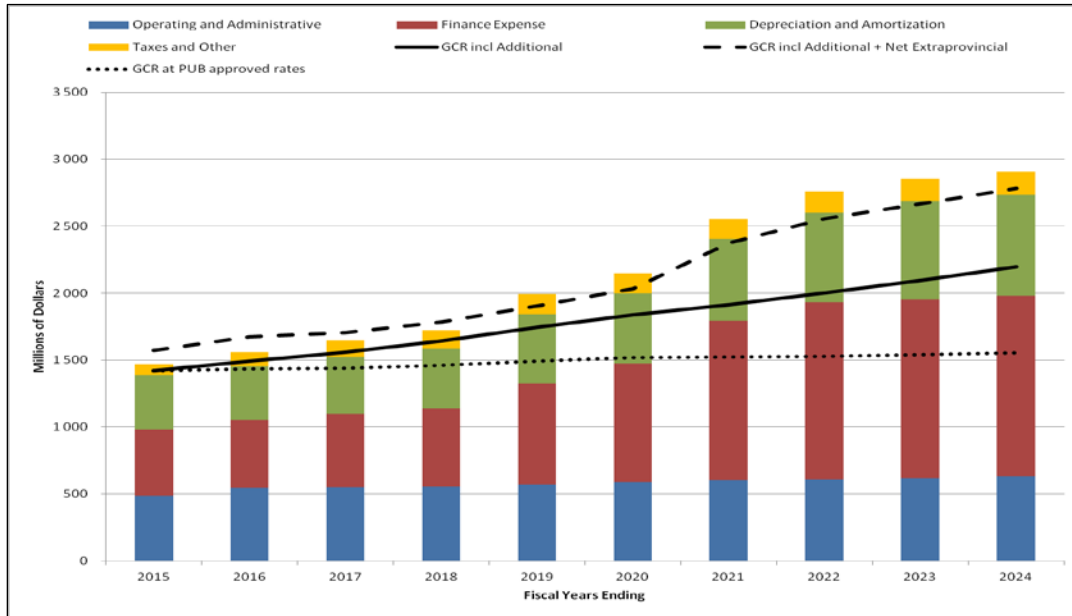
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20

Section 2.3.2 of Tab 2 of the Application describes the main reasons driving the need for Manitoba Hydro's rate increases relate to the extensive capital investment and re-investment in infrastructure that the Corporation will be required to make in order to meet the growing energy needs of Manitoba, to replace aging utility assets, and to address capacity constraints on the system to continue to provide reliable service to all customers. As a result of these significant investments, the asset base of the Corporation, and therefore, total revenue requirements are projected to double over the next ten (10) years.

The following figure provides a depiction of the increase in costs for electric operations over the next 10 year period compared to the revenues that are projected to be generated from domestic and export customers. Over the 10 year period, the total costs of electric operations are projected to increase from the current level of \$1.5 billion to nearly \$3.0 billion.

1 **Figure 28- Electric Expenses to Compared to Revenues (MH14)**



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As noted above, the increase in costs in the next 10 years primarily relate to increases in finance expense and depreciation as a result of the assets that are coming into service. Finance expense is projected to increase from \$500 million to \$1.3 billion over the next 10 years with the projected 3.95% rate increases. OM&A remains relatively constant over the ten year period, does not materially contribute to the increase in electric costs, and therefore, is not driving the need for rate increases.

Figure 28 also illustrates is that while the proposed and indicative rate increases accumulate to approximately 42% percent by 2024, Manitoba Hydro’s revenue requirement is expected to double, or increase by 100%, over that same time period. As a result, losses of \$900 million for electric operations are projected between 2019-2024 even with the 3.95% rate increases.

As Mr. Rainkie explained at Page 241 of the transcript, if Manitoba Hydro were to consider rate increases from a strictly financial perspective, it would be requesting rate increases in the order of 5.5% to 6%. In striking the appropriate balance between investment to maintain safe and reliable service to customers and rate stability for customers, Manitoba Hydro is not requesting 100% rate increases over the next 10 years in accordance with the increase in costs, but rather has proposed what it believes are fair and reasonable rate increases of 3.95% that balances these factors.

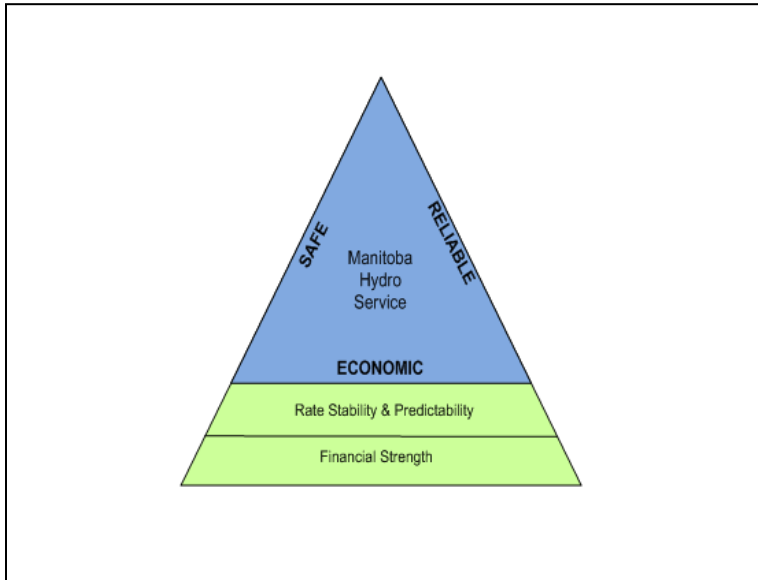
1 **3.3. Rate Stability for Customers is Dependent on Financial Strength of the**
2 **Corporation**

3
4 During his direct evidence presentation, Mr. Rainkie outlined rate stability and
5 predictability for customers depends on the continued financial strength of Manitoba
6 Hydro. Without the necessary rate increases, there is significant risk to customers of
7 volatile rate changes and the need for sudden or large increases in the future, also known
8 as “rate shock” (transcript page 275). This risk is particularly acute in the upcoming
9 period of extensive capital investment.

10
11 In a Crown-owned utility such as Manitoba Hydro, financial reserves are needed to
12 maintain rate stability for customers and maintain access to low-cost financing on behalf
13 of customers as the cost of financing is included in the revenue requirement of the
14 corporation and collected from customers through the rates. The financial strength of
15 Manitoba Hydro is not at odds with taking care of its customers. As was noted in
16 Manitoba Hydro’s oral Final Argument, Sections 39 to 40 of *The Manitoba Hydro Act*
17 specify that the price for power includes the costs of operating the utility, financing costs,
18 and financial reserves (transcript pages 4626 to 4627). The mandate of the MHEB as
19 shown through these sections, is to set aside reserves to be used to maintain rate stability
20 for customers and maintain access to low-cost financing on behalf of customers.

21
22 Manitoba Hydro’s safe, reliable and economic service is based upon a solid foundation of
23 financial strength which promotes rate stability and predictability for customers.
24
25

1 **Figure 29- The Foundation of Safe, Reliable and Economic Service**



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3.4. Investments in Capital Assets Will Place Pressure on Manitoba Hydro's Financial Strength

3.4.1. Financial Strength is Measured through Manitoba Hydro's Consolidated Financial Targets

Manitoba Hydro measures its financial strength through three consolidated financial targets, which are summarized in the figure below:

1 **Figure 30- Consolidated Financial Targets**

- **Debt/Equity:**
 - Maintain minimum debt/equity ratio of 75:25
- **Interest Coverage:**
 - Maintain interest coverage ratio of > 1.20
- **Capital Coverage:**
 - Maintain capital coverage ratio of > 1.20

Note: Financial Targets may not be maintained during years of major investment in the generation and transmission system.

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The following sections demonstrate the significance of the projected rate increases by comparing the net income, retained earnings, and financial ratios of electric operations including and excluding the proposed and indicative rate increases. As can be readily seen in the sections below, the rate increases are vital to the continued financial strength of Manitoba Hydro.

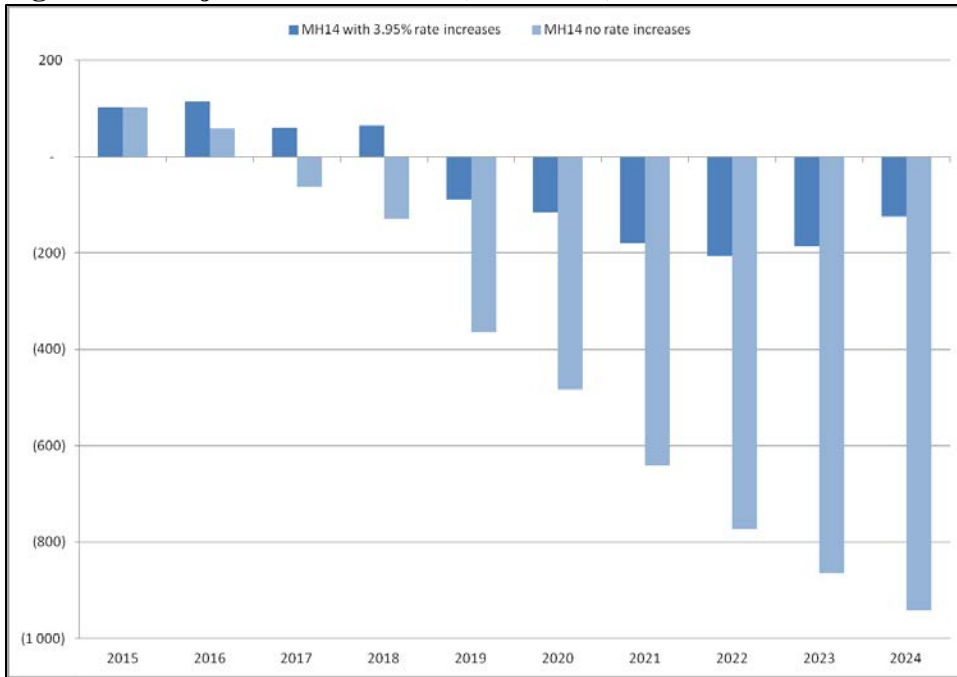
10 **3.4.2. Projected Net Income & Retained Earnings**

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As shown through Manitoba Hydro's evidence and discussed extensively at the hearing, even with the 3.95% proposed and indicative rate increases projected in MH14, losses of \$900 million are projected between 2019 and 2024 and financial reserves (retained earnings) for electric operations are projected to fall from \$2.7 billion in 2014/15 to \$2.0 billion by 2023/24. This amount is barely sufficient to absorb the impact of the reoccurrence of a historic 5-year drought, and does not provide sufficient reserves to mitigate the potential financial impacts of the considerable array of risks the Corporation faces in fulfilling its mandate.

1

Figure 31- Projected Net Income (2015-2024)

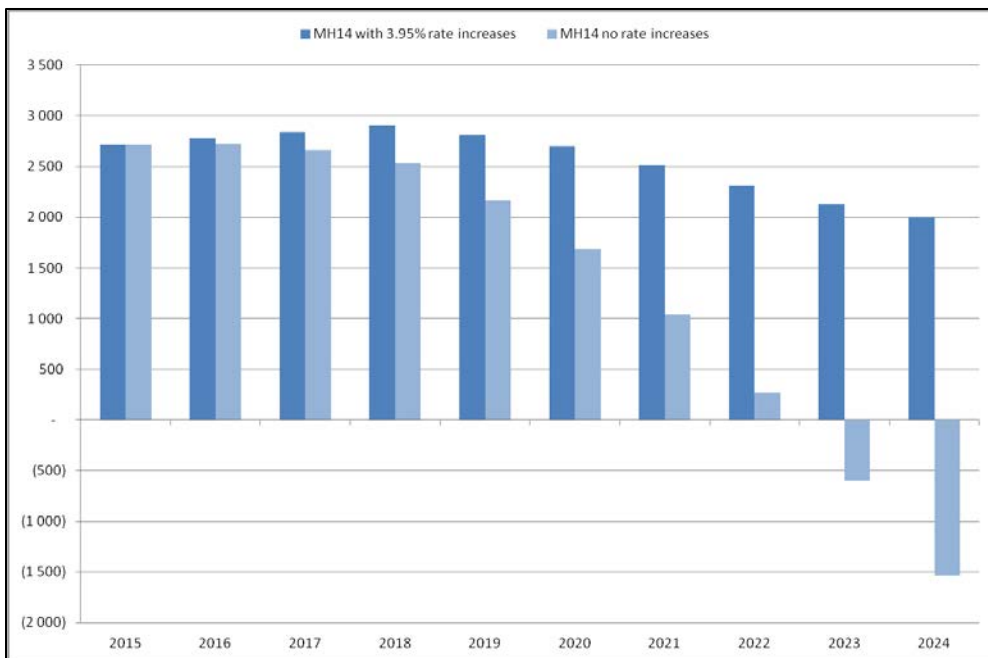


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Figure 32- Projected Retained Earnings (2015-2024)



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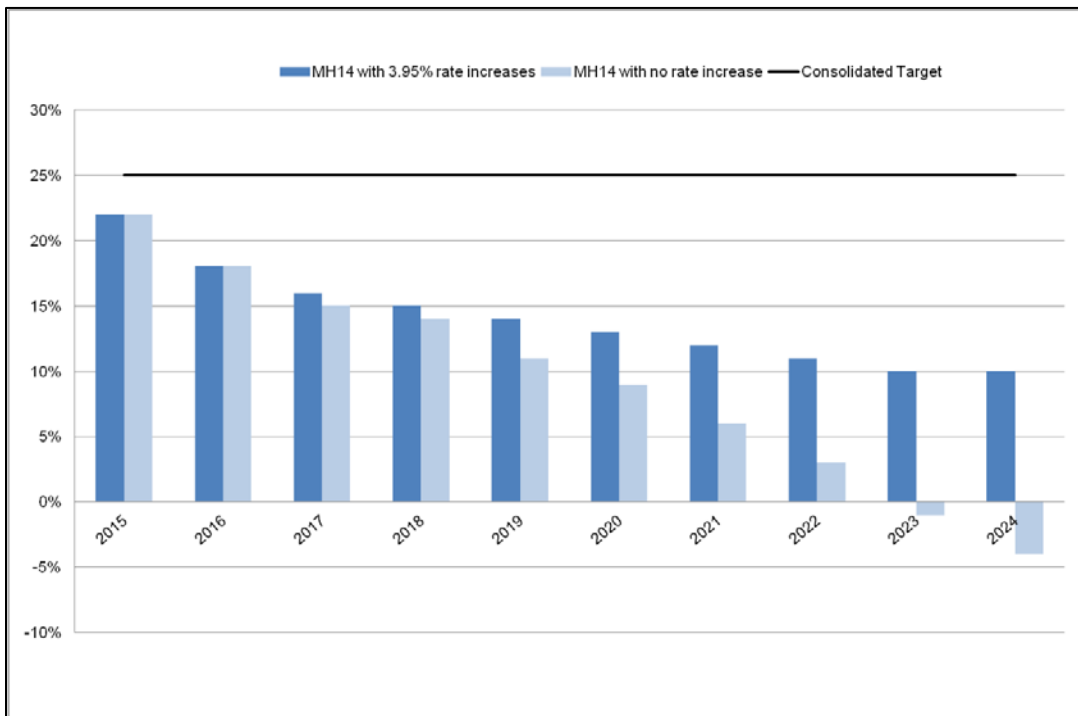
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1 **3.4.3. Projected Equity Ratio**

2
3 As shown in the figure below, Manitoba Hydro's equity ratio for electric operations is
4 projected to deteriorate from the current level of 23% to 10% by 2022/23. Manitoba
5 Hydro's consolidated debt/equity target is to maintain a minimum debt to equity ratio of
6 75:25 (i.e. 75% debt and 25% equity). The equity ratio measures the portion of assets that
7 have been financed by internally generated funds (equity) rather than debt. Manitoba
8 Hydro's equity is not a cash reserve but is primarily represented by the internally
9 generated funds accumulated since its inception that have been reinvested in the assets of
10 the Corporation. As Mr. Rainkie testified at page 280 of the transcripts this is at a time
11 when other crown-owned utilities have equity ratios higher than Manitoba Hydro or plan
12 to strengthen their equity ratios in the next decade.

13
14 **Figure 33- Projected Equity Ratio (2015-2024)**



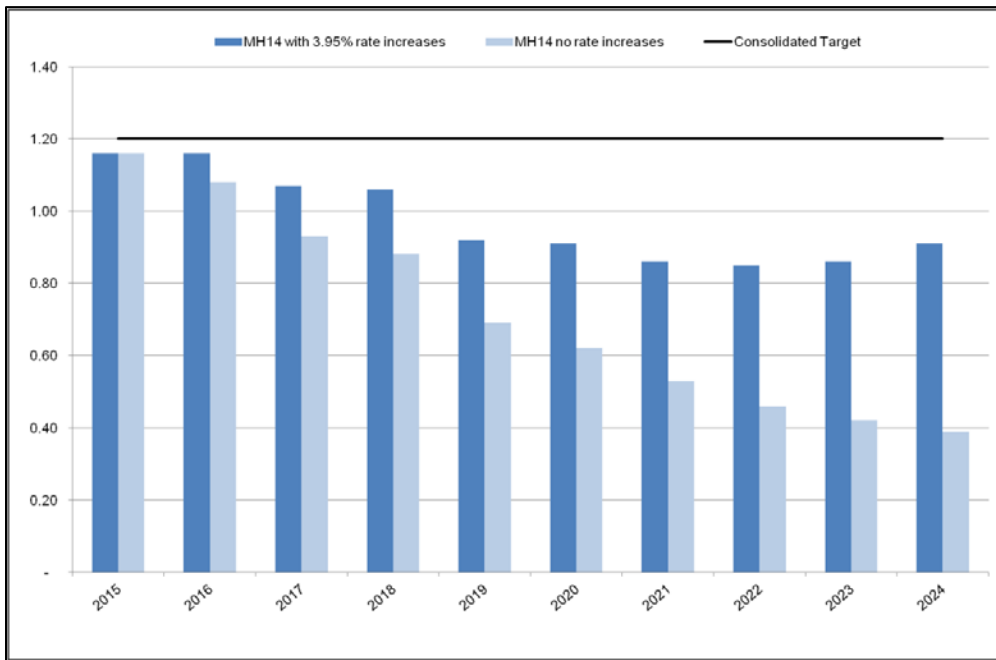
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1 **3.4.4. Projected Interest Coverage Ratio**

2
3 Manitoba Hydro's consolidated target is to maintain a minimum annual gross interest
4 coverage ratio of greater than 1.20. The interest coverage ratio provides an indication of
5 the ability of the Corporation to meet interest payment obligations with the net income
6 generated by the Corporation. Annual interest coverage at or greater than 1.20 ensures
7 that there is a sufficient margin of earnings in excess of that which is required to cover
8 interest payments to bondholders.

9
10 With the proposed and indicative 3.95% rate increases, Manitoba Hydro's interest
11 coverage ratio is also forecast to be well below target for several years of the forecast. In
12 six years of the 10 year forecast, Manitoba Hydro's interest coverage ratio is projected to
13 be below 1.0, which indicates that the utility would experience elevated operational
14 liquidity risk and may have difficulty generating sufficient revenues and cash flow from
15 operations to pay its interest obligations.

16
17 **Figure 34- Projected Interest Coverage Ratio (2015-2024)**



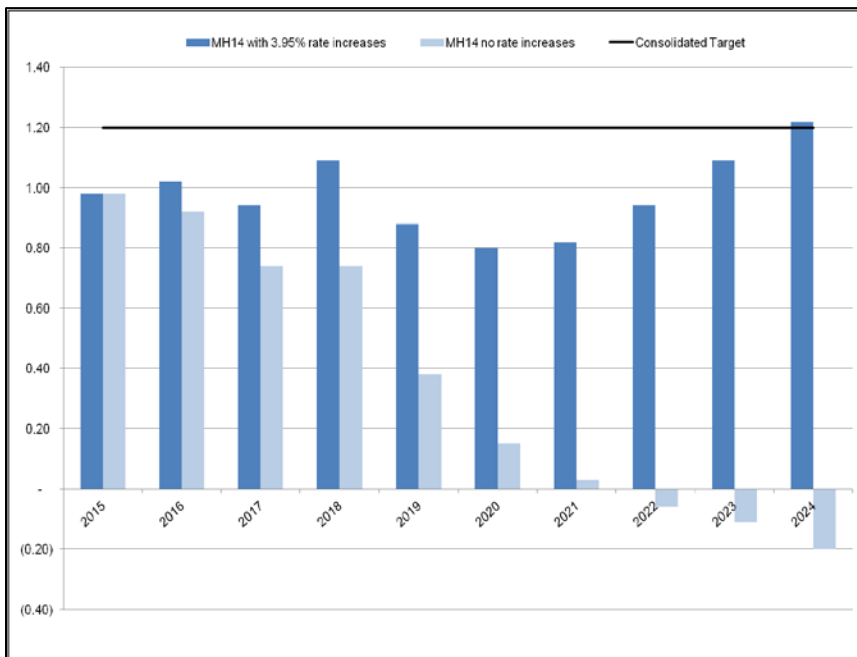
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1 **3.4.5. Projected Capital Coverage Ratio**

2
3 Manitoba Hydro's consolidated target is to maintain a capital coverage ratio of greater
4 than 1.20. The capital coverage ratio measures the ability of current period internally
5 generated funds to finance sustaining capital expenditures (excluding major new
6 generation and transmission capital expenditures). A capital coverage ratio of greater than
7 1.20 provides sufficient cash flow from operations to fund sustaining capital expenditures
8 and further reduces the need for debt financing.

9
10 As shown below, the capital coverage ratio is below target for several years as a result of
11 lower net earnings and the increase in capital requirements for the renewal and
12 replacement of aging infrastructure. Manitoba Hydro has historically funded sustaining
13 capital expenditures through internally generated funds; however, it is projecting capital
14 coverage ratios below 1.0 in six years of the 10 year forecast, which indicates that the
15 utility will not generate sufficient revenues to fund its sustaining capital expenditures and
16 must borrow in order to renew or replace existing infrastructure.

17
18 **Figure 35- Projected Capital Coverage Ratio (2015-2024)**



19
20
21

1 **3.4.6. Manitoba Hydro's Financial Targets Remain an Appropriate Guide for Rate-**
2 **Setting**

3
4 As discussed in Section 3.3 above, rate stability for customers is dependent on the
5 financial strength of the Corporation. While MH14 projects that Manitoba Hydro's
6 financial ratios will deteriorate significantly below targets during the period of significant
7 investment, it is important that Manitoba Hydro's financial position improves following
8 the investment period as external stakeholders, such as credit rating agencies and lenders,
9 will closely monitor Manitoba Hydro's progression towards its financial targets.

10
11 As the PUB is aware, Manitoba Hydro retained KPMG to conduct a review of its
12 financial targets. Manitoba Hydro will consider the recommendations from this report as
13 well as further internal financial modeling and make recommendations to the MHEB in
14 the fall 2015 in conjunction with IFF15 (transcript page 2081).

15
16 Mr. Rainkie provided some insight on page 413 of the transcript that KPMG's indications
17 are that Manitoba Hydro's current financial targets remain reasonable, but at the lower
18 end of the spectrum for comparable utilities and that Manitoba Hydro should consider
19 strengthening its financial targets.

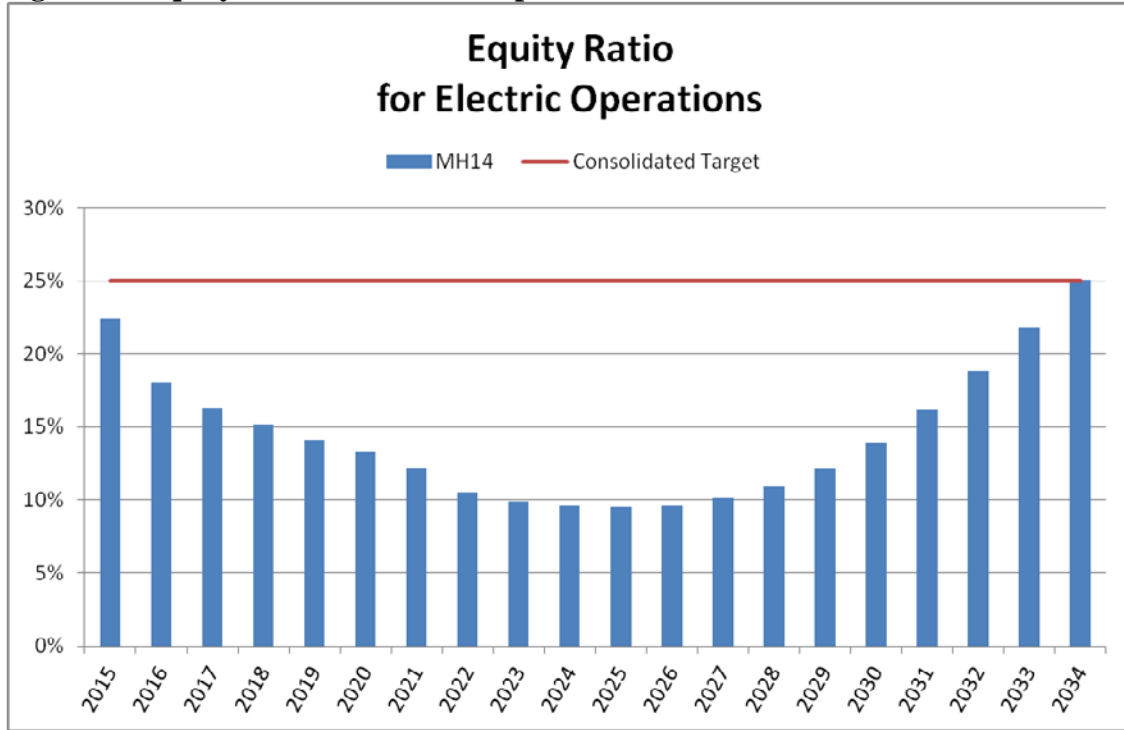
20
21 As a result, until the financial target review is complete and the results of the review have
22 been approved by the MHEB, the current financial targets remain as the key measure of
23 the Corporation's financial strength and are the appropriate guide for rate-setting
24 purposes.

25
26 **3.4.7. Manitoba Hydro is Projecting Deterioration of its Financial Ratios to Mitigate Rate**
27 **Increases to Customers**

28
29 As indicated by Mr. Rainkie at transcript pages 325-327, higher rate increases in the
30 order of 5.5-6.0% over the next 4 years would be necessary to reduce the losses that are
31 projected in the next 10 years and maintain financial reserves at current levels.
32 Additionally, the rate increases that would be necessary to maintain Manitoba Hydro's
33 financial ratios at or above targets in the near to medium term, would be even more
34 financially challenging for its customers.

1 As demonstrated in the following figure, even with the 3.95% rate increases Manitoba
2 Hydro's electric operations equity ratio is expected to deteriorate to 10% by 2022/23, and
3 not recover to the 25% target until 2033/34.
4
5

Figure 36-Equity Ratio for Electric Operations MH14 with 3.95% Rate Increases



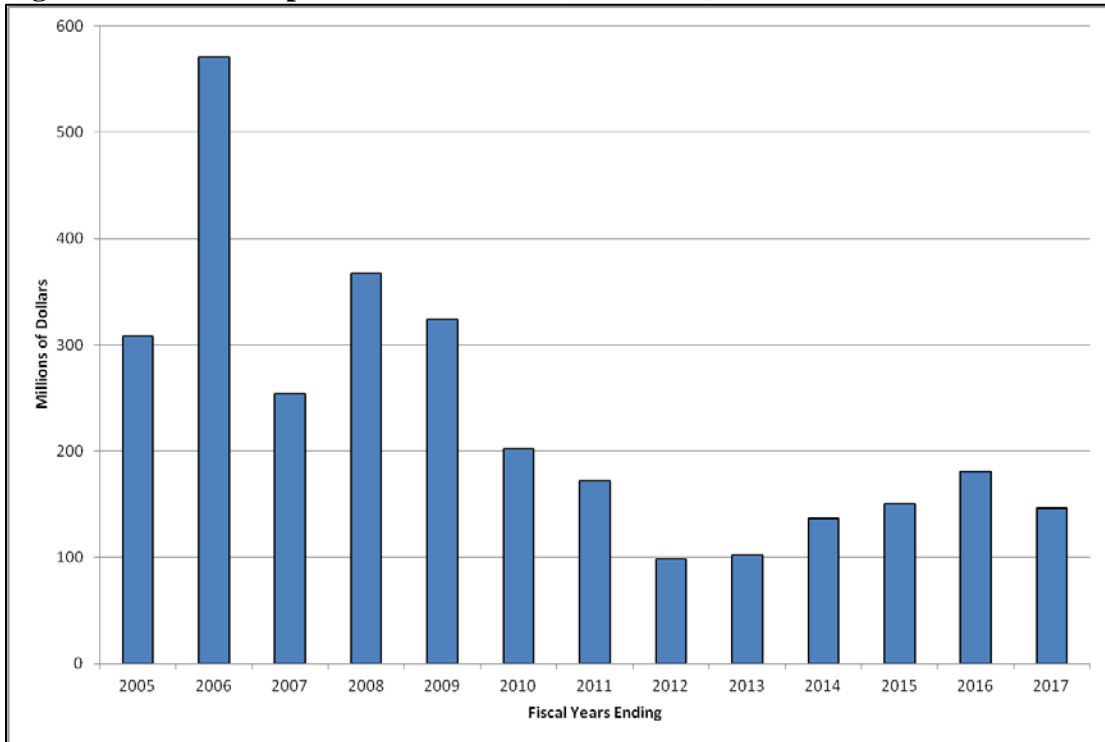
6
7
8 In Manitoba Hydro's judgment, the projected deterioration in the equity ratio in MH14 to
9 10% is the minimum acceptable financial operating level. As such, the 3.95% proposed and
10 indicative rate increases are the minimum that are necessary to manage the deterioration
11 in the projected financial results and ratios over the next 10 years. Relaxing the longer-
12 term equity target to levels below 25% would still necessitate the requested rate increases
13 of 3.95% in the medium-term as lower rate increases would result in projected equity
14 ratios well below 10%.
15

16 **3.5. Rates Have Not Increased to Fully Compensate for Reductions in Net** 17 **Extraprovincial Revenue**

18
19 As indicated at transcript page 181, historically, net extraprovincial revenues have
20 enabled Manitoba Hydro to maintain low electricity rates for Manitobans. Recently,
21 prices on the export market have been lower and net extraprovincial revenues have not
22 been as strong.

1 As illustrated in Figure 37 below, Manitoba Hydro’s net extraprovincial revenues are
2 projected to be \$150 million in 2014/15, \$181 million in 2015/16 and \$147 million in
3 2016/17, which is significantly lower than the \$365 million average net
4 extraprovincial revenues generated from 2004/05 to 2008/09. It is necessary to
5 gradually increase rates over time to compensate for the reduction in net
6 extraprovincial revenues.

7
8 **Figure 37- Net Extraprovincial Revenue (2015-2017)**



*Actuals 2004/05 to 2013/14; forecast 2014/15 to 2016/17

9
10
11
12 **3.6. Manitoba Hydro’s Rate Proposals Maintain Net Income & Financial Ratios at**
13 **Acceptable Levels**

14
15 As discussed during oral closing argument, and as shown in the figure below, approval of
16 the proposed rate increases are necessary to maintain net income and financial ratios for
17 2015/16 & 2016/17 at acceptable levels and to promote longer term rate stability for
18 customers. Approval of the proposed 3.95% rate increases for 2016 and 2017 would
19 result in a contribution to financial reserves (net income) of \$115 million and \$59 million
20 respectively. This level of net income is modest considering the asset base (nearly \$17
21 billion) and retained earnings (\$2.7 billion) of Manitoba Hydro.
22

Absent the rate increases, Manitoba Hydro is projecting net income of \$58 million in 2016 and a loss of \$58 million in 2017. As well, the equity ratio, interest and capital coverage ratios would decline to 15%, 0.93 and 0.74 in 2017, respectively, without the requested rate increases.

Figure 38- Rate Proposals Maintain Net Income and Financial Ratios at Acceptable Levels

Net Income - Electricity Operations					
(in millions of \$)	2013	2014	Forecast		
			2015	2016	2017
Revenue					
General Consumers Revenue					
- at approved rates	\$ 1 341	\$ 1 424	\$ 1 437	\$ 1 454	\$ 1 460
- Bipole III Reserve	-	(19)	(30)	(32)	(34)
Extraprovincial Revenue (net of Fuel & Power Purchased and Water Rentals)	101	137	150	181	147
Other Revenue	30	22	15	14	14
	1 472	1 564	1 572	1 617	1 587
Expenses					
Operating, Maintenance and Administrative	1 407	1 439	1 495	1 571	1 653
Finance Expense	463	481	486	542	552
Depreciation and Amortization	452	435	495	510	548
Capital and Other Taxes	392	411	405	401	422
Corporate Allocation	86	97	99	107	121
Other expenses	9	9	9	8	8
	5	6	2	2	2
Non-controlling Interest	13	22	25	12	8
Net Income (loss) before proposed rate increases	\$ 78	\$ 147	\$ 102	\$ 58	\$ (58)
Proposed rate increases (3.95% April 1, 2015 and 3.95% April 1, 2016)				57	118
Net Income including proposed rate increases	\$ 78	\$ 147	\$ 102	\$ 115	\$ 59

Retained Earnings and Financial Ratios (without proposed rate increases)

Retained Earnings (electric operations)	\$ 2 468	\$ 2 615	\$ 2 717	\$ 2 721	\$ 2 663
Debt to Equity Ratio (electric operations)	75:25	77:23	78:22	82:18	85:15
Interest Coverage Ratio (electric operations)	1.13	1.25	1.16	1.08	0.93
Capital Coverage Ratio (electric operations)	1.26	1.39	0.98	0.92	0.74

Retained Earnings and Financial Ratios (including proposed rate increases)

Retained Earnings (electric operations)	\$ 2 468	\$ 2 615	\$ 2 717	\$ 2 778	\$ 2 837
Debt to Equity Ratio (electric operations)	75:25	77:23	78:22	82:18	84:16
Interest Coverage Ratio (electric operations)	1.13	1.25	1.16	1.16	1.07
Capital Coverage Ratio (electric operations)	1.26	1.39	0.98	1.02	0.94

As discussed by Mr. Barnlund, at transcript page 2717, the above table assumes the requested rate increases are effective April 1st of each year. Each month the implementation of the proposed rate increase is delayed results in lost revenue of approximately \$4 million per month. If the proposed 3.95% rate increase were

1 implemented on July 1, 2015, forecast net income for 2015/16 would be \$102 million,
2 and would be \$98 million if the rate increase were implemented August 1, 2015.

