



#### **EXHIBIT LIST FOR**

## MANITOBA HYDRO 2017/18 & 2018/19 General Rate Application

February 16, 2018

## **MANITOBA HYDRO (MH) Exhibits**

Ex. #	MH-1	Manitoba Hydro letter to PUB re Timing of Electric GRA dated November 29, 2016
Ex. #	MH-2	Manitoba Hydro letter to PUB re Intentions in respect of 2017 Rate Application(s) dated March 24, 2017
Ex. #	MH-3	Manitoba Hydro letter to PUB re Minimum Filing Requirements & Scope of the Upcoming General Rate Application
Ex. #	MH-4	Manitoba Hydro cover letter dated May 5, 2017 re General Rate Application
Ex. #	MH-5	Manitoba Hydro 2017/18 & 2018/19 General Rate Application
Ex. #	MH-6	Manitoba Hydro cover letter dated May 12, 2017 re General Rate Application
Ex. #	MH-7	Manitoba Hydro cover letter dated May 26, 2017 re General Rate Application
Ex. #	MH-8	Manitoba Hydro to PUB letter re August 1, 2017 Interim Rates dated June 2, 2017
Ex. #	MH-9	Manitoba Hydro Written Submission on Interim Rates dated June 20, 2017
Ex. #	MH-10	Manitoba Hydro cover letter dated June 21, 2017 re General Rate Application MFRs
Ex. #	MH-11	Manitoba Hydro cover letter dated June 23, 2017 re General Rate Application

Ex. #	MH-12	Manitoba Hydro cover letter dated June 30, 2017 re General Rate Application
Ex. #	MH-13	Manitoba Hydro letter dated July 11, 2017 re Updated Financial Forecast
Ex. #	MH-14	Manitoba Hydro CSI Process Motion - dated July 11, 2017
Ex. #	MH-14-1	CSI Process Submission Schematic
Ex. #	MH-15	Manitoba Hydro Interim Rates August 1, 2017 Reply Submission - July 19, 2017
Ex. #	MH-16	Presentation by Manitoba Hydro - Business Operations, Capital and Asset Management Technical Conference - July 20, 2017
Ex. #	MH-17	Transcript of Proceedings - Business Operations, Capital and Asset  Management Technical Conference - July 20, 2017
Ex. #	MH-18	Manitoba Hydro's response to the Coalition's request re Cost of Service Model - July 20, 2017 email from Counsel
Ex. #	MH-19	Manitoba Hydro's Comments on Proposed Intervener Budgets dated July 21, 2017
Ex. #	MH-20	Cost of Service Model - July 26, 2017 email
Ex. #	MH-21	Manitoba Hydro's Comments on the Business Council's Budget Submission
Ex. #	MH-22	Manitoba Hydro - Rate Schedules further to Order 80/17 - August 1, 2017
Ex. #	MH-23	Proof of Revenues based on 2017 Electric Load Forecast - August 2, 2017
Ex. #	MH-24	Manitoba Hydro to PUB re City of Winnipeg's Proposed Intervention - letter dated August 2, 2017
Ex. #	MH-25	Manitoba Hydro to PUB re Information Requests - August 2, 2017
Ex. #	MH-26	Revised Rate Schedules to be Effective August 1, 2017 - Area & Roadway Lighting (Outdoor Lighting) Light Emitting Diode (LED) Rates - Letter dated August 24, 2017

Ex. #	MH-27	Letter from KA Shepherd of Manitoba Hydro re First Round Information Requests - September 5, 2017									
Ex. #	MH-28	Manitoba Hydro - CSI Motion - September 7, 2017									
Ex. #	MH-29	Manitoba Hydro to PUB re Remaining Minimum Filing Requirements - September 7, 2017									
Ex. #	MH-30	Manitoba Hydro re Appendix 9.14 Report on Rate Design for the Residential Class - September 14, 2017									
Ex. #	MH-31	Manitoba Hydro to PUB re IEC Status and Scope - September 18, 2017									
Ex. #	MH-32	Manitoba Hydro - CSI Motion - Round 1 Information Requests - September 21 2017									
Ex. #	MH-33	Manitoba Hydro to PUB re Revised Information Requests - September 21 2017									
Ex. #	MH-34	Manitoba Hydro to PUB re Independent Expert Consultants Scope of Work - October 2, 2017									
Ex. #	MH-35	Manitoba Hydro CSI Motion - Manitoba Hydro Reply to Intervenor Submissions - October 6, 2017									
Ex. #	MH-36	Manitoba Hydro to PUB re Round II Information Requests - October 16, 2017									
Ex. #	MH-37	Manitoba Hydro to PUB re Revised Round 1 Information Request - October 24, 2017									
Ex. #	MH-38	Manitoba Hydro - Request to Review and Vary Order 112/17 - October 30, 2017									
Ex. #	MH-39	Manitoba Hydro (MH) to AMC Information requests (1-8)									
Ex. #	MH-39-1	" " " " Summary and Discussion									
Ex. #	MH-39-2	" " " " " retainer letter for Assembly of Manitoba Chiefs									

Ex. #	MH-39-3	II	II	II	11	11	11	impact of .15 kWh and .70kWh
Ex. #	MH-39-4	п	11	11	11	11	11	MH Application conclusion Mipole III developed
Ex. #	MH-39-5	п	II	11	11	11	11	export revenues
Ex. #	MH-39-6	11	11	11	11	11	11	Icome figures
Ex. #	MH-39-7	II II	11	11	11	11	II	assistance for electricity costs social assistance
Ex. #	MH-39-8	п	II	11	11	11	11	Qualifications on report
Ex. #	MH-40		nitoba uests	Hydro (	MH) to	o Coali	tion	(Compton/Simpson) Information
Ex. #	MH-40-1	"	11	11	11	11	11	Limitations of Methodology and modeling
Ex. #	MH-40-2	"	II	11	11	11	11	Total Input Use
Ex. #	MH-40-3	"	11	11	11	11	11	Price elasticity of demand
Ex. #	MH-40-4	"	II	11	11	11	11	zero price elasticity of demand
Ex. #	MH-40-5	11	11	11	11	11	11	Total employment level
Ex. #	MH-40-6	II II	11	11	11	11	11	Financial Forecast
Ex. #	MH-40-7	11	II	11	11	11	11	Retainer Letters of Dr. Simpson and Dr. Compton
Ex. #	MH-41	Mai	nitoba	Hydro (	MH) to	Coali	tion (	(ECS) Information Requests
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Ex. #	MH-41-2							CFO to CAP/EX ratio
Ex. #	MH-41-3	"	11	11	11	11	11	Retained earnings
Ex. #	MH-41-4	"	11	11	11	"	11	Comparative results
Ex. #	MH-41-5	"	II .	11	11	11	11	IFF15 and IFF16
Ex. #	MH-41-6	"	11	11	11	11	11	DSM deferred asset account
Ex. #	MH-41-7	II II	11	11	11	11	11	Regulatory costs associated with CEC proceedigngs for Bipole III
Ex. #	MH-41-8	"	"	11	"	"	11	Total Assets with total number of customers
Ex. #	MH-41-9	"	II	11	11	11	"	Regulatory Justifications
Ex. #	MH-41-10	"	11	11	11	11	11	avoided emission costs
Ex. #	MH-41-11	"	II .	11	11	11	11	Rate Design proposal
Ex. #	MH-41-12	ıı	II	11	11	11	11	Assistance from Social Assistance
Ex. #	MH-41-13	11	II	11	11	11	11	Low-income assistance funded by all ratepayers
Ex. #	MH-41-14	"	"	11	11	11	11	Lost Revenue and Recovery base
Ex. #	MH-41-15	"	"	11	11	11	11	Zone of reasonableness
Ex. #	MH-41-16	"	11	11	11	11	11	Ratemaking objectives
Ex. #	MH-42	Mar	nitoba	Hydro (	(MH) to	o Coali	tion (	(METSCO) Information Requests
Ex. #	MH-42-1	"	II	11	11	11	11	Stategic asset management system

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Ex. #	MH-42-2	lii	II	"	11	II	"	Asset Management plan
Ex. #	MH-42-3	11	II	II	11	11	II	Regulatory Model
Ex. #	MH-42-4	"	"	11	11	II	II	oversight recommendations
Ex. #	MH-42-5	"	"	11	11	II	II	Duties and METSCO retainer letter
Ex. #	MH-43	Mani	toba Hy	/dro (M	H) to (	Coaliti	on (	Simpson) Information Requests
Ex. #	MH-43-1	II	п	11	II	11	11	Identifying energy poor
Ex. #	MH-43-2	11	11	п	11	II.	"	Efficient rate assistance program
Ex. #	MH-43-3	11	II	II	II .	II	"	Efficient Rate Assistance Program funding
Ex. #	MH-43-4	11	11	II	"	"	"	Qualifications and Duties for Dr. Simpson
Ex. #	MH-44	Mani	toba Hy	/dro (M	H) to (	Coaliti	on (	MPA) Information Requests
Ex. #	MH-44-1	II	II .	II .	II	п	11	Capital Markets on other financial metrics
Ex. #	MH-44-2	"	II	п	II	II	II	Meaning of Costs to MPA
Ex. #	MH-44-3	"	11	11	II	II	11	Minimize Rate Costs for domestic customers
Ex. #	MH-44-4	11	II	II	11	11	II	Debt levels and consequent interest costs
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Ex. #	MH-44-5	l"	II.	п	II	II .	" Fluc	tuations
Ex. #	MH-44-6	"	11	II	11	11	" Fina	ncial Markets
Ex. #	MH-44-7	ıı .	11	п	11	11	" Leve	el Rate Increase
Ex. #	MH-44-8	"	"	II .	11	"	" Fina	ncial Distress
Ex. #	MH-44-9	11	11	II	11	11	" Fina	ncial Metrics
Ex. #	MH-44-10	11	II	п	11	11	" Inte	rest Rates declining impact on net me
Ex. #	MH-44-11	"	II	II	II	11	" Cash	n flow sufficiency
Ex. #	MH-44-12	"	11	п	11	11	" Cash	n Flow Metrics
Ex. #	MH-44-13	"	11	п	11	11	" Afte	r Keeyask, Cash flow contribution
Ex. #	MH-44-14	"	II	п	11	11	" Capi	ital Investors
Ex. #	MH-44-15	"	"	II	11	11	" Reve	enue Requirement formula
Ex. #	MH-44-16	"	"	II	11	"	" Fina	ncial Reserves
Ex. #	MH-44-17	11	11	п	11	11		vidual peer utilities to their ness model
Ex. #	MH-44-18	ıı .	11	II	11	11	" Regi	ulatory Risk
Ex. #	MH-44-19	"	11	II	11	11	" Inte	rest Coverage
Ex. #	MH-44-20	II II	II .	II	II	11	" Disc	ount Rates
Ex. #	MH-44-21	11	11	II	11	11	" Deb	t Service Costs

Ex. #	MH-44-22	"	11	11	11	"	11	Ratepayers contributions
Ex. #	MH-44-23	11	II	11	11	11	11	Rate-making Policy
Ex. #	MH-44-24	11	11	11	11	11	11	Summary Observations contributors
Ex. #	MH-44-25	11	11	11	11	11	11	Retainer Letters for contributors
Ex. #	MH-45		nitoba uests	Hydro (	MH) to	Gree	n Act	ion Centre (GAC) Information
Ex. #	MH-45-1	"	11	11	11	11	11	Retainer letter for Mr. Chernick
Ex. #	MH-45-2	"	II .	11	11	11	11	Order 112/17
Ex. #	MH-45-3	п	11	11	11	11	11	Rate Design
Ex. #	MH-45-4	11	11	11	11	11	11	Marginal Costs
Ex. #	MH-45-5	II	11	11	11	11	11	Marginal distribution costs by class
Ex. #	MH-45-6	ıı	ıı .	II	11	11	11	Rate Proposals
Ex. #	MH-45-7	II II	11	11	11	11	11	Excel Calculations
Ex. #	MH-45-8	11	11	11	11	11	11	LICO 125 customers
Ex. #	MH-45-9	ıı	II .	11	11	"	"	kWH table figures
Ex. #	MH-45-10	"	"	11	11	11	11	Rate Proposals
Ex. #	MH-46	МН	to GSS	S/GSM-I	KAP In	format	ion F	Request
Ex. #	MH-46-1	ıı ı	11	11	11	"	11	Key Findings

MH-46-2 MH-46-3	11	"	"	II	11	"	Keystone Agricultureal Producers (KAP)
MH-46-3	"	-,-					,
		.,	11	"	"	11	Average Commercial Rate
MH-46-4	"	11	11	11	11	II	Rate Increase for jurisdictions
MH-46-5	"	"	11	ıı	ıı	11	Gross Farm Expenditures
MH-46-6	"	"	"	ıı	II.	11	Declining average operating profit
MH-46-7	"	"	II	"	"	II	Graph with non zeoro origin
MH-46-8	"	II .	11	II	II .	11	US NACS and gas station
MH-46-9	II .	"	"	ıı .	11	11	Smith Travel Research
MH-46-10	11	II .	11	11	11	11	London Economics Report
MH-46-11	"	"	"	ıı .	ıı .	11	Key Performance Indicators
MH-46-12	"	"	11	"	ıı .	II	Performance Indicators
MH-47	MH	to MIP	UG (Bo	wman	) 1-24	Infor	mation Requests
MH-47-1	"	"	11	11	11	ıı	Retainer of Mr. Bowman
MH-47-2	"	"	11	11	11	11	Conclussion and Recommendation
MH-47-3	11	II	"	11	II	11	Actual 1962-Forecast 2017-2036 rates compared to CPI
MH-47-4	11	II .	11	11	11	II	price changes per province
MH-47-5	ıı .	II .	11	II	II	11	Capital Resource Plan
	MH-46-6  MH-46-7  MH-46-8  MH-46-9  MH-46-10  MH-46-12  MH-47  MH-47-1  MH-47-1  MH-47-2  MH-47-3	MH-46-6  MH-46-7  MH-46-8  MH-46-9  MH-46-10  MH-46-11  MH-46-12  MH-47  MH-47  MH-47  MH-47-1  MH-47-2  MH-47-3  MH-47-4	MH-46-6 " " MH-46-7 " " MH-46-8 " " MH-46-9 " " MH-46-10 " " MH-46-11 " " MH-46-12 " " MH-47-1 " " MH-47-1 " " MH-47-2 " " MH-47-3 " " MH-47-4 " "	MH-46-6  MH-46-7  MH-46-8  MH-46-9  MH-46-10  MH-46-11  MH-46-12  MH-47-1  MH-47-1  MH-47-1  MH-47-2  MH-47-3  MH-47-4	MH-46-6  MH-46-7  MH-46-8  MH-46-9  MH-46-10  MH-46-11  MH-46-12  MH-47-1  MH-47-1  MH-47-2  MH-47-3  MH-47-4  MH-47-4	MH-46-6 " " " " " " " " " " " " " " " " " "	MH-46-6 " " " " " " " " " " " " " " " " " "

Ex. #	MH-47-6	II	II	II	11	11	11	Investment requirements
			"					
Ex. #	MH-47-7	11	"	II	"	II	"	Hydroelectric project
Ex. #	MH-47-8	"	11	11	11	11	11	Low Power Pricing
Ex. #	MH-47-9	ıı .	11	11	11	11	11	Capital Market experience
Ex. #	MH-47-10	II	11	11	11	"	11	Substantial Reserve
Ex. #	MH-47-11	11	11	11	11	"	II	Full Net Income
Ex. #	MH-47-12	11	11	11	"	ıı	ıı	Self Sufficiency
Ex. #	MH-47-13	II	11	11	11	"	ıı	BCG's views
Ex. #	MH-47-14	II	11	11	11	"	II	Load Forecast for Gross Firm Energy
Ex. #	MH-47-15	11	11	11	11	"	"	Interim Hearing
Ex. #	MH-47-16	II II	11	11	11	11	11	Forecast net Debt
Ex. #	MH-47-17	II	11	11	11	11	11	Net cost to ratepayers
Ex. #	MH-47-18	11	11	11	11	11	II	O&A costs in current filing
Ex. #	MH-47-19	11	11	11	11	11	11	ASL method
Ex. #	MH-47-20	11	11	11	11	11	11	Building Moves and Safety Watches
Ex. #	MH-47-21	II	11	11	11	11	11	Industrial & Commercial Solutions
Ex. #	MH-47-22	ıı	"	11	"	"	11	calculations supporting Figure A-6

MH-47-23	11	11	11	11	11	ıı	Figure A-7
MH-47-24	"	"	11	11	11	II	Table A-2
MH-48	МН	to MIP	UG (Os	ler/Fo	rrest) :	1-5 In	formation Requests
MH-48-1	"	"	"	11	11	11	Cv's , retainers, and job descriptions
MH-48-2	"	"	"	11	"	II	Policy goals in realtion to rates
MH-48-3	11	11	11	11	11	II	year to year percentage rate changes
MH-48-4	"	11	11	11	11	ıı	Maximum Debt
MH-48-5	11	п	II .	11	11	11	Behind the scene contributions
MH-49	МН	to PUB	revised	d MFR			
MH-50	Mar	nitoba I	Hydro t	o City	of Win	nipe	g Information Requests
MH-50-1	"	п	11	11	11	ıı	Mr. Markowsky's CV and Job description
MH-50-2	"	п	"	II	11	"	Price elasticity in direct electricity costs
MH-50-3	"	"	11	11	11	11	Past Electricity price increase
NALL FO A	11	II .	11	11	11	11	Direct Electricity Billings chart
IVIN-5U-4							
MH-50-5	"	11	"	11	11	11	Indirect Electricity Billing Chart
	MH-47-24  MH-48-1  MH-48-2  MH-48-3  MH-48-4  MH-48-5  MH-50  MH-50-1  MH-50-2	MH-47-24 "  MH-48 MH  MH-48-1 "  MH-48-2 "  MH-48-3 "  MH-48-5 "  MH-49 MH  MH-50 Mar  MH-50-1 "  MH-50-2 "	MH-47-24 " "  MH-48	MH-47-24 " " " " " MH-48-2 MH to MIPUG (Os MH-48-2 " " " " " MH-48-3 " " " " " MH-48-4 " " " " MH-48-5 " " " " MH-49 MH to PUB revised MH-50 Manitoba Hydro to MH-50-1 " " " " " MH-50-2 " " " " " " " " " MH-50-3 " " " " " " " " " " " " " " " " " " "	MH-47-24 " " " " " " " " " " " " " " " " " " "	MH-47-24 " " " " " " " " " " " " " " " " " " "	MH-47-24 " " " " " " " " " " " " " " " " " " "

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Ex. #	MH-50-7	" "	"	"	"	" Unsustainable structural deficit
Ex. #	MH-50-8	" "	11	11	11	" Conference Board of Canada's Metroplitian Outlook
Ex. #	MH-50-9	" "	11	II	II	" Financial Target review
Ex. #	MH-51	Manitoba 21, 2017	Hydro -	CSI Mo	tion -	Round 2 Information Request - November
Ex. #	MH-52	Manitoba	Hydro R	ebutta	l Evide	ence - November 22, 2017
Ex. #	MH-53	Manitoba 2017	Hydro le	etter to	PUB r	re: BCM Budget Variance - November 24,
Ex. #	MH-54	Manitoba	Hydro le	etter to	PUB r	re: IR of IEC - November 24, 2017
Ex. #	MH-55	Manitoba	Hydro t	o Dr. Y	atche	w - Information Requests
Ex. #	MH-55-1	11 11	11	II.	"	" electiricty price elasticity
Ex. #	MH-55-2	11 11	11	"	II	" third party priticiate or assitante in report
Ex. #	MH-55-3	11 11	II	"	11	" Scope of Work - retainer documents
Ex. #	MH-55-4	11 11	II	II.	"	" price elasticity impact on electricity demand
Ex. #	MH-55-5	11 11	11	"	11	" degree price response be attenuated given MB lower electricity prices
Ex. #	MH-56	Manitoba	Hydro t	o Dayn	nark (I	Export) - Information Requests
Ex. #	MH-56-1	11 11	11	"	II	" consdiered reports in preparation of Export Pricing Revenue
Ex. #	MH-56-2	" "	11	II	II	" Expencted New Generation Over next 20 years
Ex. #	MH-56-2	" "	"	"	"	expericted New Generation Ove

Ex. #	MH-56-3	п	"	11	11	11	11	Retire,emt Assumptions by zone by 2031
Ex. #	MH-56-4	"	II	11	11	11	11	MTEP Report Book 3, MVP Portfolio
Ex. #	MH-56-5	II	11	11	11	11	11	Assumed reitrements in MTEP17
Ex. #	MH-56-6	"	11	11	11	11	11	Statewide RPS renewable Retail Sales
Ex. #	MH-56-7	II II	11	11	11	11	11	NSP applies to North Dakota, separate North States Power
Ex. #	MH-56-8	"	II	11	11	11	11	Planning Resource Aution
Ex. #	MH-56-9	11	II .	11	11	11	11	24 GW resources by 2031
Ex. #	MH-56-10	11	11	11	11	11	11	Page 50 - CSI
Ex. #	MH-56-11	II II	11	11	11	11	11	probability based forecasting superior to scenario based forecasting
Ex. #	MH-56-12	11	II	11	11	11	11	reasonableness definition
Ex. #	MH-56-13	II .	11	11	11	11	11	third party forecasters, P50 P-value
Ex. #	MH-56-14	II	11	11	11	11	11	Reference cast forecast to be a P50 case
Ex. #	MH-56-15	II .	11	11	11	11	11	Electricty price foreacst
Ex. #	MH-56-16	II II	11	11	11	11	11	documents in regards to retainer
Ex. #	MH-56-17	II II	11	11	11	11	11	Export Pricing and Revenus Report authors
Ex. #	MH-57	Mai	nitoba	Hydro-	Dayma	rk (Loa	ad Fo	rcast) - Information Requests
Ex. #	MH-57-1	II	11	11	11	11	11	forecast probability of being acurate 50%

Ex. #	MH-57-2	II	II	11	11	"	11	forecasting approaches would be considered loading edge
Ex. #	MH-57-3	"	"	11	11	11	II	base forecast
Ex. #	MH-57-4	11	II .	11	11	11	11	Electric Load drecese due to natural gas
Ex. #	MH-57-5	II .	II	11	11	11	II	developing alternative futures
Ex. #	MH-57-6	11	II	11	II	11	11	suggested price elasticty valyes incorrectly estimated
Ex. #	MH-57-7	II	II	11	11	11	11	2011, 2014, 2015, 2016 Forecast Values
Ex. #	MH-57-8	"	"	11	11	11	II	electric price assumption
Ex. #	MH-57-9	11	"	11	11	11	II	annual HDDs lower than normal HDD
Ex. #	MH-57-10	ıı	II	11	II	11	11	Popukation statistics/ population forecast
Ex. #	MH-57-11	11	"	11	11	11	11	Key Summary Findings
Ex. #	MH-57-12	11	"	11	11	11	II	Scope of Work
Ex. #	MH-57-13	11	"	11	11	11	11	price of elasticity impact on electracity demands
Ex. #	MH-58	Man 201		Hydro le	etter to	PUB F	Respo	onse to Order 120-17 - November 28,
Ex. #	MH-59	Man	iitoba	Hydro -	Policy	Panel		
Ex. #	MH-59-1	11	II .	11	11	11	11	CV Shepherd Kelvin
Ex. #	MH-59-2	11	"	11	11	11	11	CV McCallum Jamie
Ex. #	MH-60	Man	iitoba	Hydro -	Requir	ement	Pan	el

Ex. #	MH-60-1	II	"	11	11	11	II	CV Bauerlein Sandy
Ex. #	MH-60-2	11	11	11	11	11	ıı	CV Carriere Liz
Ex. #	MH-60-3	11	11	11	11	11	11	CV Cormie David
Ex. #	MH-60-4	ıı	···	11	11	"	ıı	CV Miles Terry
Ex. #	MH-60-5	ıı	"	11	11	"	ıı	CV Morrison Lois
Ex. #	MH-60-6	ıı	"	11	11	"	ıı	CV Neufeld Gerald
Ex. #	MH-60-7	ıı	"	11	11	"	ıı	CV Steele Chuck
Ex. #	MH-60-8	ıı	"	11	11	"	ıı	CV Stephen Susan
Ex. #	MH-60-9	ıı	"	11	11	"	ıı	CV Swatek David
Ex. #	MH-60-10	ıı	"	11	11	11	"	CV Turner Hal
Ex. #	MH-60-11	ıı	"	11	11	11	"	CV Wortley Joel
Ex. #	MH-61			to PUB i			Hydro	o Electic Board Report - November 28,
Ex. #	MH-62	Qua	rterly	Report (	Cover L	etter -	Nove	ember 16-17, 2017
Ex. #	MH-63	Ope	ning S	tatemer	nt			
Ex. #	MH-64	Ope	ning P	resenta	tion			
Ex. #	MH-65	Mar	iitoba	Hydro's	Top 10	) Irs		
Ex. #	MH-66			Hydro le 4, 2017		PUB r	e Res	sponse to letter of November 30, 2017 -

