

### REFERENCE:

Section 3.0 Proposed Rate Changes & Customer Impacts by Class (p.35 of 43)

### PREAMBLE TO IR (IF ANY):

Fig. 3.1 states the additional revenues required from each customer class. The "Residential" class presumably includes First Nations On-Reserve residential customers as well.

### QUESTION:

Please restate Figure 3.1 under the assumption of a 0% increase in FNOR rates.

#### **RESPONSE:**

Please find the requested information in the table below.

Figure 3.1

	as per November		2019/20 Approved
	30, 2018 filing	2019/20 Approved	Budget reflecting a
	2019/20 Interim	Budget reflecting	June 1, 2019 and
	<b>Budget Additional</b>	June 1, 2019	0% increase for
	Revenue	implementation	FNOR
Customer Class	\$(000s)	\$(000s)	\$(000s)
Residential	24,800 <sup>1</sup>	21,200 <sup>2</sup>	20,400 <sup>3</sup>
General Service (GS) Small	11,900	10,000	10,300
GS Medium	7,400	6,600	6,700
GS Large	13,600	11,300	11,600
Area & Roadway Lighting	800	700	700
Miscellaneous	200	200	200
Total General Consumers Revenue	58,800	50,000	49,900 <sup>4</sup>

Totals may not add due to rounding.

<sup>&</sup>lt;sup>1</sup> Includes additional revenue of approximately \$1,700 from the First Nations On Reserve and Diesel Residential classes.

<sup>&</sup>lt;sup>2</sup> Includes additional revenue of approximately \$1,400 from the First Nations On Reserve and Diesel Residential classes.

<sup>&</sup>lt;sup>3</sup> Includes \$0 additional revenue from the First Nations On Reserve and Diesel Residential classes.

<sup>&</sup>lt;sup>4</sup> On an annualized basis, the revenue shortfall associated with a 0% increase from the First Nations on Reserve and Diesel Residential classes is fully recovered such that the total revenue increase for Manitoba Hydro is 3.5%.



### **REFERENCE:**

Appendix 12 (p. 1 of 7)

### PREAMBLE TO IR (IF ANY):

### Residential First Nations On Reserve

Forecast Customers: 18,478

kWh	June 1, 2018 \$ / Month	April 1, 2019 \$ / Month	Difference \$ / Month	Percent Change
250	\$28.57	\$29.57	\$1.00	3.50%
750	\$69.55	\$71.99	\$2.44	3.51%
1 000	\$90.04	\$93.20	\$3.16	3.51%
2 000	\$172.00	\$178.04	\$6.04	3.51%
5 000	\$417.88	\$432.56	\$14.68	3.51%

### QUESTION:

- a) Please clarify if the number of kWh is per month, or per two-month billing period.
- b) Please indicate the average on-reserve consumption, based on the billing periods identified in the previous response.
- c) Please indicate what percentage of the forecast 18,478 customers are expected to be found in each bin (e.g. up to 250 kWh, between 251 and 750 kWh, etc.).

### **RESPONSE:**

- a) Bill Comparisons in Appendix 12 represent kWhs for a one-month period.
- b) The 2019/20 forecast for average on-reserve consumption is 2,500 kWhs per month.
- c) Manitoba Hydro does not forecast bill frequency for those customer classes that do not have a blocked energy rate structure. Please see the response to MKO/MH I-1 for data pertaining to the actual First Nations On Reserve Residential bill frequencies for the 2017/18 fiscal year.



Appendix 10 (p. 1 of 7)

### PREAMBLE TO IR (IF ANY):

### **PROOF OF REVENUE**

June 1, 2018 Rates vs April 1, 2019 Rates Fiscal year ending March 31, 2020 (\$000s)

	Calculated Revenue 1, 2018 Rates	Calculate Revenue April 1, 2019 I	R	Diff. in evenue Dollars	Diff. in Revenue Percent	
Basic	647,160	66	59,953		22,793	3.5%
Residential on Reserve	47,059	4	8,712		1,653	3.5%
Diesel	798		826		28	3.5%
Seasonal	8,085		8,370		285	3.5%
FRWH	1,237		1,281		44	3.5%
Residential	\$ 704,339	\$ 72	9,141	\$	24,802	3.5%

### **QUESTION:**

- a) Please confirm that the 3.5% increase for Residential on Reserve is expected to provide an additional \$1,653,000 of revenue to Manitoba Hydro.
- b) Please express this value as a percentage of total MH domestic revenue (\$1,737 million).

### **RESPONSE:**

- a) Manitoba Hydro confirms that based on the November 30, 2018 filing the 3.5% increase for Residential On-Reserve customers was expected to provide \$1,653,000 in revenue. Based on the Supplement filed on February 14, 2019 and a June 1, 2019 implementation, the 3.5% increase is now expected to provide approximately \$1,400,000 in revenue for the 2019/20 fiscal year.
- b) The \$1,400,000 in revenue from the Residential On-Reserve class equates to 0.08% of total domestic revenue.



Appendix 10 (p. 1 of 7)

### PREAMBLE TO IR (IF ANY):

#### **PROOF OF REVENUE**

June 1, 2018 Rates vs April 1, 2019 Rates Fiscal year ending March 31, 2020 (\$000s)

	Calculated Revenue e 1, 2018 Rates	Calculated Revenue April 1, 2019 Rate		Diff. in Revenue Dollars	Diff. in Revenue Percent
Basic	647,160	669,95	53	22,793	3.5%
Residential on Reserve	47,059	48,71	12	1,653	3.5%
Diesel	798	82	26	28	3.5%
Seasonal	8,085	8,37	70	285	3.5%
FRWH	1,237	1,28	31	44	3.5%
Residential	\$ 704,339	\$ 729,14	41 \$	24,802	3.5%

### QUESTION:

- c) Please indicate the expected return on equity (ROE) and FY2020 debt to equity ratio for Manitoba Hydro:
  - i. If the full requested rate increase in granted, and
  - ii. If the full requested rate increase in granted, with the exception of a 0% increase for Residential on Reserve.

#### **RESPONSE:**

i. Based on the Supplement to the 2019/20 Electric Rate Application and a June 1, 2019 implementation, if the requested 3.5% rate increase is granted, it will result in an expected return on equity (ROE) of 3.43% and debt to equity ratio of 87:13 in FY2020.



ii. Assuming the 0% rate increase for First Nations On Reserve Residential class is granted on the same basis as the 2018/19 approved rate increase and the revenue shortfall created by no rate increase to the FNOR class is recovered from other customer classes, the expected ROE and debt to equity ratio will be the same as those referenced in the response to (c)(i) above.



PUB/MH I-1

### PREAMBLE TO IR (IF ANY):

"As discussed with Board Counsel, should the PUB wish to consider specific documents which were filed by Manitoba Hydro as part of its evidence in the 2017/18 & 2018/19 GRA in connection with the current Application, Manitoba Hydro respectfully requests that those specific documents be put to Manitoba Hydro for review and adoption as part of the evidence in support of the 2019/20 Electric Rate Application."

### **QUESTION:**

Please confirm that Manitoba Hydro adopts the following documents, filed in the 2017/18 & 2018/19 GRA, or part of the hearing transcript as set out below, as part of its evidence in this proceeding. For any document or documents that it does not adopt, please provide an updated version.