3

4

1 **4.0 RISKS IF PROPOSED RATE INCREASES ARE NOT GRANTED**

2
3 Section 4.0 of the Argument summarizes the risks to customers and Manitoba Hydro if
4 the proposed rate increases are not granted.

5
6 **4.1. Increased Risk to Customers of Rate Instability & Rate Shock**

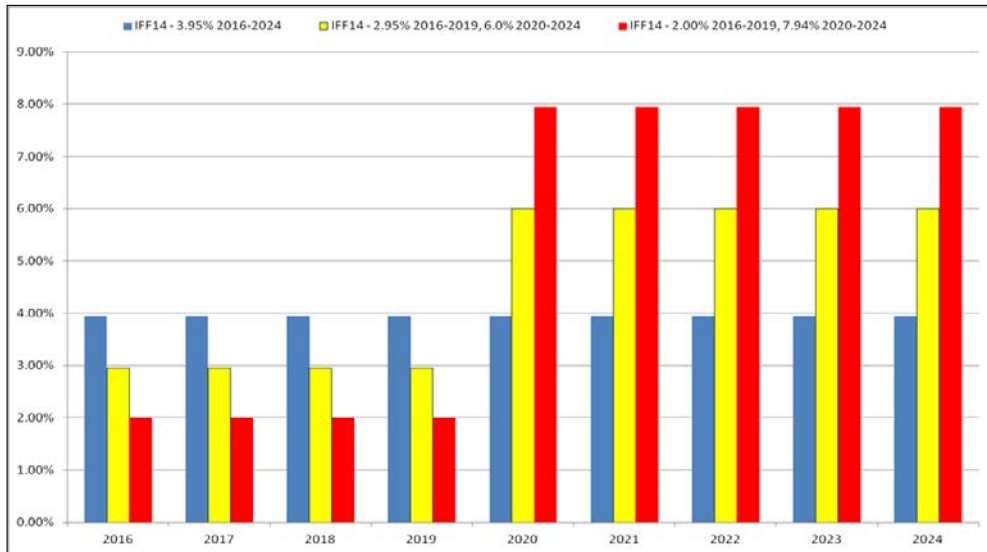
7
8 As outlined earlier in this written argument, Manitoba Hydro's rate proposals are
9 designed to promote long-term rate stability and predictability for customers.

10
11 To demonstrate the potential rate volatility of reducing the near term 3.95% indicative
12 rate increases in MH14, Manitoba Hydro prepared two scenarios that calculated the
13 compensating rate increases that are required in the five year period from 2020 to 2024 if
14 rate increases for the four year period from 2016 to 2019 were reduced to 2.95% or 2.0%
15 respectively. The compensating rate increases were calculated to achieve the same
16 financial position as MH14, in particular the minimum acceptable equity ratio of 10% in
17 2024.

18
19 The rate scenarios prepared, as depicted in the figure below, shows that with 2% rate
20 increases for the next 4 years, Manitoba Hydro would require 8% rate increases (red bars
21 on figure) for the following five years, and with 2.95% rate increases for the next four
22 years, Manitoba Hydro would require 6% rate increases (yellow bars on figure) in the
23 five years that follow. This analysis demonstrates how future rate increases would have to
24 significantly increase in order to compensate for lower rate increases granted in the near
25 term. In contrast, the 3.95% proposed and indicative rate increases are provided in the
26 blue bars in the figure.

27
28

1 **Figure 39-Projected Rate Increase Scenarios- 3.95%, 2.95% and 2.0% (2016-2019)**



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Given that these rate scenarios are also derived using average water flow assumptions and that adverse drought conditions may occur in the future, it is of vital importance that the rate increases be regular and occur even when there are short-term favorable water flow or financial conditions. In Manitoba Hydro’s view, gradually raising rates by the minimum 3.95% rate increases is in the customer’s best interest as this maintains customer rate stability and predictability, and reduces the risk of severe rate shock in the future.

12 **4.2. Increased Risk to Customers of Decline in Service & Reliability**

13
14 **4.2.1. Reliability Indicators**

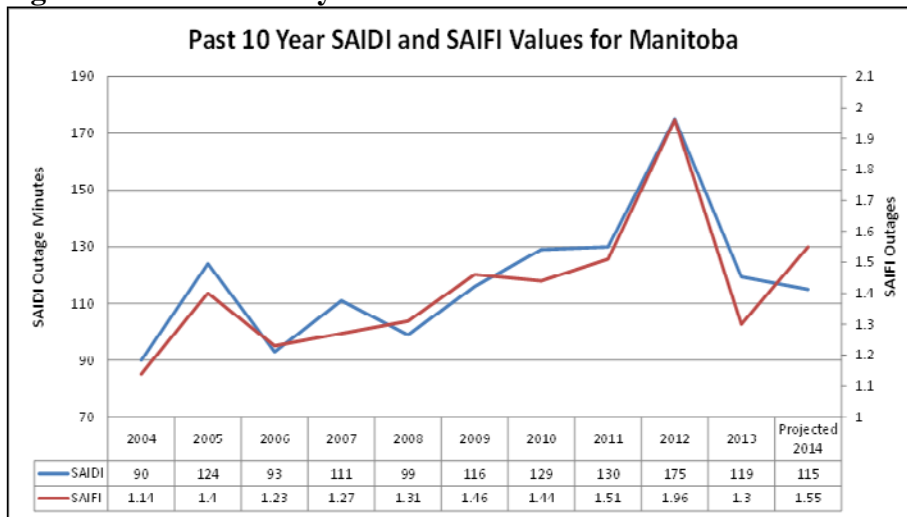
15
16 As the PUB heard during evidence at transcript page 261, a considerable portion of
17 Manitoba Hydro’s assets were installed when many of the first generating stations and
18 transmissions lines were built (1911-1950) and a large portion of the province was
19 electrified (1940-1960), and subsequently when generating stations and supporting
20 HVDC systems were developed in Northern Manitoba (1960-1990). Historically, the
21 reliability performance of Manitoba Hydro’s electric assets has been excellent, and
22 ratepayers in Manitoba have enjoyed the benefits of an affordable supply of safe and
23 reliable electricity for many decades. However, many of Manitoba Hydro’s generation,
24 transmission and distribution assets have reached an age where their overall condition is
25 such that system reliability has begun to degrade.

1 The PUB also heard at transcript page 262 and during oral closing arguments that all
2 purveyors of common infrastructure are grappling with the issue of balancing the level of
3 investment, the right pace of investment and trying to obtain the necessary funds to make
4 that work. Given the critical nature of electricity to Manitobans, Manitoba Hydro
5 certainly wants to make sure that the pace is appropriate as it does not want the
6 investment requirements to overwhelm the Corporation. Manitoba Hydro cannot afford to
7 do that with a service as essential as electricity.

8
9 SAIDI and SAIFI are the duration of outages and the frequency of outages for customers.
10 Mr. Rainkie, explained at transcript pg. 288 that as a large portion of the assets are
11 extended beyond their life expectancy, Manitoba Hydro sees system failures and
12 customer outages occurring on a more regular basis. Assets do not last forever.
13 Replacement rates and associated capital investment on the majority of our asset types
14 needs to be increased to better align with life expectancy.

15
16 As shown in the following figure, Manitoba Hydro’s reliability performance based on the
17 SAIFI and SAIDI indicators show an increased trend of outage frequency and duration.

18
19 **Figure 40- Manitoba Hydro SAIDI and SAIFI Indicators**

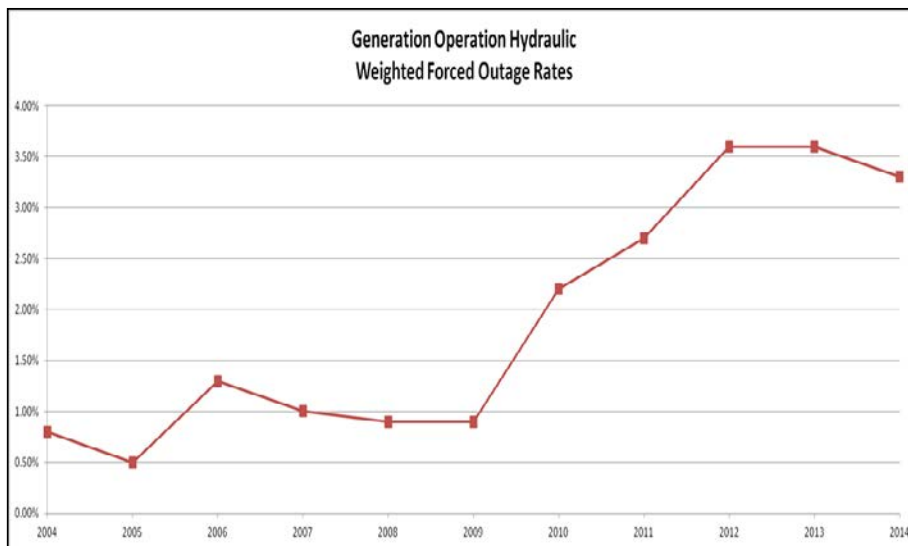


20
21
22 As this figure demonstrates, and as Manitoba Hydro indicated during closing arguments,
23 SAIDI has increased 28% and SAIFI has increased 36% between 2004 and the projection
24 for 2014.
25

1 Likewise, generation forced outage rates have increased significantly in the past four
2 years, as the following figure demonstrates. The generation forced outage rate is the time
3 that a generating station is out of service, not for maintenance or planned purposes, but
4 largely due to equipment failure.

5
6 As clarified by Mr. Read during a discussion with the Chairman on transcript pages
7 1359-1361, Manitoba Hydro has included a comprehensive program under CEF14 which
8 deals with many of Manitoba Hydro's old assets at all its generating stations, not just
9 Pointe du Bois and Jenpeg Generating Stations. As shown on the risk map at
10 COALITION/MH II-49(a)-(d), the projects currently included in Manitoba Hydro's
11 CEF14 are all the very highest risks shown in red. However, Manitoba Hydro also has
12 projects for many of the situations developing in yellow which are considered medium-
13 high risk, which are all moving in the direction of being high risk.

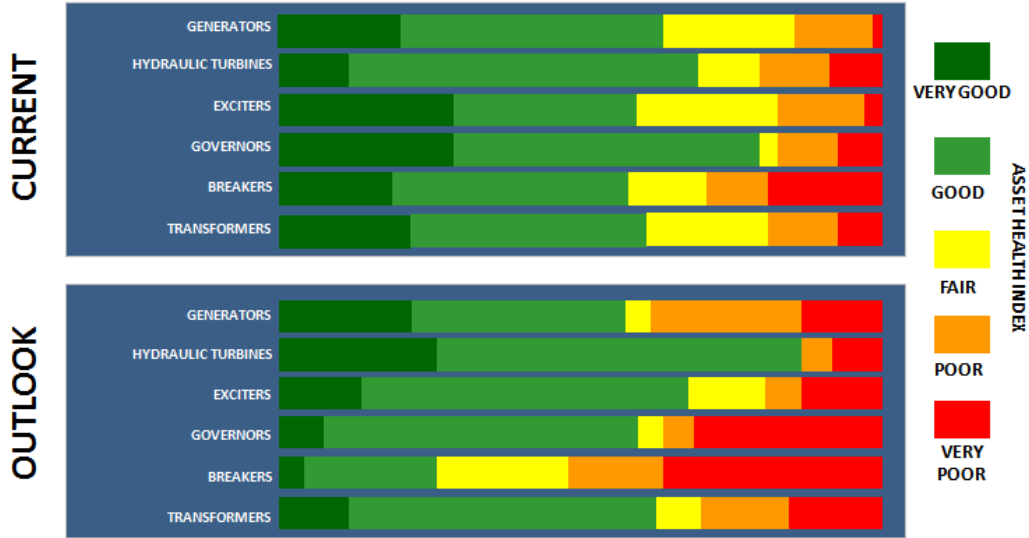
14
15 **Figure 41- Hydraulic Generation Forced Outage Rates**



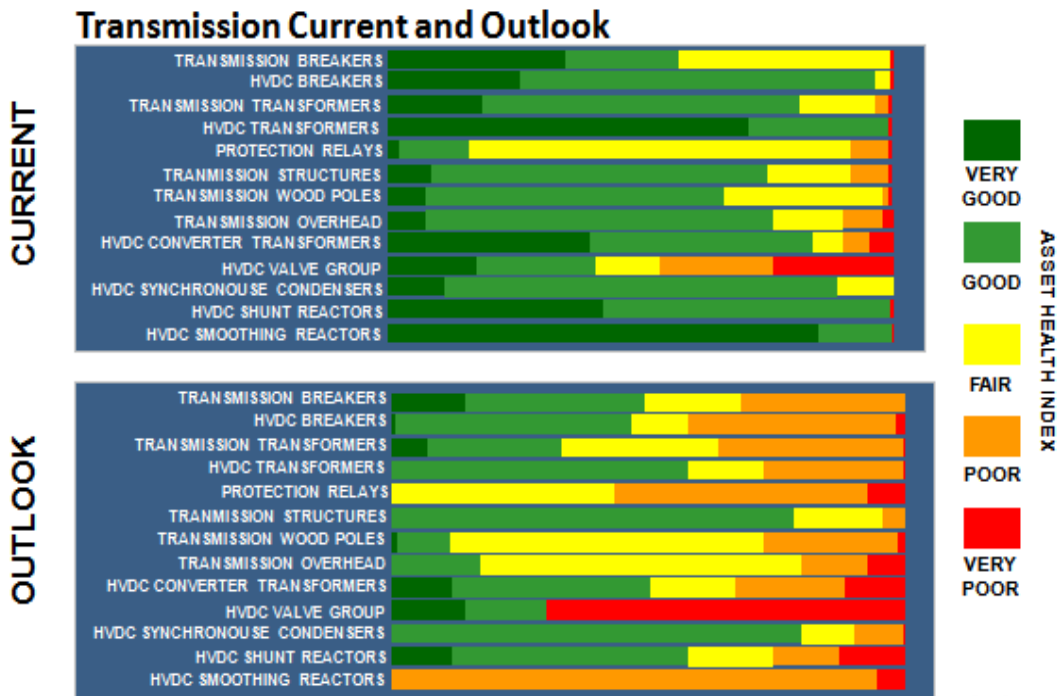
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18 **4.2.2. Asset Health Indices – 20 Year Outlook**

19
20 Manitoba Hydro discussed in evidence how it uses an Asset Health Index (“AHI”) to
21 quantify equipment condition based on numerous parameters, to indicate whether the
22 asset type is in very poor, poor, fair, good or very good condition. The figures below
23 provide a summary of current AHI results for Manitoba Hydro's generation, transmission
24 and distribution asset types, as well as the 20 year outlook of the AHI based on current
25 spending levels.

1 **Figure 42- Generation – Asset Health Indices: Current & 20 Year Outlook**
Generation Current and Outlook

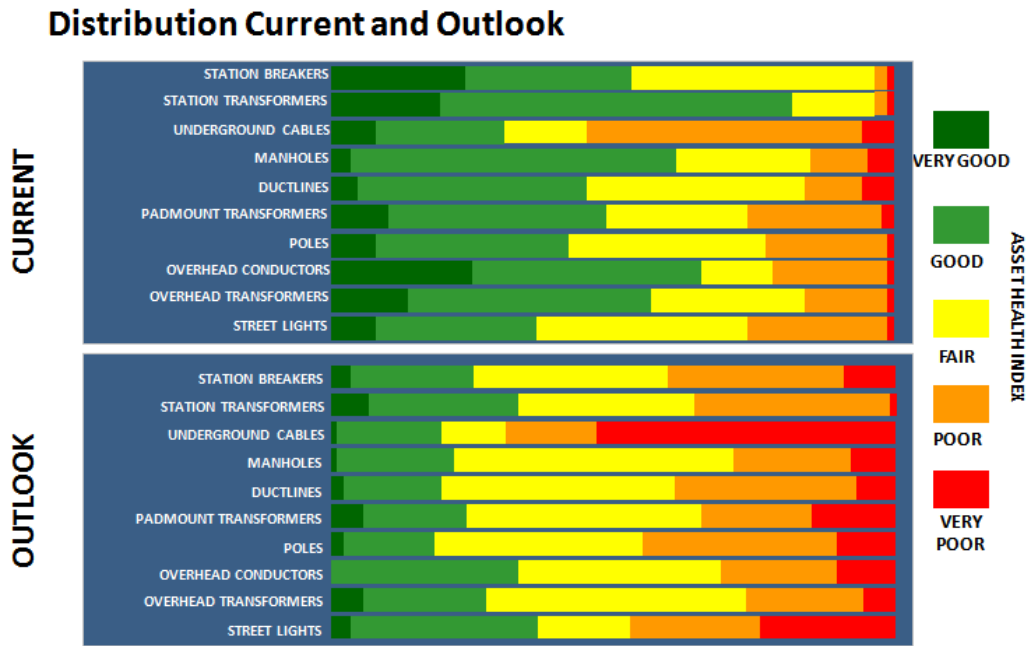


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 4 **Figure 43- Transmission – Asset Health Indices: Current & 20 Year Outlook**



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Figure 44- Distribution – Asset Health Indices: Current & 20 Year Outlook



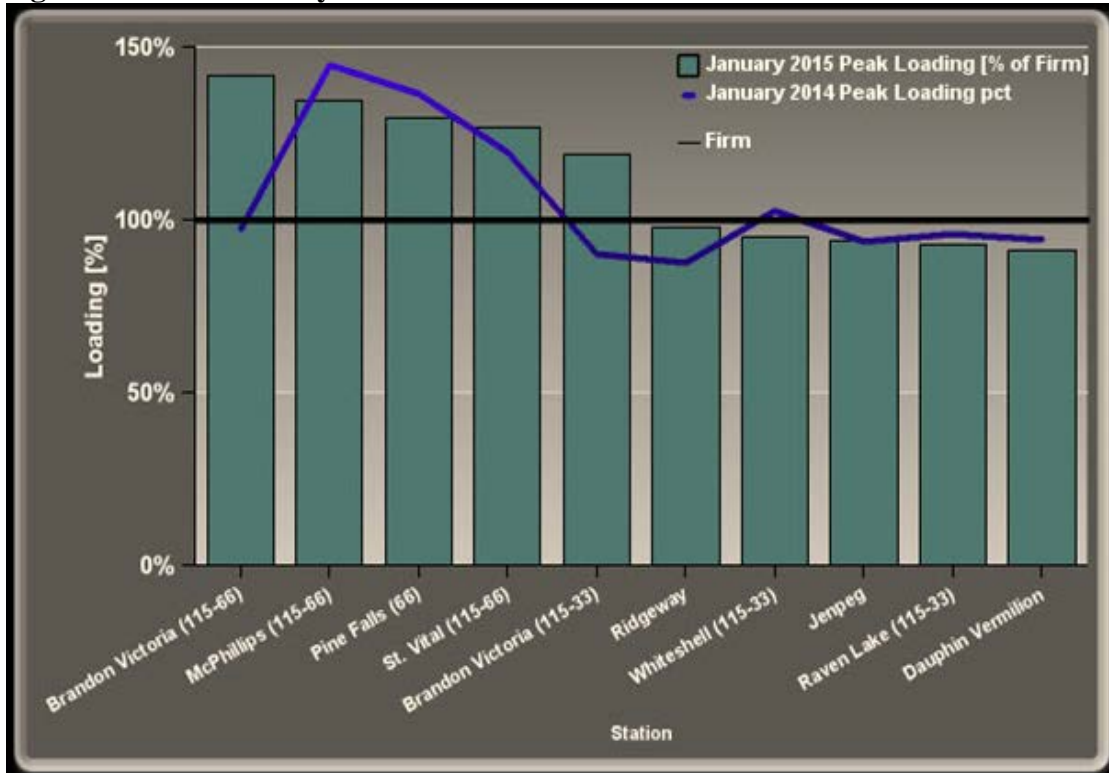
As discussed in Tab 2 of the Application, page 32 of 49, a larger percentage of assets age beyond life expectancy, they will begin to fall into the poor and very poor categories and system failures and customer outages are expected to occur on a more regular basis. As such, replacement rates in the majority of Manitoba Hydro’s asset types need to be increased to better align with life expectancy.

At transcript page 287, Mr. Rainkie noted that the condition of assets is a major contributing factor to the deterioration in these measures and as further explained by Mr. Morin, once system performance starts to deteriorate, there is no “silver bullet” that fixes reliability fast; rather, once a system starts to lose that performance, it is a major undertaking to correct it (Transcript page 752).

During cross-examination by Mr. Hacault at transcript page 1496, Mr. Rainkie addressed the importance of Manitoba Hydro prioritizing its investment in sustaining capital in order to keep pace with the degradation of its assets so that it doesn’t get “behind the curve”. While Manitoba Hydro will always do its best to maintain safe and reliable service, the proposed rate increases would put the Corporation in a better position to fund the necessary investments to ensure that Manitoba Hydro continues to provide the high level of service that customers currently enjoy.

1 As discussed by Mr. Swatek at transcript pages 788-789, Manitoba Hydro's electricity
2 system is capacity constrained in many areas of the Province, including in the eastern
3 Lake Winnipeg area, the Steinbach area and the Morden/Winkler area, as well as in the
4 cities of Winnipeg and Brandon. The figure below shows Manitoba Hydro's most heavily
5 loaded transmission stations (peak load as a percentage of firm capacity for each station).
6
7

Figure 45- Most Heavily Loaded Transmission Stations

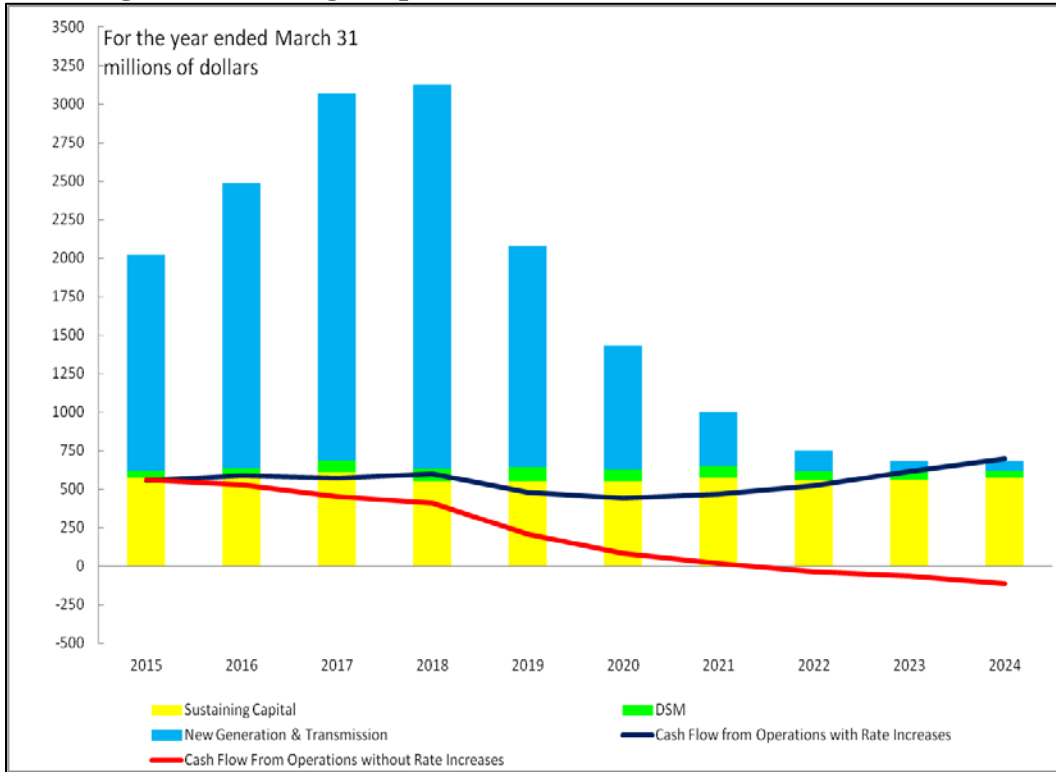


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10 **4.3. Increased Risk of Higher Borrowing Requirements, Debt Levels & Carrying**
11 **Costs to be Recovered from Customers**

12
13 As can be seen in the following figure, and as discussed extensively throughout the
14 evidentiary portion of the current proceeding by both Mr. Rainkie and Mr. Schulz,
15 without the proposed and indicative rate increases, Manitoba Hydro would be required to
16 fund a continually increasing portion of its sustaining capital expenditures through debt
17 financing as opposed to through the cash flow generated from operations. This would be
18 in addition to the debt financing that's required for major new generation and
19 transmission investment.
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Figure 46- Electricity Capital Expenditures and Cash Flow from Operations Including and Excluding Proposed and Indicative Rate Increases



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Maintaining reasonable financial ratios through regular and reasonable rate increases is in the best interests of customers as it reduces the need for borrowing and additional financing costs that must be borne by customers, which serves to reduce the pressure on future rates and provide more financing flexibility in the event of adverse financial circumstances.

Cash flow is an important consideration for rate-setting purposes, just as it is for general business purposes. Manitoba Hydro believes that rates should generate sufficient cash flow to sustain its operations. It is important that Manitoba Hydro be granted the proposed rate increases to be able to generate sufficient cash flow from operations to finance sustaining capital expenditures. This will allow Manitoba Hydro to maintain reliable service to customers in a sustainable manner.

4.4. Potential Negative Implications to Provincial Credit Ratings and Manitoba Hydro's Borrowing Costs

4.4.1. Customers Benefit from High Credit Rating of Manitoba

As discussed in Tab 2, Section 2.4.4, page 34 of 49, and by Mr. Schulz in his direct evidence, the Province of Manitoba has a high credit rating as can be seen in the following figure that shows the long term credit ratings for each of the Canadian provinces. As Manitoba Hydro receives a flow through credit from the Province of Manitoba, this high credit rating benefits its customers by reducing the cost of borrowing that the Corporation must recover in its rates.

Figure 47- Provincial Long Term Credit Ratings Comparison

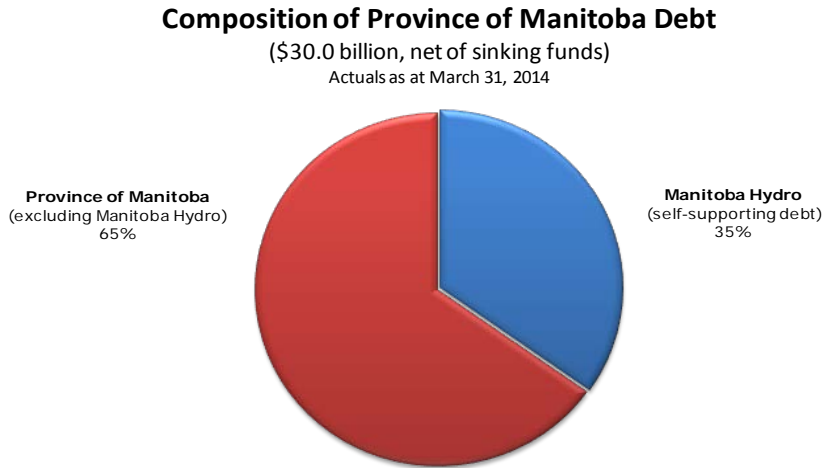
Province	Standard & Poors	DBRS	Moody's Investors Service
British Columbia	AAA	AA (high)	Aaa
Saskatchewan	AAA	AA	Aaa
Alberta	AAA	AAA	Aaa
Manitoba	AA	A (high)	Aa1
Ontario	AA-	AA (low)	Aa2
Nova Scotia	A+	A (high)	Aa2
Newfoundland & Labrador	A+	A	Aa2
Québec	A+	A (high)	Aa2
New Brunswick	A+	A (high)	Aa2
Prince Edward Island	A	A (low)	Aa2

As was outlined by Mr. Rainkie on page 4639 of the transcript, it is of critical importance that Manitoba Hydro maintain access to low cost financing during a time of major capital investment.

4.4.2. Requirements for Supportive Regulatory Framework & Maintaining Self-Supporting Status

As demonstrated in the figure below, debt advances to Manitoba Hydro form a significant portion of the total provincial debt and the Corporation's financial performance is therefore a contributing factor toward the financial strength and stability of the Province's credit rating. The Credit Rating Agencies view Manitoba Hydro to be financially self-supporting in that the Corporation is able to meet its financial obligations based on its own revenues without being supported by the tax-base of the Province.

1 **Figure 48- Composition of Province of Manitoba Debt**



14 Credit rating agencies view Manitoba Hydro's current low rates and reasonable
15 regulatory framework as positive ratings considerations. It is important that credit rating
16 agencies continue to view Manitoba Hydro's debt as self-supporting and that weakened
17 financial ratios as a result of major capital investments and reinvestments do not
18 negatively impact the credit ratings of the Province or Manitoba Hydro's borrowing
19 costs.

20
21 The proposed rate increases are necessary to continue to demonstrate to the credit rating
22 agencies that the regulatory framework in Manitoba is supportive of Manitoba Hydro's
23 self-supporting financial status and that the Corporation can recover its actual costs of
24 providing service to customers through rates.

25
26 In Order 43/13, the PUB recognized the importance of Manitoba Hydro's financial
27 strength to deal with financial risks and to ensure that the credit rating of the province is
28 not negatively impacted.

29
30 *Manitoba Hydro currently has achieved its debt-to-equity target of 75:25. However,*
31 *the Board is concerned about the contemplated deterioration in the utility's financial*
32 *targets, particularly the fact that by 2021, the debt-to-equity ratio is projected to be*
33 *90:10. Any further escalations in the capital cost for Manitoba Hydro's major new*
34 *capital projects will cause the financial structure to deteriorate further.*

35

1 *The Board notes that Manitoba Hydro shares the benefit of the flow-through credit*
2 *rating of the Province, which affords it preferential interest rates on its debt and*
3 *access to funds to meet its major capital spending program. However, as its debt*
4 *grows, there is a potential for Manitoba Hydro's financial condition to affect the*
5 *credit rating of the Province. It is important that Manitoba Hydro remains a*
6 *financially strong and viable organization.*

7
8 Source: Manitoba Public Utilities Board Order 43/13 dated April 26, 2013 (page
9 23)

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1 **5.0 MANITOBA HYDRO IS EFFECTIVELY CONTROLLING ITS COSTS TO**
2 **MAINTAIN PROJECTED 3.95% RATE INCREASES**
3

4 Section 5.0 of this Argument outlines Manitoba Hydro's plans to limit the growth in its
5 OM&A costs to 1% (excluding accounting changes) in order to maintain the 3.95%
6 projected rate increases.
7

8 **5.1. Manitoba Hydro has Implemented Effective Cost Control Measures to minimize**
9 **Growth in OM&A Expenditures**
10

11 Manitoba Hydro has shown through its evidence that it is committed to carefully
12 managing its costs and utilizing resources efficiently and effectively to fulfill its mandate
13 and provide maximum value to its stakeholders and ratepayers. In order to fulfill this
14 commitment, Manitoba Hydro continues to develop measures to manage its operating
15 costs, while at the same time balancing the need to ensure staffing levels are adequate to
16 provide safe and reliable service.
17

18 Manitoba Hydro explained at transcript page 301 how it has undertaken an extensive
19 review of its staff complement and is committed to reducing approximately 330
20 operational positions over the 3 year forecast period from 2014/15 to 2016/17, which
21 represents 8% of current EFTs charged to operating costs. These reductions will be
22 achieved through attrition, through the application of technology, and the consolidation
23 and elimination of work processes where appropriate.
24

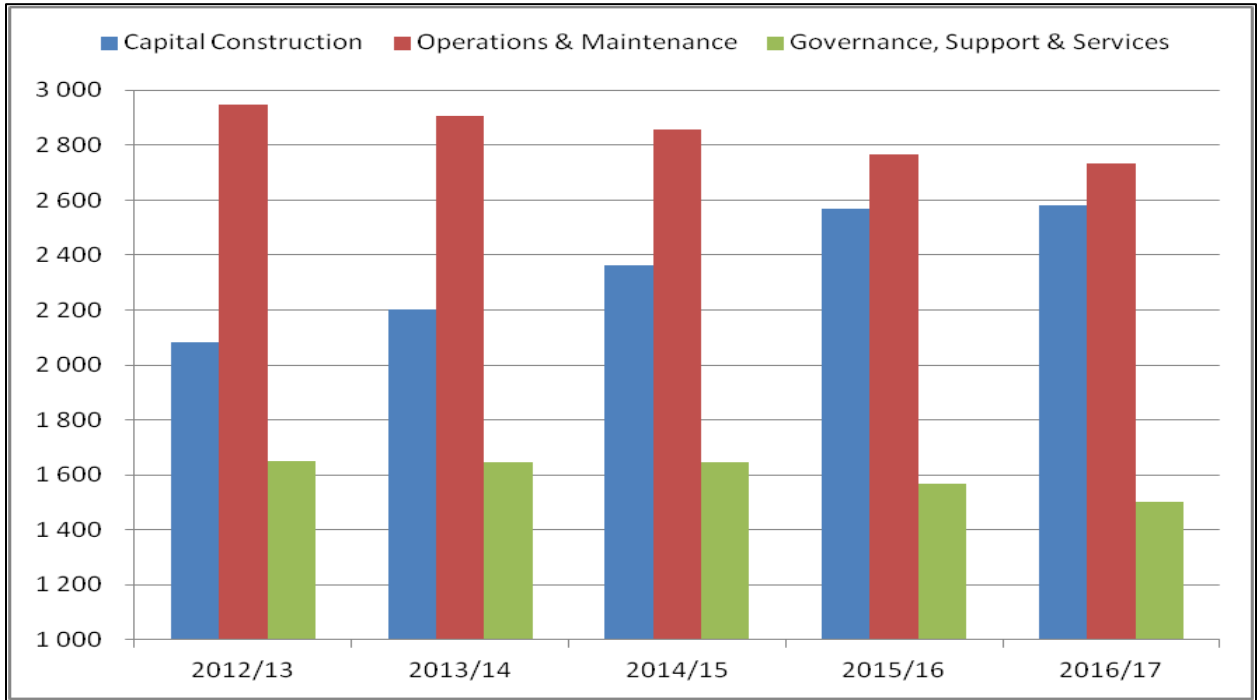
25 As discussed at transcript pages 2541-2542, Manitoba Hydro went through a detailed
26 review to determine the positions that could be reduced with due regard for having an
27 adequate staff complement to carry out operations safely, as well as to continue to
28 provide excellent customer service and adequate response times.
29

30 The following figure provides a summary of the Corporation's actual and projected EFT
31 employees for the period 2012/13 to 2016/17 segregated between those EFTs that work
32 on capital construction, operations & maintenance, and provide governance & support
33 services. As should be expected during a period of significant capital investment, the
34 EFTs associated with capital construction are increasing. In contrast, consistent with
35 Manitoba Hydro's commitment to manage its operating costs, the number of EFTs

1 associated with operations & maintenance and governance & support activities are
2 forecast to decline.

