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June 9, 2023

THE PUBLIC UTILITIES BOARD OF MANITOBA  
400-330 Portage Avenue  
Winnipeg, Manitoba  
R3C 0C4

ATTENTION: Dr. D. Christle, Board Secretary and Executive Director

Dear Dr. Christle:

**RE: MANITOBA HYDRO'S 2023/24 & 2024/25 GENERAL RATE APPLICATION – UNDERTAKINGS**

Please find enclosed Manitoba Hydro's undertakings 27, 30, 33, 42, 54, 56, 63, and undertaking accepted at page 3532 of the transcript.

Should you have any questions with respect to the foregoing, please do not hesitate to contact the writer at 204-360-3257.

Yours truly,

**MANITOBA HYDRO LEGAL SERVICES**

Per:

A handwritten signature in blue ink, appearing to read 'Brent Czarnecki', written over a horizontal line.

Brent Czarnecki  
Senior Counsel

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**2023/24 & 2024/25 GENERAL RATE APPLICATION****Manitoba Hydro Undertaking #27**

**Manitoba Hydro to provide the total attributable to the consolidated entity for SAP S4HANA (Gas and electric).**

**Response:**

The total attributable to the consolidated entity for SAP S/4HANA (electric and gas) is forecast at \$172M for the period 2023/24 to 2029/30: \$156M is attributable to electric (as described throughout the Application) and \$16M is attributable to the gas revenue requirement.

Manitoba Hydro is currently in phase zero, developing a business case for the replacement of its Enterprise System Software (SAP) with a cloud-based application, which Manitoba Hydro views as a best practice to better understand all of the potential costs. As such, the overall cost impact of \$172M is to be taken as place holder not yet based on a fulsome study.

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## 2023/24 & 2024/25 GENERAL RATE APPLICATION

### Manitoba Hydro Undertaking #30

**If you're building or operating for export sales, that's something that should be paid for by government. Is there a way to do that sort of allocation within Manitoba Hydro to identify what costs relate to domestic service and what costs relate to export.**

### Response

For the reasons outlined below, there is no method for Manitoba Hydro to reasonably allocate or estimate costs between domestic service and export activities.

Manitoba Hydro's understanding is that this question may have resulted, in part, to materials presented by Midgard on the topic of "Minimum System". For the reasons outlined below, there is no method for Manitoba Hydro to reasonably allocate or estimate costs between domestic service and export activities.

For context, there are differences in the level of details available for the four broad cost components that make up the Corporation's revenue requirement:

- Manitoba Hydro maintains accounting records that track the investment and depreciation expense for generation and transmission assets at the location level.
- Finance expense and capital tax are not associated with any specific assets in Manitoba Hydro's accounting records. Implementing a minimum system approach would require developing a means to attribute these expenses to specific facilities.
- Operating expense can be attributed to specific generating stations using the settlement cost centre view that is used to prepare the Cost of Service study.
- Water rentals and fuel costs can be associated with individual generating stations.

Once the direct costs have been determined for these facilities, there are still significant shared/common costs that would need to be allocated to these facilities on a yet to be determined basis to encompass the full revenue requirement. The appropriate treatment of costs that may also be viewed as generation or transmission related, such as mitigation, would need to be considered in addition to the overhead type costs that are more general in nature.

The difficulty with minimum system approach is not necessarily due to granularity of accounting costs, rather the task of defining and achieving consensus on the portions of the system that are surplus to domestic needs.

The typical implementation of the minimum system approach is to identify the customer and demand related portions of the distribution system in cost allocation studies. Despite the long standing and widespread use in this context, there is still considerable controversy implementing the approach even for comparatively simple distribution systems. The difficulty in apportioning the much more complex and interrelated G&T system using a theoretically similar approach cannot be underestimated. This complexity is compounded substantially in the case of Manitoba Hydro's system because of its connectivity to neighbouring markets.