- 1) Appendix 10.5;
- 2) the report on Bill Affordability prepared by Prairie Research Associates, filed as Appendix A to Appendix 10.5;
- 3) Updates to the Prairie Research Associates report set out in:
- a) AMC/MH II-23a-c;
- b) MH-98 (Undertakings 21, 22 and 23);
- c) AMC/MH II-28;
- 4) AMC/MH I-4, Attachment 1;
- 5) AMC/MH I-13a-b;
- 6) AMC/MH I-23;
- 7) AMC/MH I-43;
- 8) AMC/MH II-1;
- 9) AMC/MH II-2;
- 10) AMC/MH II-3c;
- 11) AMC/MH II-3-Attachment 1;

12) AMC/MH II-5a-g; 13) AMC/MH II-7a-d; 14) AMC/MH II-8a-i; 15) AMC/MH II-18a; 16) AMC/MH II-18b; 17) AMC/MH II-19a-b; 18) AMC/MH II-22; 19) AMC/MH II-29; 20) AMC/MH II-32, Attachment 1; 21) COALITION/MH I-130 22) PUB/MH I-37a-b; 23) PUB/MH I-125a-d, Attachment 1; 24) Cost of Service Panel, Transcript, Dec 20, p2723; 25) Mr Kelvin Shepherd, Transcript, Dec 5, p515; 26) Mr Kelvin Shepherd, Transcript, Dec 5, p554-555; 27) Mr Kelvin Shepherd, Transcript, Dec 5, p560-562; 28) Mr Kelvin Shepherd, Transcript, Dec 5, p570-573; 29) Mr Kelvin Shepherd, Transcript, Dec 5, p573-574; 30) Mr Kelvin Shepherd, Transcript, Dec 5, p586-587; 31) Mr Kelvin Shepherd, Transcript, Dec 5, p562; 32) Cost of Service Panel, Transcript, Dec 20, p2335; 33) Cost of Service Panel, Transcript, Dec 20, p2673; 34) Cost of Service Panel, Transcript, Dec 20, p2691; 35) Cost of Service Panel, Transcript, Dec 20, p2694-95; 36) Cost of Service Panel, Transcript, Dec 20, p2423-2424; 37) Cost of Service Panel, Transcript, Dec 20, p2444; 38) Cost of Service Panel, Transcript, Dec 20, p2662-2664; 39) Cost of Service Panel, Transcript, Dec 20, p2669; 40) Exhibit MH-108;

### **RATIONALE FOR QUESTION:**

41) Exhibit MH-88;

These documents were relied upon by AMC's expert, and in AMC's final submissions.



### **RESPONSE:**

Manitoba Hydro adopts the following documents related to the 2017/18 & 2018/19 GRA as part of its evidence in this proceeding (please note: numbers correlate to the numbers as listed in the question above):

- 14) AMC-MH II-8a-i;
- 26) Kelvin Shepherd, Transcript, Dec 5, p.553, line 21 to p.556, line 2;
- 27) & 31) Kelvin Shepherd, Transcript, Dec 5, p.560, line 21 to p.563, line 9;
- 29) Kelvin Shepherd, Transcript, Dec 5, p.573, line 20 to p.574, line 25;
- 34) Cost of Service Panel, Transcript, Dec 20, p.2691, line 15 to p.2692, line 5;
- 35) Cost of Service Panel, Transcript, Dec. 20, p.2694, line18 to p.2696, line 22;
- 37) Cost of Service Panel, Transcript, Dec 20, p2444;
- 38) Cost of Service Panel, Transcript, Dec 20, p.2662, line 5 to p.2664, line 24;
- 39) Cost of Service Panel Transcript, Dec 20, p.2669, lines 1-25.

Manitoba Hydro adopts the following documents as part of its evidence in this proceeding but notes that these documents or responses were provided at a point in time, based on information current at that time. Manitoba Hydro is not providing updated information as it does not believe that any update would be materially different from what was provided in 2017:

- 8) AMC-MH II-1;
- 9) AMC-MH II-2a-b;
- 12) AMC-MH II-5a-g Note that more current information was filed as part of this Application, please see the 2018/19 Demand Side Management Plan at Appendix 13 and AMC/MH I-9a-b;
- 13) AMC-MH II-7a-d;
- 20) AMC-MH II-32-Attachment 1;
- 21) COALITION-MH I-130a-e;
- 36) Cost of Service Panel, Transcript, Dec 20, p.2423, line 14 to p.2424, line 10;
- 40) Exhibit MH-108.



Manitoba Hydro adopts in part the testimony provided by the Cost of Service Panel, Transcript, Dec 20 p. 2673 (item 33) with the following clarification: The CMHC funding for On-Reserve Non-Profit Housing Program requires First Nations to meet or exceed the National Building Code. As Manitoba Hydro is not responsible for building code requirements, further clarification was sought from Indigenous Services Canada. Manitoba Hydro has been advised that homes built without CMHC funding are requested to have an independent inspection to ensure the home adheres to the National Building Code requirements as part of the individual community's funding agreement with Indigenous Services Canada.

Manitoba Hydro does not adopt the following documents as the information contained therein is out of date. For each of these references, Manitoba Hydro has identified where the updated information has been requested and is being filed as part of the current application:

- 4) AMC-MH I-4-Attachment. Please see the response to AMC/MH I-7 and AMC/MH I-11;
- 6) AMC-MH I-23. Please see the response to AMC/MH I-7;
- 11) AMC-MH I-3-Attachment. Please see the response to AMC/MH I 9a-b;
- 23) PUB-MH I-125a-d-Attachments. Please see the response to AMC/MH I-7.

Manitoba Hydro does not adopt the following documents as this evidence as the discussion that occurred on the transcript was specific to the 7.9% rate proposed in the 2017/18 & 2018/19 General Rate Application. Manitoba Hydro is seeking a 3.5% rate increase in the current Application and will rely upon the evidence filed in the current Application to support its position:

- 25) Mr. Kelvin Shepherd, Transcript, Dec 5, p515;
- 28) Mr. Kelvin Shepherd, Transcript, Dec 5, p570-573;
- 30) Mr. Kelvin Shepherd, Transcript, Dec 5, p586-587.

Manitoba Hydro does not adopt Exhibit MH 88 (item 41) as the evidence included in the presentation has either been replaced with new evidence in the current proceeding or the content has been deemed out of scope for this proceeding. With respect to the cost of service study and rate and bill impacts, the most current evidence has been filed in response to PUB/MH I-61a), Appendix 10 Updated and Appendix 12. With respect to rate



making principles and objectives, please see the response to Coalition/MH I-41. Information regarding current DSM programs is outlined in the 2018/19 DSM Plan filed as Appendix 13 of this Application and in the response to AMC/MH I-9a-b.

Manitoba Hydro does not adopt the response to AMC/MH II-22 from the 2017/18 & 2018/19 GRA (item 18). The dedicated Indigenous Energy Advisor retired in 2018 under Manitoba Hydro's Voluntary Departure Program. Responsibility for the work undertaken previously by the dedicated Indigenous Energy Advisor has been assigned to the Residential Programs Supervisor within the Energy Efficiency Programs Department with support provided as projects arise pending transition of responsibility for the planning, design and implementation of DSM initiatives from Manitoba Hydro to Efficiency Manitoba.

The Bill Affordability Collaborative Process Summary Report and Recommendations dated January 2017 and the Bill Affordability Research Services Final Report prepared by Prairie Research Associates ("PRA") dated January 9, 2017 was filed in response to PUB directive 5 of Order 73/15 and discusses different rate options and strategies. All evidence related to those documents was reviewed extensively in the 2017/18 & 2018/19 General Rate Application. The PUB made certain findings as a result of the information presented in Order 59/18 as well as certain recommendations to Government and a directive to Manitoba Hydro to create a First Nation On-Reserve Customer Class. In Procedural Order 1/19 the PUB determined that "new or different bill affordability mechanisms or programs" were out of scope for the 2019/20 Electric Rate Application (p. 12 of Order 1/19). Manitoba Hydro has responded to inquiries regarding the First Nation On-Reserve Residential Rate Class created pursuant of Order 59/18 in AMC/MH I-1, AMC/MH I-5, AMC/MH I-6 and has provided information on current programs offered to First Nations by Manitoba Hydro in the 2018/19 DSM Plan filed as Appendix 13 of this Application. Manitoba Hydro has further provided information regarding First Nation usage, bill impacts, and arrears in Appendix 12, MKO I-1a-c, MKO-MH I-8, MKO-MH I-12, AMC/MH I-7, AMC/MH I-8a-b, AMC/MH I-9a-b, AMC-MH I-10, AMC-MH I-11, AMC/MH I-14, AMC/MH I-15, AMC/MH I-16, AMC/MH I-17, and AMC/MH I-18.