Ex. #	MH-67	Manitoba Chambers of Commerce - Our Plan to Restore Manitoba Hydro and Protect Manitobans									
Ex. #	MH-68	Manitoba Hydro - Revenue Requirements Presentation									
Ex. #	MH-68-1	" " " " " " Page 29-1 of Revenue Requirement  Presentation									
Ex. #	MH-69	Manitoba Hydro Speaking Notes for Mr. Riley's Public Information Session Presentation from October 2016									
Ex. #	MH-70	Supplement to PUB-MH I-56a-c with Attachments									
Ex. #	MH-71	Manitoba Hydro Undertaking 3 - 2018 DBRS Canadian Provincial Government Outlook Report									
Ex. #	MH-72	Manitoba Hyrdo Undertaking 1 - IFF models to MH Electric Board									
Ex. #	MH-73	Manitoba Hydro Undertaking 2 - IFF Models									
Ex. #	MH-74	Manitoba Hydro Undertaking from transcript page 507 - Performance Targets re: Colaition/MH I-144									
Ex. #	MH-75	Manitoba Hydro Question from PUB Board- Cost of Heating with Carbon Levy									
Ex. #	MH-76	Maniotba Hydro Question from PUB Board - DSM Costs									
Ex. #	MH-77	Manitoba Hydro - Cost of Service and Rate Design Panel									
Ex. #	MH-77-1	" " " " " " " CV of Greg Barnlund									
Ex. #	MH-77-2	" " " " " " " CV of Paul Chard									
Ex. #	MH-77-3	" " " " " " " CV of Colleen Galbraith									
Ex. #	MH-77-4	" " " " " " " CV of Greg Mason									
Ex. #	MH-78	Manitoba Hydro Undertaking 5 - Operating and Administravie Costs									

Ex. #	MH-79	Manitoba Hydro Undertaking 6 - Updated PUB MFR 55 and MIPUG-MH I- 14b
Ex. #	MH-80	Manitoab Hydro Undertaking 9 - Updated Chart from MIPUG 23-2 page 83 Maximum Net debt
Ex. #	MH-81	Manitoba Hydro Undertaking 10 - 12 year WATM
Ex. #	MH-82	Manitoba Hydro Undertaking 11 - 20 year WATM
Ex. #	MH-83	MH-PUB Rebuttal Evidence re Daymark load and export Reports
Ex. #	MH-84	Manitoba Hydro Undertaking 7 - MH-68 Slide 72
Ex. #	MH-85	Manitoba Hydro Undertaking 8 - 1990 on MH-68 Slide 72
Ex. #	MH-86	Manitoba Hydro Undertaking 12 - IFF without payments to Government
Ex. #	MH-87	Manitoba Hydro Undertaking 4 - Provincial Equity Injection
Ex. #	MH-88	Manitoba Hydro Cost of Service, Rate Design and Bill Affordability Panel Presentation
Ex. #	MH-89	Manitoba Hydro Undertaking 28 - Appendix 3.8 updated with 3.36 % interim, effective August 1, 2016
Ex. #	MH-90	Manitoba Hydro Undertaking 15 - Avoided Infrastructure cost for Gneration marginal value calculation
Ex. #	MH-91	Manitoba Hydro Undertaking 19 - change in methodology and why the change was made
Ex. #	MH-92	Manitoba Hydro - MGF - Information Requests
Ex. #	MH-92-1	" " " " " " " CV's from MGF Report
Ex. #	MH-92-2	" " " " " " " Management Improvements on Capital Expenditure
Ex. #	MH-92-3	" " " " " " Target Price Contract

Ex. #	MH-92-4	"	II .	II	"	11	"	11	"	11	Project Schedule
Ex. #	MH-92-5	"	11	11	II	11	"	II	"	II	Labour Costs
Ex. #	MH-92-6	"	11	11	"	11	"	"	"	II .	KCN and Local employment
Ex. #	MH-92-7	"	11	11	II	11	"	"	"	II .	Cost Increases
Ex. #	MH-92-8	"	11	11	II	11	"	II.	"	"	Increase to GCC - quantities
Ex. #	MH-92-9	"	11	11	II	11	"	II.	"	"	Keeyask Cost Estimate
Ex. #	MH-92-10	"	11	11	11	11	"	"	"	"	escalation calculations
Ex. #	MH-92-11	"	11	11	"	11	"	II.	II.	II .	Project Execution Reporting and Financial Reporting
Ex. #	MH-92-12	"	11	II	11	11	"	11	"	11	Governance
Ex. #	MH-92-13	"	11	11	II	11	"	II	"	II	Misaligened Estimates
Ex. #	MH-92-14	"	11	II	11	11	11	II	II	11	Trends from 2017 Basis of Estimate Document
Ex. #	MH-92-15	"	II	II	11	11	"	II	"	11	Monitoring and Managing
Ex. #	MH-92-16	"	11	11	"	11	"	"	"	II .	Work Breakdown Structure Summary
Ex. #	MH-92-17	"	11	11	II	11	"	II.	"	"	Control Budget
Ex. #	MH-92-18	"	11	11	II	11	II	"	II	"	BBE Construction Drawings (IFC)
Ex. #	MH-92-19	"	II .	II	11	11	11	11	II	"	410-day magnitude
Ex. #	MH-92-20	"	11	11	"	11	11	"	"	"	work with BBC and Voith to align schedules

Ex. #	MH-92-21		- 11	"	"	"	11	11	"	Extra Work Orders
		"								
Ex. #	MH-92-22	" "	"	II	"	"	"	"	11	Procurement of equipment of General
		"								Civil Work Contractor
Ex. #	MH-92-23	" "		11	11	11	11	11	11	craft to foreman ratio
		"								
Ex. #	MH-92-24	11 11	"	11	"	11	"	"	11	Keeyask Transmission Project
		"								
Ex. #	MH-92-25	11 11	"	11	11	"	"	"	11	Contingency
		"								
Ex. #	MH-92-26	" "	"	11	11	11	11	II	11	Capital Review
		"								
Ex. #	MH-92-27	11 11	"	11	"	11	"	"	11	Correction to Response to MGF -
		"								Keeyask
Ex. #	MH-92-28	11 11	"	11	"	11	"	"	11	survey of earthwork
		"								
Ex. #	MH-92-29	" "	"	ш	II	ш	u	11	11	scaffold costs
		"								
Ex. #	MH-92-30	" "		II	11	11	"	11	11	concretet productivity
		"								
Ex. #	MH-92-31	" "		II	11	11	"	11	11	Productivity and lower cost
		"								
Ex. #	MH-92-32	" "	"	II	"	"	"	"	11	Schedule of Cost
		"								
Ex. #	MH-92-33		"	11	II	11	"	II	11	internal labour costs budgeted beyond
		"								project
Ex. #	MH-92-34	11 11	"	II	"	11	11	11	11	Bipole III Converter Station Porject
		"								Controls Report
Ex. #	MH-92-35	" "	"	"	"	"	"	"	11	Keewatinohk 230kV AV Switchyard
		11								behind scheudle
Ex. #	MH-92-36	" "	"	"	"	"	"	"	11	lump sum Variations
		11								
Ex. #	MH-92-37	" "	"	11	11	11	11	П	ш	P50 Coporate Standard
		"								
	1									

Ex. #	MH-92-38	" " " " " " " Stanley Co	onstultants
Ex. #	MH-92-39	" " " " " " " " Rokstad C	Contact
Ex. #	MH-92-40		ion Line Crossing and sion Line Contraction Yard
Ex. #	MH-92-41	" " " " " " " Risk Regst	ter
Ex. #	MH-92-42	" " " " " " " " Contracts	listing
Ex. #	MH-92-43	" " " " " " " variation	log/summaries
Ex. #	MH-92-44	" " " " " " " Rokstad P	ower completeion date
Ex. #	MH-92-45	" " " " " " " Recovery	Plan for Rokstad
Ex. #	MH-92-46	" " " " " " Basis of E	stimate
Ex. #	MH-92-47	" " " " " " " " Industry S	Standard Project Cost
Ex. #	MH-92-48	" " " " " " " Klohn Crip	open Berger
Ex. #	MH-92-49	" " " " " " " Hydroeled " Northern	ctric power Projects in Canada
Ex. #	MH-93	Manitoba Hydro Follow-up Undertaking Nos 7 Updated	& 8 -MH 68 Slide 72
Ex. #	MH-94	Manitoba Hydro Undertaking 24 -2014 Resider	ntial Energy Survey
Ex. #	MH-95	Manitoba Hydro Undertaking 16 - Other Count programs	ries bill affordability
Ex. #	MH-96	Manitoba Hydro Undertaking 20 - explanation changed under new methodology	why marginal values
Ex. #	MH-97	Manitoba Hydro Undertaking 29 - 10,000 paym Nation customers receiving socail assistance	nents to accounts of First

Ex. #	MH-98	Manitoba Hyro Undertakings 21-23 - Figure 7 of AMC/MH II-23, LICO-125 6 percent threshold
Ex. #	MH-99	Manitoba Hydro Undertaking 17 - Meter Maintenance Subfunctionalizing distribution of poles, wires and substations
Ex. #	MH-100	Manitoba Hydro Undertaking 27 -20 year levelized marginal values
Ex. #	MH-101	Manitoba Hydro Undertaking from transcript page 2396 -Updated Figure 8.14 (Tab 8)
Ex. #	MH-102	Manitoba Hydro Undertaking 18 - Performance Optimization Programs
Ex. #	MH-103	Manitoba Hydro Undertaking 14 - Rate Increases for different jurisdictions in Canada
Ex. #	MH-104	Manitoba Hydro Projected Annual Residential Eletric Bills
Ex. #	MH-105	Manitoba Hydro Undertaking 37 - Updated of Slide 15 from MH 88
Ex. #	MH-106	Manitoba Hydro letter to Public Utilies Board re Daymark Saskpower Report redactions - January 5, 2018
Ex. #	MH-107	Maniotba Hydro letter to Public Utilities Board re Withdrawl of R & V on Daymark Saskpower Report - January 9, 2018
Ex. #	MH-108	Manitoba Hydro Undertaking 32 - Single Detached Homes Electricity Heat on and off reserve
Ex. #	MH-109	Manitoba Hydro Undertaking 38 - Geothermal Program
Ex. #	MH-110	Manitoba Hydro Undertaking 34 - Actual Expenditures for 2016/17 year for Load Displacement Program
Ex. #	MH-111	MH to MGF (KCB) Information Requests
Ex. #	MH-111-1	" " " " " " " MH-92-1
Ex. #	MH-111-2	" " " " " " MH-92-3
Ex. #	MH-111-3	" " " " " " " MH-92-38

Ex. #	MH-111-4	" " " " " " MH-92-48							
Ex. #	MH-111-5	" " " " " " MH-92-49							
Ex. #	MH-112	Manitoba Hydro Undertaking 35 - DSM Expenditures							
Ex. #	MH-113	Manitoba Hydro Undertaking 25 - MKO First Nation Revenue							
Ex. #	MH-114	Manitoba Hydro Undertaking 26 - MKO Revenue at 7.9% increase							
Ex. #	MH-115	Manitoba Hydro Undertaking 30 & 31 - Geneneration Marginal Value							
Ex. #	MH-116-1	Manitoba Hydro Book of Documents for Cross Examination of Morrison Park Advisors							
Ex. #	MH-116-2	Manitoba Hydro Book of Documents 2 - Cross Examination of MIPUG							
Ex. #	MH-116-3	Manitoba Hydro Book fo Documents 3 - Cross Examination of London Economics International							
Ex. #	MH-116-4	Manitoba Hydro Book fo Documents 4 - Cross Examination of MGF							
Ex. #	MH-117	Manitoba Hydro Rebuttal of MGF Evidence - January 16, 2018							
Ex. #	MH-118	Manitoba Hydro - Major Capital Projects Panel							
Ex. #	MH-118-1	" " " " " " " CV of Lorne Midford							
Ex. #	MH-118-2	" " " " " " " CV of Glenn Penner							
Ex. #	MH-118-3	" " " " " " " CV of Dave Bowen							
Ex. #	MH-118-4	" " " " " " " CV of Jeff Strongman							
Ex. #	MH-118-5	" " " " " " " CV of Alastair Fogg							

MH-119	Manitoba Hydro Letter to Public Utilities Board re MGF Report Redactions - January 19, 2018
MH-120	Manitoba Hydro - Major Capital Projects Presentation
MH-121 CSI	Manitoba Hydro - Major Capital Projects Panel Presentation - Confidential
MH-122	Manitoba Hydro Undertaking 33 - MH variatoin with respect to Order 116/08
MH-123	Manitoba Hydro Undertaking 36 - Projections for Load Displacement Program
MH-124	Manitoba Hydro Undertaking from Transcript page 3088 - Status Update from page 220 of Order 5/12
MH-125	Manitoba Hydro Undertaking 54 - Presentation of Dr. Swatek - Needs for Bipole III
MH-126	Manitoba Hydro Undertaking 58 - Estimated Costs of Bipole III
MH-127	Manitoab Hydro Undertaking 59 - Road Costs Attributed to Conawapa
MH-128	Terms of Reference for NFAT
MH-129	MH letter to all parties re Legal Argument - January 29, 2018
MH-130	MH letter to PUB re CSI in MFG Report and Rebuttal Evidence
MH-131	Manitoba Hydro Undertaking 55 - Manitoba Hydro Control Schedule
MH-132	Manitoba Hydro Undertaking from Transcript Page 2640 - Solar and other Non-Utility Generation system credits
MH-133	Manitoba Hydro Undertaking 56 - payments to KPMG
MH-134	Manitoba Hydro Undertaking 63 - % of First Nations and Indigenous person working on Keeyask
MH-135	Manitoba Hydro Rebuttal Presentation
	MH-120 MH-121 CSI MH-122 MH-123 MH-124 MH-125 MH-126 MH-127 MH-128 MH-129 MH-130 MH-131 MH-131 MH-131

Ex. #	MH-135-1	Morrison Park Advisors Analysis
Ex. #	MH-136	Manitoba Hydro Oral Argument - February 5, 2018
Ex. #	MH-137	Manitoba Hydro Written Argument
Ex. #	MH-138	Manitoba Hydro Undertaking 60 - Most Recent Monthly Report
Ex. #	MH-139	Manitoba Hydro Undertaking 53 - Distance between Bipole I and Bipole II
Ex. #	MH-140	Manitoba Hydro additional MH16 Update with Interim Scenarios
Ex. #	MH-140-1	Manitoba Hydro additional MH16 Update with Interim Scenarios with Redacctions
Ex. #	MH-141	Manitoba Hydro Undertaking 57 - Keeyask Termination Costs
Ex. #	MH-142	Manitoba Hydro Reply Presentation





#### **EXHIBIT LIST FOR**

# MANITOBA HYDRO 2017/18 & 2018/19 General Rate Application

February 16, 2018

## **PUBLIC UTILITIES BOARD (PUB) Exhibits**

Ev #	PUB-1	PUB Letter to Manitoba Hydro dated March 17, 2017 re 2017 Rate
EX. #	LOD-T	
		Applications
Ex. #	PUB-2	PUB Rules of Practice and Procedure
Ex. #	PUB-3	PUB Leter to Manitoba Hydro and Interveners of Record dated March 31,
		2017 re Planning Meeting and Minimum Filing Requirements (MFRs)
Ex. #	PUB-4	Order in Council 92/2017 dated April 5, 2017
Ev. #	PUB-5	PUB Letter to Manitoba Hydro and Interveners of Record dated April 24,
EX. #	PUB-3	2017 re Intervener Proposed MFR & Additional PUB MFRs
		2017 Te intervener i roposeu Wii N & Additional i OB Wii No
Ex. #	PUB-6	PUB Cover Letter for Public Notice - dated May 9, 2017
Ex. #	PUB-7	PUB Public Notice - Manitoba Hydro's rate application
Ex. #	PUB-8	PUB to MH and Interveners of Record re August 1, 2017 interim rate
		request and GRA process matters dated May 17, 2017
Ex. #	PUB-9	PUB to MH re Revised Minimum Filing Requirements of the Public Utilities
		Board dated May 23, 2017
Ex. #	PUB-10	PUB to all Parties re Process Matters dated May 26, 2017
Ex. #	PUB-11	PUB to Potential New Interveners re Process Matters dated May 26, 2017
Ex. #	PUB-12	PUB to All Parties re August 1 2017 Interim Rates dated June 9, 2017
	<u>!</u>	!

Ex. #	PUB-13	PUB 2017		parties	re Intei	rim Ra	te Re	quest Oral Hearing - dated June 15,						
Ex. #	PUB-14		PUB Order 70/17 - Procedural Order in Respect of Manitoba Hydro's 2017/18 and 2018/19 General Rate Application - June 30, 2017											
Ex. #	PUB-15		PUB Response to the Coalition's letter re Access to COS Model - July 21, 2017											
Ex. #	PUB-16	Mot in M	PUB Order No. 82/17 - An Order in Respect of Manitoba Hydro's Process Motion for Confidential and Commercially Sensitive Documents Requested in Manitoba Hydro's 2017/18 & 2018/19 General Rate Application - July 28, 2017											
Ex. #	PUB-17	Appl	PUB Order No. 80/17 - An Order in Respect of Manitoba Hydro's Application for a 7.9% Interim Rate Increase Effective August 1, 2017 - July 31, 2017											
Ex. #	PUB-18		PUB Order No. 85/17 - Order Approving Manitoba Hydro's Rate Filings for August 1, 2017 Rates - August 3, 2017											
Ex. #	PUB-19		Public Utilities Board to Manitoba Hydro - First Round Information Requests											
Ex. #	PUB-19-1	PUB	to MI	H - First	Round	<u>Irs</u>		Updated MIPUG MFR 5, MH16						
Ex. #	PUB-19-2	"	11	п	11	11	11	Present value of proposed annualized revenue increase requested						
Ex. #	PUB-19-3	"	"	11	II	11	"	Updated table - PUB MFR12						
Ex. #	PUB-19-4	"	11	п	II	11	"	KMPG's update to the report based on MH16 Update						
Ex. #	PUB-19-5	11	II	11	11	"	11	Update to BCG Report						
Ex. #	PUB-19-6	"	11	II	11	11	11	BCG Report - Keeyask recovery plan						
Ex. #	PUB-19-7	II II	II	11	11	11	11	Generation peak demand, generation sources & capacities, and import capacities for the summer and winter season						
Ex. #	PUB-19-8	"	11	П	11	11	11	Affordable Utility Rate Accountability Act						

Ex. #	PUB-19-9	11	11	11	11	11	"	2016/17 Vacancy allowance and
EX. #	FOB-19-9							2016/17 Vacancy allowance and assumed vacancy allowance for 2017/18 & 2018/19
Ex. #	PUB-19-10	"	11	II	II	11	"	OM&A Expense Analysis
Ex. #	PUB-19-11	"	11	11	11	П	11	EFT staffing level information (MFR 34) - utlizing MH16 Update & voluntary take-up
Ex. #	PUB-19-12	11	п	II	11	11	11	MFR 35 - Utilizing MH16 update and incorporating known voluntary take-up
Ex. #	PUB-19-13	"	11	II	11	11	"	Position Reductions
Ex. #	PUB-19-14	"	II	II	11	II	II	Operating & administrative costs by cost elements
Ex. #	PUB-19-15	"	II	II	11	11	"	Operating and administrative expenses by division
Ex. #	PUB-19-16	11	11	II	11	11	"	Capitalized OM&A costs by business unit
Ex. #	PUB-19-17	"	II	II	II	11	"	Operating and administrative costs (MH16 vs MH15)
Ex. #	PUB-19-18	"	11	II	11	11	"	Depreciation and Amortization breakdown
Ex. #	PUB-19-19	"	11	II	11	11	"	Water flow
Ex. #	PUB-19-20	"	11	II	II	11	"	Deviations in the MH hydraulic energy
Ex. #	PUB-19-21	"	11	II	11	11	II	Payments to Government for Keeyask and Bipole III
Ex. #	PUB-19-22	"	11	II	"	11	"	Treatment of costs incurred for Conawapa GS
Ex. #	PUB-19-23	"	11	II	11	11	"	Debt Management - Free cash flow
Ex. #	PUB-19-24	"	11	II	11	11	II	Capitalized Interest

Ex. #	PUB-19-25	II	II	11	11	11	11	Updated PUB MFR 59 - Financing plans, weighted average of outstanding debt, principal amount and proportions of debt maturing
Ex. #	PUB-19-26	11	ıı .	11	"	11	11	Proforma basis for Bipole III - cash negative
Ex. #	PUB-19-27	"	11	11	11	11	"	Interest Rate Forecasting
Ex. #	PUB-19-28	II	II	11	11	11	II	Consolidated Borrowing Requirements & Maturity Schedule
Ex. #	PUB-19-29	11	"	11	II .	11	11	Debt Maturities
Ex. #	PUB-19-30	11	ıı .	11	II	11	11	Benchmark GoC and Manitoba 10 Year+ Bond yields
Ex. #	PUB-19-31	11	II .	II	II	11	11	PUB MFR 52 Update
Ex. #	PUB-19-32	11	ıı .	11	11	11	"	PUB MFR 57 & 58 - Debt Issuances and corresponding interest rates
Ex. #	PUB-19-33	"	"	11	"	11	II	Reconciliation of values used in the determination of forecast financial ratios with the values in the IFF
Ex. #	PUB-19-34	11	11	11	11	11	"	Electric operations only-IFF scenarios
Ex. #	PUB-19-35	II II	ıı .	11	II	11	11	References to credit rating reports
Ex. #	PUB-19-36	11	11	11	11	11	II	PUB MFR 51 - exclusion of Bipole III- related capitalized interest from the adjustment
Ex. #	PUB-19-37	11	II	"	II	11	"	Utilities utilizing a CFO to CAPEX ratio
Ex. #	PUB-19-38	11	II .	11	"	11	"	Major New Generation and Transmission projects in CFO to Capex ratio
Ex. #	PUB-19-39	11	11	11	11	11	11	Keeyask - Capitalized interests

Ex. #	PUB-19-40	"	11	II	11	"	11	KMPG recommended metrics
Ex. #	PUB-19-41	"	11	11	II	II .	11	Impact of provincial credit rating downgrade to MH's borrowing costs
Ex. #	PUB-19-42	"	11	II	11	11	11	Manitoba Hydro's capital structure
Ex. #	PUB-19-43	"	11	II .	"	11	ıı .	Risks insured by third parties
Ex. #	PUB-19-44	"	11	II .	ıı .	11	11	Bipole - Infrastructure risk
Ex. #	PUB-19-45	"	11	11	II	II .	11	Key variable sensitivity impacts to MH16 Retained earnings
Ex. #	PUB-19-46	11	II	II .	II.	11	11	Updated Additional Interest Rate Forecast Information
Ex. #	PUB-19-47	"	11	II	11	"	"	Uncertainty analysis
Ex. #	PUB-19-48	II	11	II	ıı .	11	11	Financial Impact of Drought
Ex. #	PUB-19-49	"	11	II	11	"	ıı	Composition of flow cases
Ex. #	PUB-19-50	11	11	II .	II	II	11	Dependable energy premiums and capacity premium
Ex. #	PUB-19-51	11	11	II .	11	11	"	Export commitments
Ex. #	PUB-19-52	"	11	II	II	"	11	Export sale contracts made with American Electric Power, NextEra and Basin Electric
Ex. #	PUB-19-53	11	11	II	11	11	11	2017 Load Forecast
Ex. #	PUB-19-54	11	11	II	"	II	II	Potential Large Industrial Load
Ex. #	PUB-19-55	II	11	II .	II	11	"	20 year IFF scenario - Efficiency Manitoba
Ex. #	PUB-19-56	"	11	11	ıı	"	II	Load Forecast

Ex. #	PUB-19-57	II	11	11	II	11	"	Forecasts accuracies
Ex. #	PUB-19-58	II II	11	II	ıı .	11	11	Power Resource Plan
Ex. #	PUB-19-59	II	11	11	11	11	II.	Potential increase in interest rates & borrowing costs if further credit rating downgrades occurs
Ex. #	PUB-19-60	"	11	11	II	11	11	Credit rating reports
Ex. #	PUB-19-61	11	11	11	11	11	II	Communications between Manitoba Hydro and credit rating agencies
Ex. #	PUB-19-62	11	11	II	II .	11	11	Progression of project costs
Ex. #	PUB-19-63	11	11	11	11	11	"	Major capital G&T project for year 2008/09 to 2016/17
Ex. #	PUB-19-64	"	11	11	11	11	11	Asset management technology
Ex. #	PUB-19-65	II II	11	11	"	11	"	Change in definition of Major New Generation and Transmission
Ex. #	PUB-19-66	"	11	"	II	11	"	Capital expenditure cost savings
Ex. #	PUB-19-67	11	11	11	11	11	11	Corporate value framework
Ex. #	PUB-19-68	II II	11	11	11	11	II	Corporate risk standards, tolerance levels and risk assessments
Ex. #	PUB-19-69	11	11	II	II	11	11	Corporate risk
Ex. #	PUB-19-70	II	11	11	11	11	II.	Asset-level risk assessment process and process of assessing non-monetary risks
Ex. #	PUB-19-71	ıı	11	11	11	11	"	UMS Group - Asset Management Gap Assessment Report - addressing gaps
Ex. #	PUB-19-72	II	11	11	II	11	11	Risk assessments - aging electric infrastructure

