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MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO'S APPLICATION  
FOR APPROVAL OF NEW ELECTRICITY RATES  
FOR 2010/11 AND 2011/12

Before Board Panel:

- Graham Lane - Board Chairman
- Robert Mayer, Q.C. - Board Member
- Len Evans - Board Member

HELD AT:

Public Utilities Board  
400, 330 Portage Avenue  
Winnipeg, Manitoba  
January 6, 2011  
Pages 456 to 914

APPEARANCES

1  
2 Bob Peters ) Board Counsel  
3  
4 Patti Ramage ) Manitoba Hydro  
5 Marla Boyd )  
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7 Byron Williams (np) ) CAC/MSOS  
8 Myfanwy Bowman )  
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10 Antone Hacault (np) ) MIPUB  
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12 Michael Anderson (np) ) MKO  
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14 William Gange ) RCM/TREE  
15  
16 Delanie Coad (np) ) SCO  
17  
18 Denise Pambrum ) City of Winnipeg  
19  
20 Gavin Wood ) Independent Experts  
21  
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8	DARREN RAINKIE, Resumed	
9	ROBIN WIENS, Resumed	
10	LLOYD KUCZEK, Resumed	
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10		(Manitoba) Inc. and Manitoba Society	
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15		(Manitoba) Inc. and Manitoba Society	
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18		- reconcile the actual electricity	
19		segment results	
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21		(Manitoba) Inc. and Manitoba Society	
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15		(Manitoba) Inc. and Manitoba Society	
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20		(Manitoba) Inc. and Manitoba Society	
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9		(Manitoba) Inc. and Manitoba Society	
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14		(Manitoba) Inc. and Manitoba Society	
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17		- reconciliation of differences between	
18		the total revenue, OM&A and net income	
19		values for 2007/08 and 2008/09	
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21		(Manitoba) Inc. and Manitoba Society	
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13	CAC/MSOS/MH-1-25	Consumers' Association of and	
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14		(Manitoba) Inc. and Manitoba Society	
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9		(Manitoba) Inc. and Manitoba Society	
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10		(Manitoba) Inc. and Manitoba Society	
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15		US by year from 2006/07 to 2019/20	
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10		(Manitoba) Inc. and Manitoba Society	
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15	CAC/MSOS/MH-1-49	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
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11		(Manitoba) Inc. and Manitoba Society	
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17		(Manitoba) Inc. and Manitoba Society	
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10		(Manitoba) Inc. and Manitoba Society	
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17		(Manitoba) Inc. and Manitoba Society	
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3 (Manitoba) Inc. and Manitoba Society  
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5 Requests and Manitoba Hydro's responses  
6 - financial forecast - capital spending  
7 - customer service and distribution  
8 domestic projects
- 9 CAC/MSOS/MH-1-57 Consumers' Association of and  
10 (Manitoba) Inc. and Manitoba Society  
11 of Seniors' 1st round Information  
12 Requests and Manitoba Hydro's responses  
13 - financial forecast - capital spending  
14 - AMI pilot
- 15 CAC/MSOS/MH-1-58 Consumers' Association of and  
16 (Manitoba) Inc. and Manitoba Society  
17 of Seniors' 1st round Information  
18 Requests and Manitoba Hydro's responses  
19 - load forecast - hydro sales
- 20 CAC/MSOS/MH-1-59 Consumers' Association of and  
21 (Manitoba) Inc. and Manitoba Society  
22 of Seniors' 1st round Information  
23 Requests and Manitoba Hydro's responses  
24 - load forecast - effect of electric  
25 vehicles

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3	CAC/MSOS/MH-1-60	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- load forecast - natural gas prices	
8		are forecast to increase at less than	
9		0.9 percent	
10	CAC/MSOS/MH-1-61	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 1st round Information	
13		Requests and Manitoba Hydro's responses	
14		- financial forecast - power supply	
15	CAC/MSOS/MH-1-62	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
17		of Seniors' 1st round Information	
18		Requests and Manitoba Hydro's responses	
19		- financial forecast - risk analysis	
20	CAC/MSOS/MH-1-63 and 64		
21		Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
23		of Seniors' 1st round Information	
24		Requests and Manitoba Hydro's responses	
25		- energy supply	

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3	CAC/MSOS/MH-1-65	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
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6		Requests and Manitoba Hydro's responses	
7		- export markets and export sales	
8	CAC/MSOS/MH-1-66	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 1st round Information	
11		Requests and Manitoba Hydro's responses	
12		- proposed rates and customer impacts	
13	CAC/MSOS/MH-1-67	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 1st round Information	
16		Requests and Manitoba Hydro's responses	
17		- cost of service study - export prices	
18	CAC/MSOS/MH-1-68	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 1st round Information	
21		Requests and Manitoba Hydro's responses	
22		- cost of service - terms of reference	
23		for the external contract	
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3	CAC/MSOS/MH-1-69	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
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6		Requests and Manitoba Hydro's responses	
7		- cost of service - treatment of DSM	
8		costs and savings	
9	CAC/MSOS/MH-1-70	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 1st round Information	
12		Requests and Manitoba Hydro's responses	
13		- cost of service - weightings used	
14		for each of the allocation factors	
15	CAC/MSOS/MH-1-71	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
17		of Seniors' 1st round Information	
18		Requests and Manitoba Hydro's responses	
19		- cost of service - the historic CP-LFS	
20		and CFS	
21	CAC/MSOS/MH-1-72	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
23		of Seniors' 1st round Information	
24		Requests and Manitoba Hydro's responses	
25		- cost of service - contributed capital	



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3	CAC/MSOS/MH-1-73	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- power smart	
8	CAC/MSOS/MH-1-74	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 1st round Information	
11		Requests and Manitoba Hydro's responses	
12		- enhancements to the Power Smart Plan	
13	CAC/MSOS/MH-1-75	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 1st round Information	
16		Requests and Manitoba Hydro's responses	
17		- Power Smart Plan 2009/2010- 2008/2009	
18		evaluation report	
19	CAC/MSOS/MH-1-76	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
21		of Seniors' 1st round Information	
22		Requests and Manitoba Hydro's responses	
23		- power smart plan 2009/2010 -	
24		electricity programs	
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2 CAC/MSOS/MH-1-77 Consumers' Association of and  
3 (Manitoba) Inc. and Manitoba Society  
4 of Seniors' 1st round Information  
5 Requests and Manitoba Hydro's responses  
6 - power smart plan 2009/2010 - natural  
7 gas programs

8 CAC/MSOS/MH-1-78 Consumers' Association of and  
9 (Manitoba) Inc. and Manitoba Society  
10 of Seniors' 1st round Information  
11 Requests and Manitoba Hydro's responses  
12 - Power smart plan 2009/2010 - LIEEP

13 CAC/MSOS/MH-1-79 Consumers' Association of and  
14 (Manitoba) Inc. and Manitoba Society  
15 of Seniors' 1st round Information  
16 Requests and Manitoba Hydro's responses  
17 - Power smart plan 2009/2010 - power  
18 smart plan 2009

19 CAC/MSOS/MH-1-80 Consumers' Association of and  
20 (Manitoba) Inc. and Manitoba Society  
21 of Seniors' 1st round Information  
22 Requests and Manitoba Hydro's responses  
23 - power smart review 2007/2008 - energy  
24 efficient light fixtures mail-in  
25 rebate program

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4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- power smart review 2007/2008 -	
8		natural gas customer service initiatives	
9		and cost recovery programs	
10	CAC/MSOS/MH-1-82	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 1st round Information	
13		Requests and Manitoba Hydro's responses	
14		- power smart review 2007/2008 -	
15		electric incentive based programs	
16	CAC/MSOS/MH-1-83	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 1st round Information	
19		Requests and Manitoba Hydro's responses	
20		- power smart review 2007/2008 -	
21		total resource cost benefit/cost	
22		analysis - natural gas incentive-	
23		based programs	
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4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- power smart	
8	CAC/MSOS/MH-1-85	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 1st round Information	
11		Requests and Manitoba Hydro's responses	
12		- diesel update hearing	
13	CAC/MSOS/MH-1-86	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 1st round Information	
16		Requests and Manitoba Hydro's responses	
17		- report on recommendations for	
18		reducing or eliminating the use of	
19		diesel fuel to supply power in	
20		off-grid communities	
21	CAC/MSOS/MH-1-87	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
23		of Seniors' 1st round Information	
24		Requests and Manitoba Hydro's responses	
25		- diesel - customers in each class	

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3	CAC/MSOS/MH-1-88	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- decision made by HYDROOEB at its	
8		January 21, 2010 meeting with respect	
9		to rates in the diesel zone	
10	CAC/MSOS/MH-1-89	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 1st round Information	
13		Requests and Manitoba Hydro's responses	
14		- diesel update hearing - documents on	
15		the record of this proceeding	
16	CAC/MSOS/MH-1-90	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 1st round Information	
19		Requests and Manitoba Hydro's responses	
20		- update information - diesel update	
21		hearing	
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1 LIST OF EXHIBITS

- 2 CAC/MSOS/MH-1-91 Consumers' Association of and  
3 (Manitoba) Inc. and Manitoba Society  
4 of Seniors' 1st round Information  
5 Requests and Manitoba Hydro's responses  
6 - diesel update hearing - status of the  
7 settlement agreement
- 8 CAC/MSOS/MH-1-92 Consumers' Association of and  
9 (Manitoba) Inc. and Manitoba Society  
10 of Seniors' 1st round Information  
11 Requests and Manitoba Hydro's responses  
12 - options for re-structuring diesel  
13 rates considered by Manitoba Hydro
- 14 CAC/MSOS/MH-1-93 Consumers' Association of and  
15 (Manitoba) Inc. and Manitoba Society  
16 of Seniors' 1st round Information  
17 Requests and Manitoba Hydro's responses  
18 - undertakings no. 1 - 2, filed  
19 following the diesel update hearing
- 20 CAC/MSOS/MH-1-94 Consumers' Association of and  
21 (Manitoba) Inc. and Manitoba Society  
22 of Seniors' 1st round Information  
23 Requests and Manitoba Hydro's responses  
24 - diesel update hearing - 2000 kwh  
25 monthly limit

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- 2 CAC/MSOS/MH-1-95 Consumers' Association of and  
3 (Manitoba) Inc. and Manitoba Society  
4 of Seniors' 1st round Information  
5 Requests and Manitoba Hydro's responses  
6 - diesel update hearing - energy walk  
7 throughs
- 8 CAC/MSOS/MH-1-96 Consumers' Association of and  
9 (Manitoba) Inc. and Manitoba Society  
10 of Seniors' 1st round Information  
11 Requests and Manitoba Hydro's responses  
12 - risk review - documents and reports  
13 provided to the Board pursuant to  
14 Board Order 32/09
- 15 CAC/MSOS/MH-1-97 Consumers' Association of and  
16 (Manitoba) Inc. and Manitoba Society  
17 of Seniors' 1st round Information  
18 Requests and Manitoba Hydro's responses  
19 - risk review - cvs of the individuals  
20 at KPMG
- 21 CAC/MSOS/MH-1-98 Consumers' Association of and  
22 (Manitoba) Inc. and Manitoba Society  
23 of Seniors' 1st round Information  
24 Requests and Manitoba Hydro's responses  
25 - risk review - former consultant

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3	CAC/MSOS/MH-1-99	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- how much the Corporation has spent	
8		to date, and anticipates spending	
9		in the future, with respect to the	
10		disclosure pursuant to the Public	
11		Interest Disclosure Act	
12	CAC/MSOS/MH-1-100	Consumers' Association of and	
13		(Manitoba) Inc. and Manitoba Society	
14		of Seniors' 1st round Information	
15		Requests and Manitoba Hydro's responses	
16		- disconnection and arrears - low	
17		income	
18	CAC/MSOS/MH-1-101	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 1st round Information	
21		Requests and Manitoba Hydro's responses	
22		- disconnection and arrears -	
23		number of electricity-only accounts	
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3	CAC/MSOS/MH-1-102	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- CEA COPE study	
8	CAC/MSOS/MH-1-103	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 1st round Information	
11		Requests and Manitoba Hydro's responses	
12		- economic downturn	
13	CAC/MSOS/MH-1-104	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 1st round Information	
16		Requests and Manitoba Hydro's responses	
17		- corporate strategic plan	
18	CAC/MSOS/MH-1-105	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 1st round Information	
21		Requests and Manitoba Hydro's responses	
22		- integrated financial forecast -	
23		risk protection is achieved through	
24		adequate levels of equity	
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3	CAC/MSOS/MH-1-106	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- integrated financial forecast -	
8		risk management report that is used	
9		for internal purposes	
10	CAC/MSOS/MH-1-107	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 1st round Information	
13		Requests and Manitoba Hydro's responses	
14		- integrated financial forecast and	
15		electric load forecast	
16	CAC/MSOS/MH-1-108	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 1st round Information	
19		Requests and Manitoba Hydro's responses	
20		- debt and debt-equity	
21	CAC/MSOS/MH-1-109	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
23		of Seniors' 1st round Information	
24		Requests and Manitoba Hydro's responses	
25		- debt and debt management	

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3	CAC/MSOS/MH-1-110	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
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7		- operating, maintenance and	
8		administrative expense	
9	CAC/MSOS/MH-1-111	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 1st round Information	
12		Requests and Manitoba Hydro's responses	
13		- operating, maintenance and	
14		administrative expense	
15	CAC/MSOS/MH-1-112 and 113		
16		Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 1st round Information	
19		Requests and Manitoba Hydro's responses	
20		- retained earnings and debt/equity	
21	CAC/MSOS/MH-1-114	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
23		of Seniors' 1st round Information	
24		Requests and Manitoba Hydro's responses	
25		- risk and risk management	

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3	CAC/MSOS/MH-1-115	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- risk-credit rating agencies	
8	CAC/MSOS/MH-1-116	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 1st round Information	
11		Requests and Manitoba Hydro's responses	
12		- risk - net income affecting the	
13		debt/equity ratio	
14	CAC/MSOS/MH-1-117	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 1st round Information	
17		Requests and Manitoba Hydro's responses	
18		- risk - national bank financial	
19		independent assessment of corporate	
20		policy fixed vs. floating rate debt	
21	CAC/MSOS/MH-1-118	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
23		of Seniors' 1st round Information	
24		Requests and Manitoba Hydro's responses	
25		- risks within established tolerances	

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CAC/MSOS/MH-1-121	Consumers' Association of and (Manitoba) Inc. and Manitoba Society of Seniors' 1st round Information Requests and Manitoba Hydro's responses - export sales	
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4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- debt rating agency reports	
8	CAC/MSOS/MH-1-124	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 1st round Information	
11		Requests and Manitoba Hydro's responses	
12		- productivity improvements	
13	CAC/MSOS/MH-1-125	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 1st round Information	
16		Requests and Manitoba Hydro's responses	
17		- export prices [on average] for each	
18		of the years 2000/01 through 2009/10	
19	CAC/MSOS/MH-1-126	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
21		of Seniors' 1st round Information	
22		Requests and Manitoba Hydro's responses	
23		- 59th annual report, for the year	
24		ended March 31, 2010	
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4		Consumers' Association of and	
5		(Manitoba) Inc. and Manitoba Society	
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8		- operating, maintenance and	
9		administrative cost	
10	CAC/MSOS/MH-1-129	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 1st round Information	
13		Requests and Manitoba Hydro's responses	
14		- utility rate comparison	
15	CAC/MSOS/MH-1-130	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
17		of Seniors' 1st round Information	
18		Requests and Manitoba Hydro's responses	
19		- operating, maintenance and	
20		administrative costs - historical	
21		accounting of past IRFS costs	
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4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- operating, maintenance and	
8		administrative cost - degree to which	
9		the strategic issues relate to	
10		financial matters	
11	CAC/MSOS/MH-1-132	Consumers' Association of and	
12		(Manitoba) Inc. and Manitoba Society	
13		of Seniors' 1st round Information	
14		Requests and Manitoba Hydro's responses	
15		- operating, maintenance and	
16		administrative cost - corporate	
17		planning and strategic analysis group	
18	CAC/MSOS/MH-1-133	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 1st round Information	
21		Requests and Manitoba Hydro's responses	
22		- operating, maintenance and	
23		administrative cost - forecast IFRS	
24		costs	
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5		(Manitoba) Inc. and Manitoba Society	
6		of Seniors' 1st round Information	
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8		- debt and debt management - finance	
9		expense - 2009 economic outlook	
10	CAC/MSOS/MH-1-136	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 1st round Information	
13		Requests and Manitoba Hydro's responses	
14		- debt and debt management - finance	
15		expense - integrated financial forecast	
16		and economic outlook	
17	CAC/MSOS/MH-1-137	Consumers' Association of and	
18		(Manitoba) Inc. and Manitoba Society	
19		of Seniors' 1st round Information	
20		Requests and Manitoba Hydro's responses	
21		- debt and debt management - finance	
22		expense - historical support for the	
23		relationship between the T-bill rate	
24		and the "HYDRO Cost of Debt"	
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3	CAC/MSOS/MH-1-138	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- debt and debt management - finance	
8		expense - methodology employed in the	
9		development of the forecast	
10	CAC/MSOS/MH-1-139	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 1st round Information	
13		Requests and Manitoba Hydro's responses	
14		- debt and debt management - finance	
15		expense - CAC/MSOS/Centra 2-75 and	
16		CAC/MSOS/Centra 2-158.	
17	CAC/MSOS/MH-1-140	Consumers' Association of and	
18		(Manitoba) Inc. and Manitoba Society	
19		of Seniors' 1st round Information	
20		Requests and Manitoba Hydro's responses	
21		- debt and debt management - finance	
22		expense - CAC/MSOS/Centra 2-76 and	
23		CAC/MSOS/Centra 2-156.	
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3	CAC/MSOS/MH-1-141	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- debt and debt management - finance	
8		expense - long term Canada rate	
9	CAC/MSOS/MH-1-142	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 1st round Information	
12		Requests and Manitoba Hydro's responses	
13		- debt and debt management - finance	
14		expense - the financing plan for the	
15		forecast 2010/11, 2011/12 period	
16	CAC/MSOS/MH-1-143	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 1st round Information	
19		Requests and Manitoba Hydro's responses	
20		- debt and debt management - finance	
21		expense - congruency of the prior	
22		forecast with the executed financings	
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4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 1st round Information	
6		Requests and Manitoba Hydro's responses	
7		- debt and debt management strategy -	
8		report is dated November, 2009	
9	CAC/MSOS/MH-1-145	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 1st round Information	
12		Requests and Manitoba Hydro's responses	
13		- debt and debt management strategy -	
14		- reduction in US dollar debt in	
15		absolute terms	
16	CAC/MSOS/MH-1-146	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 1st round Information	
19		Requests and Manitoba Hydro's responses	
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8		- increase in the proportion of the	
9		floating rate US dollar debt	
10	CAC/MSOS/MH-1-148	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 1st round Information	
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16		floating rate Canadian dollar debt	
17	CAC/MSOS/MH-1-149	Consumers' Association of and	
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9		term issues	
10	CAC/MSOS/MH-1-151	Consumers' Association of and	
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15		- define "optimal"	
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9	CAC/MSOS/MH-1-154	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
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15	CAC/MSOS/MH-1-155	Consumers' Association of and	
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9	CAC/MSOS/MH-1-160	Consumers' Association of and	
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16	CAC/MSOS/MH-1-161	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
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9		Milhau	
10	CAC/MSOS/MH-1-167	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
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9		power net revenues as opposed to profits	
10	CAC/MSOS/MH-1-170	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
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17	CAC/MSOS/MH-1-171	Consumers' Association of and	
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10	CAC/MSOS/MH-1-176	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
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14		- debt and debt management fixed vs.	
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16	CAC/MSOS/MH-1-177	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
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10	CAC/MSOS/MH-1-179	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
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17		(Manitoba) Inc. and Manitoba Society	
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10		retained earnings	
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12		(Manitoba) Inc. and Manitoba Society	
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19		(Manitoba) Inc. and Manitoba Society	
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10 (Manitoba) Inc. and Manitoba Society  
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17 (Manitoba) Inc. and Manitoba Society  
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13		(Manitoba) Inc. and Manitoba Society	
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19	CAC/MSOS/MH-1-196	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
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12		(Manitoba) Inc. and Manitoba Society	
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17		(Manitoba) Inc. and Manitoba Society	
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9	CAC/MSOS/MH-2-1	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
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9		(Manitoba) Inc. and Manitoba Society	
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9		(Manitoba) Inc. and Manitoba Society	
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11		(Manitoba) Inc. and Manitoba Society	
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17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 2nd round Information	
19		Requests and Manitoba Hydro's responses	
20		- OM&A target as per the relevant CSP	
21	CAC/MSOS/MH-2-27	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
23		of Seniors' 2nd round Information	
24		Requests and Manitoba Hydro's responses	
25		- Inclusion of AOCI	