As a result of the PUB's determination in Order 1/19 and the evidence filed on the record of the current proceeding, the following documents are not being adopted by Manitoba Hydro



as their content discusses new or different bill affordability mechanisms or programs based on the Bill Affordability Workshop and Prairie Research Associates Report:

- 1) Appendix 10.5;
- 2) Report on Bill Affordability prepared by PRA, filed as Appendix A to Appendix 10.5;
- 3) Updates to the PRA report set out in a) AMC-MH II-23a-c; b) MH-98-MH Undertakings; c) AMC-MH II-28;
- 5) AMC-MH I-13a-b;
- 7) AMC-MH I43R;
- 10) AMC-MH II-3c;
- 15) AMC-MH II-18a;
- 16) AMC-MH II-18b-c;
- 17) AMC-MH II-19a-b;
- 19) AMC-MH II-29;
- 24) Cost of Service Panel, Transcript, Dec 20, p2723;
- 32) Cost of Service Panel, Transcript, Dec 20, p2335 and
- 41) Exhibit 88 Presentation on Bill Affordability Stakeholder Engagement & Working Group, Research Findings and Considerations for Bill Affordability.

Manitoba Hydro does not adopt the response to PUB/MH I-37 (item 22) as evidence related to the CFO to CAPEX ratio is not relevant to the current proceeding and is not an issue deemed in-scope pursuant to Appendix A of Order 1/19. Long term financial ratios will be considered and discussed with the filing of the next full General Rate Application.

Manitoba Hydro

#### REFERENCE:

PUB/MH I-61a

### PREAMBLE TO IR (IF ANY):

"The tables below provides the annual rate differentiation required to move all classes into the zone of reasonableness (95-105%), while maintaining overall revenue neutrality, over 1, 5 and 9 years. The revenue shortfall that results from the below average rate changes for the GSS ND nd A&RL classes is assumed to be recovered from all classes below unity, and is distributed between the Residential, First Nations On-Reserve, GSM and GSL 0-30 kV classes such that the final RCC for all four is equivalent."

The table referred to (Figure 2) shows the differential between Residential and First Nations On-Reserve rates (96.5% vs. 93.1%, for the initial RCC) disappearing, such that both classes show the same Final RCC (98.3%). This implies that the differentiation between residential and First Nations On-Reserve rates established in Order 59/18 would be effectively reversed by the end of the transition period.

### **QUESTION:**

- a) Please restate Figure 2 under the assumption that the current RCC differential between Residential and First Nations On-Reserve customer classes remains unchanged; and
- b) Please restate Figure 2 under the assumption that the First Nations On-Reserve rate remains unchanged.

### **RESPONSE:**

a) The table below restates Figure 2 of PUB/MH 1-61a with the additional assumption that the RCC differential between Residential and First Nations On-Reserve classes remains unchanged.

The revenue shortfall that results from the rate decreases for the GSS ND and A&RL classes is distributed such that the final RCC for Residential, GSM and GSL 0-30 kV



classes are equivalent, and First Nations On-Reserve remains 3.4% below Residential, while maintaining overall revenue neutrality.

Annual increases for Residential, GSM and GSL 0-30 kV under these assumptions are higher than those indicated in the original Figure 2 of PUB/MH 1-61a.

Figure 1: Maintain RCC Differential between Residential and First Nations On-Reserve

	Initial RCC	Annual	Annual	Annual	Final
	including	Differentiation	Differentiation	Differentiation	RCC
	BPIII	1 Year	5 Years	9 Years	
Residential	96.5%	2.00%	0.40%	0.22%	98.5%
First Nations On-Reserve	93.1%	2.12%	0.42%	0.23%	95.1%
GSS ND	116.7%	-10.02%	-2.09%	-1.17%	105.0%
GSS D	101.8%	0.00%	0.00%	0.00%	101.8%
GSM	97.5%	1.01%	0.20%	0.11%	98.5%
GSL 0-30	96.1%	2.43%	0.48%	0.27%	98.5%
GSL 30-100	104.6%	0.00%	0.00%	0.00%	104.6%
GSL >100	101.9%	0.00%	0.00%	0.00%	101.9%
Area & Roadway Lighting	118.7%	-11.56%	-2.43%	-1.36%	105.0%

b) The table below restates Figure 2 of PUB/MH 1-61a with the additional assumption that the First Nations On-Reserve rate remains unchanged.

The revenue shortfall that results from the rate decreases for the GSS ND and A&RL classes is distributed between the Residential, GSM and GSL 0-30 kV classes such that the final RCC for all three is equivalent.

Annual increases for Residential, GSM and GSL 0-30 kV under these assumptions are higher than those indicated in the original Figure 2 of PUB/MH 1-61a.



Figure 2: FNOR Rate Unchanged

	Initial RCC	Annual	Annual	Annual	Final
	including	Differentiation	Differentiation	Differentiation	RCC
	BPIII	1 Year	5 Years	9 Years	
Residential	96.5%	2.10%	0.42%	0.23%	98.5%
First Nations On-Reserve	93.1%	0.00%	0.00%	0.00%	93.1%
GSS ND	116.7%	-10.02%	-2.09%	-1.17%	105.0%
GSS D	101.8%	0.00%	0.00%	0.00%	101.8%
GSM	97.5%	1.10%	0.22%	0.12%	98.5%
GSL 0-30	96.1%	2.53%	0.50%	0.28%	98.5%
GSL 30-100	104.6%	0.00%	0.00%	0.00%	104.6%
GSL >100	101.9%	0.00%	0.00%	0.00%	101.9%
Area & Roadway Lighting	118.7%	-11.56%	-2.43%	-1.36%	105.0%

#### REFERENCE:

PUB/MH 1-63a-e, referring to Application, page 33.

### PREAMBLE TO IR (IF ANY):

The response provides foregone revenue from First Nations on Reserve ("FNOR") Residential and Diesel Residential customer classes, under a variety of assumptions.

### **QUESTION:**

Please restate the response, taking into account only the 0% rate increases for FNOR, and excluding all consequences related to Diesel Residential customers.

### **RATIONALE FOR QUESTION:**

The 0% increase for Diesel Residential customers is due to the deferral of review of Diesel Zone rates and not to the policy decision regarding FNOR set out in Order 59/18.

#### **RESPONSE:**

The rates paid by residential customers within the diesel zone are based on residential grid rates. The 0% increase for Diesel Residential customers effective June 1, 2018, was not due to a deferral in reviewing Diesel Zone rates as suggested in the Rationale for Question above, but is consistent with the PUB's direction in Order 59/18, page 231 that:

"A majority of the Board directs Manitoba Hydro to establish a First Nations On-Reserve Residential customer class for existing First Nations reserves and that this customer class will receive a 0% rate increase for the 2018/19 Test Year, such that the rate for this customer class will be maintained at the August 1, 2017 approved Residential rate. The 0% rate increase for 2018/19 is also to apply to First Nations diesel zone residential customers." (emphasis added).



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GRA 2017, PUB/MH I-125a

### PREAMBLE TO IR (IF ANY):

A link to the 2014 REUS was provided in the response.

### **QUESTION:**

Has a more recent REUS been prepared? If so, please provide a copy.

### **RESPONSE:**

A Residential Energy Use Survey was conducted in 2017. Please see Attachment 1 to this response for the 2017 Residential Energy Use Survey report.



GRA 2017, AMC/MH I-1

### PREAMBLE TO IR (IF ANY):

The response provides average usage and average bills for each First Nation community for 2016/17.

### **QUESTION:**

- a) Please provide similar data for 2017/18;
- b) Please provide similar data for 2019/20, assuming that consumption is identical to 2017/18 and that the requested 3.5% rate increase is approved.

### **RESPONSE:**

a) Please see the following table for the average usage and average monthly bill for Residential First Nations customers on reserves for 2017/18.