Ex. #	PUB-19-73	II	11	11	п	п	11	Reputational risk
Ελ. π	1001373							Reputational risk
Ex. #	PUB-19-74	"	11	11	"	11	"	Risk tolerance thresholds
EX. #	PUD-13-74							risk tolerance timesholds
Ex. #	PUB-19-75	"	"	11	"	п	"	Manitoba Hydro Corporate Risk
								Management Report
Ex. #	PUB-19-76	"	11	11	"	11	"	Manitoba Hydro's Corporate Risk
								Rating Criteria scale
Ex. #	PUB-19-77	"	"	11	11	II	"	Impact of lower domestic load growth
Ex. #	PUB-19-78	ıı	11	11	11	11	11	EFT staffing level information
ΕΧ. π	1001570							Li i stannig lever information
Ex. #	PUB-19-79	"	11	11	"	11	11	Target overtime levels
								<u> </u>
Ex. #	PUB-19-80	ıı .	11	11	"	11	11	Risk and cost replacement to inform
								transformer refurbishment vs
								replacement decisions
Ex. #	PUB-19-81	"	11	11	"	11	"	HVDC Bipole III Valve Hall Wall
								Bushing Replacement
Ex. #	PUB-19-82	"	11	11	"	11	"	Sustaining and major capital
								assessment
Ex. #	PUB-19-83	"	"	"	"	"	"	Sustaining and major capital -
								operational risk evaluation
Ex. #	PUB-19-84	"	11	11	"	11	"	Capital Planning Model
Ex. #	PUB-19-85	"	"	"	"	11	"	System assets and investments
Ex. #	PUB-19-86	"	11	11	"	"	"	Asset Investment Process
								Improvements - roadmap
Ex. #	PUB-19-87	"	"	11	II	"	"	Asset Health Indices
Ex. #	PUB-19-88	ıı	11	11	11	11	"	System Average Interruption Duration
								Index (SAIDI) and System Average
								Interruption Frequency Index (SAIFI)

Ex. #	PUB-19-89	II	II	II	II	II	11	Implementation plan re Table of Concordance of Past Board Orders related to Asset Management and Asset Condition Assessments
Ex. #	PUB-19-90	"	11	п	II .	II	II	Asset Condition Assessment Audit by Kinetrics
Ex. #	PUB-19-91	11	11	II .	11	II	"	Asset Condition Assessment Audit by Kinetrics
Ex. #	PUB-19-92	11	11	11	II	11	"	Asset Condition Assessment Audit by Kinetrics
Ex. #	PUB-19-93	II	11	II	"	11	II	Asset Condition Assessment Audit by Kinetrics
Ex. #	PUB-19-94	11	11	II	"	11	11	Asset Condition Assessment Audit by Kinetrics - Power Transformers
Ex. #	PUB-19-95	11	11	II	"	11	11	Asset Condition Assessment Audit by Kinetrics - Power Transformers
Ex. #	PUB-19-96	"	11	II	11	11	"	Asset Condition Assessment Audit by Kinetrics - Transmission Steel Structures
Ex. #	PUB-19-97	11	II	11	11	II	"	Asset Condition Assessment Audit by Kinetrics - Transmission Conductors
Ex. #	PUB-19-98	11	11	п	11	II	"	Asset Condition Assessment Audit by Kinetrics - Data Availability
Ex. #	PUB-19-99	II	п	11	II	II	11	Asset Condition Assessment Audit by Kinetrics - Projected Flagged for Action Plan
Ex. #	PUB-19-100	II	п	II	II .	II	"	Asset Condition Assessment Audit by Kinetrics - Condition Based Flagged for Action Plan
Ex. #	PUB-19-101	II	11	II	"	11	II	Age Availability data for all assets
Ex. #	PUB-19-102	"	11	II	11	II	"	Asset Condition Assessment - Flagged for Action
Ex. #	PUB-19-103	П	11	11	II	II	"	Asset Condition Assessment - Flagged for Action

Ex. #	PUB-19-104	п	11	11	11	11	"	Asset Condition Assessment - Results for Each Asset Category
Ex. #	PUB-19-105	"	11	11	11	11	"	Asset Condition Assessment - UG HV Oil Cables
Ex. #	PUB-19-106	11	11	11	11	11	11	Asset Condition Assessment - Conclusions and Recommendations
Ex. #	PUB-19-107	"	11	11	11	11	11	Asset Condition Assessment - Age Limiting Factor
Ex. #	PUB-19-108	"	"	11	"	11	11	Asset Condition Assessment - Station Breakers
Ex. #	PUB-19-109	11	"	11	11	11	11	HVDC Converter Station Assets
Ex. #	PUB-19-110	11	11	11	II	11	II	Asset Condition Assessment Scoring & Replacement Requirements
Ex. #	PUB-19-111	11	11	11	11	11	11	Asset Condition Assessment Scoring & Replacement Requirements
Ex. #	PUB-19-112	"	11	11	11	11	"	Asset Condition Assessment - projected footing replacements
Ex. #	PUB-19-113	ıı	11	11	11	11	11	Asset Condition Assessment - circuit breakers
Ex. #	PUB-19-114	"	II	11	11	11	"	Qualitative Condition Assessment Report
Ex. #	PUB-19-115	"	II	11	II	11	II	Manitoba Hydro Report for Slave Falls G.S. Powerhouse Mechanical Condition Assessment Report: Turbines & Generators
Ex. #	PUB-19-116	II	11	11	11	11	11	Manitoba Hydro Capital Project Justification
Ex. #	PUB-19-117	"	11	11	11	11	II	Electric Business Operational Capital 10 Year Forecast by Investment Category
Ex. #	PUB-19-118	II II	11	11	11	11	11	Planning criteria - capacity hot spots

Ex. #	PUB-19-119	II	11	11	11	11	"	Capital Program budget
Ex. #	PUB-19-120	"	11	ıı .	11	"	"	Distribution wood pole replacements
LX. #	100 13 120							Distribution wood pole replacements
Ex. #	PUB-19-121	"	11	II .	11	"	"	Skewing of typical useful life values
Ex. #	PUB-19-122	"	11	II	11	II	11	Capital Investment Justifications (CIJ)
Ex. #	PUB-19-123	11	11	II .	11	11	II	Reduction of volitional capital expenditures to mitigate the rate impacts of Major Project costs
Ex. #	PUB-19-124	"	11	II .	II	II	II	Customer preferences
Ex. #	PUB-19-125	II	11	11	11	II	11	2014 Residential Energy Use Survey (REUS)
Ex. #	PUB-19-126	"	11	II	11	II.	11	Affordable Energy Program Annual Report
Ex. #	PUB-19-127	"	11	11	11	11	II	DSM measures - residential customers
Ex. #	PUB-19-128	"	11	II	11	"	II	Dunsky Energy Consulting Reports
Ex. #	PUB-19-129	"	11	II	11	ıı	11	Fuel Switching
Ex. #	PUB-19-130	"	11	II	11	11	11	LED street lighting rates
Ex. #	PUB-19-131	"	11	11	11	11	II	Marginal values - Rate design & DSM cost effectiveness evaluations
Ex. #	PUB-19-132	11	11	11	11	II	11	Additional General Consumers Revenue - rate increase
Ex. #	PUB-19-133	"	11	11	11	II	11	Calendar year hourly marginal cost study
Ex. #	PUB-19-134	"	11	11	11	II	"	Customer related charges from PCOSS18
Ex. #	PUB-19-135	"	11	II	11	II	11	Customer impacts - models & data

Ex. #	PUB-19-136	II	11	11	II	11	"	Rate design
Ex. #	PUB-19-137	"	11	"	"	"	11	Comparison of Class RCC Results
Ex. #	PUB-19-138	11	11	11	II .	11	"	Bipole III reserve account
Ex. #	PUB-19-139	11	11	II .	II .	11	"	Bipole III reserve account
Ex. #	PUB-19-140	11	11	II	"	11	"	Regulatory Referral
Ex. #	PUB-19-141	11	11	11	"	11	"	Metering Transformer
Ex. #	PUB-19-142	11	11	п	11	11	"	PCOSS18
Ex. #	PUB-19-143	11	11	п	11	11	"	Interprovincial interconnections
Ex. #	PUB-19-144	11	11	П	11	11	"	AC Transmission Facilities
Ex. #	PUB-19-145	11	11	п	11	11	"	Other non-energy revenue
Ex. #	PUB-19-146	II .	11	п	11	11	"	General Service Small - meters
Ex. #	PUB-19-147	11	11	II .	II .	11	"	C27 Service Drops
Ex. #	PUB-19-148	11	11	II .	II .	11	"	Revenue cost allocation
Ex. #	PUB-19-149	11	11	II	II .	11	II	Cost of service and rate design for diesel rates
Ex. #	PUB-19-150	"	11	II	"	11	"	Allocation of common costs
Ex. #	PUB-19-151	II .	11	П	11	11	"	Bill Comparisons
Ex. #	PUB-19-152	11	11	П	11	11	"	Bipole III reserve funds
Ex. #	PUB-19-153	11	11	II .	II .	11	"	MFRs and Application Updates

Ex. #	PUB-19-154	"	II	II .	II	11	"	PCOSS18 Electronic Model
Ex. #	PUB-19-155	11	11	II	11	"	"	PCOSS18 Electronic Model
Ex. #	PUB-19-156	11	11	II	II .	"	"	PCOSS18 Electronic Model
Ex. #	PUB-19-157	11	11	II	II .	"	"	PCOSS18 Electronic Model
Ex. #	PUB-19-158	11	11	II	II .	"	"	PCOSS18 Electronic Model
Ex. #	PUB-19-159	II	II	П	11	11	"	PCOSS18 Electronic Modle, Operating Costs
Ex. #	PUB-20			ited Aug Request	_	8, 201	7 to	Manitoba Hydro re Round 1
Ex. #	PUB-21	PUB le	tter re	City of	Winn	peg's	Req	uest to intervene - August 25, 2017
Ex. #	PUB-22	PUB le	tter da	ited Au	gust 2	5, 201	7 re	Intervener Budgets
Ex. #	PUB-23	PUB le Hydro	tter da	ited Sep	otemb	er 11,	201	7 re Rule 13 Motion by Manitoba
Ex. #	PUB-24			ited Ser d Interv				7 re GSS/GSM and KAP Request to
Ex. #	PUB-25			ited Sep Request				7 re Manitoba Hydro's Round 1 on
Ex. #	PUB-26	Public	Utilitie	es Board	d to M	anitob	a H	ydro - Round 2 Information Requests
Ex. #	PUB-26-1	11	11	11	11	11	"	Schedule of regulatory deferral account balances
Ex. #	PUB-26-2	11	11	II	11	11	II	Depreciation Expense
Ex. #	PUB-26-3	II	"	11	11	11	II	Net present value of the proposed annualized rate increases
Ex. #	PUB-26-4	II	11	11	11	11	II	Change management
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Ex. #	PUB-26-5	II .	II	II	11	11	11	Other expenses - previously in CWIP that are no longer providing future economic benefit
Ex. #	PUB-26-6	"	II	II	II	11	11	Voluntary Departure Program
Ex. #	PUB-26-7	"	11	11	11	11	11	OM&A Expenditures by cost element
Ex. #	PUB-26-8	11	II .	II	II	11	11	Change in OM&A costs
Ex. #	PUB-26-9	11	"	11	11	11	11	Electric O&A
Ex. #	PUB-26-10	11	11	11	11	11	11	Mitigation measures
Ex. #	PUB-26-11	"	II	11	II	11	ıı	Total interest forecast to be capitalized by year through Keeyask full in-service
Ex. #	PUB-26-12	"	11	11	11	11	11	Conawapa expenditures
Ex. #	PUB-26-13	"	"	11	11	11	11	Manitoba Hydro debt
Ex. #	PUB-26-14	"	11	II	11	11	11	Forecast interest rates
Ex. #	PUB-26-15	"	II	11	II	11	"	Updates to 2014 Depreciation Study
Ex. #	PUB-26-16	"	"	II	II	"	"	Canada 30-year Bond yield, Manitoba 30 Year Bond yield
Ex. #	PUB-26-17	"	11	II	11	11	11	Debt management strategy
Ex. #	PUB-26-18	"	II	11	II	11	"	Restated scenario analyses - Bipole III
Ex. #	PUB-26-19	"	"	II	II	"	"	Credit rating agencies calculation of cash flow to capex ratio
Ex. #	PUB-26-20	"	II .	11	II	11	11	Bipole III Reliability Project
Ex. #	PUB-26-21	"	11	11	11	11	11	KMPG recommended metrics

Ex. #	PUB-26-22	"	П	11	11	11	"	Capital Structure
Ex. #	PUB-26-23	11	11	11	11	11	"	Interest rate change scenarios
Ex. #	PUB-26-24	"	11	11	"	II	"	Cashflow to capex ratio
Ex. #	PUB-26-25	11	11	11	11	11	"	Corporate Strategic Plan
Ex. #	PUB-26-26	11	II	11	"	11	"	Alternative scenario IFF16 Update with interim based on a 32 month delay
Ex. #	PUB-26-27	"	II	11	"	II	"	Capital construction EFTs
Ex. #	PUB-26-28	11	II	II	"	II	ıı	PUB MFR 55 & 56 based on Appendix 3.4 and Appendix 3.7 scenario 3
Ex. #	PUB-26-29	"	П	11	11	11	"	Cash surplus beyond 2035
Ex. #	PUB-26-30	11	II	11	II .	II	"	Forecast cash flow from Operations and capital expenditures
Ex. #	PUB-26-31	"	п	11	11	II	11	Debt Management - Free cash flow
Ex. #	PUB-26-32	"	11	11	11	II	11	Contracts that require newly constructed generation resources
Ex. #	PUB-26-33	п	11	П	II	II	"	Status update of Manitoba Hydro's implementation of BCG's suggestions to mitigate impacts of continuing with the completion of Bipole III and Keeyask
Ex. #	PUB-26-34	"	11	11	11	11	"	Load Forecast
Ex. #	PUB-26-35	11	II	II	"	"	11	Implementation of BCG's suggestions to address sourceable spending
Ex. #	PUB-26-36	11	II	11	II .	II	11	Capacity

Ex. #	PUB-26-37	"	II	11	11	11	"	Hydraulic generation
Ex. #	PUB-26-38	"	11	11	11	11	11	Hydraulic generation
Ex. #	PUB-26-39	11	11	11	11	11	"	Key variable sensitivity impacts
Ex. #	PUB-26-40	ıı	п	11	11	11	11	Drought sensitivities
Ex. #	PUB-26-41	11	11	11	11	11	11	Comparison of the Annual Equity Ratio Variability
Ex. #	PUB-26-42	II II	11	11	11	11	11	Deduct Capitalized Interest on Major Projects
Ex. #	PUB-26-43	11	11	11	11	11	II	Major New Generation and Transmission projects in CFO to Capex ratio
Ex. #	PUB-26-44	11	11	11	11	11	11	Minimum acceptable debt to equity ratio
Ex. #	PUB-26-45	II	11	11	11	11	11	Selkirk Generating Station
Ex. #	PUB-26-46	ıı	11	11	11	11	11	Dependable energy premiums and capacity premium
Ex. #	PUB-26-47	11	11	11	11	11	11	Long term Potential Large Industrial Load
Ex. #	PUB-26-48	II II	11	11	11	11	11	Top Consumers Load forecast
Ex. #	PUB-26-49	11	11	11	11	11	11	Top Consumers Load forecast
Ex. #	PUB-26-50	II II	II	11	11	11	"	Pipeline loads
Ex. #	PUB-26-51	11	II	11	II	11	11	Winter peak demand or dependable energy requirements
Ex. #	PUB-26-52	11	II	11	11	11	11	Electric heat rate design
Ex. #	PUB-26-53	11	II	11	II	11	11	DSM meetings - presentations made to external stakeholder group

Ex. #	PUB-26-54	"	II	11	"	11	"	Degree Day Heating (DDH) map of Manitoba
Ex. #	PUB-26-55	"	11	11	II	11	"	Annual incremental capital taxes and water rental fees from Keeyask
Ex. #	PUB-26-56	II	11	II	11	11	"	Electricity for space heating in Manitoba
Ex. #	PUB-26-57	"	II	II	11	11	11	Updated Generation and combined marginal values
Ex. #	PUB-26-58	"	II	II	11	11	11	2014 Residential Energy Use Survey (REUS)
Ex. #	PUB-26-59	"	II	11	п	11	"	Insulation upgrades under Affordable Energy Program or the Indigenous Power Smart Program
Ex. #	PUB-26-60	11	11	11	11	11	"	Directional change in economic impacts based on IFF-16
Ex. #	PUB-26-61	"	"	II	11	11	11	Residential customer data
Ex. #	PUB-26-62	"	II	11	"	11	11	Breakdown of CEF16 and CEF15
Ex. #	PUB-26-63	II	11	11	11	11	"	Project management of Keeyask and Bipole III - tendering
Ex. #	PUB-26-64	"	11	II	"	11	II	Keeyask Risk Registry
Ex. #	PUB-26-65	11	II	11	11	11	II.	UMS Asset Management Gap Assessement Report - Findings
Ex. #	PUB-26-66	II .	"	II	11	11	"	UMS Asset Management Gap Assessement Report - Findings
Ex. #	PUB-26-67	11	11	11	11	11	II	UMS Asset Management Gap Assessement Report - Findings
Ex. #	PUB-26-68	11	11	11	11	11	II	UMS Asset Management Gap Assessement Report - Findings
Ex. #	PUB-26-69	"	"	11	11	11	"	UMS Asset Management Gap Assessement Report - Findings
Ex. #	PUB-26-70	"	11	11	11	11	"	Corporate Risk Management Report - Infrastructure Risk

Ex. #	PUB-26-71	11	11	11	II	11	11	Load growth projections - hot spots
Ex. #	PUB-26-72	11	11	11	11	11	11	Capital Expenditures
Ex. #	PUB-26-73	III	11	11	11	11	11	Bipole II Valve Hall Bushing Replacements
Ex. #	PUB-26-74	11	II	II	II	11	11	Ratio of distribution to transmission to generation capital investment levels
Ex. #	PUB-26-75	11	11	11	11	11	11	SAIDI values
Ex. #	PUB-26-76	III	11	11	II	11	11	Asset Condition Assessment Audit - Kinetrics
Ex. #	PUB-26-77	11	11	II	II	11	"	Asset Condition Assessment Audit - Kinetrics
Ex. #	PUB-26-78	11	11	11	11	11	11	Asset Condition Assessment Audit - Kinetrics
Ex. #	PUB-26-79	ıı .	11	11	11	11	11	Asset Condition Assessment Audit - Kinetrics
Ex. #	PUB-26-80	ıı	11	11	11	11	11	Asset Condition Assessment Audit - Kinetrics
Ex. #	PUB-26-81	"	11	11	11	11	11	Asset Condition Assessment Audit - Kinetrics
Ex. #	PUB-26-82	11	11	11	II	11	"	Asset Condition Assessment Methodology Standards & Results Update
Ex. #	PUB-26-83	11	11	11	II	11	"	Capital Project Justification
Ex. #	PUB-26-84	"	11	11	II	11	11	Business Operations Capital and Asset Management Technical Conference presentation
Ex. #	PUB-26-85	11	11	11	II	11	11	Capital investment requirements
Ex. #	PUB-26-86	II	11	11	II	11	11	Bill frequency data for all non residential rate classes
Ex. #	PUB-26-87	II	11	11	11	11	11	RCC cost parity issues

Ex. #	PUB-26-88	" "	11	"	11	11	Comparison of Class RCC Results
Ex. #	PUB-26-89	11 11	11	11	II	II	PCOSS18
Ex. #	PUB-26-90	11 11	11	11	II	11	PCOSS18
Ex. #	PUB-26-91	11 11	11	11	11	11	Planned GILT
Ex. #	PUB-26-92	11 11	11	II	11	11	Rate Design
Ex. #	PUB-26-93	11 11	11	11	11	"	Rate Design
Ex. #	PUB-26-94	11 11	11	11	11	11	Rate Design
Ex. #	PUB-27	PUB to all p Revised MG			•		opert Consultants Report Deadlines and oper 5, 2017
Ex. #	PUB-28						lication to Review and Vary Pulbic 5, 2017 - October 16, 2017
Ex. #	PUB-29	treatment o	of informand M	mation otion b	in the	201 Cons	nitoba Hydro seeking confidential 7/18 and 2018/19 General Rate umers Coalition seeking access to
Ex. #	PUB-30	PUB to all p October 25		e Inde	pende	nt Ex	opert Consultants' Scope of Work -
Ex. #	PUB-31	PUB Order Order 112/		- An A	pplica	tion I	by Manitoba Hydro to Review and Vary
Ex. #	PUB-32	Public Utilit Information		-	JB) to	Asse	mbly of Manitoba Chiefs (AMC) -
Ex. #	PUB-32-1	п	11	11	II	11	Annual income apply to on-reserve FN individuals/households
Ex. #	PUB-32-2	" "	II	"	11	"	Rate increase within bounds, view of maximum rate increase for non-lower income and non-FN
Ex. #	PUB-32-3	" "	11	11	II	11	Appropriate to reduce RCC for Residential class

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assistance
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disposal of assets
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Ex. #	PUB-33-16	ıı	11	II	11	11	"	Definitions of exonomic impacts
Ex. #	PUB-33-17	"	11	11	11	11	11	areas COSS evolving
Ex. #	PUB-33-18	"	11	II	11	11	11	MH Guidelines and Board of Commissions decision opinions
Ex. #	PUB-33-19	"	"	11	"	11	11	ratemarking proceedings on use of block rates
Ex. #	PUB-33-20	"	"	II	11	11	11	adjustments to generation marginal costs
Ex. #	PUB-33-21	"	"	11	"	11	11	LICO-125 targeted subset for rate assistance
Ex. #	PUB-33-22	"	"	II	11	11	11	merits and drawbacks on rate design options
Ex. #	PUB-33-23	"	"	II	11	11	11	research undertaken with Alternative Rate Designs Specifically
Ex. #	PUB-33-24		to Coa	alition /Simpso	on) IRs			Percentage change in spending allocated
Ex. #	PUB-33-25	"	"	II	"	11	11	Direct effect of fall in damand by Industy Affected, leakage
Ex. #	PUB-33-26	"	11	II	11	11	11	Tax Revenue Impact
Ex. #	PUB-33-27	"	11	II	11	11	11	Carbon Pricing
Ex. #	PUB-33-28	PUB	to Coa	alition (	MPA) I	Rs		Metric v Free Cash Flow or Discretionary Free Cash Flow metric
Ex. #	PUB-33-29	II .	"	II	11	11	11	Metric
Ex. #	PUB-33-30	11	11	II	II .	11	11	Capital Structure odf 75:25
Ex. #	PUB-33-31	"	11	11	11	11	11	Drought fund
Ex. #	PUB-33-32	ıı	11	II	11	11	11	Economic efficiency
Ex. #	PUB-33-33	"	11	II	ıı	11	11	Debt Servicing ratemaking formula

Ex. #	PUB-34	Publi Requ		ities Bo	ard (Pl	JB) to	Gree	n Action Centre (GAC) Information
Ex. #	PUB-34-1	п	11	11	11	11	"	Lower Income Rates
Ex. #	PUB-34-2	11	II	11	11	"	11	Electric Space Heating
Ex. #	PUB-34-3	11	11	11	11	11	"	Increase in energy rate
Ex. #	PUB-34-4	11	11	11	11	11	11	Recovery Rates
Ex. #	PUB-34-5	п	11	11	11	11	11	Revenue to Cost Coverage Ratios
Ex. #	PUB-34-6	11	11	11	11	11	11	Lost Revenue and Recovery Rates
Ex. #	PUB-34-7	11	11	11	11	11	11	Home Insulation Program and AEP
Ex. #	PUB-34-8	II II	11	11	11	11	11	Customer Class or Classes Implement time of use rates apply
Ex. #	PUB-34-9	п	11	11	11	11	11	demand metered customers, and changes
Ex. #	PUB-34-10	11	11	11	11	11	11	Electric Utilities adopted residential rate structure
Ex. #	PUB-34-11	"	11	11	11	11	11	customers charges based
Ex. #	PUB-34-12	II	11	11	11	11	11	Calculation and Assumption additional payment
Ex. #	PUB-34-13	"	11	11	11	11	11	Calculation performed to support marginal costs
Ex. #	PUB-34-14	II	11	11	11	11	11	Rate Design
Ex. #	PUB-35		ium/k		-	_		eral Service Small/General Service ducers (GSS-GSM-KAP) Information
Ex. #	PUB-35-1	"	II	11	"	11	II.	LEI evidence analysis

Ev. #	PUB-35-2	II	11	11	"	п	11	LEI Evidence
EX. #	PUB-33-2							LEI EVIGETICE
Ex. #	PUB-35-3	"	"	11	11	11	11	LEI Evidence asset management
Ex. #	PUB-35-4	"	11	11	11	11	11	LEI Evidence change in operating profits
Ex. #	PUB-35-5	11	II.	11	II	11	"	LEI Evidence MB Convenience store gross margins
Ex. #	PUB-35-6	11	"	11	11	11	11	LEI Evidence reduction in grid reliability
Ex. #	PUB-35-7	11	II	11	11	11	11	LEI Evidence gas generation alternatives
Ex. #	PUB-35-8	"	II	11	11	11	11	LEI Evidence real discount rate
Ex. #	PUB-35-9	ıı ı	11	11	11	11	11	LEI Evidence number of empoloyees
Ex. #	PUB-35-10	"	II .	11	11	11	11	LEI Evidence Crown Corportations
Ex. #	PUB-35-11	11	II.	II	II	11	"	LEI Evidence escalted rate in other jurisdictions
Ex. #	PUB-35-12	"	11	11	11	11	11	LEI Evidence IMPLAN
Ex. #	PUB-35-13	"	II.	II	II	11	11	LEI Evidence economic impacts
Ex. #	PUB-35-14	11	II.	11	11	11	11	LEI Evidence Economic Impacts
Ex. #	PUB-35-15	11	"	11	11	11	11	LEI Evidence Sector exomonic impacts
Ex. #	PUB-35-16	"	11	11	11	11	11	LEI Evidence Sector exomonic impacts
Ex. #	PUB-35-17	"	II .	11	11	11	11	LEI Evidence Key Performance Indicator Analysis
Ex. #	PUB-36			ities Bo nformat	-	_		itoba Industrial Power Users Group .7)
Ex. #	PUB-36-1	11	п	11	11	11	11	DSM High Keeyask scenario