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Figure 49- Total Equivalent Full Time Employees- Capital, Operating & Support



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Manitoba Hydro has demonstrated excellent progress on operational staffing reductions in 2014/15. As demonstrated in the response to MH Exhibit #101, Manitoba Hydro achieved a total reduction of 232 operational positions in 2014/15, which was ahead of the commitment target for 2014/15 of 146 positions by 87 positions.

The quantum of the cumulative savings associated with the position reduction is projected to be approximately \$36 million by the end of 2016/17, which is an equivalent cost savings to over a 2% rate increase.

1 **Figure 50- Position (or Equivalent) Cost Reductions for 2014/15**

Position (or Equivalent) Cost Reductions for 2014/15

	Actual Position Reductions 2014/15*	Projected Reductions 2014/15	Higher than projected
President & CEO	2	2	0
General Counsel & Corporate Secretary	2	1	1
Human Resources & Corporate Services	53	33	20
Corporate Relations	6	3	3
Finance & Regulatory	6	4	2
Generation Operations	41	9	32
Major Capital Projects	3	1	2
Transmission	49	30	19
Customer Service & Distribution	49	46	3
Customer Care & Energy Conservation	21	16	5
Total	232	146	87

*Source: MH Exhibit 101

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5.2. Manitoba Hydro’s Cost Control Measures will Limit OM&A Growth to 1%

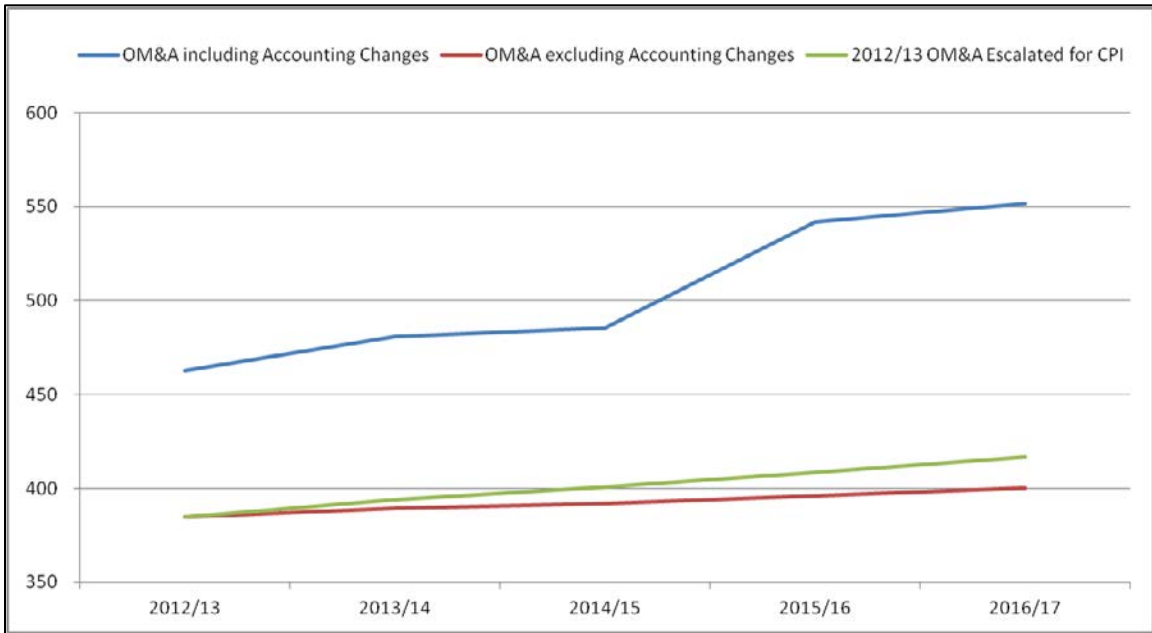
In addition to operating position reductions, Manitoba Hydro discussed during its evidence that it is continually undertaking a number of initiatives across the various Business Units that are intended to result in further operating and capital cost savings. Some of these key initiatives include Consolidation of Rural District Offices, Implementation of Mobile Workforce Management, Review of the Gillam Redevelopment & Expansion Project, and Supply Chain Management Initiatives.

As shown in the following figures, Manitoba Hydro’s year over year growth in OM&A, excluding accounting changes has been at or below inflation for most years, and these measures will allow the Corporation to maintain OM&A cost increases at an annual average increase of 1% per year (excluding accounting changes) through fiscal 2016/17 and beyond, which is below inflationary levels.

1 **Figure 51- Operating, Maintenance & Administrative Growth Excluding**
2 **Accounting Changes**

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2009-2014	2014-2017
	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Average Annual % Inc/(Dec)	Average Annual % Inc/(Dec)
OM&A % Change (excluding Accounting Changes)	2.7%	-0.1%	3.1%	2.4%	1.3%	0.6%	1.1%	1.1%	1.9%	0.9%
Manitoba CPI	1.9%	0.6%	2.8%	1.6%	2.4%	1.8%	1.9%	2.0%	1.9%	1.9%

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6 **Figure 52- Operating, Maintenance & Administrative Costs Including/Excluding**
7 **Accounting Changes**



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10 Cost containment measures have assisted the Corporation in maintaining projected annual
11 rate increases at the same 3.95% level as those projected in MH13, despite the
12 Corporation facing significant and increasing cost pressures. This is consistent with the
13 expectations of the PUB in Order 43/13, wherein it recommended that Manitoba Hydro
14 control OM&A costs increases below inflation.
15
16

1 **5.3. The Vacancy Rate used in Manitoba Hydro's Forecast is Appropriate**

2
3 Manitoba Hydro has included a 4.5% vacancy factor in its OM&A forecast in MH14.
4 This rate is lower than the actual vacancy rate over the past number of years.

5
6 MIPUG recommended in its final argument (Exhibit MIPUG-14 pages 3-1 through 3-3)
7 that higher historical vacancy rates should be used to assess the reasonableness of
8 Manitoba Hydro's rate request in terms of assessing the appropriateness of its forecasted
9 O&M expenses. MIPUG has suggested that a vacancy rate in the range between 7.2%
10 and 9.3% is appropriate and provides a scenario assuming a long term average vacancy
11 rate of 8.2%.

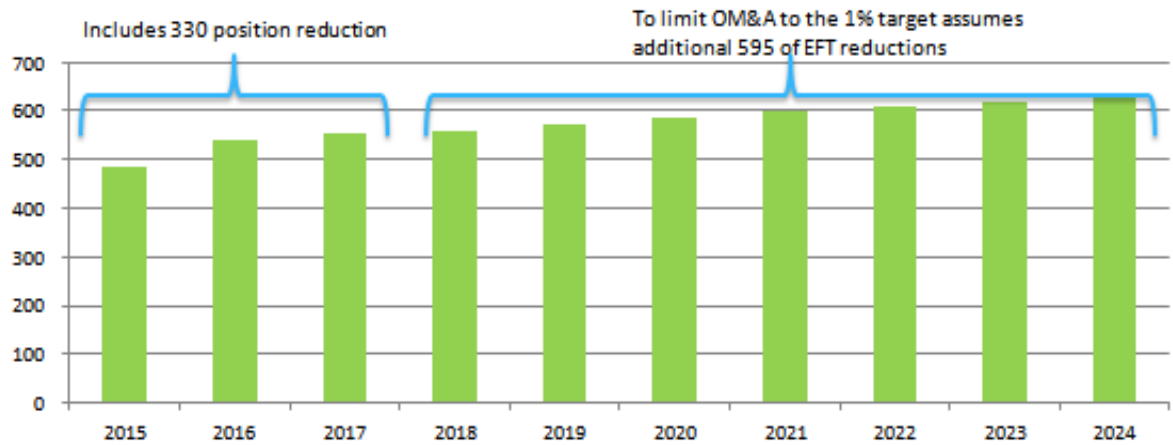
12
13 As discussed at transcript page 2104, salary costs have escalated at rates of approximately
14 4% in the last number of years, due to contracted wage settlements and merit and
15 progression. At the same time, Manitoba Hydro has been successful in limiting OM&A
16 growth to 1.9% in large part by holding a higher level of vacant positions, which has
17 resulted in a higher actual vacancy rate than forecast historically (transcript page 2184).

18
19 On a go forward basis, Manitoba Hydro has discussed during the proceeding how it is
20 taking a different approach and is eliminating positions by taking advantage of attrition
21 opportunities by streamlining processes through the use of technology and consolidation
22 or elimination of work. Manitoba Hydro has incorporated a reduction of more than 300
23 operational positions over the period of 2015-2017 in order to limit the average annual
24 increases in OM&A to 1% net of accounting changes. As such, a lower forecast vacancy
25 rate is expected and MIPUG's recommendation should be rejected.

26
27 In addition, as per Manitoba Hydro's response to PUB/MH II-1, while the 330 position
28 reductions assist the Corporation in meeting its OM&A targets through to 2016/17,
29 Manitoba Hydro will be reviewing other options, including additional EFT reductions in
30 order to meet the OM&A targets beyond 2016/17. It is estimated that approximately 595
31 additional EFT reductions would be necessary to achieve the OM&A targets through to
32 2023/24 as is outlined in the following figure. Any further reductions assumed through a
33 higher vacancy factor are not plausible as they would impair the Corporation's ability to
34 provide safe and reliable service. As such, the forecasted vacancy rate of 4.5% is
35 appropriate for projected employment levels that reflect the Corporation's focus on cost
36 containment.

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Figure 53- Projected Position Reductions to Limit OM&A Growth to 1%



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It is also noted in MH Exhibit #123, that the actual vacancy factor for 2014/15 was 5.5%, excluding the Customer Service & Distribution business, which experienced extenuating circumstances in 2014/15, the actual vacancy factor was 4.6%.

1 **6.0 A LONG-TERM PERSPECTIVE TO RATE-SETTING IS BENEFICIAL TO**
2 **CUSTOMERS**

3
4 Section 6.0 of the Argument provides Manitoba Hydro's position that a long-term
5 perspective to rate-setting is beneficial to customers and refutes intervenor positions that
6 the PUB should take a short-term perspective in approving rate increases.

7
8 **6.1. Rate Increases are Required Notwithstanding More Favorable Near-Term**
9 **Results**

10
11 Intervenors suggested that the PUB can grant lower rate increases, in the range of 2% to
12 3%, due to the near-term improvement in MH14 net income compared to previous
13 forecasts, as well as Manitoba Hydro's favourable financial performance over the last
14 decade.

15
16 The following figure from Tab 2, page 37 of 49, shows that projected net income from
17 electric operations (including the proposed rate increases) is higher in MH14 as compared
18 to MH13 in the near term to 2016/17, largely due to favourable water flow conditions, as
19 well as lower finance and depreciation expense.

20
21 Notwithstanding the more favourable near-term results, there are lower net earnings
22 projected in the remaining years of MH14, such that between the period 2017/18 to
23 2023/24 projected net earnings from electric operations (including indicative rate
24 increases of 3.95% per year) are \$666 million lower compared to MH13. In total, MH14
25 projects net losses of \$901 million between 2018/19 and 2023/24. As a result, financial
26 reserves are projected to deteriorate from the current level of \$2.7 billion to \$2.0 billion
27 by 2023/24. Lower than 3.95% rate increases in 2015/16 and 2016/17 would further
28 exacerbate the situation.

29
30

1 **Figure 54- Comparison of Electric Operations Net Income MH14 to MH13**

	Forecast 2014/15	Forecast 2015/16	Forecast 2016/17	10 Year Cumulative to 2023/24	20 Year Cumulative to 2033/34
Current Forecast (MH14)	\$ 102	\$ 115	\$ 59	\$ (559)	\$ 3 003
Previous Forecast (MH13)	55	12	19	(85)	4 775
Increase/ Decrease	\$ 48	\$ 103	\$ 41	\$ (474)	\$ (1 772)

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It is important to recognize that Manitoba Hydro’s financial results are subject to significant volatility based on potential changes in water flow conditions. At transcript page 682, Mr. Cormie explains:

“...we're now into the eleventh year of average or better. If you go back to 1962 to 1975, you have a four (4) -- a fourteen (14) year period of -- of similar conditions, where you have the long periods of -- of average or above average. This -- this one is slightly more productive than the previous high water period. But then you get into long periods of below average, like we went through the '80s and -- and the '90s, and if you go back, in the '30s. So this -- this pattern of -- is -- is quite typical in -- in major watersheds where you have cyclical -- long cyclical periods. The main reverting point is that, at some point in time, the -- the high water periods will end and we'll go back into a below average period. And I think we're -- we're -- you know, we -- we're getting -- I -- I would suspect, based on history, that we're getting close to that point now, where history has never shown us to have a longer period than -- than fourteen (14) years”

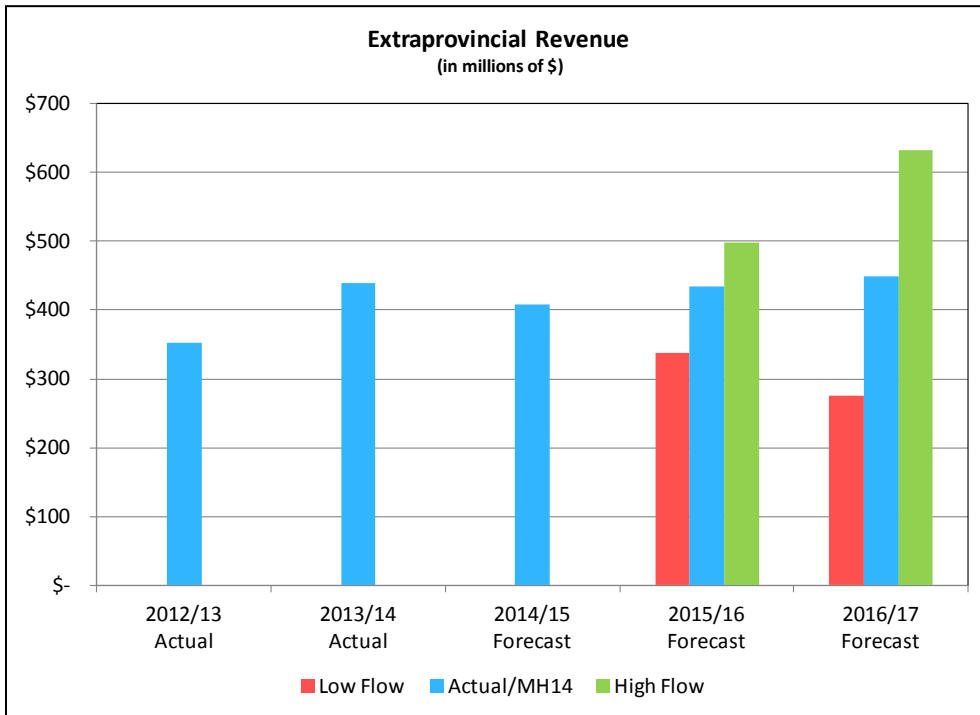
The following figures from Exhibit MH-36, pages 9 and 11, show the extraprovincial revenues and fuel and power purchases forecast for MH14 (blue bars) assuming expected water flows for 2014/15 and median water inflows for 2015/16 and average water flows for 2016/17.

Actual generation came in very close to what was forecast for 2014/15; however, there can be significant uncertainty in flows in 2015/16. For 2015/16 and 2016/17, the red and green bars on either side of the MH14 blue bars indicate the potential impacts due to low and high flows, respectively.

1 As shown in the figure below, in 2015/16, extraprovincial revenue could be as much as
2 \$100 million lower under low flow conditions than MH14 and \$175 million lower in
3 2016/17 under low flow conditions.

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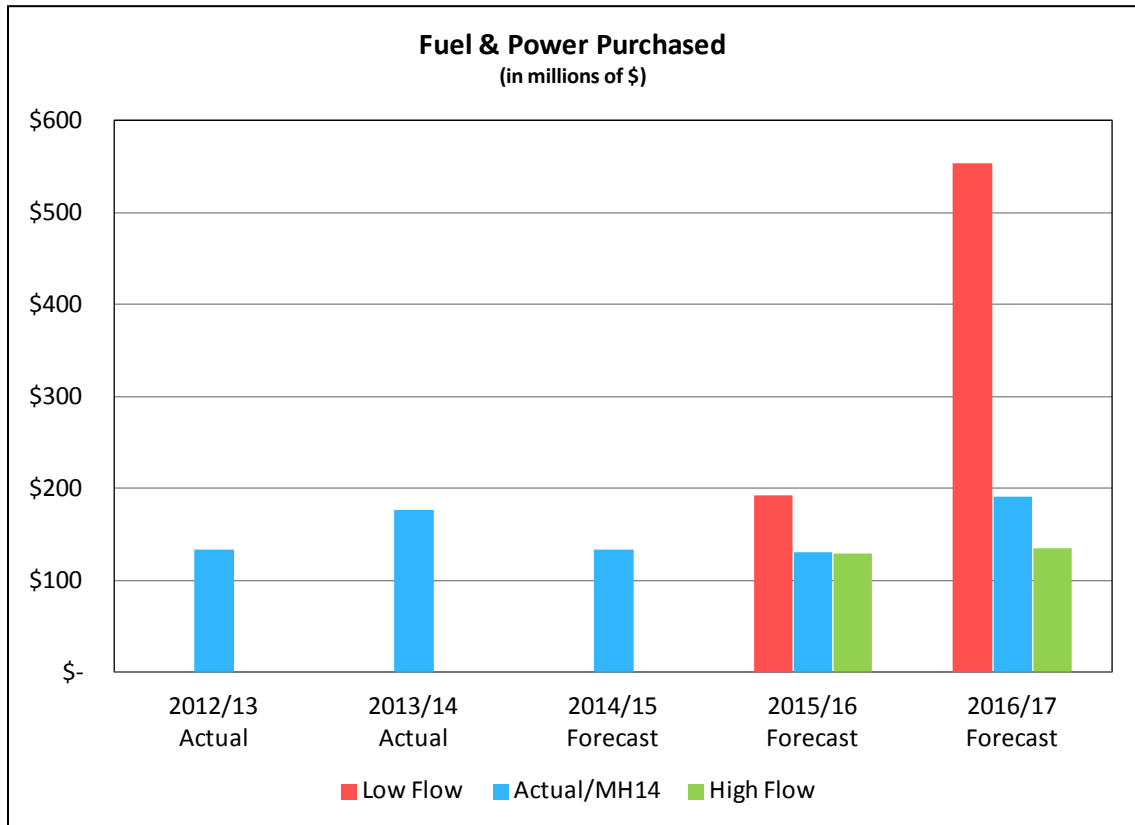
Figure 55- Extraprovincial Revenue



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As shown in the following figure, fuel and power purchase can be as much as \$60 million in 2015/16 and \$360 million higher in 2016/17 compared to MH14 under low water flows.

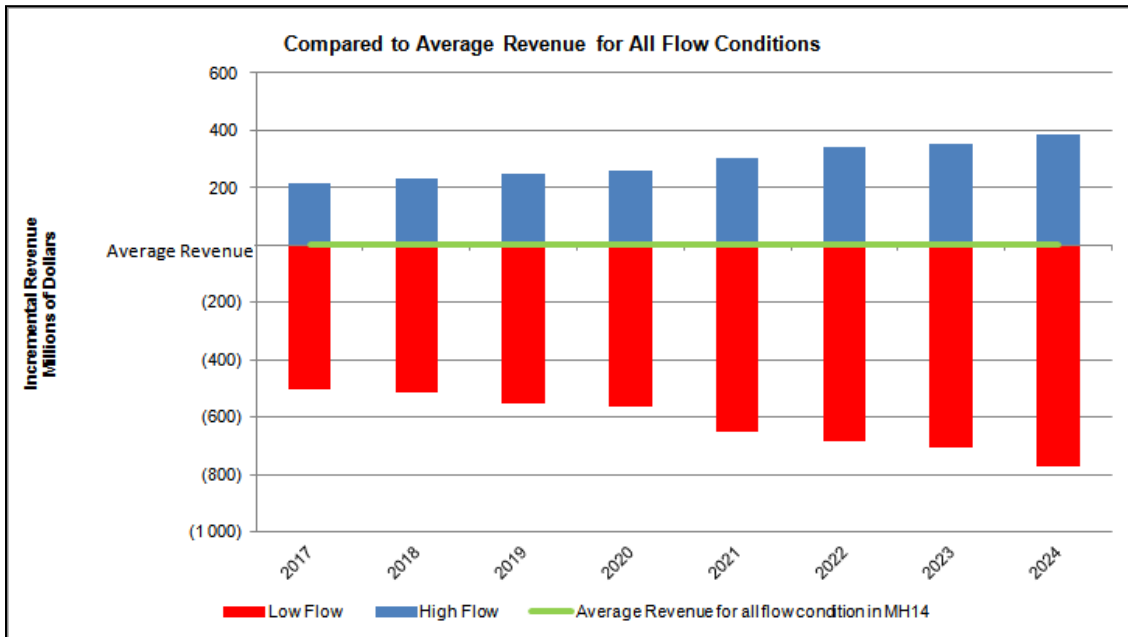
1 **Figure 56- Fuel & Power Purchased**



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Over the longer term, MH14 is forecast based on the average revenues for all water flow conditions for the past 102 years for the subsequent years of the forecast (2016/17 and thereafter). The following chart from Exhibit MH-31, page 50, which compares the potential increase in net extraprovincial revenues as a result of high water flows (blue bars) with the potential decrease in net extraprovincial revenues associated with low water conditions (red bars) for the period from 2016/17 to 2023/24. In this chart, the bolded green line represents the average revenues for all flow conditions upon which the extraprovincial revenues in MH14 have been forecast.

1 **Figure 57- Variability of Net Extraprovincial Revenue 2017-2024**



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As Mr. Cormie indicates at transcript page 671, the mean reverting nature of water flows suggests that Manitoba Hydro can expect a period of low flows to return to the average as reflected in MH14. The gradual implementation of rate increases over the 20-year forecast period is integral to addressing the distinct possibility of low flows occurring in the next several years.

10 It is necessary that rate increases be implemented gradually, even in years with
11 favourable water flows and financial results, to balance out the inevitable years with
12 lower water conditions in order to maintain average rate increases of 3.95% over the long
13 term.

14
15 The challenge for Manitoba Hydro is not forecast accuracy but managing the volatility in
16 water flows. There is very little that can be done to slow the deterioration in financial
17 position once it is recognized that Manitoba Hydro is in a low flow period.

18
19 **6.2. Inflationary Rate Increases are Not Sufficient to Maintain Rate Stability for**
20 **Customers**

21
22 As noted in Section 3.1 of the Argument, revenue requirements are being largely driven
23 by the extensive investments to be made on behalf of domestic customers, which are

1 much more significant than inflationary cost pressures. Mr. Rainkie testified at transcript
2 page 299 that, "...the projected increases in the revenue requirement are driven by the
3 extensive investments, and capital to be made on it on behalf of customers. They are not
4 inflationary cost pressures, so trying to match up a revenue stream based on inflation
5 with a cost line that is not moving at inflation is -- is not going to work."
6

7 The interveners have recommended that rate increases that are more in line with the rate
8 of inflation, in the range of 2% to 3%, should be granted by the PUB. MIPUG submitted
9 in its direct evidence two alternative rate scenarios, 2% in 2016/17 and 2.5% for the four
10 years from 2015/16 to 2018/19. These scenarios assumed an 8.4% vacancy rate,
11 continuing to capitalize ineligible overhead, and retaining the CGAAP ASL depreciation
12 methodology.
13

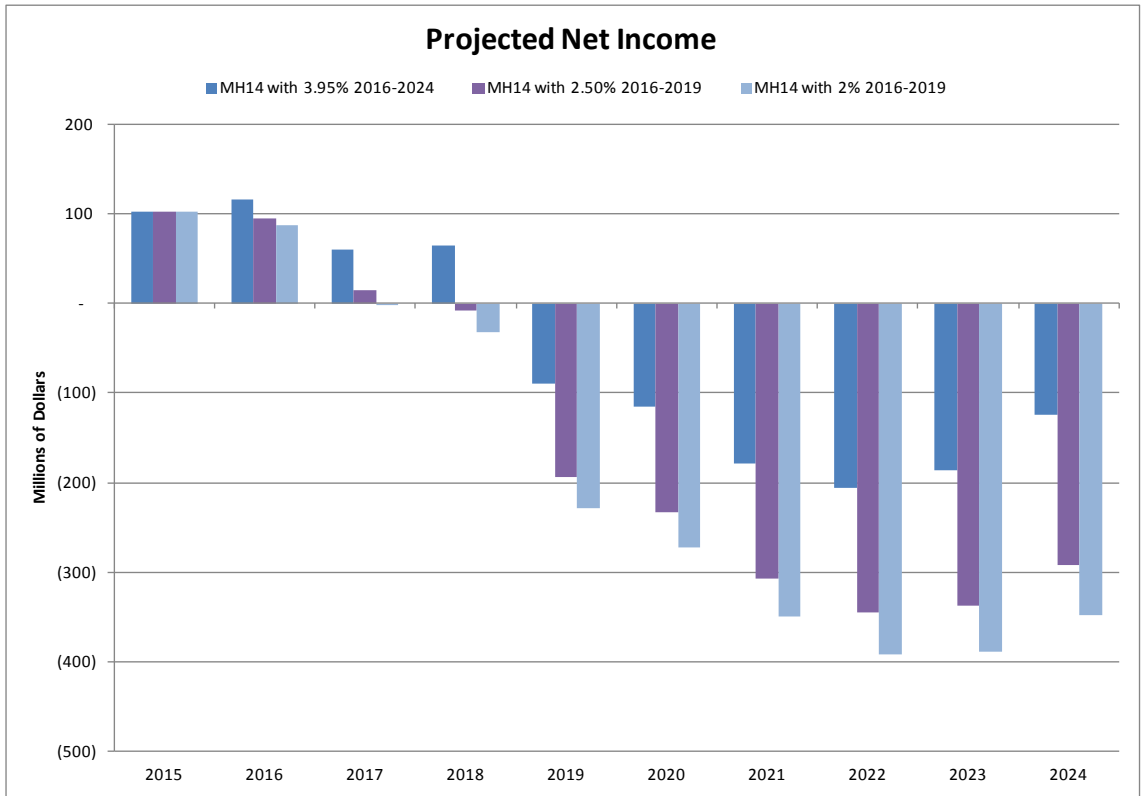
14 The MIPUG scenarios are not realistic in that they utilize an artificially high vacancy rate
15 (see Section 5.3 of the Argument), and did not consider the amortization of overhead and
16 depreciation differences that would result from the need to establish separate regulatory
17 deferral accounts (see Sections 8.2 below). Further, MIPUG did not present the full
18 balance sheet and financial ratio impacts of the scenarios.
19

20 In order to demonstrate the full financial impacts of 2.5% rate increases from 2015/16 to
21 2018/19, and to correct for the deficiencies in the MIPUG scenario, Manitoba Hydro
22 provided this alternate rate scenario in MH Exhibit #130.
23

24 As discussed and shown during oral closing arguments, the following figures provide a
25 comparison of the net income, retained earnings, equity ratio, interest coverage ratio and
26 capital coverage ratio under the following scenarios:
27

- 28 • MH14 3.95% rate increases from 2016-2024;
 - 29 • 2.5% rate increases from 2016-2019 and 3.95% thereafter to 2024; and,
 - 30 • 2% rate increases from 2016-2019 and 3.95% thereafter to 2024.
- 31
32

1 **Figure 58- Projected Net Income (Loss): 3.95% (2016-2024), 2.50% (2016-2019), and**
2 **2.0% (2016-2019)**

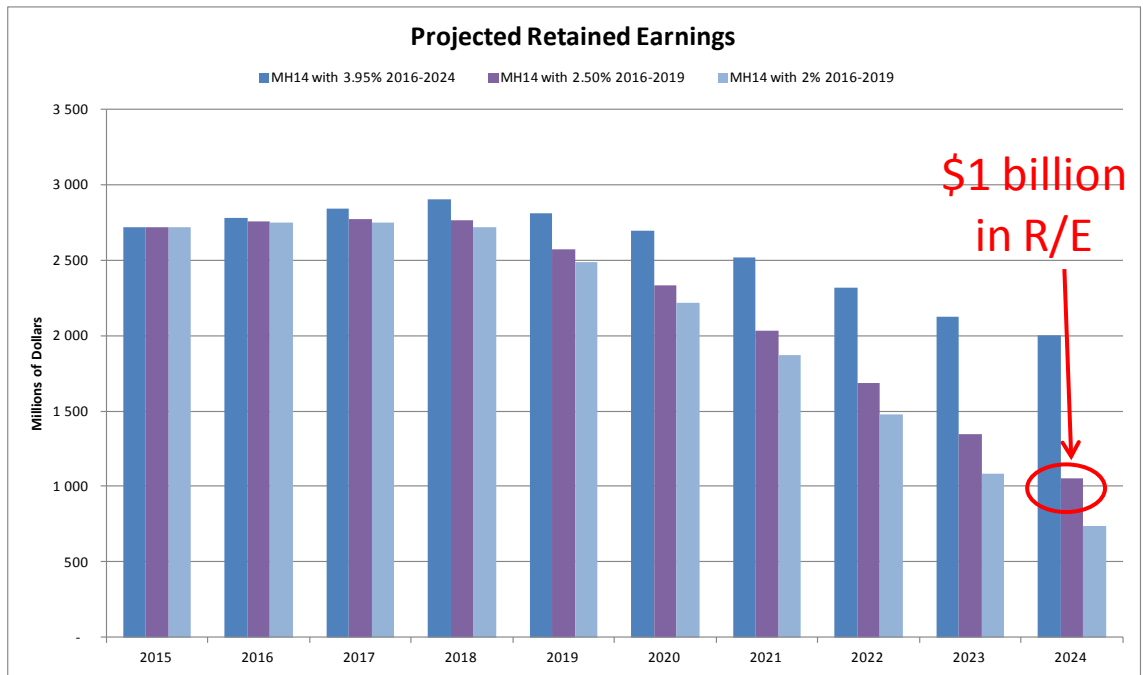


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5 As shown in the figure above, the 2.0% scenario results in net losses of \$2.0 billion
6 between 2017 to 2024, and the 2.5% rate scenario results in net losses that total \$1.7
7 billion between 2018 to 2024. This contrasts with the MH14 3.95% scenario that results
8 in net losses of \$0.9 billion between 2019 to 2024. The 2.0% and 2.5% rate scenarios
9 result in projected losses that are between \$0.8 billion and \$1.1 billion higher than the
10 MH14 3.95% rate scenario.

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Figure 59- Projected Retained Earnings: 3.95% (2016-2024), 2.50% (2016-2019), and 2.0% (2016-2019)



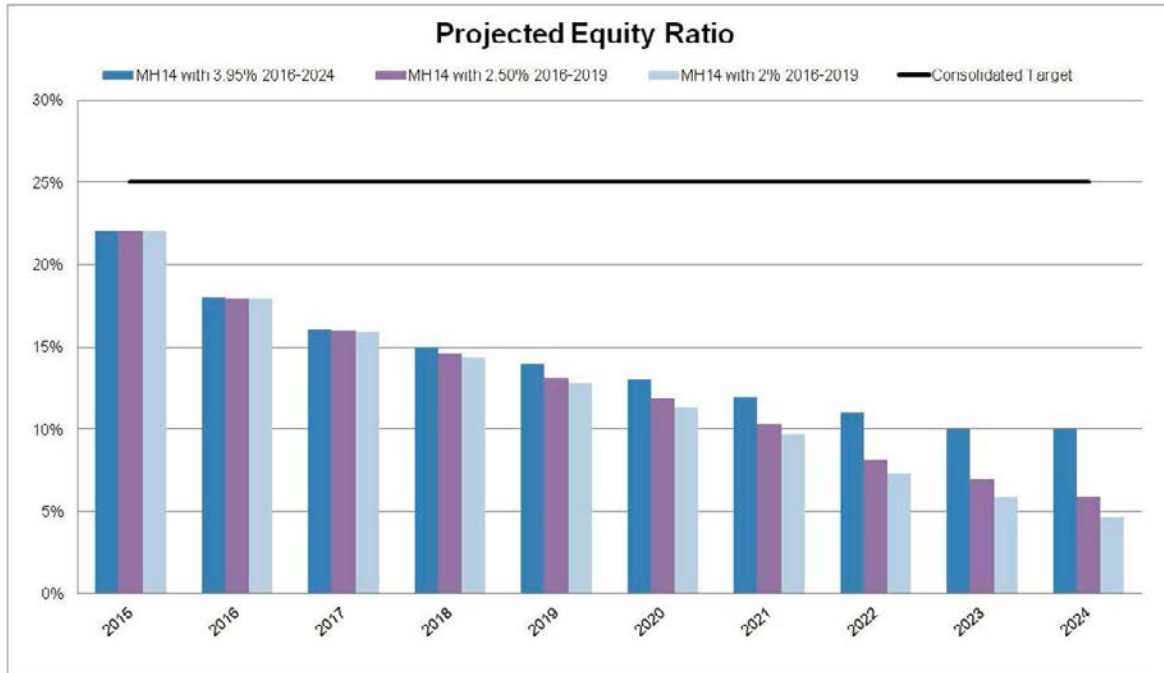
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As shown in the figure above, the 2.0% scenario results in projected retained earnings of \$0.7 billion in 2024, and the 2.5% rate scenario results in projected retained earnings of \$1.0 billion in 2024. Both the 2.0% and the 2.5% rate scenarios result in retained earnings which are significantly lower than Manitoba Hydro's \$1.7 billion estimate of the cost of a 5-year drought. The MH14 3.95% scenario results in retained earnings of \$2.0 billion in 2024.