Residential	On First Nati	on Reserve	S	
First Nation Community	Active Elec Services	Electric Space Heat	2017/18 Avg Usage (kW.h)	2017/18 Avg Monthly Bill
Barren Lands First Nation	142	0	13,598	\$99
Berens River First Nation	321	208	26,360	\$186
Birdtail Sioux Nation	118	113	27,388	\$193
Bloodvein First Nation	200	177	27,292	\$192
Brokenhead Ojibway First Nation	185	183	26,612	\$188
Buffalo Point First Nation	181	149	19,249	\$139
Bunibonibee (Oxford House) First				
Nation	414	177	33,656	\$236
Canupawkpa Dakota First Nation	109	108	26,327	\$186
Chemanwawin Cree Nation	317	268	35,038	\$245



Residential C	On First Nati	on Reserve	S	
First Nation Community	Active Elec	Electric Space	2017/18 Avg Usage	2017/18 Avg Monthly
First Nation Community  Dakota Plains First Nation	Services 39	Heat 38	( <b>kW.h)</b> 23,931	<b>Bill</b> \$169
Dakota Figir First Nation	59 54	50	30,216	\$109 \$212
Dauphin River First Nation	76	74	22,339	\$159
Ebb And Flow First Nation	405	379	30,191	\$212
Fisher River First Nation	484	405	24,767	\$175
Fox Lake First Nation	81	72	29,986	\$211
Gamblers First Nation	35	34	24,826	\$176
Garden Hill First Nation	525	272	30,189	\$212
Gods Lake First Nation	296	128	31,378	\$220
Hollow Water First Nation	197	168	28,134	\$198
Keeseekoowenin First Nation	167	159	26,569	\$188
Kinonjeoshtegon First Nation	87	61	26,907	\$190
Lake Manitoba First Nation	248	228	32,868	\$230
Lake St Martin First Nation	153	150	11,261	\$80
Little Black River First Nation	196	185	25,516	\$180
Little Grand Rapids First Nation	276	187	29,816	\$209
Little Saskatchewan First Nation	142	141	27,773	\$196
Long Plains First Nation	370	366	29,033	\$204
Manto Sipi Cree Nation	133	64	39,959	\$278
Marcel Colomb First Nation	14	14	40,517	\$282
Mathias Colomb First Nation	415	394	37,575	\$262
Misipawistik (Grand Rapids) First Nation	248	230	30,882	\$217
Mosakahiken Cree Nation	259	217	33,882	\$238
Nischawayaksihk Cree Nation	513	486	38,177	\$266
Northlands Dene First Nation	149	0	12,692	\$94
Norway House Cree Nation	1201	1138	35,152	\$246
O-Chi-Chak-Ko-Sipi First Nation	136	126	28,267	\$199
O-PIPON-NA-PIWIN	217	198	32,594	\$228
Opaskwayak (OCN) Cree Nation	738	639	30,803	\$216
Pauingassi First Nation	135	92	23,886	\$169
Peguis First Nation	851	745	31,365	\$220
Pimicikamak Cree Nation	950	935	38,444	\$268
Pinaymootang (Fairford) First Nation	314	262	30,110	\$211



Residential (	On First Nati	on Reserve	S	
First Nation Community	Active Elec Services	Electric Space Heat	2017/18 Avg Usage (kW.h)	2017/18 Avg Monthly Bill
Pine Creek First Nation	212	199	29,547	\$208
Poplar River First Nation	226	150	28,884	\$203
Red Sucker Lake First Nation	208	98	30,029	\$211
Rolling River First Nation	145	141	22,049	\$157
Roseau River First Nation	201	163	32,907	\$231
Sagkeeng First Nation	663	644	27,481	\$194
Sandy Bay First Nation	559	550	37,177	\$260
Sapotaweyak Cree Nation	247	244	31,331	\$220
Sayisi Dene First Nation	122	0	10,253	\$77
Shamattawa First Nation	174	0	16,196	\$117
Sioux Valley First Nation	361	344	24,449	\$174
Skownan First Nation	131	120	28,275	\$199
St Theresa Point First Nation	631	338	35,048	\$245
Swan Lake First Nation	157	150	23,556	\$167
Tataskweyak (Split Lake) First Nation	401	376	39,109	\$273
Tootinaowaziibeeng (Valley River) First				
Nation	115	106	35,425	\$248
War Lake First Nation	36	30	27,095	\$191
Wasagamack First Nation	271	129	34,448	\$241
Waywayseecappo First Nation	440	401	30,737	\$216
Wuskwi Sipihk First Nation	37	35	27,704	\$195
York Factory First Nation	133	122	34,404	\$240

b) The information provided in part (a) are 2017/18 actuals which are not weather adjusted and as such utilizing the information to project a rate increase of 3.5% may not be reflective of an expected annual average bill for the 2019/20 fiscal year.



### **REFERENCE:**

GRA 2017, AMC/MH I-3 Attachment 1

### PREAMBLE TO IR (IF ANY):

The table indicates average annual consumption for each community through 2016/17, and cumulative participation data through June 30, 2017.

### **QUESTION:**

- a) Please update the table with 2017/18 consumption data.
- b) Please indicate any increase since June 30, 2017 in the cumulative participation data, by community.

### **RESPONSE:**

Please see Attachment 1 to this response for the requested updates for parts a) & b).