Ex. #	PUB-36-2	III	II.	II	II	11	II	US and Saskatchewan
Ex. #	PUB-36-3	"	11	11	II	11	11	Marginal Value
Ex. #	PUB-36-4	"	11	11	II	11	11	Histrorical RCC
Ex. #	PUB-36-5	"	"	II	11	11	11	COS Methodology
Ex. #	PUB-36-6	"	II.	II	II	11	11	Revenue Loss
Ex. #	PUB-36-7	"	II.	II	II	11	11	Time of use Rate
Ex. #	PUB-36-8	"	11	11	II	11	11	financial reporting
Ex. #	PUB-36-9	"	ıı	11	II	11	11	Peer Canadian hydroelectric generation companies
Ex. #	PUB-36-10	"	II .	II	II	11	11	revise debt terming stategy
Ex. #	PUB-36-11	11	II	II	II	11	11	MIPUG contention O&A
Ex. #	PUB-36-12	"	II .	II	II	11	11	Provincially Owned Utilties
Ex. #	PUB-36-13	11	II	II	II	11	II	Proposal to recognized gain
Ex. #	PUB-36-14	11	II .	II	II	11	11	Minimum Retained Earning Targe
Ex. #	PUB-36-15	"	II .	II	II	11	11	define rate shock
Ex. #	PUB-36-16	"	II .	11	II	11	11	deferral in charges
Ex. #	PUB-36-17	"	II .	"	11	11	11	rate trajectory
Ex. #	PUB-37		lic Utili uests	ties Bo	ard (PL	JB) - C	ity of	Winnipeg (COW) Information
Ex. #	PUB-37-1	"	II.	11	11	11	11	rate increase over 10 years, water rates, sewer rates, basic

Ex. #	PUB-37-2	II	"	11	11	11	11	Markowsky Evidence
Ex. #	PUB-38		lic Utili uests	ities Bo	ard (PL	JB) - D	ayma	ark Energy Advisors Information
Ex. #	PUB-38-CSI-1	11	11	11	"	11	11	Export
Ex. #	PUB-38-CSI-2	II .	11	11	11	11	11	Export
Ex. #	PUB-38-1	II .	11	11	11	II	11	Export Revenue, Minn Hub or MHEB Hub
Ex. #	PUB-38-2	"	11	11	"	11	11	Export Revenue, Minnesota Power
Ex. #	PUB-38-3	11	11	11	II.	11	11	Export Revenue, Northern States Power
Ex. #	PUB-38-4	11	"	11	11	11	11	Export Revenue, Minnesota and Wisconsin's Renewable Portfolio
Ex. #	PUB-38-5	"	11	II	11	II	11	Export Revenue, MISO forward capacity market
Ex. #	PUB-38-6	II .	11	11	11	11	11	Export Revenue, nuclear plants in Minnesota
Ex. #	PUB-38-7	III	11	II	11	11	11	Export Revenue, actual forecast prices
Ex. #	PUB-38-8	III	11	II	11	II	11	Export Revenue, source of actual forecast
Ex. #	PUB-38-9	II	11	11	11	11	11	Export Revenue, natural gas forecasts
Ex. #	PUB-38-10	"	11	11	11	11	11	Export Revenue, pricing locations
Ex. #	PUB-38-11	"	11	II	11	II	11	Export Revenue, adjustments of forecasters Minn Hub appropriate
Ex. #	PUB-38-12	11	"	11	II	11	11	Export Revenue, surplus dependable energy opportunity energy
Ex. #	PUB-38-13	11	"	11	II.	11	11	Export Revenue, energy premium
Ex. #	PUB-38-14	"	11	11	ıı	11	11	Export Revenue, natural gas price forecasts

Ex. #	PUB-38-15	li	11	11	11	II	ıı	Export Revenue, revenue forecast
								carryover
Ex. #	PUB-38-16	II .	"	11	"	11	"	Load Forecast, Top customers load
								forecast
Ex. #	PUB-38-17	"	"	11	II	"	"	Load Forecast, methodology changes
Ex. #	PUB-38-18	11	11	11	11	II	"	Load Forecast, periodfs and secotrs
								forecasts
Ex. #	PUB-38-19	11	11	11	11	11	"	Load Forecast, lagged electricity price
								GSL, non-lagged GSS/GSM
Ex. #	PUB-38-20	"	"	"	"	II	"	Load Forecast, Top Customers to
								General Service Mass Market
Ex. #	PUB-38-21	"	"	II	"	"	"	Load Forecast, forecasting monthly peaks
Ex. #	PUB-38-22	II II	"	11	11	11	11	Load Forecast, gas to electricity prices
	. 65 66 11							Residential forecast
Ex. #	PUB-38-23	II II	11	11	II .	11	"	Load Forecast, population forecasting
Ex. #	PUB-38-24	ıı	ıı .	11	11	II	"	Load Forecast, price elasticity
								estimates
Ex. #	PUB-38-25	11	"	11	11	11	"	Load Forecast, alternative load
								forecast scenarios
Ex. #	PUB-38-26	"	"	II	"	11	"	Load Forecast, load forecast accuracy
Ex. #	PUB-38-27	ii ii	II .	11	11	11	"	Load Forecast, impact of load forecast
								using lower CDD and HDD coefficients
Ex. #	PUB-38-28	11	"	11	11	11	11	Load Forecast, normal weather
Ex. #	PUB-38-29	ıı	"	11	11	11	"	Load Forecast, DSM in load forecast
								problematic
Ex. #	PUB-38-30	ıı .	"	11	11	II	"	Load Forecast, Load forecast
								methodologies reasonable and
Ex. #	PUB-38-31	11	II	11	11	п	11	Load Forecast, Potential Large
								Industries load
Ex. #	PUB-38-32	li .	"	11	"	II	"	Load Forecast, in-come, GDP,
								population

Ex. #	PUB-38-33	п	11	11	11	11	11	Load Forecast, blended GDP variarle in GSMM and Top Customer forecasts
Ex. #	PUB-38-34	11	11	11	II.	11	11	Load Forecast, estimate transmission and distribution losses
Ex. #	PUB-39	Pub	lic Utili	ties Bo	ard - D	r. Yato	hew	Information Requests
Ex. #	PUB-39-1	"	"	"	"	11	"	Oil and Natural Gas Market and Exports
Ex. #	PUB-39-2	"	11	п	"	11	"	Grid Parity
Ex. #	PUB-39-3	п	"	п	"	11	11	Provincial Energy Intensity Trends
Ex. #	PUB-39-4	11	11	11	"	11	"	Cost of living and wages in Manitoba vs. other Provinces
Ex. #	PUB-39-5	"	11	11	"	11	11	long term electricity demand growth
Ex. #	PUB-39-6	II	П	П	II	11	"	efficencies to increasing rates
Ex. #	PUB-39-7	11	11	11	II	11	11	Energy Poverty
Ex. #	PUB-39-8	п	11	11	11	11	"	Market Snapshot: Fuel Poverty Across Canada
Ex. #	PUB-39-9	11	11	11	"	11	11	Rate Shock in rate trajevtory
Ex. #	PUB-39-10	11	11	11	II	11	11	Carbon Leakage Problem
Ex. #	PUB-39-11	II	11	II	"	11	11	Effect of Proposed Hydro Rate Increase on MB Economy
Ex. #	PUB-40			ties Boa 29, 201		V. Gar	dner	re: MGF Project Extension Request -
Ex. #	PUB-41			ies Boa Report			•	ties re Rule 13 Motion and CSI in 017
Ex. #	PUB-42	Boa	rd Coui	nsel's B	ook of	Docu	ment	s
Ex. #	PUB-42-1	п	11	11	11	11	"	Volume 1 - Corporate Overview

Ex. #	PUB-42-2	II	II	11	"	II	"	Volume 2 - Financiel Targets
Ex. #	PUB-42-3	11	11	11	11	11	"	Volume 3 - Credit and Debt and Financiel Expenses
Ex. #	PUB-42-4	"	"	II	II	II	11	Volume 4- Payment, Depreciation, Load Forecast
Ex. #	PUB-42-5	II .	11	11	11	11	11	Volume 5 - Cost of Service and Rate Design
Ex. #	PUB-42-5-1	"	11	II	II	II	11	Summary of Approved August 1, 2017 Rates
Ex. #	PUB-42-6	"	11	II	II	II	11	Volume 6 - Major New Capital Projects
Ex. #	PUB-43	PUB	letter	to BCol	M re Bu	udget \	/aria	nce - December 5, 2017
Ex. #	PUB-44	PUB	letter	to all pa	arties r	e Moti	ion 1	3 Moodys Report - December 5, 2017
Ex. #	PUB-45		letter 2017	to all p	arties r	e Moti	on 1	3 MGF Report Redactions - December
Ex. #	PUB-46	Publ	lic Utili	ities Bo	ard to	MGF -	Info	rmation Requests
	PUB-46 PUB-46-1	Pub	lic Utili	ities Bo	ard to	MGF -	Info	rmation Requests  Productivity in original GCC
							Info	
Ex. #	PUB-46-1	п	11	"	11	"	Info	Productivity in original GCC
Ex. #	PUB-46-1 PUB-46-2	11	"	11	"	11	Info	Productivity in original GCC  Construction Management Methods
Ex. #  Ex. #  Ex. #	PUB-46-1 PUB-46-2 PUB-46-3	"	"	11	11	11	Info	Productivity in original GCC  Construction Management Methods  Aboriginal Labour Availability
Ex. #  Ex. #  Ex. #	PUB-46-1 PUB-46-2 PUB-46-3 PUB-46-4	11	" "	"	11	11	Info	Productivity in original GCC  Construction Management Methods  Aboriginal Labour Availability  Trends and Delay Estimate
Ex. #  Ex. #  Ex. #  Ex. #	PUB-46-1  PUB-46-2  PUB-46-3  PUB-46-4  PUB-46-5	""	" "	" "	11 11	11	Info	Productivity in original GCC  Construction Management Methods  Aboriginal Labour Availability  Trends and Delay Estimate  risk related to geotechnical issues  management system for developing
Ex. #  Ex. #  Ex. #  Ex. #  Ex. #	PUB-46-1  PUB-46-2  PUB-46-3  PUB-46-4  PUB-46-5  PUB-46-6	11	" " "	11	11 11	11	Info	Productivity in original GCC  Construction Management Methods  Aboriginal Labour Availability  Trends and Delay Estimate  risk related to geotechnical issues  management system for developing cost estimates

Ex. #	PUB-46-9	II	II.	II	II	II	Concrete Productivity Factor
Ex. #	PUB-46-10	"	"	II	II	II	contract Management and cost control system
Ex. #	PUB-46-11	11	II	II	II	11	foreman to craft labour
Ex. #	PUB-46-12	"	"	II	II	II	self performing contractor
Ex. #	PUB-46-13	11	II .	II	ıı	II	mitigation measures
Ex. #	PUB-46-14	11	"	11	"	11	Order of Magnitude Estimate Range
Ex. #	PUB-46-15	"	II	11	II .	11	heightened levels of risk and recommend risk mitgation
Ex. #	PUB-46-16	"	II	II	II	II	conrete and earthworks productivity
Ex. #	PUB-46-17	II II	11	11	11	11	KCB Historicial coperative unit price
Ex. #	PUB-46-18	"	11	11	II	II	P75 contingency
Ex. #	PUB-46-19	"	II .	II	ıı .	II	Basis of Estimate
Ex. #	PUB-46-20	"	II .	11	11	11	Scope of work conclusion of forecast completion costs
Ex. #	PUB-46-21	"	11	11	11	11	Scope of Work Conclusion schedule estimates
Ex. #	PUB-46-22	"	11	11	11	II	Manitoab Minnesota Transmission Project
Ex. #	PUB-46-23	"	11	11	11	II	Bipole III applied to Manitoba - Minnestora Transmission
Ex. #	PUB-46-24	11	II.	II	II	II	page 132 higher than whose costs
Ex. #	PUB-46-25	II II	11	11	11	11	Great Northern Tramission Line
Ex. #	PUB-47			ties Boa on Requ		Daymarl	k Energy Advisors (Saskpower) -

				II	"	35- contract revenues from 1 day delay
PUB-47-2	II II	11	II.	"	II	36- Facilities Contruction Agreement - in-service date
PUB-47-3	II .	II	11	11	11	37 - MH 2016 Sales Evaluation
PUB-47-4	ıı	11	11	II	11	CSI-3 - Saskpower Report Page 23
PUB-47-5	ıı	11	II .	ıı	II .	CSI-4 - Saskpower Report Page 24
PUB-48						13 Motion CSI in Daymark Saskpower
PUB-49	PUB 16 2018	etter	to Cons	umers	Coalitio	on re Public Presentations dated January 5,
PUB-50	PUB-N	MGF (	KCB) In	format	ion Req	uests
PUB-50-1	"	11	II	11	II	PUB-46-5
PUB-50-2	"	11	11	11	11	PUB-46-6
PUB-50-3	"	11	11	ıı .	11	PUB-46-7
PUB-50-4	"	11	II	II	II	PUB-46-8
PUB-50-5	"	11	II .	11	II .	PUB-46-17
PUB-51	PUB I	etter	to all pa	artires	re: Rul 1	13 Motionn re CSI in MGF Rebuttal
	PUB-47-2 PUB-47-3 PUB-47-4 PUB-47-5 PUB-48 PUB-49 PUB-50 PUB-50-1 PUB-50-2 PUB-50-3 PUB-50-5 PUB-51	PUB-47-2  PUB-47-3  " PUB-47-4  " PUB-48  PUB-49  PUB-60  PUB-50  PUB-50  PUB-50-1  " PUB-50-2  " PUB-50-3  " PUB-50-5  " PUB-50-5  "	PUB-47-3 " " PUB-47-4 " " PUB-47-5 " " PUB-48 PUB letter Report dat PUB-49 PUB letter 2018 PUB-50 PUB-MGF ( PUB-50-1 " " PUB-50-2 " " PUB-50-3 " " PUB-50-4 " "	PUB-47-2  PUB-47-3  """"  PUB-47-4  """"  PUB-47-5  """"  PUB-48  PUB letter to all paragraph Report dated January  PUB-49  PUB-49  PUB-MGF (KCB) In  PUB-50-1  PUB-50-2  """  PUB-50-3  """  PUB-50-4  """  PUB-50-5  """  PUB-50-5	PUB-47-3  PUB-47-4  PUB-47-5  PUB-48  PUB letter to all partires Report dated January 3, 2  PUB-49  PUB-B-50  PUB-MGF (KCB) Informat  PUB-50-1  PUB-50-2  PUB-50-3  PUB-50-4  PUB-50-5  PUB-50-5  PUB-50-5	PUB-47-3  PUB-47-4  PUB-47-5  PUB-48  PUB letter to all partires re: Rule Report dated January 3, 2018  PUB-49  PUB-Better to Consumers Coalitic 2018  PUB-50  PUB-MGF (KCB) Information Required Pub-50-1  PUB-50-2  PUB-50-3  PUB-50-3  PUB-50-5  PUB-50-5  PUB-50-5  PUB-50-5





### **EXHIBIT LIST FOR**

### MANITOBA HYDRO 2017/18 & 2018/19 General Rate Application

February 16, 2018

## **Assembly of Manitoba Chiefs (AMC) Exhibits**

Ex. #	AMC-1	Assembly of Manitoba Chiefs letter re Manitoba Hydro's Interim Rate									
		Request dated July 14, 2017									
Ex. #	AMC-2	Assembly of Manitoba Chiefs' Budget Submission									
Ex. #	AMC-2-1	Attachment 1 - Issues List									
Ex. #	AMC-3	Assembly of Manitoba Chiefs' Reply to Manitoba Hydro's Comments on Proposed Intervener Budgets - July 24, 2017									
Ex. #	AMC-3-1	CV of Philip Raphals									
Ex. #	AMC-4	Assembly of Manitoba Chiefs (AMC) to Manitoba Hydro (MH) - Round 1 Information Requests									
Ex. #	AMC-4-1	AMC to MH - Round 1 Irs  Rate Increase - Customer Impacts - Residential Electric Customers									
Ex. #	AMC-4-2	" " " " Rate Increase - Customer Impacts - General Service Customers									
Ex. #	AMC-4-3	" " " " " Cumulative number of participating customers in First Nation Power Smart Program									
Ex. #	AMC-4-4	" " " " " Program enhancements - First Nations households affected by energy poverty									

Ex. #	AMC-4-5	ш	11	11	11	11	11	Indigenous & Northern Affairs Canada
								(INAC) - April 5, 2016 letter re jurisdiction over Manitoba Hydro Rates
Ex. #	AMC-4-6	"	11	11	II	II	"	2017 Residential Energy Use Survey (REUS)
Ex. #	AMC-4-7	"	"	II	II.	II	"	Bad debts expenses for electricity
Ex. #	AMC-4-8	"	"	11	ıı	"	"	Existing bill affordability programs for low-income customers
Ex. #	AMC-4-9	"	"	II	"	"	"	Estimates of Electricity costs by INAC
Ex. #	AMC-4-10	II	11	11	11	11	"	Affordable Energy Program - First Nations' participation
Ex. #	AMC-4-11	"	"	11	11	"	11	Bill Affordability - PRA report
Ex. #	AMC-4-12	11	"	"	II	11	11	Energy Poverty
Ex. #	AMC-4-13	"	"	II	11	II	11	Energy Poverty
Ex. #	AMC-4-14	II .	"	11	II	11	11	Proposal to direct a portion of incremental capital taxes & water rental fees - Keeyask Project
Ex. #	AMC-4-15	II	11	11	II	II	"	Status of Manitoba Hydro
Ex. #	AMC-4-16	II	11	11	II	II	11	Non-rate programs/interventions offered by Manitoba Hydro
Ex. #	AMC-4-17	II	11	11	II	II .	"	Neighbours Helping Neighbours
Ex. #	AMC-4-18	II .	11	11	II	11	11	Results of Collaborative Process - effectiveness for on-reserve First Nations households
Ex. #	AMC-4-19	"	II	11	11	11	11	Equivalent data for MH rate increases in constant (inflation-adjusted) dollars

Ex. #	AMC-4-20	"	II	11	II	11	11	Results of Collaborative Process - Profile of MH customers
Ex. #	AMC-4-21	11	11	II	II	11	11	Percent of on-reserve First Nations households sampled
Ex. #	AMC-4-22	III	11	11	11	11	"	Factors affecting energy consumption - analysis for on-reserve First Nations households
Ex. #	AMC-4-23	"	"	11	11	"	11	Bill affordability - Electricity consumption
Ex. #	AMC-4-24	11	11	II	11	11	11	Agreements with INAC establishing the "Social Process"
Ex. #	AMC-4-25	"	11	п	11	11	II	EIA program in paying utility bills
Ex. #	AMC-4-26	"	11	11	11	11	11	Latitude and average annual heating degree days for each First Nations community
Ex. #	AMC-4-27	"	11	11	11	11	"	Status of housing in First Nations communities
Ex. #	AMC-4-28	"	II	II	11	"	П	Factors in energy poverty and arrears among First Nations
Ex. #	AMC-4-29	"	11	II	11	11	11	Arrears in First Nations communities - Administrative (short-term) issues
Ex. #	AMC-4-30	"	II	II	II	11	"	Power Smart First Nations Program
Ex. #	AMC-4-31	11	II	11	11	11	11	Estimated impact of potential rate increases on customers
Ex. #	AMC-4-32	"	II	II	11	11	"	Household incomes on First Nations reserves
Ex. #	AMC-4-33	II	II	II	11	11	"	Excel versions of data used for Figures 7 & 8 of the PRA Report
Ex. #	AMC-4-34	II	11	11	11	11	11	Excel versions of data used on the impact of rate increases on energy burdens experiend by energy-poor and non-energy poor households

Ex. #	AMC-4-35	II	II	11	11	11	11	Impact of rate increase upon the proportion of LICO-125 households
Ex. #	AMC-4-36	"	11	11	11	11	II	Proportion of LICO-125 households with energy burdens exceeding 6%
Ex. #	AMC-4-37	11	II	11	11	II	11	Copies of the External Review of the AEP by Dunsky and Affordable Energy Program & Neighbours Helping Neighbours by Galbraith
Ex. #	AMC-4-38	"	"	11	11	11	11	Benefits and barriers to enrollment in the AEP
Ex. #	AMC-4-39	"	"	11	11	11	"	Current uptake of bill affordability programming
Ex. #	AMC-4-40	11	11	11	11	11	"	AEP program's current offering for electric baseboard heating customers
Ex. #	AMC-4-41	11	11	11	11	11	"	Percentage of on-reserve First Nations households considered as tenants
Ex. #	AMC-4-42	"	11	п	11	11	11	Reports by Ross (2014) and Kuczeck, Morrison, Barnlund, Chard & Galbraith (2015)
Ex. #	AMC-4-43	11	II	11	11	11	11	Estimated impact of bill affordability options on MH and its customers
Ex. #	AMC-4-44	"	II .	11	11	11	II	Bill affordability impact on Manitoba Hydro revenues
Ex. #	AMC-4-45	"	"	11	11	11	"	Bill affordability impact on Manitoba Hydro revenues
Ex. #	AMC-4-46	п	II	11	11	11	II	Bill affordability impact on Manitoba Hydro revenues
Ex. #	AMC-4-47	11	II	II	11	11	"	Fixed Credit Approach
Ex. #	AMC-4-48	11	II	11	11	11	II	Conservation Rates - Distribution of monthly billed kWh
Ex. #	AMC-4-49	11	II	11	11	11	"	Conservation Rates - Distribution of monthly billed kWh

Ex. #	AMC-4-50	11	11	11	11	11	11	Energy usage in MKO communities
	AIVIC-4-50							Energy usage in MKO communities
Ex. #	AMC-4-51	"	"	11	"	II	11	Percentage of electrically heated on- reserve First Nations households
Ex. #	AMC-4-52	"	"	11	11	"	11	Alternative Rate Design Proposal
Ex. #	AMC-4-53	11	"	11	11	II	11	Diesel General Service rate increase
Ex. #	AMC-4-54	III	II	11	11	11	11	Energy-effeciency & weatherization initiatives
Ex. #	AMC-4-55	"	11	11	11	"	11	Fair & equitable rates
Ex. #	AMC-4-56	III	II	11	11	11	11	General ratemaking principles - marginal costs
	4 A 4 C E	Lott	or hy A	ssembl	y of Ma	anitob	a Chie	efs in response to Manitoba Hydro's
Ex. #	AMC-5						ation	Requests - dated August 4, 2017
Ex. #	AMC-6	Aug <u>Asse</u>	ust 2, 2	2017 let	toba Cl	nform		Requests - dated August 4, 2017  to Manitoba Hydro (MH) - Round 2
		Aug <u>Asse</u>	ust 2, 2	2017 let of Mani	toba Cl	nform		
Ex. #	AMC-6	Asse Info	embly o	2017 let of Mani n Requ	toba Cl	nform	AMC)	to Manitoba Hydro (MH) - Round 2  data on-reserve FN Residentail
Ex. #	AMC-6 AMC-6-1	Asse Info	embly crmatio	2017 let of Mani n Requ	toba Clests	nform	AMC)	to Manitoba Hydro (MH) - Round 2  data on-reserve FN Residentail customers only
Ex. #  Ex. #	AMC-6-1 AMC-6-2	Asse Info	embly or rmatio	2017 let of Mani n Requi	toba Clests	nform	AMC)	to Manitoba Hydro (MH) - Round 2  data on-reserve FN Residentail customers only  table for each FN in provice for 2016  impediments to using Indian Status as
Ex. #  Ex. #  Ex. #	AMC-6-1 AMC-6-2 AMC-6-3	Aug Asse Info	embly or rmatio	of Mani	toba Clests	nform	" "	to Manitoba Hydro (MH) - Round 2  data on-reserve FN Residentail customers only  table for each FN in provice for 2016  impediments to using Indian Status as a criterion  tax treatment available to person with
Ex. #  Ex. #  Ex. #	AMC-6-1  AMC-6-2  AMC-6-3  AMC-6-4	Aug Asse Info	embly or rmatio	of Mani	toba Clests	nform	" " " " " " " " " " " " " " " " " " "	to Manitoba Hydro (MH) - Round 2  data on-reserve FN Residentail customers only  table for each FN in provice for 2016  impediments to using Indian Status as a criterion  tax treatment available to person with Indian Status under Indian Act  customers participaing in FN Power