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3	CAC/MSOS/MH-2-28	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- productivity improvement factor	
8	CAC/MSOS/MH-2-29 and 30		
9		Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 2nd round Information	
12		Requests and Manitoba Hydro's responses	
13		- surplus energy program	
14	CAC/MSOS/MH-2-31	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 2nd round Information	
17		Requests and Manitoba Hydro's responses	
18		- application of TOU rates to regular	
19		GS-large customers	
20	CAC/MSOS/MH-2-32	Consumers' Association of and	
21		(Manitoba) Inc. and Manitoba Society	
22		of Seniors' 2nd round Information	
23		Requests and Manitoba Hydro's responses	
24		- loads and revenues for the EIR	
25		class	

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3	CAC/MSOS/MH-2-33	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- forecast NEB assessments	
8	CAC/MSOS/MH-2-34	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- PCOSS08	
13	CAC/MSOS/MH-2-35	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- load research data	
18	CAC/MSOS/MH-2-36	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 2nd round Information	
21		Requests and Manitoba Hydro's responses	
22		- rate design	
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2 CAC/MSOS/MH-2-37 Consumers' Association of and  
3 (Manitoba) Inc. and Manitoba Society  
4 of Seniors' 2nd round Information  
5 Requests and Manitoba Hydro's responses  
6 - DSM

7 CAC/MSOS/MH-2-38 Consumers' Association of and  
8 (Manitoba) Inc. and Manitoba Society  
9 of Seniors' 2nd round Information  
10 Requests and Manitoba Hydro's responses  
11 - obligation to purchase from MISO  
12 where supply shortage in Manitoba

13 CAC/MSOS/MH-2-39 Consumers' Association of and  
14 (Manitoba) Inc. and Manitoba Society  
15 of Seniors' 2nd round Information  
16 Requests and Manitoba Hydro's responses  
17 - amount of electricity transacted  
18 annually through the Minnesota Hub

19 CAC/MSOS/MH-2-40 Consumers' Association of and  
20 (Manitoba) Inc. and Manitoba Society  
21 of Seniors' 2nd round Information  
22 Requests and Manitoba Hydro's responses  
23 - costs in the US associated with the  
24 provision of additional import capability  
25 to Canada

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3	CAC/MSOS/MH-2-41	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- vintage export price forecasts	
8	CAC/MSOS/MH-2-42	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- listed service charges that do not	
13		require PUB approval	
14	CAC/MSOS/MH-2-43	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 2nd round Information	
17		Requests and Manitoba Hydro's responses	
18		- residential service charges	
19	CAC/MSOS/MH-2-44	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
21		of Seniors' 2nd round Information	
22		Requests and Manitoba Hydro's responses	
23		- Actual EFTs for 2008/09	
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3	CAC/MSOS/MH-2-45	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- exports/imports	
8	CAC/MSOS/MH-2-46	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- impact of accounting changes	
13	CAC/MSOS/MH-2-47	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- fuel and power purchases	
18	CAC/MSOS/MH-2-48	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 2nd round Information	
21		Requests and Manitoba Hydro's responses	
22		- financial results	
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3	CAC/MSOS/MH-2-49	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- export prices	
8	CAC/MSOS/MH-2-50	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- high "average salaries"	
13	CAC/MSOS/MH-2-51	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- overtime, vacancies and other	
18	CAC/MSOS/MH-2-52	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 2nd round Information	
21		Requests and Manitoba Hydro's responses	
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3	CAC/MSOS/MH-2-53	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- Mitigation cost obligations assumed	
8		by Manitoba Hydro are expensed as OM&A	
9		or capitalized.	
10	CAC/MSOS/MH-2-54 to 56		
11		Consumers' Association of and	
12		(Manitoba) Inc. and Manitoba Society	
13		of Seniors' 2nd round Information	
14		Requests and Manitoba Hydro's responses	
15		- cost of service study	
16	CAC/MSOS/MH-2-57	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 2nd round Information	
19		Requests and Manitoba Hydro's responses	
20		- cost of purchases required to "back"	
21		the merchant sales	
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3	CAC/MSOS/MH-2-58	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- financial outlook - no "allowance"	
8		for capitalized OM&A after 2011/12	
9	CAC/MSOS/MH-2-59	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 2nd round Information	
12		Requests and Manitoba Hydro's responses	
13		- financial outlook - average annual	
14		wind production	
15	CAC/MSOS/MH-2-60	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
17		of Seniors' 2nd round Information	
18		Requests and Manitoba Hydro's responses	
19		- financial outlook - firm export	
20		contracts	
21	CAC/MSOS/MH-2-61	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
23		of Seniors' 2nd round Information	
24		Requests and Manitoba Hydro's responses	
25		- DSM - increase in participants	

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2	Exhibit No.	Description	Page
3	CAC/MSOS/MH-2-62	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- DSM - revenue gain calculation	
8	CAC/MSOS/MH-2-63	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- DSM - levelized value	
13	CAC/MSOS/MH-2-64	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- DSM - infrastructure costs	
18	CAC/MSOS/MH-2-65	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 2nd round Information	
21		Requests and Manitoba Hydro's responses	
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3	CAC/MSOS/MH-2-66	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- exports	
8	CAC/MSOS/MH-2-67	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- temporary billing demand deferral	
13	CAC/MSOS/MH-2-68	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- rate design	
18	CAC/MSOS/MH-2-69	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 2nd round Information	
21		Requests and Manitoba Hydro's responses	
22		- corporate overview	
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3	CAC/MSOS/MH-2-70	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- OM&A expense	
8	CAC/MSOS/MH-2-71	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- financial expense	
13	CAC/MSOS/MH-2-72	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- financial forecast - capital	
18		expenditures	
19	CAC/MSOS/MH-2-73	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
21		of Seniors' 2nd round Information	
22		Requests and Manitoba Hydro's responses	
23		- energy supply	
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3	CAC/MSOS/MH-2-74	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- financial forecast - capital	
8		expenditures	
9	CAC/MSOS/MH-2-75 and 76		
10		Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 2nd round Information	
13		Requests and Manitoba Hydro's responses	
14		- proposed rates and customer impacts	
15	CAC/MSOS/MH-2-77	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
17		of Seniors' 2nd round Information	
18		Requests and Manitoba Hydro's responses	
19		- cost of service	
20	CAC/MSOS/MH-2-78	Consumers' Association of and	
21		(Manitoba) Inc. and Manitoba Society	
22		of Seniors' 2nd round Information	
23		Requests and Manitoba Hydro's responses	
24		- diesel	
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3	CAC/MSOS/MH-2-79	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- financial forecast	
8	CAC/MSOS/MH-2-80 and 81		
9		Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 2nd round Information	
12		Requests and Manitoba Hydro's responses	
13		- temporary billing demand concession	
14	CAC/MSOS/MH-2-82	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 2nd round Information	
17		Requests and Manitoba Hydro's responses	
18		- letter of application	
19	CAC/MSOS/MH-2-83 and 84		
20		Consumers' Association of and	
21		(Manitoba) Inc. and Manitoba Society	
22		of Seniors' 2nd round Information	
23		Requests and Manitoba Hydro's responses	
24		- fuel and power purchased	
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3	CAC/MSOS/MH-2-85	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- financial forecast - capital spending	
8	CAC/MSOS/MH-2-86 and 87		
9		Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 2nd round Information	
12		Requests and Manitoba Hydro's responses	
13		- low income	
14	CAC/MSOS/MH-2-88	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 2nd round Information	
17		Requests and Manitoba Hydro's responses	
18		- cost of service	
19	CAC/MSOS/MH-2-89	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
21		of Seniors' 2nd round Information	
22		Requests and Manitoba Hydro's responses	
23		- low income	
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3	CAC/MSOS/MH-2-90	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- Power Smart - recommendations	
8	CAC/MSOS/MH-2-91	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- Power Smart - updated metrics	
13	CAC/MSOS/MH-2-92	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- Power Smart - Dunsky report	
18	CAC/MSOS/MH-2-93	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 2nd round Information	
21		Requests and Manitoba Hydro's responses	
22		- Power Smart - kwh savings	
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3	CAC/MSOS/MH-2-94	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- Power Smart review 2007/2008	
8	CAC/MSOS/MH-2-95	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- corporate strategic plan	
13	CAC/MSOS/MH-2-96	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- OM&A per customer and IFRS	
18	CAC/MSOS/MH-2-97	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 2nd round Information	
21		Requests and Manitoba Hydro's responses	
22		- term "economic downturn" contained	
23		in the economic outlook	
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3	CAC/MSOS/MH-2-98	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- risk associated with domestic	
8		requirements for electricity and risk	
9		associated with prices received for	
10		power in the export market	
11	CAC/MSOS/MH-2-99	Consumers' Association of and	
12		(Manitoba) Inc. and Manitoba Society	
13		of Seniors' 2nd round Information	
14		Requests and Manitoba Hydro's responses	
15		- reduction in electricity available	
16		for export due to the increase in	
17		domestic demand would likely be offset	
18		by higher fuel prices	
19	CAC/MSOS/MH-2-100	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
21		of Seniors' 2nd round Information	
22		Requests and Manitoba Hydro's responses	
23		- Icf report	
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3	CAC/MSOS/MH-2-101	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- copy of all of the analysis conducted	
8		of each internal or external study	
9	CAC/MSOS/MH-2-102	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 2nd round Information	
12		Requests and Manitoba Hydro's responses	
13		- changes to revenue amounts	
14	CAC/MSOS/MH-2-103	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 2nd round Information	
17		Requests and Manitoba Hydro's responses	
18		- risk factors	
19	CAC/MSOS/MH-2-104	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
21		of Seniors' 2nd round Information	
22		Requests and Manitoba Hydro's responses	
23		- integrated financial forecasters	
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3	CAC/MSOS/MH-2-105	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- how the 75:25 debt-equity translates	
8		into benefits to MH domestic customers	
9	CAC/MSOS/MH-2-106	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 2nd round Information	
12		Requests and Manitoba Hydro's responses	
13		- debt/equity up to 95:15	
14	CAC/MSOS/MH-2-107	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 2nd round Information	
17		Requests and Manitoba Hydro's responses	
18		- cost of debt	
19	CAC/MSOS/MH-2-108	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
21		of Seniors' 2nd round Information	
22		Requests and Manitoba Hydro's responses	
23		- guarantee of MH's arrangements	
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3	CAC/MSOS/MH-2-109	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- what factors and metrics are	
8		demonstrating the need for the rate	
9		increase	
10	CAC/MSOS/MH-2-110	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 2nd round Information	
13		Requests and Manitoba Hydro's responses	
14		- MH's ability to absorb the financial	
15		impacts of adverse events	
16	CAC/MSOS/MH-2-111	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 2nd round Information	
19		Requests and Manitoba Hydro's responses	
20		- risk - calculations together with a	
21		complete list of assumptions	
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3	CAC/MSOS/MH-2-112	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- approach to identify opportunities,	
8		goals and strategies, benefits or the	
9		stakeholders	
10	CAC/MSOS/MH-2-113	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
12		of Seniors' 2nd round Information	
13		Requests and Manitoba Hydro's responses	
14		- Hydro's key financial ratios	
15	CAC/MSOS/MH-2-114	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
17		of Seniors' 2nd round Information	
18		Requests and Manitoba Hydro's responses	
19		- net export revenue as a percent of	
20		total revenue	
21	CAC/MSOS/MH-2-115	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
23		of Seniors' 2nd round Information	
24		Requests and Manitoba Hydro's responses	
25		- financial results	

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3	CAC/MSOS/MH-2-116	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- actual results 2009/10 in the format	
8		of the IFF	
9	CAC/MSOS/MH-2-117	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 2nd round Information	
12		Requests and Manitoba Hydro's responses	
13		- Emera analysis	
14	CAC/MSOS/MH-2-118	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 2nd round Information	
17		Requests and Manitoba Hydro's responses	
18		- 2004-2008 Manitoba Hydro values	
19	CAC/MSOS/MH-2-119	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
21		of Seniors' 2nd round Information	
22		Requests and Manitoba Hydro's responses	
23		- short term notes and floating rate	
24		debt	
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3	CAC/MSOS/MH-2-120	Consumers' Association of and	
4		(Manitoba) Inc. and Manitoba Society	
5		of Seniors' 2nd round Information	
6		Requests and Manitoba Hydro's responses	
7		- financial statements of Saskpower	
8	CAC/MSOS/MH-2-121	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- Q1 2008 report	
13	CAC/MSOS/MH-2-122	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- Coalition/MH II-77(d)	
18	CAC/MSOS/MH-2-123	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
20		of Seniors' 2nd round Information	
21		Requests and Manitoba Hydro's responses	
22		- optimal mix of fixed and floating	
23		rate debt	
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8	CAC/MSOS/MH-2-125	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- NBF report source of the underlying	
13		new information	
14	CAC/MSOS/MH-2-126	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 2nd round Information	
17		Requests and Manitoba Hydro's responses	
18		- actual to the modeled fixed equivalent	
19	CAC/MSOS/MH-2-127	Consumers' Association of and	
20		(Manitoba) Inc. and Manitoba Society	
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7		- subtlety between the phrases	
8		"optimal allocation to" and "optimal	
9		breakdown between"	
10	CAC/MSOS/MH-2-129	Consumers' Association of and	
11		(Manitoba) Inc. and Manitoba Society	
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13		Requests and Manitoba Hydro's responses	
14		- contrast the NBF financial model to	
15		the Martellini and Mihau model	
16	CAC/MSOS/MH-2-130	Consumers' Association of and	
17		(Manitoba) Inc. and Manitoba Society	
18		of Seniors' 2nd round Information	
19		Requests and Manitoba Hydro's responses	
20		- term versus maturity values	
21	CAC/MSOS/MH-2-131	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
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7		- NBF awareness	
8	CAC/MSOS/MH-2-133	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- NBF report	
13	CAC/MSOS/MH-2-134	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
15		of Seniors' 2nd round Information	
16		Requests and Manitoba Hydro's responses	
17		- OM&A and CPI	
18	CAC/MSOS/MH-2-135	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
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7		- tender for the NBF report	
8	CAC/MSOS/MH-2-137	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- 14 percent floating rate portfolio	
13		increases the return to shareholders	
14		by 51 percent.	
15	CAC/MSOS/MH-2-138	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
17		of Seniors' 2nd round Information	
18		Requests and Manitoba Hydro's responses	
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20		93.4 percent of the theoretical return	
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8 CAC/MSOS/MH-2-140 Consumers' Association of and  
9 (Manitoba) Inc. and Manitoba Society  
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12 - NBF's understanding of the regulatory  
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14 CAC/MSOS/MH-2-141 Consumers' Association of and  
15 (Manitoba) Inc. and Manitoba Society  
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20 CAC/MSOS/MH-2-142 Consumers' Association of and  
21 (Manitoba) Inc. and Manitoba Society  
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8	CAC/MSOS/MH-2-144	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
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11		Requests and Manitoba Hydro's responses	
12		- debt maturity schedule	
13	CAC/MSOS/MH-2-145	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
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17		- term sheet for the series 4Z issue	
18	CAC/MSOS/MH-2-146	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
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7		- revised debt strategy for various	
8		periods	
9	CAC/MSOS/MH-2-148	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 2nd round Information	
12		Requests and Manitoba Hydro's responses	
13		- debt maturity schedule where the	
14		maturity of a forward interest rate swap	
15	CAC/MSOS/MH-2-149	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
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18		Requests and Manitoba Hydro's responses	
19		- maturity date versus the obligation	
20		date	
21	CAC/MSOS/MH-2-150	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
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7		- Canadian T-bill rate	
8	CAC/MSOS/MH-2-152	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- commercial paper rates	
13	CAC/MSOS/MH-2-153	Consumers' Association of and	
14		(Manitoba) Inc. and Manitoba Society	
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18	CAC/MSOS/MH-2-154	Consumers' Association of and	
19		(Manitoba) Inc. and Manitoba Society	
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23		spread for long-term debt	
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7		- interest allocated to construction	
8	CAC/MSOS/MH-2-156	Consumers' Association of and	
9		(Manitoba) Inc. and Manitoba Society	
10		of Seniors' 2nd round Information	
11		Requests and Manitoba Hydro's responses	
12		- calculation of the adjusted finance	
13		expense	
14	CAC/MSOS/MH-2-157	Consumers' Association of and	
15		(Manitoba) Inc. and Manitoba Society	
16		of Seniors' 2nd round Information	
17		Requests and Manitoba Hydro's responses	
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3 (Manitoba) Inc. and Manitoba Society  
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7 .22 percent, 0.87 percent, 3.75 percent  
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10 (Manitoba) Inc. and Manitoba Society  
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14 plus rates
- 15 CAC/MSOS/MH-2-160 Consumers' Association of and  
16 (Manitoba) Inc. and Manitoba Society  
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20 integrating actual and forecast data
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9	CAC/MSOS/MH-2-163	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
11		of Seniors' 2nd round Information	
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13		- yields on the C107 issue and the	
14		FK-2 series	
15	CAC/MSOS/MH-2-164	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
17		of Seniors' 2nd round Information	
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19		- yields on the C108 issue and the FM	
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21	CAC/MSOS/MH-2-165	Consumers' Association of and	
22		(Manitoba) Inc. and Manitoba Society	
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4		(Manitoba) Inc. and Manitoba Society	
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8		dependable sales volumes	
9	CAC/MSOS/MH-2-167	Consumers' Association of and	
10		(Manitoba) Inc. and Manitoba Society	
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12		Requests and Manitoba Hydro's responses	
13		- power price data for a more	
14		extensive period than Bloomberg	
15	CAC/MSOS/MH-2-168	Consumers' Association of and	
16		(Manitoba) Inc. and Manitoba Society	
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20	CAC/MSOS/MH-2-169	Consumers' Association of and	
21		(Manitoba) Inc. and Manitoba Society	
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12		risk report - Dunsky's review of	
13		Manitoba Hydro's Power Smart Program	
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15		and Time to Respect Earth's Ecosystems'	
16		1st round Information Requests and	
17		Manitoba Hydro's responses - ICF	
18		risk report integrated financial	
19		forecast, November 2008	
20	RCM/TREE/MH-1-17	Resource Conservation Manitoba	
21		and Time to Respect Earth's Ecosystems'	
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23		Manitoba Hydro's responses - ICF	
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- 3 and Time to Respect Earth's Ecosystems'
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- 5 Manitoba Hydro's responses - ICF
- 6 risk report annual revenues from
- 7 domestic load and from exports for
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- 9 RCM/TREE/MH-1-19 Resource Conservation Manitoba
- 10 and Time to Respect Earth's Ecosystems'
- 11 1st round Information Requests and
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- 14 energy
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- 16 and Time to Respect Earth's Ecosystems'
- 17 1st round Information Requests and
- 18 Manitoba Hydro's responses - ICF risk
- 19 report export trade agreements
- 20 RCM/TREE/MH-1-21 Resource Conservation Manitoba
- 21 and Time to Respect Earth's Ecosystems'
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- 24 Risk report documents regarding the
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9	RCM/TREE/MH-1-23	Resource Conservation Manitoba	
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11		1st round Information Requests and	
12		Manitoba Hydro's responses - ICF risk	
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17		Manitoba Hydro's responses - ICF Risk	
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7		report MISO transmission studies	
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9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
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12		report summary of LT contract	
13	RCM/TREE/MH-1-28	Resource Conservation Manitoba	
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7		report management control plan	
8	RCM/TREE/MH-1-31	Resource Conservation Manitoba	
9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses - ICF risk	
12		report report, dated March 31,2008	
13	RCM/TREE/MH-1-32	Resource Conservation Manitoba	
14		and Time to Respect Earth's Ecosystems'	
15		1st round Information Requests and	
16		Manitoba Hydro's responses - ICF risk	
17		report 2002-2004 drought risk	
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12		Manitoba Hydro's responses - ICF risk	
13		report documents reviewed by ICF	
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15	RCM/TREE/MH-1-36	Resource Conservation Manitoba	
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17		1st round Information Requests and	
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19		report impact of global warming	
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21		and Time to Respect Earth's Ecosystems'	
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25		company under a range of scenarios	

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6		Manitoba Hydro's responses - ICF risk	
7		report risk analysis using prism	
8	RCM/TREE/MH-1-39	Resource Conservation Manitoba	
9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses - ICF risk	
12		report execution risk	
13	RCM/TREE/MH-1-40	Resource Conservation Manitoba	
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19		Resource Conservation Manitoba	
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5		1st round Information Requests and	
6		Manitoba Hydro's responses - residential	
7		late fee revenue	
8	RCM/TREE/MH-1-44	Resource Conservation Manitoba	
9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses - late charge	
12	RCM/TREE/MH-1-45	Resource Conservation Manitoba	
13		and Time to Respect Earth's Ecosystems'	
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15		Manitoba Hydro's responses - cost	
16		justification late fee payment	
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18		and Time to Respect Earth's Ecosystems'	
19		1st round Information Requests and	
20		Manitoba Hydro's responses - residential	
21		electric service charges not covered by	
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- 2 RCM/TREE/MH-1-47 Resource Conservation Manitoba
- 3 and Time to Respect Earth's Ecosystems'
- 4 1st round Information Requests and
- 5 Manitoba Hydro's responses - cost-
- 6 justification for the fee
- 7 RCM/TREE/MH-1-48 Resource Conservation Manitoba
- 8 and Time to Respect Earth's Ecosystems'
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- 10 Manitoba Hydro's responses - arrears
- 11 RCM/TREE/MH-1-49 Resource Conservation Manitoba
- 12 and Time to Respect Earth's Ecosystems'
- 13 1st round Information Requests and
- 14 Manitoba Hydro's responses - arrears
- 15 by the size of arrears by bands
- 16 RCM/TREE/MH-1-50 Resource Conservation Manitoba
- 17 and Time to Respect Earth's Ecosystems'
- 18 1st round Information Requests and
- 19 Manitoba Hydro's responses - number of
- 20 residential accounts
- 21 RCM/TREE/MH-1-51 Resource Conservation Manitoba
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- 24 Manitoba Hydro's responses - expenses
- 25 for residential collection activities