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The 2.0% scenario also results in an increase in net debt of \$12.7 billion by 2024 with incremental finance expense of \$240 million by 2024 or an average of \$26 million per year. The 2.5% rate scenario results in an increase in net debt of \$12.4 billion by 2024 with incremental finance expense of more than \$180 million by 2024 or an average of \$20 million per year. Under MH14's 3.95% rate increase scenario, net debt increases by \$11.5 billion by 2024. The 2.0% and 2.5% rate increase scenarios result in projected net debt that is between \$0.9 billion and \$1.2 billion higher than the MH14 3.95% rate increase scenario.

1 **Figure 60- Projected Equity Ratio: 3.95% (2016-2024), 2.50% (2016-2019), and**
2 **2.0% (2016-2019)**



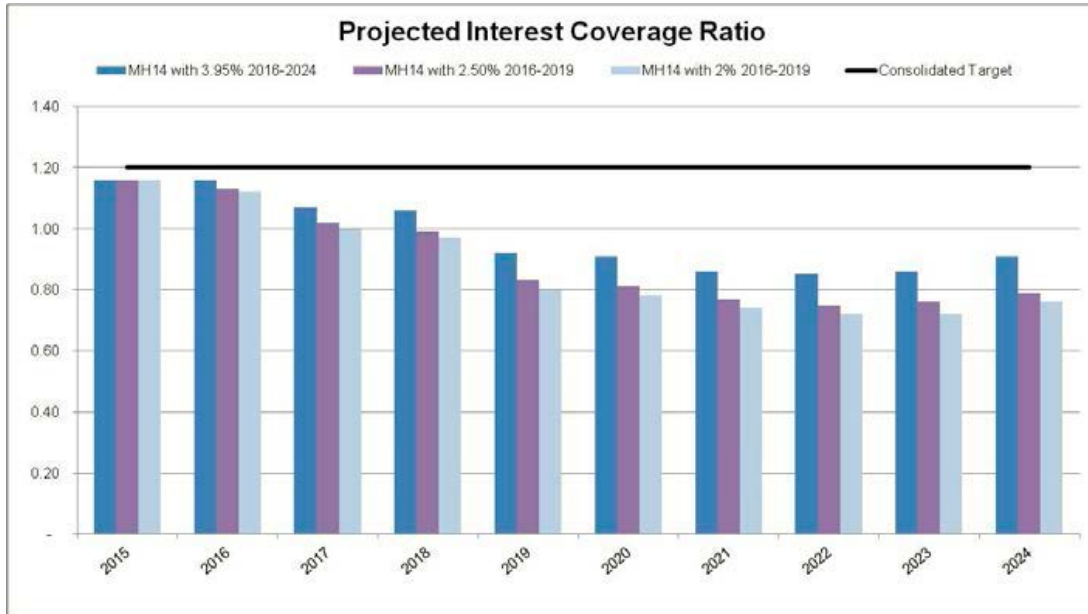
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5 As shown in the figure above, the 2.0% scenario results in a projected equity ratio of 5%
6 in 2024, and the 2.5% rate scenario results in projected equity ratio of 6% in 2024. Both
7 the 2.0% and the 2.5% rate scenarios result in equity ratios which are significantly lower
8 than the 10% minimum acceptable level that is projected in the MH14 3.95% scenario.

9
10 In recommending rate increases of 2.5%, MIPUG has suggested that Manitoba Hydro
11 should finance a significant portion of its sustaining capital expenditures with debt
12 financing. As discussed in Section 2.5.2, Manitoba Hydro is taking advantage of low cost
13 financing in order to fund the extensive investment in major new generation and
14 transmission assets that will be required over the next decade, but it does not believe that
15 it is prudent to finance a greater proportion of its sustaining capital expenditures with
16 debt and deteriorate its debt to equity ratio further below 90:10.

17
18

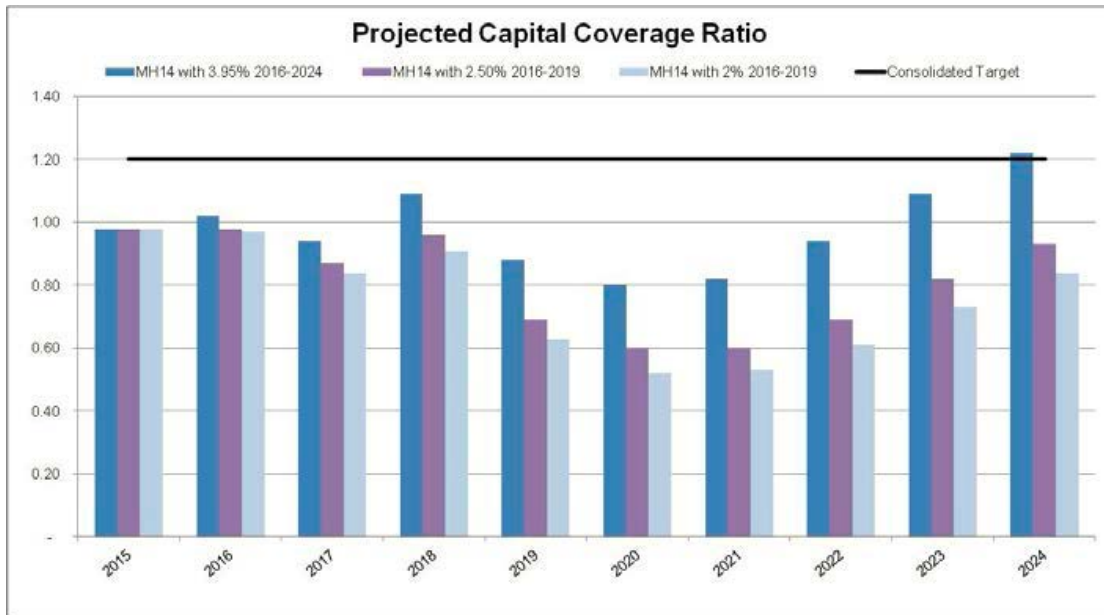
1
2

Figure 61- Projected Interest Coverage Ratio: 3.95% (2016-2024), 2.50% (2016-2019), and 2.0% (2016-2019)



3
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6

Figure 62- Projected Capital Coverage Ratio: 3.95% (2016-2024), 2.50% (2016-2019), and 2.0% (2016-2019)



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11

As can be seen in Figures 61 and 62 above, the 2.0% and 2.5% rate increase scenarios result in projected interest and capital coverage ratios that are well below those projected in the MH14 3.95% rate increase scenario and well below minimum acceptable levels.

1 As the preceding scenarios demonstrate, if inflationary rate increases were granted by the
2 PUB, financial reserves would be significantly depleted by 2024. In the face of risks such
3 as future low water flow conditions or rising interest rates, this situation would jeopardize
4 Manitoba Hydro's ability to provide rate stability to customers as it would be unable to
5 recover the real costs of providing an essential service and ensure sufficient financial
6 reserves are in place.

7
8 Similar to the suggestion that a rate increase can be forgone during those years where
9 current results are better than projected, granting a rate increase that does not allow the
10 utility to recover its costs each year will only result in higher borrowing requirements in
11 future. The impact of deferring or reducing the needed 3.95% rate increases will be to the
12 detriment of customers, as it serves to increase the requirements for higher rate increases
13 in the future than have been projected in MH14. This approach does not achieve rate
14 stability in the long-run and will subject consumers to increased rate volatility in the
15 future.

16 17 **6.3. A Long-Term Perspective to Rate-Setting is Beneficial to Customers**

18
19 As a result of the extensive investments that Manitoba Hydro has to make to continue to
20 provide safe and reliable service to customers, there is a requirement for a period of
21 continual rate increases to cover the associated costs. Setting rates considering longer-
22 term revenue requirements, as opposed to being overly focused on the shorter term
23 financial outlook, is the prudent approach and in the best interest of customers. Focusing
24 only on the short term, will inevitably result in rate instability as ratepayers will be
25 faced with substantially higher rate increases in the future, especially considering the
26 longer term and significant investments Manitoba Hydro is undertaking.

27
28 The Corporation believes that the position advanced by the Green Action Centre (page 3
29 of its written submission) as part of Manitoba Hydro's Application for Interim Electric
30 Rates effective April 1, 2014 appropriately acknowledges that the proposed rate increases
31 should be assessed through a longer-term perspective.

32
33 *"In order to reconcile the variability of the Manitoba Hydro revenue*
34 *stream with the stability desired by many of Manitoba Hydro's customers,*
35 *the Board ought to look at setting rates on the basis of longer term trends*
36 *as opposed to the actual results of last year's revenues or the short-term*

1 *conditions, be they favourable or unfavourable. GAC is of the view that*
2 *the current longer term trends point strongly in the direction of requiring*
3 *more revenue for Manitoba Hydro”*
4

5 While reducing rate increases in the short-term may offer some temporary relief to
6 ratepayers in the immediate year, the reality is that doing so does not eliminate the impact
7 on consumers but only defers the rate increase to a future period. Regular and moderate
8 rate increases, such as those proposed in this Application, minimize the impact to
9 ratepayers arising from the unavoidable need to make the necessary investments in
10 Manitoba Hydro’s system and the risk associated with adverse conditions such as below
11 average water flow conditions. Such an approach is critical when considering the long
12 term significant investments that Manitoba Hydro is undertaking on behalf of customers.
13

14 If Manitoba Hydro has short-term results that are more favourable than forecast, the
15 situation is actually beneficial for customers as the Corporation would be required to
16 borrow less debt, which would ultimately reduce the costs to be recovered from
17 ratepayers.
18

19 To ensure rate stability for customers, Manitoba Hydro submits that the most reasonable
20 and prudent approach is to implement regular and reasonable rate increases, even during
21 periods of favourable water flows, thereby balancing the inevitable years of less
22 favourable than forecast results where water flows are below average.
23
24
25

1 **7.0 MANITOBA HYDRO HAS APPROPRIATELY PRIORITIZED AND PACED ITS**
2 **SUSTAINING CAPITAL EXPENDITURES**

3
4 Section 7.0 of the Argument will demonstrate that Manitoba Hydro has appropriately
5 prioritized and paced its investment in sustaining capital expenditures based upon risk
6 assessments and that the totality of the information provided on Manitoba Hydro's capital
7 expenditure forecast in this proceeding is appropriate for rate setting purposes.
8

9 **7.1. Manitoba Hydro has Appropriately Prioritized its Sustaining Capital**
10 **Expenditures**

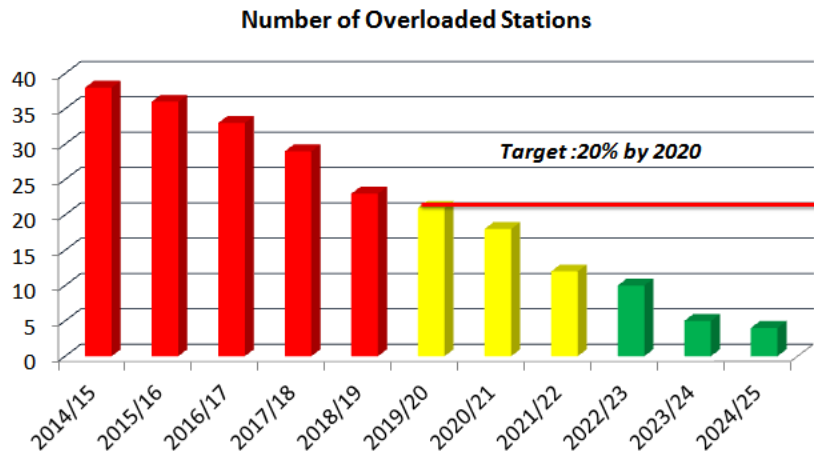
11
12 The PUB heard three days of testimony from Mr. Read, Mr. Morin and Dr. Swatek in
13 candid detail as to why sustaining capital expenditures are required. The Planning and
14 Operations Panel showed the PUB photographs of the current state of some of Manitoba
15 Hydro's assets, as shown in the figure below.
16

17 **Figure 63- Examples of Distribution Assets in Very Poor Condition**



18
19 Manitoba Hydro also showed the PUB the capacity problem that is occurring today. As
20 shown in the figure below, the capacity problem decreases over a 10 year period under
21 the assumption that Manitoba Hydro is receiving investments based on 3.95% rate
22 increases over the forecast period.
23

1 **Figure 64- Overloaded Stations in Winnipeg**

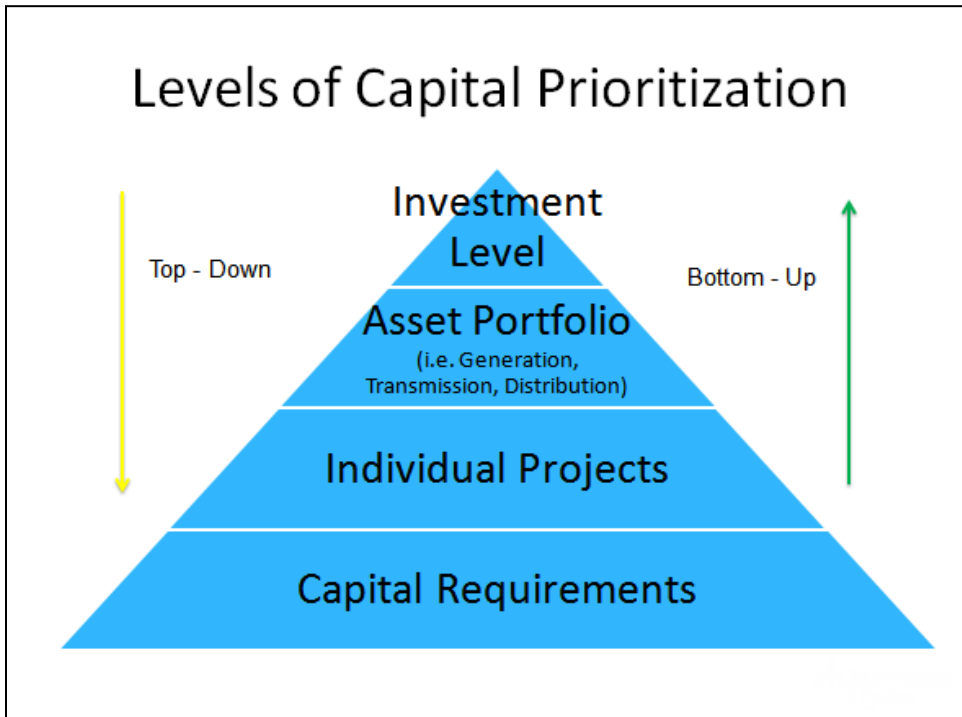


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As outlined by Ms Bauerlein, starting on page 851 of the transcript, Manitoba Hydro prioritizes its investment in sustaining capital through a framework that is guided by the key areas of focus in its CSP, including safety, energy conservation, Aboriginal relationships, financial strength, customer value, workforce management and the environment. The complexities of this prioritization process include the need to maintain the financial strength of the corporation, to withstand the risks inherent in Manitoba Hydro’s operations and to provide customers with long term rate stability.

This prioritization framework consists of the following levels and incorporates both a top-down and bottom-up approach, as illustrated in the chart below.

1 **Figure 65- Levels of Capital Prioritization**



2
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9

As outlined in Ms. Bauerlein’s direct evidence, there are three (3) levels of prioritization which address the overall need for investment as identified in the fourth level (capital requirements).

7.1.1 Investment Level

10 The first level assesses the overall requirement for sustaining capital expenditure which is
11 managed by Manitoba Hydro’s executive. In evaluating the overall investment in
12 sustaining capital, the executive must consider the risks related to reliability, safety and
13 load growth and balance these against the financial strength (e.g. debt/equity ratio) of the
14 utility along with rate stability for customers.

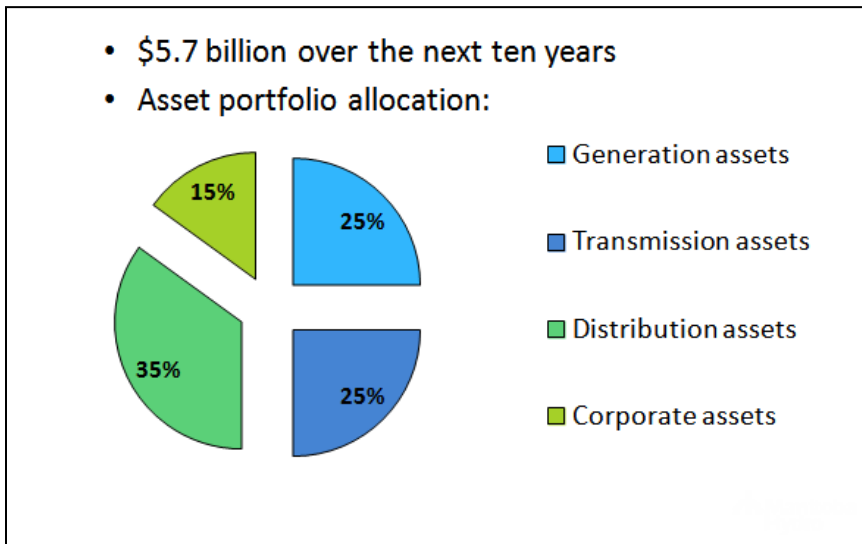
15
16 The level of investment is set considering Manitoba Hydro’s projected capital coverage
17 ratio, which indicates the projected amount of cash flow from operations that can be
18 utilized to fund sustaining capital expenditures. In MH14, Manitoba Hydro has set a level
19 of overall sustaining capital expenditures in the 2015 to 2017 fiscal years that is
20 consistent with a projected capital coverage ratio of approximately 1.0 and projected cash
21 flow from operations of approximately \$600 million per year. While Manitoba Hydro’s

1 capital coverage target is 1.20, it is recognized that it will be difficult to attain this target
2 in the near term as a result of the requirements to replace aging utility assets and address
3 capacity concerns on the existing electrical system.
4

5 **7.1.2 Asset Portfolio Level**

6
7 The second level of capital prioritization is the allocation of investment to generation,
8 transmission, distribution and corporate assets. The allocation of the investment to the
9 various asset categories in MH14 is presented below.
10

11 **Figure 66- Sustaining Capital Allocation**



12
13
14 The process for allocating investment to the major asset categories takes into
15 consideration long-term planning goals, asset condition, operational risks including safety
16 and reliability, as well as resource demands.
17

18 As stated in Manitoba Hydro's response to Coalition/MH I-11a, on an ongoing basis,
19 approved capital targets are reviewed at the Vice-President level to assess whether a
20 reallocation of funds is required in order to balance operational priorities and optimize
21 overall corporate value considering changes in business, financial and economic
22 assumptions as well as operational risk factors.
23
24

1 **7.1.3 Individual Project Level**
2

3 The third level of capital prioritization allocates funds within the asset portfolio level to
4 the individual projects. Each asset category has unique operational, maintenance and risk
5 factors and as such a Vice-President has been assigned to manage each asset category.
6 Manitoba Hydro utilizes a common set of risk criteria to prioritize its capital investments
7 and manage its portfolio of projects with consideration for asset condition and
8 maximizing economic value. Risk factors include public and employee safety, impacts of
9 reliability and capacity on system operations, customer requirements including load
10 growth and environmental impacts.

11
12 As Manitoba Hydro noted several times on the record (Exhibit #36, transcript page 764 &
13 765) Manitoba Hydro does not prioritize capital based solely on age.

14
15 While the overall framework for capital prioritization is consistently applied across the
16 Corporation, the risk management tools and prioritization processes are customized to
17 address the specific characteristics and risks associated with the varied asset categories
18 within each area. For example the prioritization of transmission projects must consider
19 compliance with the North American Electric Reliability Corporation (NERC) standards.
20 The evaluation of risk considers both the consequence and the probability of occurrence,
21 recognizing that a project may be impacted by multiple risk factors. Advancement and
22 deferral of capital projects occurs throughout the year to address changing priorities while
23 managing within approved funding levels.

24
25 The fourth level represents the overall capital requirements or need for investment for
26 each asset category and is further discussed in section 2.3.

27
28 Each project that is identified needs to be evaluated through the Capital Project
29 Justification (CPJ) process. Each CPJ contains detailed information relative to each
30 project including the business case, risk assessment and other pertinent details. In
31 addition, many CPJ's are supported by detailed engineering studies. The requirement and
32 justification for the project is reviewed at either the Vice-President or Executive
33 Committee level.

34
35 The prioritization process is an iterative approach whereby approved capital investments
36 are reviewed on an on-going basis to assess whether a reallocation of funds is required in

1 order to prioritize and optimize changes in business, financial and economic assumptions
2 as well as operational risk factors. As per Ms. Bauerlein’s testimony (TP 855-856) “*This*
3 *is really a continuous process for Manitoba Hydro, and that we reallocate dollars as*
4 *priorities change. That is one (1) of the key advantages of taking a portfolio approach.*
5 *We continually assess what those investment requirements are.*”
6

7 The advantages of Manitoba Hydro’s capital prioritization framework is that it:
8

- 9 • Considers long-term planning objectives while addressing short term challenges
 - 10 • Is flexible to accommodate unexpected risks
 - 11 • Addresses changing priorities through reallocation of funds
 - 12 • Is a collaborative and continuous process
 - 13 • Aligns organizational structure with asset groups
- 14

15 This process balances the need for safe and reliable service with the Corporation’s
16 financial strength and rate stability for customers.
17

18 **7.2. Manitoba Hydro has Appropriately Paced its Sustaining Capital Expenditures**

19

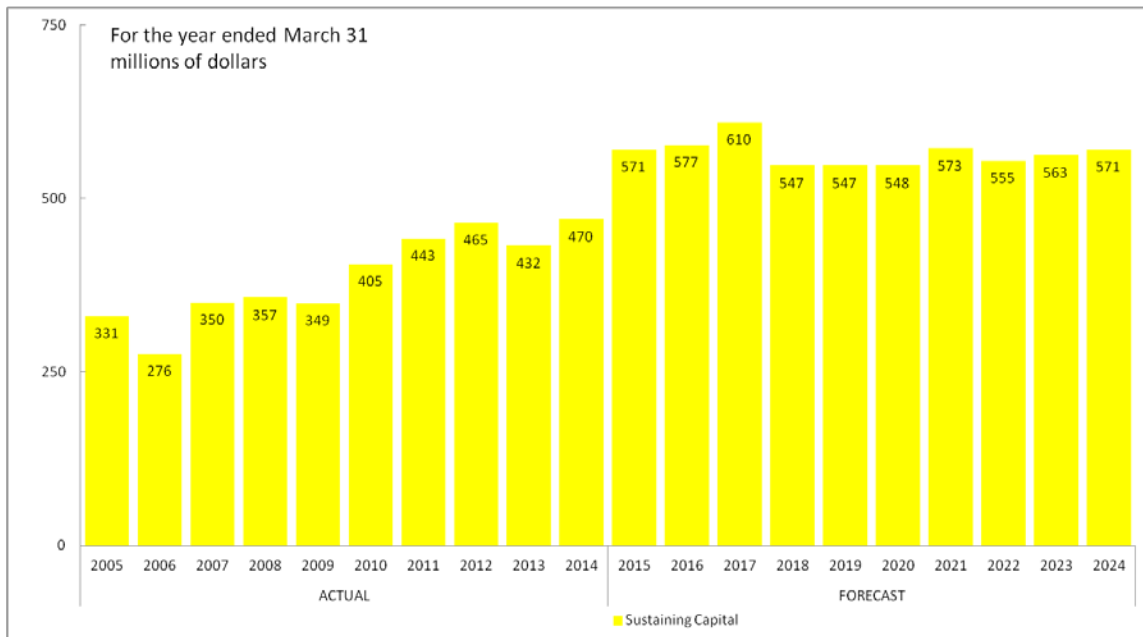
20 In its opening comments at transcript page 180, MIPUG explained that its members take
21 a long-term view in making capital investment decisions and support a prioritized and
22 paced investment that considers rate impacts for all consumers. Manitoba Hydro concurs
23 that a longer term perspective in capital planning is the prudent approach and is in the
24 best interest of customers, especially considering the extensive investments that Manitoba
25 Hydro will make over the next ten years in order to continue to provide safe and reliable
26 service to customers. In Section 2.3 of the Argument, Manitoba Hydro describes how this
27 investment will be allocated over the next decade to its generation, transmission and
28 distribution assets.
29

30 The proposed timing and levels of sustaining capital investment were derived after
31 careful consideration of Manitoba Hydro’s other significant capital investments and
32 financial position over the next 10 years. This reality includes the Keeyask Generating
33 station and the Bipole III Reliability Projects which have received the necessary
34 government and environmental approvals and are currently under construction. The
35 sustaining capital investment required to ensure Manitoba Hydro can maintain its

1 mandate to provide safe and reliable service for customers is projected at \$5.7 billion
2 over the next decade in CEF14.

3
4 The following chart demonstrates that although the overall requirement for sustaining
5 capital investment has increased, Manitoba Hydro has been gradually increasing this
6 investment and intends to maintain a stable level of investment over the forecast period.
7

8 **Figure 67- Sustaining Capital Expenditures**



9
10
11 As stated by Ms. Fernandes (TP 4636) “As you can see from this slide, we have been
12 increasing our sustaining capital gradually over the last ten (10) years, and we will
13 continue to increase our sustaining capital expenditures. And I submit to you that this
14 graph shows you that we are pacing.”

15
16 Manitoba Hydro has demonstrated that the pace and prioritization of its investments in
17 sustaining capital is in the best interests of the ratepayers of Manitoba. As stated by Mr.
18 Rainkie (TP 1496)

19
20 “..., I think the -- this panel in the last week has demonstrated that the
21 pacing that we have in the CEF and the IFF is the appropriate one. If we
22 let this wave get ahead of us, it's -- it's going to result in higher rate
23 increases in the future and lower reliability. So we spend a lot of time

1 *carefully thinking about the level of capital expenditures that we put into*
2 *CEF14. But it's not just a matter of doing a financial run. It's a matter of,*
3 *as we said, trying to keep up with the degradation of our assets so that we*
4 *don't get behind the curve."*

5
6 Manitoba Hydro submits that it has provided the PUB with a substantial amount of
7 information regarding the reasonableness of its expenditures relating to sustaining capital.

1 **8.0 MANITOBA HYDRO'S ACCOUNTING POLICY CHOICES ARE FAIR AND**
2 **DESIGNED TO MINIMIZE CUSTOMER RATE IMPACTS**

3
4 Section 8.0 of the Argument demonstrates that Manitoba Hydro's proposed accounting
5 changes result in a decrease in revenue requirement and are not contributing to the need
6 for the proposed rate increases as suggested by Intervenors in their final argument. As
7 such, there is no need to use accounting policies for rate-setting purposes that differ from
8 those used for financial reporting purposes.

9
10 **8.1. The Proposed Rate Increases are Not Being Driven by Aggressive Accounting**
11 **Policy Selection**

12
13 There are a number of prospective accounting changes that Manitoba Hydro is making
14 for financial reporting purposes in 2014/15 and 2015/16. The most significant of these
15 include the implementation of a comprehensive depreciation study in 2014/15 and further
16 changes to the level of capitalized overhead and deprecation methodologies as part of the
17 implementation of IFRS in 2015/16.

18
19 Concern has been expressed by MIPUG that Manitoba Hydro's rate increases are being
20 driven by aggressive accounting policy choices, in particular the expensing of additional
21 overheads and the proposed change to the depreciation methodology. MIPUG has
22 recommended that the PUB determine net income for rate-setting purposes on a different
23 basis than financial reporting by continuing to capitalize ineligible overheads, retain
24 CGAAP average service life ("ASL") depreciation, and to increase the amortization
25 period with respect to DSM expenditures.

26
27 Manitoba Hydro's approach to the implementation of IFRS and accounting policy
28 selection in general has been to select accounting policies for financial reporting purposes
29 that will not negatively impact revenue requirements for rate-setting purposes.

30
31 As summarized in the figure below, the net impacts of the accounting policy and estimate
32 changes offset each other and result in decreases to revenue requirement of \$25 million in
33 2014/15 and \$4 million in each of 2015/16 and 2016/17. The significance of the net
34 changes are minimal in the 2015 to 2017 period and are neither driving the need for the
35 proposed rate increases nor negatively impacting ratepayers. Furthermore, the net

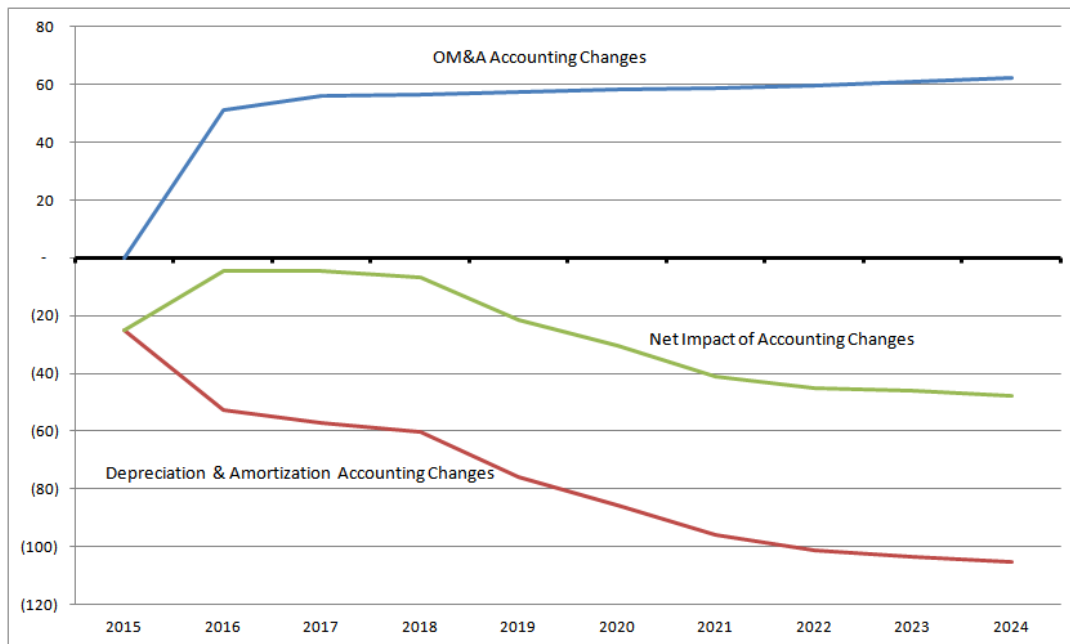
1 decrease in revenue requirements as a result of the accounting policy and estimate
2 changes is projected to be \$48 million in 2024.

3 **Figure 68- Accounting Policy & Estimate Changes 2015 - 2024**

Accounting Policy & Estimate Changes										
Electric operations (in millions of \$s)										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
OM&A Expense Changes		51	56	57	58	58	59	60	61	62
Depreciation Expense Changes	(25)	(53)	(57)	(60)	(76)	(86)	(96)	(101)	(103)	(105)
Other		(3)	(3)	(4)	(3)	(3)	(4)	(4)	(3)	(4)
Total Increase (Decrease) in Revenue Requirement	(25)	(4)	(4)	(7)	(22)	(31)	(41)	(45)	(46)	(48)

4
5 The following figure illustrates the overall net reduction to revenue requirements between
6 2015 and 2024 in the green line, with the increases in OM&A accounting changes in the
7 blue line being more than offset by decreases in depreciation & amortization accounting
8 changes in the red line.

9
10 **Figure 69- Net Reduction to Revenue Requirement Resulting from Accounting**
11 **Changes**



12
13
14 Given that there is no harm to ratepayers as a result of the net reductions to revenue
15 requirement, Manitoba Hydro's position is that the use of IFRS for rate-setting purposes
16 is fair and appropriate.
17
18

1 **8.2. Recognition of Regulatory Deferral Balances Lessens Differences Between**
2 **Expenses Recognized for Financial Reporting and Rate-Setting Purposes**
3

4 The recommended changes to depreciation and overheads capitalized as proposed by
5 MIPUG are not IFRS compliant and as such, will have significant consequences to
6 Manitoba Hydro in terms of its financial reporting and management of its accounting
7 records.
8

9 **8.2.1. IFRS 14 Regulatory Deferral Accounts Interim Standard**
10

11 The International Accounting Standards Board (IASB) has implemented interim standard
12 *IFRS 14 Regulatory Deferral Accounts* to encourage rate regulated entities to transition to
13 IFRS while the IASB continues to work on its project on rate-regulated activities; the
14 outcome of which is still undecided.
15

16 IFRS 14 requires that the standard be applied to all or none of an entity's rate-regulated
17 activities and that any cumulative differences between accounting for financial reporting
18 and rate-setting purposes be recognized in a regulatory deferral account. Regulatory
19 deferral accounts must be amortized into rates over a period of time specified by the
20 regulator and are not permitted to be suspended indefinitely on the balance sheet of an
21 entity. The requirement to amortize regulatory deferral accounts over a reasonable period
22 of time lessens the differences between expenses recognized for financial reporting and
23 rate-setting purposes.
24

25 In response to PUB/MH-II-21b, Manitoba Hydro provided an example of the net income
26 impact on MH14 of using a regulatory deferral account to recognize the cumulative
27 difference of using ELG method for financial reporting purposes and CGAAP ASL
28 depreciation method for rate-setting purposes, which is amortized to income over a
29 period of 10 years. Under this scenario, customer rate increases were calculated at 3.90%
30 annually from 2018 through to 2031 and 2.0% thereafter in order to achieve a 25% equity
31 ratio by 2034. The figure below provides the results of this scenario and demonstrates
32 that the \$1.2 billion reduction in depreciation expense through to 2034 by continuing with
33 the CGAAP ASL method is primarily offset by the \$0.9 billion increase resulting from
34 the amortization of the deferred regulatory asset and as such, establishment of a deferral
35 account would not impact Manitoba Hydro's requested rate increases of 3.95%. The net

1 change in retained earnings is minimal relative to the overall retained earnings balance
2 and has little or no impact on the debt-equity ratio.