Ex. #	AMC-6-8	11	"	II	11	"	11	AEP program available to Indigenous ratepayers
Ex. #	AMC-6-9	11	11	11	11	11	"	General Service customers in Indigenous communities, or covered
Ex. #	AMC-6-10	11	11	11	11	11	"	FN home meet all criteria to be eligible for insulation upgrades
Ex. #	AMC-6-11	11	11	11	11	11	"	Non-Electric apply to all 3 zones (urban, rural, Indigenous)
Ex. #	AMC-6-12	11	11	11	11	11	II	table for FN participants only
Ex. #	AMC-6-13	11	II	II	11	11	"	MH decididing in what order to offer programs to FN Communities
Ex. #	AMC-6-14	11	11	11	11	11	"	contribution from Band Counsil for paying MH Bills vs. non assistance
Ex. #	AMC-6-15	11	11	11	11	11	"	1/3 of all on-reserve FN households, spend 10% or more of total income on engery
Ex. #	AMC-6-16	11	11	11	11	11	"	explain FN owned service and infrastructure
Ex. #	AMC-6-17	11	11	11	11	11	"	simulation model used by PRA, how it models household on and off reserve
Ex. #	AMC-6-18	11	II	II	11	11	"	updated tables of PRA reports
Ex. #	AMC-6-19	11	11	11	11	11	II	members of Bill Affordability Working Group, other than MH and Government entities
Ex. #	AMC-6-20	"	11	II	11	11	11	weather-adjusted electricity twice as great for FN residential customers
Ex. #	AMC-6-21	11	11	11	11	11	"	FN in province, repairs
Ex. #	AMC-6-22	11	11	II	11	11	"	Indigenous Energy Advisors for each FN community
Ex. #	AMC-6-23	11	11	11	11	11	"	revisde table, PRA report
Ex. #	AMC-6-24	11	11	11	11	11	II	household income on FN reserve grow rate

Ex. #	AMC-6-25	п	"	11	11	11	II	formuals, of calculations used to produce figures in PRA figures 7-8
Ex. #	AMC-6-26	11	"	11	11	11	II	formuals, of calculations used to produce figures in PRA figures 9-10
Ex. #	AMC-6-27	п	11	11	11	11	II	updated Figure 1 account application of rate increase to fixed change
Ex. #	AMC-6-28	11	11	11	11	11	11	update Tables 1 and 2, application of rate increase to fixed change
Ex. #	AMC-6-29	11	11	11	11	11	11	lost revenues to MH various affordability measures
Ex. #	AMC-6-30	11	"	11	11	11	"	rate impacts on non-energy-poor residential customers
Ex. #	AMC-6-31	11	11	11	11	11	11	MH to access data on customer- specific basis all on-reserve FN
Ex. #	AMC-6-32	11	"	11	11	11	11	table for each FN in province regarding if gas is available
Ex. #	AMC-6-33	п	11	11	11	11	II	version of Figure 5 from on-reserve customers only
Ex. #	AMC-7	-						eneral Rate Application by Philip Centre
Ex. #	AMC-7-1	-				-		eneral Rate Application by Philip Centre Revised
Ex. #	AMC-8	AM	C to G/	AC Infor	matio	n Requ	ests	
Ex. #	AMC-8-1	11	"	11	11	11	11	Annual Income
Ex. #	AMC-8-2	11	"	11	11	11	II	Paul Chernick Testimony
Ex. #	AMC-9	Trut	h and	Reconci	liation	Comm	nision	l of Canada - Call to Action
Ex. #	AMC-10	Unit	ed Nat	tions De	clarati	on of F	Rights	s of Indigenous Peoples
Ex. #	AMC-11	AMO	C to M	H - Exec	utive P	anel V	Vritte	en Interrogation
								_

Ex. #	AMC-11-1	11 11	II	11	11	II	Action Plan/ Written Policy includes TRC Calls to Action
Ex. #	AMC-11-2	" "	11	11	11	II	Plan
Ex. #	AMC-11-3	11 11	П	II	II	"	MH Implement TRC Call to Action
Ex. #	AMC-11-4	11 11	П	II	II	"	redress Indigenous Peopls in accordance with UNDRIP
Ex. #	AMC-11-5	" "	11	11	11	II	budgetary impact of plans on Financial Position
Ex. #	AMC-12	Book of D	ocumen	ts - Re	venue	Requ	irement Panel
Ex. #	AMC-13	Senate Re	port On	-Reserv	re Hou	sing a	and Infrastructure
Ex. #	AMC-14	Philip Rap	hals Pre	sentati	on		
Ex. #	AMC-15	Senate Int	erim Re	port Oı	n-Rese	rve H	lousing Chanllanges and Sccuesses
Ex. #	AMC-16	AMC lette	r to all p	arties	re Lega	al Arg	rument - January 29, 2018
Ex. #	AMC-17	AMC Undo	ertaking	71 - El	ectrica	l Pow	ver and Control Act Newfoundland and
Ex. #	AMC-18	AMC Undo	ertaking	70 - Oı	ntario	Energ	gy and Poverty Tax Credit
Ex. #	AMC-19	AMC Undo	ertaking	69 - Fii	rst Nat	ion B	ill Assistance
Ex. #	AMC-20	Book of A	uthoritie	es - Clos	sing Su	bmis	ions
Ex. #	AMC-21	AMC Final	Writter	Subm	issions	i	
Ex. #	AMC-22	AMC Final	Submis	sions -	Preser	ntatio	on





### **EXHIBIT LIST FOR**

# MANITOBA HYDRO 2017/18 & 2018/19 General Rate Application

February 16, 2018

### **Business Council of Manitoba (BCoM) Exhibits**

Ex. #	BCoM-1	Sub 201		n re Ma	nitoba	Hydro	's Int	erim Rate Request (email dated July 12,
Ex. #	BCoM-2	Busi	iness C	ouncil c	of Man	itoba's	Inter	rvener Budget Submission
Ex. #	BCoM-3			ouncil c r 15, 20		itoba's	lette	r to PUB re Issues and Expert Evidence -
Ex. #	BCoM-4			ouncil c				ew and Vary Application re Intervener 17
Ex. #	BCoM-5	BCN	/I to Co	alition	(Simps	on/Co	mpto	on)
Ex. #	BCoM-5-1	11	11	11	11	11	11	Risk of credit downgrade of MH by DBRS
Ex. #	BCoM-5-2	11	"	11	11	11	11	Risk of Credit downgrade of MH by Moodys
Ex. #	BCoM-5-3	11	"	11	11	11	11	Risk of Credit downgrade of MH by Standard & Poor's
Ex. #	BCoM-5-4	ıı	11	11	11	11	II	Risk of Credit downgrade of MB by DBRS
Ex. #	BCoM-5-5	"	11	11	11	11	II	Risk of Credit downgrade of MB by Moodys
Ex. #	BCoM-5-6	11	11	11	11	11	11	Risk of Credit downgrade of MB by Standard & Poor's

Ex. #	BCoM-5-7	"	11	11	11	11	II	Credit Rating Reports
Ex. #	BCoM-5-8	п	11	11	11	11	"	DBRS statement
Ex. #	BCoM-5-9	II	11	11	11	11	11	Recover costs Increased rates
Ex. #	BCoM-5-10	II II	11	11	11	11	11	Debt financial burden re: cash flow
Ex. #	BCoM-5-11	ıı	11	11	11	11	"	Self Supporting Status
Ex. #	BCoM-5-12	II II	11	11	11	11	"	Standard and Poor statement
Ex. #	BCoM-5-13	ıı	11	11	11	11	"	MH debt load
Ex. #	BCoM-5-14	п	11	11	11	11	"	Gov support Utility in event of financial distress
Ex. #	BCoM-5-15	II II	11	11	11	11	II	Standard and Poor
Ex. #	BCoM-5-16	п	11	11	11	11	11	MH credit rating agencies
Ex. #	BCoM-5-17	11	11	11	11	11	II	credit rating downgrades, on rate increase
Ex. #	BCoM-5-18	II	11	11	11	11	II	Borrowing costs affect credit rating downtrades
Ex. #	BCoM-5-19	п	11	11	11	11	"	DBRS Combining MH debt with MB debt
Ex. #	BCoM-5-20	II II	11	11	11	11	11	Moody combining debt
Ex. #	BCoM-5-21	"	11	11	11	11	11	Sel supporting status contributing factor to downgrade
Ex. #	BCoM-5-22	п	11	11	11	11	II	Self Supporting Status increased borrowing costs
Ex. #	BCoM-5-23	ıı	11	11	11	II .	11	Debt/Equity ratio target

BCoM-5-24	II II	11	11	11	11	11	payind debt down and increasing rates
BCoM-5-25	"	11	11	11	11	11	Debt Situation
BCoM-5-26	"	11	11	11	11	ıı	Cash flow
BCoM-5-27	11	11	11	11	11	11	Cash flow change over 10 years
BCoM-5-28	"	11	II	11	11	11	Cash Flow with credit agencies
BCoM-5-29	"	11	11	11	11	ıı	Increase in borrowing costs
BCoM-5-30	11	11	11	11	11	"	Interest rate increase on cash flow
BCoM-5-31	"	11	11	11	11	11	Debt/Equity ratio compare to other utilities
BCoM-5-32	11	11	11	11	11	11	Rate Increase on Economy
BCoM-5-33	"	11	II	11	11	11	Job reduction
BCoM-5-34	11	11	11	11	11	ıı	economy and job impact on credit rating downgrade
BCoM-6	BCN	/I to M	IPUG (1	-32) In	forma	tion F	<u>l</u> Requests
BCoM-6-1	11	11	11	11	11	"	risk of credit downgrade
BCoM-6-2	"	11	11	11	11	ıı	risk of credit downgrade
BCoM-6-3	"	11	11	11	11	II	risk of credit downgrade
BCoM-6-4	"	11	11	11	11	ıı	risk of credit downgrade
BCoM-6-5	"	II .	11	11	11	11	risk of credit downgrade
	BCoM-5-25  BCoM-5-26  BCoM-5-27  BCoM-5-28  BCoM-5-30  BCoM-5-31  BCoM-5-31  BCoM-5-32  BCoM-5-34  BCoM-6-3  BCoM-6-1	BCOM-5-24  BCOM-5-25  BCOM-5-26  BCOM-5-27  BCOM-5-28  BCOM-5-29  BCOM-5-30  BCOM-5-31  BCOM-5-31  BCOM-5-32  BCOM-5-32  BCOM-6-3  BCOM-6-1  BCOM-6-1  BCOM-6-3  BCOM-6-4  " " " " " " " " " " " " " " " " " "	BCOM-5-24  BCOM-5-25 " " "  BCOM-5-26 " " "  BCOM-5-27 " " "  BCOM-5-28 " " "  BCOM-5-29 " " "  BCOM-5-30 " " "  BCOM-5-31 " " "  BCOM-5-32 " " "  BCOM-5-32 " " "  BCOM-5-34 " " "  BCOM-6-3 " " "  BCOM-6-3 " " "	BCOM-5-25 " " " " BCOM-5-26 " " " " " BCOM-5-27 " " " " BCOM-5-28 " " " " BCOM-5-29 " " " " BCOM-5-30 " " " " BCOM-5-31 " " " BCOM-5-31 " " " BCOM-5-32 " " " " BCOM-5-32 " " " " BCOM-5-34 " " " " BCOM-6-3 " " " " " BCOM-6-1 " " " " " BCOM-6-1 " " " " " BCOM-6-1 " " " " " BCOM-6-2 " " " " " " BCOM-6-2 " " " " " " BCOM-6-3 " " " " " " " BCOM-6-3 " " " " " " " " " " " " " " " " " " "	BCoM-5-25 " " " " " " " " BCoM-5-26 " " " " " " " " " BCoM-5-27 " " " " " " " " BCoM-5-28 " " " " " " " " BCoM-5-29 " " " " " " " " " BCoM-5-30 " " " " " " " " " BCoM-5-31 " " " " " " " " " " BCoM-5-32 " " " " " " " " " " BCoM-5-32 " " " " " " " " " " BCoM-5-33 " " " " " " " " " " " " " " BCoM-6-3 " " " " " " " " " " " " " " " " " " "	BCOM-5-25	BCOM-5-25

Ex. #	BCoM-6-6	"	11	II	11	11	II	risk of credit downgrade
Ex. #	BCoM-6-7	"	ıı .	II	II	11	11	Credit Ratings
Ex. #	BCoM-6-8	"	11	II	11	11	II	Credit Ratings
Ex. #	BCoM-6-9	11	11	11	11	11	"	Credit Rating downgrade
Ex. #	BCoM-6-10	ıı	11	11	11	11	11	Credit Rating downgrade
Ex. #	BCoM-6-11	ıı	11	11	11	11	11	Rate Increase on Credit rating
Ex. #	BCoM-6-12	ıı.	ıı .	II	II	11	11	Rate Increase on Credit rating
Ex. #	BCoM-6-13	ıı	ıı .	II	II.	11	11	Debt/Equity ration monitored
Ex. #	BCoM-6-14	ıı	ıı .	II	II.	11	11	Debt on structure and operations
Ex. #	BCoM-6-15	"	"	11	11	11	"	Financial Indicators monitored
Ex. #	BCoM-6-16	"	"	11	11	11	"	Paying down debt and increasing rates
Ex. #	BCoM-6-17	"	"	11	11	11	"	Credit downgrade risks
Ex. #	BCoM-6-18	ıı	11	11	11	11	"	Credit downgrade risks
Ex. #	BCoM-6-19	"	11	11	11	11	"	Credit downgrade risks
Ex. #	BCoM-6-20	ıı .	"	11	11	11	ıı	Credit downgrade risks
Ex. #	BCoM-6-21	"	"	II .	11	11	"	Credit downgrade risks
Ex. #	BCoM-6-23	ıı ı	ıı .	II	II .	11	"	Credit ratings

Ex. #	BCoM-6-24	"	11	11	11	11	"	Credit ratings
Ex. #	BCoM-6-25	"	II	"	II	11	11	Borrowing costs affect credit rating downtrades
Ex. #	BCoM-6-26	п	11	11	11	11	II	Credit Rating downgrades
Ex. #	BCoM-6-27	"	II.	11	11	"	11	Debt for credit rating
Ex. #	BCoM-6-28	II II	11	11	11	"	11	Debt for credit rating
Ex. #	BCoM-6-29	11	11	11	11	"	11	Debt/Equity ratio target
Ex. #	BCoM-6-30	ıı	II	11	11	11	11	Debt on structure and operations
Ex. #	BCoM-6-31	"	ıı .	11	11	"	II	Financial Indicators monitored
Ex. #	BCoM-6-32	"	II	II .	11	"	"	Debt payment and Increasing rate
Ex. #	BCoM-6-32 BCoM-7							Debt payment and Increasing rate to PUB dated November 23, 2017
		Busi	iness C	ouncil c	of Mani	itoba le	etter	
Ex. #	BCoM-7 BCoM-8	Busi	iness C	ouncil c	of Mani	itoba le	etter	to PUB dated November 23, 2017
Ex. #	BCoM-7 BCoM-8	Busi	iness C	ouncil c	of Mani of Man	itoba le	etter - <b>Dr.</b> '	to PUB dated November 23, 2017  Yatchew - Inforamtion Requests
Ex. #  Ex. #	BCoM-7 BCoM-8 BCoM-8-1	Busi	iness C	ouncil c	of Mani	itoba le	etter - Dr. '	to PUB dated November 23, 2017  Yatchew - Inforamtion Requests  MH Future earnings  Electric Operations Projected Operating Statement  reduced net earnings result in bond raters concluding MH no longer self-
Ex. #  Ex. #  Ex. #	BCoM-8  BCoM-8-1  BCoM-8-2	Busi "	iness C	ouncil c	of Mani	itoba le	etter	to PUB dated November 23, 2017  Yatchew - Inforamtion Requests  MH Future earnings  Electric Operations Projected Operating Statement  reduced net earnings result in bond
Ex. #  Ex. #  Ex. #	BCoM-8 BCoM-8-1 BCoM-8-2 BCoM-8-3	Busi	iness C	ouncil o	of Man	itoba k	etter	to PUB dated November 23, 2017  Yatchew - Inforamtion Requests  MH Future earnings  Electric Operations Projected Operating Statement  reduced net earnings result in bond raters concluding MH no longer self- supporting level of reduced net earnings, result in

Ex. #	BCoM-8-7	II	II .	II	11	П	borrowing costs exposed absolute dollar cost prescpective credit
Ex. #	BCoM-8-8	"	11	П	II	II	macroeconomic prescpective expected impact on MH or Prov MB credit downgrade
Ex. #	BCoM-8-9	"	II	II	II .	II	risk of credit downgrade for MH and MB
Ex. #	BCoM-8-10	11	II	II	II	11	credit downgrade increased or decreased





#### **EXHIBIT LIST FOR**

## MANITOBA HYDRO 2017/18 & 2018/19 General Rate Application

February 16, 2018

### CONSUMER ASSOCIATION OF CANADA (MANITOBA) and WINNIPEG HARVEST (COALITION)

Ex. #	CC-1	Consumer Coalition letter dated March 28, 2017 re Manitoba Hydro's March 24, 2017 letter
Ex. #	CC-2	Minimum Filing Requirements (MFRs) of the Consumer Coalition
Ex. #	CC-3	Coalition Letter re Manitoba Hydro's Interim Rate Application dated May 26, 2017
Ex. #	CC-3-1	Appendix A - An Interim Rate Addition Table
Ex. #	CC-3-2	Appendix B - Interim Rate Request
Ex. #	CC-4	"Rate Shock and Malleable Metrics: Avoiding an Unreasonable Rush to Judgment" - Submission of the Consumers Coalition re Interim Rate Request
Ex. #	CC-4-1	Revised July 17, 2017 - "Rate Shock and Malleable Metrics: Avoiding an Unreasonable Rush to Judgment" - Submission of the Consumers Coalition re Interim Rate Request
Ex. #	CC-4-2	Revised July 18, 2017 - "Rate Shock and Malleable Metrics: Avoiding an Unreasonable Rush to Judgment" - Submission of the Consumers Coalition re Interim Rate Request
Ex. #	CC-5	Budget Submission dated July 14, 2017
Ex. #	CC-5-1	Attachment A - Draft Budget and Workplan
Ex. #	CC-5-2	Attachment B - Issues List

Ex. #	CC-6	"Avoiding a Rate Shock Rush to Judgement" - Presentation by the Consumer Coalition - July 18, 2017									
Ex. #	CC-6-1	Revised "Avoiding a Rate Shock Rush to Judgement" - Presentation by the Consumer Coalition - July 18, 2017									
Ex. #	CC-7	Coalit	ion's	letter d	ated Ju	ıly 18,	, 2017 re Revised Interim Rate Submission				
Ex. #	CC-8	Coalit	ion r	e COSS I	Model	- July 2	20, 2017				
Ex. #	CC-9	Coalit July 2		-	se to M	lanitok	ba Hydro's comments on Interverner Budgets -				
Ex. #	CC-10	Consu Requ		s Coaliti	on (Co	alition)	n) to Manitoba Hydro - Round 1 Information				
Ex. #	CC-10-1	Coalit	tion to	o MH - f	Round	<u>1 lrs</u>	Ten year target - 75:25 equity ratio				
Ex. #	CC-10-2	11	11	11	"	II	" Need to improve equity level				
Ex. #	CC-10-3	11	11	11	11	II	" Uncertainty analysis - equity ratio results				
Ex. #	CC-10-4	II II	11	11	11	11	" Change in underlying assumptions				
Ex. #	CC-10-5	11	11	II .	11	11	" 2016 Financial Statement values - Property, Plant and Equipment				
Ex. #	CC-10-6	11	11	II	"	11	" Intangible Assets - Remaining Useful Life				
Ex. #	CC-10-7	п	"	II	II.	"	" Property, Plant and Equipment - Remaining Useful Life				
Ex. #	CC-10-8	11	II	II	"	11	" Full set of financial statements generation for each of the scenarios in Figure 4.4 - Key variable sensitivity impacts to MH16 retained earnings				
Ex. #	CC-10-9	II .	"	11	"	11	" Uncertainty analysis - Water flow variability				

Fv #	CC-10-10	11	11	11	11	11	" Uncertainty analysis - Export Revenue
Δλ. π	10 10						oncertainty analysis - Export Nevenue
Ex. #	CC-10-11	"	II	11	II	11	" Uncertainty analysis - equity ratio
Ex. #	CC-10-12	11	II .	11	11	11	" Uncertainty analysis - net debt
Ex. #	CC-10-13	"	11	11	II	11	" Uncertainty analysis - retained earnings
Ex. #	CC-10-14	"	"	II	II	11	" Uncertainty analysis - Interest coverage ratio & capital coverage ratio
Ex. #	CC-10-15	"	II	11	11	11	" Credibility of equity ratio plan
Ex. #	CC-10-16	"	II .	П	11	11	" Inadequacy of previous financial plans
Ex. #	CC-10-17	11	II .	11	11	П	" Corporate strategic plan and dashboard
Ex. #	CC-10-18	"	II	п	11	11	<ul><li>Manitoba Clean Environment Commission - Lake Winnipeg Regulation Report - Nelson</li><li>&amp; Churchill River systems</li></ul>
Ex. #	CC-10-18	11	11	П	11	11	" Debt Management Strategy
Ex. #	CC-10-19	"	11	11	11	II	" Debt Management Strategy - Interest rate information
Ex. #	CC-10-20	"	11	11	11	11	" Debt Management Strategy - Debt retirement
Ex. #	CC-10-21	"	II	11	11	11	" Debt Management Strategy
Ex. #	CC-10-22	"	II	11	"	II	" Lower Electric Load Forecast and Domestic Revenues
Ex. #	CC-10-23	"	11	II	II	II	" Manitoba Hydro Climate Change Report
	L						

Ex. #	CC-10-24	"	п	II	11	"	11	Electric Load Forecast 2016 - Prime drivers of growth
Ex. #	CC-10-25	II .	II	11	II	II	11	Electric Load Forecast 2016 - General Service Top Customers
Ex. #	CC-10-26	II .	11	11	II	II	11	Electric Load Forecast 2016 - Load Sensitivities and extreme events
Ex. #	CC-10-27	11	II	II	11	11	II	Load Forecast - Price Elasticities - Reasonableness of value estimated
Ex. #	CC-10-28	II	11	II	II	11	II	Load Forecast - Forecast of residential dwellings
Ex. #	CC-10-29	"	11	11	II .	11	"	2017 Energy Price Outlook
Ex. #	CC-10-30	11	II .	11	11	11	11	Load Forecast - GS Top Consumers Forecast - short term vs long term forecast
Ex. #	CC-10-31	11	II	II	11	II	11	Load Forecast - GS Top Consumers Forecast - major changes & effects
Ex. #	CC-10-32	11	11	11	11	11	11	Load Forecast - GS Top Consumers Forecast - Potential Large Industrial Loads Forecast
Ex. #	CC-10-33	II .	II	11	II	II	II	Load Forecast - GS Top Consumers Forecast - Potential Large Industrial Loads Forecast
Ex. #	CC-10-34	11	II	II	11	11	11	Economic Outlook - Changes in Outlook - Population Forecasts
Ex. #	CC-10-35	11	11	11	11	II	11	Load Forecast - Residential Customer Count - Basis for Forecast
Ex. #	CC-10-36	"	II	11	II .	II	II .	Load Forecast - Multiple Customer Sectors - Potential Distributed Generation
Ex. #	CC-10-37	"	п	11	II	11	II	Load Forecast - Adjustments made for IFF16
Ex. #	CC-10-38	11	п	II	11	11	II	Load Forecast - Load Forecast Uncertainty

Ex. #	CC-10-39	"	II	11	II	II	" Load Forecast - Definitions - Domestic Sales
Ex. #	CC-10-40	ıı	11	11	11	11	" Load Forecast - DSM and forecast savings
Ex. #	CC-10-41	11	II	II	11	11	" Load Forecast - Residential forecast - Input Assumptions and Methodology Used
Ex. #	CC-10-42	"	11	11	"	11	" Load Forecast - Residential - Changes from previous forecasts
Ex. #	CC-10-43	"	II	11	11	11	" Load Forecast - General Service Forecast - Forecast Methodology
Ex. #	CC-10-44	11	II	11	11	11	" Load Forecast - GS Mass Market - Changes from previous forecasts
Ex. #	CC-10-45	"	11	11	"	11	" Load Forecast - Top Consumers - Forecast methodology
Ex. #	CC-10-46	II .	11	11	"	11	" Load Forecast - Plug-in electric vehicles - changes in forecasts
Ex. #	CC-10-47	"	11	п	11	11	" DSM Metrics - Basis for Calculation
Ex. #	CC-10-48	11	II	П	п	11	" Load Forecast - DSM Savings
Ex. #	CC-10-49	ıı	11	11	"	11	" Load Forecast - Impact of DSM - Changes between IFFs
Ex. #	CC-10-50	"	II	П	"	11	" Supply and Demand Balance - System Firm Energy Demand and Resources - Impact of 2017 Load Forecast
Ex. #	CC-10-51	"	II	11	"	11	" Export Price Forecast Modelling
Ex. #	CC-10-52	11	11	11	11	11	" Export Price Forecast Modelling
Ex. #	CC-10-53	11	11	11	11	11	" Closures of coal facilities - delayed under the Trump Administration in MISO or SPP markets