Manitoba Hydro has a significant history attempting to implement an export class in its Cost of Service Study, which in concept is similar to the minimum system in that the goal is to isolate revenue requirement into domestic and export related portions. Manitoba Hydro began exploring incorporating an export class in the Cost of Service study in 2003 and the approach was abandoned in 2016 due to the inability to reach any consensus about the portion of the G&T system that should be allocated to export customers rather than domestic customers. As explained at page 30 of Board Order No. 164/16:

*Existence of an Export Class*

*The original reasons for a separate Export class were discussed in a 1988 report from the Board to the Minister<sup>1</sup>. In this report, the Board recommended that revenues and costs related to export sales be segregated in Manitoba Hydro's accounting records in order to demonstrate that domestic customers are not subsidizing export sales. To accomplish this, the Board suggested the method of treating export sales as a separate customer class in the COSS. In addition, Manitoba Hydro has explained that the creation of an Export class was to promote fairness, including a means of returning export revenues to domestic customers on a basis that Manitoba Hydro considered to be fairer.*

The reasons for the existence and issues surrounding the Export Class were also explained by the Board at page 30 in Order 164/16:

*The Treatment of Export Revenue:*

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<sup>1</sup> Board Report to the Minister of Energy and Mines, March 31, 1988.

*Manitoba Hydro plans its system so that it meets two planning criteria: (1) having sufficient generation under minimum, or what is referred to as dependable, water flows, and (2) having sufficient generation to meet the maximum winter peak demand. Because the dependable flow condition is based on the worst drought conditions in Manitoba Hydro's one hundred year hydrological record, in water years with more water than such extreme drought, there is surplus generation available that may be exported. Manitoba Hydro also must have sufficient generation capacity to meet Manitoba Hydro's customers' peak electricity demands plus an operating reserve margin. Hydroelectric generating stations are built with substantial capacity such that large amounts of generation, with long lead times, are added to Manitoba Hydro's system in large increments resulting in surplus generation even under dependable flow conditions. The combination of these effects means Manitoba Hydro has surplus generation that can be exported to earn additional revenue.*

Ultimately, the Board decided in the Board Findings at page 32 of Order 164/16 to abandon the Export Class:

*The Board finds that an Export class should not be used in the COSS.*

*First, the Board notes the general agreement of the experts and parties in this proceeding that the use of an Export class is not an appropriate way to measure or determine whether Manitoba Hydro's decisions to proceed with particular capital projects were economically sound. The Board concludes that the Export class is not a vehicle for measuring the profitability of Manitoba Hydro's export business, nor is it possible to use the COSS to measure risks associated with the export venture or the prudence of any resource development plans. [emphasis added]*

The integrated nature of the predominately hydro system and its complex flow and load driven market interactions make any exercise to tease apart domestic and export costs an arbitrary exercise which provides no insight into the objective of determining export profitability.

Manitoba Hydro applies a single, system-based approach to the evaluation of generation investments, which recognizes the obligation to serve the Manitoba load, existing export obligations, and the value obtained by domestic customers from interaction with external markets (i.e., exports and imports). Through these interactions, Manitoba Hydro's system

performance and reputation in the market can materially impact value for Manitoba customers. One example is through Manitoba Hydro's Contingency Reserve Sharing Agreement with MISO, as discussed below.

For years, Manitoba hydro has shared reserves with bordering utilities in the US. In 2010, MISO and Manitoba Hydro began operating a new Contingency Reserve Sharing Group consisting of only these two entities. The MISO-MBHydro CRSG, which was established through amendments to the MISO-Manitoba Hydro Coordination Agreement, provides Manitoba Hydro access to at least 1,850 MW of contingency reserves from MISO's substantive Balancing Area and provides MISO access to 150 MW of Manitoba Hydro's contingency reserves. The CRSG frees up a large amount of capacity on the Manitoba Hydro system, which would otherwise have to be held for contingency.

To understand the significance of the CRSG to Manitoba from a reliability perspective, it is helpful to cite an example. In 2008, a major forest fire near the HVDC corridor resulted in faults and tripping of 3 of 4 HVDC Poles in less than two minutes. A photo of this fire is provided in Figure 1. Figure 2 below illustrates how this event transpired for the Manitoba Hydro Balancing Area. The left axis is the "Area Control Error" in MW, which is a measure of the balance of the Manitoba system in operations. If the Area Control Error is 0 MW, then the power flowing into or out of the province matches what it is scheduled to be. If the Area Control Error is negative, then Manitoba Hydro is under generating. The right axis is the power system frequency in Hz.