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10		and Time to Respect Earth's Ecosystems'	
11		1st round Information Requests and	
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13		payment charge - residential	
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7		deposits	
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9		Resource Conservation Manitoba	
10		and Time to Respect Earth's Ecosystems'	
11		1st round Information Requests and	
12		Manitoba Hydro's responses - credit	
13		and collection activities	
14	RCM/TREE/MH-1-61	Resource Conservation Manitoba	
15		and Time to Respect Earth's Ecosystems'	
16		1st round Information Requests and	
17		Manitoba Hydro's responses -	
18		organizational structure which provide	
19		all credit and collection services	
20	RCM/TREE/MH-1-62	Resource Conservation Manitoba	
21		and Time to Respect Earth's Ecosystems'	
22		1st round Information Requests and	
23		Manitoba Hydro's responses - budgeted	
24		collection costs	
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6		Manitoba Hydro's responses - actual	
7		collection costs	
8	RCM/TREE/MH-1-64	Resource Conservation Manitoba	
9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses -	
12		residential accounts	
13	RCM/TREE/MH-1-65	Resource Conservation Manitoba	
14		and Time to Respect Earth's Ecosystems'	
15		1st round Information Requests and	
16		Manitoba Hydro's responses -	
17		residential customers	
18	RCM/TREE/MH-1-66	Resource Conservation Manitoba	
19		and Time to Respect Earth's Ecosystems'	
20		1st round Information Requests and	
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6		Manitoba Hydro's responses -	
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8	RCM/TREE/MH-1-68	Resource Conservation Manitoba	
9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses - long-	
12		and/or short-term price elasticities	
13	RCM/TREE/MH-1-69	Resource Conservation Manitoba	
14		and Time to Respect Earth's Ecosystems'	
15		1st round Information Requests and	
16		Manitoba Hydro's responses - document	
17		of any nature-residential collections	
18	RCM/TREE/MH-1-70 and 71		
19		Resource Conservation Manitoba	
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21		1st round Information Requests and	
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7		re: collection procedures	
8	RCM/TREE/MH-1-73 and 74		
9		Resource Conservation Manitoba	
10		and Time to Respect Earth's Ecosystems'	
11		1st round Information Requests and	
12		Manitoba Hydro's responses - disconnect	
13		service due to the arrear age	
14	RCM/TREE/MH-1-75	Resource Conservation Manitoba	
15		and Time to Respect Earth's Ecosystems'	
16		1st round Information Requests and	
17		Manitoba Hydro's responses -	
18		residential collections	
19	RCM/TREE/MH-1-76	Resource Conservation Manitoba	
20		and Time to Respect Earth's Ecosystems'	
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7		by-month load curve	
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12		in the load curve for residential	
13		customers	
14	RCM/TREE/MH-1-83	Resource Conservation Manitoba	
15		and Time to Respect Earth's Ecosystems'	
16		1st round Information Requests and	
17		Manitoba Hydro's responses - electricity	
18		usage of residential customers	
19	RCM/TREE/MH-1-84	Resource Conservation Manitoba	
20		and Time to Respect Earth's Ecosystems'	
21		1st round Information Requests and	
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7		(kwh) from each customer class	
8	RCM/TREE/MH-1-86	Resource Conservation Manitoba	
9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses - revenue	
12		from each customer class	
13	RCM/TREE/MH-1-87	Resource Conservation Manitoba	
14		and Time to Respect Earth's Ecosystems'	
15		1st round Information Requests and	
16		Manitoba Hydro's responses - term	
17		"sustainable bill relief"	
18	RCM/TREE/MH-1-88	Resource Conservation Manitoba	
19		and Time to Respect Earth's Ecosystems'	
20		1st round Information Requests and	
21		Manitoba Hydro's responses -	
22		"sustainable bill relief" is	
23		temporary relief?	
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3 and Time to Respect Earth's Ecosystems'

4 1st round Information Requests and

5 Manitoba Hydro's responses - initial

6 bill assistance report dated February

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8 RCM/TREE/MH-1-90 Resource Conservation Manitoba

9 and Time to Respect Earth's Ecosystems'

10 1st round Information Requests and

11 Manitoba Hydro's responses - list of

12 key considerations

13 RCM/TREE/MH-1-91 Resource Conservation Manitoba

14 and Time to Respect Earth's Ecosystems'

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16 Manitoba Hydro's responses - balance

17 between improving the affordability

18 of energy for lower income customers

19 and maintaining social equity for the

20 general body of ratepayers

21 RCM/TREE/MH-1-92 Resource Conservation Manitoba

22 and Time to Respect Earth's Ecosystems'

23 1st round Information Requests and

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6		Manitoba Hydro's responses - term	
7		"efficient energy affordability"	
8	RCM/TREE/MH-1-94	Resource Conservation Manitoba	
9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses - distinguish	
12		between "facilitating efficient energy	
13		affordability" and "achieving efficient	
14		energy affordability?"	
15	RCM/TREE/MH-1-95	Resource Conservation Manitoba	
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17		1st round Information Requests and	
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19		of lower income customers for whom it	
20		is not possible to achieve - "efficient	
21		energy affordability"	
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3 and Time to Respect Earth's Ecosystems'

4 1st round Information Requests and

5 Manitoba Hydro's responses - internal

6 procedures manuals for company call

7 center personnel

8 RCM/TREE/MH-1-97 Resource Conservation Manitoba

9 and Time to Respect Earth's Ecosystems'

10 1st round Information Requests and

11 Manitoba Hydro's responses - internal

12 procedures manuals for company field

13 office personnel

14 RCM/TREE/MH-1-98 Resource Conservation Manitoba

15 and Time to Respect Earth's Ecosystems'

16 1st round Information Requests and

17 Manitoba Hydro's responses - staff

18 training manuals for company call

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20 RCM/TREE/MH-1-99 Resource Conservation Manitoba

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6		Manitoba Hydro's responses - procedures	
7		manuals neighbors helping neighbors	
8	RCM/TREE/MH-1-101	Resource Conservation Manitoba	
9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses - staff	
12		training manuals - neighbours helping	
13		neighbours	
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3 and Time to Respect Earth's Ecosystems'

4 1st round Information Requests and

5 Manitoba Hydro's responses -

6 calculations generated in the review

7 of the energy burden of Manitoba

8 Hydro's lower income customers

9 RCM/TREE/MH-1-105 Resource Conservation Manitoba

10 and Time to Respect Earth's Ecosystems'

11 1st round Information Requests and

12 Manitoba Hydro's responses - crisis

13 level

14 RCM/TREE/MH-1-106 Resource Conservation Manitoba

15 and Time to Respect Earth's Ecosystems'

16 1st round Information Requests and

17 Manitoba Hydro's responses - the

18 energy burden - based on single

19 RCM/TREE/MH-1-107 Resource Conservation Manitoba

20 and Time to Respect Earth's Ecosystems'

21 1st round Information Requests and

22 Manitoba Hydro's responses - study

23 determined that the energy burden

24 is not at a crises level done by an

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6		Manitoba Hydro's responses - burden	
7		is not at a crisis level	
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9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses - number	
12		of Manitoba Hydro lower income	
13		customers	
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15		and Time to Respect Earth's Ecosystems'	
16		1st round Information Requests and	
17		Manitoba Hydro's responses - feedback	
18		from Manitoba stakeholders	
19	RCM/TREE/MH-1-111	Resource Conservation Manitoba	
20		and Time to Respect Earth's Ecosystems'	
21		1st round Information Requests and	
22		Manitoba Hydro's responses - assistance	
23		provided to those most in need and who	
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7	learnings from other programs	
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11	1st round Information Requests and	
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17	Manitoba Hydro's responses - most	
18	common challenge facing bill assistance	
19	programs is lack of program awareness	
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11	RCM/TREE/MH-1-124	Resource Conservation Manitoba and Time to Respect Earth's Ecosystems' 1st round Information Requests and Manitoba Hydro's responses - demand side management through energy efficiency measures and customer education	
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- RCM/TREE/MH-1-127 Resource Conservation Manitoba  
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- RCM/TREE/MH-1-128 Resource Conservation Manitoba  
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7		families who are unable to pay their	
8		energy bills due to personal	
9		hardship or crisis	
10	RCM/TREE/MH-1-134	Resource Conservation Manitoba	
11		and Time to Respect Earth's Ecosystems'	
12		1st round Information Requests and	
13		Manitoba Hydro's responses - NHN	
14		program was designed to target	
15		Manitoba Hydro customers who are	
16		considered lower income and who	
17		find themselves in an emergency	
18		situation	
19	RCM/TREE/MH-1-135	Resource Conservation Manitoba	
20		and Time to Respect Earth's Ecosystems'	
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22		Manitoba Hydro's responses - 472	
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11		and Time to Respect Earth's Ecosystems'	
12		1st round Information Requests and	
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14		helping Heighbours spent 37.4 percent	
15		(\$81,250 of \$217,172) of total	
16		contributions on administrative costs	
17	RCM/TREE/MH-1-139	Resource Conservation Manitoba	
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7		each grant averaging \$254 each, the	
8		company spent \$172 in administrative	
9		costs	
10	RCM/TREE/MH-1-142	Resource Conservation Manitoba	
11		and Time to Respect Earth's Ecosystems'	
12		1st round Information Requests and	
13		Manitoba Hydro's responses - combined	
14		administrative and marketing costs	
15	RCM/TREE/MH-1-143	Resource Conservation Manitoba	
16		and Time to Respect Earth's Ecosystems'	
17		1st round Information Requests and	
18		Manitoba Hydro's responses -	
19		administration costs	
20	RCM/TREE/MH-1-144	Resource Conservation Manitoba	
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9	RCM/TREE/MH-1-146	Resource Conservation Manitoba	
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11		1st round Information Requests and	
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13		used in the review of energy burdens	
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15		and Time to Respect Earth's Ecosystems'	
16		1st round Information Requests and	
17		Manitoba Hydro's responses - distribution	
18		of the number of customers by ranges	
19		of LICO	
20	RCM/TREE/MH-1-148	Resource Conservation Manitoba	
21		and Time to Respect Earth's Ecosystems'	
22		1st round Information Requests and	
23		Manitoba Hydro's responses - LICO	
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3 and Time to Respect Earth's Ecosystems'

4 1st round Information Requests and

5 Manitoba Hydro's responses -

6 calculation of energy cost of \$1,633

7 for electricity heating customers

8 RCM/TREE/MH-1-150 Resource Conservation Manitoba

9 and Time to Respect Earth's Ecosystems'

10 1st round Information Requests and

11 Manitoba Hydro's responses - calculation

12 of energy cost of \$1,633 for natural

13 gas heating customers

14 RCM/TREE/MH-1-151 Resource Conservation Manitoba

15 and Time to Respect Earth's Ecosystems'

16 1st round Information Requests and

17 Manitoba Hydro's responses - median

18 income for LICO population

19 RCM/TREE/MH-1-152 Resource Conservation Manitoba

20 and Time to Respect Earth's Ecosystems'

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22 Manitoba Hydro's responses - distribution

23 of the number of customers in the LICO

24 x 125 percent population by quintiles

25 of income

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7		the electric heating customers by	
8		energy costs in bands of \$250	
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10		and Time to Respect Earth's Ecosystems'	
11		1st round Information Requests and	
12		Manitoba Hydro's responses - the	
13		natural gas heating customers by	
14		energy costs in bands of \$250	
15	RCM/TREE/MH-1-155	Resource Conservation Manitoba	
16		and Time to Respect Earth's Ecosystems'	
17		1st round Information Requests and	
18		Manitoba Hydro's responses - \$900	
19		average customer arrears for customers	
20		receiving NHN	
21	RCM/TREE/MH-1-156	Resource Conservation Manitoba	
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24		Manitoba Hydro's responses -	
25		NHN participants	

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6		Manitoba Hydro's responses - energy	
7		burdens based on an annual income	
8		of \$17,000	
9	RCM/TREE/MH-1-158	Resource Conservation Manitoba	
10		and Time to Respect Earth's Ecosystems'	
11		1st round Information Requests and	
12		Manitoba Hydro's responses - energy	
13		burdens based on an annual income	
14		of \$24,000	
15	RCM/TREE/MH-1-159 and 160		
16		Resource Conservation Manitoba	
17		and Time to Respect Earth's Ecosystems'	
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19		Manitoba Hydro's responses - each	
20		utility offering a "rate discount"	
21		studied for the report	
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RCM/TREE/MH-1-163	Resource Conservation Manitoba and Time to Respect Earth's Ecosystems' 1st round Information Requests and Manitoba Hydro's responses - negative assets if the debt on mortgage is considered	
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4		and Time to Respect Earth's Ecosystems'	
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7		burden/crisis level	
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9		and Time to Respect Earth's Ecosystems'	
10		1st round Information Requests and	
11		Manitoba Hydro's responses - number	
12		of lower income customers	
13	RCM/TREE/MH-1-167	Resource Conservation Manitoba	
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16		Manitoba Hydro's responses - current	
17		average arrears of an NHN recipient	
18	RCM/TREE/MH-1-168	Resource Conservation Manitoba	
19		and Time to Respect Earth's Ecosystems'	
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RCM/TREE/MH-1-171	Resource Conservation Manitoba and Time to Respect Earth's Ecosystems' 1st round Information Requests and Manitoba Hydro's responses - resource sources	
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23		cost (MC)-COSS analysis required by	
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7	CITY/MH-1-10 City of Winnipeg's 1st round
8	Information Requests and Manitoba
9	Hydro's responses - the number of
10	customers and the adjustments for
11	the water heating
12	CITY/MH-1-11 City of Winnipeg's 1st round
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15	into the distribution system
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17	Information Requests and Manitoba
18	Hydro's responses - analysis undertaken
19	to determine the allocated portion of
20	interest and contribution to reserves
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23	Hydro's responses - direct operating
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7		class share for individual SCC's	
8	CITY/MH-2-3	City of Winnipeg's 2nd round	
9		Information Requests and Manitoba	
10		Hydro's responses - explanation for	
11		each column which pertains to roadway	
12		and area lighting	
13	CITY/MH-2-4	City of Winnipeg's 2nd round	
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15		Hydro's responses - basis of the	
16		factor 1:10	
17	CITY/MH-2-5	City of Winnipeg's 2nd round	
18		Information Requests and Manitoba	
19		Hydro's responses - interest charges	
20	CITY/MH-2-6	City of Winnipeg's 2nd round	
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23		materials and purchased services,	
24		overheads, less: depreciation	
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SCO/MH-1-3	Southern Chiefs' Organization Inc.'s 2nd round Information Requests and Manitoba Hydro's responses - do rates include provision for damages	
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6		studies of accounting impacts for
7		damages of aboriginal properties
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15		Inc.'s 2nd round Information Requests
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17		records on consultations and
18		potential damages
19	SCO/MH-1-9	Southern Chiefs' Organization
20		Inc.'s 2nd round Information Requests
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4	Hydro's responses - imported power versus
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8	Inc.'s risk round Information Requests
9	and Manitoba Hydro's responses -
10	KM-1 Terms of reference
11	KM-2 Evidence of Doctors Kubursi and
12	Magee
13	NYC-1 Appendix A - the New York consultant's
14	June 30, 2010 public document MH-8:
15	Manitoba Hydro's rebuttal evidence, filed
16	December 31st, 2010
17	MH-7-1 to 2 Manitoba Hydro Information Requests of
18	MIPUG witness and responses
19	MH-8 Manitoba Hydro's rebuttal evidence, filed
20	December 31st, 2010
21	MH-9 Manitoba Hydro's affidavit of publication
22	and service, dated January 29th, 2010
23	MH-10 Manitoba Hydro's letter dated October 15th,
24	2010, responding to CAC/MSOS's draft
25	motion for disclosure

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3	MH-12	Mr. Warden's presentation		
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3	1	Manitoba Hydro to indicate whether or not	
4		there was a larger number embedded in	
5		IFF-08 on account of energy intensive	
6		industrial rates	742
7	2	Manitoba Hydro to show the lower IFF-09	
8		revenues that result from the load	
9		reductions between IFF-08 and IFF-09	762
10	3	Manitoba Hydro to quantify transmission	
11		and ancilliary service costs in forecast	
12		IFF-09 for the test years and 2019/'20	
13		and provide actuals for 2009/'10	814
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15		of the merchant trading function on an	
16		annual basis for the last five (5) years	825
17	5	Manitoba Hydro to determine what	
18		"dependable" depicts on page 28 of Board	
19		counsel book of documents	
20		(Exhibit PUB-15)	846
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UNDERTAKINGS (Con't)

No.	Description	Page No.
6	Manitoba Hydro to provide estimate of the increase in gas generated electricity, as well as coal generated electricity, if there was a fifteen dollar (\$15) a tonne greenhouse gas penalty, and double for thirty (30)	906

1

2 --- Upon commencing at 9:37 a.m.

3

4 THE CHAIRPERSON: Okay. Welcome back,  
5 everyone. When we left off, I believe Manitoba Hydro was  
6 re -- researching one (1) of Mr. Peter's questions.

7 Mr. Peters...?

8

9 MANITOBA HYDRO PANEL:

10 VINCE WARDEN, Resumed

11 DARREN RAINKIE, Resumed

12 ROBIN WIENS, Resumed

13 LLOYD KUCZEK, Resumed

14 HAROLD SURMINSKI, Resumed

15

16 CONTINUED CROSS-EXAMINATION BY MR. BOB PETERS:

17 MR. BOB PETERS: Yes, Mr. Chairman. I  
18 was asking of Mr. Warden whether the ten (10) year  
19 Manitoba bond spread over -- the Canada ten (10) year  
20 bond spread had changed in the last year, and I flew that  
21 at him and Mr. Schulz at -- at the end of day, and I'm  
22 not sure if they've had a chance to think about that  
23 further.

24 Mr. Warden...?

25 MR. DARREN RAINKIE: Good morning, Mr.

1 Peters.

2 MR. BOB PETERS: Good morning, Mr.  
3 Rainkie.

4 MR. DARREN RAINKIE: I've been away from  
5 treasury for a while, but Mr. Schulz has assisted us  
6 ably, so just on a -- on a global basis, the treasury has  
7 indicated that our -- the Manitoba spread has moved  
8 between a range of fifty-six (56) to eighty-seven (87)  
9 basis points over the last year, and currently it's  
10 around seventy (70) basis points.

11

12 (BRIEF PAUSE)

13

14 MR. BOB PETERS: Mr. Warden, if you and I  
15 could reconnect on Tab 2 of the book of documents, and  
16 I'll just indicate on the transcript that it's my  
17 expectation that in addition to the transcript from the  
18 proceedings being posted on the Board's website as usual,  
19 a copy of PUB-Exhibit 15, which is the Board counsel book  
20 of documents will also be posted. It's a hyperlinked,  
21 I'm told that's a word, version, and it'll make it easy  
22 for people to follow from tab to tab.

23

24 But we were on Tab 2 yesterday, Mr.  
25 Warden. Do you have that in front of you?

25

MR. VINCE WARDEN: I do.



1 MR. BOB PETERS: And as we were working  
2 through the document, and we were almost through it, we  
3 had gotten down to column number 7, and the latest  
4 forecast, both in the second quarter Manitoba Hydro  
5 report and in IFF-10, had the forecast net income at  
6 about \$150 million, or \$149 million.

7 Correct?

8 MR. VINCE WARDEN: Correct.

9 MR. BOB PETERS: And then yesterday you  
10 were raising some caution relative to that number because  
11 after your eight (8) month financial reports, there was  
12 some unfavourable tracking going on relative to the  
13 forecast.

14 Is that also correct?

15 MR. VINCE WARDEN: That is also correct.

16 MR. BOB PETERS: And while you may have  
17 put a number in terms of being unfavourable on the -- on  
18 the record, at this point in time you're not prepared to  
19 tell this Board what Manitoba Hydro's forecast for net  
20 income will be for 2011.

21 MR. VINCE WARDEN: No, I prefer to look  
22 at December results before I project out to the last  
23 quarter. I did indicate, however, that we're tracking  
24 \$13 million unfavourable to the end of November.  
25 December is likely to continue that trend.

1                   There are some variances that are  
2 favourable, others that are unfavourable, but the  
3 unfavourable trend is likely to continue, and I would  
4 like to have December results in hand before I put  
5 forward -- put forward a forecast for the balance of the  
6 fiscal year.