Ex. #	CC-10-54	"	11	11	II	11	" Export Price Forecast - Capacity Prices
Ex. #	CC-10-55	11	п	11	"	11	" Export Price Forecast - Carbon Prices and Restrictions
Ex. #	CC-10-56	"	11	"	"	11	" Export Price Forecast
Ex. #	CC-10-57	п	11	11	"	11	" Consultant Export Price Forecasts
Ex. #	CC-10-58	11	11	"	"	11	" Approvals sought - interim rate orders
Ex. #	CC-10-59	ıı	II .	II .	"	11	" Regulatory deferral accounts
Ex. #	CC-10-60	11	"	11	II	11	" Deterioration in Financial Outlook
Ex. #	CC-10-61	11	II .	11	II	II	" Reason for a rate increase - need to complete Keeyask
Ex. #	CC-10-62	"	II	II	"	11	" Favourable water flows
Ex. #	CC-10-63	"	II .	II	"	"	" Favourable interest rates
Ex. #	CC-10-64	II	ıı	11	"	II	" Cash Flow for Sustaining and Reliability Projects
Ex. #	CC-10-65	"	11	II	"	"	" Interest Costs Calculation of Cash Flow
Ex. #	CC-10-66	11	"	п	11	11	" Cash Flow for Sustaining and Reliability Projects - Calculation of Cash Flow
Ex. #	CC-10-67	"	II .	П	II .	"	" Cash Flow for Sustaining and Reliability Projects - Calculation of Cash Flow
Ex. #	CC-10-68	"	11	II	II	11	" Cash Flow for Sustaining and Reliability Projects - Break Even Period/Requirement

Ex. #	CC-10-69	III	II	II	11	II	"	Alternative Cash Flow Calculation
Ex. #	CC-10-70	"	11	II .	11	11	"	Capital Expenditures in Calculation of Cash Flow
Ex. #	CC-10-71	11	11	11	II	П	11	Cash Flow for Keeyask
Ex. #	CC-10-72	II .	II	11	II	"	"	Need to improve equity level
Ex. #	CC-10-73	II	11	11	II	11	II	Forecast equity ratio
Ex. #	CC-10-74	"	II	II	II	II	11	Forecast cash flow surplus/deficit
Ex. #	CC-10-75	11	11	II	11	11	11	Comparison of net income from operations
Ex. #	CC-10-76	11	11	11	11	11	11	Economic outlook
Ex. #	CC-10-77	11	11	II .	II	II	"	Economic outlook
Ex. #	CC-10-78	"	II	II	II	11	II	Economic outlook
Ex. #	CC-10-79	"	11	11	II	II	11	Long Term Interest Rates
Ex. #	CC-10-80	"	II	11	II	п	"	Bank of Canada interest rates
Ex. #	CC-10-81	"	11	11	II	11	"	Committed Resource assumptions
Ex. #	CC-10-82	"	II	II	II .	11	"	Actual/forecast financial statements 2016/17

Ex. #	CC-10-83	11	11	II .	II	II	"	Other revenue
Ex. #	CC-10-84	"	11	11	11	II .	"	Recent outlook for 2016/17 Other revenue
LX. #	CC-10-84							Necent outlook for 2010/17 Other revenue
Ex. #	CC-10-85	11	II .	11	п	II	"	IFRS vs CGAAP
Ex. #	CC-10-86	"	II	11	II .	11	"	Water rentals
Ex. #	CC-10-87	"	"	11	11	11	II	Fuel and Power purchased costs
Ex. #	CC-10-88	"	II	П	11	II	"	Fuel and Power purchased costs
Ex. #	CC-10-89	"	II	11	11	11	"	Transmission charges
Ex. #	CC-10-90	11	II .	II	11	II .	"	Power purchased
Ex. #	CC-10-91	II	11	11	II	II	II	Capital taxes
Ex. #	CC-10-92	"	II	II	II	II .	11	Other expense under CGAAP
Ex. #	CC-10-93	"	11	11	11	11	11	Other expense under CGAAP
Ex. #	CC-10-94	11	II	II .	11	"	11	Projected financial statement
Ex. #	CC-10-95	"	11	11	11	II .	11	Regulatory deferral accounts
Ex. #	CC-10-96	"	11	11	11	II	"	Long term debt and net debt values
Ex. #	CC-10-97	11	II .	II	II	II .	"	Weighted average interest rate

Ex. #	CC-10-98	l"	11	11	11	11	"	Export Revenue
Ex. #	CC-10-99	11	11	II	11	11	11	Mix of exports
Ex. #	CC-10-100	11	11	11	11	11	II.	Export Revenue
Ex. #	CC-10-101	11	11	11	II	11	11	PUB MFR 83
Ex. #	CC-10-102	11	"	11	11	"	ш	Average unit revenue/cost schedule
Ex. #	CC-10-103	II .	11	11	11	11	11	Merchant purchases
Ex. #	CC-10-104	11	11	"	II	"	ıı.	Additions to Regulatory deferral accounts
Ex. #	CC-10-105	11	II .	11	II	"	"	Conawapa costs
Ex. #	CC-10-106	11	11	II	II	"	11	MIPUG MFR 5 - IFF16 Updates
Ex. #	CC-10-107	11	11	11	11	11	11	Supply chain management initiatives
Ex. #	CC-10-108	"	11	11	11	11	II.	Asset management strategies and supply
								chain management initiatives
Ex. #	CC-10-109	"	11	11	11	11	II.	EFT information
Ex. #	CC-10-110	"	11	11	11	11	II.	EFT information
Ex. #	CC-10-111	"	11	11	II	11	"	Voluntary Departure Program
Ex. #	CC-10-112	"	11	II	11	11	"	External costs to the Boston Consulting
								Group's engagement
Ex. #	CC-10-113	11	11	II	11	11	11	Hydro One's 2018-2022 Distribution Rate
								Application
		1						

Ex. #	CC-10-114	11	11	11	II	11	" Compensation paid to executives
Ex. #	CC-10-115	III	11	11	11	11	" Hay Consulting
Ex. #	CC-10-116	III	11	"	II	II	" Post 2018/19 Operating & Administative Expense forecast
Ex. #	CC-10-117	"	11	II	II	11	" Reserve margin
Ex. #	CC-10-118	ıı	11	11	11	11	" Rate making objectives
Ex. #	CC-10-119	11	11	II .	II .	11	" Maximum bill impacts
Ex. #	CC-10-120	ıı	11	11	11	11	" Case equity scenario
Ex. #	CC-10-121	II II	11	11	11	11	" Energy poverty based on common use
Ex. #	CC-10-122	11	11	11	"	11	" Logit regressions - energy poverty
Ex. #	CC-10-123	ıı	11	11	11	11	" Low income energy efficiency and weatherization initiatives
Ex. #	CC-10-124	II	"	11	11	11	" Neighbours Helping Neighbours
Ex. #	CC-10-125	ıı	11	11	II	11	" Affordable Energy/Bill Affordability Advisory Committee
Ex. #	CC-10-126	"	11	11	11	11	" Equal Payment Plan
Ex. #	CC-10-127	n n	"	11	11	11	" Bill payment/matching program
Ex. #	CC-10-128	"	11	11	11	11	" 2016/17 Annual Report - Affordable Energy Fund
Ex. #	CC-10-129	III	11	11	II	11	" Affordable Energy Fund
Ex. #	CC-10-130	п	11	11	11	11	" Residential Electric Heating customers

Ex. #	CC-10-131	li	11	II	II .	"	" Conservation rates
Ex. #	CC-10-132	"	11	11	II .	"	" DSM Supplemental Report
Ex. #	CC-10-133	"	11	11	II	II	" SCC Costs in evaluating DSM and other resources program
Ex. #	CC-10-134	"	11	II	II	11	" GS Small and Medium customers
Ex. #	CC-10-135	11	11	11	ıı	"	" 150W LED rates
Ex. #	CC-10-136	"	11	II	II .	"	" Sentinel metered rates
Ex. #	CC-10-137	"	II	II	11	"	" Limited Use of Billing Demand Report
Ex. #	CC-10-138	"	II	II	11	11	" Depreciation
Ex. #	CC-10-139	"	II	II	11	11	" Deferral Account
Ex. #	CC-10-140	"	11	11	11	II .	" Settlement Agreements
Ex. #	CC-10-141	11	11	II .	II	11	" Independent Benchmark
Ex. #	CC-10-142	"	11	II .	II	II	" Electric Business Operations Capital
Ex. #	CC-10-143	"	11	11	II	II	" Annual Spending Forecast
Ex. #	CC-10-144	"	11	11	11	II .	" Forecast Capital Spending
Ex. #	CC-10-145	"	11	11	11	II .	" 20 year outlook of capital expenditures
Ex. #	CC-10-146	11	II	II .	II	II	<ul><li>Business Operations capital spending 2018- 2027</li></ul>

F #	66 10 117	lıı	11	11		11	" Diasal CS in Las Prochet
Ex. #	CC-10-147						" Diesel GS in Lac Brochet
Ex. #	CC-10-148	11	11	11	11	11	" SAIDI and SAIFI forecasts
		"	11	11			
Ex. #	CC-10-149	"	"	"	"	"	" UMS Group's engagement
Ex. #	CC-10-150	11	п	II	"	п	" Decision-making criteria for asset
							replacement
Ex. #	CC-10-151	III	II	II	"	II	" CIJ/CPJ - Other investment
Ex. #	CC-10-152	11	11	11	11	11	" Investment categories in Capital
LX. 11	CC 10 132						Expenditures Table
							Experience residence
Ex. #	CC-10-153	11	11	11	11	II	" Business Operations capital targets
- "	66.40.454	"	"	11			" Capital planning process and assumptions
Ex. #	CC-10-154	"					" Capital planning process and assumptions
Ex. #	CC-10-155	11	11	11	11	п	" Business Operations Support capital
							expenditures
Ex. #	CC-10-156	ll	II	II	"	II	" Capital spending related to system load
							capacity
Ex. #	CC-10-157	II	II .	II	11	п	" System Load Capacity project
LX. 11	CC 10 137						System Load Capacity project
Ex. #	CC-10-158	II .	11	11	"	II	" Capacity & Growth project, with hot spots
Ex. #	CC-10-159	ıı	11	11	11	11	" Growth in Number of Customers by Class
EX. #	CC-10-159						Growth in Number of Customers by Class
Ex. #	CC-10-160	"	11	11	11	п	" status update on Kinectrics work
							•
Ex. #	CC-10-161	"	"	"	11	"	" Asset Condition Assessment Audit,
							Kinectrics, May 12, 2016, for each asset
Ex. #	CC-10-162	"	11	11	11	11	" MH Electrical Infrastructure Condition
L^. #	CC-10-102						Assessment Summary Report
							Assessment summary report
	•						

Ex. #	CC-10-163	II	"	11	11	II	" Flagged for Auction Plan
Ex. #	CC-10-164	11	11	"	11	"	" Rationale for replacement criteria
EX. II	00 10 10 1						nationale for replacement enteria
Ex. #	CC-10-165	"	11	11	11	11	" Age Limiter defined by Age Limiter Curve
Ex. #	CC-10-166	ıı	II	II .	"	11	" Functional Failure curve
Ex. #	CC-10-167	"	II	· ·	"	II	" Major System Renewal Projects
Ex. #	CC-10-168	ıı ı	II	II .	II .	II	" Risk Assessment study, forced outages
Ex. #	CC-10-169	ıı ı	II	II .	II .	II	" consequence costs will reduce with Bipole
							III
Ex. #	CC-10-170	"	II	II .	II	11	11
							Risk Assessment study, Pine Falls Units
Ex. #	CC-10-171	11	П	11	11	11	" failure probability and impact Dorsey HVD0
LX. II	CC 10 171						Synchronous Condenser refurbishment
Ex. #	CC-10-172	11	11	11	11	11	" safety and aging infrastructure conerns of
LX. 11	00 10 172						King Station
Ex. #	CC-10-173	11	11	11	11	11	" Capital Planning assumption
	00 10 175						capital Hamming assumption
Ex. #	CC-10-174	"	11	"	11	11	" CIJ/CPJ all 2017-2018 projects
Ex. #	CC-10-175	ıı	11	II .	11	11	" Portfolio Adjuestments for MH's capital
							ependitures
Ex. #	CC-10-176	11	11	11	11	11	" MH Assumptoin/expectation impact of
							large scale asset replacement maintenace
Fv. #	CC-10-177	"		"	11	"	" Asset Management partises at MH
Ex. #	CC-10-1//						" Asset Management partices at MH
Ex. #	CC-10-178	11	11	"	11	11	" UMS assessment for subcomponent within
LA. #	CC-10-170						ten AM domains

Ex. #	CC-10-179	li	11	ıı	11	11	" Policy, Strategy and Objectives Documents
Ex. #	CC-10-180	II II	II .	н	II	11	" Asset Management competency level
Ex. #	CC-10-181	"	11	11	11	11	" Asset Management Roadmap/Strategies developed by the Business Unit
Ex. #	CC-10-182	"	"	11	"	11	" Asset Management improvement plan
Ex. #	CC-10-183	"	11	11	11	11	" Asset Management Practice
Ex. #	CC-10-184	III	II .	11	II	11	" portion of operating expenditures directed at servicing
Ex. #	CC-10-185	11	II	11	II	11	" MH capital planning, implementation and cost allocation practices
Ex. #	CC-10-186	11	II	п	11	11	" MH effects to optimize the allocatin of labour force across planned capital
Ex. #	CC-10-187	"	11	II	11	11	" MH decision-making assumpotions underlaying asset replacement strategies
Ex. #	CC-10-188	ıı	11	II	11	11	" Consequence categories
Ex. #	CC-10-189	11	"	11	"	11	" Asset Management planning assumptions
Ex. #	CC-10-190	III	II	п	11	11	" Replacement capital budget and year of replacment
Ex. #	CC-10-191	11	II	11	"	11	" Slave Falls project Asset Management planning assumptions
Ex. #	CC-10-192	11	II .	"	II	11	" planned schedule for HVDC BP2 Value Hall Wall Bushing replacement
Ex. #	CC-10-193	"	II .	11	ıı	II	" Capital Budget planning assumptions
Ex. #	CC-10-194	11	11	II	11	11	" Assumptions underlaying the model

Ex. #	CC-10-195	II	11	ıı .	11	11	" RCM analysis to date
Ex. #	CC-10-196	ıı .	II	11	II .	11	" Asset Investment Planning software
Ex. #	CC-10-197	II II	п	п	п	II	" Assess MH utilization of copperleaf software for capital program planning
Ex. #	CC-10-198	ıı	11	11	11	II	" MH capital budget planning assumptions
Ex. #	CC-10-199	II	II	11	"	11	" Assess effectiveness and efficiency of MH supply chain function
Ex. #	CC-10-200	"	II	п	"	11	" Assess MH capital budget planning assumptions
Ex. #	CC-10-201	11	II	11	II	II	" Assess scope and nature of anticipated changes to MH asset Management practices
Ex. #	CC-10-202	II	11	II	"	11	" understand Asset Management objectives
Ex. #	CC-10-203	11	II	"	II	II	" undestand current asset management pratices
Ex. #	CC-10-204	II .	II	11	"	11	" Process of setting target level of capital expenditures
Ex. #	CC-10-205	ıı	"	п	11	11	" Population risk is forecasted
Ex. #	CC-10-206	II	II	11	"	11	" Keeyask project full and complete analysis and understanding
Ex. #	CC-10-207	"	II	п	II	II	" review new revised costs/dates for Keeyask project considered
Ex. #	CC-10-208	II	11	11	11	11	" Keeyask Recovery Plan, improved cost/schedule performance Keeyask Gerneration Project
Ex. #	CC-10-209	ıı	II	11	II	II	" Bipole III Reliability Project contact management arrangement
Ex. #	CC-10-210	"	II	п	"	11	" Bipole III project full and complete analysis and understanding

Ex. #	CC-10-211	III	11	п	"	II	" Manitoba-Minnesota Transmission Project full and complete analysis and understanding
Ex. #	CC-10-212	"	п	II	II	11	" Saskatchewan commences in 2020/21
Ex. #	CC-10-213	"	11	II	"	11	" unredacted version of latest CPJ/CIJ Manitoba-Saskatchewan Tranmission
Ex. #	CC-10-214	п	11	11	11	II	" scope and nature of applicant's efforts to justify re-evaluate Keeyask and Bipole III
Ex. #	CC-10-215	11	П	II	"	11	" planning processes BCG review
Ex. #	CC-10-216	ıı	11	11	"	II	" role of ZOR in light of Order 164/16
Ex. #	CC-10-217	ıı	11	п	п	11	" other factors considered besides results of Cost of Service Study
Ex. #	CC-10-218	11	11	II	11	11	" reconcile Compliance filing with Board Order 164/16
Ex. #	CC-10-219	"	11	II	"	11	" compliance filing Average Rate Base for Sub Transmission
Ex. #	CC-10-220	11	11	II	"	11	" Average Rate Base for Distribution has increased slightly
Ex. #	CC-10-221	11	11	II	"	11	" basis for allocating Common Costs
Ex. #	CC-10-222	"	п	II	11	11	" test the appropriateness of allocator used for EMS.SCDA portion Communications
Ex. #	CC-10-223	"	11	II	"	11	" understanding basis for allocating common costs
Ex. #	CC-10-224	11	11	II .	11	11	" understanding basis for allocating common costs
Ex. #	CC-10-225	11	11	II	11	11	" understanding basis for allocating common costs
Ex. #	CC-10-226	11	11	II	11	11	" understanding allocation factor used for Net Export Revenue

Ex. #	CC-10-227	II II	II	"	П	II	" clarify treatment of distribution service costs
Ex. #	CC-10-228	"	11	II	"	11	" undestand basis for Meter Investment weighting factors
Ex. #	CC-10-229	"	11	11	11	11	" Reconcile Revenue Requirement components with cost categories used in Cost of Service
Ex. #	CC-10-230	11	11	II	11	II	<ul> <li>clarify appropriate starting point for adjustments</li> </ul>
Ex. #	CC-10-231	II .	П	11	П	II	" clarify the Revenue Reconciliation adjustments included in Cost of Service Study
Ex. #	CC-10-232	III	"	II	11	"	" clarify treatment of other Revenue
Ex. #	CC-10-233	ıı ı	11	11	"	II	" clarify Treatment of Capital and other Tax
Ex. #	CC-10-234	ıı ı	11	11	II	II	" understand Cost of Service treatment of Corporate Allocation
Ex. #	CC-10-235	11	11	II	11	11	" understannd treatment of Net Movement in Regulatory Deferrals
Ex. #	CC-10-236	"	11	II	11	II	" complete COSS analysis and clarify portential misunderstandings
Ex. #	CC-10-237	11	11	II	11	II	" understand derivation of Operating Costs used to functionalize Buildings, Gereral Equipment and Communications
Ex. #	CC-10-238	"	11	II	"	11	" understand basis for sub-functionalization of costs
Ex. #	CC-10-239	II	П	II .	11	II	" understand basis for functionalization of Communications and Control Systems cos
Ex. #	CC-10-240	"	П	II	11	II	" understand how SEP costs are established
Ex. #	CC-10-241	"	11	II .	11	11	" determine how MH addressed issue of MISO fees as noted in PUB's April 3, 2017 letter
Ex. #	CC-10-242	"	11	II	11	11	" understand treatment of Wind and Water Rental costs

Ex. #	CC-10-243	II.	"	11	11	11	11	understand the functionalization of Common Costs
Ex. #	CC-10-244	"	II	11	11	11	11	determine MH response to Board's Directives from Order 164/16
Ex. #	CC-10-245	11	II	11	II	11	11	understand Manitoba Hydro's functionalization of facilities
Ex. #	CC-10-246	11	II.	11	11	11	11	understand MH Functionalization of these costs
Ex. #	CC-10-247	"	"	11	11	11	II	understand MH allocation of Customer Service Costs
Ex. #	CC-10-248	"	II	11	11	11	11	Understand MH allocation of Services costs
Ex. #	CC-10-249	"	11	11	11	11	11	MH plans for future study
Ex. #	CC-11							uncil of Manitoba re Request for Information
		on P	ropose	ed Evide	ence - 3	septen	ibei .	18, 2017
Ex. #	CC-12							ydro - Round 2 Information Requests
	CC-12 CC-12-1							
Ex. #		Con	sumers	s Coaliti	on to N	Manito	ba H	ydro - Round 2 Information Requests
Ex. #	CC-12-1	Con	sumers	s Coaliti	on to N	Manito "	ba H	ydro - Round 2 Information Requests  20 year information for MIPUG
Ex. #  Ex. #	CC-12-1 CC-12-2	Con	sumers	s Coaliti	on to N	Manito "	ba H	ydro - Round 2 Information Requests  20 year information for MIPUG  full raw output for 918 model  Electric Operations Project Operating
Ex. #  Ex. #  Ex. #	CC-12-1 CC-12-2 CC-12-3	Cons	sumers	s Coaliti	on to N	Manito	ba H	ydro - Round 2 Information Requests  20 year information for MIPUG  full raw output for 918 model  Electric Operations Project Operating statement 104 Water flow  Electric Operations Project Operating
Ex. #  Ex. #  Ex. #	CC-12-1 CC-12-2 CC-12-3	Cons	sumers	" "	" "	Manito	ba H	ydro - Round 2 Information Requests  20 year information for MIPUG  full raw output for 918 model  Electric Operations Project Operating statement 104 Water flow  Electric Operations Project Operating statement 102 Water flow  calculations and modeling results if domestic rates increases allowed from

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Ex. #	CC-12-8	II	"	II	II	11	" Assuming climate change, affecting trent and variability of streamflow over time
Ex. #	CC-12-9	11	11	11	11	11	" price growth contributor to load growth
Ex. #	CC-12-10	П	11	11	11	11	" reasonablity of residential forecast
Ex. #	CC-12-11	п	11	11	11	11	" historical proportions of dwellings, by type and area
Ex. #	CC-12-12	11	11	11	11	11	" Energy prices used as inputs to load forecast
Ex. #	CC-12-13	11	11	11	"	11	" impacts in two sectors result one increasing and other decreasing
Ex. #	CC-12-14	11	II	11	11	11	" basis for impact of changes in determiantion of PLIL
Ex. #	CC-12-15	П	11	11	11	11	" clarify the impact of changes in approach t determining PLIL
Ex. #	CC-12-16	11	11	11	11	11	" understand basis for MH decision that premium was not appropriate at this time for long term planning purposes
Ex. #	CC-12-17	II	11	11	11	11	" response to initial information request
Ex. #	CC-12-18	11	II	11	"	11	" implication of not allowing balances to be amortized
Ex. #	CC-12-19	11	11	11	11	11	" understand implications of MH regulatory accounting assumptions
Ex. #	CC-12-20	11	11	"	11	11	" clarify financial forecasts used in response
Ex. #	CC-12-21	11	11	11	"	11	" understand implications of Voluntary Departure Program
Ex. #	CC-12-22	11	II	II	11	11	" implication of actual capital spending in- service additions for 2016/17

Ex. #	CC-12-23	11	"	11	II	II	" understand consequences of approved Aug 1, 2017 interim rate increase
Ex. #	CC-12-24	11	11	11	"	11	" calrify basis for cash clow calculation
Ex. #	CC-12-25	11	II	II	II	11	" understand how forecast load requirements used determining investment needs aligns with overall load forecast
Ex. #	CC-12-26	11	II	11	11	11	" clarify categories of customers used in response
Ex. #	CC-12-27	11	11	11	11	11	" clarify basis for deriving marginal costs and portention variation by TOU
Ex. #	CC-12-28	11	11	11	11	11	" Clarify relevant PCOSS18 results for use in rate design
Ex. #	CC-12-29	11	II	11	II	11	" undestand how items captured in Net Movement are functionalized
Ex. #	CC-12-30	11	П	11	II	11	" reconcile values reported in response
Ex. #	CC-12-31	11	II	11	II	11	" understand change in treatment of Buildings and General Equipment with respect to Diesel
Ex. #	CC-12-32	11	П	11	II	11	" Clarify basis for tables presented in response
Ex. #	CC-12-33	11	П	11	II	11	" Clarify applicability of principle cited in question to non-TOU circumstances
Ex. #	CC-12-34	11	II	11	II	11	" Clarify basis for transmission component of marginal costs
Ex. #	CC-12-35	11	II	11	II	11	" Clarify basis for distribution component of marginal costs
Ex. #	CC-12-36	11	II	11	II	11	" Clarify basis for labour allocator used in PCOSS18
Ex. #	CC-12-37	11	П	11	II	11	" Clarify basis for determination of System Load Factor as used in PCOSS18

Ex. #	CC-12-38	11	11	11	11	11	" Clarify cash flow calculations provided in response
Ex. #	CC-12-39	11	11	11	"	11	" Understand financial implication of load shifting due to TOU rates
Ex. #	CC-12-40	11	11	11	"	11	" Clarify circumstances under MH oversees work near eletric plant
Ex. #	CC-12-41	11	П	11	11	11	" understand likelihood of risk indetified in response
Ex. #	CC-12-42	11	П	11	11	11	" update change in financial outlook from MH14
Ex. #	CC-12-43	11	П	11	11	11	" Treatment bolumes associated with Merchant Sales
Ex. #	CC-12-44	11	11	11	11	11	" scatter diagram with annual hydro bill percentage of income
Ex. #	CC-12-45	11	11	11	II	11	" basis for evaluating DSM and generation resource options
Ex. #	CC-12-46	11	11	11	11	11	" determine appropriateness of propsed rates
Ex. #	CC-12-47	11	11	11	11	11	" Clarify basis for results of benchmarking study prepared in BCG
Ex. #	CC-12-48	11	II	11	11	11	" change in forecast capital spending and in- service additions
Ex. #	CC-12-49	11	11	11	"	11	" Business Operations Capital
Ex. #	CC-12-50	11	II	11	II	11	" annual Business Operations Capital spending for 2027/28 through 2033/34
Ex. #	CC-12-51	11	11	11	11	11	" reconcile 2016/17 capital contribution
Ex. #	CC-12-52	11	П	11	II	11	" Keeyask project not possible has Bipole III not been committed to