3
4 **Figure 70- CGAAP ASL without Net Salvage Scenario**

Account	March 31, 2034
Retained Earnings (MH14)	5 557
Depreciation expense reduction – continue with CGAAP ASL (no net salvage)	1 238
Depreciation expense increase – amortization of Deferral Account (10 year amortization period)	(921)
Reduction in customer rate revenue via 3.90% increases	(184)
Increase in Finance expense for higher debt levels	(81)
Increase in Capital taxes for higher debt levels	(23)
Reversal of the 2015 Retained Earnings adjustment for the change to ELG depreciation	33
Ending Retained Earnings	5 619
Net change in Retained Earnings	62

5
6 Manitoba Hydro also filed MH Exhibit #97, which provided a further scenario where the
7 deferral account was amortized over a period of 40 years, which resulted in the deferral
8 account growing to approximately \$1 billion at the end of 2034. Under this scenario,
9 customer rate increases were calculated at 3.82% annually from 2018 through to 2031
10 and 2.0% thereafter in order to achieve a 25% equity ratio by 2034.

11
12 These two scenarios demonstrate that even with the selection of a long amortization
13 period of 40 years, which has the drawback of deferring costs to future generations of
14 ratepayers, the calculated rate increases only differ slightly from the 3.95% proposed by
15 Manitoba Hydro. Furthermore, considering the projected net losses from 2019 through to
16 2026 in MH14, Manitoba Hydro would continue to request a rate increase of 3.95% so as
17 to ensure the utility’s financial position is strong enough to absorb future financial risk
18 and avoid volatility in customer rates in the future.

19
20 Fundamental to the consideration of regulatory deferral accounts is that IFRS 14
21 *Regulatory Deferral Accounts* is only an interim standard, pending the outcome of the
22 IASB’s projects on Rate-regulated Activities over the next few years. Should the IASB
23 conclude at the end of these projects that regulatory deferral accounts can no longer be

1 recognized under IFRS for financial reporting purposes, Manitoba Hydro would have to
2 write off its regulatory account balances to income immediately.

3
4 During its final argument, MIPUG downplayed the impact of this possibility by stating:

5
6 *“The only notable downside to this approach is for some reason in the*
7 *future, the new IFRS14 interim standard is not continued and the Board*
8 *decides to continue with MIPUG’s proposed approach in future GRA’s –*
9 *at that time Hydro would likely be forced into separate reporting results*
10 *for IFRS and for the PUB. However, at best, this should be viewed as a*
11 *speculative and (if it arises) minor downside,...”(page 6-4 MIPUG Final*
12 *Argument).*

13
14 MIPUG has not considered the financial consequences of writing off significant
15 regulatory deferral account balances on Manitoba Hydro’s financial position and the
16 impacts this may have on intergenerational equity. MIPUG’s submission also ignores the
17 position of CAMPUT as outlined in its letter to the IASB (attached to Manitoba Hydro’s
18 response to PUB/MH-II-21c) with respect to the negative implications of having two sets
19 of financial statements, one for financial reporting purposes and one for rate-setting
20 purposes.

21 22 **8.2.2. Implications of Maintaining Multiple Asset Sub-ledgers**

23
24 Under MIPUG’s recommended approach, in order to capture the differences in regulatory
25 deferral accounts, two sets of detailed asset accounting records would have to be
26 maintained to support asset additions, depreciation expense, asset retirements and
27 associated gains and losses. Going forward, cost and accumulated depreciation balances
28 in the two sub-ledger accounts would be very different. The process for maintaining two
29 PP&E sub-ledgers would be onerous, extremely time consuming and costly given the
30 thousands of transactions that are recorded each year for Manitoba Hydro’s plant assets.

31
32 The accounting differences with respect to the depreciation and overhead capitalization
33 methods, as proposed by MIPUG, will impact the 93,000 different property, plant &
34 equipment balances (\$16 billion and growing) currently maintained by Manitoba Hydro
35 which are expected to double in the next 20 years. Maintaining these differences over the
36 course of the lives of these assets will require a significant one-time effort and cost to the

1 ratepayer to change existing SAP systems and related processes, as well as significant
2 ongoing efforts and costs. This is explained by Ms. Bauerlein and Ms. Hooper on
3 transcript pages 3616-3618. Manitoba Hydro outlined the process for maintaining two
4 separate asset sub-ledgers in response to PUB/MH-II-21c.

5
6 It is also anticipated that the PUB would require an audit to be performed on the PP&E
7 related balances used for rate-setting purposes. In addition, as compared to performing a
8 single depreciation study for financial reporting purposes, Manitoba Hydro would be
9 required to perform two studies, one based on IFRS compliant asset cost and depreciation
10 methods and one based on regulatory asset cost and depreciation methods.

11
12 The following administrative efforts would need to be duplicated for each set of asset
13 sub-ledgers or separate sets of financial statements:

- 14
- 15 • Monthly and quarterly financial reports;
 - 16 • Annual forecasting requirements (i.e. 2 different Integrated Financial Forecasts,
17 one for rate setting purposes and one for other users such management, financial
18 institutions, government);
 - 19 • Quarterly/annual reconciliation of PP&E related accounts;
 - 20 • Annual audit of depreciation rates / expense, asset retirement gains and losses,
21 and PP&E net book value balances; and,
 - 22 • Depreciation Studies.
- 23

24 As stated by Ms. Hooper, *“But as time goes by, those two sub-ledgers will diverge. And*
25 *the process for trying to reconcile those costs and that accumulated depreciation will get*
26 *more and more complex over time.”* (trans page 3490 line 19, 3492 line 4).

27

28 Ms. Lee further demonstrates her lack of understanding of the implications relating to the
29 implementation of IFRS in her testimony where she states:

30
31 *“The company asserts that it does not want to keep two sets of books – one*
32 *for financial accounting and one for regulatory. Hydro and Mr. Kennedy*
33 *do not view ELG implementation as being burdensome because the*
34 *computer calculates everything. For this reason, I do not understand the*
35 *adversity to keeping two sets of books as this can be handled by the*
36 *computer.”* (page 13 line 23-27 of Ms. Lee testimony).

1 **8.3. There is no Need for Differences between Financial Reporting and Rate Setting**
2 **Under the Cost of Service Rate-Setting Methodology**

3
4 Manitoba Hydro's position is that the transition to IFRS should not trigger the
5 requirement for an alternate set of depreciation calculations and the establishment of
6 multiple asset sub-ledgers for rate-setting purposes. These steps are not necessary under
7 the cost of service rate-setting methodology that is used to set electric rates in Manitoba.

8
9 The cost of service approach applied in Manitoba does not determine rates based strictly
10 on changes in costs and on an established capital structure and return on equity as
11 required in a rate based rate of return model. Rather, the cost of service methodology
12 coupled with Manitoba Hydro's approach of implementing regular and reasonable rate
13 increases has the flexibility to recognize changes in costs and levels of retained earnings
14 and transition these changes into rates gradually over time, while at the same time
15 ensuring the maintenance of an adequate financial structure over the long-term. This
16 approach serves to protect customers from sudden or large rate increases and minimizes
17 the need to have excessive regulatory deferral accounts to capture differences between
18 financial reporting and rate setting as well as the need to maintain multiple asset sub-
19 ledgers.

20
21 **8.4. The PUB Rejected the Intervener's Recommendations to Adjust Accounting**
22 **Policies to Lower Rate Increases in Order 43/13**

23
24 Manitoba Hydro is concerned with the approach recommended by MIPUG to choose
25 accounting policies for rate-setting purposes with the express purpose to improve net
26 income and reduce customer rates with little understanding as to how these changes
27 impact the cash flow and financial strength of the Corporation.

28
29 The reduction in depreciation expense resulting from the continued use of the CGAAP
30 ASL method does not result in a reduction in cash outflows as depreciation is a non-cash
31 expense. However, as outlined in Manitoba Hydro's response to PUB/MH-I-37b, the
32 corresponding reduction in customer revenue as a result of the MIPUG recommendation
33 would result in a cumulative reduction in cash inflows of \$1.2 billion (excluding carrying
34 charges) through to 2034 which will result in a corresponding increase in debt levels.

35

1 As outlined earlier in the Argument, Manitoba Hydro is entering a period of extensive
2 capital investment and re-investment in its infrastructure. The vast majority of this
3 investment will be funded through debt financing resulting in debt levels that are
4 unprecedented in Manitoba Hydro's history. The additional \$1.2 billion of debt would
5 further weaken the financial strength of Manitoba Hydro and increase the risk of rate
6 volatility to customers.

7
8 At the 2012/13 and 2013/14 GRA, MIPUG and CAC recommended for rate-setting
9 purposes that the PUB not accept overhead changes and remove net salvage from
10 depreciation rates in advance of IFRS conversion in order to justify lower rate increases.
11 This approach was explicitly rejected by the PUB in their findings on page 10 of Order
12 43/13 from Manitoba Hydro's 2012/13 and 2013/14 GRA, as follows:

13
14 *“Intervenors recommended various accounting changes to lessen rate*
15 *increases over the test years. The Board rejects this approach as it would*
16 *have the effect of reducing Manitoba Hydro's revenues, weakening its*
17 *financial situation, and increasing borrowing costs. It is important that*
18 *Manitoba Hydro remain a financially strong and viable organization.”*

19
20 Manitoba Hydro notes that the PUB used the words “reject” and “approach” in the above-
21 noted reference from Order 43/13. This suggests that these findings related not only to
22 the specific recommendations that were put forward by MIPUG and CAC at the last
23 GRA, but rather a general principle that selectively adjusting accounting policies for rate-
24 setting purposes in order to justify lower rate increases was not appropriate due to the
25 higher debt levels and weakening of the financial strength of the Corporation.

26 MIPUG's recommendations in the current GRA related to accounting policy changes are,
27 in Manitoba Hydro's view, a further example of the same approach that was rejected by
28 the PUB in Order 43/13. For this reason, MIPUG's recommendations should be similarly
29 rejected by the PUB.

30

1 **9.0 MANITOBA HYDRO’S PROPOSED DEPRECIATION CHANGES ARE**
2 **APPROPRIATE FOR RATE-SETTING IN A HYDRO-ELECTRIC UTILITY**
3

4 Section 9.0 of the Argument will demonstrate that Manitoba Hydro’s proposed
5 depreciation changes are appropriate for rate-setting purposes in a Crown-owned Hydro-
6 Electric utility, and will respond to Intervenor concerns with respect to the application of
7 the Equal Life Group (“ELG”) depreciation method at Manitoba Hydro.
8

9 **9.1. Manitoba Hydro’s Depreciation Changes are Required to Comply with Financial**
10 **Reporting Requirements of IFRS effective April 1, 2015**
11

12 Effective April 1, 2015, Manitoba Hydro is required to comply with the financial
13 reporting requirements of IFRS. The requirements of IFRS with respect to the calculation
14 of depreciation are different than Canadian GAAP in three ways:
15

- 16 • IFRS requires a greater degree of precision.
- 17 • IFRS requires gains and losses on asset retirements to be recognized into income
18 immediately. Under CGAAP, such gains and losses are deferred in accumulated
19 depreciation and factored into future depreciation rates.
- 20 • IFRS treats the cost of removal differently.
21

22 In recognition that IFRS has different requirements and requires a greater degree of
23 precision than Canadian GAAP with respect to determining depreciation expense,
24 Manitoba Hydro retained a consultant with a recognized expertise in Depreciation,
25 Gannett Fleming, and Mr. Larry Kennedy specifically.
26

27 As detailed in the pre-filed evidence and evidence at the hearing, in order to move to
28 IFRS Manitoba Hydro identified that further data and componentization would be
29 necessary to comply with the IFRS depreciation standards. Mr. Kennedy suggested that
30 Manitoba Hydro consider changing to the ELG method so that Manitoba Hydro could
31 comply with the depreciation requirements of IFRS without the need to further
32 componentize to the level of detail that using an ASL method would require. In selecting
33 the ELG method, Manitoba Hydro recognized that this method of depreciation is already
34 used by utilities throughout North America and provides a better matching of
35 depreciation to the consumption of the asset.
36

1 In order to change to the ELG method, further work was required to identify the
2 additional asset component groups that would be necessary for compliance with IFRS.
3 This also required Manitoba Hydro to determine the necessary vintage data relating to
4 asset acquisition and retirement. Much of this information was developed for the 2010
5 Depreciation study and was further enhanced as part of the 2014 Depreciation Study.
6

7 In complying with the more precise requirements of IFRS, Manitoba Hydro recognized
8 that there will be an initial increase in annual depreciation expense. As a consequence,
9 Manitoba Hydro then made the policy decision to eliminate the collection of net salvage
10 in depreciation rates so as to offset the impacts to customers of complying with IFRS.
11

12 Ms. Lee, MIPUG's expert witness on depreciation matters, stated that while the
13 theoretical application of ELG (pure ELG) better matches the consumption of capital
14 with the service provided, it is not practical to implement as it requires a significant
15 amount of data and adjustments. Ms. Lee's arguments are based on incorrect assumptions
16 and ignore key considerations. Ms. Lee also demonstrated a distinct bias against the use
17 of the ELG method when she stated, "*I just have a fundamental concern with the ELG
18 procedure*" (transcript page 4096, lines 5-6).
19

20 MIPUG proposes that Manitoba Hydro maintain the current CGAAP ASL approach for
21 rate setting purposes. Such an approach is not compliant with IFRS and would require
22 Manitoba Hydro to establish a regulatory deferral account and to maintain two separate
23 sets of asset sub-ledgers to capture the differences between depreciation determined for
24 financial reporting and depreciation determined for rate setting purposes, the implication
25 of which were discussed in Section 8.2 above.
26

27 The following sections address the arguments presented by the intervenors in more detail.
28

29 **9.2. Changing to the ELG Method Ensures Compliance with IFRS without Having to**
30 **Increase Manitoba Hydro's Degree of Componentization**
31

32 Regardless of the depreciation method used (ASL or ELG), calculating depreciation at a
33 greater level of asset componentization will result in a similar increase in depreciation
34 expense.
35

1 To utilize the ELG method, Manitoba Hydro developed 198 new asset component groups
2 as part of its 2010 Depreciation Study so as to ensure its level of asset componentization
3 using the ELG method would be in compliance with the requirements of IFRS. Mr.
4 Kennedy reviewed this level of componentization assuming the use of the ELG method
5 and concluded that the groups were in conformance with the requirements of IFRS.
6

7 In 2014, Mr. Kennedy also examined and considered Manitoba Hydro's current level of
8 asset componentization for compliance with IFRS assuming the use of the ASL method
9 of depreciation and concluded that:

10
11 "Based on the broad experience of Gannett Fleming developing depreciation practices
12 and policies ensuring compliance with the IFRS for utilities across Canada, Gannett
13 Fleming does not view that the current level of Manitoba Hydro asset componentization
14 is sufficient if using the ASL method for financial statements prepared under
15 IFRS."(Appendix 11.49 Attachment A (page II-2)
16

17 The ASL method calculates depreciation based on the average service life for a
18 component group of assets (one depreciation rate for the group). Using the ASL method,
19 compliance with IFRS would require Manitoba Hydro to further componentize its assets
20 so as to minimize the dispersion in asset service lives in any one group such that the
21 "average service life" will more closely resemble the actual lives of the assets in the
22 group. Examples of how the components could be broken down further are provided on
23 pages 12-13 in Appendix 11.49.
24

25 The key advantage to using the ELG method for Manitoba Hydro is that it will allow
26 Manitoba Hydro to comply with the componentization requirements of IFRS without the
27 need to further componentize its assets. This is due to the fact that the ELG method
28 calculates the depreciation rate differently than the ASL method. The ELG method sub-
29 divides an asset component group into sub-components of equal lives and depreciates
30 each group separately.
31

32 It is estimated that it would cost approximately \$2.5 million to further componentize
33 Manitoba Hydro's assets to the degree required in order to be IFRS-compliant using the
34 ASL method, as outlined in response to PUB/MH-II-59b.
35

1 Ms. Lee agrees that there will be additional costs associated with developing and
2 maintaining additional asset components as she states:

3
4 *“But anytime you do componentization or sub-categorization you need to*
5 *ask yourself the question: Is there enough investment with a sufficiently*
6 *different life to warrant separate treatment? Because every time you*
7 *establish separate sub-accounts or sub – or componentize is going to cost*
8 *the utility money to do that, to track those investments separately, so you*
9 *want to make sure that it’s worthwhile.” (Transcript page 3947 (lines 10 –*
10 *18) emphasis added)*

11
12 Manitoba Hydro’s position, as supported by the opinion of Mr. Kennedy, is that there is
13 no reason to incur the costs associated with pursuing IFRS compliance using an ASL
14 methodology given that Manitoba Hydro’s current level of componentization in
15 combination with using the ELG method satisfies the requirements for compliance with
16 IFRS.

17
18 **9.3. Manitoba Hydro has Sufficient Asset Investment and Retirement Information to**
19 **Implement the ELG Method**

20
21 MIPUG has criticized the use of the ELG method based on their belief that Manitoba
22 Hydro does not have sufficient historical retirement data from which to derive
23 appropriate life curves.

24
25 *Mr. Bowman states that, “Additionally, the cost curves and asset lives detail used*
26 *in the current depreciation study need to be adequately supported based on actual*
27 *information of Hydro’s assets.”*
28 *(Page 25, MIPUG Exhibit No. 7)*

29
30 *Ms. Lee’s testimony states, “It is clear that for many of Hydro’s accounts, there*
31 *has been insufficient retirement activity from which to derive a future pattern.”*
32 *(Page 12, MIPUG Exhibit No. 8)*

33
34 Ms. Lee assumed in her evidence that Manitoba Hydro had insufficient vintage data on
35 asset additions and retirements to implement the ELG method. This was evident in her
36 response to PUB/MIPUG/COALITION(LEE)–2 where she states, “According to
37 *Manitoba Hydro’s 2014 depreciation study it does not have vintage data for many of its*

1 *accounts.*”(page 11). Starting on page 4056, Ms Lee acknowledged in cross examination
2 she was referencing the 2005 depreciation study, not the 2014 depreciation study, and
3 that she was not brought into the proceeding until April, 2015. She acknowledged that
4 she did not request any IR’s of Manitoba Hydro with respect to its level of
5 componentization and how it developed its componentization, and that she had not
6 reviewed any of Manitoba Hydro’s data. Overall, Manitoba Hydro submits that Ms. Lee
7 based much of her evidence on incorrect facts and assumptions.

8
9 The evidence at this hearing demonstrates that since 2005, Manitoba Hydro has
10 undertaken extensive efforts to compile historic retirement data for those asset groups
11 where historical records were missing. Such efforts were initially implemented for the
12 2010 depreciation study as new asset components were established for use under the ELG
13 method for compliance with IFRS. The process required thousands of hours of staff time
14 to convert information from historical manual accounting ledger books dating back to the
15 1940s. This process also involved extensive discussion and analysis with Manitoba
16 Hydro engineers to confirm the results of the data compilation.

17
18 Manitoba Hydro has full and complete asset accounting data for 365 of 397 or 94% of its
19 asset component groups. This data includes original investment by installation year and
20 for all retirements, the year of retirement and the original year of installation or
21 acquisition. The degree of adequacy of Manitoba Hydro’s accounting records are
22 addressed by Mr. Kennedy as follows:

23
24 *“Manitoba Hydro records are definitely sufficient for applying the Equal*
25 *Life Group method. In fact, I consult with thereabouts 80% of the utilities*
26 *across this country. And I would suggest that the Manitoba hydro plant*
27 *accounting records are at the top of the group, or within the very top of*
28 *the group of regulated utilities that I have the opportunity to work with.”*
29 (Transcript page 3519 line 12 and MH Undertaking #32)

30
31 In response to PUB/MH-II-59a, Manitoba Hydro provided the costs pertaining to the
32 conversion to ELG which included \$1.7 million of costs to prepare/review historical
33 accounting records for existing and new asset components and to re-allocate costs
34 between component groups. The effort of asset conversion is not expected to be
35 completed later in 2015.

1
2 **9.4. Historical Information is not the only Information Considered when Calculating**
3 **Depreciation Rates**
4

5 Ms. Lee's primary criticism of Manitoba Hydro's use of the ELG method is that
6 Manitoba Hydro does not have the historical retirement information to apply the ELG
7 procedure. Manitoba Hydro agrees with Ms Lee when she states:
8

9 "A fundamental requirement for ELG was that actuarial vintage data would be
10 maintained. Such data includes the records that show the age of retirements (and the
11 transfers/adjustments) being experienced." (page 5 of Ms. Lee's testimony).
12

13 However Ms Lee is incorrect when she states:
14

15 "However, Hydro's asset history data for many accounts does not show sufficient
16 retirements, especially for the larger investments to rely on for determining a future
17 retirement pattern (dams, dykes & weirs). (MIPUG/COALITION Exhibit 1, Slide 15).
18

19 Ms. Lee's testimony and evidence also ignores many of the other factors that are taken
20 into consideration when determining IOWA curves and depreciation rates. As stated by
21 Mr. Kennedy in the presentation of his evidence,
22

23 "..., we can't get focused on the statistics. We have to look at the broader view.
24 Otherwise we are not doing our job effectively." (Transcript page 3522, lines 7 – 10).
25

26 Mr. Kennedy goes on to further state that:
27

28 "Historic data is only one of many inputs into the choice of the IOWA curve. We spent
29 many hours interviewing the internal operations experts. We spent many hours
30 reviewing industry data." (Transcript page 3627 lines 15-23).
31

32 Only by considering all the relevant facts can the impacts of such circumstances as
33 technological change, changes in industry practices (e.g. safety issues and regulations)
34 and changes in management plans be considered in developing depreciation rates.
35
36

1 **9.5. Asset Retirement Gains and Losses are Treated Differently Under IFRS**

2
3 Manitoba Hydro’s response to MIPUG /MH-I-17a provides the relevant excerpts from
4 IFRS with respect to the depreciation of property, plant & equipment. One of the key
5 excerpts is found in paragraph 68 which states that, “*The gain or loss arising from the*
6 *de-recognition of an item of property, plant & equipment shall be included in profit and*
7 *loss when the item is derecognized.*” This is a significant difference from CGAAP where
8 gains and losses on asset retirements are recorded in accumulated depreciation and
9 deferred and incorporated into future depreciation rate adjustments.

10
11 When applying the ASL method to an asset group with a wide dispersion in service lives,
12 it can be expected that assets will retire at ages different than the average life used to
13 depreciate the group resulting in gains and losses upon retirement. Pursuant to IFRS,
14 these gains and losses will be required to be recognized immediately to net income.
15 Compared to the ASL method, such gains and losses are expected to be much smaller
16 under ELG since this method calculates depreciation with consideration of the different
17 service lives of the assets in a component group.

18
19 Manitoba Hydro has provided a simple example on page 10 of Appendix 11.49 and a
20 more complete example in Exhibit #85 of how retirement gains and losses can impact the
21 total expense recognized in any one year. A comparison of the net income impacts of the
22 ELG and ASL methods is incomplete if the comparison does not also consider the impact
23 of retirement gains and losses. The immediate recognition of retirement losses in income
24 can greatly reduce the difference in depreciation expense between the ELG and ASL
25 methods. Notably, both Mr. Bowman and Ms. Lee make no reference to the change in
26 the accounting for asset retirement gains and losses in their comparisons of the ASL and
27 ELG impacts.

28
29 **9.6. Compliance with IFRS will Improve Intergenerational Equity for Rate-Setting**
30 **Purposes**

31
32 Manitoba Hydro submits that the position put forward by MIPUG through Mr. Bowman
33 is not supported by the factual evidence. Mr. Bowman stated in his pre-filed evidence
34 (page 7):

35
36 *“The Equal Life Group (ELG) method of depreciation as proposed in the*
37 *Application imposes unfair added costs on current ratepayers and*

1 *therefore should not be adopted, and the Average Service Life method*
2 *should be retained, consistent with other Crown owned and hydro*
3 *dominated utilities.”*
4

5 IFRS requires a greater degree of precision than Canadian GAAP with respect matching
6 the depreciation expense of an asset with its consumption. Specifically, IFRS requires
7 that an asset’s significant components be depreciated separately when doing so would
8 have a material impact on net income. Therefore, calculating depreciation on a greater
9 number of depreciable components will result in an increase in depreciation expense for
10 assets with service lives shorter than the average life of the group from which they were
11 previously depreciated. Conversely, there will be a decrease in depreciation for long-
12 lived assets whose service lives are greater than the average life of the group. The net
13 result will be an increase in annual depreciation expense as the increase in depreciation
14 on the short-lived assets is spread over a shorter period than the decrease in depreciation
15 on the long-lived assets.
16

17 Manitoba Hydro is changing from the CGAAP Average Service Life (ASL) method to
18 the Equal Life Group (ELG) method of depreciation so that it can maintain its existing
19 level of asset componentization and comply with the componentization requirements of
20 IFRS. MIPUG argues that the ELG procedure will substantially “accelerate” depreciation
21 and impose higher costs on today’s rate payers. The “acceleration” or “front loading” of
22 depreciation as referred to by MIPUG is the result of an improvement in matching the
23 annual depreciation of an asset with its service life as required by IFRS. Applying the
24 CGAAP ASL method to Manitoba Hydro’s existing asset component groups
25 undercharges current rate payers for short-lived assets as such assets are being amortized
26 over an average period that is longer than their actual service life. As such, short lived
27 assets are likely to be retired from service before their depreciation costs are fully
28 recouped in customer rates. The CGAAP ASL method is not promoting intergenerational
29 equity to the same degree as required by ELG under IFRS.
30

31 Intergenerational equity is a fundamental concept to rate setting and consistent with the
32 more precise requirements of IFRS as it pertains to depreciation.
33

34 Manitoba Hydro does not agree with the recommendation to continue with the CGAAP
35 Average Service Life method for rate-setting purposes. The ELG method is more
36 representative of an asset’s annual depreciation than an ASL method when applied to a

1 group of assets with a wide dispersion in service lives, as is the case for Manitoba
2 Hydro's assets. Manitoba Hydro's change to the ELG method is the preferred alternative
3 for both financial reporting and rate-setting purposes as it improves inter-generational
4 equity, by matching the amortization of cost to the life of the assets in use, ensuring that
5 each generation of ratepayers is charged only for assets of benefit to that generation.

6
7 **9.7. The ELG Method Provides Consistent Results with the Methods Used by Other**
8 **Crown Owned Hydro-Electric Utilities**

9
10 The ELG procedure is used throughout many jurisdictions for rate-setting purposes in
11 North America as outlined in the response to PUB/MH-I-42b. This was acknowledged by
12 Ms. Lee who agreed that she is aware that state regulators (other than Florida) have
13 permitted the use of ELG. Mr. Kennedy stated that the Alberta utilities have been using
14 the ELG method since the 1980s. The ELG procedure has been used by Newfoundland
15 Power since 1983. In making their decision to allow Newfoundland Power to fully adopt
16 the ELG method for all property, plant and equipment in 1983, the Board of Commission
17 of Public Utilities in Newfoundland stated in its order that it, "...agrees that rates of
18 depreciation based on the [ELG] procedure is the best method of recovering invested
19 capital over the useful life of the plant. Having reached this conclusion, the [ELG]
20 procedure stands the test of a reasonable and prudent expense properly charged to
21 operating account."¹ (Page 21, Newfoundland and Labrador, An Order of the Board of
22 Commissioners of Public Utilities No. P.U. 47 (1982)).

23
24 MIPUG's argument that Manitoba Hydro is an outlier compared to other Canadian
25 Crown utilities by using the ELG method ignores the fact that the nature and level of
26 asset componentization varies between utilities, and many of the larger Crown utilities
27 (BC Hydro, SaskPower and Hydro Quebec) have historically maintained a greater level
28 of asset componentization and detailed asset records than Manitoba Hydro. (trans page
29 3930, lines 13-15). Such utilities are applying the ASL method based on a "unit"
30 accounting approach as opposed to a "group" accounting approach and as such, the
31 calculation of depreciation is more consistent with the requirements of IFRS.

¹ Page 21, Newfoundland and Labrador, An Order of the Board of Commissioners of Public Utilities No. P.U. 47. (1982) See also PUB/MH-I-42b,

1 As demonstrated in Appendix 11.49, the differences in depreciation expense between the
2 ELG method and ASL method are reduced when the ASL method is applied to a greater
3 level of asset componentization. Manitoba Hydro's change to the ELG method of
4 depreciation will make its depreciation expense calculation more comparable with the
5 ASL unit approach to depreciation as calculated by the other crown utilities in Canada.
6

7 **9.8. Compliance with IFRS Depreciation Requirements is Appropriate for Both Long**
8 **& Short Lived Assets**

9
10 It is not appropriate to link depreciation rates to the net revenue of a generating station as
11 suggested by MIPUG. Mr. Bowman's argument that the ELG method is not appropriate
12 for long-lived assets is inconsistent with the purpose of depreciation. His argument is not
13 premised on the depreciation principle of recognizing a plant asset's cost over the period
14 in which it is consumed, but is instead based on his presumption that the economic value
15 (i.e. profitability) of hydraulic generation assets increase over time. Since compliance
16 with IFRS will result in higher depreciation in the early years of a pool of assets, Mr.
17 Bowman argues that proper matching does not occur.
18

19 As outlined in section 4.3 of Appendix 11.49, the IASB has formally rejected the concept
20 of depreciating an asset based on the pattern of revenue it generates. The IASB explicitly
21 prohibits revenue from being used as a basis for depreciation because factors other than
22 the consumption of an asset affect revenue. The IASB points out that although
23 depreciation and revenue share some common attributes, depreciation is an estimate of
24 the benefits consumed from an asset in the period whereas revenue reflects the output of
25 the asset, but also reflects the impact of other factors that do not affect the physical
26 consumption of an asset.
27

28 The profitability of a hydraulic generating station is dependent on a number of variables
29 that are not related to the physical consumption of the plant such as future electricity
30 prices, exchange rates, and water levels.
31

32 Using a depreciation method that is intended to match depreciation rates to the
33 profitability of a plant asset would require ongoing adjustments to depreciation rates to
34 accommodate changes in other forecast variables such as market prices and water levels
35 which would only result in an increased level of subjectivity and volatility in depreciation

1 expense. Use of the approach suggested by Mr. Bowman would be problematic for rate-
2 setting purposes.

3
4 **9.9. Manitoba Hydro’s Accounting Policies are Consistent with the Application of the**
5 **ELG method of Depreciation**

6
7 MIPUG states in its final argument (MIPUG Exhibit #14):

8
9 “Hydro also does not appear to have accounting policies that are consistent with ELG.
10 Hydro’s capitalization policies may not reflect required capitalization of some retirements
11 of assets that the higher ELG rate is based on.”

12
13 MIPUG appears to be suggesting that if retirements are not recognized for the
14 replacement of distribution poles that are damaged by vehicles, then the retirement
15 information to apply the ELG method is not available.

16
17 Manitoba Hydro’s accounting policy with respect to pole replacements (regardless of the
18 reason for the replacement) is to retire the damaged/worn pole and capitalize the costs
19 associated with the replacement pole. Distribution poles and fixtures form an asset
20 component group for Manitoba Hydro and all costs associated with installing and
21 replacing distribution poles are capitalized. As such, Manitoba Hydro’s accounting
22 policies do support the application of the ELG method.

23
24 **9.10. Manitoba Hydro has Managed the Rate Impact of ELG through the Removal of**
25 **Negative Salvage Value in Depreciation Rates**

26
27 Manitoba Hydro does not agree with Mr. Bowman when he states:

28
29 *“the elimination of net salvage costs should be accepted because it was not taking*
30 *into account inherent economic value associated with hydroelectric sites”*

31
32 and,

33
34 *“Net salvage inaccurately added costs to ratepayers today to pay for dismantling*
35 *that would not occur in the future.”*

36 (Page 26 of his pre-filed testimony)

37

1 The collection of costs required to remove an asset from service (i.e. negative salvage) is
2 a valid regulatory construct and is consistent with the regulatory principle of
3 intergenerational equity which ensures that rate payers who benefited from the asset are
4 charged with the total costs, including the cost to remove the asset from service. This
5 approach to matching the costs associated with retiring an asset to the years of benefit
6 derived from the asset is fair and reasonable and has been a PUB approved practice for
7 rate-setting purposes for Manitoba Hydro's electric operations for the past 20 years.

8
9 Manitoba Hydro made a policy decision in 2010 to move to the Equal Life Group
10 depreciation method to comply with the transition to IFRS. In making that policy
11 decision, Manitoba Hydro recognized that there would be an initial increase in
12 depreciation expense. At that same time, Manitoba Hydro made an explicit policy
13 decision to remove net salvage from depreciation rates upon transition to IFRS to manage
14 both the financial reporting and rate-setting impacts of the move to ELG.

15
16 As noted in the figure below, the decision to eliminate net salvage in depreciation rates
17 results in a reduction in 2016 and 2017 of \$60 and \$63 million, respectively, and a
18 cumulative reduction to depreciation expense in excess of \$2 billion through to 2034,
19 which is more than sufficient to offset the revenue requirement impacts of the adoption of
20 ELG. This approach makes Ms. Lee's recommendation for a three-year phase-in period
21 of ELG for rate-setting purposes unnecessary.