7                   MR. BOB PETERS:     And when does that  
8 December forecast come to your hands?

9                   MR. VINCE WARDEN:     The December actual  
10 results?

11                  MR. BOB PETERS:     The re -- the results  
12 you're waiting for before you can be more definitive.

13                  MR. VINCE WARDEN:     Yeah, the -- they come  
14 in -- typically, we would get our revenue numbers as  
15 early as tomorrow. So we'll have our -- our revenue  
16 numbers and then our expense numbers would follow a few  
17 days later. So as we get -- probably when we re --  
18 reconvene on the 17th, I think it is, we'll pro -- I'll  
19 be in a better position to perhaps venture a forecast to  
20 the end of the year.

21                  MR. BOB PETERS:     All right. Let's --  
22 let's leave it at the point where Manitoba Hydro's latest  
23 filing shows forecast net income of \$150 million for  
24 2011. And you will update the Board when we come back  
25 February -- sorry January 17th should there be any

1 different information you want to impart to the Board,  
2 would that be fair?

3 MR. VINCE WARDEN: Well, we can leave it  
4 that 150 million, 149 million is likely to be -- very  
5 likely to be high for net income for '10/'11, and I will  
6 update the Board when we re -- reconvene on the 17th.

7

8 (BRIEF PAUSE)

9

10 MR. BOB PETERS: While it may be high and  
11 you're not prepared to tell us how much too high other  
12 than your hint that it's tracking unfavourably by 13  
13 million at this point, you will agree that when we take  
14 the 2010 net income, where the Corporation was about \$39  
15 million better off, and then if we use the \$150 million  
16 number for 2011, the Corporation is collectively \$110  
17 million better off financially than when the application  
18 was filed.

19 MR. VINCE WARDEN: Well, there has to be  
20 some qualifications around those numbers though. As we  
21 did speak earlier, the 39 million is comprised mainly of  
22 an accounting adjustment, so it's not in terms of real  
23 dollars but it is -- it -- it, nevertheless, did affect  
24 net income by that amount. So the 39 million, largely an  
25 adjustment, an accounting adjustment, a one-time

1 accounting adjus -- adjustment, and the 71 million, as  
2 we've just discussed, is -- is on the high side.

3 MR. BOB PETERS: Well, maybe you can  
4 explain to the Board why an accounting adjustment  
5 favourable is not real money, but when it comes to IFRS  
6 or other accounting adjustments negative that is real  
7 money.

8 MR. VINCE WARDEN: No. No, I -- I think  
9 I said that it's -- I didn't -- I don't think I used the  
10 terms "real money." It do -- it does affect net income  
11 by that amount. I just wanted to be clear that it was an  
12 adjustment that was made, a one-time accounting  
13 adjustment that was made affecting results by the amount  
14 of approximately \$30 million.

15 MR. BOB PETERS: All right. Thank you.  
16 Let's continue with book of documents, Tab 2, and look at  
17 the second test year ending March 31 of 2012. We see in  
18 column 3 of the document at Tab 2 of Board counsel book  
19 of documents, PUB Exhibit 15, that 87 million was the  
20 forecast from IFF-09, correct?

21 MR. VINCE WARDEN: Correct.

22 MR. BOB PETERS: When that forecast was  
23 done, it assumed mean water flows and did the  
24 calculations based on mean water flows.

25 MR. VINCE WARDEN: Medium water

1 conditions, yes.

2 MR. BOB PETERS: Sorry, was it mean or  
3 median? And can you help me?

4 MR. VINCE WARDEN: Medium.

5 MR. HAROLD SURMINSKI: If it's the second  
6 year or the third year of the -- the forecast, it's the  
7 mean of the results of all water conditions, so it's not  
8 the mean water condition; it's the mean of ninety-four  
9 (94) water conditions, and the financial result at each  
10 of the ninety-four (94) conditions is used in the  
11 average.

12 MR. BOB PETERS: You're going to have to  
13 explain that me, Mr. Warden. I -- I thought we were  
14 talking the same language, and Mr. Surminski has -- has  
15 helped maybe clarify it. When we talk about the IFF and  
16 using the mean, I had understood the mean to be the  
17 average of the ninety-four (94) years of historical  
18 record of Manitoba Hydro. Is there a different mean that  
19 I should be aware of?

20 MR. HAROLD SURMINSKI: It's -- it's not  
21 the mean water condition; it's the mean of the financial  
22 consequences of all of them. So the lows have a  
23 financial consequence which is, you know, on the extreme  
24 low side.

25 MR. BOB PETERS: All right.

1 MR. HAROLD SURMINSKI: But there's a  
2 difference between using a mean water condition and using  
3 ninety-four (94) different financial outcomes.

4 MR. BOB PETERS: So the mean is -- is --  
5 is only related to the financial outcomes from ninety-  
6 four (94) years, not related to the -- whatever the water  
7 level was during those ninety-four (94) years?

8 MR. HAROLD SURMINSKI: It is all ninety-  
9 four (94) water conditions with a consequence for each of  
10 them weighted equally to get the mean.

11 MR. BOB PETERS: All right. I think I  
12 understand what your point is. So the -- the forecast of  
13 87 million was based on the mean of those ninety-four  
14 (94) water conditions in financial situations?

15 MR. HAROLD SURMINSKI: Yes, and that's  
16 the third year of the forecast --

17 MR. BOB PETERS: Yes.

18 MR. HAROLD SURMINSKI: -- whereas the  
19 second year is a single water flow condition we based on  
20 medium in -- inflows.

21 MR. BOB PETERS: And the 2010 -- the  
22 second test year that you're before the Board on, with  
23 mean flows of water and financial results, that would  
24 have translated into...

25

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: Let me -- let me  
4 withdraw that and rephrase the question. Even though  
5 it's January of 2011, it is certain that Manitoba Hydro  
6 will now have significantly above mean water flows at the  
7 beginning of April of 2011. Would that also be  
8 agreeable?

9 MR. HAROLD SURMINSKI: Yes, that's  
10 correct.

11 MR. BOB PETERS: Have you put a  
12 quantification on it, Mr. Surminski, at this point in  
13 time?

14 MR. HAROLD SURMINSKI: That would be a  
15 better question to pose to Mr. Cormie, who will be here  
16 next week. He's in the -- the short-term operations and  
17 -- and -- and using, you know, his estimates are for the  
18 next two (2) years.

19 MR. BOB PETERS: If it was a mean flow  
20 year, Mr. Surminski, that would translate in abo -- to  
21 about, do we say 7,000 gigawatt hours of exports?

22 MR. HAROLD SURMINSKI: It -- it depe --  
23 it depends on your starting elevation, starting storage  
24 levels. So just because you have a -- a mean inflow, it  
25 depends on what your starting storage levels are. So if

1 you have excess storage, you will gain more energy  
2 because you could be utilizing your storage plus your  
3 inflows.

4 MR. ROBERT MAYER: Mr. Surminski, your  
5 water -- your -- your storage levels are at maximum, are  
6 they not?

7 MR. HAROLD SURMINSKI: That's exactly  
8 right, so that's why I'm saying we could be generating  
9 more energy, because we could be using that storage.

10

11 (BRIEF PAUSE)

12

13 CONTINUED BY MR. BOB PETERS:

14 MR. BOB PETERS: With IFF-10 being  
15 released, it appears that the Corporation has  
16 acknowledged, and I'm looking at column number 8 on the  
17 second tab, PUB book of documents. The Corporation is  
18 forecasting \$125 million of net income for the second  
19 test year, Mr. Warden. Is that correct?

20 MR. VINCE WARDEN: Yes.

21 MR. BOB PETERS: And would you agree that  
22 if water flows are similar to the '09 or '10 year, and  
23 maybe even if export prices remain as they are, that \$87  
24 million was increased to at least \$125 million?

25 MR. VINCE WARDEN: Yes.



1                   MR. BOB PETERS:     And that \$125 million  
2     may even be low in light of the water levels that you're  
3     seeing already coming through for the next year?

4                   MR. VINCE WARDEN:     Possibly, but again,  
5     we have a real price issue.    The -- the assumption that  
6     would have been in the forecast for that fiscal year  
7     would have been some price recovery.   We have not seen --  
8     seen that yet.   And will we see that is very -- very  
9     uncertain.   We do know that water lev -- levels, water  
10    conditions are not that much different in fiscal year  
11    2011/'12 compared to '10/'11, and export revenues are  
12    forecast to increase in that year, in the -- in the later  
13    year.   Very much dependent on price though.

14                  MR. BOB PETERS:     Water is not seen as a  
15    limiting factor, but price is?

16                  MR. VINCE WARDEN:     Yes.

17

18   (BRIEF PAUSE)

19

20                  MR. BOB PETERS:     Mr. Warden, I want to  
21    turn to the third document in the book of documents that  
22    has been prepared for Board counsel, and this is a  
23    response to PUB Manitoba Hydro First Round Question 2B,  
24    and it also has a chart prepared at the front of -- of  
25    that answer.

1                   And when the Board looks at the chart  
2 information, would it be correct that, since Manitoba  
3 Hydro's fiscal 2005 year until April 1st of 2010,  
4 including the 2.9 percent increase awarded on an interim  
5 basis, that the rate increases have been approximately 20  
6 percent on a non-compounded basis?

7                   MR. VINCE WARDEN:     Yes.  A simple  
8 addition would yield that number, Mr. Peters.  It is  
9 somewhat -- yeah, I'll go with that.  It's -- it is a  
10 simple addition, non-compounding, yes.

11                  MR. BOB PETERS:     And what you're telling  
12 the Board is that if -- if you compounded the rate  
13 increases as factually occurred in billings to consumers,  
14 the number would be higher than 20.2 percent?

15                  MR. VINCE WARDEN:     Yes, and that's  
16 typically what we do when we make rate comparisons.  We  
17 select a base year and then compound from that base year  
18 to compare to inflation over that same period of time.  
19 It's the fairest way of doing it, and that's what we've  
20 done in -- in our Exhibit Number 12, page 30 of Exhibit  
21 Number -- Exhibit Number 12 does represent that more  
22 accurately, I believe.

23

24

(BRIEF PAUSE)

25

1                   MR. BOB PETERS:     Maybe you can help, Mr.  
2 Warden, see if we're talking in the same point. The  
3 inflation rate, while the -- the simple -- simple  
4 additional rate increases were over 20 percent in that  
5 period of time from fiscal '05 to April 1st of 2010, the  
6 inflation rate was 13.7 percent?

7                   MR. VINCE WARDEN:     Again, based on simple  
8 -- simple addition, yes.

9

10   (BRIEF PAUSE)

11

12                   MR. BOB PETERS:     When we look at -- Mr.  
13 Warden, when the Board looks at page 30 of your  
14 presentation to them yesterday afternoon and -- and sees  
15 the graph, the graph includes years in which Manitoba  
16 Hydro chose not to seek a rate increase of any kind, is  
17 that correct?

18                   MR. VINCE WARDEN:     Yes. It shows the  
19 impact on the consumer over that period of time.

20                   MR. BOB PETERS:     And if you were to plot  
21 the information from 2005 up until present, the graph  
22 would look -- would look different, would it not?

23                   MR. VINCE WARDEN:     It would, and that's  
24 why, if you flip the page to page 31 of Exhibit Number  
25 12, we have shown the time -- time frame I think we're

1 discussing in -- in the chart in the book of documents,  
2 and it does show the cumulative increases over that  
3 period of time to be 13.5 percent. So we just wanted to  
4 be clear exactly the difference that is made with  
5 different time frames.

6 MR. BOB PETERS: And your -- your chart  
7 on page 31 doesn't include the 5 percent rate increase  
8 from 2004/'05?

9 MR. VINCE WARDEN: That's right. In this  
10 particular case, it starts in 2006.

11 MR. BOB PETERS: So it's a question of  
12 where you start and how you -- how you index it at that  
13 point in time as to what the graph would look like?

14 MR. VINCE WARDEN: Absolutely, and that's  
15 why it's useful, I -- we think, to look at it over a  
16 longer period of time, because if you -- a short period  
17 of time can be misleading. That's why the chart on page  
18 30 is more representative and more fair of the impact on  
19 consumers over time.

20 MR. BOB PETERS: Can you remind the Board  
21 why Manitoba Hydro didn't seek rate increases in the  
22 early years depicted on your graph?

23 MR. VINCE WARDEN: Well, this was  
24 following a time of -- a new generation had just come --  
25 come in. Limestone gener -- generating station had --

1 had been placed in ser -- service.

2 There was no immediate plans to put new  
3 generation into service at that time. The net income was  
4 reasonable, making good progress towards achieving  
5 financial targets. There was no real need for rate  
6 increases given tho -- that situation at the time.

7 MR. ROBERT MAYER: Mr. Warden, if my  
8 memory serves me correctly I recall a government ordered  
9 rate freeze for Manitoba Hydro. The government ordered a  
10 rate freeze by the Filmon government.

11 MR. VINCE WARDEN: No, Mr. Mayer, the  
12 rate freeze was actually, if my mem -- memory serves me  
13 correctly, and Mr. Wiens can probably correct me on this,  
14 but it was in the -- in the 1970s.

15 Seventy (70) -- '79 to '83 is -- was the  
16 rate freeze.

17

18 (BRIEF PAUSE)

19

20 CONTINUED BY MR. BOB PETERS:

21 MR. BOB PETERS: Mr. Warden, looking at  
22 your graph on page 30 of your presentation from  
23 yesterday, which you've identified as Manitoba Hydro  
24 Exhibit 12, where on the graph did Manitoba Hydro's plans  
25 change such that rate increases to support future major

1 construction plans was -- was determined by Manitoba  
2 Hydro?

3 MR. VINCE WARDEN: Well, as we're all  
4 aware, we did incur significant drought during 2003/2004.  
5 Rate increases were implemented -- modest, I must say,  
6 modest rate increases were implemented at -- at that  
7 time, partly as a result of the -- the drought conditions,  
8 the losses that were incurred.

9 So demonstrating the value of having  
10 adequate retained earnings such that we can respond to  
11 drought without rate shocks and that's what happened  
12 during that period of time.

13 MR. BOB PETERS: When you say, "modest,"  
14 are you adding together with the 5 percent the 2 1/4  
15 percent awards, as well?

16 MR. VINCE WARDEN: Well, I think, again,  
17 looking at any -- any one (1) year, 5 percent definitely  
18 was above the rate of inflation for that year.

19 But nevertheless, if you look at it over a  
20 period of time, the preceding years where there were no  
21 rate increases then certainly it was modest.

22 MR. BOB PETERS: Wasn't the intention to  
23 be able to weather those droughts without coming to the  
24 consumers for any rate increases?

25 MR. VINCE WARDEN: No. No, I think the

1 intention is to have adequate retained earnings such that  
2 there would not be rate shock to consumers.

3 MR. BOB PETERS: So even going forward,  
4 no matter what the equity reserve is, there will be an  
5 intention in a drought year to come back to consumers for  
6 rate increases?

7 MR. VINCE WARDEN: Oh, not necessarily.  
8 A decision would be made at that time, if we were to --  
9 and then we would have to make a decision based on the  
10 conditions at the time, how long -- how long, how deep  
11 that drought might be.

12 We -- we are in the position now of having  
13 sufficient retained earnings to respond to a -- a five  
14 (5) year drought, but that doesn't mean we wouldn't have  
15 rate increases to replenish retain -- retained earnings  
16 over a reasonable period of time.

17 MR. BOB PETERS: Still on document number  
18 3 in the Board counsel book of documents, the additional  
19 revenues flowing from the rate increases from fiscal 2005  
20 works out by math to be about \$195 million of additional  
21 revenues.

22 Would you agree with that, sir?

23

24

(BRIEF PAUSE)

25

1 MR. VINCE WARDEN: Yes.

2 MR. BOB PETERS: And that \$195 million of  
3 additional revenues, that will form the base of revenues  
4 going forward if the April 1st of 2010 interim rate  
5 increases is confirmed.

6 MR. VINCE WARDEN: Yes.

7 MR. BOB PETERS: Is it also correct that  
8 in that time period there was 1.5 billion approximately  
9 of net income in that six (6) year period?

10 MR. DARREN RAINKIE: Mr. Peters, do you  
11 have a reference where that's calculated?

12

13 (BRIEF PAUSE)

14

15 MR. BOB PETERS: Mr. Rainkie, we'll --  
16 we'll go back on that and come with you. We -- we took  
17 it from your corporate fi -- annual reports, but we can  
18 check it and come back.

19 MR. DARREN RAINKIE: Looks reasonable  
20 just from a quick eyeball, Mr. Peters.

21 MR. BOB PETERS: All right, then we won't  
22 check it and get back to you. We'll -- thank you for  
23 your answer, Mr. Rainkie. If the second test year rate  
24 request of 2.9 percent effective April 1st of 2011 is  
25 approved, then the cumulative -- sorry, then the rate



1 increases on a non-compounded basis since 2005 would be  
2 23 percent, Mr. Warden.

3 MR. VINCE WARDEN: Yes.

4 MR. BOB PETERS: And that would be  
5 measured against 15.7 percent inflation rate in that same  
6 period of time.

7 MR. VINCE WARDEN: Over that same period  
8 of time, yes.

9 MR. DARREN RAINKIE: Mr. Peters, just  
10 going back two (2) questions ago, and I -- I forget what  
11 year -- time frame was specified, but we talk about a  
12 billion and a half dollars over that time frame, but I  
13 would just point out to the Board we left out the \$435  
14 million loss that happened the year before, so as, you  
15 know, the discussion with you and Mr. Warden just a few  
16 minutes ago, it's all important about what your time  
17 frame is. The cost of se -- service rate making  
18 methodology that we use works over a long period of time.  
19 So when we splice these things into one (1) or two (2)  
20 years, I'm not sure there's a large conclusion.

21 In fact, if you look at our rebuttal  
22 evidence, if you look at the rate increases over the last  
23 twenty (20) years for Manitoba Hydro, they are less than  
24 inflation, so the real place of electricity in Manitoba  
25 Hydro has gone down in the last twenty (20) years, and so

1 we're trying to provide some broader perspectives here  
2 rather than just splicing out a year or two (2) here and  
3 there because I'm not sure that a year or two (2) really  
4 makes the difference.

5 MR. BOB PETERS: Thank you, Mr. Rainkie.  
6 The time frame in the book of documents, just so the  
7 Board is clear, the calculations were arising from the  
8 2005 fiscal year of the Corporation, which is, by memory,  
9 post-drought. And because it was post-drought, it was to  
10 -- it was in the recovery period, was it not, in terms of  
11 where the Corporation sought rate increases as a result  
12 of the drought?

13 MR. DARREN RAINKIE: That's correct, but  
14 it -- you know, we're -- we -- we have in that data set,  
15 if you like, a \$415 million net income, the largest in  
16 the Corporation's history if my memory serves me well.  
17 But you -- you move back a year or two (2) and you have  
18 the largest loss in the Corporation's history, 435 or  
19 something like that, so I was just pointing that out.  
20 It's very important where you -- where you start and  
21 where you stop.

22 MR. BOB PETERS: And do you think the  
23 consumers -- the average consumer paying their electric  
24 bill every month looks back that far, Mr. Rainkie?

25 MR. DARREN RAINKIE: Well, I'm not sure

1 what the average consumer thinks and how much they know  
2 about our actual net income, but I think they know about  
3 their electricity bill every year. And like I said, over  
4 the last twenty (20) years it hasn't kept up with  
5 inflation, so hopefully that's -- that's an indication  
6 that things are working well in this jurisdiction.

7 MR. BOB PETERS: When you say, "it hasn't  
8 kept up with inflation," at least if you include going  
9 back to 1999 and 2000.

10 MR. DARREN RAINKIE: Well, in that one I  
11 was even going back, you know, two (2) decades, Mr. --  
12 Mr. Peters, just to -- to provide a larger snapshot on  
13 what's happened.

14 MR. BOB PETERS: You're acknowledging  
15 that you --

16 MR. DARREN RAINKIE: Certainly it's true  
17 in the -- it's true in the last twenty (20) years and in  
18 the last ten (10) years, just to be clear.

19 MR. BOB PETERS: And also to be clear,  
20 you're not expecting the average consumer would have that  
21 top of mind as they're writing their cheque every month  
22 for their hydro bill?

23 MR. DARREN RAINKIE: Well, I don't know,  
24 Mr. Peters. I'm not sure what the average consumer looks  
25 at, but -- but as stewards of the company, I think we

1 have to look over the longer -- the longer run at -- at  
2 that as well. And certainly if you want to splice out a  
3 certain data set, you can show whatever you want, but,  
4 you know, we have to run the company over a number of  
5 decades, so I think we're taking a longer perspective and  
6 cost of service methodology does that.

7                   The only reason we didn't come back -- or  
8 one (1) of the reasons we didn't have to come back to the  
9 Board with a huge rate increase post-drought is because  
10 of the retained earnings, as Mr. Warden mentioned, and  
11 the ability under a cost of service methodology to  
12 average these things out over the long run.

13                   More restrictive rate-setting  
14 methodologies like rate-based rate of return would have  
15 reacted very quickly to those types of events and take a  
16 very short-term view on the world, so, you know, I'm just  
17 -- I'm just providing that broader perspective.

18                   MR. VINCE WARDEN: And I wouldn't want to  
19 leave the impression that we don't know what consumers  
20 think. We -- we survey consumers on an almost continual  
21 basis and we -- we do correspond with consumers daily,  
22 so, you know, ranked number 1 in customer satisfaction in  
23 Canada. We didn't get to that position by -- by not  
24 taking into consideration the concerns of consumers.