Figure 1. June 2008 Forest Fires near HVDC Corridor

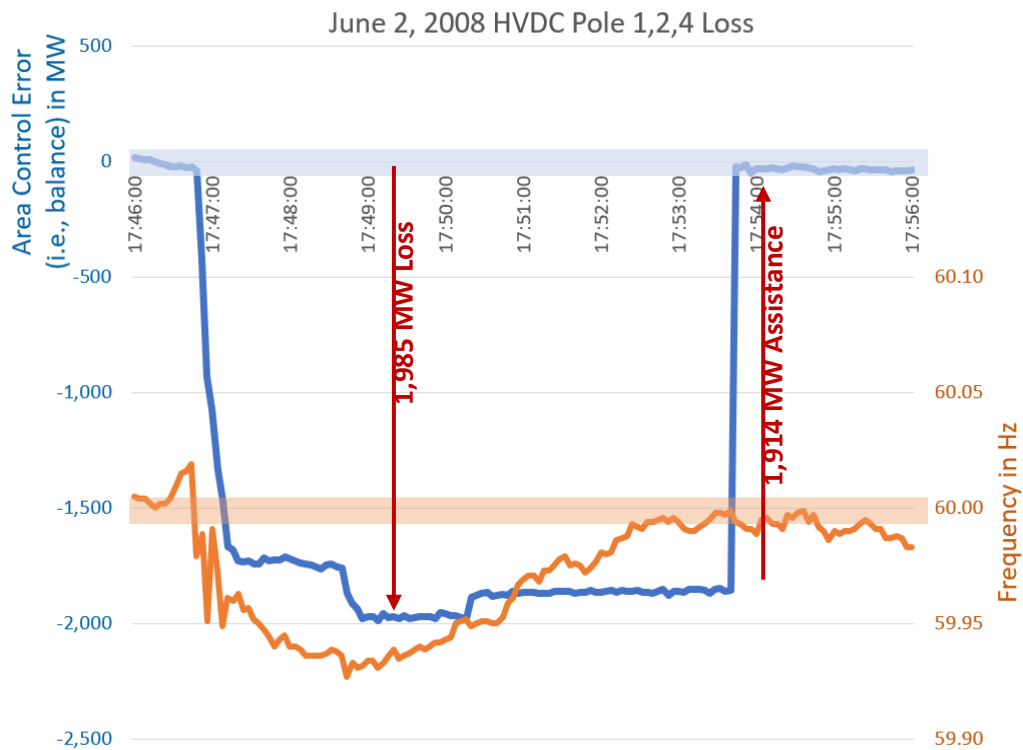


Figure 2. Manitoba Hydro Balance – June 2, 2008

Prior to the event, the Manitoba Hydro system was in close balance with the Area Control Error near zero. The HVDC poles tripped and, within less than two minutes, Manitoba was shorting the combined system (including Manitoba) by about 2,000 MW. The frequency of the system immediately dropped, affecting the entire Eastern Interconnection down to the Gulf of Mexico. Manitoba Hydro operators called for assistance from the CRSG, and over 1,900 MW of generation in MISO – roughly three times the capacity of Keeyask - responded and Manitoba's system was immediately rebalanced. According to Manitoba Hydro records, no Manitoba customers were impacted by this event.

This was a major event and certainly not the only occurrence on the Manitoba system. Other examples are provided at page 75 of Manitoba Hydro's rebuttal evidence. In the last year, the CRSG has been used over 30 times and Manitoba Hydro has called just over half of the events despite its relatively small size (less than 5% of the combined MISO-MH System).

These events are reported to NERC as a group, so Manitoba Hydro takes great care to minimize the risk of negatively impacting its reputation due to losses on its system. For example, specifically related to forest fires, Manitoba Hydro has enhanced its HVDC controls that automatically attempt to restart the HVDC system after a brief period following a fault. Manitoba Hydro has also implemented additional severe weather and forest fire monitoring, training, and procedures. However, Manitoba Hydro has large contingencies, particularly on the HVDC system, and events will happen. MISO is keenly interested in the performance of our system – so much so that they have information on the statuses and output of our HVDC on their main system displays in their control room.