22
23 **Figure 71- Depreciation Policy & Estimate Changes 2015-2034**

Depreciation Policy & Estimate Changes												
Electric Operations (in millions of \$s)												
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025-2034	Total
Change in service life - (2014 Depreciation Study)	(25)	(29)	(30)	(30)	(34)	(38)	(43)	(41)	(43)	(42)	(391)	(746)
Overhead Ineligible for Capitalization	-	-	(2)	(4)	(6)	(7)	(9)	(11)	(13)	(14)	(244)	(310)
Elimination of Provision for Asset Removal	-	(60)	(63)	(67)	(86)	(96)	(107)	(117)	(117)	(119)	(1,309)	(2,141)
Change in Methodology (ELG)	-	36	38	41	49	55	63	67	68	69	752	1,238
Depreciation Expense Increase (Decrease)	(25)	(53)	(57)	(60)	(77)	(86)	(96)	(102)	(105)	(106)	(1,192)	(1,959)

24
25
26 Manitoba Hydro recommends that the PUB should consider the overall impact of the
27 collective depreciation changes for rate-setting purposes under the regulatory principle of
28 fairness, rather than concentrating only on the impact of ELG as Mr. Bowman has in his
29 evidence.

30
31 As outlined by Mr. Rainkie on pages 313-314 of the transcript, the PUB should apply two
32 tests in order to approve the use of the ELG method for rate-setting purposes. First, is

1 ELG a reasonable depreciation methodology for rate-setting purposes? And secondly,
2 from an overall perspective, is there any harm to customers? Manitoba Hydro submits
3 that the use of ELG for rate-setting purposes passes both of these tests. Previous sub-
4 sections of Section 9 demonstrate why the ELG method is an appropriate method for rate-
5 setting purposes in a Crown-owned hydro-electric utility, and how ELG can be
6 appropriately applied by Manitoba Hydro.

7
8 In addition, given that Manitoba Hydro has managed the revenue requirement impacts of
9 the transition to ELG through a policy decision to remove negative salvage value from
10 depreciation rates, there is no harm to ratepayers.

11
12

1 **10.0 DEMAND SIDE MANAGEMENT PROGRAMS**

2
3 Section 10.0 of the Argument summarizes how Manitoba Hydro Power Smart programs
4 play a key role in meeting Manitoba's future energy needs, the appropriateness of DSM
5 activities and costs for the years under review, and how Manitoba Hydro's DSM plans
6 are consistent with direction from Government and the PUB.

7
8 **10.1. Manitoba Hydro's Power Smart Programs Play a Key Role in Meeting**
9 **Manitoba's Future Energy Needs**

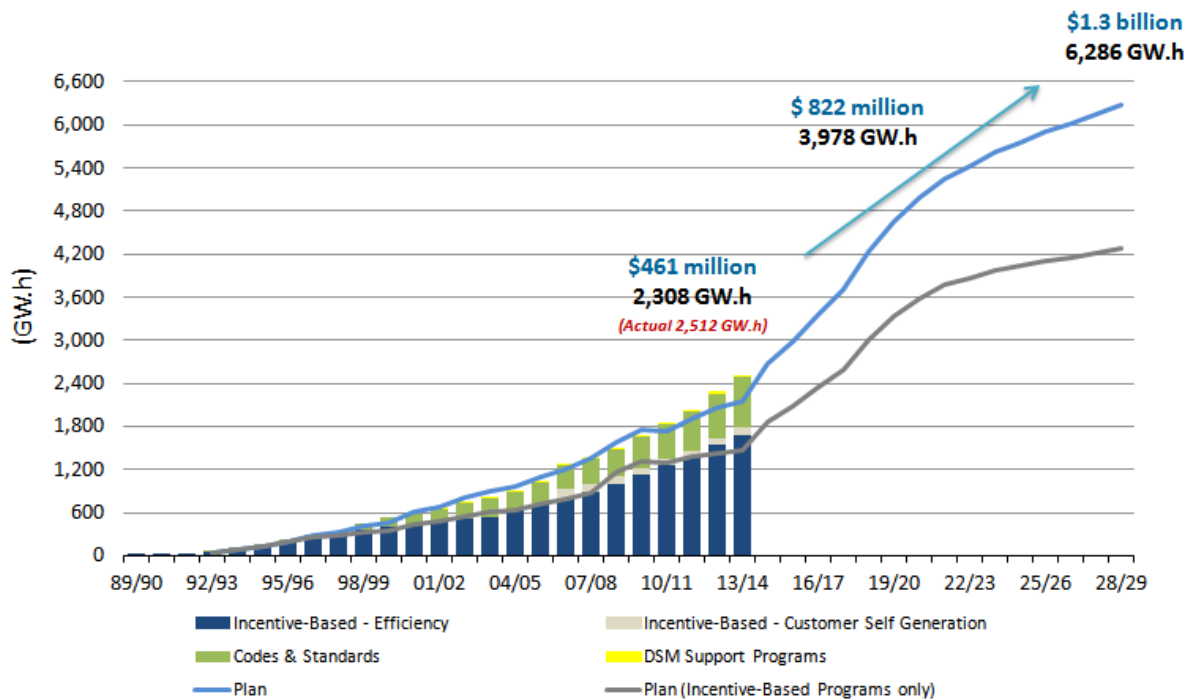
10
11 Manitoba Hydro's Power Smart Programs play a key role in meeting Manitoba's future
12 energy needs in a sustainable manner and assisting customers in reducing their energy
13 bills by using energy more efficiently. As noted in section 2.2.4, DSM is one of the key
14 areas of focus in the corporation's CSP and plays a significant role in supporting a
15 number of other key objectives in the CSP.

16
17 **10.1.1. Manitoba Hydro's current DSM Activities and Costs are Appropriate in the Test**
18 **Years**

19
20 As discussed at transcript pages 2663 and 2722, DSM should be examined from a long-
21 term perspective as it involves long timeframes for implementation and the impact of
22 some initiatives takes a number of years to be realized. While the most recent Power
23 Smart Plan covers one-year, Manitoba Hydro continues to prepare a longer term DSM
24 Plan.

25
26 The figure below demonstrates the historical achievements of DSM and the expectations
27 for the future in terms of meeting the future energy needs of Manitobans.
28

1 **Figure 72- Electric DSM Savings and Expenditures 1990-2029**



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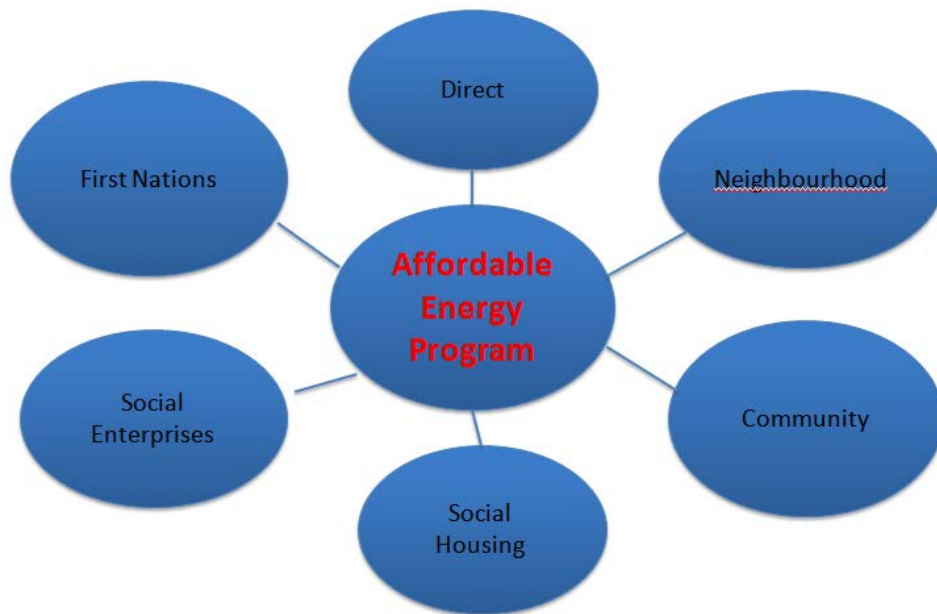
As discussed in Tab 8 of the Application, Manitoba Hydro’s DSM plan targets the achievement of 1,136 MW and 3,978 GWh of savings over the next 15 years, involves an investment of more than a billion dollars and will be relied upon to meet 66% of projected electricity load growth in Manitoba during this period. The electricity savings achieved through DSM is significant with the magnitude being in the same range as a number of large generating stations.

10.1.2. Manitoba Hydro’s DSM Plan are Consistent with Government and the PUB’s Directions

Since 2012, Manitoba Hydro’s DSM Plan has been developed in consultation with the government pursuant to the *Energy Savings Act* and is consistent with government directions. As the PUB heard during Manitoba Hydro’s evidence, Manitoba Hydro has expanded its suite of DSM programs targeted to low-income families and aboriginal & northern communities, options available to customers in arrears, and geothermal initiatives. Manitoba Hydro is also pursuing load displacement initiatives, and has undertaken a number of independent evaluations of its DSM programming.

1 Manitoba Hydro offers DSM programs targeted specifically to its low-income customers
2 and those in First Nations communities. As shown in Manitoba Hydro Exhibit #67, as
3 part of the Affordable Energy Program (AEP), Manitoba Hydro utilizes a multi-pronged
4 approach to reach targeted customers and other groups as represented in the figure below.
5

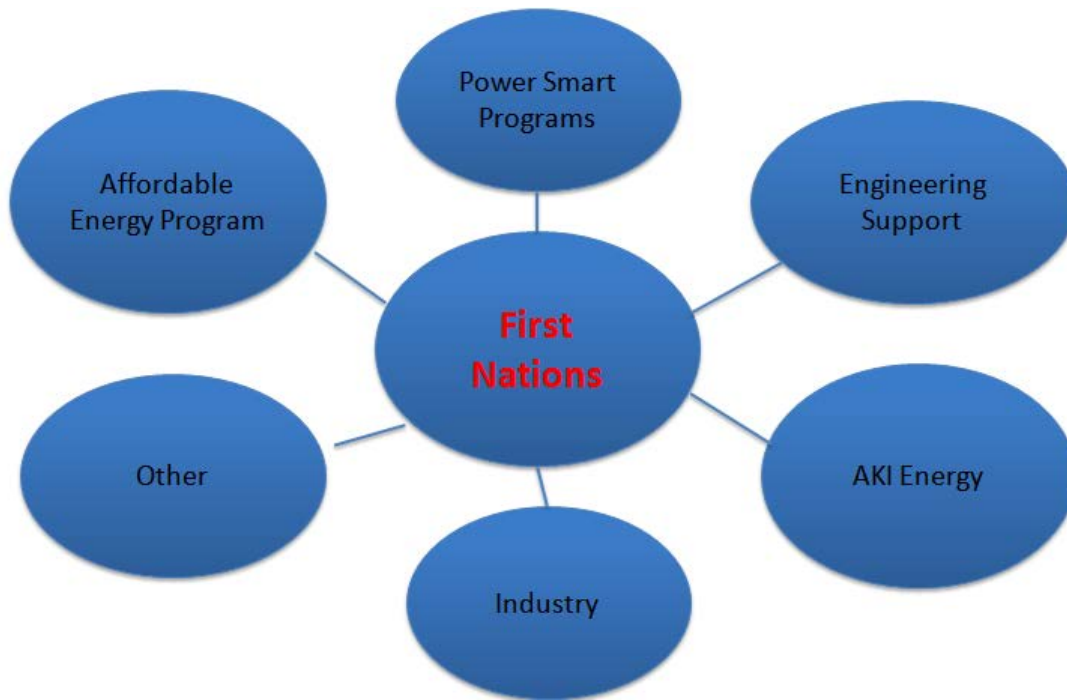
6 **Figure 73- Affordable Energy Program Multi-Pronged Approach**



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8
9 As discussed in Section 11.3 and transcript pages 2666-2668, Manitoba Hydro has
10 implemented improvements to its AEP, including clarifying program eligibility for
11 customers in arrears, including of installation of drain water heat recovery units for
12 electrically heated water tanks, increasing focus on the neighbourhood street-by-street
13 approach, extending the AEP to private landlords and tenants, and investigating
14 opportunities for installing low cost measures in multi-residential buildings. Manitoba
15 Hydro has also undertaken some efforts with the Manitoba Metis Federation. Almost
16 11,000 homes have participated in the AEP to date.

17
18 As shown in MH Exhibit #67, Manitoba Hydro is also taking a fairly comprehensive
19 approach with respect to First Nations DSM that involves more than just the AEP, as
20 represented in the figure below.
21
22

1 **Figure 74- First Nations – DSM**



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Since 2009, Manitoba Hydro has taken a community and partnership-based approach with respect to First Nations DSM, with the objective that First Nations communities will develop their own energy efficiency plans in the future. Manitoba Hydro has made significant achievements in terms of insulation efforts, with over 1,599 homes having benefited to date (transcript page 2672). Manitoba Hydro’s Exhibit #67 discusses that, since 2014, all homes in First Nations communities receive basic measures. Manitoba Hydro has had significant success in the community-based geothermal initiative, and has also undertaken efforts with communities for the installation of solar hot water systems, drain water heat recovery systems, and is pursuing opportunities in the commercial sector as well. In partnership with AKI Energy, Manitoba Hydro is also studying potential use of biomass in a number of First Nations communities, and pursuing expansion of natural gas to a number of northern communities.

As discussed in transcript pages 2678 to 2682, Manitoba Hydro is also undertaking efforts to enhancements to programs to support electrically heated homes and buildings, increased incentives in a number of programs, and implemented program design changes to reach more rural electric customers. Manitoba Hydro has also been at the forefront of the development of energy codes and standards, and as noted above, Manitoba Hydro is

1 currently pursuing load displacement initiatives and other opportunities with emerging
2 technologies.

3
4 During the hearing (transcript pages 1847-1848) the Bipole III Coalition, expressed
5 concerns that Manitoba Hydro has not included distributed solar generation in its
6 forecasts, and noted that grid parity has also been reached in other jurisdictions. As
7 discussed at transcript page 2681, Manitoba Hydro is continually assessing the potential
8 for solar photovoltaic application in Manitoba and, under a range of lower costs
9 projections, early assessments suggest that grid parity will not be reached until the late
10 2020s (under the low cost scenario, using average cost) and possibly 2030s-2040s (under
11 the low cost scenario, using levelized cost) as shown in Manitoba Hydro Exhibit #67.

12
13 As explained at transcript pages 2683 to 2685, the desire to pursue further savings
14 through DSM would result in higher DSM costs in the future. There is the potential for
15 initiatives such as fuel choice, load displacement and conservation rates to result in
16 higher savings but these initiatives would also come at a higher cost. In undertaking
17 DSM, Manitoba Hydro leverages participating customer's investments, third-party
18 partnerships, and synergies available within Manitoba Hydro.

19

1
2 **11.0 MANITOBA HYDRO OFFERS A COMPREHENSIVE AND INTEGRATED**
3 **SUITE OF INITIATIVES TO ASSIST LOW-INCOME CUSTOMERS WITH**
4 **MANAGING THEIR ELECTRICITY BILLS**
5

6 Section 11.0 of the Argument demonstrates that Manitoba Hydro’s customer payment
7 performance has been improving, and that the Corporation sets appropriate standards for
8 managing customer payment and offers a suite of programs that are coordinated to assist
9 its low income customers.

10
11 In his report and comments to the PUB, Mr. Colton included a list of Recommendations
12 requesting that the PUB make a number of adverse findings regarding Manitoba Hydro’s
13 customer payment performance. As shown in Manitoba Hydro’s Rebuttal evidence (MH
14 Exhibit #29) and during cross examination of Mr. Colton, Manitoba Hydro submits that
15 Mr. Colton’s findings are erroneous and based on a failure to take into consideration a
16 number of factors.

17
18 **11.1. Manitoba Hydro’s Payment Performance Has Been Improving**
19

20 Through the evidence filed during the course of the proceeding, Manitoba Hydro has
21 provided detailed information as to how its payment performance has been improving.
22 When making a comparison between different years, consideration must be given to the
23 impacts of weather and other variables. Comparing one year with above average normal
24 temperatures (2012) to one with below average normal temperatures (2014) could lead to
25 misleading results or conclusions.

26
27 The 2014 year was impacted by an eight-month period (October 2013 to May 2014),
28 which consisted of persistent below normal temperatures that would have tended to result
29 in consecutive above normal bills for energy consumers. Years with below average
30 normal temperatures clearly lead to higher than normal customer bills. Mr. Colton agreed
31 on transcript pg. 3371 that”... *if the bill goes up and the ability to pay stays the same then*
32 *your arrearages will go up.*”

33
34 At page 36 of Manitoba Hydro’s rebuttal evidence, Manitoba Hydro provided the
35 Heating Degree Days by month for 2012, 2013 and 2014 as well as the percentage
36 change from the previous year and the “normal” Heating Degree Day calculated for 2014.

1 Manitoba Hydro also provided the average residential bill by month for 2012-2014 in
2 order for an appropriate comparison to be made. It is clear from the evidence presented
3 that the last three years does not represent a pattern of deterioration but rather one of
4 variation.

5
6 **11.2. Manitoba Hydro's Collections Activities Are Improving and Appropriate**
7 **Standards are Set for Managing Customer Payments**

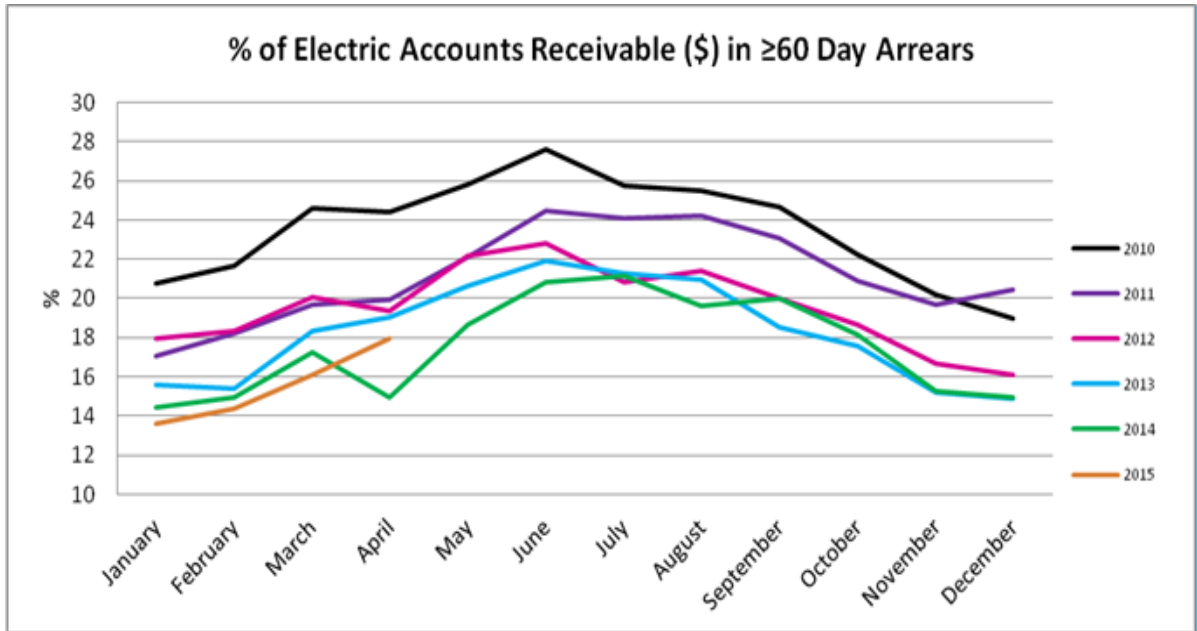
8
9 Manitoba Hydro has shown how it measures the outcomes of its Credit and Recovery
10 activities through different measures.

11
12 As shown through the evidence presented on the percentage of electric accounts sixty
13 days or more in arrears, Manitoba Hydro has experienced consistent improvement over
14 the past five years.

15
16 On page 38 of its Rebuttal Evidence (MH Exhibit #29) and in Mr. Chard's direct
17 testimony (Manitoba Hydro Exhibit #67), Manitoba Hydro presented a graph that puts
18 the last three years in the context of the last five years. The graph captures many of the
19 variables that need to be considered when measuring overall performance in a single
20 picture. It takes into accounts receivables, sixty days or greater, and expresses them as a
21 percentage of total account receivables due at the end of each month. There is a great deal
22 of variation from month to month, but the overall trend is an improvement in the payment
23 performance.

24
25 Mr Colton confirmed during cross examination at transcript pg. 3372 that the percentage
26 of electric accounts receivable greater than sixty days in arrears is equal to 2013 and is at
27 a low point relative to 2012, 2011 and 2010.
28
29

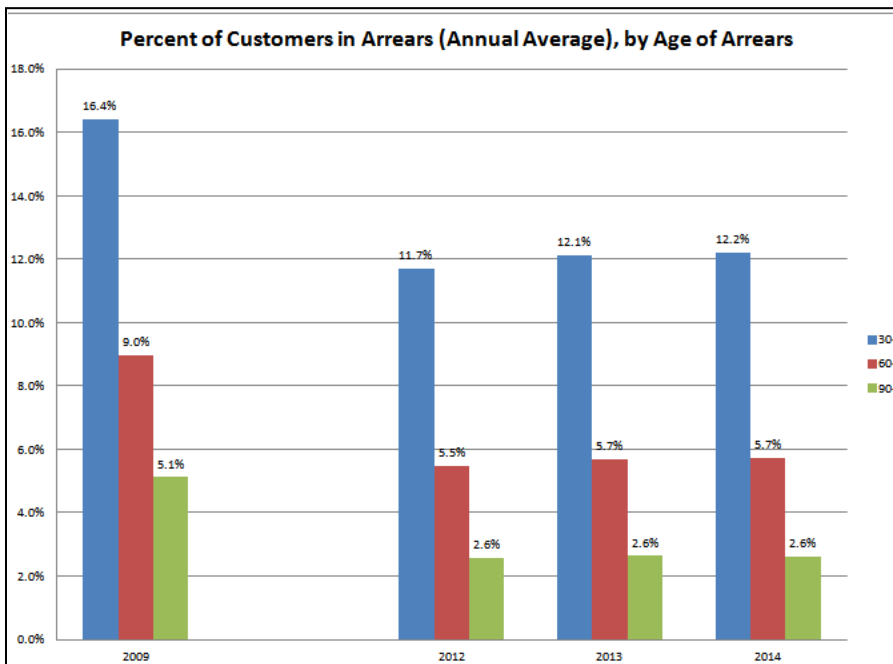
1 **Figure 75- Customer Arrears 2010-2015**



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In fact, if one compares the average percentage of current customers in arrears to customers in arrears in 2009, it is very clear that the percentage of customers in arrears has declined since 2009 for all ages of arrears (MH Exhibit #73).

9 **Figure 76 – Percentage of Customers in Arrears 2009 and 2012-2014**

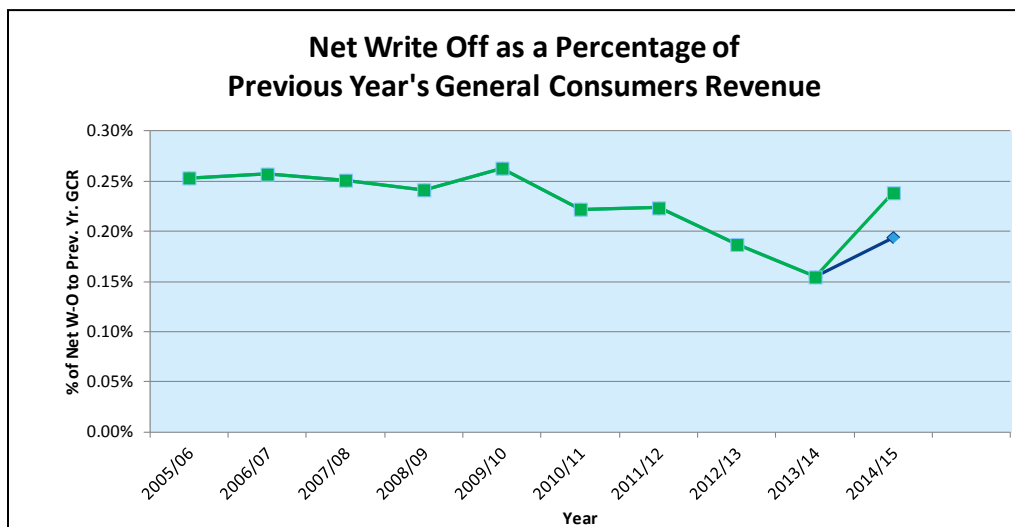


9
10

1 Another performance measure that Manitoba Hydro considers is the write-off for bad
2 debts, which is presented on pg. 39 of Manitoba Hydro's Rebuttal Evidence as well in
3 Manitoba Hydro Exhibit #67. The graph presented by Mr. Chard showed the last ten
4 years of write-off experience and expresses it as a percentage of the previous year's
5 general consumer's revenue. Mr. Chard explained at transcript pg. 2657 that the reason
6 we look at the previous year's revenue is that this is the year in which the bills that are
7 being written off would most likely have been issued. It is therefore, the most appropriate
8 point of comparison.

9
10 The graph presented by Mr. Chard, shows results that cluster very strong around 0.25%
11 or one quarter of a percent for the first five years. The following five years shows an
12 improvement dipping below 0.2% for a couple of years, and then rebounding for the year
13 just ended. Manitoba Hydro explained at transcript pg. 2658 that the second point for
14 2014/15 is presented because the 2014/15 fiscal year write-off included several
15 extraordinary items such as the write-off of a significant non energy billing and the
16 acceleration of three write-offs related to large bankruptcies. Manitoba Hydro Exhibit
17 #67 depicted what the write-off would have been if we had excluded these items.

18
19 **Figure 77- Write-off Performance 2006-2015**



20
21
22 Even when one looks at measures such as collection costs as a percentage of billings,
23 Manitoba Hydro is faring well in comparison to other jurisdictions that have a low
24 income affordability program. As confirmed during cross examination at transcript pages
25 3374-3377, in Pennsylvania where Mr. Colton has been extensively involved in terms of

1 bill affordability programs, the collection costs as a percentage of billings (excluding the
2 cost of the bill affordability program) is 3.34%. In Manitoba, Manitoba Hydro's
3 collection costs as a percentage of billings is 1.32%, significantly lower than that of
4 Pennsylvania.

5
6 Manitoba Hydro has taken, and continues to take, steps aimed at improving the cost
7 effectiveness of its credit and collection activities. As discussed in its rebuttal at pages
8 41-42 (MH Exhibit #29), Manitoba Hydro has made significant changes to the
9 organization of its credit and collection functions. All credit related activities were
10 centralized to the Credit and Recovery Services Department in Winnipeg, which has
11 allowed for a consistent treatment of accounts province wide.

12
13 Manitoba Hydro also undertook an Information Technology project to help focus
14 resources on customers in need of the most attention. The Predictive Analysis project,
15 which was implemented in mid-2014, measures past payment history to assess potential
16 future payment performance. The project included the acquisition of an auto dialer and
17 analytics and reporting capabilities used to target customers who need to be contacted
18 and to present Credit Representatives with more comprehensive and useable information
19 regarding the account or accounts of the customer with whom they are dealing. An
20 explanation of these projects and other changes associated with these projects contributed
21 to the decline in Credit and Collection Costs are provided in Manitoba Hydro's response
22 to MKO/COALITION/MH I-2d).

23
24 At transcript pg. 2659, Mr. Chard discussed how, when customers fall into arrears, the
25 approach that is taken is to work with the customers to help get their account back to
26 current as quickly as possible. Manitoba Hydro's credit representatives listen to the
27 customers and work within customers' personal situations. The credit representatives are
28 fully empowered to be as flexible as possible in terms of working within the customers
29 means to ensure they don't fall further behind in their monthly bills. The credit
30 representatives are fully empowered to make appropriate payment arrangements and to
31 use incentives such as forgiveness of late payment charges. Manitoba Hydro forgives late
32 payment charges in a variety of circumstances, including for example in the spring of
33 2011 where it canceled the billing of late payment charges for customers who were
34 affected by flooding during the period of April 2011 to May 2012 (MH Exhibit #29, page
35 37).

36

1 At transcript page 2660, Mr. Chard also explained how Manitoba Hydro has a specialist
2 within the credit department who deals with vulnerable customers and assists them in
3 accessing additional resources within the community. By speaking directly with
4 customers, Manitoba Hydro is able to identify customers who may be eligible for
5 additional assistance through programs such as the Neighbors Helping Neighbors and
6 Affordable Energy program. As further explained by Mr. Chard, when it is clear from
7 listening to customers that they may not qualify for those programs, Manitoba Hydro's
8 credit representatives will discuss with these customers, the programs that are available
9 through Manitoba Hydro's residential Power Smart program. As will be discussed in the
10 next section, Manitoba Hydro also has a strong suite of programs that are designed to
11 help customers manage their bills.
12

13 It is clear from the evidence seen in this proceeding, there is no substantial and
14 deteriorating payment problem. Manitoba Hydro has presented evidence that its payment
15 performance has been improving and that it is flexible and works with customers'
16 individual situations in order to provide assistance to customers who are in need.
17

18 **11.3. Manitoba Hydro Offers a Comprehensive and Integrated Suite of Initiatives to** 19 **Assist Customers with Managing their Electricity Bills, with a Specific Focus on** 20 **Targeted Customer Segments**

21
22 Manitoba Hydro's overall strategy to assist customers with managing their electricity
23 bills involves a suite of initiatives including DSM, bill management and emergency
24 financial assistance using a holistic and integrated approach. Manitoba Hydro recognizes
25 all three components are important; however, DSM is the primary component of the
26 overall strategy as it offers the best long term solution for customers and the utility.
27

28 **11.3.1. The Importance of Demand Side Management**

29
30 In its Application and throughout the hearing, Manitoba Hydro has outlined the
31 importance of DSM to Manitoba Hydro. DSM fills a key role in how Manitoba Hydro
32 will successfully fulfill our mandate and our mission. As Mr. Kuczek testified,

33 *“demand-side management is one (1) of the key focus areas for the Corporation*
34 *as an -- as indicated in our Corporate Strategic Plan. But I also wanted to point*
35 *out that demand-side management also plays a key role in supporting our efforts*
36 *in a -- a number of the other key areas of focus for the Corporation. And that --*

1 *that includes providing customers value, financial strength, and developing*
2 *Aboriginal -- positive Aboriginal relations as well as protecting the*
3 *environment.”*

4 (Transcript page 2663)

5 And that

6
7 *“DSM plays two (2) important roles within the Corporation. That one (1) is to*
8 *assist customers in managing their bills, but the other is in terms of meeting the*
9 *future energy needs of the province.” (Transcript page 2665)*

10 11 **11.3.2. Manitoba Hydro is Assisting Electric Heat Customers**

12
13 For the overall residential market, DSM is the primary strategy employed to assist
14 customers in lowering their home energy costs. Since the DSM program’s inception,
15 Power Smart has been successful in reducing overall residential customer bills by \$37
16 million (see Appendix 8.2 p 49); savings which continue to be realized into the future.

17
18 In assisting customers in managing their energy bills, Manitoba Hydro recognizes the
19 circumstances of customers heating with electricity. As Ms. Morrison testified, Manitoba
20 Hydro has initiated program enhancements specifically targeted to customers with
21 electrically heated homes and buildings, including increased financial incentives,
22 technical support and targeted sales approaches. In addition, Ms Morrison testified that
23 Manitoba Hydro has also enhanced other programs which assist not just electrically
24 heated customers, but all customers. (Transcript page 2678).

25
26 Manitoba Hydro has also introduced new programs (Drain Water Heat Recovery,
27 Residential LED Lighting), and is piloting new technologies, such as solar domestic
28 water heating, to reduce electricity use and energy bills for our customers. (2015-16
29 Power Smart Plan; Coalition/MH I-69 Revised – Attachment 2).

30
31 Manitoba Hydro is also continuing to explore emerging opportunities, such as cold
32 climate air source heat pumps (ccASHP). As noted in Ms. Morrison’s testimony
33 (transcript pages 3156 - 3161 and in Manitoba Hydro’s response to GAC/MH I-66e),
34 there are significant costs associated with installing these systems and other
35 considerations, such as actual in-field performance and maintenance, which must be
36 further explored prior to promoting ccASHP. Manitoba Hydro is currently actively

1 investigating the opportunities that are presented by ccASHP (MMF/MH II-4d). As Ms.
2 Morrison testified Manitoba Hydro, is working at a national level through the Canadian
3 Standards Association (CSA) and in partnership with BC Hydro and Hydro Quebec to
4 establish national standards for seasonal efficiency performance ratings reflecting local
5 climates which will provide consistency and help the industry move forward (Transcript
6 page 3159). This investigation is necessary prior to promoting an energy efficiency
7 opportunity to customers, particularly lower income customers. As Ms. Morrison
8 testified:

9
10 *“Yes. The -- as we stated, we -- we have looked at the technology, and it does*
11 *appear to be attractive. However, and from a theoretical perspective, they're*
12 *indicating that they can operate at the colder temperatures.*

13 *But we also recognize, as Mr. Kuczek testified earlier, that the efficiency*
14 *at those colder temperatures will degrade. And so we want to make sure that,*
15 *prior to promoting this to our customers, and in particular, customers who would*
16 *be quite concerned if those energy-efficiency savings did not materialize, that*
17 *these units will perform as indicated.” (Transcript page 3159)*

18
19 Counsel for MKO, Mr. Masi, also recommends that Manitoba Hydro evaluate and
20 consider fuel-switching opportunities for all-electric customers, including the use of
21 biomass for space and hot water heating. Manitoba Hydro is currently exploring the
22 option of offering a program supporting the use of wood fuel as an alternative to electric
23 heating as noted in Manitoba Hydro’s response to MMF/MH II-10b and information
24 regarding wood pellet stoves and boilers were outlined in Manitoba Hydro’s responses to
25 GAC/MH I-66b through to GAC/MH I-66e.