														_	
						Average \	Weather A	djusted An	nual Consu	ımption peı	r residentia	l custom	er (kWh)		
	Cumulative number of participating customers in the Indigenous Energy Efficiency Program to June 30,	Cumulative number of participating customers in the Indigenous Energy Efficiency Program to	Cumulative number of customers retrofitted with Insulation to	Cumulative number of customers retrofitted with Direct Install to											
Name of First Nations	2017	January 31, 2019	January 31, 2019	January 31, 2019	2007/08*	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Barren Lands First Nation(Brochet)	52	52	52	0	-	13,821	13,550	13,643	12,750	15,342	12,488	12,616	12,799	13,833	12,969
Beren's River First Nation	15	74	74	0	-	25,367	26,969	26,461	25,708	27,456	24,873	28,753	27,640	26,676	25,503
Birdtail Sioux First Nation(Beulah)	20	20	20	0	-	30,717	28,967	29,069	28,864	27,278	27,849	28,808	26,291	27,588	26,509
Bloodvein First Nation	43	63	63	0	-	27,878	28,552	28,909	28,266	28,486	26,464	32,060	30,194	29,256	26,977
Brokenhead Ojibway Nation (Scanterbury)	85	85	85	0	-	25,462	26,942	26,249	27,149	25,502	26,792	28,744	27,974	25,358	25,807
Buffalo Point First Nation	0	0	0	0	-	30,376	35,343	31,307	30,065	32,052	29,140	30,570	30,782	31,808	29,695
Bunibonibee Cree Nation (Oxford House)	45	86	45	46	-	27,287	28,837	29,333	27,961	27,133	27,612	28,688	26,350	26,390	25,530
Canupawakpa Dakota (Oak Lake) First Nation (Pipestone)**	110	109	36	100	-	31,812	33,844	34,272	32,238	33,035	32,115	35,040	33,132	34,308	34,019
Chemawawin Cree Nation (Easterville)	45	45	45	0	-	36,433	39,391	36,607	37,831	34,785	35,675	39,872	38,365	36,503	37,437
Cross Lake First Nation	96	114	114	0	-	25,813	25,141	24,859	26,568	24,867	27,917	27,242	21,533	19,531	23,462
Dakota Plains First Nation (Portage la Prairie)	35	35	32	31	-	39,094	36,816	35,372	34,056	30,953	36,685	34,978	31,183	32,057	29,635
Dakota Tipi First Nation	51	51	20	50	-	28,116	27,980	25,921	23,491	23,582	22,800	19,711	24,070	20,563	22,839
Dauphin River First Nation (Gypsumville)	0	0	0	0	-	33,523	32,974	32,766	31,475	31,121	31,386	32,224	30,010	30,116	29,482
Ebb & Flow First Nation	20	20	20	0	-	31,487	32,109	30,211	29,365	29,111	28,753	31,854	29,613	28,735	28,997
Fisher River Cree Nation (Koostatak)	165	181	98	101	-	28,973	33,898	30,005	31,012	29,202	28,977	29,362	26,322	25,380	24,042
Fox Lake First Nation (Gillam)	40	58	20	40	-	32,172	33,161	31,487	30,153	30,922	30,938	32,810	32,067	30,745	29,628
Gamblers First Nation (Binscarth)**	33	32	13	21	-	25,510	27,577	26,621	27,411	26,331	27,164	29,116	26,496	25,817	24,399
Garden Hill First Nation (Island Lake)	67	67	65	35	-	23,576	25,207	25,753	26,508	26,523	27,796	30,943	31,101	30,827	29,506
God's Lake First Nation (God's Lake Narrows)	118	137	101	60	-	26,751	28,784	28,002	28,991	28,556	29,847	32,120	31,265	30,438	30,627
Hollow Water First Nation (Wanipigow)	0	0	0	0	-	32,272	33,537	33,608	33,214	32,013	30,668	31,721	31,736	31,783	30,444
Keeseekoowenin Ojibway Nation (Elphinstone)	136	136	47	89	-	27,992	29,527	28,372	29,561	28,274	29,129	31,045	28,459	27,127	27,533
Kinonjeoshtegon First Nation (Jackhead)	67	67	60	40	-	28,745	27,938	29,799	28,951	27,924	27,128	29,304	27,004	27,864	26,393
Lake Manitoba First Nation (Dog Creek)	119	172	81	141	-	31,591	33,324	32,568	31,218	31,213	26,562	29,664	29,331	27,994	25,956
Lake St. Martin First Nation	0	0	0	0	-	32,627	33,441	32,545	32,833	32,038	32,204	34,275	32,576	32,684	31,797
Little Black River First Nation (O'Hanley)	68	68	68	0	-	29,812	28,998	30,275	12,781	18,026	15,497	19,017	27,241	29,422	23,706
Little Grand Rapids First Nation	18	58	45	43	-	27,811	28,970	27,132	27,614	26,503	25,690	28,935	25,824	24,876	24,790
Little Saskatchewan First Nation	0	0	0	0	-	27,962	30,183	28,952	29,972	30,395	29,274	36,188	29,131	28,060	29,649
Long Plain First Nation	124	124	96	37	-	31,408	32,604	30,607	27,621	27,075	24,134	22,124	21,155	24,429	26,320
Manto Sipi Cree Nation (God's River)	86	86	62	40	-	30,321	33,142	32,038	31,891	30,448	31,994	31,292	29,875	28,336	28,680
Marcel Colomb First Nation Black Sturgeon (Lynn Lake)	0	0	0	0	-	38,575	37,743	40,219	39,739	37,413	40,794	41,678	40,369	40,303	39,281
Mathias Colomb Cree Nation (Pukatawagan)	55	80	80	0	-	,	. ,	-,	, ,-	32,260	35,301	42,060	38,273	38,575	39,118
Misipawistik (Grand Rapids)	126	126	25	120	-	36,916	38,491	35,067	36,676	36,671	37,145	37,289	37,168	36,713	36,997
Mosakahiken (Moose Lake)	29	29	29	0	-	32,202	33,296	33,484	32,544	32,967	33,599	35,599	34,257	34,498	34,243
Nisichawayasihk (Nelson House)	380	450	19	445	-	37,520	39,451	38,392	39,441	38,478	37,066	39,215	37,931	37,399	37,364
Northlands Dene (Lac Brochet)	47	47	47	0	-	13,256	13,557	13,169	13,421	13,756	13,349	16,173	11,180	14,846	12,509
Norway House	15	15	15	0	-	34,551	34,323	34,347	35,042	33,076	33,177	35,751	35,134	34,910	34,094
O-Chi-Chak-Ko-Sipi (Crane River)	60	60	9	52	-	30,898	33,416	32,042	31,645	32,046	32,417	34,097	31,521	28,856	28,537
Opaskwayak (OCN)Pas	214	274	215	132	-	32,462	33,294	32,080	33,294	31,776	31,813	33,693	30,047	32,392	30,870
O-Pipon-Na-Piwin (South Indian Lake)	25	25	20	9	-	29,381	30,788	30,584	30,464	30,038	29,978	31,148	30,280	29,758	30,100
Pauingassi (Pauingassie)	0	63	63	0	-	28,921	28,425	29,477	29,048	28,255	29,283	32,374	33,041	32,583	32,840
Peguis	165	197	142	60	-	23,175	25,184	22,954	24,427	25,119	26,422	31,378	25,234	24,482	24,261
Pinaymootang (Fairford)	11	24	11	13	-	35,453	36,893	35,958	35,086	33,509	32.957	35,356		31,046	30,854
- maymostang (rantora)	1 11		1 44	1 10	_	JJ, <del>4</del> JJ	50,055	33,330	33,000	33,303	32,331	33,330	31,347	31,040	50,054

			ı			Average \	Weather A	djusted An	nual Consu	umption pe	er resident	al custome	r (kWh)		
	Cumulative number of participating customers in the Indigenous Energy Efficiency	Cumulative number of participating customers in the Indigenous Energy	Cumulative number of customers retrofitted with	Cumulative number of customers retrofitted with											
	Program to June 30,	Efficiency Program to	Insulation to	Direct Install to											 
Name of First Nations	2017	January 31, 2019	January 31, 2019	January 31, 2019	2007/08*		•	-	•			2014/15			2017/18
Pine Creek (Camperville)	111	111	45	68	-	29,633	32,333	31,339	29,876	29,863		30,259	28,925	29,262	28,313
Poplar River (Negginan)	128	171	140	106	-	29,470	29,698	29,206	30,612	28,597		29,972	29,216	25,236	28,593
Red Sucker Lake (Island Lake)	142	142	107	99	-	24,644	25,091	25,312	26,869	28,089		31,188	29,076	29,950	29,386
Rolling River (Erickson)	20	74	20	61	-	22,336	23,240	22,665	22,295	21,360		22,118	21,683	22,025	21,511
Roseau River (Anishinabe)	106	106	95	40	-	32,870	34,774	34,458	33,740	32,187	32,590	33,677	32,224	32,895	31,741
Sagkeeng (Fort Alexander)	459	499	224	445	-	30,197	30,696	30,059	29,885	29,145		29,836	28,577	27,829	26,721
Sandy Bay (Marius)	479	485	204	474	-	36,871	38,589	38,591	38,322	38,112		39,969	37,659	37,290	35,997
Sapotaweyak (Pelican Rapids)	61	61	61	0	-	28,684	29,979	31,219	31,452	30,666	30,415	31,890	32,229	29,885	30,729
Sayisi Dene (Tadoule Lake)	67	107	27	80	-	10,396	10,488	10,271	10,684	10,629	11,374	10,133	10,210	11,341	9,404
Shamattawa	15	15	15	0	-	15,693	16,505	17,152	17,476	17,144	18,255	19,036	18,983	17,506	15,967
Sioux Valley (Griswold)	360	360	285	302	-	26,821	27,735	27,770	27,202	27,012	26,946	27,611	25,801	25,581	24,123
Skownan (Waterhen)	40	40	40	0	-	30,050	32,665	30,690	32,754	29,400	29,256	33,073	28,975	28,854	27,273
St. Theresa Point (Island Lake)	90	153	108	117	-	40,240	39,584	40,632	41,349	40,278	40,157	41,992	41,207	38,632	38,011
Swan Lake	0	0	0	0	-	25,564	24,411	30,863	29,757	29,150	31,367	35,026	35,441	35,307	34,209
Tataskweyak (Split Lake)	39	56	56	0	-	26,331	26,728	26,705	26,309	23,938	24,766	26,809	24,763	24,233	23,351
Tootinaowaziibeeng (Valley River)	46	46	46	0	-	32,498	32,472	33,176	32,811	33,431	32,723	35,636	34,213	33,481	34,073
War Lake (Ilford)	0	0	0	0	-	29,677	34,440	33,141	33,033	29,582	31,581	31,894	33,446	29,539	26,998
Wasagamack	45	61	61	0	-	21,987	23,021	24,678	24,638	25,523	27,078	32,085	32,949	33,850	33,447
Waywayseecappo	289	289	129	238	-	33,354	34,762	33,715	32,497	32,894	32,275	33,746	31,418	32,263	29,745
Wuskwi Sipihk (Birch River)	24	24	8	21	-	26,911	30,978	36,573	33,937	34,718	34,593	34,180	29,321	29,587	26,615
York Factory (York Landing)	52	52	52	0	-	32,489	32,582	33,427	33,035	31,651	32,193	33,118	31,378	34,845	34,077
TOTAL	5358	6182	3760	3756	-	29,109	30,215	29,874	29,434	28,966	29,030	30,923	29,413	29,115	28,471
*Consumption data for 2007/08 is unavailable. ** Duplicate record found. Participation adjusted								•	•			•			