Absent sharing contingency reserves with MISO, MH would have to immediately secure a large volume of spare capacity which would add significant costs to Manitoba Customers. Attempting to allocate costs of what may be surplus to Manitoba customer needs for most of the year or under most water conditions is not appropriate because these assets are also used to ensure domestic customers are not impacted by significant events, directly or indirectly, such as through loss of contingency reserve sharing benefits. Through good utility practice and prudent investments to sustain its system, Manitoba Hydro can perform reliably and maintain the value the export market provides to Manitoba Customers.



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## 2023/24 & 2024/25 GENERAL RATE APPLICATION

### Manitoba Hydro Undertaking #33

**Manitoba Hydro to advise whether it acknowledges that the unique relationship to the land may be a hurdle for many First Nations candidates who would otherwise be qualified to be employed with Manitoba Hydro**

#### Response:

Manitoba Hydro cannot speak for individual First Nations people and notes that an individual's relationship to the land is highly personal. That being said, Manitoba Hydro would acknowledge that some prospective First Nations candidates may be reluctant to seek employment outside of their community out of a concern that they might lose their connection to family, land, or community.

As an organization with a presence across the province, Manitoba Hydro has many employees who are traveling and working away from their home communities. An individual's interest in relocating for work varies considerably from person to person, and this is highly influenced by family and personal circumstances. While some individuals are not interested in relocating, others actively seek it out at certain stages of their life.

It is also noted that, for certain positions at Manitoba Hydro, connection to the land and water is considered an asset. Positions in the Waterways Management Program, for example, are located within northern First Nations. When recruiting for these positions, Manitoba Hydro seeks individuals with a knowledge of the local Indigenous culture and language, and a familiarity with open water and ice travel conditions in the area.

Whether positions are located within a small community or a large center, Manitoba Hydro has generous and flexible vacation and leave policies, and working conditions that provide for a balanced approach to work, family life, and community.

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2023/24 & 2024/25 GENERAL RATE APPLICATION

**Manitoba Hydro Undertaking #42**

**Manitoba Hydro to file the mandate letter from 2016.**

**Response:**

See Attachment 1 to this response for a copy of the mandate letter dated May 3, 2016.

See Attachment 2 to this response for a copy of the framework letter, which is undated. It is Manitoba Hydro's understanding that this framework letter was issued on or about June 15, 2016. It can be found on the Government of Manitoba's website at the link below:

[https://www.gov.mb.ca/asset\\_library/en/executivecouncil/mandate/hydro\\_framework\\_letter.pdf](https://www.gov.mb.ca/asset_library/en/executivecouncil/mandate/hydro_framework_letter.pdf)

Manitoba Hydro was unable to locate any other mandate letters.

May 3, 2016

Honourable Ron Schuler  
Minister of Crown Services  
Room 343 Legislative Building  
Winnipeg, Manitoba R3C 0V8

Dear Colleague,

Thank you for agreeing to serve Manitoba as Minister of Crown Services. Together, our party has been given a mandate to restore trust in government and improve the lives of Manitobans and their families. This is a high honour and privilege we have been given. It will be our focus every day in government.

At the outset, I want to remind you of the need to comport yourself at all times with personal and professional integrity as a representative of our new government. I insist we adhere to the highest possible standards of accountability and respect in the conduct of the province's business. Accordingly, I expect you to be fully aware and compliant with all ethical rules and guidelines currently established as well as those which will be part of our Open Government Initiative.

### **Most Improved Province**

We asked for and received a mandate from Manitobans to improve our province in several key areas. We will be judged on how well we deliver on this. This government will relentlessly focus on these results. I expect us to be a government of results. We must strive each day to deliver high quality public services to citizens at reasonable costs to taxpayers.

A fundamental part of our platform commitment to Manitobans is to ensure our province improves in key areas. All ministers are expected to support and deliver on all of these commitments with colleagues. As Minister of Crown Services, you have a key role to play in delivering on these particular Most Improved Province commitments:

- Most improved province in job creation performance.
- Most improved province in partnership initiatives with business and communities.