25                   MR. BOB PETERS: Was there any consumer

1 survey done, Mr. Warden, with respect to the rate  
2 increase that is before this Board?

3 MR. VINCE WARDEN: Maybe I'll ask Mr.  
4 Kuczek to respond to that question. He's right on top of  
5 those surveys.

6 MR. LLOYD KUCZEK: Unfortunately, I'm  
7 not, but we don't -- we don't ask customers -- we don't  
8 do surveys to see what their general impressions of our  
9 rate increases are going to be or of our applications  
10 coming before the Board, if that's what you're asking,  
11 but we do ask them questions related to their  
12 satisfaction with prices, and we see stability over that.  
13 And, generally speaking -- and I don't recall where I get  
14 this from, but we do have a sense that customers in  
15 Manitoba certainly do appreciate the stability of  
16 electricity prices as opposed to natural gas, so.

17 MR. BOB PETERS: Why don't you do a  
18 survey of customers relative to your general rate  
19 applications?

20 MR. LLOYD KUCZEK: I think we have --  
21 well, what we do is, we look at what's important in terms  
22 of trying to get a feel for what our customers are  
23 thinking and perceiving, and this isn't one of the things  
24 that we thought that we need to do, and I'm not sure it  
25 would be reasonable to go and ask customers without being

1 able to provide them with full information in terms of  
2 what the application is all about.

3 MR. BOB PETERS: Would it also be  
4 expected by the Corporation that customers are usually  
5 opposed to rate increases? Wouldn't that be intuitively  
6 correct?

7 MR. LLOYD KUCZEK: Intuitively, yes.

8 MR. BOB PETERS: So as when we discussed  
9 yesterday with Mr. Warden, the Corporation, taking into  
10 account customer sensitivity, it's Manitoba Hydro's  
11 perception of customer sensitivity, would that also be  
12 correct?

13 MR. LLOYD KUCZEK: To a degree, I guess.

14 MR. BOB PETERS: I want to turn to Tab 4  
15 of the book of documents, Mr. Chairman and Board members  
16 and witness panel. This document comes from an  
17 information request PUB Manitoba Hydro First Round 199.  
18 It is an integrated financial forecast run prepared by  
19 Manitoba Hydro, and it's a twenty (20) year -- a twenty  
20 (20) year forecast; is that correct, Mr. Rainkie?

21 MR. DARREN RAINKIE: That's correct, Mr.  
22 Peters. It's --

23 MR. BOB PETERS: And it would replace --

24 MR. DARREN RAINKIE: -- a twenty (20)  
25 year forecast for electric operations.

1                   MR. BOB PETERS:    Yes, as opposed to your  
2 consolidated this refers only to the electric side of the  
3 business?

4                   MR. DARREN RAINKIE:    That's correct.

5                   MR. BOB PETERS:    And it replaces IFF-08?

6                   MR. DARREN RAINKIE:    That's right.  It  
7 was the next update the following year.

8                   MR. BOB PETERS:    And as I understand it,  
9 you filed IFF-10, and we've talked a little bit about  
10 that, as Appendix 76 to these proceedings, correct?

11                  MR. DARREN RAINKIE:    I'll accept the  
12 appendix -- that you're better at the appendix number  
13 than me, but, yeah, that's right.

14                  MR. BOB PETERS:    And if I'm not mistaken,  
15 as a result of -- it may even have been a pre-ask  
16 question, that the IFF-10 was going to be extended to  
17 twenty (20) years, maybe has been, but it's going to go  
18 first before the Manitoba Hydro-Electric Board this  
19 month?

20

21   (BRIEF PAUSE)

22

23                  MR. VINCE WARDEN:    Partly because of  
24 staff being dedicated to hearing preparation, it's going  
25 to be touch and go whether it makes the January -- our

1 January board meeting. Still hopeful, but there's a --  
2 some -- a little bit of work to be done on that yet  
3 before it goes to our -- our January board, which is on  
4 January the 20th.

5 MR. BOB PETERS: If we look at the  
6 general consumer's revenue shown on your IFF-09, and we  
7 can look for the first test year, which is the 2011 year,  
8 we see one billion one hundred and fifty-nine million  
9 dollars (\$1,159,000,000), correct?

10 MR. DARREN RAINKIE: That's correct, Mr.  
11 Peters.

12 MR. BOB PETERS: And moving forward, we  
13 see 1.177 billion for the second test year, being 2012?

14 MR. DARREN RAINKIE: That's right.  
15 That's without any rate increases.

16 MR. BOB PETERS: Just a second, the rate  
17 increases are contained on a different line, isn't that--

18 MR. DARREN RAINKIE: That's right,  
19 they're on the -- the additional line.

20 MR. BOB PETERS: All right. We'll come  
21 to that. Well, maybe they're not, Mr. Rainkie, even  
22 though it says at approved rates, and we're talking  
23 \$1.159 billion, that number embeds in it a certain amount  
24 of money on account of the energy intensive industrial  
25 relate -- rate. Isn't that correct?



1 MR. DARREN RAINKIE: That's correct, Mr.  
2 Peters.

3 MR. BOB PETERS: So you've included \$5  
4 million in 2011 on account of the EIIR in that consumer's  
5 revenue at approved rates?

6 MR. DARREN RAINKIE: That's right. I  
7 think in -- if my memory serves me correct, in IFF-10 we  
8 actually put that number in the additional line just to  
9 make that a little clearer. But I think for IFF-09 it  
10 actually was included in the approved rates column.

11 MR. BOB PETERS: All right. And -- and  
12 then while we're looking at IFF-09, for the 2012 year,  
13 Mr. Rainkie, the proof of revenue seems to show that \$7.5  
14 million was included in general consumer's revenue at  
15 approved rates, and that \$7.5 million also relates to  
16 energy intensive industrial rate revenue?

17 MR. DARREN RAINKIE: Mr. Peters, did --  
18 did you say IFF-09 or IFF-10, sorry?

19 MR. BOB PETERS: I'm looking at IFF-09 at  
20 Tab 4 of the book of documents. And my suggestion to you  
21 is that embedded in the general consumer's revenue, the  
22 top line, is energy intensive industrial rate revenue,  
23 even though that rate hasn't yet been dealt with by this  
24 Board, or even by Manitoba Hydro?

25 MR. DARREN RAINKIE: That's correct, and

1 I indicated to you that we're rectified that  
2 presentation, if you like, in IFF-10.

3 MR. BOB PETERS: Well, in terms of  
4 presentation, Mr. Rainkie, isn't the Board correct in  
5 understanding that the energy intensive industrial rate  
6 is supposed to be revenue neutral to the Corporation, and  
7 that is for those electrons not consumed by domestic  
8 customers, Manitoba Hydro would then export them to  
9 recover that revenue on the export market?

10 MR. VINCE WARDEN: That's correct.

11 MR. BOB PETERS: And so, Mr. Rainkie, in  
12 terms of presentation, that energy intensive industrial  
13 rate revenue, if it's -- if it's misplaced in the top  
14 line, it really should be in the extraprovincial line,  
15 because that's where it would come from on a revenue  
16 neutral basis. Do you agree with that?

17 MR. DARREN RAINKIE: Mr. Peters, that --  
18 that revenue is obtained from domestic customers. It  
19 would be appropriately in the general consumer's revenue.

20 MR. BOB PETERS: I don't disagree with  
21 you, but I think I maybe didn't make my question clear,  
22 Mr. Rainkie, what we know is that the depiction on the  
23 top line of IFF-09 is, in 2011, it's \$5 million  
24 incorrect. Would you agree with that?

25 MR. DARREN RAINKIE: Well, I think it's a

1 better presentation to include that in additional revenue  
2 as opposed to in the revenue at approved rates, but when  
3 you're dealing with \$1.2 billion, I'm not sure that \$5  
4 million -- I mean, I'm not saying that \$5 million isn't  
5 important to us, don't get me wrong, but it doesn't  
6 change, really, the magnitude of the numbers that you're  
7 dealing with here.

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(BRIEF PAUSE)

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MR. BOB PETERS: My point, and I think you've missed it, with respect, Mr. Rainkie, is that you don't have an energy intensive industrial rate and so there's no energy intensive industrial rate revenue, is there?

MR. DARREN RAINKIE: No -- not at this point, no.

MR. BOB PETERS: I --

MR. DARREN RAINKIE: That was a forecast at a point in time, I guess, based on our assumptions of what was going to transpire, you know, and --

MR. BOB PETERS: Fair enough, Mr. Rainkie. And in hindsight maybe it should have been in a different line item as opposed to the top item. It should have been in the additional revenue line, as you

1 suggest, and that's how -- I'd have to check your IFF-10,  
2 but you believe you may have depicted it going forward.

3 But recognizing you do not have, sir, a  
4 energy intensive industrial rate, any revenue that you  
5 would have forecast to come from that we know didn't come  
6 from that because there was no rate.

7 Correct?

8 MR. DARREN RAINKIE: There's no rate at  
9 this point, yes, Mr. Peters.

10 MR. BOB PETERS: So instead, that \$5  
11 million, the Board will find that under the  
12 extraprovincial line because you would have exported  
13 those electrons because you didn't have any consumer in  
14 Manitoba displacing them.

15 MR. ROBIN WIENS: Mr. Peters, maybe I'll  
16 step in here. I --

17 MR. BOB PETERS: Help me with my  
18 question, Mr. Wiens.

19 MR. ROBIN WIENS: -- I -- I can't say  
20 that. If the -- if the actual consumption, additional  
21 consumption by customers who would have paid the  
22 intensive rate had it been in place, if that additional  
23 consumption did not materialize, then the revenue,  
24 assuming everything else bore out as forecast, would show  
25 up in the export line.

1                   If that consumption did materialize, but  
2 the intensive rate was not applied to it, it would just  
3 mean that there would be less revenue in the domestic  
4 line.

5                   Does -- does that clarify things?

6                   MR. BOB PETERS:    I understand the point  
7 you're making, and -- and I know it's more than splitting  
8 hairs. It -- it has to do with -- with whether or not  
9 the consumers would have been charged a higher rate for  
10 the same consumption they made.

11                   And that's your point, that that revenue  
12 is now foregone because there was no rate, and it would  
13 be under general consumers line.

14                   MR. ROBIN WIENS:    Right. And -- and --  
15 and if as -- I -- I can't verify it, but if as is quite  
16 possible given the change in conditions over the last  
17 couple of years, if that additional consumption did not  
18 materialize then the kilowatt hours would have flowed  
19 down to the export line, which of course may or may not  
20 be borne out because of the export prices.

21                   MR. BOB PETERS:    Mr. Rainkie, while we're  
22 on energy intensive industrial rates, two (2) questions  
23 come to mind.

24                   One (1) is, Can you tell the Board,  
25 looking at IFF-09, what dollar amount is embedded in the

1 general consumers at approved rates line going past the  
2 test year for energy intensive industrial rate revenue?

3 MR. DARREN RAINKIE: You know, Mr.  
4 Peters, I have those numbers for IFF-10 because I've  
5 moved on in my own mind, but I'd -- I'd have to undertake  
6 to give you that for IFF-09. I can probably find it very  
7 quickly at the break, and get back to you.

8 MR. BOB PETERS: I hope our Canadian  
9 juniors are moving on, too, Mr. Rainkie, but we have to  
10 dwell on our -- on this. After the break you can maybe  
11 check, and let the Board know first of all if any amount  
12 was included, and then what amount was included after the  
13 break would be fine.

14 MR. DARREN RAINKIE: Mr. Peters, I can  
15 get -- if you give me one (1) second, I can give you --

16 MR. BOB PETERS: Okay.

17 MR. DARREN RAINKIE: -- those figures.

18 MR. BOB PETERS: Thank you.

19

20 (BRIEF PAUSE)

21

22 MR. DARREN RAINKIE: Mr. Peters, that  
23 figure is \$8 million post test years.

24 MR. BOB PETERS: Your answer assumes it's  
25 a constant \$8 million, Mr. Rainkie, in each and every

1 year after 2012?

2 MR. DARREN RAINKIE: I think it varies  
3 between about 7.5 and 8 million, Mr. Peters, but it's  
4 just -- that's the magnitude relative to --

5 MR. BOB PETERS: All right.

6 MR. DARREN RAINKIE: -- the presentation  
7 here.

8 MR. BOB PETERS: Thank you. Mr. Rainkie,  
9 I hope you haven't moved on too far, but do you remember  
10 back to IFF-08 and whether or not -- there was a larger  
11 number embedded in IFF-08 on account of energy intensive  
12 industrial rates.

13 Do you recall that?

14 MR. DARREN RAINKIE: That is really  
15 testing our collective memory, Mr. Peters. We would have  
16 to find that for you at the break.

17

18 --- UNDERTAKING NO. 1: Manitoba Hydro to indicate  
19 whether or not there was a  
20 larger number embedded in  
21 IFF-08 on account of energy  
22 intensive industrial rates

23

24 CONTINUED BY MR. BOB PETERS:

25 MR. BOB PETERS: Mr. Rainkie, I would

1 mind if you could let the Board know by way of  
2 undertaking during these proceedings what amount was  
3 imbedded in IFF-08 going forward for all of the forecast  
4 years on account of energy intensive industrial rate  
5 revenue.

6 MR. VINCE WARDEN: I might just comment,  
7 Mr. Peters, that at the time IFF-08 was put together,  
8 that was pre the economic downturn, so your point about  
9 there being an offset between general consumers revenue  
10 and extraprovincial sales is certainly valid for -- for  
11 that particular forecast. So whatever was in IFF-08 will  
12 be a total offset. It -- it would be totally reven --  
13 revenue neutral in that forecast.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: Mr. Rainkie, I was just  
18 trying to do my own math off the microphone and try to  
19 verify what the additional revenues were included in IFF-  
20 10 on account of energy industrial revenue, and your  
21 number is again -- it's in the \$8 million range for --  
22 for those years. Yes, for IFF-10.

23 MR. DARREN RAINKIE: I think, Mr. Peters,  
24 it was around 4 to \$5 million in IFF-10.

25



1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: On a related topic to  
4 energy intensive industrial rate was the service  
5 extension policy. And, Mr. Warden or Mr. Wiens, can you  
6 update the Board as to the status of the service  
7 extension policy?

8 MR. ROBIN WIENS: Manitoba Hydro is not  
9 yet ready to propose changes to the service extension  
10 policy affecting the general service large customers 30  
11 kV and higher. It's a subject matter that we're still  
12 looking at.

13 MR. BOB PETERS: Can you remind --

14 MR. VINCE WARDEN: Having -- having said  
15 that, if a large industrial customer approaches Manitoba  
16 Hydro for service, a dedicated service, they will pay 100  
17 percent of the costs of providing that service.

18 MR. BOB PETERS: And how long has  
19 Manitoba Hydro been operating under the 100 percent cost  
20 recovery for service extension to large customers?

21 MR. ROBIN WIENS: I believe it is since  
22 2005, Mr. Peters.

23 MR. BOB PETERS: And a little off the  
24 chart on my questions here, Mr. Wiens, but while we're on  
25 this topic, when the Board reviews Manitoba Hydro's

1 latest capital expenditures forecast they will see that  
2 Manitoba Hydro has done expansions for some of the very  
3 customers that may have been targeted by the energy  
4 industrial -- sorry, the energy intensive industrial  
5 rate; isn't that correct?

6 MR. ROBIN WIENS: I -- I believe that's  
7 correct, Mr. Peters. I'd have to go back and refresh my  
8 memory with respect to particulars, but I believe that's  
9 correct.

10 MR. BOB PETERS: And in light of what Mr.  
11 Warden has told the Board, did those system expansions or  
12 the capacity expansions to those customers that were  
13 targeted under the energy intensive industrial rate, did  
14 they pay 100 percent of the additional costs to expand  
15 capacity?

16 MR. VINCE WARDEN: Those customers would  
17 have paid 100 percent of -- of the costs to provide that  
18 service, except for any system upgrades that might have  
19 taken place at that point in time. We do -- when a  
20 customer comes in for -- requests service, we do take the  
21 opportunity to upgrade service in that area if that  
22 opportunity presents itself. So essentially, though, any  
23 dedicated costs would be 100 percent borne by that  
24 customer.

25 MR. BOB PETERS: How do you draw the line

1 between what is a dedicated cost and what is a system  
2 upgrade?

3 MR. VINCE WARDEN: Well, it does involve  
4 a fair bit of engineering analysis to come to that  
5 conclusion, but that -- that is essentially what we do do  
6 is go through that analysis.

7 MR. BOB PETERS: If the expansion of an  
8 industrial customer requires -- you call them dedicated  
9 costs, those are paid by the customer, you've told the  
10 Board.

11 MR. VINCE WARDEN: Yes.

12 MR. BOB PETERS: But if the Corporation  
13 can at the same time do a system expansion, they'll do  
14 that out of the revenues they receive in consumer rates?

15 MR. VINCE WARDEN: Yes, if there's  
16 benefit to other customers by providing a -- a service  
17 extension to a dedicated customer, then -- then, yes,  
18 those costs will be appropriately borne through rates.

19 MR. BOB PETERS: But do those system --  
20 but -- but does the providing of the dedicated  
21 facilities, doesn't that trigger a need for the system  
22 upgrade in many instances?

23 MR. VINCE WARDEN: Oh, certainly it would  
24 trigger the need, but that system may have been due for  
25 upgrade two (2), three (3), some number of years into the

1 future, and this would accelerate when that upgrade would  
2 take place, and that would be taken into consideration in  
3 the amount of contribution requested from that customer.

4

5

(BRIEF PAUSE)

6

7 MR. BOB PETERS: Ms. Boyd will perhaps  
8 remind you, Mr. Warden, that when Centra Gas does a  
9 system expansion, the Corporation uses a net present  
10 value thirty (30) year test that Mr. Rainkie's  
11 fingerprints are all over. Is that same process used on  
12 the electric side of the business?

13 MR. ROBIN WIENS: No, Mr. Peters. That  
14 approach is not taken. If an extension is necessary,  
15 it's evaluated in terms of customer revenue that will be  
16 made available to the -- to the Corporation as a result  
17 of that system expansion. If it is simply a system  
18 improvement that is required, then the Corporation  
19 undertakes that cost itself. If it is a cost that is  
20 applicable to a -- an individual customer or customers  
21 that are seeking service extension, then that portion of  
22 the extension will be revenue tested for all customers  
23 other than those that are served at 30 kV and higher.

24

25 MR. BOB PETERS: Why doesn't the Corporation use the same test for both sides of the

1 business, Mr. Wiens?

2 MR. ROBIN WIENS: This is partly for  
3 historical reasons, that this is the approach that's been  
4 taken by Manitoba Hydro-Electric for many, many years,  
5 and I would say also partly because of the sheer number  
6 of extensions that are undertaken on the electric side.

7 MR. BOB PETERS: The sheer number meaning  
8 that it's -- it's too onerous to do a more detailed  
9 calculation?

10 MR. ROBIN WIENS: The system of applying  
11 rules of thumb in terms of revenue testing has served  
12 Manitoba Hydro pretty well over the years, and it's been  
13 maintained after the acquisition of -- of Centra Gas.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: I hear your answer, Mr.  
18 Wiens, but would it -- would you agree with me that the  
19 net present value test is more protective of the existing  
20 consumers on the system so that they don't have to pay  
21 additional costs as opposed to the way Manitoba Hydro  
22 does it on the electric side?

23 MR. ROBIN WIENS: It gives you a more  
24 precise answer, Mr. Peters.

25 MR. BOB PETERS: But does that not carry

1 with it more protection for existing consumers, Mr.  
2 Wiens, that they will not have to cross-subsidize an  
3 expansion that doesn't provide sufficient revenue to  
4 provide a revenue to cost ratio equal to one (1) after  
5 five (5) years?

6 MR. ROBIN WIENS: I -- I'm not sure it  
7 provides them more protection. It -- it makes the  
8 protection more explicit. It may give you a more precise  
9 answer, of course, depending on what you assume about --  
10 about future costs and revenues.

11

12 (BRIEF PAUSE)

13

14 MR. ROBERT MAYER: You will admit, Mr.  
15 Wiens, that not only does it make it more explicit, but  
16 it certainly makes it more transparent so that everybody  
17 understands what we're talking about, as opposed to the  
18 engineering answer we -- we got from Mr. Warden?

19 MR. VINCE WARDEN: Mr. Mayer, regardless  
20 if -- if we use the thirty (30) year test as we do with  
21 Centra, you still have that engineering split of costs  
22 that would have to take place regardless.

23 MR. ROBERT MAYER: But the formula at  
24 least is probably understandable to even somebody like me  
25 who doesn't really understand some of the engineering

1 you're talking about is -- insofar as the service  
2 extension is concerned. I understand a service extension  
3 to a gas line, you're moving it out somewhere. I'm not  
4 entirely sure what exactly we call a service extension in  
5 the electric business.

6 I -- I certainly understand that if you  
7 actually build the transmission lines in the Shamattawa,  
8 Brochet, Lac Brochet, and Tadoule Lake. That's clearly  
9 very a mi -- very much an extension. I don't know what  
10 you call a service extension when it comes to the  
11 industrial -- large industrial rates because those I have  
12 -- I have less ability to understand.