26 27 **11.3.3. Manitoba Hydro is Providing Assistance to Low Income Customers and First** 28 **Nation Communities**

29
30 In addition, recognizing the unique challenges faced by lower income customers,
31 Manitoba Hydro offers the Affordable Energy Program (AEP) providing lower income
32 households, owners and renters, with a free in-home energy efficiency review including
33 free basic energy saving measures, free insulation and a new high efficient furnace for
34 \$9.50/month over five years for a total cost of \$570 (as noted in the 2015/16 Power Smart
35 Plan). Participating lower income households directly benefit with reduced utility bills.
36

1 As noted in the 2015/16 Power Smart Plan, customers in electrically heated homes
2 insulating their homes under the AEP can save up to \$600 annually. This is higher than
3 the potential bill savings of up to \$470 annually for a natural gas heated customer
4 participating under the AEP and receiving both insulation and a furnace upgrade
5 (Coalition/MH I-69 Revised, Attachment 2, page 6). The Affordable Energy Program
6 promotes participation through various media channels, partners with community
7 organizations, provides information sessions, connects with community networks and the
8 program is marketed directly through call campaigns to customers including those in
9 arrears or receiving Neighbours Helping Neighbours assistance.

10
11 Ms. Galbraith also discussed Manitoba Hydro's multi-pronged approach to reach targeted
12 customers and various working groups through the AEP at transcript pgs. 2666-2668.
13 According to the external review conducted by Dunsky Energy Consulting, the annual
14 participation rate of 1.8% overall, with participation of 4.1% per year among customers
15 with poor/fair insulation, compares well to other low income programs (MKO/Coalition
16 I-9 attachment 1 p.25). Mr. Dunsky goes on to further state the program is well managed
17 and achieving solid results (MKO/Coalition I-9 attachment 1 p. 28). His review also
18 noted, the best programs achieve an annual participation rate of 1% to 4%
19 (MKO/Coalition I-9 attachment 1 p. 25). Ms. Galbraith further testified that Manitoba
20 Hydro has eliminated the requirement for customers to make lenient payment
21 arrangements prior to becoming eligible for the AEP and has included the installation of
22 drain water heat recovery units for electrically heated water tanks. Manitoba Hydro has
23 increased focus on its street-by-street approach and added additional support and
24 incentive compensation for the North End Community Renewal Corporation and
25 increased incentive compensation for the Brandon Community Renewal Corporation to
26 further increase participation for our customer demographics. Manitoba Hydro has
27 extended the AEP to private landlords and tenants and launched a pilot with housing and
28 community development using the social enterprise contractor, BUILD (transcript pg.
29 2668).

30
31 As noted by Ms. Galbraith at transcript pg. 2668, Manitoba Hydro is also currently
32 investigating opportunities for installation of some low cost measures, including LED
33 light bulbs for multi-unit residential buildings as well as promoting the installation of the
34 water and energy saver kit in multi-unit residential buildings. The results are noticeable
35 as to date, almost 28,000 suites have participated in the installation of the water and
36 energy saver kit (transcript pg. 2668). As shown in Manitoba Hydro Exhibit #67,

1 Manitoba Hydro has had participation in the AEP of almost 11,000 homes and projects
2 participation of almost 46,000 to the year 2028/29. These results show that Manitoba
3 Hydro offerings are coordinated and integrated to assist it low-income customers.
4

5 Further to these comprehensive overall strategies, and in response to the concerns raised
6 by Mr. Orle in his closing argument, Manitoba Hydro believes it is valuable to remind the
7 PUB of Mr. Kuczek's testimony regarding the targeted and comprehensive approach that
8 Manitoba Hydro is taking to better serve our customers in First Nation communities. As
9 Mr. Kuczek testified:

10
11 *"we're taking a fairly comprehensive approach in this area. It involves more than*
12 *what Ms. Galbraith's doing through the Energy -- Affordable Energy Program. It*
13 *includes Ms. Morrison's efforts with -- through her programs, Mr. Friesen's*
14 *support through his technical engineering support, and also our external support*
15 *through AKI Energy which I'll talk about a bit later in the presentation, as well as*
16 *industry and some other areas. And I'll touch on that as well. But just some*
17 *background. Manitoba Hydro's approach to DSM used to be that we would just*
18 *offer programs. And I -- I think that was the traditional approach that most*
19 *utilities took in the '90s and maybe the early 2000s. And we've earned through*
20 *our experience that a -- a more effective strategy is to take a -- more of a*
21 *community and partnership-based approach. And -- and we've done that with the*
22 *First Nations since 2009. And we're also partnering with AKI Energy since 2013,*
23 *and that is proving out to be quite effective as well. So our vision is -- is to*
24 *actually develop a First Nation community energy efficiency program which is*
25 *actually -- is the -- take -- is developed by the First Nation. And our role is really*
26 *just there to be supportive for the First Nation."* (Transcript page 2670 - 2671).
27

28 The response to MMF/MH I-24 describes the First Nations Power Smart programs which
29 is focused on capturing energy efficient opportunities and assisting customers through
30 having lower energy costs and describes Manitoba Hydro's efforts to market both the
31 AEP and the First Nation Power Smart Programs.
32

33 At transcript pages 2671-2674, Manitoba Hydro discusses that the First Nations Power
34 Smart Program has a dedicated energy advisor who works directly with First Nation
35 Communities to complete free basic energy savings measures and free insulation
36 upgrades to all qualifying homes. Funding is provided for training, labour and material

1 allowing local members to complete the installation. A new initiative under the program
2 will provide free basic energy savings measures to all remaining First Nation homes with
3 funding for labour provided to the First Nation communities for implementing this
4 program. First Nation households directly benefit with reduced utility bills.

5
6 Working in partnership with AKI Energy and participating First Nation communities,
7 geothermal heating and cooling systems are currently being installed in four First Nation
8 communities through Manitoba Hydro's Power Smart Geothermal Community program.
9 AKI Energy is currently in discussions with other First Nation communities to expand
10 this program to include broader participation, and Mr. Kuczek confirmed that Manitoba
11 Hydro would consider including other rural communities into the program at transcript
12 page 3139-3140.

13
14 As discussed at transcript pages 2674-2677, in partnership with AKI Energy and Pequis
15 First Nation, Manitoba Hydro is piloting a solar hot water initiative with 20 systems
16 being installed and monitored for system performance and cost effectiveness. Manitoba
17 Hydro is also working AKI Energy through the Power Smart Bioenergy Optimization
18 Program to evaluate opportunities for the use of biomass for space and hot water heating
19 within three First Nation Communities, focusing on the utilization of locally-available
20 biomass resources to displace electric load for space and hot water heating needs that
21 would otherwise be served from the Manitoba Hydro system.

22
23 As discussed at transcript page 3123, another key strategy employed to assist all
24 customers in lowering their energy costs is the Heating Fuel Choice Initiative. The
25 objective of the initiative is to increase awareness and understanding of the total lifetime
26 cost of natural gas, electricity and geothermal heating systems and to provide customers
27 with the information to effectively choose the most economic system which best meets
28 their needs and circumstance. To aid in offsetting the capital cost of a new heating
29 system, Manitoba Hydro also offers innovative on-bill financing through its various
30 financing programs, including the Power Smart Residential Loan, the Power Smart
31 PAYS Financing program and the Residential Earth Power Loan. Customers can choose
32 which financing program best fits their needs.

33
34

1 **11.3.4. Manitoba Hydro is Working with the Manitoba Metis Federation**

2
3 In Manitoba Hydro Exhibit #67 and as discussed at transcript pg. 2669, Manitoba Hydro
4 has highlighted some of the efforts undertaken with the Manitoba Metis Federation
5 (“MMF”) including adding an MMF member to the AEP advisory committee and
6 incorporating specific targeted advertising through newspaper and radio. Manitoba Hydro
7 would note that this AEP advisory committee would be a more productive venue to
8 propose and discuss recommendations such as the contracting of an independent
9 engineering contractor to conduct physical surveys of lower income household insulation
10 levels.

11
12 Manitoba Hydro would be willing to discuss in more detail the type of detailed
13 information available and additional options for better understanding the energy use of
14 lower income customer sector. As Ms. Morrison testified, complementing the Residential
15 Energy Use Survey information, Manitoba Hydro has an extensive database on customer
16 insulation levels from across the province through its delivery of past programs including
17 the EnerGuide for Houses program and its successor, the ecoENERGY for Houses
18 program. This data is based upon in-home pre and post energy assessments. In addition,
19 pre and post in-home energy assessments are provided under the Affordable Energy
20 Program and Home Insulation Program (as discussed at transcript page 3144). This data
21 also informs Manitoba Hydro’s understanding of the energy use and insulation levels of
22 homes across Manitoba. There is a cost associated with undertaking in-home energy
23 assessments by trained Energy Advisors. Manitoba Hydro is of the opinion that if a
24 customer is not willing to act upon the information received through the assessment, that
25 a large portion of the value of these assessments is lost. In his closing statements
26 (transcript page 4278), Mr. Masi acknowledges that cost effectiveness should be a
27 consideration when pursuing programming; Manitoba Hydro exercises the same
28 consideration when gathering market data.

29
30 **11.3.5. Manitoba Hydro Assists Customers with Accommodating its Practices with**
31 **Payment Arrangements**

32
33 Manitoba Hydro’s bill management strategy provides customers with very
34 accommodating practices which include payment arrangements, equal payment plans,
35 disconnection avoidance, negotiable late payment charges, and custom due dates. As
36 discussed by Ms. Galbraith during direct evidence, when customers face personal

1 hardship or a crisis, Manitoba Hydro refers these customers to seek emergency financial
2 assistance through the Neighbours Helping Neighbours (“NHN”) Program. Through this
3 program, customers can qualify for funding and be referred to various community
4 resources to help with their personal situation. Manitoba Hydro has shown how its
5 collection activities and programs are coordinated and integrated with its Affordable
6 Energy Program, including the First Nations Power Smart Program, and the NHN bill
7 assistance programs.

8
9 As stated above, the AEP provides assistance in completing energy efficiency upgrades
10 to low income homeowners and landlords of low income tenants and the NHN, which is
11 administered by the Salvation Army, is designed to support people experiencing personal
12 hardship or crisis who are unable to pay their electricity bills. As noted by Ms. Galbraith
13 at transcript pgs. 2660-2661, a majority of the referrals from the NHN come from
14 Manitoba Hydro’s credit and recovery services department. In response to MMF/MH I-
15 24, Manitoba Hydro discusses how it currently works closely with The Salvation Army
16 to provide assistance to individuals facing financial hardship and how through
17 participation in the NHN, customers are required to complete an Affordable Energy
18 application to encourage participation in the AEP. The Salvation Army is also
19 promoting the AEP to individuals requesting food assistance or food hampers.

20
21 Manitoba Hydro has also shown how the programs are coordinated by providing
22 examples at transcript pg. 2661 – 2662 with respect to the customers in arrears and how
23 Manitoba Hydro looks at the specific circumstances of each individual customer and
24 provided assistance. In one instance Manitoba Hydro made an exception for a customer
25 who exceeded the income threshold of the AEP in order to assist this customer in
26 obtaining free insulation. In another instance Manitoba Hydro representatives assisted a
27 customer by filling out the application with him in order that he could be approved for the
28 AEP. Ms. Galbraith also provided an example Manitoba Hydro worked with NHN to
29 have a customer reapply for the NHN program as well as for the AEP. As noted
30 previously, when it is clear from listening to customers that they may not qualify for the
31 AEP or the NHN programs, Manitoba Hydro’s vulnerable customer specialist will
32 discuss with these customers, the programs that are available through Manitoba Hydro’s
33 residential Power Smart program.

34
35

1 **11.3.6. Manitoba Hydro Assists its Commercial and Industrial Customers**
2

3 For the overall commercial market, Power Smart is also the key strategy employed to
4 assist business and institutional customers in lowering their energy costs. Since the
5 program's inception, Power Smart has been successful at reducing overall commercial
6 customer bills by \$37 million (see Appendix 8.2 p 49); savings which continue to be
7 realized each year into the future. Although, Power Smart programs are available to all
8 commercial customers regardless of heat source, in the 2014/2015 plan, several
9 commercial programs were enhanced in order to specifically assist commercial customers
10 using electricity consuming technologies.

11
12 As noted within Manitoba Hydro's filing in the current application including the 2014-
13 2017 Power Smart Plan, 2014-17 Power Smart Plan 15-year Supplement Report and
14 2015/16 Power Smart Plan, Manitoba Hydro continues to provide its industrial and
15 commercial customers with opportunities to conserve energy and improve efficiency,
16 improving the overall productivity and competitiveness of Manitoba industry through
17 participation in its Power Smart Performance Optimization and Natural Gas Optimization
18 Programs. Additionally, opportunities to use low-cost or no-cost waste and byproducts
19 streams to generate heat and electricity through combined heat and power systems are
20 also supported through Manitoba Hydro's Power Smart Bioenergy Optimization and
21 Load Displacement Programs, which support customer-sited generation as an opportunity
22 to displace energy purchases that would otherwise be made from Manitoba Hydro's
23 system.

24
25 **11.4. The Energy Savings Act**
26

27 With the enactment of the *Energy Savings Act* and *The Winter Heating Cost Control Act*,
28 the Affordable Energy Fund was created and Manitoba Hydro was required to prepare an
29 energy efficiency plan in consultation with the Minister responsible for the Corporation.
30 The Acts stated the purposes of the Affordable Energy Fund. In the *Energy Savings Act*,
31 section 6, specifically states,
32

33 **Efficiency and Conservation programs and services**

34 6. *"The programs and services for efficiency improvements and conservation*
35 *referred to in subclause 5(1)(a)(i)*

36 *(a) Must be generally designed and delivered to ensure*

- 1 (i) *That people living in rural or northern Manitoba, seniors and*
2 *people with low incomes have access to those programs,*
3 *services and projects, and*
4 (ii) *That the corporation’s residential customers, regardless of the*
5 *energy source they use to heat their homes, have access to*
6 ***comparable** (emphasis added) programs, services and*
7 *projects;”*
8

9 With the introduction of the Affordable Energy Fund, Manitoba Hydro has offered
10 comparable programs to targets customers, including:
11

- 12 1) Incentive heating programs for customers who used oil and propane for
13 heating purposes which were comparable to the incentives offered to
14 customers eligible for converting their heating source from standard efficient
15 furnaces to high efficient furnaces
16 2) Incentive insulation programs for customers who used oil and propane for
17 heating purposes which were comparable to the incentives offered to
18 customers using either natural gas or electricity for space heating; and
19 3) Affordable Energy programs for lower income customers.
20

21 Manitoba Hydro has developed Energy Efficiency Plans in consultation with the Minister
22 since 2012 and submits that the intent of the “comparable” programming was not
23 intended to mean “resulting in comparable energy bill savings” for customers.
24

25 **11.5. Manitoba Hydro’s Legislative Context on a Rate Affordability Program**

26

27 Manitoba Hydro views the adoption and implementation of a Low Income Affordability
28 Program, specifically the models proposed by Mr. Colton whereby rates for certain
29 customers are subsidized based on the income of the customers to be outside of Manitoba
30 Hydro’s mandate as it is defined by its enabling legislation.
31

32 Manitoba Hydro’s mandate flows from section 2 of *The Manitoba Hydro Act*, C.C.S.M.
33 H190. Section 2 provides that:
34

35 *The purposes and objects of this Act are to provide for the continuance of*
36 *a supply of power adequate for the needs of the province, and to engage in*
37 *and to promote economy and efficiency in the development, generation,*

1 *transmission, distribution, supply and end-use of power and , in addition,*
2 *are*

3
4 *(a) to provide and market products, services and expertise related to the*
5 *development, generation, transmission, distribution, supply and end-use of*
6 *power, within and outside the province; and*

7
8 *(b) to market and supply power to persons outside the province on terms*
9 *and conditions acceptable to the board.*

10
11 Manitoba Hydro’s mandate does not extend to issues associated with the affordability of
12 electricity as proposed by Dr. Colton. *The Manitoba Hydro Act* provides clear context
13 that the Corporation’s mandate to promote economy refers to the production and
14 provision of electricity to customers at a cost reflective of least cost planning
15 considerations and to promote efficiency refers to efficiency in the end-use of power
16 (such as Manitoba Hydro’s Power Smart programs and the Lower Income Energy
17 Efficiency Program).

18
19 *The Manitoba Hydro Act* stipulates in section 39(1) that “The prices payable for power
20 supplied by the corporation shall be such as to return to it in full the cost to the
21 corporation, of supplying the power, including” operating expenses, interest and debt
22 service costs, working capital, and reserves. In section 39(2.1), *The Manitoba Hydro Act*
23 states that “The rates charged for power supplied to a class of grid customers within the
24 province shall be the same throughout the province”. Read together, Manitoba Hydro has
25 a clear obligation to fully recover its costs to supply power and in doing so, it must
26 charge equalized rates to each class of customers.

27
28 *The Manitoba Hydro Act* also prohibits the funds of the Corporation being employed for
29 the purposes of the government or any agency of the government in section 43(3). This
30 section places limits on the use of Manitoba Hydro’s funds and marks a delineation with
31 respect to the use of funds for intended and legitimate purposes as set out in Manitoba
32 Hydro’s mandate as set forth above and other social policy purposes which are within the
33 purview and jurisdiction of the legislature.

34
35 Manitoba Hydro submits that the Government has taken steps in the past with respect to
36 bill affordability or providing assistance with energy bills with the introduction of the

1 *Energy Savings Act* and *The Winter Heating Cost Control Act*. Section 2 of *The Winter*
2 *Heating Cost Control Act*, for example, states:

3 **Purposes of this Act**

4 2 The purposes of this Act are

5 (a) to protect consumers from the impact of rising heating costs during the winter
6 season; and

7 (b) to provide support for programs and services

8 (i) for electricity and natural gas energy efficiency, enhanced space heat retention
9 and heating efficiency, and

10 (ii) for developing alternatives to natural gas,

11 in order to ensure that sufficient and sustainable energy resources are available in the
12 future.

13 In its closing comments, GAC provides its understanding of the PUB's jurisdiction over
14 Manitoba Hydro in support of the assertions made that the PUB should decide the
15 threshold policy issue of implementation of an affordability program, facilitate a
16 collaborative process and decide disputed areas of program design based on a
17 collaboration process final report.

18
19 GAC submits that pursuant to section 26(4) of *The Crown Corporations Public Review*
20 *and Accountability Act* (the "Accountability Act"), the PUB has the jurisdiction to
21 consider the proposal put forward by GAC with respect to a rate affordability program. It
22 is clear that section 26(4) is to be read with the remainder of section 26, which limits the
23 jurisdiction of the PUB to a review and approval of rates for services. In the case of
24 Manitoba Hydro, "rates for services" is defined in section 26(2)(b) as prices charged with
25 respect to the provision of power. In reviewing the discretion of the PUB, section 26(4)
26 cites factors which the PUB may take into consideration in reviewing rates charged for
27 power, including:

28
29 26(4)(a)

30 (viii) any compelling policy considerations that the board considers
31 relevant to the matter; and

32 (ix) any other factors that the board considers relevant to the matter
33

1 GAC's review of section 26(4), fails to take into consideration the entire Part IV of the
2 Accountability Act. Section 26(1) of the Accountability Act indicates that no change in
3 rates for services and no new rates for services shall be introduced without the approval
4 of the PUB. The term "rates for services" is a defined term in section 26(2). The term
5 "rates for services" is specifically defined as "...prices charged by that corporation with
6 respect to the provision of power...". The PUB mandate is solely with respect to the
7 setting of the price charged for the provision of power. The consideration of other factors
8 does not expand the PUB's jurisdiction with respect to the creation of an affordability
9 program. In other words, while the PUB may have broad discretion in the factors which
10 can be reviewed in approving rates, this discretion is to be used in fulfilling a narrow
11 mandate. The enabling legislation provides the PUB with the jurisdiction to consider
12 policy in making its determination regarding rates charged for power. It does not provide
13 the jurisdiction to set social policy. In Manitoba, based on the existing legislation, the
14 Legislature has reserved the right to set social policy as it has not expressly granted that
15 power to the PUB.

16
17 GAC also relies upon section 27 and 28 of *The Public Utilities Board Act* (the "PUB
18 Act") in support of their assertion that the PUB has jurisdiction to require and to facilitate
19 a collaborative process, and on sections 27, 28 and 31 of the PUB Act as providing the
20 PUB with the jurisdiction to decide the disputed areas.

21
22 As noted in Manitoba Hydro's rebuttal evidence, GACs position, ignores section 2(5) of
23 the PUB Act which clearly states that

24
25 Subject to Part IV of *The Crown Corporations Public Review and*
26 *Accountability Act* and except for the purposes of conducting a public
27 hearing in respect of an application made to the board under subsection
28 38(2) or 50(4) of *The Manitoba Hydro Act*, this Act, other than subsection
29 83(4) and the regulations under that subsection, does not apply to
30 Manitoba Hydro and the board has no jurisdiction or authority over
31 Manitoba Hydro.

32
33 It is clear that other than the authority granted to the PUB to review Manitoba Hydro's
34 rates for service and sections 38(2), 50(4) and 83(4), the other sections, including sections
35 20, 27, 28 and 31 of the *PUB Act* do not apply to Manitoba Hydro.
36

1 GAC also relies upon the Ontario case of *Advocacy Centre for Tenants-Ontario v*
2 *Ontario (Energy Board)*, 2008 O.J. #1970 (the “Advocacy Centre case”) to argue that the
3 PUB has the jurisdiction to consider the proposal put forward. In order to properly assess
4 the applicability of the Ontario case, one must look at the legislation in Ontario and
5 compare it to the legislation in Manitoba and the determination made by the Ontario
6 Superior Court of Justice.

7
8 Section 36 of the Ontario Energy Board Act states that:

- 9
- 10 (1) No gas transmitter, gas distributor or storage company shall sell gas or
11 charge for the transmission, distribution or storage of gas except in
12 accordance with an order of the Board, which is not bound by the terms
13 of any contract.
 - 14 ...
 - 15 (2) The Board may make orders approving or fixing just and reasonable
16 rates for the sale of gas by gas transmitters, gas distributors and storage
17 companies, and for the transmission, distribution and storage of gas.
 - 18 (3) In approving or fixing just and reasonable rates, the Board may adopt
19 any method or technique that it considers appropriate.
- 20

21 A reading of the Manitoba legislation demonstrates that there is no equivalent of section
22 36(3) of the Ontario Energy Board Act as there is no section giving the PUB the authority
23 to adopt any method or technique. The consideration of factors is solely for the purpose
24 of reaching a decision pursuant to the rates charged for power.

25
26 GAC also considered the decision in Nova Scotia, by the Nova Scotia Court of Appeal.
27 In *Dalhousie Legal Aid Service v. Nova Scotia Power Inc.*, 2006 NSCA 74, the issue
28 before the court was whether or not the Utility and Review Board had committed a
29 reviewable error by concluding that it had no statutory authority to adopt a rate assistance
30 program for low income customers.

31
32 The Nova Scotia Utility and Review Board in concluding that it had no power to consider
33 the proposed Rate Assistance Program stated:

34
35 The Board has the authority given to it by the Legislature to perform its
36 duties in accordance with the provisions of the Act. The Board's role is to

1 make decisions, based on fact and law, within the parameters of the
2 statutory authority it has been given by the Legislature. The Board's duty
3 is to follow public policy decisions made by the Legislature and expressed
4 in statutes. The Board does not have jurisdiction to establish public policy.
5 That is the role of elected officials who are accountable to the public for
6 this function. It seems almost certain that the RAP, as described by Mr.
7 Colton, would result in the electricity bills of certain customers, depending
8 on their income, being subsidized by other customers. In the Board's view,
9 this is a social and public policy question which falls within the purview
10 of the Legislature rather than the Board.²

11
12 The Nova Scotia Court of Appeal, in a unanimous decision, held that the Nova Scotia
13 Utility and Review Board did not err in its conclusions that s. 67(1) precludes the Board
14 from considering DLA's rate assistance program for low income customers."³ In its
15 reasons, the Nova Scotia Court of Appeal clarified that "[t]he Board's regulatory power is
16 a proxy for competition, not an instrument of social policy".⁴ The court also confirmed
17 that "[i]t is for the Legislature to decide whether to expand the Board's purview" to
18 authorize different residential rates based on income.⁵ The Supreme Court of Canada
19 denied leave to appeal.⁶

20
21 Manitoba Hydro therefore submits that the case law from different jurisdictions in
22 Canada is not determinative of the issue as it can be distinguished on the basis of
23 differing legislation as discussed above. Similarly, the mandatory requirement in *The*
24 *Manitoba Hydro Act* that rates charged for power supplied to a class of grid customers
25 within the province be the same throughout the province, precludes the implementation
26 of a rate assistance plan for low income residential customers. Fundamental to a low
27 income rate is that all customers not qualifying for the low income rate will have to make
28 up the difference or subsidize the rate. The government addressed rate subsidization
29 when it passed the uniform rates legislation in 2001. Prior to uniform rates, rates in

² *Ibid* at para 8.

³ *Ibid* at para 40.

⁴ *Ibid* at para 33.

⁵ *Ibid* at para 25.

⁶ *Dalhousie Legal Aid Service v. Nova Scotia Power Inc.* 364 N.R. 391(note).

1 certain zones were considerably higher than rates in other zones. It was a policy decision
2 of government that all customer would pay the same rates as those in Winnipeg (i.e. the
3 government explicitly decided that a certain zone of customers would subsidize another
4 zone of customers). This was a government policy decision. If government intended to
5 subsidize certain customers based on income, it would have done so or it can make
6 another policy decision to do so. It would be inappropriate for the PUB to presume to
7 alter government policy decision by adding another level of subsidization which one class
8 of customers will pay to another.
9

10 **11.5.1. Participation in a Collaborative Process**

11
12 With respect to the participation by Manitoba Hydro in a collaborative process regarding
13 a low-income affordability program, Manitoba Hydro has maintained throughout the
14 hearing that it would be interested in being involved in such a process. Manitoba Hydro's
15 President and CEO, Mr. Thomson, indicated the Corporation's interest in participating in
16 such a process at transcript pg. 505. Mr. Barnlund confirmed at transcript pg. 2952-2953
17 that Manitoba Hydro is interested in engaging in discussions with regards to this area,
18 however, it has to recognize what Manitoba Hydro is responsible for and the areas that
19 Manitoba Hydro could reasonably address in terms of the issues of the plight of low
20 income customers. Mr. Barnlund went on to explain that there are certain things under
21 Manitoba Hydro's control and discretion. There are a large number of broad social issues
22 that are at play in the discussion between the ability of lower income customers to pay
23 their bills. It would need to be absolutely clear in any terms of reference what Manitoba
24 Hydro can be expecting to achieve and what Manitoba Hydro's role and responsibility
25 would be within that type of process.
26

27 Manitoba Hydro views that the process followed in Ontario is more akin to the process
28 that should be followed here in Manitoba. As confirmed by Mr. Colton during cross
29 examination (Transcript pg. 3364) the Minister of Energy in Ontario established the
30 fundamental policy decision that there would be a bill assistance program in Ontario and
31 directed the Ontario Energy Board to recommend an option for delivering an ongoing
32 ratepayer funded bill assistance program. The Ontario Minister of Energy invoked his
33 power under s. 35 of the *Ontario Energy Board Act*, which states that "The Minister may
34 require the Board to examine, report and advise on any question respecting energy." The
35 result of this request was the Ontario Energy Board Report published in December 2014.
36

1 In terms of their approach, the Ontario Energy Board performed extensive consultations
2 which included a number of parties offering different perspectives. During cross
3 examination, Mr. Colton agreed the perspectives of social agencies, utilities, government
4 departments, low income advocates, First Nations, and Metis communities should be
5 included in a conversation regarding the development of a low income program
6 (Transcript pg. 3365). Mr. Colton also agreed that any program design would benefit
7 from the coordination and integration of services and assistance programs that are
8 targeted to the same low income customers that would benefit from a rate affordability
9 program (Transcript page 3366).

10
11 As shown in MH Exhibit #73, one of the items included in the Ontario Energy Board's
12 report was a study gauging ratepayer support for the broad objectives of the program and
13 to help align program design with the values and expectations of ratepayers. The Ontario
14 Energy Board interpreted the results of the survey to mean that Ontario ratepayers would
15 support targeted assistance to low-income customers with the greatest need and that taxes
16 are the preferred funding option but Ontario ratepayers would be satisfied with a modest
17 provincial charge on their energy bills.

18
19 It should be noted that the report issued by the Ontario Energy Board also indicated that
20 the Board believed legislative change would be necessary as the Ontario Energy Board
21 indicated that they did not have the authority to set a provincial charge for this type of
22 program and also establish the rules for the funds to be disbursed to the distributors (MH
23 Exhibit #73). At transcript pg. 3234, Mr. Colton indicated that the Ontario government
24 recently introduced legislation with respect to affordability issues.

25
26 Manitoba Hydro submits that in order to establish a rate affordability program in
27 Manitoba, direction from the Minister is required as well as amendments to legislation.
28 Manitoba Hydro submits that there needs to be coordination and integration of services
29 and assistance programs as well as participation from government departments, social
30 agencies, low income advocates, First Nations, and Metis communities in order to have
31 an effective program which truly assists low income customers. A consultation process
32 which potentially leaves out important stakeholders because they aren't involved at the
33 initial stages of the process as proposed by Mr. Colton would, in Manitoba Hydro's
34 respectful submission, fail to truly provide low income customers with the appropriate
35 and most useful assistance required.

36

1 **11.6. Manitoba Hydro’s Late Payment Charges are Permitted by Legislation**

2
3 MKO and MMF both recommend that Manitoba Hydro eliminate the late payment charge
4 currently applied to customer’s accounts that are in arrears or alternatively recommend
5 that Manitoba Hydro reduce the interest rate charged from 16.03% annually to the
6 interest rate charged by Hydro in its PAYS program.

7
8 Pursuant to Section 28(1) of *The Manitoba Hydro Act*, the MHEB may, by regulation,
9 prescribe the terms and conditions upon and subject to which the corporation will supply
10 power to the users of the power supplied by it. Section 16(2) of the Electric Power Terms
11 and Conditions of Supply Regulation, C.C.S.M. c. H190 (the “Regulation”) which
12 provides that “All overdue and unpaid accounts are subject to a service charge.” The
13 determination of the interest rate is a business decision which has to be made by
14 Manitoba Hydro. Pursuant to legislation, all overdue and unpaid accounts are subject to a
15 service charge. MKO recommendation would require an amendment to the legislation in
16 order to eliminate the late payment charge.

17
18 As noted in Manitoba Hydro’s evidence at transcript pg. 2659-2660, “credit
19 representatives are fully empowered to make payment arrangements... such as
20 forgiveness of late payment charges, as a way to help customers – as an incentive to help
21 customers stay on track.” Therefore, although all overdue and unpaid accounts are subject
22 to a service charge, Manitoba Hydro makes business decisions and applies discretion as
23 to when late payment charges should be waived. Manitoba Hydro takes into
24 consideration a customer’s circumstances and will, where appropriate, waive the charge.

25
26

1 **12.0 MANITOBA HYDRO'S RATE DESIGN MATTERS AND OTHER APPROVALS**

2
3 Section 12.0 of the Argument summarizes Manitoba Hydro's rate matters and other
4 approvals that were the subject of review as part of the current proceeding.

5
6 **12.1. Rate Design**

7
8 Manitoba Hydro applied for approval to implement a Time-of-Use ("TOU") rate design
9 for General Service Large customers served at voltages greater than 30 kV. This rate
10 design initiative was deferred by the PUB to be heard in conjunction with the Cost of
11 Service Study review later in 2015.

12
13 There were other rate design matters that were raised by intervenors during the course of
14 this hearing. The issue of rate design for First Nations customers was raised by MKO in
15 its final argument. MKO has recommended the creation of separate residential and
16 general service rate classes for all First Nations accounts.

17
18 It is important to note Mr. Barnlund's testimony with regard to average cost rate setting,
19 as found in the transcript beginning at line 15 page 2616:

20
21 *"Since November of 2001, we have had legislation that's required that Manitoba*
22 *Hydro charge all customers a uniform or postage stamp rate for service. So what*
23 *does that mean? That means that, if you're a residential customer, there's no*
24 *distinction as to whether you reside in the south or the north or whether you*
25 *reside in the city or in a rural area, you're going to be charged the same unit rate*
26 *for service. Now, in reality, there is a huge difference in the cost of serving a*
27 *customer, whether they are in an urban area or in a rural area. The cost of*
28 *service is significantly driven by the density of the customer base that you're*
29 *servicing in your service territory.*

30
31 *It's much more economical, much cheaper to serve a large number of customers*
32 *in a cluster than it is to serve a number of customers that are widely dispersed.*
33 *And that should be pretty apparent because if you have widely dispersed*
34 *customers you have to construct a lot more feeder, you have to construction a lot*
35 *more facilities to be able to serve those customers. But the cost of providing*
36 *customer service to those customers is also higher, too, because you have to staff*
37 *people farther apart and you have to travel and you have to have vehicles if*
38 *you're going to be able to transpe -- transport employees to be able to go and*

1 *reestablish service for customers, to be able to provide electrical inspections, to*
2 *be able to do all of the customer service requirements that we, as a utility, have.”*
3

4 Rates for customer classes are set on an average cost basis, and the rate for electricity
5 service for each class is the average cost across the entire Manitoba Hydro system.
6 Uniform rates for service are a well established regulatory principle, which have also
7 been enshrined in legislation in Manitoba since November of 2001.
8

9 Mr. Barnlund goes on to state on page 2619 at line 7:

10
11 *“So in essence, if I live in Fort Garry I'm assisting paying for the cost of*
12 *somebody who would be living farther out of town, and that's accepted. And I just*
13 *want to make that point clear because we have had discussions in this proceeding*
14 *about the cost of serving customers in different locations, and talking about*
15 *removing certain components of cost from rates.*
16

17 *And I would submit to you that it's not appropriate to be cherry picking rates*
18 *apart, and taking out one cost component which would provide a benefit to a*
19 *given customer group only to ignore the fact that the underlying cost to serve that*
20 *group may be significantly different than the average in the first place. So that*
21 *has to be taken into consideration, and understood.”*
22

23 The cost to serve remote rural customers, such as those of MKO's membership, is higher
24 than the average cost to serve all residential customers on Manitoba Hydro's system.
25 MKO's members already receive a beneficial cross subsidy from the customers served in
26 urban centers.
27

28 MKO's recommendation is tantamount to requesting that other customers subsidize the
29 rates that are being paid by First Nations customers. As noted above, the government
30 addressed rate subsidization when it passed the uniform rates legislation in 2001. Prior to
31 uniform rates, customers in the North were paying rates which were considerably higher
32 than rates in Winnipeg. It was a policy decision of government that the customers in the
33 North pay the same rates as those in Winnipeg (i.e. the government explicitly decided
34 that a certain zone of customers would subsidize another zone of customers).
35

36 Manitoba Hydro submits that it would be inappropriate for the PUB to alter the
37 government specific policy decision by recommending that Manitoba Hydro create a
38 separate residential and general service rate class for all First Nations account which
39 would require subsidization by other customers. In the event that those categories of costs

1 were to be removed, the rates for service in such a zone would need to be based on the
2 actual costs to serve customers situated in that zone. It is conceivable that such rates
3 would, in the end, be higher for service to those customers than those currently charged
4 on a uniform rate basis.