Ex. #	CC-12-53	11	11	II	II	11	<ul><li>basis for determining probability of failure</li><li>v. consequences of failure</li></ul>
Ex. #	CC-12-54	11	11	11	11	11	" gain clarification on incremental evidence provided by applicant
Ex. #	CC-12-55	11	11	11	II	11	" clarify use of asset age in determining asset replacement
Ex. #	CC-12-56	11	11	п	11	11	" understand the effect of the re- prioritization process discussed in response
Ex. #	CC-12-57	11	11	п	11	11	" clarification on incremental evidence provided by applicant
Ex. #	CC-12-58	11	11	п	11	11	" Capital and Operating savings, forecast savings
Ex. #	CC-12-59	11	п	11	II	11	" incremental evidence provided by applicant
Ex. #	CC-12-60	11	П	11	II	II	" increase/decrease spending outlook over the years
Ex. #	CC-12-61	11	П	11	11	II	" System Capacity Process
Ex. #	CC-12-62	11	11	п	II	11	" Capacity Planning Process
Ex. #	CC-12-63	11	11	11	11	11	" Incremental evidence provided by Application CEMI/CELID
Ex. #	CC-12-64	11	II	11	II	II	" further detail on incremental evidence provided by applicant
Ex. #	CC-12-65	11	II	II	II	II	" Methodology used to estimate the portfolio adjustment forecast values for the test year
Ex. #	CC-12-66	11	П	II	II	11	" formal mandate, objectives, timelines and milestones for division over following 3 years
Ex. #	CC-12-67	11	II	11	11	11	" correspondence between MH and UMS

Ex. #	CC-12-68	II	II	11	II	11	" Summary Report on Current Maintenace Plan
Ex. #	CC-12-69	II	11	11	II	II	" itemized breakdown of Other category for Pointe Du Bois Spillway and Riel 230/500 KV Station
Ex. #	CC-12-70	II	11	11	"	II	" MH attempted to quantify magnitude of avoided costs
Ex. #	CC-12-71	11	11	11	"	II.	" Keeyask Project complete analysis and understanding of project
Ex. #	CC-12-72	II	II	II	II	"	<ul> <li>expect Keeyask Recovery Plan result in improved cost/schedule performances for Generation Project</li> </ul>
Ex. #	CC-12-73	11	11	11	11	11	" Bipole Project complete analysis and understanding of project
Ex. #	CC-12-74	11	11	11	11	11	" Gas Generation Service evaluated alternative to Keeyask and Bipole III
Ex. #	CC-12-75	11	11	11	11	11	" Major Project Business Unit associated with Generation or Tranmission using MH SAP
Ex. #	CC-12-76	11	11	11	11	11	" Other Revenue, Other Expenses and Corporate Allocation are functionalized
Ex. #	CC-12-77	II	11	11	11	II	" nature of direction or conclussion from the PUB
Ex. #	CC-12-78	II	"	11	II	II	" readily know which of the illustrative rates would apply to them
Ex. #	CC-12-79	11	11	11	"	II.	" Residential Diesel customers considered Basic Standard
Ex. #	CC-12-80	11	11	11	11	11	" MH use of Eletric Heat Billed classification
Ex. #	CC-12-81	11	11	11	11	11	" load profiles for Eletric Heat Billed and Non Heat Billed customers
Ex. #	CC-12-82	11	11	11	II	II.	" why necessary to achieve revenue for class as a whole

Ex. #	CC-12-83	11	"	11	11	11	11	Electric Billed Customers and Non Heat Billed Customers, of Figure 5
Ex. #	CC-12-84	11	11	11	11	11	11	Mertis of illustrative rate design set out by MH
Ex. #	CC-12-85	11	II	11	II	11	"	Implications/Impact of removal of URA from COSS Study on Residential rates
Ex. #	CC-12-86	11	II .	II	II	11	"	basis for 2 % as increase energy charge for Non Heat Billed customers
Ex. #	CC-12-87	11	"	II	11	11	11	need for COSS revisions
Ex. #	CC-12-88	11	II	11	II	11	11	how bills assigned to each of four seasons for purposes of responding
Ex. #	CC-12-89	11	II	п	II	11	"	heating requirements vary across Manitoba residential customers
Ex. #	CC-13							osed Scope of Work for the Independent PUB - September 22, 2017
Ex. #	CC-14			s Coaliti eptemb			to M	anitoba Hydro's September 7, 2017 CSI
Ex. #	CC-14-1	Appe	ndice	s to Cor	nsumer	s Coal	ition	CSI Motion response
Ex. #	CC-15	Cons	umers	s Coaliti	on re R	Revised	l Bud	lget for Dr. Gotham - September 26, 2017
Ex. #	CC-15-1	Revis	ed Bu	idget an	ıd Wor	kplan 1	for D	r. Gotham - Blackline
Ex. #	CC-15-2	Revis	ed Bu	idget an	ıd Wor	kplan 1	for D	r. Gotham - Clean
Ex. #	CC-16	Lette Evide		n Coaliti	on dat	ed Oct	ober	31, 2017 re Filing of Consumers Coalition
Ex. #	CC-17			Manitol Park Adv			incia	l Targets: Report to the Manitoba PUB - by

toba Economy - by										
Review of Manitoba Hydro's 2017/18 and 2018/19 GRA Sustainment Capital - by METSCO Energy Solutions Inc.										
and 2018/19 sulting Services										
Hydro Rate Manitoba Hydro										
ne customers										
rature reviewed in nal's evidence										
conducts nal's evidence										
deciding bill										
Resource Cost Test										
omer										

Ex. #								
LX. #	CC-23-5	П	II	11	11	11	11	LICO-125 residential customers
Ex. #	CC-23-6	п	11	11	11	11	11	Customers Inclining rate structure applies
Ex. #	CC-23-7	п	11	11	11	11	11	Low-income customers
Ex. #	CC-23-8	п	11	11	II.	11	11	Peer-Reviewed and Literature reviewed
Ex. #	CC-23-9	11	11	11	II .	11	11	consumer engagement conducted in prep of Mr. Chernick's tetimony
Ex. #	CC-23-10	п	11	11	11	11	11	Rate proposals
Ex. #	CC-24	Coa	lition t	o GSS-G	SM-KA	\P		
Ex. #	CC-24-1	"	II	11	II	11	11	LEI Evidence - Macroeconomic Impact
Ex. #	CC-25	Coa	lition t	o MIPU	G			
Ex. #	CC-25-1	11	11	11	11	11	11	US and Saskatchewan utility supply
Ex. #	CC-25-2	"	11	п	"	11	ıı	DSM costs in IFF16 than in NFAT
	CC-25-2 CC-25-3	11	11	11	"	"	11	DSM costs in IFF16 than in NFAT  Hydro Uncertainty Analysis
Ex. #		" Lett	" er to P	п	" ed Nove	" ember	ıı	
Ex. #	CC-25-3	" Lett Evid	" er to P lence (	" UB date	" ed Nove n & MI	" ember PUG)	ıı	Hydro Uncertainty Analysis

Ex. #	CC-27-2	11	II.	II.	II.	11	11	Risk Analysis
Ex. #	CC-28	Coa	lition-[	Dayman	ık (exp	ort) In	form	ation Requests
Ex. #	CC-28-1	II	II	II	11	11	11	Mr Chernicks Assessment of US (MISO) supply mix
Ex. #	CC-28-2	п	"	II	"	11	11	forecast and actual values, Export Price Forecast
Ex. #	CC-28-3	п	II.	II	"	11	11	on-peak and off-peak export prices
Ex. #	CC-28-4	11	II	II	"	11	11	key inputs into export energy price forecast: Natural Gas, Carbon and Capacity
Ex. #	CC-28-5	II	11	II.	II.	11	11	MH market view and Consultants market view
Ex. #	CC-28-6	11	11	11	11	11	11	MH adjustments
Ex. #	CC-28-7	п	"	II .	II .	11	11	IFF16 actual inflows
Ex. #	CC-28-8	11	II	II .	11	11	11	export revenues determinted by average revenues across inflow conditions
Ex. #	CC-28-9	п	II	п	"	11	11	appropriateness of preium for surples dependable energy and capacity
Ex. #	CC-28-10	11	II.	11	ıı	II	11	implications of findings regarding MHs forecast export revenue
Ex. #	CC-28-11	II	II	"	11	11	11	extaprovincial revenue forecast
Ex. #	CC-28-12	11	II .	11	ıı	11	11	implications on MH export price forecast
Ex. #	CC-28-13	11	"	II .	"	11	11	reasonableness of assumption

Ex. #	CC-28-14	11	11	11	11	11	" magnitude of significance on MH export price forecast
Ex. #	CC-28-15	11	II	11	II.	II	" high and low price cases developed by changing natural gas price
Ex. #	CC-29	Coali	ition-Y	atchew	/ Infor	matio	n Requests
Ex. #	CC-29-1	11	II	"	ıı	II	" Price Elasticities
Ex. #	CC-29-2	п	11	II	II .	11	" Measuring Energy poverty
Ex. #	CC-29-3	11	п	П	11	11	" mechanism for assisting low income households
Ex. #	CC-29-4	11	11	"	II.	II	" Economic Outlook- GDP
Ex. #	CC-29-5	п	II	"	11	II	" Economic Outkook - Exchange Rate
Ex. #	CC-29-6	11	"	11	ıı	11	" Impact of Rate Increase
Ex. #	CC-29-7	11	11	"	ıı	11	" lower rate increase
Ex. #	CC-29-8	п	11	11	11	11	" electricity price increases in Ontario affected rate of growth
Ex. #	CC-29-9	11	11	"	"	11	" incorrectly estimated price elasticities
Ex. #	CC-30	Coali	ition-D	aymar	k (Load	Fore	cast) Inforamtion Requests
Ex. #	CC-30-1	11	11	11	11	11	" Price Elasticity, Accuracy of price elasticity values
Ex. #	CC-30-2	11	11	11	11	11	" Stochasitc Risk Assessment, Impact of Multicollinearity on Stochiastic Risk Assessment

Ex. #	CC-30-3	11	11	"	11	11	" Statistical concerns in models, MH testing for statistical concerns
Ex. #	CC-30-4	11	II	11	11	11	" Multicollinearity, Impact of Variance Inflation Factors
Ex. #	CC-30-5	11	11	11	11	11	" Definition of 50/50 Forecast
Ex. #	CC-30-6	п	II	11	II	11	" Forecasting top consumers, Implication of approach to forecasting
Ex. #	CC-30-7	11	11	11	11	11	" Population trends, Under-forecasting population trends
Ex. #	CC-30-8	11	"	11	11	11	" Load Forecast to high or low
Ex. #	CC-30-9	11	11	11	"	11	" Growth Rate in Load Forecast
Ex. #	CC-30-10	11	11	11	"	11	" Average use forecast
Ex. #	CC-30-11	п	П	11	11	11	" Customers excluded from PLIL analysis
Ex. #	CC-30-12	11	11	11	11	11	" 2014 Methodologu based on MH current electricty price forecast
Ex. #	CC-30-13	11	"	11	11	11	" upward or downward trends, transmission and distribution loss
Ex. #	CC-30-14	11	11	11	"	11	" DSM program savings
Ex. #	CC-30-15	II	II	11	II	11	" weather tempature
Ex. #	CC-30-16	11	п	11	11	11	" differences between 2014 and 2017 forecasts
Ex. #	CC-30-17	п	П	11	II	11	" historicial average use

Ex. #	CC-30-18	"	11	11	"	11	11	DSM savings are adjusted via PLIL Model for Top Customer category			
Ex. #	CC-31	Ope	ning St	atemer	nt						
Ex. #	CC-32-1	Book of Documents - Sustaining Capital									
Ex. #	CC-32-2	Bool	k of Do	cument	ts - Rev	enue	Requ	irement Panel			
Ex. #	CC-32-3	Bool	k of Do	cument	ts - COS	SS and	Rate	Design and Bill Affordability Panel			
Ex. #	CC-32-3-1	II II	II	п	II	11	11	Energy Poverty Figures			
Ex. #	CC-33	Coal	ition-N	ИGF - II	nforma	ition F	Reque	ests			
Ex. #	CC-33-1	11	II	11	II	11	11	Overall Keeyask Project Management			
Ex. #	CC-33-2	II	II	11	II	11	11	Keeyask Project Cost Overrun -GCC			
Ex. #	CC-33-3	II	11	п	"	11	11	Keeyask Project Cost Overrun - Generating Station			
Ex. #	CC-33-4	II .	II	II	"	11	11	Keeyask Project Cost Estimating			
Ex. #	CC-33-5	ıı	11	II	11	11	11	Keeyask Estimate Adjustments			
Ex. #	CC-33-6	11	II	11	11	11	II .	Keeyask Basis of Schedule			
Ex. #	CC-33-7	II II	II	11	11	11	II	Keeyask Schedule Baseline			
Ex. #	CC-33-8	11	11	11	"	II	11	Keeyask -BBE Schedule Negatice Float			

Ex. #	CC-33-9	II	11	11	"	11	11	Keeyask - BBE Forecast Completion Date
Ex. #	CC-33-10	II .	II	II	"	п	"	Keeyask Contract Management
Ex. #	CC-33-11	"	"	II	"	"	"	Keeyask Craft to Foreman Ratio
Ex. #	CC-33-12	II .	11	11	"	11	"	Keeyask Board Recommendation
	<b>50</b> 55 <u>-</u>							
Ex. #	CC-33-13	"	11	11	II .	11	"	Keeyask Estimated Final Cost Range
Ex. #	CC-33-14	11	11	11	11	11	"	Keeyask Cost Contingency
	33 11							neeyasii essi esiitii geney
Ex. #	CC-33-15	II II	II	ш	"	II	11	Keeyask Concrete Quantity and Earthwork
								fill Reporting
Ex. #	CC-33-16	II .	11	II	"	11	"	Keeyask Contruction - Various Items
Ex. #	CC-33-17	11	11	11	"	11	"	HVDC Converter Stations - Risk
LX. #	CC-33-17							Management
Ex. #	CC-33-18	"	11	П	"	11	11	Bipole III Transmission Line Risk Register
Ex. #	CC-33-19	"	II .	11	"	11	"	Bipole III Transmission Line - Rokstad Power
								Company Schedule
Ex. #	CC-34	Coalit	tion Let	ter to P	UB re	Public	Pre	sentations dated December 22, 2017
Ex. #	CC-35	Chart	of Rate	e Increa:	ses an	d Bill II	mna	act
Ελ. π	JCC 33	Chart	. or nate	. merea:	JCJ all	a bili li	πpα	
Ex. #	CC-36	Coms	umers	Coalitio	n to M	IGF (KO	CB)	Information Requests
			"	11	"	"		
Ex. #	CC-36-1	"	"	11	"	"	"	CC-33-3

Ex. #	CC-37	Load Forecasting In Electric Utiltiy Integrated Resource Planning
Ex. #	CC-38	What are the Effects of Muticollinearity and when can I Ignore them Article
Ex. #	CC-39	NERC - Long Term Reliability Asssessment
Ex. #	CC-40	US Energy Information Administration - Assumptions to the Annual Energy Outlook 2017
Ex. #	CC-41	US Federal Energy Regulatory Commission Decision
Ex. #	CC-42	Alberta's Renewable Electricity Program
Ex. #	CC-43	Presentation of Dr. Compton and Dr. Simpson - Rate Impacts on Manitoba Economy
Ex. #	CC-44	Presentation of Dr. Simpson - Rate Increases and Energy Poverty
Ex. #	CC-45	Presentation of Morrison Park Advisors (MPA)
Ex. #	CC-45-1	Debt Ratios Calculation - from MPA Presentation
Ex. #	CC-46	William Harper of Econalysis Presentation
Ex. #	CC-47	MMTP - NEP Application
Ex. #	CC-48	Correction to Mr. Bill Harper (Ecoalysis) Testimony
Ex. #	CC-49	British Columbia DSM Regulations
Ex. #	CC-50	London Economics - Ontario Power Report

Ex. #	CC-51	Consumers Coalition Undertaking 51- of Janice Compton and Wayne Simpson
Ex. #	CC-52	METSCO Presentation
Ex. #	CC-53	Comsumers Coalition letter to all parties re Legal Argument - January 29, 2018
Ex. #	CC-54	Consumers Coalition Closing Submission Presentation
Ex. #	CC-55	Book of References for Closing Submissions
Ex. #	CC-56	Legal Sources





#### **EXHIBIT LIST FOR**

## MANITOBA HYDRO 2017/18 & 2018/19 General Rate Application

February 16, 2018

### **CITY OF WINNIPEG (CoW) Exhibits**

Ex. #	CoW-1	Email from the City of Winnipeg dated April 7, 2017 re Manitoba Hydro's Intentions in Respect of 2017 Rate Application
Ex. #	CoW-2	Report by the City of Winnipeg - October 31, 2017
Ex. #	CoW-3	Tyler Markowsky Presentation on behalf of City of Winnipeg
Ex. #	CoW-4	City of Winnipeg Undertakings 66-68
Ex. #	CoW-5	City of Winnipeg Closing Submissions Presentation





#### **EXHIBIT LIST FOR**

# MANITOBA HYDRO 2017/18 & 2018/19 General Rate Application

February 16, 2018

## **GREEN ACTION CENTRE (GAC) Exhibits**

Ex. #	GAC-1	Green Action Centre letter dated April 7, 2017 re Scope of Proposed 2017 General Rate Application										
Ex. #	GAC-2	GAC's Minimum Filing Requirements (MFRs)										
Ex. #	GAC-3	GAC Position on Interim Rate Increase dated May 26, 2017										
Ex. #	GAC-3-1	Attachment to GAC letter dated May 26, 2017										
Ex. #	GAC-4	Interim Rate Request Submission - July 18, 2017										
Ex. #	GAC-5	Green Action Centre to PUB re Budget Submission dated July 14, 2017										
Ex. #	GAC-5-1	GCH Budget										
Ex. #	GAC-5-2	Budget RII Estimate										
Ex. #	GAC-6	GAC's response to Coalition's letter re Cost of Service Model										
Ex. #	GAC-7	Green Action Centre to Manitoba Hydro - Round 1 Information Requests										
Ex. #	GAC-7-1	" " " " Bill Frequency for residential class										
Ex. #	GAC-7-2	" " " " " Average Bill for residential customer by moth, tariff subclass past 5 years										

Ex. #	GAC-7-3	II	11	II	11	II	11	Basic, Low-income, non-low-income customers with and without electric heat
Ex. #	GAC-7-4	11	11	11	11	11	11	Domestic and Export Revenue, Forecast and Actual
Ex. #	GAC-7-5	II	11	11	11	"	11	Billing demand by month for each rate year
Ex. #	GAC-7-6	11	11	II	II	11	11	Proofs of Revenue
Ex. #	GAC-7-7	11	"	II	II	"	11	Number of billing units assumed, source, total revenue and any adjustments
Ex. #	GAC-7-8	11	11	11	11	II	11	Number of test year billing Units
Ex. #	GAC-7-9	11	11	11	11	"	11	Bill Comparision
Ex. #	GAC-7-10	11	11	11	11	11	11	Domestic Rate Clas, demand, energy, customer and other charges under existing and propsed rates
Ex. #	GAC-7-11	11	11	11	11	11	11	Analysis of Seasonal Variation in Marginal Costs
Ex. #	GAC-7-12	11	11	II	11	II	11	Seasonally-differentiated rates for Resdidential and General Service no- demand rates
Ex. #	GAC-7-13	11	11	II	11	11	11	Seasonally-differentiated rates for Gereral Service Small and Medium demand rates
Ex. #	GAC-7-14	11	11	11	"	"	11	demand-related costs in peak period energy charge rather than demand charge
Ex. #	GAC-7-15	11	"	II	11	II	11	metering in place by class
Ex. #	GAC-7-16	II	II	11	II	ıı	11	Plan for upgrading metering by class

Ex. #	GAC-7-17	II	"	11	11	11	11	Appendix 8.4-8.7
Ex. #	GAC-7-18	11	11	11	11	11	11	explain common bus total energy is greater than sum of class total energy
Ex. #	GAC-7-19	11	II	11	11	11	11	basis for the selection of time periods
Ex. #	GAC-7-20	11	II	11	11	11	11	estimate of each component of the avoided cost used to screen DSM programs
Ex. #	GAC-7-21	11	II	11	11	11	11	Derivation of the avoided costs used to screen DSM programs
Ex. #	GAC-7-22	11	"	11	11	11	11	avoided distribution costs in its Power Smart cost effective metrics
Ex. #	GAC-7-23	11	II .	11	11	11	11	Value to avoided T&D used by MH for screening DSM at any time since January 2010
Ex. #	GAC-7-24	11	II	11	11	11	11	MH Current estimates of avoided T&D costs and basis of the estimates
Ex. #	GAC-7-25	II	ıı	11	11	11	11	Distribution planning Guidelines
Ex. #	GAC-7-26	11	ıı	11	11	11	"	Percentage of Transmission, subtransmission and distributoin plant that is drive by customer's individual
Ex. #	GAC-7-27	11	II	11	11	II	"	Marginal cost study
Ex. #	GAC-7-28	11	"	11	11	11	11	SEP prices aggregated by season and time of period for the past 5 years
Ex. #	GAC-7-29	11	"	11	11	11	11	Estimate of Marginal Energy Costs by season and time period
Ex. #	GAC-7-30	ıı .	11	11	"	11	11	Derivation the marginal energy cost

Ex. #	GAC-7-31	11	"	11	11	II	11	Current forecast of average hourly export price by season and time period
Ex. #	GAC-7-32	11	11	11	11	11	11	Prices for firm export sales under each existing MH contact
Ex. #	GAC-7-33	п	11	11	11	II	11	Prices negotiation with Wisconsin Public Service, Minnesota Power and any other extra-provincial
Ex. #	GAC-7-34	11	11	11	11	II	11	Derivation of estimate of marginal generation cost
Ex. #	GAC-7-35	11	11	11	11	II	11	Estimate of marginal Geratio cost
Ex. #	GAC-7-36	п	11	11	11	11	11	Projected annual revenue requirements of Keeyask Project and assumptions and calculations
Ex. #	GAC-7-37	11	11	11	11	11	11	Estimate of costs per kW.h for power supply from Keeyask
Ex. #	GAC-7-38	11	11	11	11	II	11	Keeyask Project cost-effective
Ex. #	GAC-7-39	п	11	11	11	II	11	Derivation of Company's estimates of marginal T&D costs
Ex. #	GAC-7-40	п	11	11	II	II	11	Fixed and Variable O&M cost estimates included in marginal T&D cost estimates
Ex. #	GAC-7-41	II	II	11	11	II	11	Demand and energy loss factors applied to generation, tramission and distribution marginal cost
Ex. #	GAC-7-42	11	11	11	11	II	11	Justification for each system load capactity tranmission or distribution project
Ex. #	GAC-7-43	п	"	11	II	II	II	Description of Project and explanation of justification
Ex. #	GAC-7-44	11	11	11	11	11	11	categories of projects included in Customer Connections-Residential Commercial & Industrial

	1							
Ex. #	GAC-7-45	"	"	11	11	II	II	Estimate of portion of ependitures on Customer Connetions-Residential, Commerical & Industrial yearly
Ex. #	GAC-7-46	11	11	II	11	II	11	Nature of Portfolio Adjustments
Ex. #	GAC-7-47	11	11	11	11	II	11	Justification documents for each project
Ex. #	GAC-7-48	11	II	11	11	11	11	Purpose of expenditure of each project
Ex. #	GAC-7-49	11	11	II	II	II	II	Cause of reliability problem
Ex. #	GAC-7-50	11	11	11	11	II	11	Table 2.2.1.1 System Load Capacity
Ex. #	GAC-7-51	II	11	II	11	H	II	Revisions directed by Board in Order 164//16 not reflected in updated PCOSS14 or PCOSS18
Ex. #	GAC-7-52	11	"	11	11	II	"	Modifications made to PCOSS14 and PCOSS18 not explained in Tab 8
Ex. #	GAC-7-53	11	II	11	11	II .	"	Why is PCOSS18 referred to as Rudimentary
Ex. #	GAC-7-54	11	11	11	11	11	11	MH Modification listed, supporting work
Ex. #	GAC-7-55	11	11	II	11	11	11	PCOSS14 Reflecting Order
Ex. #	GAC-7-56	п	11	11	11	II .	11	Revision of labour allocator to reflect refunctionalization of Gerneration Outlet Transmission
Ex. #	GAC-7-57	11	II	11	11	"	11	Eliminated assignment of NEB fees to export
Ex. #	GAC-7-58	11	II	11	11	II	11	AEF assigned to exports why decresed
Ex. #	GAC-7-59	11	II	11	11	II	II .	Assignment of Water Rental and variable O&D to exports