13 But once you've decided it is a service  
14 extension, Centra Gas has a formula and Manitoba Hydro  
15 has -- the consumer pays 100 percent, unless it somehow  
16 benefits, or possibly could benefit other consumers that  
17 benefit from the same extension. I -- I've seen more  
18 transparency in the -- in the Centra Gas option than I do  
19 in the electric option.

20

21 (BRIEF PAUSE)

22

23 MR. ROBIN WIENS: Mr. Mayer, having a  
24 formula in place and a process whereby that is reviewed  
25 externally, certainly does provide it more transparency.

1 (BRIEF PAUSE)

2

3 MR. VINCE WARDEN: It -- it -- it  
4 doesn't, however, relieve or -- or -- the -- the need --  
5 the need for -- for more analysis to be done whenever  
6 there -- an extension is provided. With a -- with a  
7 simple extension to a single customer for gas -- a gas  
8 line, it's a very simple calculation.

9 It -- it's quite different, however, in --  
10 in providing an extension to an electricity customer  
11 where transmission lines, transformers, a number of  
12 different facilities that -- that -- that form part of  
13 providing service to a customer may or may not have to be  
14 upgraded in order to provide that service. So it's --  
15 we're talking two (2) entirely different extensions, and  
16 one (1) is much more complicated than the other.

17

18 CONTINUED BY MR. BOB PETERS:

19 MR. BOB PETERS: Thank you, gentlemen.  
20 I'm sure the Vice-Chair will distill your answers, but  
21 Mr. Wiens, you've -- you've told me you will get a -- a  
22 more precise answer from using the net present value test  
23 and that intuitively seems to make sense.

24 Does it follow that you would therefore  
25 get a different answer in terms of what the customer



1 contribution should be?

2 MR. ROBIN WIENS: No, that's not  
3 necessarily the case. And maybe I should perhaps qualify  
4 in terms of more precise. I mean, as -- assuming that  
5 all your inputs are -- are appropriate, and -- and are  
6 reasonably borne out.

7 In fact, it -- it will be a more precise  
8 answer but it's not necessarily going to give you a  
9 different answer in terms of the size of the customer  
10 contribution.

11 MR. BOB PETERS: Like you, Mr. Wiens, I  
12 don't have my capital expenditure forecast at hand, but  
13 my recollection is that at the energy intensive  
14 industrial rate hearing Manitoba Hydro had concerns over  
15 the expansion capacity of some of its larger customers.

16 Correct?

17 MR. ROBIN WIENS: Yes, that's correct.  
18 And this concern was specifically related to the cost or  
19 the impact on the cost of energy.

20 It was related to the foregone revenue  
21 that would have been earned at market rates compared to  
22 the revenue that would have been earned from the sale of  
23 energy at rates tied to embedded costs for domestic  
24 customers.

25 MR. BOB PETERS: And is it your

1 understanding, and Manitoba Hydro's knowledge, that one  
2 (1) of the capital expenditures they did was in fact to  
3 allow one (1) of Manitoba Hydro's larger clients to  
4 expand their capacity even more than what Manitoba Hydro  
5 wanted them to do during the energy intensive industrial  
6 rate hearing.

7 MR. ROBIN WIENS: I can't confirm that  
8 without going back to that -- without going back to the  
9 actual data on that, Mr. Peters.

10 MR. BOB PETERS: Well, you -- you can  
11 check that, if you'd like, but can you explain to the  
12 Board why Manitoba Hydro would allow those system  
13 expansions that are reflected in the capital expenditures  
14 forecast when they seem to run contrary to the intension  
15 of the energy intensive industrial rate process?

16 MR. ROBIN WIENS: Well, I -- no, I don't  
17 think they run contrary to the intention of the energy  
18 intensive rate at all.

19 As I said a moment ago, the -- in -- the  
20 energy intensive industrial rate was intended to deal  
21 with the issues related to energy values, and energy  
22 costs.

23 The expansions, I believe that you're  
24 talking about here, although as I say I -- I'd have to go  
25 back and check the record, but these are relating to

1 expansions of either the transmission or subtransmission  
2 systems, which are a different issue and which were not a  
3 concern going into the energy intensive rate because  
4 Manitoba Hydro's policy at that time, and still is, that  
5 those costs which are specifically related to the  
6 expansion of those customers on the transmission or  
7 subtransmission systems will be paid by the customer.

8 MR. BOB PETERS: Those expansions allow  
9 the customers to consume greater quantities of energy,  
10 correct?

11 MR. ROBIN WIENS: Yes, they do.

12 MR. BOB PETERS: And it is that  
13 consumption of greater quantities of energy that was the  
14 focus of the Energy Intensive Industrial Rate Hearings.

15 MR. ROBIN WIENS: That's correct.

16 MR. BOB PETERS: And so now that these  
17 customers have increased capabilities to -- to use  
18 additional energy, how is the energy industrial rate  
19 supposed to apply to the consumption that you've now  
20 provided to them?

21 MR. ROBIN WIENS: Well, Mr. Peters, it  
22 won't apply because we don't have an energy intensive  
23 industrial rate.

24 MR. BOB PETERS: But you're looking at  
25 it?

1 MR. ROBIN WIENS: Yes, we are.

2 MR. BOB PETERS: And so the boundaries  
3 have changed in terms of what is permitted capacity, and  
4 what is committed -- permitted consumption?

5

6 (BRIEF PAUSE)

7

8 MR. ROBIN WIENS: Well, Mr. Peters, while  
9 -- we're -- we're engaged in discussions and attempts to  
10 come up with a -- a rate design that will be acceptable  
11 to the parties and will -- will pass scrutiny. Our  
12 customers continue to demand service and it's -- we have  
13 to -- we have to respond to those demands for service.

14 MR. BOB PETERS: All right, we'll --  
15 we'll leave it at that. Mr. Chairman, this might be an  
16 appropriate time if the Board wanted a morning recess.  
17 I'm going to move to some load forecast questions with, I  
18 believe, Mr. Kuczek after the -- after the recess.

19 THE CHAIRPERSON: Very good, Mr. Peters.

20 MR. BOB PETERS: Thank you.

21 THE CHAIRPERSON: We'll have our break  
22 now.

23

24 --- Upon recessing at 10:41 a.m.

25 --- Upon resuming at 11:02 a.m.

1 THE CHAIRPERSON: Welcome back, everyone.  
2 Mr. Peters...?

3

4 CONTINUED BY MR. BOB PETERS:

5 MR. BOB PETERS: Thank you, Mr. Chairman.  
6 I wanted to turn, if I could, still on that -- we're  
7 talking generally, sir, about the IFF-09, which is found  
8 at Tab 4 of Board counsel's book of documents. And --  
9 but I want to turn to Tab 5, I believe, with Mr. Kuczek.  
10 And, Mr. Kuczek, can you confirm to the Board that  
11 between IFF-08 and IFF-09 in looking at the first test  
12 year of 2011 there were reduced domestic sales by  
13 approximately one thousand one hundred and forty-two  
14 (1,142) gigawatt hours?

15 MR. LLOYD KUCZEK: Correct.

16 MR. BOB PETERS: And you're looking, sir,  
17 on -- although it's in the top right-hand corner marked  
18 as page 21, you're looking at PUB Manitoba Hydro Second  
19 Round question, 194(a).

20 MR. LLOYD KUCZEK: Correct.

21 MR. BOB PETERS: And the Board will see  
22 that for the 2010/'11 year in the far right-hand column  
23 that consumption was down one thousand one hundred and  
24 forty-two (1,142) gigawatt hours, correct?

25 MR. LLOYD KUCZEK: Correct.

1                   MR. BOB PETERS:    Mr. Kuczek, this is  
2    where it gets really embarrassing for me because I -- I  
3    look at a gigawatt hour of electricity, and I'm going to  
4    blame Mr. Wiens if I'm wrong, but that would be the  
5    equivalent of approximately a hundred homes using ten  
6    thousand (10,000) kilowatt hours a year.

7                   MR. LLOYD KUCZEK:    A hundred thousand  
8    homes.

9                   MR. BOB PETERS:    We -- well, I was  
10   talking one (1) gigawatt hour. This is where it gets  
11   really embarrassing for me because I agree that if...

12

13                                   (BRIEF PAUSE)

14

15                   MR. LLOYD KUCZEK:    If you use twenty  
16   thousand (20,000) kilowatt hours for an average home,  
17   which is sort of in-between your natural gas heated and  
18   electric heated homes, I came up with fifty thousand  
19   (50,000) homes for one (1) gigawatt hour.

20

21                                   (BRIEF PAUSE)

22

23                   MR. LLOYD KUCZEK:    Just one (1) sec. We  
24   got to figure this out.

25

1 (BRIEF PAUSE)

2

3 MR. LLOYD KUCZEK: Okay. So if a  
4 customer uses 10,000 gigawatt hours (sic), that's eq -- 1  
5 gigawatt hour is equivalent to a hundred (100) homes.

6 MR. BOB PETERS: Right. And I appreciate  
7 your sticking with my assumption of 10,000 kilowatt hours  
8 a year, and that's the number I was going to blame on Mr.  
9 Wiens because I think he told us in the diesel hearing  
10 that that's not unexpected for a typical residential home  
11 without electric heat.

12 Mr. Wiens, have I misspoken on your  
13 behalf?

14 MR. ROBIN WIENS: That -- that would be  
15 close.

16 MR. BOB PETERS: All right. So -- and  
17 that's what I want, is I want close. Precision is not --  
18 not necessary here.

19 But so if -- if a gigawatt hour is -- is a  
20 hundred (100) homes, then 1,000 gigawatt hours is the  
21 hundred thousand (100,000) homes that we could talk about  
22 if there was 1,000 gigawatt hours of energy reduction.

23 Are you okay with that, Mr. Kuczek?

24 MR. LLOYD KUCZEK: Yes.

25 MR. BOB PETERS: And I -- I do that, sir,

1 only to put it in a -- perhaps a comparative form for the  
2 Board and others that when the reduction happened between  
3 IFF-08 and 09 of 1,142 gigawatt hours, that was  
4 equivalent to more than a hundred thousand (100,000)  
5 homes worth of electricity.

6 MR. LLOYD KUCZEK: Yes.

7 MR. BOB PETERS: All right. And I  
8 appreciate that's not the way you may think about it, but  
9 I just wanted to put that forward. Excuse me.

10 Mr. Kuczek, if I assume that that 1,142  
11 gigawatt hours of reduced consumption would have returned  
12 to the Corporation about five (5) cents a kilowatt hour,  
13 my calculation is that the Corporation would lose \$55  
14 million in domestic revenue as a result of that 1,142  
15 gigawatt hour reduction.

16 Do you accept that math subject to check?

17 MR. LLOYD KUCZEK: I do, and that's --  
18 that's assuming the five (5) cents, of course.

19 MR. BOB PETERS: Right. If I look to the  
20 2012 year, that's the second test year before the Board,  
21 Mr. Kuczek, I see that consumption was down 1,332  
22 gigawatt hours.

23 Correct? And again, I'm looking at page 5  
24 of Board counsel book of doc -- sorry, Tab 5, page 21, of  
25 Board counsel's book of documents.



1 MR. LLOYD KUCZEK: That's correct, if  
2 that was 2011/'12.

3 MR. BOB PETERS: Yeah. And -- and just  
4 so the Board is clear, the -- the first -- the question  
5 embedded a chart with some numbers in it, Manitoba Hydro  
6 refined that on the next page in their answers but their  
7 answers didn't change for these -- for these points that  
8 I'm talking to you about, Mr. Kuczek.

9 So I -- again, Mr. Kuczek, if I take that  
10 1,332 gigawatt hour reduction and load for 2012, use my  
11 five (5) cents a kilowatt hour, that's a \$65 million  
12 reduction from domestic revenues as a result of the  
13 downgrade in consumption, correct?

14 MR. LLOYD KUCZEK: Correct.

15 MR. BOB PETERS: Would I also be correct  
16 that we don't see in IFF-09 a \$55 million reduction in  
17 domestic revenue for 2011, and we don't see in IFF-09 a  
18 \$65 million reduction for domestic revenue in 2012.

19 MR. LLOYD KUCZEK: I guess before you go  
20 too far, we might as well clarify, at least, that the  
21 difference in load forecast was mainly our large  
22 customers, so the in -- you know, the rates wouldn't --  
23 wouldn't be the five (5) cents, they would be much lower  
24 than that, so.

25 So your bigger numbers there should be

1 probably divided by two (2) just to put things in  
2 perspective.

3 MR. BOB PETERS: All right. That's --  
4 that's a fair comment, Mr. Kuczek. Thank you for that.

5 What you're telling the Board is that your  
6 expected revenue might not be five (5) cents a kilowatt  
7 hour, it might be closer to three (3) cents a kilowatt  
8 hour?

9 MR. LLOYD KUCZEK: That's correct.

10 MR. BOB PETERS: But can you tell the  
11 Board whether even at three (3) cents a kilowatt hour,  
12 whether you reduced domestic sales revenue in IFF-09,  
13 found at Tab 4 of Board Council book of documents, by 25  
14 or \$30 million for 2011, and then by another \$35 million  
15 for 2012, using your numbers.

16

17 (BRIEF PAUSE)

18

19 MR. DARREN RAINKIE: Mr. Peters, it  
20 sounds like you've done the math on this. Is there  
21 something on the record, I -- I don't have IFF-08 with  
22 me. As I said, I've got a book on IFF-10 versus IFF-09,  
23 but I'm -- I'm assuming you've done the calculation for  
24 us somehow from the -- from the material.

25 MR. BOB PETERS: Well, I had done the

1 math until Mr. Kuczek made a fairly good point. And if I  
2 compared your IFF-08 to your IFF-09, Mr. Rainkie, I think  
3 I can get it down, excuse me, by about 30, \$31 million,  
4 and wondering -- and I didn't see the \$65 million or the  
5 60 million, and so I'm wondering if the -- if the  
6 downgrade was only based on a lower return?

7

8 (BRIEF PAUSE)

9

10 MS. MARLA BOYD: Mr. Peters, we'll maybe  
11 take that away as an undertaking to confirm those  
12 numbers.

13 MR. BOB PETERS: That probably would be  
14 helpful, Ms. Boyd. I thank you for that.

15

16 --- UNDERTAKING NO. 2: Manitoba Hydro to show the  
17 lower IFF-09 revenues that  
18 result from the load  
19 reductions between IFF-08 and  
20 IFF-09

21

22 CONTINUED BY MR. BOB PETERS:

23 MR. BOB PETERS: Let me -- let me -- let  
24 me work -- work it this way, Mr. Kuczek. In preparing  
25 the IFF-09, would you have expected to reduce the

1 domestic sales revenue by what you see as a reduction in  
2 the domestic load?

3 MR. LLOYD KUCZEK: I'll let our finance  
4 guys answer that question.

5 MR. DARREN RAINKIE: Well, yes, Mr.  
6 Peters. I think if I get the gist of your question, our  
7 -- our forecast would be on the -- the gigawatt hours  
8 that we expect to -- to sell. So I think the answer is,  
9 Yes, Mr. Peters.

10

11 (BRIEF PAUSE)

12

13 MR. BOB PETERS: And maybe to assist Ms.  
14 Boyd, if the Undertaking could simply be to confirm what  
15 amount on account of reduced domestic sales was reflected  
16 in IFF-09 for the two (2) test years, compared to IFF-08,  
17 that would be -- that would be sufficient.

18 Mr. Kuczek, while we're on domestic load,  
19 you made a -- a point to the Chair and the -- and the  
20 Board that the reason for the downgrade in '08 to '09 in  
21 terms of domestic load consumption was premised on your  
22 industrial sector not consuming as much as it otherwise  
23 was forecast to consume?

24 MR. LLOYD KUCZEK: It was actually  
25 primarily a reduction in what we were forecasting the

1 growth to be as opposed to the reduction in actual use.

2 MR. BOB PETERS: The growth didn't  
3 materialize?

4 MR. LLOYD KUCZEK: That's correct.

5

6 (BRIEF PAUSE)

7

8 MR. BOB PETERS: And, Mr. Kuczek, the  
9 growth didn't materialize as between IFF-08 and 09,  
10 that's what you're telling the Board, correct?

11 MR. LLOYD KUCZEK: I guess I think in  
12 terms of load forecast and then we hand that off to our  
13 finance people. So when you're talking about the  
14 integrated financial forecast, I -- I'm usually not  
15 working with those numbers.

16 MR. BOB PETERS: Well, let's leave Mr.  
17 Rainkie out of this if we can. And I have no disrespect.  
18 All I'm meaning is that let's just talk the load itself  
19 before we get the numbers attached to it and -- the load  
20 didn't materialize between IFF-08 and IFF-09. Can you  
21 agree with that?

22 MR. LLOYD KUCZEK: That's correct.

23 MR. BOB PETERS: And I'm going to suggest  
24 to you, sir, that if we take it to the industrial sector  
25 in 2010, the load actually reduced by some 650 gigawatt

1 hours.

2 Would you agree with that, sir?

3 MR. LLOYD KUCZEK: In years -- in year  
4 2010?

5 MR. BOB PETERS: Yes, sir.

6 MR. LLOYD KUCZEK: That's correct.

7 MR. BOB PETERS: And that 650 gigawatt  
8 hour reduction in 2010 was in your general service  
9 sector, your industrial customer -- customers, correct?

10 MR. LLOYD KUCZEK: Correct, and that was  
11 incorporated in the 2010 load forecast, right?

12 MR. BOB PETERS: All right, and -- and  
13 that's what I think we've seen, and that 650 gigawatt-  
14 hour reduction, four hundred and forty (440) of that,  
15 approximately, can be attributed to one (1) customer that  
16 closed their doors?

17 MR. LLOYD KUCZEK: I won't be specific on  
18 the number, but it's in that range.

19 MR. BOB PETERS: That's fair, and that  
20 customer -- and I don't want to put any specific customer  
21 information identifiable on the record, sir, but their  
22 rate would have been in the -- in the four (4) cent  
23 range?

24 MR. LLOYD KUCZEK: Correct.

25 MR. BOB PETERS: And so, by my math,

1 that's a \$20 million lost revenue from just one (1)  
2 customer on an annual basis?

3 MR. LLOYD KUCZEK: Lost domestic revenue,  
4 yes.

5 MR. BOB PETERS: Okay, so lost domestic  
6 revenue. You're telling the Board with that answer that  
7 you would have shipped that out on the export market?

8 MR. LLOYD KUCZEK: Whatever we don't sell  
9 domestically, we sell in the export market, correct.

10 MR. BOB PETERS: And -- and Mr. Warden  
11 told us -- told the Board yesterday that he was getting  
12 two point three (2.3) cents on average for opportunity  
13 sales, I believe, that year. Mr. Warden, did I say that  
14 right?

15 MR. VINCE WARDEN: You did.

16 MR. BOB PETERS: You'll agree with Mr.  
17 Warden?

18 MR. LLOYD KUCZEK: I always do.

19 MR. BOB PETERS: You're a rookie vice-  
20 president. That'll change. So while your domestic  
21 revenue would have gone down \$20 million, Mr. Kuczek, in  
22 -- in rough numbers, the net effect, before Mr. Rainkie  
23 can confirm or otherwise, would be more in the -- in the  
24 \$10 million range on account of being able to sell it on  
25 the export market, but not as much as you would have got

1 had you sold it in Manitoba?

2 MR. LLOYD KUCZEK: Using those numbers,  
3 that would be correct, yes.

4 MR. BOB PETERS: And not only was one (1)  
5 customer leaving the province or closing, but other  
6 sectors were also down, were they not, sir?

7

8 (BRIEF PAUSE)

9

10 MR. LLOYD KUCZEK: Yeah. In 2010, I  
11 mean, there were a lot of ups and downs, but there wasn't  
12 any substantial net up or down other than the -- the  
13 number that we were talking about.

14 MR. BOB PETERS: I also looked through  
15 your -- your answer to PUB Manitoba Hydro Second Round  
16 220A, which isn't in the book of documents, but I thought  
17 the primary metals was down probably another 200 gigawatt  
18 hours as well, but that doesn't stand out to you, or  
19 you'd accept that subject to check?

20 MR. LLOYD KUCZEK: I would accept that,  
21 yeah.

22 MR. BOB PETERS: And in terms of other  
23 forecast growth sectors such as chemical and pipelines,  
24 again the growth didn't materialize that may have been  
25 expected from those sectors, would that be true?



1 MR. LLOYD KUCZEK: Correct.

2 MR. BOB PETERS: Would I also be correct  
3 in saying that the downturn of the reduced load by 650  
4 gigawatt hours, that wasn't reflected in IFF-09, correct?

5 MR. LLOYD KUCZEK: Couldn't be IFF-09. I  
6 assume it'd have the '09 load forecast numbers  
7 incorporated into it as opposed to the 2010 load  
8 forecast.

9 MR. BOB PETERS: Right. IFF-09 was  
10 prepared before these load results came in?

11 MR. LLOYD KUCZEK: Correct.

12 MR. BOB PETERS: Does Manitoba Hydro  
13 forecast load growth and load consumption, or consumption  
14 by sector?

15 MR. LLOYD KUCZEK: Yes.

16 MR. BOB PETERS: Does that mean that you  
17 have key account individuals that will provide you with  
18 what their responsible clients are expected to consume in  
19 the -- in the forecast year?