5
6 MKO has also recommended that the PUB reduce the respective rates for First Nations
7 Accounts by removing the costs associated with mitigation payments, water rentals,
8 capital tax and the provincial debt guarantee fee. As part of the NFAT review, the PUB
9 has already made a recommendation to government that they direct a portion of the
10 incremental capital taxes and water rental fees from the development of the Keeyask
11 Project to be used to mitigate the impact of rate increases on lower income customers,
12 northern and aboriginal communities. Manitoba Hydro, nor the PUB, can unilaterally
13 remove costs associated with water rentals, capital taxes and the provincial debt
14 guarantee fee.

15
16 In final argument, MKO also attempted to revive the issue of a separate meter system for
17 heating consumption for First Nation ratepayers, in its recommendation #6. Manitoba
18 Hydro notes that this topic was determined to be out-of-scope for this regulatory
19 proceeding, as set out in the PUB's Order 28/15 (at page 4). As such, Manitoba Hydro
20 submits that the PUB should give no consideration to MKO's recommendation.

21 22 **12.2. Curtailable Rates Program**

23
24 Under the Curtailable Rates Program, large industrial customers who enroll in this
25 program receive a monthly credit on their bill in exchange for the obligation to curtail
26 their load when and as requested by Manitoba Hydro in response to system emergencies
27 and to maintain or re-establish generation reserves. Curtailments cannot be dispatched by
28 Manitoba Hydro for economic reasons (transcript page 3216).

29 Customers may select from different curtailment options, each of which has different
30 notice period provisions and differences in the number and duration of curtailment
31 occurrences.

32
33 Manitoba Hydro is seeking confirmation of the proposed changes to the CRP that were
34 approved on an interim basis in Order 43/13. Manitoba Hydro implemented a number of
35 these interim changes effective May 1, 2013, but implementation of the change in the
36 defined hours for peak and off-peak periods (to correspond to the hours being defined for
37 a potential TOU rate offering) and the elimination of Curtailment Options "C" and "CE",
38 were deferred until final approval could be granted by the PUB.

1
2 Manitoba Hydro notes that the change in defined hours for peak and off-peak periods is
3 intended to correspond to the periods that will be proposed as part of its Time-of-Use rate
4 design, to be heard later this year in conjunction with the Cost of Service Study review.
5

6 In Order 43/13, Manitoba Hydro received interim approval to reduce the cap limitations
7 for CRP load to 50 MW for Option R load (from the previous 100 MW) and 180 MW for
8 Option A and C loads (previously 230 MW), assuming that the Option C load will
9 convert to Option A prior to the sunset date. Should Option C load revert to firm service,
10 then the cap for Option A will be reduced to 150 MW. Final approval of the proposed
11 caps will allow existing customers to continue to participate. As Mr. Cormie testified
12 (transcript page 3214) the changes to the caps would only affect future customers
13 interested in enrolling in the CRP.
14

15 Mr. Bowman suggests that the PUB should defer making changes to cap participation in
16 the CRP and reconsider this issue in the future in the context of fully considered DSM
17 programs and an integrated resource plan (Pre-filed Testimony by P. Bowman MIPUG
18 Exhibit #7).
19

20 As noted in response to MIPUG/MH I-29a, Manitoba Hydro has concluded that
21 additional curtailable load in the form presently available under the CRP would only add
22 to an existing capacity surplus. Additional subscriptions within the existing limits of
23 Option A and R would provide some small value but would not fully justify the
24 additional cost to Manitoba Hydro (Transcript pages 3202 - 3203).
25

26 Manitoba Hydro recognizes that there may be value in the long term of increasing the
27 amount of curtailable load. However, as Mr. Cormie testified (Transcript page 3204) it
28 would be more appropriate to contract for more curtailable load at a future date when a
29 capacity resource planning decision needs to be made. Given the large existing capacity
30 surplus and the short term cost to other Manitoba Hydro customers there is no urgency to
31 contract for additional capacity under the CRP at this time.
32

33 Manitoba Hydro recognizes that each large industrial customer may have unique
34 characteristics. As Mr. Cormie testified, Manitoba Hydro is prepared to work with
35 customers with a view to identifying new mutually beneficial alternative rate options.
36 (Transcript page 3219)

1
2 **12.3. Demand Response Programs**
3

4 In transcript pages 1824-1825, Members of MIPUG expressed concerns about the
5 proposed changes to the CRP and noted that there are “minimal programs or rate options
6 available in Manitoba to help industry manage their power costs”. In addition, in MIPUG
7 Undertaking #33, MIPUG presenters provided examples of alternative rate programs
8 offered in other jurisdictions across North America.
9

10 Manitoba Hydro would remind the PUB that in addition to the numerous commercial
11 Power Smart Programs, Manitoba Hydro offers comprehensive financial and technical
12 support targeted to our industrial customers through our Performance Optimization,
13 Natural Gas Optimization, Load Displacement and BioEnergy programs. These programs
14 offer a broad spectrum of opportunities for improvements to processes, biomass and
15 waste energy stream self generation. (2015-16 Power Smart Plan; Coalition/MH I-69
16 Revised – Attachment 2).
17

18 With respect to the alternate rate information provided by MIPUG presenters, Manitoba
19 Hydro notes that this information was provided as a presenter submission and not
20 evidence, and no evidence as to the programming in other jurisdictions was provided by
21 MIPUG’s expert in this proceeding. The information provided has discrepancies (such as
22 the application of taxes to Manitoba rates but not other jurisdictions, for example) and
23 may represent rate options that are closed and not available to new industrial customers
24 served by those utilities. Large industrial customers operating in jurisdictions that have
25 experienced electricity market restructuring may have access to load displacement and
26 demand response programs, but the costs and benefits of such transactions may be
27 commercially sensitive, and not available in the public domain, which makes a
28 transparent evaluation of energy programs difficult.
29

30 Nevertheless, Manitoba Hydro is fully supportive of engaging with industrial customers
31 in an open dialogue on such matters. Mr. Barnlund discussed the issue and offered that
32 Manitoba Hydro would propose to:
33

34 *“...be able to look at the specific requirements of the customer base, the industrial*
35 *customer base we have, and look at the opportunities we may have in terms of managing*
36 *overall system demand, and be able to create solutions that are appropriate for our*
37 *needs, and for the customers' needs.”*

1 Manitoba Hydro welcomes the opportunity to hear directly from its industrial customers
2 as to the nature of their operations and the opportunities that might be mutually beneficial
3 in the current energy market.
4

5 **12.4. Surplus Energy Program**

6
7 Manitoba Hydro is seeking confirmation of the proposed change to the Terms and
8 Conditions for Option 1 of the SEP. This proposed change was approved on an interim
9 basis in Order 43/13.
10

11 This change would allow customers to nominate a different Reference Demand level for
12 each of the three pricing periods. The highest designated Reference Demand would be
13 used in determining the customer's monthly billed demand.
14

15 Manitoba Hydro developed the proposed change in response to interest expressed by a
16 large energy consumer. While there are currently no customers on Option 1, Manitoba
17 Hydro seeks approval of this change, as it adds greater flexibility to the existing rate
18 program and may be of interest to customers who may consider this Option in the future.
19 No intervenors expressed any concerns regarding these proposed changes.
20

21 **12.5. Diesel Rates**

22
23 Manitoba Hydro provides electrical service to approximately 760 customers located in
24 four remote northern communities (Shamattawa, Brochet, Lac Brochet and Tadoule
25 Lake) by way of diesel generation.
26

27 As part of its Application, Manitoba Hydro was requesting final approval of Orders
28 116/12 and 117/12 that approved, on an interim basis, a 6.5% rate increase to the full cost
29 portion of the General Service and Government rates in the four remote communities
30 served by diesel generation effective September 1, 2012, and final approval of diesel
31 zone interim Orders 17/04, 46/04, 159/04, 176/06, 1/10, 134/10, 1/11 and 148/11, subject
32 to confirmation that MKO has provided the parties to the agreement with the required
33 affidavits from representatives of signatories to the agreement. As noted in Tab 10, page
34 9, PUB Directives and Interim Orders, a compensation issue had arisen between AANDC
35 and MKO which did not involve Manitoba Hydro and that Manitoba Hydro is not privy
36 to the exact details.
37

1 Unfortunately, Mr. Anderson has not provided the true copies which Mr. Anderson states
2 at transcript pg. 214 “I still have safe and sound in my records in my office, a full set of
3 all of the original copies of the executed agreements or sworn statements for those that
4 we required in accordance with the agreement that we had.” Manitoba Hydro shares the
5 PUB’s frustration of not having obtained true copies of the Settlement Agreement. The
6 delay has been unreasonable; however, Manitoba Hydro does not have subpoena power
7 in order to obtain the copies As the true copies of the settlement Agreement are not in
8 Manitoba Hydro’s possession, Manitoba Hydro is not in a position to request finalization
9 as requested in its original application. The parties to the original settlement agreed that
10 finalization would occur when parties obtained copies. The next available option for
11 Manitoba Hydro in an attempt to resolve the matter is to approach the Department of
12 Indian Affairs and Northern Development Canada in an attempt to come to some type of
13 other agreement in order to enable Manitoba Hydro to request once and for all, that the
14 diesel zone rates be finalized.

15 16 **12.6. Area & Roadway Lighting**

17
18 Manitoba Hydro is proposing to apply the 3.95% increase to each category of luminaires
19 in the Area and Roadway Lighting class, and has also added several new categories of
20 Light Emitting Diode (“LED”) luminaires in this Application. Manitoba Hydro is also
21 seeking confirmation of the rates approved for various LED street light categories on an
22 interim basis in Order 79/14.

23
24 Manitoba Hydro introduced the LED Roadway Lighting Conversion Program in 2014 to
25 retrofit existing High Pressure Sodium (HPS) roadway lighting to more efficient LED-
26 based technology. At that time, the Corporation requested interim approval of rates for
27 new LED streetlight categories, in order to reflect the reduced energy cost associated with
28 the lower energy consumption of LED luminaires.

29
30 Manitoba Hydro has determined the rates for LED categories by adjusting the rates for
31 comparable categories of HPS luminaires to reflect the reduced level of energy consumed
32 by an LED luminaire of similar output. The respective rate differentials between various
33 HPS luminaires was originally established by a separate street lighting cost study
34 performed in 1990. Manitoba Hydro updates the rates for each category of luminaire
35 over time with each approved rate change.
36

1 The City of Winnipeg expressed concern at the use of the 1990 cost study in this regard
2 and asked the PUB to direct the preparation of a new study specifically to address the
3 costs allocated between different types and sizes of luminaires, and to provide this study
4 in conjunction with the upcoming Cost of Service Review.
5

6 With respect to rates and the determination of rates for the Area & Roadway Lighting
7 class, Manitoba Hydro submits that the methodology that it has used is reasonable and
8 appropriate. In the past, the PUB has approved similar rate applications as new street
9 lighting categories were added to the system, and the methodology followed was the
10 same.
11

12 The implementation of LED rates is not contingent to the preparation of a detailed street
13 lighting cost of service study, and as noted by Manitoba Hydro at transcript pages 2897-
14 2898 and 2916, such a study should only be carried out once more information on the
15 costs of service for LED luminaires is available. At this time, there is insufficient
16 information available on several types of costs and such information will only be
17 available once the program has advanced.
18

19 The City of Winnipeg also had concerns about the information on the count of installed
20 street lights for billing purposes. It had concerns about the available information on the
21 number and location of luminaires in the City of Winnipeg, and whether Manitoba Hydro
22 has ever done a physical count of luminaires to confirm the data used in determining the
23 bills issued to the City of Winnipeg. As noted in Manitoba Hydro exhibit #107, as part of
24 the post-closing due diligence performed between the City of Winnipeg (on behalf of
25 Winnipeg Hydro) and Manitoba Hydro with respect to the purchase of Winnipeg Hydro,
26 in October 2002, the City of Winnipeg provided Manitoba Hydro with excel files
27 containing the classification, lamp type and wattage for approximately 25,000 lights
28 which had been installed and maintained by Winnipeg Hydro, including approximately
29 3,700 Mercury Vapor luminaires of various wattages. This is the information upon which
30 Manitoba Hydro initially established its billing records for that portion of the City of
31 Winnipeg commencing in late 2002 and for which the City of Winnipeg has been
32 remitting payment.
33

34 Mr. Chard testified at pages 2871-2872 that Manitoba Hydro relies on information
35 obtained from service requests to disconnect and reconnect or install luminaires. This

1 information is used in the billing system to bill the street lighting customer, and is
2 considered to be the most reasonably reliable information available for billing purposes.

3
4 In its final argument, the City of Winnipeg stated (transcript page 4228, lines 18-21) that
5 Manitoba Hydro is holding off on the process of improving the information used for
6 billing until after the LED conversion is complete, and asks the PUB to direct Manitoba
7 Hydro to provide the City immediately with the location, type of luminaire and type of
8 pole for each light that the City is currently being billed for and to provide a map
9 showing each of the boundaries for the 17 invoices that the City of Winnipeg receives.

10
11 While it is recognized that there are some information gaps that hinder Manitoba Hydro's
12 ability to provide all of the information that the City of Winnipeg is seeking, Mr. Chard
13 testified at transcript pages 2887-2888 that Manitoba Hydro is in the early stages of work
14 to address the reconciliation of a variety of data sources for these purposes.

15
16 Manitoba Hydro would propose that a more efficient use of resources would be for
17 Manitoba Hydro and the City of Winnipeg to work cooperatively to test and improve the
18 quality of data in Manitoba Hydro's GIS system such that could be used for billing, prior
19 to the LED conversion being completed.

20 21 **12.7. Rescind DSM Deferral Account**

22
23 Manitoba Hydro is seeking approval to rescind the DSM deferral account that was
24 established in Order 43/13 for the 2012/13 and 2013/14 fiscal years. It is Manitoba
25 Hydro's understanding that the intent of directing the establishment of this deferral
26 account was to encourage the Corporation to bolster Power Smart DSM efforts.
27 Subsequent to the issuance of Order 43/13 and the establishment of the deferral account,
28 Manitoba Hydro has released a much more aggressive Power Smart Plan. As noted in the
29 PUB correspondence filed as Appendix 11.1 of the Application, the PUB indicated that it
30 was encouraged by the increased level of savings and investment in the 2014-17 Power
31 Smart Plan and would look at the further need for this deferral account on an ongoing
32 basis.

33
34 Apart from the Corporations significant planned increase in DSM investment, it is useful
35 to understand the accounting treatment of DSM investment and to determine whether any
36 such deferral account has further purpose.

37

1 As noted in the exchange between Mr. Hacault and Mr. Barnlund between pages 3023
2 and 3025 of the transcript, the amount of investment made by the Corporation in a given
3 year is not borne in rates for the current year. Rather, the actual amount expended on
4 DSM programming in a year is deferred and amortized over a 10 year period. The
5 amortization period begins one year after the actual investment is made. One tenth of the
6 actual amount of investment will begin to be reflected in revenue requirements in the year
7 following, and in the subsequent 10 years to follow.

8
9 Given that Manitoba Hydro has significantly increased its commitment to DSM
10 programming and that only the actual amount invested in DSM is amortized into rates,
11 Manitoba Hydro is of the view that a deferral account to record any underinvestment is
12 neither needed nor practical, and Manitoba Hydro seeks the PUB's approval to reverse
13 the accounting entries and dissolve the deferral account.
14

1 **13.0 OTHER ISSUES**
2

3 Section 13.0 of the Argument, provides Manitoba Hydro's comments with respect to
4 procedural issues raised during the proceeding.
5

6 **13.1. Electronic Filing and Models**
7

8 Manitoba Hydro notes that in Order 33/15, the PUB ruled that it would not require
9 Manitoba Hydro to file electronic models or spreadsheets with formulae intact and
10 advised that it would follow its past practice not to require electronic models (pg. 9). As
11 understood by the PUB, this issue is not one of simply granting access.
12

13 As noted in Manitoba Hydro's oral final argument, with respect to the issue of modeling,
14 the PUB has already determined in Order 33/15 that this issue will be dealt with in a
15 separate proceeding. Manitoba Hydro believes this is the correct course of action as the
16 issue of modeling, for example, is not as simple as providing it in confidence to parties.
17 There are a number of complex issues which the PUB needs to hear and understand in
18 full prior to making any decisions or recommendations with respect to these issues. In
19 Order 33/15, the PUB included a comment that it understood that at the Lake Winnipeg
20 Regulation hearings, Intervenors were provided with access to a Hydro model. As
21 clarified during closing arguments, no Intervenors were provided with access to any
22 models during the course of the Lake Winnipeg Regulation hearing. There was only one
23 model provided which was created for the very limited purposes of testing one of the
24 assumption in a tab of the filing. The only individual provided with access to the model
25 was the independent consultant hired by the CEC under the terms of a non-disclosure
26 agreement.
27

28 There was the further mention by Mr. Williams regarding MPI having shared one of its
29 models with Intervenors. As Manitoba Hydro noted in its closing comments, Manitoba
30 Hydro wanted to be very careful with the impression this statement may have left on the
31 PUB as Manitoba Hydro inquired with MPI and advised the PUB that MPI had held an
32 open session with Intervenors, explain one of their models and performing a live run .
33 We were advised by MPI that although CAC has requested the model, they have not
34 shared it. This is a very important issue for all parties involved and the PUB needs to hear
35 evidence from all parties on this issue prior to making any preliminary determinations on
36 the issue.

1 **13.2. Minimum Filing Requirements**
2

3 Manitoba Hydro understands that the PUB will be continuing to implement process
4 improvements and potentially including Minimum Filing Requirements as requested by
5 Intervenors. As indicated by Mr. Rainkie on transcript pg. 927, Manitoba Hydro expects
6 that it will be permitted to be involved in any discussions or considerations that are given
7 to Intervenors with respect to posing Minimum Filing requirements. Manitoba Hydro
8 understands that most parties to this proceeding will be involved in the cost of gas
9 hearing and cost of service review which will occur over the next number of months,
10 however, we expect that the parties will work together to accomplish the process
11 improvements being requested by the PUB.
12

13 Minimum filing requirements need to be framed within the current legislative framework
14 in place in Manitoba. Some of the requests are not necessary nor cost effective and
15 require substantial financial resources which would provide little additional insight into
16 the rate increases being requested by Manitoba Hydro. Any review process must be
17 considered in light of future requirements, as well as the legislative framework in place
18 and balance process cost implications.
19

20 As noted by Mr. Rainkie, the Minimum Filing Requirement is not simply about obtaining
21 additional information; it is about obtaining information that is of value to the PUB and
22 required by the PUB in order to satisfy itself that the rate requests are just and reasonable.
23 Manitoba Hydro reiterates its comments that the Minimum Filing Requirements should
24 not be a tool for parties to inquire into matters that may simply be of interest to parties
25 but do not have an impact on Manitoba Hydro's requested rate increases, nor a tool to
26 request information which is to be used for other purposes such as other proceedings or
27 forums, ongoing or future negotiations or discussions with Manitoba Hydro.
28

29 Manitoba Hydro submits that all parties should reflect on the process which has just been
30 completed and part of the discussions should include a lessons learned process of what
31 was beneficial and assisted the parties and what did not. This is not a discussion which
32 should be undertaken lightly. For example, for certain information Manitoba Hydro did
33 not have available with respect to inquiries made by MMF, Manitoba Hydro has
34 committed to working with MMF outside of the GRA process in order to determine the
35 information that is required and for what purpose, as well as what alternative information
36 can be provided to assist MMF in their intervention. Manitoba Hydro would expect that

1 such a process would result in assisting with decreasing the number of Information
2 Requests and issues discussed in the public hearing, resulting in a more efficient process
3 from which the PUB can rely upon in reaching any decision.
4

5 **13.3. Manitoba Hydro's Interest Rate Forecasting Methodology is Appropriate**

6
7 The Coalition's conclusions regarding interest rate forecasting variances, as drawn from
8 the data table in their preamble to Coalition/MH-II-54, are not accepted by Manitoba
9 Hydro. The Coalition's quantitative variance analysis used a "percentage changes of
10 percentages" method using data pre-dating the 2008 economic downturn [transcript pages
11 2324-2328] and is unreliable as a result. As stated by Mr. Page on page 2328: "I would
12 use a high degree of caution when doing this analysis." However, Manitoba Hydro
13 acknowledged that economic forecasters were challenged by changing economic
14 conditions. As stated by Mr. Schulz on page 2433: "I think what Mr. Williams brought
15 forth today was a painstaking exercise in demonstrating that forecasters don't have
16 perfect insight."
17

18 It is vital to recognize that ratepayers are not harmed by forecasters' lack of perfect
19 insight. Manitoba Hydro remains disappointed that the Coalition continues with its
20 repeated suggestion that Manitoba Hydro's interest rate forecast ought to be subjected to
21 further review requesting that the PUB order a technical conference for such purpose [Tr.
22 4451]. This position ignores the fact that:
23

- 24 a) Manitoban Hydro's interest rate forecasting methodology has been extensively
25 canvassed since 2008;
- 26 b) the PUB has previously ruled on the interest rate forecasting methodology to be
27 used by the Corporation in Order 128/09 Directive 9;
- 28 c) Manitoba Hydro has fully adopted all of the PUB-approved interest rate
29 forecasting methodologies, dating back to IFF10;
- 30 d) the cost of service rate setting methodology self-corrects for any forecast
31 variances that may occur due to changing conditions, and Manitoba Hydro's
32 retained earnings and net income are held for the benefit of ratepayers. To the
33 extent that financial results are higher or lower than forecast, the difference, along
34 with all other differences, flows to retained earnings;
- 35 e) Manitoba Hydro periodically updates its financial projections to reflect a wide
36 range of updated information. However, these updates need to be viewed in

1 context and with caution. There does seem to be some confusion as to the role of
2 the sensitivity analysis included in the IFF. Sensitivity analysis identifies key
3 areas of sensitivity by showing the impacts of changing a variable while holding
4 all other variables constant. Such analysis does not recognize the interdependence
5 of various factors. The response to PUB/MH-I-10b is an example of analysis that
6 gives due consideration to the effects of the underlying cause of a change in
7 interest rates. Isolating impacts of changes, beneficial or adverse, in any one input
8 variable has the potential to create spurious forecasts, and add undue rate
9 variability and/or to alter the longer term progress towards the achievement of
10 Manitoba Hydro's financial targets. For revenue requirement and rate setting
11 purposes, the most balanced representation of the Corporation's financial
12 prospects is the Integrated Financial Forecast (IFF) that was filed as part of the
13 Application;

14 f) Manitoba Hydro operates in a complex economic environment that
15 simultaneously affects many parts of its operations. The economy's impact upon
16 Manitoba Hydro's revenue requirement is not exclusively seen through the
17 changing interest rates and the evolving views of Manitoba Hydro's external
18 interest rate forecasters. There are numerous counterbalances. The reality is that
19 forecast variances arise out of changing external conditions and are not a function
20 of the unbiased consensus approach employed by Manitoba Hydro. Changing
21 external conditions are neither self-inflicted or predicted by experts world-wide.
22 For example, the economic recession of 2008, the impact of the new fracking
23 technology on the price of natural gas, or the new Bank of Canada views on
24 interest rates were not foreseeable or predicted; and

25 g) In order for the PUB to see a more representative and balanced outlook of
26 Manitoba Hydro's electric operations, Manitoba Hydro provided a MH14
27 scenario in response to PUB/MH-I-10b that showed the combined effects of
28 updated interest rates along with estimated reductions in export revenues. The
29 evidence demonstrated that the cumulative net income to 2016/17 is \$6 million
30 lower when simultaneously updated with both interest rates and extra-provincial
31 revenues (for additional information regarding forecast updates, see the response
32 to Coalition/MH-II-44a-e).

33
34 Manitoba Hydro respectfully requests that the PUB makes a specific finding that the
35 Coalition's repeated insistence to criticize Manitoba Hydro's interest rate forecasting
36 methodology is unwarranted and without merit. The Coalition's request for a technical

1 conference to once again revisit the interest rate forecasting methodology should be
2 rejected by the PUB.
3
4
5
6

1 **14.0 CONCLUSION**

2
3 Section 14.0 of the Argument summarizes the reasons why the proposed rate increases
4 should be approved by the PUB in full.

5
6 **14.1. Confirmation of 2014/15 Interim Rates & Approval of 3.95% Rate Increase for**
7 **2015/16**

8
9 As indicated in Section 1.3 of the Argument, Manitoba Hydro is entering a period of
10 extensive capital investment to meet the growing energy requirements of Manitoba, to
11 replace aging utility assets and address increased capacity needs on the system. Manitoba
12 Hydro's projected costs and associated revenue requirements are expected to double in
13 the next 10 years due to the investment in assets. This is the key factor driving the need
14 for rate increases.

15
16 Rate stability for customers is dependent on Manitoba Hydro maintaining its financial
17 strength. The required investment in assets will place pressure on Manitoba Hydro's
18 financial strength by deteriorating the financial results and key financial ratios.

19
20 In its Application, Manitoba Hydro is seeking final approval of the 2.75% rate increase
21 granted, on an interim basis, effective May 1, 2014 in Orders 49/14 and 51/14. Manitoba
22 Hydro is also requesting final approval of rate schedules incorporating an across-the-
23 board rate increase of 3.95% for 2015/16. Manitoba Hydro will address the proposed
24 3.95% across-the-board rate increase for 2016/17 in Section 14.2 below. Approval of the
25 proposed rate increases in this Application are required to maintain net income and
26 financial ratios at acceptable levels, and to promote long-term rate stability for customers
27 and ensure the continued financial integrity of the Corporation.

28
29 Manitoba Hydro follows a cost of service rate-setting approach that does not set rates
30 based strictly on costs but rather implements gradual rate increases to cover costs and
31 achieve financial targets over time. Manitoba Hydro strives to propose rates that cover
32 the costs of providing service, including financing costs and an annual contribution (net
33 income) to financial reserves (retained earnings) for the purposes of rate stabilization.

34
35 The following figure summarizes the projected net income for electric operations for
36 2014/15, 2015/16, and 2016/17 with and without the proposed 3.95% rate increases.

1 **Figure 78- Projected Net Income With and Without Proposed Rate Increases**

Retained Earnings and Financial Ratios (without proposed rate increases)	2015	2016	2017
Net Income (electric operations)	\$ 102	\$ 58	\$ (58)
Retained Earnings (electric operations)	\$ 2,717	\$ 2,721	\$ 2,663
Debt to Equity Ratio (electric operations)	78:22	82:18	85:15
Interest Coverage Ratio (electric operations)	1.16	1.08	0.93
Capital Coverage Ratio (electric operations)	0.98	0.92	0.74

Retained Earnings and Financial Ratios (including proposed rate increases)	2015	2016	2017
Net Income (electric operations)	\$ 102	\$ 115	\$ 59
Retained Earnings (electric operations)	\$ 2,717	\$ 2,778	\$ 2,837
Debt to Equity Ratio (electric operations)	78:22	82:18	84:16
Interest Coverage Ratio (electric operations)	1.16	1.16	1.07
Capital Coverage Ratio (electric operations)	0.98	1.02	0.94

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Approval of the proposed 3.95% rate increases for 2015/16 and 2016/17 is projected to result in net income of \$115 million and \$59 million, respectively. This level of net income is modest, considering the asset base of nearly \$17 billion and retained earnings of approximately \$2.7 billion of Manitoba Hydro.

Each month the implementation of the proposed rate increase is delayed results in lost revenue of approximately \$4 million per month. If the proposed 3.95% rate increase were implemented on July 1, 2015, forecast net income for 2015/16 would be \$102 million, and would be \$98 million if the rate increase were implemented August 1, 2015.

The 3.95% rate increases are the minimum necessary to address core earning requirements and preserve rate stability for customers. The 3.95% rate increases assist Manitoba Hydro in managing the decline in its financial strength during the period of intensive capital investment but do not allow it to pre-fund future investment requirements. The cash flow that would be generated from the proposed 3.95% rate increases would be sufficient to fund sustaining capital expenditures but would not be sufficient to finance the major new generation and transmission capital expenditures.

Absent the proposed rate increases, Manitoba Hydro is projecting net income of \$58 million in 2015/16 and a loss of \$58 million in 2016/17. The equity ratio, interest and capital coverage ratios would decline to 15%, 0.93, and 0.74 in 2016/17, respectively.

1 **14.2. Manitoba Hydro is Seeking a Further Determination from the PUB on Rates for**
2 **2016/17**

3
4 Manitoba Hydro's view is that the investment requirements of the next decade require a
5 long-term approach to setting revenue requirements and rate setting, and would prefer
6 that the PUB conduct three-year rate reviews as permitted under *The Crown*
7 *Corporations Review and Accountability Act*. This approach would be beneficial as it would
8 provide certainty to Manitoba Hydro in terms of its domestic revenues and predictability
9 to customers in terms of rates, especially in the current period of significant capital
10 investment.

11
12 Manitoba Hydro received direction from the MHEB in December 2014 to request a
13 3.95% rate increase for the 2016/17 fiscal year. Accordingly, Manitoba Hydro included
14 its forecast for the 2016/17 fiscal year in its Application, which was reviewed during this
15 proceeding, and requested a 3.95% rate increase effective April 1, 2016.

16
17 Manitoba Hydro notes that there is a challenging upcoming regulatory schedule which
18 includes a Cost of Gas Application that was recently filed with the PUB, and a
19 Cost of Service Study review that is scheduled for later in 2015. Manitoba Hydro is also
20 aware that there are a number of other matters in front of the PUB, including an MPI
21 general rate application. Considering the regulatory agenda, it would be impossible to
22 conduct another full electric general rate application proceeding prior to the
23 commencement of Manitoba Hydro's 2016/17 fiscal year on April 1, 2016.

24
25 Considering these facts, and the fulsome record of the current proceeding that is before
26 the PUB, Manitoba Hydro respectfully submits that it has provided sufficient justification
27 and information such that the PUB could make a determination of electricity rates
28 effective April 1, 2016. As noted by Manitoba Hydro, the future reality will not
29 materially change before the next GRA and in fact, postponing the rate increases will
30 only put more pressure on Manitoba Hydro and its customers.

31
32 Alternatively, and at a minimum, Manitoba Hydro is seeking direction from the PUB
33 with respect to an interim process that would consider Manitoba Hydro's forecast for the
34 2016/17 fiscal year, which has been filed with the PUB as part of the current proceeding,
35 and result in the granting of an interim rate increase effective April 1, 2016. Confirmation

1 of such an interim rate increase would be sought at its next GRA, anticipated to be filed
2 in late 2016.

3 4 **14.3. The Proposed Rates Increases are Essential to Provide Customer Value**

5
6 At transcript page 330, Mr. Rainkie explained that in Manitoba Hydro's Corporate
7 Strategic Plan, customer value means excellent customer service, high system reliability,
8 and affordable stable rates for our customers. Manitoba Hydro strongly believes that the
9 proposed rate increases strike the appropriate balance between the needed investment to
10 maintain safe and reliable service, and providing stable and predictable rates for
11 customers.

12
13 As Mr. Rainkie outlined at page 2039 of the transcript, Manitoba is in an enviable
14 position in comparison to other jurisdictions across the country with one of the most
15 reliable, sustainable and affordable power systems in Canada. Through the proposed rate
16 increases, Manitoba Hydro is requesting Manitobans to invest in the power system that
17 they own, and that has provided safe and reliable service for decades. This investment
18 from customers will ensure the continued provision of the valuable service that they have
19 become accustomed to. As noted by Manitoba Hydro's President and CEO, Mr. Scott
20 Thomson, at transcript page 346, "*Our customers do more than just expect reliability.*
21 *They demand it.*"

22
23 Manitoba Hydro takes great pride in providing Manitobans with reliable service and
24 some of the lowest electricity rates in North America. This has been accomplished
25 through careful management of its assets, prudent spending on capital projects and by
26 managing its operating and administrative costs.

27 Manitoba Hydro is now entering a period of extensive investment and re-investment in its
28 infrastructure. This investment is needed for three main purposes: 1) to meet the growing
29 energy needs of Manitoba families and businesses, 2) to replace aging generation,
30 transmission and distribution assets that are approaching the end of their service lives,
31 and 3) to address capacity issues on the existing system. Manitoba Hydro is committed to
32 using revenues prudently for these purposes and demonstrating that its actions are cost
33 effective, efficient and fiscally responsible.

34 The revenues from the proposed rate increases are necessary so that Manitoba Hydro can
35 deliver on its mandate by:

- 1 • Continuing to deliver a reliable energy supply to Manitobans by funding the
2 necessary investments to respond to the need for system growth and asset
3 replacement;
- 4 • Funding Power Smart programs to assist customers in meeting their energy needs
5 in a cost effective manner;
- 6 • Continuing to provide rates that are affordable for Manitoba families and that
7 support the competitiveness of Manitoba business;
- 8 • Ensuring rate stability and predictability for customers by maintaining its
9 financial strength; and,
- 10 • Equitably serving the needs of all Manitoba residents, regardless of where they
11 live in the province—urban or rural, remote or central, north or south.

12 Manitoba Hydro conducts its business operations in an environmentally, socially, and
13 fiscally responsible manner, and with the revenues from the proposed rate increases can
14 continue to provide customers with reliable service and stable rates into the future.