## **Your Mandate**

You are the first Minister in Manitoba to have been given the responsibility for all of Manitoba's Crown Services. As such, you are charged with review and reform of *The Crown Corporations Public Review and Accountability Act* to strengthen the oversight of these entities while respecting the responsibility of their Boards and Management to govern and manage. An integral aspect of that review will be to assess the current governance framework relating to Crown corporations and to implement necessary amendments so as to enhance the outcome-based performance of Crown corporations.

As Minister of Crown Services, you are the lead in fulfilling the following platform commitments:

- Above all else, keep Manitoba's largest Crown Corporation, Manitoba Hydro, publicly owned.
- Adopt the recommendation of the Public Utilities Board that an independent arm's-length entity be created to take responsibility for developing and implementing planned targets for saving energy.
- Report annually on energy savings targets to Manitobans.
- Work with the new Board of Manitoba Hydro in respect to our commitment to review the Bipole III construction project.

You will form teams with your cabinet colleagues to ensure we fulfill the following platform commitments, in particular:

- The Minister of Finance in reducing red tape. You will reduce red tape in respect to Crown Services as part of this government wide project.
- Your Cabinet colleagues to open government tendering, including ending Project Labour Agreements, in the delivery of Crown Services.

You will ensure that Crown Services adhere to our commitments in respect to Open Government.

## **Working With Manitobans and the Public Service**

Our government will be a listening government. Our government will be a responsible and responsive government. As a minister and representative of this new government, I expect you to work constructively and cooperatively with citizens and stakeholders to hear their views and communicate the decisions and priorities of the government. Having secured the people's trust in this election, we must work hard every day to earn it anew.

Manitoba's civil service will be a key partner with us to deliver on our commitments and serve the public. Our commitment to protecting front line services for people and the jobs of those who deliver them is one I expect all ministers to work towards.

I made a decision at the outset to reduce the size of Cabinet and set a new tone at the top in ensuring value in government services. That tone at the top extends to how I expect you and your colleagues to work with your departmental officials and other civil servants you encounter in the course of your professional duties. I expect you to forge a collaborative working relationship with your deputy minister and senior officials. I also expect you to be accessible to officials within your department, to listen to their advice, to hear their concerns, and understand that while they are here to serve in a professional non-partisan manner, they are also our employees who deserve our respect.

### **Cabinet, Caucus and the Legislature**

Being a minister brings significant responsibility with your new duties. That responsibility extends to ensuring you are fully briefed and knowledgeable about your portfolio issues and obligations when engaging with colleagues at Cabinet and in the Legislature. I expect all ministers to know their files and bring a collegial working style to making decisions at Cabinet and Cabinet Committees.

You have also been named first Acting Minister of Sports, Culture & Heritage and second acting Minister of Infrastructure.

Caucus is a vital part of our governance model. I remind you that all caucus members are full and equal colleagues in the work and direction of this government. I expect you to work closely at all times with your caucus colleagues providing them with information as they carry out their duties and being accessible to them in the conduct of their duties. From time to time, individual caucus members will be assigned to work with you on specific projects by me. You will treat them as full cabinet colleagues in this capacity.

The Legislative Assembly remains the foundation of our democracy and is essential for representative and accountable government. We shall treat it respectfully. I expect all ministers to be briefed, ready, and available to answer questions, explain decisions, and engage colleagues in the Legislature as well as citizens that appear before it.

As we work together, I will be evaluating individual and collective performance of ministers as they deliver their mandates and support and work collaboratively with ministerial and caucus colleagues.

Manitobans expect us to work for them as a team. I know I can count on your personal support and commitment to do so as you shall have my personal support and commitment to work with you in your new duties and responsibilities.

We have been given a rare privilege to serve our province. I know you are as grateful as I am for this opportunity. Let us make Manitobans proud once more of their government.

Sincerely,

Original signed by Brian Pallister, Premier

Premier Brian Pallister

Mr. H. Sanford Riley  
Chair, Manitoba Manitoba Hydro-Electric Board

Dear Mr. Riley:

Manitobans have elected a government that is committed to improving the province of Manitoba. Our priorities include restoring prudent fiscal management, creating jobs, improving health care and education, improving our partnerships and relationships with business and communities, and increasing openness and transparency of our government. We are focused on achieving results on behalf of Manitobans.