20 MR. LLOYD KUCZEK: Yes, we do that as  
21 part of the preparation for the load forecast, so we --  
22 we -- our load forecasting staff meet with the key  
23 account and major account staff and get a feel for where  
24 those companies are -- what their plans are over the next  
25 three (3) years, and that's taken into account in terms

1 of developing the forecast for those customers.

2 MR. BOB PETERS: As you testify today,  
3 Mr. Kuczek, you can't tell the Board that there is any  
4 new industry coming to Manitoba to make up that 650  
5 gigawatt hour loss of load, domestic load, that happened  
6 in the industrial sector in 2010.

7 MR. LLOYD KUCZEK: I'm not aware of any.

8 MR. BOB PETERS: Now, when you say, "I,"  
9 you're speaking on the royal I that Mr. Warden and I  
10 struggle with; you're answering on behalf of the  
11 Corporation.

12 MR. LLOYD KUCZEK: Well, I was trying to  
13 be loose there, but, no.

14 MR. BOB PETERS: Well --

15 MR. LLOYD KUCZEK: That would be the  
16 royal "I" now.

17 MR. BOB PETERS: Yes, all right.

18 MR. ROBERT MAYER: While we're having  
19 this little interregnum, Vale announced a massive  
20 shutdown for a few years from now in Thompson. Have you  
21 incorporated those numbers into your subsequent forecast?

22 MR. LLOYD KUCZEK: Well, our subsequent  
23 forecast will be the 2011, which will be undertaken this  
24 year, so it will be incorporated.

25 MR. ROBERT MAYER: We're hoping it don't

1 get there, but we're...

2

3

(BRIEF PAUSE)

4

5 CONTINUED BY MR. BOB PETERS:

6 MR. BOB PETERS: Mr. Kuczek, we may have  
7 to get Mr. Rainkie's help on this, but in IFF-09 can we,  
8 in light of the question from the Vice-Chair, confirm  
9 that the -- the business that closed down, their load  
10 reduction was not included in IFF-09?

11 MR. LLOYD KUCZEK: Now, I'm a little  
12 confused because we're talking about two (2) different  
13 incidences here, so if neither one of them is included in  
14 the '09 forecast, so it would not be included in the  
15 financial forecast as well for '09.

16 MR. BOB PETERS: All right. And I didn't  
17 mean to -- I was going to go through them by each of the  
18 -- the sectors. But you've -- you've told the Board that  
19 the -- the one (1) customer that closed, their shedding  
20 of the load is not reflected in IFF-09.

21 MR. LLOYD KUCZEK: Correct.

22 MR. BOB PETERS: And nor is the Northern  
23 Manitoba smelter.

24 MR. LLOYD KUCZEK: Correct.

25 MR. BOB PETERS: And in fact, there's two

1 (2) Northern Manitoba smelters that have publicly given  
2 indication that they may be reducing their operations,  
3 correct?

4

5 (BRIEF PAUSE)

6

7 MR. LLOYD KUCZEK: The other customer  
8 that you're referring to, we're aware of a reduction of  
9 load there too, but they weren't using electricity in the  
10 smelter.

11 MR. BOB PETERS: All right. In -- in  
12 terms of IFF-10, and I may come to that later, but does  
13 that reflect the 650 gigawatt hour load reduction that we  
14 talked about from the industrial sector, Mr. Kuczek, do  
15 you know?

16 MR. LLOYD KUCZEK: Well, I can say the  
17 650 load reduction's reflected in the 2010 load forecast,  
18 and I assume the -- that was used for the IFF-2010  
19 financial forecasts, so it was.

20 MR. BOB PETERS: And the Northern  
21 Manitoba smelter that uses electricity, was its shedding  
22 of the load yet reflected in IFF-10?

23 MR. LLOYD KUCZEK: No, because that's --  
24 I think they announced it's going to be 2015.

25 MR. BOB PETERS: It's a future year

1 that's going to -- to be affected, correct?

2 MR. LLOYD KUCZEK: Correct.

3

4 (BRIEF PAUSE)

5

6 MR. BOB PETERS: Mr. Rainkie, you heard  
7 Mr. Kuczek indicate to the Board that it would be 2015  
8 before one (1) of the northern smelters would -- may be  
9 reducing its load commitments.

10 Has that been reflected in the IFF for the  
11 years out past 2015?

12 MR. DARREN RAINKIE: Mr. Peters, that --  
13 that announcement, I think, occurred well after the load  
14 forecast, and the preparation of IFF-10, so for none of  
15 the years, I guess, that you could list to me has not  
16 been included in IFF-10, to my knowledge.

17 MR. BOB PETERS: Okay. Thank you, Mr.  
18 Rainkie. Do I take, Mr. Rainkie, then that unless it's  
19 in the load forecast for the same year in which the IFF  
20 is being prepared, you won't reflect any differences in --  
21 - in loads and revenues as -- as -- on account of load  
22 reductions?

23 MR. DARREN RAINKIE: That's correct, Mr.  
24 Peters. The -- the budgeting process is a long one (1),  
25 and it involves many different component forecasts, so --

1 and it goes for a number of months, so that load forecast  
2 would have been done well before the -- the IFF was put  
3 together.

4 MR. BOB PETERS: There's no IFF-10-2, is  
5 there, Mr. Rainkie?

6 MR. DARREN RAINKIE: Not at this point.  
7 I mean, it would have to be a fairly significant  
8 financial impact on the company to produce another IFF.

9 MR. BOB PETERS: Are those IFFs not done  
10 as a matter of routine after -- after rate increase  
11 awards from this Board?

12 MR. DARREN RAINKIE: Well, typically we  
13 only do one (1) a year, Mr. Peters, for the November time  
14 frame. It's -- it's only if there is a significant  
15 financial change that we would do a -- a second one (1),  
16 or a third one (1).

17 MR. ROBERT MAYER: Once again while we  
18 have a moment, Mr. Peters keep referring to smelter. We  
19 also have, I understand, a relatively significant  
20 electrical load in the refinery in Thompson. We call it  
21 an electrolytic nickel.

22 MR. LLOYD KUCZEK: (Nods in affirmative).  
23

24 (BRIEF PAUSE)  
25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: All right. I -- I'm  
3 sorry, I didn't realize a question had been answered in  
4 the affirmative.

5

6 (BRIEF PAUSE)

7

8 MR. BOB PETERS: Mr. Kuczek, if those  
9 public announcements prove prophetic, and while we may  
10 wish they not be, can the Corporation indicate what  
11 additional load will be shed from the current forecast as  
12 a result of company's intentions?

13 MR. LLOYD KUCZEK: We -- we've looked at  
14 it, but we've also discussed, and ones got to be careful  
15 if it is, they talked about making other investments as  
16 well, and we don't know how much of that investment is  
17 going to be in Manitoba, how much in Saskatchewan, or  
18 elsewhere, but so when we do our updated forecast for  
19 this coming year, we'll -- we'll get a better feel for  
20 where things are going.

21 And -- but, you know, just to give you a  
22 ballpark figure, you're -- you're looking potentially in  
23 the same range as the other customer.

24 MR. BOB PETERS: And I loosely put that  
25 range at about 450 gigawatt hours a year.

1 MR. LLOYD KUCZEK: That's just a  
2 ballpark.

3 MR. BOB PETERS: That's fine. I want to  
4 turn, Mr. Rainkie, on the IFF at Tab 4 of the book of  
5 documents.

6 We've already talked about the additional  
7 revenue line, the one (1) with the asterisk beside it.  
8 This is the Corporation's indication of the additional  
9 revenues that will be received if its rate requests of  
10 this Board are approved.

11 Is that correct?

12 MR. DARREN RAINKIE: For the first two  
13 (2) years, Mr. Peters. Of course, after that, as Mr.  
14 Warden indicated yesterday, it's a general indication,  
15 but there's no Application for those years in question.

16 MR. BOB PETERS: Well, while we can  
17 appreciate that what you've told the Board is that you've  
18 -- you've included in these numbers the 2.9 percent for  
19 2011, and then 2.9 percent for 2012, correct?

20 MR. DARREN RAINKIE: That's correct.

21 MR. BOB PETERS: And we've talked already  
22 about the energy intensive revenues, but now turning to  
23 post-test years, the 2013 and going forward, is this the  
24 first time the Board will have seen, even for planning  
25 purposes, a number in the range of 3.5 percent rate



1 increases each and every year, starting in 2013?

2 MR. DARREN RAINKIE: Give me one second,  
3 Mr. Peters.

4

5 (BRIEF PAUSE)

6

7 MR. DARREN RAINKIE: That's correct, Mr.  
8 Peters.

9 MR. BOB PETERS: And while we're  
10 focussing on the test years for the rate increase  
11 requests, Mr. Rainkie, post test year the rate increase  
12 numbers that are used are provided to make sure that  
13 there's a positive net income going forward?

14 MR. DARREN RAINKIE: Partly, Mr. Peters.  
15 I think they're also there to maintain some reasonable  
16 financial targets.

17 MR. BOB PETERS: This isn't meant in a --  
18 in any kind of a derogatory way, but from an accounting  
19 perspective, is it -- is it essentially a plug number,  
20 Mr. Rainkie, that you just by default use or does it come  
21 down to that being a number that's needed to make the  
22 numbers come across as positive in the net income line?

23 MR. DARREN RAINKIE: I don't think it's  
24 ever a plug, Mr. Peters, because we don't have a formal  
25 mechanism like rate based rate of return for calculating

1 a number, but if you look at -- my recollection is if you  
2 look at Manitoba Hydro '09, that the equity ratio at the  
3 end of 2020 was around 20 percent, and I think, you know,  
4 that level of 3.5 percent to give or take was designed to  
5 keep our -- our debt to equity around the level of the  
6 previous forecast, and ensure that the finan -- the other  
7 two (2) financial targets in the intervening period were  
8 reasonable as well.

9

10 (BRIEF PAUSE)

11

12 MR. BOB PETERS: What you're telling the  
13 Board also in that answer then, Mr. Rainkie, is if the  
14 rate increases were less than that, the -- the equity  
15 percentage would -- would decrease?

16 MR. DARREN RAINKIE: As would the other  
17 two (2) finan -- primary financial targets as well, Mr.  
18 Peters.

19 MR. BOB PETERS: So do I take it then  
20 that you tried to balance the passing of the financial  
21 target test with the rate increase amount?

22 MR. DARREN RAINKIE: That's right, Mr.  
23 Peters, and it -- you know, just in terms of the  
24 discussion that you had on -- on Tab 2 where you talked  
25 about the -- you know, the increase of actual -- of IFF-

1 10 net income over IFF-09. I would point out that IFF-09  
2 was a pretty depressed net income, you know, as a result  
3 of the economic downturns, so, you know, I just wanted to  
4 make sure -- I don't think we talked about that in the  
5 last day or so that -- that the -- some -- in some years  
6 of I -- of IFF-09 we don't make the financial targets, so  
7 there is a balancing between, you know, the financial  
8 integrity of the Corporation and customer sensitivity, I  
9 would suggest.

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11

(BRIEF PAUSE)

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MR. BOB PETERS: When you say, "depressed income", Mr. Rainkie, are you suggesting that that's a one (1) off and is not likely to reoccur?

MR. DARREN RAINKIE: Well, what I was trying to point out, Mr. Peters, is that between, you know, IFF-08 and IFF-09, I think our net income forecast for the '09/'10 year at the time and the two (2) test years went down by about \$240 million. I think we've reflected that in Tab 2 of the original application, and -- but we maintain that it -- you know, the 2.9 percent rate increase is for the two (2) test years, despite the reduction in net income. So I think that shows some sensitivity to customers.

1 MR. BOB PETERS: Okay. What -- what I  
2 take from your answer, Mr. Rainkie, is that numerically  
3 it may have justified a larger rate increase than the  
4 Corporation sought, but the Corporation for its own  
5 decisions did -- didn't come in with a higher rate  
6 increase than two point nine (2.9)?

7 MR. DARREN RAINKIE: That's right, Mr.  
8 Peters. I think that's the beauty of the cost-of-service  
9 methodology.

10

11 (BRIEF PAUSE)

12

13 MR. BOB PETERS: While we're on the  
14 general service large issues, Mr. Rainkie, and, Mr.  
15 Kuczek, does the 2.9 percent indicate that that will be  
16 the actual revenue gain from the general service large  
17 classes? Is that the expectation.

18 MR. DARREN RAINKIE: Sorry, Mr. Peters,  
19 can you rephrase that? I'm not sure I understand the  
20 question.

21

22 (BRIEF PAUSE)

23

24 MR. BOB PETERS: When -- when Mr. Warden  
25 was reviewing his presentation yesterday, he had some

1 rate information provided, and I think it might have been  
2 on page 26 if you want to turn to it and also the  
3 following page. Mr. Wiens, this might be coming back to  
4 you, but has the winter ratchet been eliminated in the  
5 rates that are set for the general service class?

6 MR. ROBIN WIENS: Yes, it has.

7 MR. BOB PETERS: Effective which year,  
8 sir?

9 MR. ROBIN WIENS: Effective November 1,  
10 2009.

11 MR. BOB PETERS: And does it also  
12 reflect, Mr. Wiens, the withdrawal of the energy  
13 intensive industrial rate?

14 MR. ROBIN WIENS: Does what reflect the  
15 withdrawal, Mr. Peters?

16 MR. BOB PETERS: The rates that you have  
17 put forward don't have an express rate identified for  
18 energy intensive industrial rates, correct?

19 MR. ROBIN WIENS: There is no rate  
20 specifically identified for --

21 MR. BOB PETERS: And that's not blended  
22 or included in any of the other rates that are -- that  
23 are put forward?

24 MR. ROBIN WIENS: No. There's no rate in  
25 -- on these two (2) or three (3) pages that incorporates

1 anything for that, Mr. Peters. The rate shown on page 27  
2 of Mr. Warden's presentation for general service large --  
3 and I will look specifically at the last one, for the 100  
4 kV and over -- are intended to -- are intended to bring  
5 Manitoba Hydro the approximate 2.9 percent across the  
6 board rate increase that we've requested.

7 MR. BOB PETERS: Does the two point --  
8 excuse me. Does the 2.9 percent increase reflect any  
9 class amalgamation and consolidation, Mr. Wiens?

10 MR. ROBIN WIENS: Well, overall, there is  
11 continuing class consolidation between the general  
12 service small and medium rate classes. I'm -- off the  
13 top of my head, I can't give you the -- the -- the  
14 revenue increases that are expected as a result of those  
15 rate changes, but it does reflect that, and for those  
16 classes overall, we're looking at about 2.9 percent.

17 MR. BOB PETERS: But there's no demand  
18 charges for general service small demand class and the  
19 general service medium?

20 MR. ROBIN WIENS: To the contrary. For  
21 the general service small demand class, yes, there are  
22 demand charges. For the general service small non-demand  
23 class, no, there are no demand charges.

24 MR. BOB PETERS: Yeah, and back on page  
25 26, you're not showing any demand charges for the -- the

1 general service small or the general service medium, and  
2 I can take it then that this isn't a complete  
3 reproduction of the rates that you're looking approval  
4 for because you haven't included the demand charges.

5 MR. ROBIN WIENS: Well, the demand  
6 charges aren't shown here but of course they are in our  
7 application.

8 MR. BOB PETERS: Back to Tab 4 of the  
9 book of documents, Mr. Chairman and Board members. When  
10 we look at the top line of General Consumers Revenue, Mr.  
11 Warden, that \$1.159 billion for 2011 and one point one  
12 seven seven (1.177) billion for 2012, that is 100 percent  
13 as a result of rates approved by this Board, is that  
14 correct?

15 MR. VINCE WARDEN: Yes, it is.

16 MR. BOB PETERS: And so that comes under  
17 Mr. Wiens' job performance to make sure he can deliver --  
18 deliver on that revenue because those are the rates that  
19 he's responsible for in terms of the Corporation?

20 MR. VINCE WARDEN: Based on the -- the  
21 assumptions that go into developing those numbers, yes.

22 MR. BOB PETERS: I want to turn to -- to  
23 extraprovincial revenue. And I know Mr. Cormie's away,  
24 so we'll be mindful that my questions aren't going to be,  
25 I think, specifically aimed at him, but they are number

1 driven.

2 And if Mr. Wiens gets credit for the  
3 general consumers revenue of \$1.159 billion, then I  
4 suppose it's only fair that we give Mr. Cormie credit for  
5 the extraprovincial revenue.

6 Would that be...

7 MR. VINCE WARDEN: Okay.

8 MR. BOB PETERS: When the Board looks at  
9 IFF-09 for the 2010 year, and let's start with the 2010  
10 year, they see that extraprovincial revenues come in at  
11 \$414 million.

12 Correct?

13 MR. VINCE WARDEN: Yes.

14 MR. BOB PETERS: And if the Board flips  
15 ahead to Tab 6 of the book of documents, and looks on  
16 page 25 in the top right-hand corner, the Board is going  
17 to see that in 2010, if we go down to the total export  
18 sales line, two-thirds (2/3) of the way down the page  
19 under the 2010 column, instead of seeing \$414 million,  
20 the number \$332 million is shown.

21 Is that also correct, sir?

22

23 (BRIEF PAUSE)

24

25 MR. VINCE WARDEN: Yes, correct.



1                   MR. BOB PETERS:     And would the Board be  
2     correct, Mr. Warden, in understanding that the difference  
3     between those two (2) totals of \$82 million relates to  
4     something that is known as merchant sales?

5

6                                   (BRIEF PAUSE)

7

8                   MR. VINCE WARDEN:     It seems a little high  
9     for merchant sales, but I can't think of what anything  
10    else might be, so it's primarily merchant sales, yes.

11                   MR. BOB PETERS:     All right.    That --  
12    that's fair, and if there's going to be a clarification  
13    later if you have a question of Mr. Cormie on his joining  
14    the panel, that'll be fine, too.

15                                   But these were prepared as forecasts,  
16    correct?

17                   MR. VINCE WARDEN:     That's right.

18                   MR. BOB PETERS:     So just on merchant  
19    sales, I want to make sure the Board is clear, merchant  
20    sales do not sell any electrons that were born in  
21    Manitoba, that were generated here.

22                                   Would that be true?

23                   MR. VINCE WARDEN:     No, ultimately those -  
24    - those merchant sales are -- are backed by generation in  
25    Manitoba.

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: I'm not sure what you  
4 mean by, "backed," but somewhere in -- I have a  
5 definitions, and I don't know if it's in this book of  
6 documents, or if it's in the -- the sequel.

7 No, it's not in this book of documents,  
8 Mr. Warden, and I forgot the Information Request number,  
9 but there was a definitions from the company that was  
10 helpful, and my reading of it, and maybe incorrectly, I  
11 had assumed that merchant functions -- merchant sales  
12 were when Manitoba Hydro bought electricity in the United  
13 States, and sold it into a Canadian province other than  
14 Manitoba, probably Ontario.

15 MR. VINCE WARDEN: Well, essentially  
16 that's right but the -- the purchase in the United States  
17 was to fulfill an obligation in the United States.

18 Where there's a more attractive price in  
19 Ontario, or elsewhere, then -- then those same kilowatt  
20 hours will be sold in that elsewhere market.

21 MR. BOB PETERS: I understand that  
22 merchant sales are where Manitoba Hydro will, through the  
23 services of an American company, use US transportation to  
24 deliver electrons purchased in the United States into  
25 Ontario.

1 MR. LLOYD KUCZEK: Maybe --

2 MR. BOB PETERS: Have I said that  
3 correct?

4 MR. LLOYD KUCZEK: Maybe I can help a bit  
5 here. Here's our definition of system merchant revenues.  
6 They occur when there is a system merchant purchase and  
7 corresponding resale in another market, so I think what  
8 Mr. Peters was saying is correct. Another market could  
9 be Ontario, US.

10 MR. BOB PETERS: If you could turn to PUB  
11 Manitoba Hydro Second Round Information Request 193A,  
12 those were the definitions that I was -- was trying to  
13 memorize, perhaps not successfully. And I'll read into  
14 the record:

15 "Merchant sales..."

16

17 (BRIEF PAUSE)

18

19 MR. BOB PETERS: I'll just pause for a  
20 minute, please.

21

22 (BRIEF PAUSE)

23

24 MR. BOB PETERS: You -- you've located  
25 it, have you, Ms. Boyd?

1 MS. MARLA BOYD: We have, thank you.

2

3 CONTINUED BY MR. BOB PETERS:

4 MR. BOB PETERS: And reading from PUB  
5 Manitoba Hydro Second Round Information Request 193a, the  
6 definition of merchant sales is shown as follows:

7 "Manitoba Hydro's merchant transactions  
8 are the sale of electricity not  
9 involving Manitoba Hydro's generation  
10 assets or not related to serving or  
11 hedging its sales obligations."

12 Have I read that correctly?

13 MR. LLOYD KUCZEK: Correct.

14

15 (BRIEF PAUSE)

16

17 MR. BOB PETERS: Mr. Kuczek, would --  
18 would it then be -- would I be correct -- and I'm going  
19 to try to be more specific here, and if I'm -- I'm not --  
20 I'm not aware this is under any cloak of confidentiality,  
21 but is the origin of purchase known and something that  
22 you can disclose on the public record as to in which  
23 jurisdiction you buy those electrons for sale on merchant  
24 transactions?