GRA 2017, AMC/MH I-6

### PREAMBLE TO IR (IF ANY):

- a) Based on the 2014 Residential Energy Use Survey:
  - 49.0% of on-reserve First Nations customers spend 6% or more of their total annual household income on electricity bills; and,
  - 34.4% of on-reserve First Nations customers spend 10% or more of their total annual household income on electricity bills.
- b) Based on the 2014 Residential Energy Use Survey, 64.8% of on-reserve First Nations customers are defined as LICO-125.
- c) Based on the 2014 Residential Energy Use Survey:
  - 66.5% of on-reserve LICO-125 and 16.7% of on-reserve non-LICO-125 First Nations customers spend 6% or more of their total annual household income on electricity bills; and,
  - 53.0% of on-reserve LICO-125 and 0% of on-reserve non-LICO-125 First Nations customers spend 10% or more of their total annual household income on electricity bills.

### **QUESTION:**

- a) If any new data is available, please update the responses provided.
- b) Based on the most recent data available, please indicate the percent of LICO-125 and non-LICO-125 on-reserve First Nations customers that are expected to spend 6% or more of their total annual household income on electricity bills, assuming that the requested 3.5% increase for FNORCC is accepted;
- c) Based on the most recent data available, please indicate the percent of LICO-125 and non-LICO-125 on-reserve First Nations customers that are expected to spend 10% or more of their total annual household income on electricity bills, assuming that the requested 3.5% increase for FNORCC is accepted;



#### **RESPONSE:**

- a) The 2017 Residential Energy Use Survey has been filed in response to AMC/MH I-7 which contains the latest survey information available. Based on the 2017 Residential Energy Use Survey, the information contained in the preamble would be updated as follows:
  - a. Based on the 2017 Residential Energy Use Survey
    - 72.2% of on-reserve First Nations customers spend 6% or more of their total annual household income on electricity bills; and,
    - ii. 48.9% of on-reserve First Nations customers spend 10% or more of their total annual household income on electricity bills.
  - b. Based on the 2017 Residential Energy Use Survey, 81.9% of on-reserve First Nations customers are defined as LICO-125.
  - c. Based on the 2017 Residential Energy Use Survey:
    - 85.5% of on-reserve LICO-125 and 12.2% of on-reserve non-LICO-125 First Nations customers spend 6% or more of their total annual household income on electricity bills; and,
    - ii. 59.7% of on-reserve LICO-125 and 0% of on-reserve non-LICO-125 First Nations customers spend 10% or more of their total annual household income on electricity bills.

### b) and c)

The 2017 Residential Energy Use survey is based on information collected as of November 2017 and contains income and electric rate information at the time the survey was taken. It is not appropriate to simply apply a 3.5% increase to the information in the survey as applying a rate increase of 3.5% to the energy burden calculation would not be reflective of changes to income as a result of inflation or updated income information of customer respondents and would not appropriately reflect the income of on-reserve customer at the time of the application of a 3.5% increase.



#### REFERENCE:

GRA 2017, AMC/MH I-4, Attachment 1, Indigenous Voices Omnibus Survey 2017

### PREAMBLE TO IR (IF ANY):

Pages 8 and 9 of Indigenous Voices Omnibus Survey ("IVOS") show values in red, with the indication "Residential Energy Use Survey". These values are systematically lower than the other values reported.

### **QUESTION:**

- a) Has a more recent Indigenous Voices Omnibus Survey been prepared? If so, please provide a copy of the most recent document.
- b) Please explain why the "Residential Energy Use Survey" values shown in red are lower than those reported in the IVOS.
- c) Please provide updated values based on most recent data for:
  - i. On-reserve energy bills (page 8),
  - ii. On-reserve energy burden > 10%, and
  - iii. On-reserve energy burden between 6% and 9.9%
- d) Please indicate the percentages of LICO125 and non-LICO125 on-Reserve First Nations households that would spend 6% of their total income on energy bills, assuming that:
  - i. the FNORCC is kept at its current rate, and
  - ii. the FNORCC rate is increased by the requested 3.5%.
- e) Please indicate the percentages of LICO125 and non-LICO125 on-Reserve First Nations households that would spend 10% of their total income on energy bills, assuming that:
  - i. the FNORCC is kept at its current rate, and
  - ii. the FNORCC rate is increased by the requested 3.5%.

### **RESPONSE:**

a) Manitoba Hydro participated in the 2017 Indigenous Voices Omnibus Survey ("IVOS") to address the under representation of Indigenous responses to the Bill Affordability Working Group's Consumer Survey. Manitoba Hydro has since incorporated bill



affordability questions into its 2017 Residential Energy Use Survey ("REUS") and distributed over 15,000 surveys to First Nations Communities in an effort to ensure the responses are representative of households in Manitoba Indigenous communities. As a result, Manitoba Hydro has not participated in a more recent IVOS.

- b) The 2014 REUS was conducted by Manitoba Hydro and the IVOS was conducted by Probe Research. These are two different surveys in terms of methodology, weighting, sample size, target demographic and the point of time of when data was collected, therefore the 2014 REUS values are not directly comparable to those in the IVOS.
- c) The following values are from the 2017 Residential Energy Use Survey
  - On Reserve average monthly bill: \$230
  - ii. On Reserve energy burden\* >10%: 44.4%
  - iii. On Reserve energy burden\* between 6% and 9.9%: 23.7%

### d) and e)

Please see the response to AMC/MH I-10 b) and c).

<sup>\*</sup>Energy Burden is the percentage of total income spent on household Manitoba Hydro energy bill.



GRA 2017, AMC/MH I-4, Attachment 1, Indigenous Voices Omnibus Survey 2017 (p. 8 - 9)

### PREAMBLE TO IR (IF ANY):

Base: Respondents receiving a Manitoba Hydro bill. Excluding outliers and those for whom no income data was available. Energy Burden is the percentage of total income spent on household Manitoba Hydro energy bill.

### QUESTION:

While no income data was presented, it apparently was used to compute energy burdens. Please provide a table indicating the percentage of on-reserve households with annual incomes:

- i. Below \$10,000;
- ii. Between \$10,000 and \$15,000;
- iii. Etc.

#### **RESPONSE:**

The Indigenous Voices Omnibus Survey 2017 was conducted by Probe Research Inc. and the survey asked "Which of the following categories best describes your family income? That is, the total income before taxes of all persons in your household?" Respondents were read the following categories: Under \$10,000; \$10,000 to \$29,999; \$30,000 to \$59,999; \$60,000 to \$79,999; and \$80,000 or over. Below are the results from the survey for on-reserve households.

Income (before tax)	<u>Count</u>	Percent*
Under \$10,000	40	26%
\$10,000 to \$29,999	37	24%
\$30,000 to \$59,999	20	13%
\$60,000 to \$79,999	14	9%
\$80,000 or over	15	10%
DNK/NS	30	19%
Total	156	

<sup>\*</sup>May not add to 100% due to rounding.



#### REFERENCE:

Consultations with Ratepayers

### PREAMBLE TO IR (IF ANY):

### **QUESTION:**

- a) Following the establishment of the First Nations on Reserve Residential Customer Class, please confirm whether Manitoba Hydro conducted any formal consultations with First Nation leadership (Chiefs, Councils, or senior First Nation administrators) or with First Nation residential ratepayers living on reserves about the implementation of that new Class.
  - a. If not, please explain why not.
  - b. If so, please describe when and where the consultations took place, and provide copies of any materials provided by Manitoba Hydro during the consultations.
- b) With respect to Manitoba Hydro's request for a 3.5% rate increase for the First Nations on Reserve Residential Customer Class, please confirm whether Manitoba Hydro conducted any formal consultations with First Nation leadership or with First Nation residential ratepayers living on reserves.
  - a. If not, please explain why not.
  - b. If so, please describe when and where the consultations took place, and provide copies of any materials provided by Manitoba Hydro during the consultations.