The Manitoba Hydro board of directors is responsible for carrying out the duties, powers and functions of the corporation including those outlined in The Manitoba Hydro Act. These responsibilities include ensuring a safe, reliable, economical and environmentally responsible supply of energy for Manitoba, while keeping rates low for Manitobans.

Manitobans expect a high quality of service delivered by their public crown corporations. *The Crown Corporations Public Review and Accountability Act* was enacted to ensure public confidence and accountability in Manitoba's Crown Corporations, and to strengthen their accountability mechanisms.

In the coming months, our government will review this legislation with our partners and stakeholders, including Manitoba Hydro. Together, we will assess the current governance framework with a view to improving transparency and more clearly defining the respective roles of government and the Boards of Directors of Manitoba's major Crown Corporations. We want to find the right balance between our responsibility to ensure performance and results with the need for operational independence for our Crown Corporations.

Our government is committed to reducing red tape, providing quality service, strengthening accountability and delivering value for the money that Manitobans invest in all government services. I know that these principles of value, quality, efficiency, and effectiveness are important to Manitoba Hydro.

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Once we have developed the right governance model, I look forward to working with you to improve procurement/ tendering practices, advertising and sponsorship models with the goal of ensuring competitiveness, transparency, efficiency and cost-effectiveness across government.

I know you and your colleagues on the Board understand that it is an important responsibility to guide and oversee Manitoba's publicly owned corporations. And I know I can count on your hard work and dedication to fulfill your Board's duties and responsibilities. I look forward to hearing your advice and recommendations and to working together on achieving results that will make Manitoba the Most Improved Province.

Yours sincerely,

**Honourable Ron Schuler**  
**Minister of Crown Services**

c: Steve Kroft  
David Brown  
Earl Edmondson  
Cliff Graydon  
Jennefer Nepinak  
Michael Pyle  
Allen Snyder  
Dayna Spiring  
Dr. Annette Trimbee

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## 2023/24 & 2024/25 GENERAL RATE APPLICATION

### Manitoba Hydro Undertaking #54

**Manitoba Hydro to show what that zone of reasonableness looks like using the level of net export revenue in each sensitivity**

#### Response:

Under the RCC calculation directed by the Board (Directive 27) where net export revenue is used to reduce costs, the zone of reasonableness (ZOR) is applied as a range of +/- 5% around the net costs for a class.

- For example, in PCOSS24 the Residential class has net costs of \$881 million so the lower bound of the ZOR is 95% of net costs or \$837 million and the upper bound is 105% of net costs or \$925 million. The width of the ZOR is \$88 million under the alternate calculation.

Under the previous RCC calculation, where net export revenue was used to increase class revenues, the zone of reasonableness is applied as a range around the total costs for a class.

- The Residential class has total costs of \$1,352 million so the lower bound of the ZOR is \$1,285 million and the upper bound is \$1,420 million. The width of the ZOR is \$135 million under the previous calculation.

The following table provides these results for each of the three example classes included in Slide 13 of Manitoba Hydro's direct evidence (Exhibit MH-51).

When the ZOR is expressed in dollars, rather than as a percentage, the width of the ZOR is 35% to 48% narrower for all classes using the RCC calculation from Directive 27 compared to the previous calculation. The reduction in the width of the ZOR is greater for classes that receive relatively more net export revenue (NER), such as GSL, than for the Residential and GSM classes.



	Previous RCC Calculation			Alternate RCC Calculation			Change	
	Relative to Total Cost (\$ million)			Relative to Net Cost (\$ million)			\$ Million	%
	95% Bound	105% Bound	Range of ZOR	95% Bound	105% Bound	Range of ZOR		
Residential	1,285	1,420	135	837	925	88	(47)	-35%
GSM	360	398	38	223	247	23	(14)	-38%
GSL >100kV	268	296	28	140	155	15	(13)	-48%

The width of the ZOR varies depending on the approach used to calculate the RCC and will also be affected by the level of export revenues included in the study. The response to Coalition/MH II-61a provided PCOSS scenarios assuming reduced levels of export revenues of \$1.0 billion, \$0.9 billion and \$0.8 billion compared to the \$1.15 billion of export revenue included in PCOSS24.