Ex. #	GAC-7-60	11	11	11	11	11	11	Calculation work of System Load Factor in PCOSS14 and PCOSS18
Ex. #	GAC-7-61	II	11	11	11	II	11	Basis of updated Operating and Depreciation reflect additional Generation Outlet Transmission
Ex. #	GAC-7-62	II	11	11	11	11	11	How MH updated Gernation pool costs for classified on SLF, and cost classified as 100% Energy
Ex. #	GAC-7-63	11	11	11	11	II	11	How MH updated Tranmission costs for 100% Demand, and US interface costs calssified on SLF
Ex. #	GAC-7-64	11	11	II	II	II	II	Adjustment to C10 cost directly assigned to GSL 30-100 classes
Ex. #	GAC-7-65	II	II	II	II	11	11	Functionalization of additional Generation Outlet Tranmission
Ex. #	GAC-7-66	п	11	11	11	11	11	Functionalization of additional Generation Outlet Tranmission
Ex. #	GAC-7-67	11	II .	11	II	11	11	Revision of Revenue to include forecast Late Payment & Adjustment revenue allocated based on actual
Ex. #	GAC-7-68	11	11	"	11	II	11	Basis of customer weights
Ex. #	GAC-7-69	11	11	II	11	11	11	Basis of multi-family adjustment to C27 Service Drop allocator
Ex. #	GAC-7-70	11	11	11	11	11	11	PCOSS18 changes
Ex. #	GAC-7-71	II	11	II	11	II	11	Modification to inputs and methodology reflected in PCOSS18 but not in the updated PCOSS14
Ex. #	GAC-8	Gre	en Ad	ction Ce	entre l	etter r	e Rate	Design for Affordability - July 31, 2017
Ex. #	GAC-9	Gre	en Ad	ction Ce	entre t	o Mar	iitoba I	Hydro - Round 2 Information Requests
Ex. #	GAC-9-1	"	11	11	11	11	11	Number of Bills by month of LICO 125 customers

Ex. #	GAC-9-2	"	II .	11	II	II	11	Description of Survey sample as requested
Ex. #	GAC-9-3	11	11	11	II	11	11	Average Bill size in kW.h residential customers by month
Ex. #	GAC-9-4	II	11	11	11	11	11	Sample of Estimated total LICO-125 customers
Ex. #	GAC-9-5	"	11	II	11	11	11	2017 System Load Forecast
Ex. #	GAC-9-6	11	11	11	II	11	11	Historical Load Factor Data
Ex. #	GAC-9-7	"	ıı	11	11	"	11	Proof of Revenue
Ex. #	GAC-9-8	II	11	II	11	ıı .	11	Mariginal Generation Capacity Cost
Ex. #	GAC-9-9	11	II	11	11	II .	11	Common Bus Total Energy
Ex. #	GAC-9-10	II	II .	11	11	II	11	Calculation of customer class total energy for common bus total energy
Ex. #	GAC-9-11	11	II	11	11	II	11	Changes in planned expenditures and calcautaion of avoided transmission
Ex. #	GAC-9-12	"	"	11	11	11	11	Derivation of Company's 2010 estimate of avoided tranmission cost
Ex. #	GAC-9-13	II	II	11	11	"	11	MH estimates of avoided T&D
Ex. #	GAC-9-14	"	ıı	II	II	II	11	Transmission, subtransmission and distribution plant capacity, other than service drops
Ex. #	GAC-9-15	"	"	11	11	II	11	non fuel O&M cost reflected in estimate of merginal generation
Ex. #	GAC-9-16	"	II	11	II	"	11	benefirs of Keeyask project equal or exceed total revenue requirements
Ex. #	GAC-9-17	"	II .	11	11	11	11	estimates of marginal T&D cost
Ex. #	GAC-9-18	"	11	п	11	II	11	Study Reports SPD2010/02 and SPD 04/05

Ex. #	GAC-9-19	"	II	II	11	"	II	Growth-related expenditures
Ex. #	GAC-9-20	"	11	11	11	"	11	Marginal Transmission cost
Ex. #	GAC-9-21	"	11	11	11	II	11	decommissioning would be needed if there were no load growth in Stanley
Ex. #	GAC-9-22	"	II	II	11	"	II	Marginal distribution cost
Ex. #	GAC-9-23	"	II	11	11	II .	11	Demand and energy loss factors applied to derive marginal gernation cost
Ex. #	GAC-9-24	"	II	II	11	11	II	marginal generation cost component includes 14% loss factor
Ex. #	GAC-9-25	"	II	II .	11	"	II	Calcultions of Illustrative rates
Ex. #	GAC-9-26	"	II .	11	11	11	"	Illustrative Proof of Revenue
Ex. #	GAC-9-27	"	11	11	11	II	11	Concerns about customer confusion would be resolved
Ex. #	GAC-9-28	"	п	II	II	11	II .	Bill Affordability Working Group criterea not part of rationale
Ex. #	GAC-9-29	"	п	II .	11	11	II .	Revenue shift from all-electirc to standard customers
Ex. #	GAC-10	GAC	c's posi	tion re	Mani	toba F	lydro's	CSI Motion - September 27, 2017
Ex. #	GAC-11	Dire	ct Test	imony	of Pa	ul Che	rnick o	n behalf of Green Action Centre
Ex. #	GAC-12	GAC	to Coa	alition	(Harp	er)		
Ex. #	GAC-12-1	"	ıı	11	11	"		Export and Client
Ex. #	GAC-12-2	"	II	11	11	ıı		Expert concerns
Ex. #	GAC-12-3	"	II	11	11	11		Expert view on Fairness and Equity

Ex. #	GAC-13	GAC to MIPUG
Ex. #	GAC-13-1	" " " Basis of assertion
Ex. #	GAC-13-2	" " " Bowman basis of assertion
Ex. #	GAC-13-3	" " " Coal generation
Ex. #	GAC-14	Opening Statement
Ex. #	GAC-15	Green Action Centre Book of Documents
Ex. #	GAC-16	Space Heating Annual Operating Cost Comparison Chart
Ex. #	GAC-17	Oral Evidence of Paul Chernick
Ex. #	GAC-18	GAC letter to all parties re Legal Argument - January 29, 2018
Ex. #	GAC-19	GAC Undertaking 39 - Electric Space Heating for on-reserve customers
Ex. #	GAC-20	GAC Undertaking 40 - Transmission and Distribution Costs
Ex. #	GAC-21	GAC Undertaking 41- Northern Allowance
Ex. #	GAC-22	GAC Undertaking 42 - PUB/GAC 6(a) Response
Ex. #	GAC-23	GAC Undertaking 43 - Cost Impact of Rate Design Proposal for on-reserve residential customers
Ex. #	GAC-24	GAC Undertking 44 - Rate Design if on-reserve customers eligible for low-income rates
Ex. #	GAC-25	Green Action Centre Final Argument
Ex. #	GAC-26	Green Action Centre Closing Submissions





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### **General Service Small Customers and General Service Medium Customer Classes (GSS/GSM)**

Ex. #	GSS/GSM-1	Submission on Interim Rate Request Application					
Ex. #	GSS/GSM-2	Letter to	PUB r	e Budg	get dat	ed July	14, 2017
Ex. #	GSS/GSM-2-1	London	Econon	nics In	ternat	ional L	LC (LEI) Proposed Budget
Ex. #	GSS/GSM-2-2	AJ Gould	ling - C	urricul	um Vi	tae	
Ex. #	GSS/GSM-3	Email re	MH's (	Comme	ents o	n Interv	vener Budgets - July 26, 2017
Ex. #	GSS/GSM-4	General 1 Inform				eral Ser	vice Medium to Manitoba Hydro - Round
Ex. #	GSS/GSM-4-1	11 11	II	11	"	II	Utilization rates of Bipole I and II over the past 5 years
Ex. #	GSS/GSM-4-2	11 11	п	11	"	11	export contacts taken place absence of Bipole III
Ex. #	GSS/GSM-4-3	11 11	11	11	11	п	breakdown of cost on Keeyask
Ex. #	GSS/GSM-4-4	ппп	п	"	"	11	Breakdown of Cancellation cost estimate

Ex. #	GSS/GSM-4-5	II .	II	II	11	11	11	BCG Bipole III, Keeyask and Tie-Line summed demand growth
Ex. #	GSS/GSM-4-6	"	II	п	"	II	11	Bipole III, Keeyask and Tie-Line aggregate basis instead of individually
Ex. #	GSS/GSM-4-7	"	11	11	II	11	II	Variable hyraulic operateion and matintenance costs
Ex. #	GSS/GSM-4-8	"	II	п	11	II	11	Assigned export costs
Ex. #	GSS/GSM-4-9	"	II	11	11	II	11	RCC schedule for all customer classes after each class NER revenue deducted from total
Ex. #	GSS/GSM-5		/GSM   2017	Letter re	e Com	nbined	Inter	vention with KAP - letter dated August
Ex. #	GSS/GSM-6	GSS 6, 2		Revised	Budg	et for	Londo	on Economics International - September
Ex. #	GSS/GSM-7	GSS	/GSM I	Legal Bu	ıdget	- Sept	embe	r 7, 2017
Ex. #	GSS/GSM-8	Gen	eral Se	rvice Sr	nall/0	Senera	al Serv	vice Medium to Manitoba Hydro - Round
		<u>2 In</u>	format	ion Req	uests			
Ex. #	GSS/GSM-8-1	"	11	II	11	11	11	Impact of Bipole III on Bipole I and Bipole II levels of utilization
Ex. #	GSS/GSM-8-2	"	11	11	11	II	11	Nature of costs included in Other Gernerating Station costs
Ex. #	GSS/GSM-8-3	"	11	11	11	II	11	Cost of each cancellation cost item
Ex. #	GSS/GSM-9	Sma	all and	Mediun	n Gen	eral Se	ervice	al Rate Application on behalf of the Customer Classes and Keystone conomics
Ex. #	GSS/GSM-9-1	Lon	don Ec	onomic	s Inte	rnatio	nal- Le	etter Summary of Errata

Ex. #	GSS/GSM-9-2	London Economics International Report with Errata					
Ex. #	GSS/GSM-10	GSS-GSM to Coalition					
Ex. #	GSS/GSM-10-1	" " " " Effects of Propsed Hydro Rate Increase on Economy					
Ex. #	GSS/GSM-11	GSS-GSM to MIPUG					
Ex. #	GSS/GSM-11-1	" " " " DSM Recommendations and TOU					
Ex. #	GSS/GSM-12	GSS-GSM to Coalition (MPA)					
Ex. #	GSS/GSM-12-1	" " " debt service coverage					
Ex. #	GSS/GSM-12-2	" " " " interest rates and export prices					
Ex. #	GSS/GSM-13	London Economics International Presentation					
Ex. #	GSS/GSM-14	GSS Letter to all parties re Legal Argument - January 29, 2018					
Ex. #	GSS/GSM-15	LEI Undertaking 72 - Hydro Values re-calculated from LEI Report					
Ex. #	GSS/GSM-16	January 26th Transcript Corrections					
Ex. #	GSS/GSM-17	GSS/GSM Book of Documents					
Ex. #	GSS/GSM-18	Supplementary Book of Documents					





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## **Keystone Agricultural Producers (KAP) Exhibits**

Ex. #	KAP-1	KAP Budget Submission dated July 14, 2017
Ex. #	KAP-1-1	Attachment - Draft Budget
Ex. #	KAP-2	Interim Rate Request Submission dated July 14, 2017



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### MANITOBA INDUSTRIAL POWER USERS GROUP (MIPUG)

Ex. #	MIPUG-1	MIPUG's Minimum Filing Requirements
Ex. #	MIPUG-2	MIPUG's Interim Rate Response letter dated May 25, 2017
Ex. #	MIPUG-2-1	Attachment 1 to MIPUG's letter dated May 25, 2017
Ex. #	MIPUG-3	MIPUG Budget Submission
Ex. #	MIPUG-4	Submission on Interim Rate Request dated July 14, 2017
Ex. #	MIPUG-5	2017/18 Interim Rate Supporting Materials - July 18, 2017 Presentation
Ex. #	MIPUG-6	MIPUG's response to Manitoba Hydro's comments on Budgets - July 25, 2017
Ex. #	MIPUG-7	MIPUG to Manitoba Hydro - Round 1 Information Requests
Ex. #	MIPUG-7-1	" " " " Model scenario for Keeyask costs
Ex. #	MIPUG-7-2	" " " " " Financial forecasts to recover to target level over 20 year period

Ex. #	MIPUG-7-3	11	II	II	II	II	"	Export Price and Interest Rate Probabilities
Ex. #	MIPUG-7-4	"	11	II	н	II .	11	RCC Range History
Ex. #	MIPUG-7-5	"	11	11	11	II	11	Time of Use rates for industrial customers
Ex. #	MIPUG-7-6	ıı	11	11	11	II	11	Efficienct Manitoba Act - net Movement in Regulatory Deferral
Ex. #	MIPUG-7-7	II .	II	ıı	11	"	11	Accounts Total Debt
Ex. #	MIPUG-7-8	II II	11	11	11	II .	"	S&P rating methodology financial risk
Ex. #	MIPUG-7-9	"	11	II	н	II .	11	breakdown of increase in financial expense between 2014/15 and
Ex. #	MIPUG-7-10	"	11	11	11	II .	11	2016/17 Long-term dependable forecast prices
Ex. #	MIPUG-7-11	II II	11	11	11	II	11	Reconciliation of Revenue
Ex. #	MIPUG-7-12	"	11	II	11	II .	11	PCOSS14 Compliance filing without deducting Net Export Revenue (NER)
Ex. #	MIPUG-7-13	II	II	11	II	11	"	Chart back to actual results to 1986/87
Ex. #	MIPUG-7-14	II	11	11	11	II	11	Calculations for Interest Allocated to Construction by year
Ex. #	MIPUG-7-15	II	11	11	II	II .	11	Credit rating agencies in rating reports and recommendations
Ex. #	MIPUG-7-16	11	11	11	11	II .	11	extend to show 20 year financial forecast
Ex. #	MIPUG-7-17	"	11	11	11	II .	11	CV's for HM Staff
Ex. #	MIPUG-7-18	11	11	11	11	II	11	5 year and 7 year drought impacts for MH16

Ex. #	MIPUG-7-19	11	"	11	11	11	11	Extended Table for forecast years
Ex. #	MIPUG-7-20	"	11	11	11	11	11	cash flow requirements regarding further borrowing and debt management plans
Ex. #	MIPUG-7-21	"	11	II.	11	II .	11	compare 2016-2017 Load Forecast
Ex. #	MIPUG-7-22	11	п	11	11	II	11	20 year financial forecast schedule for MH16
Ex. #	MIPUG-7-23	"	11	II.	II	II	11	schedule of rate increases to target customer class TCC
Ex. #	MIPUG-8	MI 20:		e Scope	e of W	ork fo	r Indep	endent Expert Consultants - August 9,
Ex. #	MIPUG-9	MI	PUG t	o Mani	toba F	lydro -	Round	d 2 Information Requests
Ex. #	MIPUG-9-1	11	11	"	11	II .	"	Interm rate Increases, annual values
Ex. #	MIPUG-9-2	11	11	11	11	II	11	Retaining earnings needed to achieve target specified targeted date
Ex. #	MIPUG-9-3	11	11	11	11	11	11	Figure 3-1 from Appendix 4.1 updated
Ex. #	MIPUG-9-4	11	11	11	11	II	11	DBRS Retained Earnings as mesaure of equity, AOCI effectively not included
Ex. #	MIPUG-9-5	11	11	"	11	11	11	as offset GSL 30-11kV and GSL>100kV revenue forecase for 2017/18 and 2018/19
Ex. #	MIPUG-9-6	11	11	"	11	"	"	Calculates Marginal Costs
Ex. #	MIPUG-9-7	III	11	II	II	II	11	Additions of regulatory deferral accounts for loss on disposal of assets
Ex. #	MIPUG-9-8	II	П	"	11	11	"	Breakdowns of Allocation, Customer Class share for non energy revenue
Ex. #	MIPUG-9-9	11	11	11	11	II	11	Interest rate used for Keeyask borrowings
Ex. #	MIPUG-9-10	"	"	11	II	11	11	Deferred overheasd blance by year to Major New Generation and Transmission v. Capital Projects

Ex. #	MIPUG-9-11	11	11	II	11	II	11	Supplemental Filing Loss on Disposal of Assets
Ex. #	MIPUG-9-12	"	11	11	11	"	11	DSM Deferral
Ex. #	MIPUG-9-13	"	11	11	11	11	11	Evaluate proposed ELG Amortixation Approach
Ex. #	MIPUG-9-14	"	11	11	11	"	11	Gains on disposal and on retirement
Ex. #	MIPUG-9-15	"	11	11	11	11	11	change to ELG, and net effects of higer cost
Ex. #	MIPUG-9-16	"	11	11	11	11	11	amortization of ELG/ASL difference
Ex. #	MIPUG-9-17	"	11	11	11	11	11	Financial Structure and Regulatory framework
Ex. #	MIPUG-9-18	"	11	11	11	11	11	offset to cost and cost impacts of Bipole III
Ex. #	MIPUG-9-19	11	11	11	11	11	11	Weighted Average Term to Maturity
Ex. #	MIPUG-9-20	"	11	11	11	11	11	Considerated Borrowing requirements & Maturity Schedule
Ex. #	MIPUG-9-21	"	11	11	11	11	"	Contact Centre - Outages and Marketing R&D use and importance
Ex. #	MIPUG-10		PUG rensultan	-				endent Expert Consultants - Daymark
Ex. #	MIPUG-11		PUG to			ouncil	of Man	itoba re Issues and Proposed Evidence -
Ex. #	MIPUG-12							ro's September 7, 2017 CSI Motion - I, 2017
Ex. #	MIPUG-13	Pre	filed To	estimo	ny of	Patricl	k Bown	nan
Ex. #	MIPUG-14	Pre	filed To	estimo	ny of	Camer	on Osl	er and Gerry Forrest
Ex. #	MIPUG-15	Sup	pleme	ntary	Backg	round	Papers	

Ex. #	MIPUG-16	MIPUG t	o AMC	Inform	mation	Requ	est
	MIPUG-16-1	11 11	11	11	II	11	Shortfall arising from Low Income Program
Ex. #	MIPUG-17	MIPUG t	o Coal	ition (S	Simpso	on) Info	ormation Request
		11 11	II .	"	ıı .	11	Carbon Pricing
Ex. #	MIPUG-18	MIPUG t	o Coal	ition (I	Harpei	r) Infor	mation Request
		11 11	11	11	II	11	improving regulatory review of Capital Plan
Ex. #	MIPUG-19	MIPUG t	o GAC	Inforn	nation	Reque	est
		11 11	11	11	11	11	Marginal Cost Estimates, weaknesses
Ex. #	MIPUG-20	MIPUG t	o Dayr	mark (I	Load F	orecas	t) Information Request
Ex. #	MIPIUG-20-1	п п	11	"	II.	11	Base load forecast and Price Elasticity
Ex. #	MIPUG-21	MIPUG t	o Dr. A	Adonis	Yatch	ew Info	oramtion Request
Ex. #	MIPUG-21-1	" "	11	11	II	II	Effect of Proposed Hydro Rate Increase on Manitoba Economy
Ex. #	MIPUG-21-2	" "	11	11	11	11	Impact on Industry
Ex. #	MIPUG-21-3	11 11	11	11	II .	11	Provincial electricity demand
Ex. #	MIPUG-21-4	п п	11	"	II	11	Economic Impact - taxes
Ex. #	MIPUG-22	Opening	Staten	nent			
Ex. #	MIPUG-23-1	MIPUG B	ook of	Docur	nents	1 - Pol	icy Panel

Ex. #	MIPUG-23-2	MIPUG Book of Documents 2 - Revenue Requirement Panel							
Ex. #	MIPUG-23-3	MIPUG Book of Documents 3 - Rate Design and COSS Panel							
Ex. #	MIPUG-24	MIPUG to MGF - Information Requests							
Ex. #	MIPIG -24 -1	" " " " General MGF Report							
Ex. #	MIPIG -24 -2	" " " " General Prudence							
Ex. #	MIPIG -24 -3	" " " " Executive Summary -GCC							
Ex. #	MIPIG -24 -4	" " " " Cost Estimates							
Ex. #	MIPUG-25	MIPUG to MGF (KCB) Information Requests							
Ex. #	MIPUG-25-1	" " " " MIPUG-25-2							
Ex. #	MIPUG-25-2	" " " " MIPUG-25-3							
Ex. #	MIPUG-26	MIPUG Presentation - Patrick Bowman, Cam Osler and Gerry Forest							
Ex. #	MIPUG-27	Reference Documents for MIPUG Presentation							
Ex. #	MIPUG-28	MIPUG to all parties re Legal Argument - January 29, 2018							
Ex. #	MIPUG-29	2013 Electirc Load Forecast							
Ex. #	MIPUG-30	MIPUG Undertaking 65 - Water Rentals							
Ex. #	MIPUG-31	MIPUG Undertaking Transcript Page 6469-6470 - Unit Costs Hdyro Domestic System							
Ex. #	MIPUG-32	Figures for Cross of MH Rebuttal - for Identification							
Ex. #	MIPUG-32	Figures for Cross of MH Rebuttal - for Identification							

Ex. # MIPUG-33	Final Argument with Attachments





#### **MANITOBA HYDRO**

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## MANITOBA KEEWATINOWI OKIMAKANAK (MKO)

Ex. #	MKO -1	MKO's suggested Minimum Filing Requirements (MFRs)							
Ex. #	MKO -2	MKO's Submission on Interim Rates dated May 26, 2017							
Ex. #	MKO -3	MKO Comment on Interim Rate Request - email dated July 14, 2017							
Ex. #	MKO -4	Detailed Budget Submission							
Ex. #	MKO -5	MKO 1	to MH	Round 1	Inform	nation F	<u>Requests</u>		
Ex. #	MKO-5-1	" "	II	11	"	11	MKO FN communities Customer Accounts		
Ex. #	MKO-5-2	" "	II	11	11	11	Number of low-income customers		
Ex. #	MKO-5-3	" "	II	II	11	11	Residential Customer accounts		
Ex. #	MKO-5-4	" "	11	11	11	11	Removal of Mirigation cot from rates		
Ex. #	MKO-5-5	11 11	11	11	11	11	Natural Gas Services		
Ex. #	MKO-5-6	11 11	II.	11	"	11	filing next Diesel Community rate Application		
Ex. #	MKO-5-7	" "	11	II	11	11	DSM program in MKO		

Ex. #	MKO-5-8	" " " " Percentage increase in use
Ex. #	MKO -6	MKO Letter to all parties re Legal Argument - January 29, 2018
Ex. #	MKO -7	MKO Final Submission





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## **Daymark Energy Advisors (DEA) Exhibits**

Ex. #	DEA- 1	Daymark Energy Advisors Report - Exports							
Ex. #	DEA-2-1	Daymark Energy Advisors Report - Forecast Revised November 28, 2017							
Ex. #	DEA-2-2	Daymark Energy Advisors Errata to Load Forecast Report Review							
Ex. #	DEA-3	W. Haight to R. Peters and D. Steineld Letter re IEC Reports - CSI Process dated November 23, 2017							
Ex. #	DEA-4	Daymark Energy Advisors Report - Saskpower							
Ex. #	DEA-5	Daymark Energy Advisors Load Forecast Presentation							
Ex. #	DEA-6	Daymark Energy Advisors Load Forecast CVs							
Ex. #	DEA-6-1	" " " " CV of Kathleen Kelly							
Ex. #	DEA-6-2	" " " " CV of Suman Gautam							
Ex. #	DEA-7	Daymark Energy Advisors Export Presentation							
Ex. #	DEA-8	Daymark Energy Advisors Export CVs							
Ex. #	DEA-8-1	" " " " CV of Dan Peaco							

Ex. #	DEA-8-2	" " " " CV of Doug Smith
Ex. #	DEA-9 CSI	Daymark Energy Advisors Export Revenue Presentation - Confidential
Ex. #	DEA-10	Daymark Energy Advisors Saskpower Presentation
Ex. #	DEA-11 CSI	Daymark Energy Advisors Saskpower Presention - Confidential
Ex. #	DEA-12	Daymark Energy Advisors Load Forecast Undertakings 45-47
Ex. #	DEA-13	Daymark Energy Advisors Exports Undertaking 48 - Carbon Values





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## Dr. Adonis Yatchew (AY) Exhibits

Ex. #	AY-1	Yatchew's Report
Ex. #	AY-2	Dr. Yatchew's Presentation
Ex. #	AY-3	Dr. Yatchew CV
Ex. #	AY-4	Dr. Yatchew Undertaking 1 - CO2 per Capita
Ex. #	AY-5	Dr. Yatchew Undertaking 2 - per capita debt in Manitoba





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## **MGF Exhibits**

Ex. #	MGF-1	MGF letter to Bob Peters re Extention Request - November 28, 2017						
Ex. #	MGF-2	MGF Report						
Ex. #	MGF-3	IEC Capital Review Panel CVs						
Ex. #	MGF-3-1	" "	II	11	ıı .	II .	· ·	MGF Kieran Flanagan
Ex. #	MGF-3-2	11 11	II	11	11	11	"	MGF Jim Potter
Ex. #	MGF-3-3	11 11	"	11	11	11	"	MGF Campbell Adams
Ex. #	MGF-3-4	" "	11	11	II.	"	"	MGF Phillips Duane
Ex. #	MGF-3-5	11 11	II	11	11	11	"	MGF Ryan Devereux
Ex. #	MGF-3-6	11 11	11	11	11	11	11	Amplitude - Les Brand
Ex. #	MGF-3-7	11 11	11	11	II	11	11	KCB - Dan Campbell
Ex. #	MGF-3-8	" "	"	11	11	11	"	MGF Valerie Musfelt

Ex. #	MGF-4	MGF Presentation						
Ex. #	MGF-4-1	" " " " " " MGF -Keeyask Estimated Project Values						
Ex. #	MGF-5	Amplitude Presentation						
Ex. #	MGF-6	KCB Presentation						
Ex. #	MGF-7 CSI	MGF Confidential Presentation						
Ex. #	MGF-8 CSI	Amplitude Confidential Presentation						
Ex. #	MGF-9 CSI	KCB Confidential Presentation						
Ex. #	MGF-10	MGF Undertakings 73 and 74						