#### **RESPONSE:**

a) Manitoba Hydro did not undertake a formal engagement process with First Nation leadership or with residential customers living on First Nation reserve land regarding the implementation of the First Nations on Reserve Residential rate class. Manitoba Hydro implemented Order 68/18 and created the new rate class in June 2018. Manitoba Hydro took steps to ensure that accurate information regarding rate increases was communicated to customers: the June 2018 Manitoba Hydro bills included a notification to all customers about the approved rate increases across the various customer classes.



This notification included Manitoba Hydro contact information for those customers seeking additional information about Manitoba Hydro rates.

Manitoba Hydro has ongoing relationships with First Nations across the province, and is in communication with First Nation leaders on a range of topics, as applicable, including: customer service and billing issues, operational issues, energy efficiency programming, and issues related to planned and ongoing capital and maintenance projects. The creation of the new First Nation on-Reserve Residential rate class was discussed with some communities in the context of Manitoba Hydro's ongoing relationships with its First Nations customers.

b) Manitoba Hydro did not undertake a formal engagement process with First Nation leadership or with residential customers living on First Nation reserve land with respect to the requested 3.5% rate increase. Manitoba Hydro is planning to broadly communicate the requested rate increase to customers using social media posts, an insert in all April 2019 bills and a related webpage on the corporation's external website. Electricity Rates will also be one of the topics customers can discuss with Manitoba Hydro at upcoming public meetings scheduled for Steinbach, The Pas and Winnipeg in March 2019

In addition, through the Public Utilities Board Hearing Process, interested parties, including presenters and intervenors that represent the specific interests of Indigenous communities in Manitoba, can actively participate in the review process and provide feedback on Manitoba Hydro's requested rate increase.



GRA 2017, PUB/MH I-125b

### PREAMBLE TO IR (IF ANY):

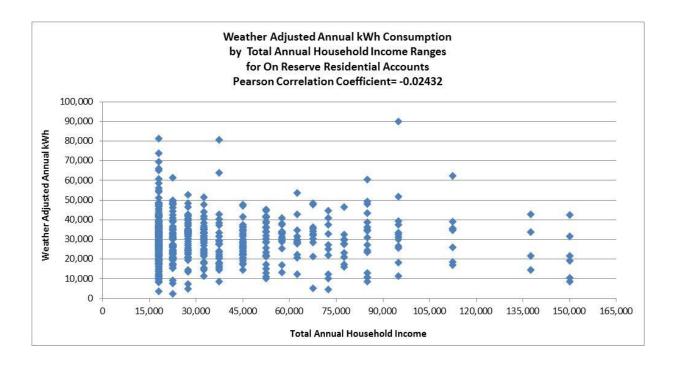
The figure presents the "Weather Adjusted Annual kWh Consumption by Total Annual Household Income Ranges", based on the 2014 REUS, along with the resulting Pearson correlation coefficient.

### **QUESTION:**

Please present a similar figure for on-reserve residential accounts. If weather-adjusted data are not available, please use the most recent actual data.

### **RESPONSE:**

Please see the following figure for the requested information using results from the 2017 Residential Energy Use Survey (filed in response to AMC/MH I-7).





GRA 2017, PUB/MH I-125c (i)

### PREAMBLE TO IR (IF ANY):

The table presents the Total Number of Residential Basic Customers Across Space Heat Types By Weather Adjusted Annual kWh Ranges, based on the 2014 REUS.

### **QUESTION:**

Please present a similar table for on-reserve residential accounts. If weather-adjusted data are not available, please use the most recent actual data.

### **RESPONSE:**

On-Reserve Residential Basic Customers Across Space Heat Types
By Weather Adjusted Annual kWh Ranges
(Based on the 2017 Residential Energy Use Survey)

			Shared Heat
	Electric Heat	Other Fuel	(No Heat On Bill)
Annual Weather			
Adjusted kWh	# of Customers	# of Customers	# of Customers
Under 1000	0	0	0
1000-2000	0	0	0
2000-3000	68	0	0
3000-4000	31	0	0
4000-5000	31	131	0
5000-6000	31	0	0
6000-7000	0	0	0
7000-8000	62	0	0
8000-9000	155	131	0
9000-10000	31	0	63
10000-11000	155	131	0
11000-12000	155	0	0
12000-13000	192	0	0



			Shared Heat
	Electric Heat	Other Fuel	(No Heat On Bill)
Annual Weather			
Adjusted kWh	# of Customers	# of Customers	# of Customers
13000-14000	124	0	0
14000-15000	254	0	0
15000-16000	187	131	0
16000-17000	155	131	0
17000-18000	503	131	0
18000-19000	218	0	0
19000-20000	379	131	0
20000-21000	373	0	0
21000-22000	758	0	0
22000-23000	466	0	0
23000-24000	466	0	0
24000-25000	690	0	0
25000-26000	497	0	0
26000-27000	653	0	0
27000-28000	690	0	0
28000-29000	591	0	0
29000-30000	529	0	0
30000-31000	373	0	0
31000-32000	653	0	0
32000-33000	684	0	0
33000-34000	882	0	0
34000-35000	746	0	0
35000-36000	534	0	0
36000-37000	529	0	0
37000-38000	342	0	0
38000-39000	249	0	0
39000-40000	342	0	0
40000-41000	218	0	0
41000-42000	342	0	0
42000-43000	311	0	0
43000-44000	124	0	0
44000-45000	124	0	0



			Shared Heat
	Electric Heat	Other Fuel	(No Heat On Bill)
Annual Weather			
Adjusted kWh	# of Customers	# of Customers	# of Customers
45000-46000	62	0	0
46000-47000	155	0	0
47000-48000	342	0	0
48000-49000	187	0	0
49000-50000	93	0	0
50000-51000	0	0	0
51000-52000	93	0	0
52000-53000	31	0	0
53000-54000	31	0	0
54000-55000	62	0	0
55000-56000	31	0	0
56000-57000	0	0	0
57000-58000	0	0	0
58000-59000	31	0	0
59000-60000	0	0	0
60000-61000	62	0	0
61000-62000	31	0	0
62000-63000	31	0	0
63000-64000	31	0	0
64000-65000	0	0	0
65000-66000	31	0	0
66000-67000	31	0	0
67000-68000	0	0	0
68000-69000	0	0	0
69000-70000	31	0	0
70000-71000	0	0	0
71000-72000	0	0	0
72000-73000	0	0	0
73000-74000	31	0	0
74000-75000	0	0	0
Over 75000	93	0	0



GRA 2017, PUB/MH I-125c (iv)

### PREAMBLE TO IR (IF ANY):

The table presents the Total Number of Residential Basic Customers Across LICO-125 By Weather Adjusted Annual kWh Ranges, based on the 2014 REUS.

### **QUESTION:**

Please present a similar table for on-reserve residential accounts. If weather-adjusted data are not available, please use the most recent actual data.