The following table provides the range of the ZOR in dollars for the Residential, GSM and GSL >100kV classes using the two approaches to calculating RCCs under the four levels of export revenues.

The sensitivity shows that the difference in the width of the ZOR under the two RCC calculations will decrease proportionally to decreases in export revenues.

	Exports (\$ billion)	Previous RCC Calculation			Alternate RCC Calculation			Change	
		Relative to Total Cost (\$ million)			Relative to Net Cost (\$ million)			\$ Million	%
		95% Bound	105% Bound	Range of ZOR	95% Bound	105% Bound	Range of ZOR		
Residential	1.15	1,285	1,420	135	837	925	88	(47)	-35%
	1.00	1,220	1,348	128	834	922	88	(41)	-32%
	0.90	1,177	1,301	124	832	919	88	(36)	-29%
	0.80	1,135	1,254	119	829	917	87	(32)	-27%
GSM	1.15	360	398	38	223	247	23	(14)	-38%
	1.00	341	377	36	223	247	23	(12)	-35%
	0.90	329	363	35	223	247	23	(11)	-32%
	0.80	316	350	33	223	247	23	(10)	-30%

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GSL >100kV	1.15	268	296	28	140	155	15	(13)	-48%
	1.00	253	280	27	143	158	15	(12)	-44%
	0.90	244	269	26	145	160	15	(10)	-41%
	0.80	234	259	25	146	162	15	(9)	-37%

**2023/24 & 2024/25 GENERAL RATE APPLICATION**

**Manitoba Hydro Undertaking #56**

**Manitoba Hydro to provide the actual average usage for both the 30-100kV and >100kV classes.**

**Response:**

At Transcript page 3470, Mr. Sven Hombach requests information on the bill impact of the proposed rate changes effective April 1, 2024 on the average customer in each of the GSL 30-100kV and GSL >100kV classes.

The following information provides the estimated bill impact for the average customer as calculated based on 2024/25 forecast billing determinants. While an average usage level was derived from forecast billing determinants for purpose of this response, this level of usage is not representative of any individual customer within each of the classes.

	Energy Billing Determinants (kWh) (PUB/MH I-165)	Demand Billing Determinants (kVA) (PUB/MH I-165)	Number of Accounts	Monthly Average Energy per Account (kWh)	Monthly Average Demand per Account (kVA)	Monthly Bill @ Proposed Rates Sep 1 2023	Monthly Bill @ Proposed Rates Apr 1 2024	Change in Monthly Bill	Percentage Increase
<b>GSL 30-100kV</b>	1 915 149 601	3 702 874	48	3 324 913	6 429	\$184 873	\$187 638	\$2 764	1.5%
<b>GSL &gt;100kV</b>	3 220 188 113	5 700 476	18	14 908 278	26 391	\$767 032	\$778 381	\$11 348	1.5%

\* There are approximately 48 accounts in the GSL 30-100kV class (which represent approximately 28 companies) and 18 accounts in the GSL >100kV class (which represent approximately 10 companies).

\* The above amounts exclude Limited Use Billing Demand accounts.

The change to the billing demand definition is designed to be revenue neutral at the average level and therefore has no incremental bill impact on the average bills above.

**Clarification regarding the bill impact of the changes to billing demand definition**

At Transcript page 3474 (lines 12-22), Mr. Sven Hombach requested information on whether there are any customers who would benefit from bill reductions significantly below -0.5% as a result of the billing demand definition change.

Manitoba Hydro indicated that one customer is expected to see a bill reduction of -0.6% from the billing demand definition change. Manitoba Hydro would like to clarify that in addition to this customer, there are approximately 6 customers that are anticipated to see bill reductions ranging from -0.7% to -2.2%. Note that these bill reductions reflect only the change to the billing demand definition (i.e., the anticipated decrease in billing determinants with an offsetting increase to the

Demand Charge to maintain revenue neutrality) and do not reflect the bill increases that would result from the differentiated revenue increase of 1.5% applied entirely to the Demand Charge.

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## 2023/24 & 2024/25 GENERAL RATE APPLICATION

### Manitoba Hydro Undertaking #63

**Manitoba Hydro to advise how the grid modernization at 180 million dollars is allocated between distribution and other functions.**

#### Response:

The capital expenditure plan includes \$180 million of expenditures over the 2022 to 2032 period for the Grid Modernization Program. The estimated costs and schedule for the program are preliminary since the scope of the work is currently being developed and the project execution plan needs to be developed.

The program appears to be primarily related to assets that will be functionalized as Distribution in the Cost of Service Study, but does identify actual expenditure for initiatives that were related to 66kV facilities<sup>1</sup> which would be functionalized as Subtransmission in the study. It is reasonable to conclude that some portion of the planned expenditures will also relate to Subtransmission assets.

Any program expenditures related to the System Control Centre would be included as part of the total System Control assets in the rate base schedule (Schedule C1, Appendix 8.1), which are functionalized in proportion to the SCADA Functionalization factors provided in Table D3. As distribution grid monitoring increases, the distribution related portion of this functionalization factor and subsequent allocation of the overall System Control assets will also increase.

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<sup>1</sup> Coalition/MH I-90e

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**2023/24 & 2024/25 GENERAL RATE APPLICATION****Manitoba Hydro Undertaking Accepted at Page 3532 of the Transcript****When does a dollar arrear become a dollar of bad debt?****Response:**

From a revenue requirement perspective, Manitoba Hydro uses the Expected Credit Loss (“ECL”) model to estimate the probability of default of trade receivables. Calculating the ECL allowance requires Manitoba Hydro to look at several parameters such as historical write-offs, collection rates and probabilities of default. Any change in the ECL allowance is recorded in the income statement as bad debt expense (included in operating and administrative expense) which forms part of the total revenue requirement. The ECL allowance balance for the past 3 years is as follows:

<i>in millions \$</i>	Fiscal Year 2021/2022	Fiscal Year 2020/2021	Fiscal Year 2019/2020
ECL allowance as at March 31 <sup>st</sup>	\$29	22	19
Impact on O&A Bad Debt Expense	\$7M	\$3M	

The ECL balance represents a provision for bad debt that may or may not be written off or removed from the allowance. The ECL allowance is sufficient to cover anticipated annual write-offs for the electric segment of Manitoba Hydro as well as estimated credit losses resulting from possible default events associated with existing trade receivables.

Manitoba Hydro will pursue internal collection efforts for all outstanding receivables and continues to do so while a customer maintains an active account. When an account becomes inactive (i.e. the customer no longer has service with Manitoba Hydro) efforts are made to collect on the outstanding receivable in a timely manner. If no monies are received or a customer cannot be located, Manitoba Hydro will place the account with a third-party collection agency. The timeframe can vary before an account is placed with a third-party; however, generally it is done 60 days after the final bill becomes due. Once an account is placed with a third-party collection agency, Manitoba Hydro segregates the outstanding balance into its doubtful category. Manitoba Hydro’s general practice is for inactive accounts to remain in this status for approximately one

year before being written-off as part of the corporation’s year-end accounting process. The doubtful category also includes some active accounts where the probability of collection is deemed to be low. The extent to which active account balances may be included in this category is evaluated each year on a case-by-case basis. There is not a single set of factors that results in a dollar arrear becoming a dollar of bad debt expense. The transition of an account being considered in arrears to being considered an uncollectible account is based on an assessment of each specific account. Accounts typically progress from being under 30 days overdue, to 30-60 days, 60-90 days and then over 90 days overdue. Accounts are deemed to be uncollectible after reasonable attempts to collect have been exhausted. It is important to note that accounts that are written off have already impacted O&A, they have however been deemed uncollectible.

Write-offs for the past three fiscal years and their relationship to electric domestic revenue are shown below. Given that write-offs generally represent accounts that have been in arrears for more than one year, the percentage of write-offs in relation to annual revenue is calculated based on prior year revenues.

<i>in millions \$</i>	<b>Fiscal Year 2021/2022</b>	<b>Fiscal Year 2020/2021</b>	<b>Fiscal Year 2019/2020</b>
Write-Offs	6	5	4
Prior Year Electric Domestic Revenue	1 714	1 702	1 707
Write-Offs as a % of Previous Year’s Revenue	0.33%	0.27%	0.22%