### **RESPONSE:**

On-Reserve Residential Customers Across LICO-125

By Weather Adjusted kWh Ranges

(Based on the 2017 Residential Energy Use Survey)

	LICO-125	Non-LICO-125
Annual Weather		
Adjusted kWh	# of Customers	# of Customers
Under 1000	0	0
1000-2000	0	0
2000-3000	68	0
3000-4000	31	0
4000-5000	131	31
5000-6000	0	31
6000-7000	0	0
7000-8000	62	0
8000-9000	224	62
9000-10000	94	0
10000-11000	62	224
11000-12000	93	62
12000-13000	68	124



	LICO-125	Non-LICO-125
Annual Weather		
Adjusted kWh	# of Customers	# of Customers
13000-14000	93	31
14000-15000	192	62
15000-16000	256	62
16000-17000	193	93
17000-18000	510	124
18000-19000	124	93
19000-20000	479	31
20000-21000	280	93
21000-22000	540	218
22000-23000	373	93
23000-24000	373	93
24000-25000	596	93
25000-26000	342	155
26000-27000	560	93
27000-28000	503	187
28000-29000	342	249
29000-30000	311	218
30000-31000	311	62
31000-32000	529	124
32000-33000	466	218
33000-34000	695	187
34000-35000	591	155
35000-36000	441	93
36000-37000	497	31
37000-38000	311	31
38000-39000	187	62
39000-40000	280	62
40000-41000	187	31
41000-42000	311	31
42000-43000	218	93
43000-44000	93	31
44000-45000	62	62



	LICO-125	Non-LICO-125
Annual Weather		
Adjusted kWh	# of Customers	# of Customers
45000-46000	31	31
46000-47000	124	31
47000-48000	311	31
48000-49000	155	31
49000-50000	62	31
50000-51000	0	0
51000-52000	62	31
52000-53000	31	0
53000-54000	31	0
54000-55000	62	0
55000-56000	31	0
56000-57000	0	0
57000-58000	0	0
58000-59000	31	0
59000-60000	0	0
60000-61000	31	31
61000-62000	31	0
62000-63000	0	31
63000-64000	31	0
64000-65000	0	0
65000-66000	31	0
66000-67000	31	0
67000-68000	0	0
68000-69000	0	0
69000-70000	31	0
70000-71000	0	0
71000-72000	0	0
72000-73000	0	0
73000-74000	31	0
74000-75000	0	0
Over 75000	62	31



GRA 2017, PUB/MH I-125c (v)

### PREAMBLE TO IR (IF ANY):

The table presents the Total Number of Residential Basic Customers Across Across % Electric Heat Burden, By Weather Adjusted Annual kWh Ranges, based on the 2014 REUS.

### **QUESTION:**

Please present a similar table for on-reserve residential accounts. If weather-adjusted data are not available, please use the most recent actual data.

#### **RESPONSE:**

# On-Reserve Residential Customers Across % Electric Energy Burden By Weather Adjusted Annual kWh Ranges (Based on the 2017 Residential Energy Use Survey)

<6%	<8%	<10%
# of customers	# of customers	# of customers
0	0	0
0	0	0
68	68	68
31	31	31
162	162	162
31	31	31
0	0	0
62	62	62
287	287	287
94	94	94
256	287	287
93	155	155
124	192	192
	# of customers  0 0 68 31 162 31 0 62 287 94 256 93	# of customers # of customers  0 0 0  68 68  31 31  162 162  31 31  0 0  62 62  287 287  94 94  256 287  93 155



	<6%	<8%	<10%
Annual Weather			
Adjusted kWh	# of customers	# of customers	# of customers
13000-14000	62	124	124
14000-15000	155	155	254
15000-16000	124	287	318
16000-17000	124	155	287
17000-18000	317	379	634
18000-19000	155	155	187
19000-20000	31	62	124
20000-21000	124	155	249
21000-22000	379	540	602
22000-23000	155	249	373
23000-24000	155	187	280
24000-25000	93	187	311
25000-26000	187	249	280
26000-27000	124	155	187
27000-28000	187	280	311
28000-29000	311	342	404
29000-30000	155	280	373
30000-31000	124	124	155
31000-32000	187	280	342
32000-33000	218	249	249
33000-34000	187	280	472
34000-35000	155	280	280
35000-36000	93	124	124
36000-37000	62	218	218
37000-38000	62	124	155
38000-39000	31	93	124
39000-40000	62	93	93
40000-41000	31	62	62
41000-42000	0	93	124
42000-43000	62	93	93
43000-44000	31	31	31
44000-45000	31	62	62
45000-46000	0	0	31



	<6%	<8%	<10%
Annual Weather			
Adjusted kWh	# of customers	# of customers	# of customers
46000-47000	31	31	31
47000-48000	31	62	124
48000-49000	0	31	31
49000-50000	31	31	31
50000-51000	0	0	0
51000-52000	31	31	31
52000-53000	0	0	0
53000-54000	0	31	31
54000-55000	0	0	0
55000-56000	0	0	0
56000-57000	0	0	0
57000-58000	0	0	0
58000-59000	0	0	0
59000-60000	0	0	0
60000-61000	0	31	31
61000-62000	0	0	0
62000-63000	31	31	31
63000-64000	0	0	0
64000-65000	0	0	0
65000-66000	0	0	0
66000-67000	0	0	0
67000-68000	0	0	0
68000-69000	0	0	0
69000-70000	0	0	0
70000-71000	0	0	0
71000-72000	0	0	0
72000-73000	0	0	0
73000-74000	0	0	0
74000-75000	0	0	0
Over 75000	0	0	31



GRA 2017, PUB/MH I-125d

### PREAMBLE TO IR (IF ANY):

The table presents the Total Number of Residential Basic Customers Across Space Heat Types By Weather Adjusted Annual kWh Ranges for 2016/17 (Manitoba Hydro Billing Data)

### **QUESTION:**

Please present a similar table for on-reserve residential accounts, using 2016/17 MH billing data, or 2017/18 data if available.

### **RESPONSE:**

On-Reserve Residential Customers Across Space Heat Types
By Weather Adjusted Annual kWh Ranges for 2017/18

(Manitoba Hydro Billing Data)

	Electric Heat	Other Heat	Shared Heat
Annual			
Weather			
Adjusted kWh	# of Customers	# of Customers	# of Customers
Under 1000	627	335	8
1000-2000	40	14	2
2000-3000	48	19	1
3000-4000	40	19	0
4000-5000	81	22	0
5000-6000	62	20	0
6000-7000	57	28	0
7000-8000	53	35	0
8000-9000	79	32	1
9000-10000	80	34	1
10000-11000	103	28	1
11000-12000	89	27	0
12000-13000	128	29	3



	Electric Heat	Other Heat	Shared Heat
Annual			
Weather			
Adjusted kWh	# of Customers	# of Customers	# of Customers
13000-14000	143	29	2
14000-15000	161	26	0
15000-16000	200	34	1
16000-17000	212	26	1
17000-18000	267	21	2
18000-19000	319	19	1
19000-20000	336	23	1
20000-21000	356	15	0
21000-22000	401	17	0
22000-23000	460	10	0
23000-24000	447	9	0
24000-25000	497	6	0
25000-26000	525	10	0
26000-27000	596	9	0
27000-28000	547	11	0
28000-29000	631	6	0
29000-30000	591	2	0
30000-31000	632	2	0
31000-32000	610	1	0
32000-33000	613	1	0
33000-34000	567	3	0
34000-35000	565	2	0
35000-36000	531	0	0
36000-37000	485	1	0
37000-38000	477	0	0
38000-39000	462	0	0
39000-40000	409	0	0
40000-41000	373	1	0
41000-42000	361	0	0
42000-43000	314	0	0
43000-44000	258	1	0
44000-45000	238	1	0



	Electric Heat	Other Heat	Shared Heat
Annual			
Weather			
Adjusted kWh	# of Customers	# of Customers	# of Customers
45000-46000	216	1	0
46000-47000	198	0	0
47000-48000	150	0	0
48000-49000	145	1	0
49000-50000	150	0	0
50000-51000	113	1	0
51000-52000	99	2	0
52000-53000	101	0	0
53000-54000	78	1	0
54000-55000	79	1	0
55000-56000	70	0	0
56000-57000	61	0	0
57000-58000	38	1	0
58000-59000	46	0	0
59000-60000	48	0	0
60000-61000	26	1	0
61000-62000	27	1	0
62000-63000	32	0	0
63000-64000	23	0	0
64000-65000	28	0	0
65000-66000	16	0	0
66000-67000	10	0	0
67000-68000	19	0	0
68000-69000	15	0	0
69000-70000	7	0	0
70000-71000	5	0	0
71000-72000	7	1	0
72000-73000	6	0	0
73000-74000	7	0	0
74000-75000	8	0	0
Over 75000	91	3	0