25

1 (BRIEF PAUSE)

2

3 MS. MARLA BOYD: Mr. Peters, this might  
4 be a little smoother if we wait till Mr. Cormie arrives.

5

6 (BRIEF PAUSE)

7

8 MR. BOB PETERS: Ms. Boyd, I'm -- I'm  
9 going to press a little bit further, and I'm trying not  
10 to -- I'll leave the definition section and Mr. Cormie  
11 can help us with that, if I remember to ask him, on his  
12 return.

13

14 CONTINUED BY MR. BOB PETERS:

15 MR. BOB PETERS: And I want to help a  
16 comment that Mr. Warden put on the record about the  
17 quantum. Would it be conceptually correct to the witness  
18 panel that, if Manitoba Hydro does merchant transactions  
19 it would have to show on IFF-09 an amount of electricity  
20 that it had to either purchase -- it's under the Fuel and  
21 Power Purchased line on IFF-09, found at Tab 4 of the  
22 book of documents. That's where you'd see the actual  
23 purchase of those electrons?

24 MR. VINCE WARDEN: Yes.

25 MR. BOB PETERS: Yeah. Mr. Rainkie, you

1 -- you prepare the IFF, I take it, and so you know from  
2 Mr. Cormie or Mr. Surminski's group or someone's group  
3 that they're buying electricity in a different market,  
4 and that is subsequently resold. Is that your  
5 understanding?

6 MR. DARREN RAINKIE: Yeah, we see the  
7 sales and the purchases, Mr. Peters.

8 MR. BOB PETERS: All right. And when we  
9 look at Tab 4 of the book of documents, and we're in the  
10 2010 year and we're looking at IFF-09 on page 14 in the  
11 top right-hand corner, we see water rentals -- I'm sorry,  
12 we see fuel and power purchased of \$103 million, and  
13 that's to reflect power purchases, which would include  
14 imports, Mr. Rainkie.

15 MR. DARREN RAINKIE: That's correct.

16 MR. BOB PETERS: It would include  
17 merchant sales -- merchant purchases for subsequent sale.

18 MR. DARREN RAINKIE: Yes, on a -- on an  
19 actual basis it would. I'm struggling now if there's  
20 actually an amount in that for merchant sales but  
21 certainly that's the line item that it rolls up to in our  
22 income statement.

23 MR. BOB PETERS: All right. And when you  
24 say, "fuel", do you know is that referring to natural gas  
25 fuel?

1 MR. DARREN RAINKIE: That's part of it,  
2 yeah.

3 MR. BOB PETERS: All right. When we --  
4 when we look for the same line item in Tab 6 of the book  
5 of documents under the IFF assumptions, we see with a bit  
6 more clarity that the imports into Manitoba appear to  
7 reflect import energy, including wind, for 2010 on page  
8 25 of Tab 6 of the book of documents that have been  
9 prepared for Board counsel. We see that there's a \$36  
10 million import energy charge, and there's also a thermal  
11 generation charge of \$8 million, totalling 44 million, is  
12 that correct, Mr. Rainkie?

13 MR. DARREN RAINKIE: That's -- yeah,  
14 that's what on this sheet, Mr. Peters.

15 MR. BOB PETERS: All right. And if we --  
16 if we remove that 44 million from the import and power  
17 purchases, we're left with \$59 million of power  
18 purchases, correct?

19 MR. DARREN RAINKIE: I think your math is  
20 correct, Mr. Peters.

21 MR. BOB PETERS: And -- and where I'm  
22 going with this is Mr. Warden earlier was uncertain as to  
23 the quantum, and -- and he may still have something to  
24 come back on on that, but while -- while it shows on the  
25 IFF \$82 million of gross merchant sales, it looks like it

1 cost \$59 million to buy the actual electrons that were  
2 sold as part of merchant sales. Would that be a correct  
3 interpretation, Mr. Rainkie, of your -- of your numbers  
4 by this Board?

5 MR. DARREN RAINKIE: Mr. Peters, where do  
6 you find the 59 million? I'm going between a number of  
7 tabs here and I'm getting mixed up myself.

8 MR. BOB PETERS: The \$103 million number  
9 that is shown, Mr. Rainkie, in IFF-09, the 103 million  
10 shown as fuel and water -- fuel and power purchased.

11 MR. DARREN RAINKIE: Okay, I'm with you  
12 so far.

13 MR. BOB PETERS: And now what I want to  
14 do is I want to subtract the imports and the thermal use,  
15 which you told me was \$44 million.

16 MR. DARREN RAINKIE: Yeah, I was with you  
17 up to that point.

18 MR. BOB PETERS: And then if I subtract  
19 the 44 million from the 103 do you get \$59 million of  
20 purchase power being the result?

21 MR. DARREN RAINKIE: That sounds like a  
22 good calculation.

23 MR. BOB PETERS: All right. And then --  
24 and then where I take it from there, Mr. Rainkie, looking  
25 for maybe Mr. Warden's agreement, is that while we



1 identified an \$82 million gross merchant sales amount, it  
2 appears that the Corporation planned to spend \$59 million  
3 to actually purchase the electrons that were then sold.  
4 Would that assumption be -- be correct?

5 MR. DARREN RAINKIE: You're -- Mr.  
6 Peters, you're taking the difference between the export  
7 revenue on Tab 6 of your book of documents and the four  
8 fourteen (414); that's where you get the 80 million fro -  
9 - 80 from, right?

10 MR. BOB PETERS: Yes, I did. I reviewed  
11 that with Mr. Warden.

12 MR. DARREN RAINKIE: I think the number  
13 might be slightly lower because I think there might be  
14 some transmission credit revenue in that 80 million, Mr.  
15 Peters. I'd have to check that. I think there's a few  
16 other miscellaneous revenues. But let's continue on and  
17 see if that makes a difference, I guess.

18 MR. HAROLD SURMINSKI: Mr. Me -- Mr.  
19 Peters, can you clarify, for my purpose -- purposes,  
20 eighty-four (84) versus fifty-nine (59)? Is that what  
21 your numbers are?

22 MR. BOB PETERS: Eighty-two (82).

23 MR. HAROLD SURMINSKI: Eighty-two (82)  
24 versus --

25 MR. BOB PETERS: Eighty (80) -- eighty-

1 two (82) in --

2 MR. HAROLD SURMINSKI: As a revenue.

3 MR. BOB PETERS: Yes.

4 MR. HAROLD SURMINSKI: -- and fifty-nine  
5 (59) as a cost.

6 MR. BOB PETERS: Yes, sir, that's --

7 MR. HAROLD SURMINSKI: Yes. And I can  
8 confirm that it's too high a differential. We realize  
9 profits, if we want to call them that, on that  
10 transaction, but it's smaller than that difference is my  
11 recollection.

12 MR. BOB PETERS: All right. And Mr.  
13 Rainkie is telling the Board that there may be other  
14 items that are included in that that aren't -- that  
15 aren't indicated here, such as transmission credits.

16 MS. HAROLD SURMINSKI: Yes, and that  
17 would -- that would be a reason for the difference.

18 MR. BOB PETERS: All right. The -- if --  
19 if we did the math, and -- and I'm not going to disagree  
20 with you, Mr. Surminski, at this time, if it was \$82  
21 million of gross merchant sales, and \$59 million of  
22 costs, that would spin out about a \$23 million profit in  
23 -- in -- I'm not sure if that's a dirty word at that side  
24 of the room or not, but it -- it would be a surplus over  
25 the costs.

1 Correct?

2 MS. HAROLD SURMINSKI: Yes.

3 MR. BOB PETERS: And you're telling the  
4 Board that from merchant sales in general, that  
5 profitability or that spread or excess margin seems a bit  
6 high.

7 MS. HAROLD SURMINSKI: Yes, that's  
8 correct.

9 MR. BOB PETERS: You wouldn't have  
10 expected \$23 million in 2010 on account of merchant  
11 sales.

12 MS. HAROLD SURMINSKI: No. It'd be less  
13 than ten (10), and the numbers I remember are more in the  
14 order of \$5 million a year.

15 MR. BOB PETERS: Well, I'd like to take  
16 you and the Board, Mr. Surminski, to the book of  
17 documents, Tab 6, to what is marked as pages 27 and 28 in  
18 the top right-hand corner, and these documents are not at  
19 the front. They are the -- the last two (2) pages in Tab  
20 6 of Board counsel's book of documents, and these are  
21 related to PUB Manitoba Hydro Second Round 193B and 'C'.

22 And just before lunch, Mr. Surminski, I  
23 think I can come down to your -- to your price points.  
24 If we look to see on what is marked as page 27 in the top  
25 right-hand corner, in response to PUB Manitoba Hydro

1 Second Round 193B, we see the merchant sales on the  
2 bottom line of the -- the graph over in the far right-  
3 hand side for the 2009 and '10 test year shows now on an  
4 actual basis \$26 million of sales.

5 On a gross basis, Mr. Surminski, that  
6 sounds correct?

7 MS. HAROLD SURMINSKI: That is the number  
8 provided in the summary.

9 MR. BOB PETERS: And if we turn the page,  
10 we see that the -- the next page shows what the imports  
11 were, and the imports related to merchants, or the power  
12 purchases related to merchant sales, was \$25 million.

13 You also see that?

14 MS. HAROLD SURMINSKI: Yes, I see that.

15 MR. BOB PETERS: So if we have \$26  
16 million of gross sales, and \$25 million of costs, that  
17 brings out about \$1 million of net profit or surplus.

18 MS. HAROLD SURMINSKI: Yes.

19 MR. BOB PETERS: And that's more in the  
20 range of your recollection as to what merchant sales  
21 would have been returning to the Corporation for 2010.

22 MS. HAROLD SURMINSKI: In general, yes,  
23 in these early years.

24 MR. BOB PETERS: All right. Mr.  
25 Chairman, this might be a good time to recess for lunch,

1 and we can pick it up here at 1:15.

2 THE CHAIRPERSON: Very good, Mr. Peters.

3 Thank you.

4

5 --- Upon recessing at 12:00 p.m.

6 --- Upon resuming at 1:19 p.m.

7

8 THE CHAIRPERSON: Welcome back, everyone.

9 Mr. Peters...?

10 MS. MARLA BOYD: Mr. Chairman, perhaps  
11 before Mr. Peters begins, Mr. Rainkie's in a position to  
12 respond to an undertaking which I have characterized as  
13 number 4, hopefully following the same list as everybody  
14 else as to the amount embedded in IFF-08 for the forecast  
15 years for the EIIR rate.

16 THE CHAIRPERSON: Very good, Ms. Boyd.

17 Mr. Rainkie...?

18 MR. DARREN RAINKIE: For the two (2) test  
19 years the figures are 20 million and 25 million, and then  
20 from 2012/'13 on the -- the numbers range between 23 and  
21 27 million.

22

23 CONTINUED BY MR. BOB PETERS:

24 MR. BOB PETERS: Thank you, Mr. Rainkie.

25 And you've indicated that the 20 million that shows up

1 for the 2011 fiscal year and the 25 million for the 2012  
2 fiscal year, those numbers were changed in the IFF-09,  
3 and we put those on the record earlier this morning.  
4 They were approximately 5 million and 7 1/2 million, if I  
5 recall, for those two (2) test years, sir.

6 MR. DARREN RAINKIE: That's correct, Mr.  
7 Peters.

8 MR. BOB PETERS: And going forward, in  
9 IFF-09 you indicated to the Board that there was an  
10 amount included but it was reclassified when you came to  
11 IFF-10, have I got that right?

12 MR. DARREN RAINKIE: That's right, it was  
13 put in the additional revenue line.

14 MR. BOB PETERS: And it was approximately  
15 how much post the test years, Mr. Rainkie?

16 MR. DARREN RAINKIE: It was approximately  
17 \$6 million post the test years.

18 MR. BOB PETERS: All right. It was 6  
19 million starting after the test years?

20 MR. DARREN RAINKIE: That's correct. It  
21 was \$5 million -- let's just make sure it's clear, Mr.  
22 Peters. It was \$5 million in 2011/'12. And then it  
23 moves to \$6 million thereafter, 2012/'13 and onward.

24 MR. BOB PETERS: And it stays at \$6  
25 million throughout the IFF-09 forecast?

1 MR. DARREN RAINKIE: That's correct.

2 MR. BOB PETERS: And then can you just  
3 remind the Board what you did in IFF-10 in terms of the  
4 amount. You added that to the additional rate --  
5 additional revenues from new rates?

6 MR. DARREN RAINKIE: That's right, Mr.  
7 Peters, because it wasn't approved yet. We put it in the  
8 additional line instead of the base general consumers  
9 revenue line.

10 MR. BOB PETERS: The same dollar amounts  
11 as well, Mr. Rainkie?

12 MR. DARREN RAINKIE: That's right.

13 MR. BOB PETERS: All right. Thank you  
14 for that, sir.

15 Before we took the recess this morning, we  
16 were talking about merchant transactions, and I'm not  
17 sure if the Corporation had an opportunity to dis --  
18 consider that and discuss that further over the -- over  
19 the lunch recess. But my conclusion to the panel was  
20 that based on 2010, on an actual basis, would the Board  
21 be correct if it concluded that the gross merchant sales  
22 in 2010 were \$26 million but the merchant power purchase  
23 to support those sales was \$25 million, resulting in a  
24 profit of \$1 million?

25 MR. HAROLD SURMINSKI: Yes, that's

1 correct.

2 MR. BOB PETERS: And, Mr. Surminski, I --  
3 I can do the math again, but if we look at Tab 6 of the  
4 book of documents, and Tab 4, if we go out to -- let's  
5 pick 2019/'20, the last year on the -- on the front page  
6 of these documents, and I see an IFF-09 found at page 14  
7 of Board Council's book of documents, which  
8 parenthetically, Mr. Chairman, I can confirm has been  
9 posted on the Board's website as an exhibit, along with  
10 other exhibits recently entered, for those who are  
11 following on the transcripts.

12 And with that, I thank Mr. Singh and his  
13 assistance. I would also then look, Mr. Surminski, that  
14 in 2020, you're reporting extraprovincial revenues of a  
15 billion and \$93 million, correct?

16 MR. HAROLD SURMINSKI: Yes, I see that,  
17 correct.

18 MR. BOB PETERS: And if we look ahead to  
19 Tab 6 of the book of documents, under the IFF-09  
20 assumptions, we're about two-thirds of the way down the  
21 page looking at total export sales. We see a number of  
22 export sales for 2020 of about \$1.013 billion, correct?

23 MR. HAROLD SURMINSKI: Yes, that's  
24 correct.

25 MR. BOB PETERS: And there's an \$80



1 million difference that's readily calcula -- calculable,  
2 correct?

3 MR. HAROLD SURMINSKI: You mean the --  
4 the difference can be calculated.

5 MR. BOB PETERS: Yeah, the difference is  
6 \$80 million?

7 MR. HAROLD SURMINSKI: Yes.

8 MR. BOB PETERS: And when we also then go  
9 back and we look to see what fuel and power purchases are  
10 in the IFF, we see a number of \$419 million for 2020,  
11 correct?

12 MR. HAROLD SURMINSKI: Correct, I see  
13 that.

14 MR. BOB PETERS: And then if we turn to  
15 the IFF assumptions found at Tab 6 of the book of  
16 documents on page 25, we see that Manitoba thermal  
17 generation plus import energy, including wind, 77 million  
18 plus 254 million --

19 MR. LARRY BUHR: Two sixty-four (264).

20

21 CONTINUED BY MR. BOB PETERS:

22 MR. BOB PETERS: Two sixty-four (264),  
23 yes, thank you, all.

24 A \$341 million combined cost; is that also  
25 correct, Mr. Surminski?

1 MR. HAROLD SURMINSKI: Yes.

2 MR. BOB PETERS: And so when we hav --  
3 start with 419 million and subtract out the import energy  
4 and the thermal, we're left with \$78 million, according  
5 to my math, and you'd agree with that subject to check?

6 MR. HAROLD SURMINSKI: Yes, I'll agree  
7 with that.

8 MR. BOB PETERS: That would tell the  
9 Board, Mr. Surminski, that the profitability in 2020 on  
10 account of merchant sales looks to be in the  
11 neighbourhood of \$2 million a year. Is that what the  
12 Board can interpret that to mean?

13 MR. HAROLD SURMINSKI: No, I think I'll  
14 take an oppor -- take a -- an opportunity here to  
15 describe what the table on page 25 is, and how we -- how  
16 we got to that. There is -- there is several additional  
17 factors that have pluses and minuses, and going from the  
18 IFF and -- and resulting in this summary table on page 25  
19 your -- there's transmission. For example, we have  
20 transmission credits and we have transmission costs.  
21 First of all, the reason for -- for having a table like  
22 the one on page 25 was to derive unit costs of energy.

23 This has evolved, I'll give you history,  
24 has evolved over time, where the PUB had requested about  
25 three (3) years ago that volumes be provided

1 corresponding to the revenues that are in the IFF. In  
2 that first 2008 summary we provided volumes. The PUB  
3 just divided revenues by volumes and got unit prices.

4 Now, it's not a correct -- it's an  
5 approximate indication, but it's not a good indication  
6 because there are a lot of revenues in there that are not  
7 volume-related. And if you include these like \$25  
8 million and \$50 million quantities that are not volume-  
9 related you get distorted unit prices.

10 So what we have done in subsequent years  
11 is try to remove these quantities that are not volume-  
12 related from -- and -- and maybe net some of these  
13 quantities. In some cases, transmission -- there's costs  
14 and there are revenues. We have netted the two (2)  
15 instead of having them separate as they may appear in the  
16 IFF.

17 So your conclusion that you're drawing  
18 using this table on twenty-five (25) is not correct  
19 because you're not including -- or considering all the  
20 factors that are different. In addition to transmission  
21 there is ASM, ancillary services market, revenues. There  
22 is summer capacity, you know, like the quantities that  
23 have no energy, they're just revenues or costs.

24 So that's -- that's the difficulty when  
25 you came up with the \$2 million attributed to system

1 merchant. In fact, I know we do not include any system  
2 merchant after the first two (2) years.

3 In our long-term estimates we assumed that  
4 system merchant revenues and profits do not exist. We --  
5 we do not forecast those.

6 MR. BOB PETERS: Do you assume they don't  
7 exist or do you assume they equal each other, Mr.  
8 Surminski?

9 MR. HAROLD SURMINSKI: Yes, you could say  
10 the same thing. They equal each other --

11 MR. BOB PETERS: No, no.

12 MR. HAROLD SURMINSKI: -- and there is no  
13 net.

14 MR. BOB PETERS: Well, the --

15 MR. HAROLD SURMINSKI: We don't -- we  
16 don't put a plus and a minus in. We don't include a  
17 revenue and a cost; we just have a zero and don't include  
18 anything for it.

19

20 (BRIEF PAUSE)

21

22 MR. BOB PETERS: Let me -- in my small  
23 mind, Mr. Surminski, there is a distinction between the  
24 two (2), and I -- I'm not going to argue with you on it.  
25 But I want to understand, is there any amount included in

1 the extraprovincial revenues shown in IFF-09 after the  
2 test years on account of merchant revenues?

3 MR. HAROLD SURMINSKI: No, after the --  
4 after the '09/'10 and '10/'11 fiscal years we do not  
5 include any -- any net revenues or any revenues or costs  
6 associated with system merchant functions.

7 MR. BOB PETERS: So my mathematics, while  
8 correct, my conclusion is that it related to merchant  
9 functions is incorrect.

10 MR. HAROLD SURMINSKI: That's why I said,  
11 "No," yes.

12 MR. BOB PETERS: Yeah. Oh, I understand.  
13 But you've also said that you don't even include it past  
14 the test years.

15 MR. HAROLD SURMINSKI: Now, I'm  
16 clarifying that, yes.

17 MR. BOB PETERS: All right. So my math  
18 during the test years before lunch was accurate, and my  
19 conclusion was also accurate before lunch.

20 MR. HAROLD SURMINSKI: On -- on the net,  
21 the -- there are other factors, and -- and that's why the  
22 23 million or whatever number you had derived was not  
23 correct, because there are additional factors that reduce  
24 that number to more. And we have verified the actuals in  
25 2009/'10 were only four point one (4.1) -- four point

1 four (4.4), I believe.

2

3

(BRIEF PAUSE)

4

5 MR. HAROLD SURMINSKI: The forecast for  
6 '09/'10 was \$4.4 million.

7 MR. BOB PETERS: All right. Well, I -- I  
8 thank you and your colleagues for the -- for that work; I  
9 think that's helpful. Before we leave it, Mr. Surminski,  
10 the transmission credits -- can you just explain to the  
11 Board what are transmission credits?

12 MR. HAROLD SURMINSKI: I'm not in the  
13 best position to do that, but it's -- it's our  
14 participation in the MISO market. Open access  
15 transmission allows revenues for use of transmission  
16 through transmission tariffs.

17 MR. BOB PETERS: Sure, and would you --  
18 would you accept that -- be careful, because I might not  
19 agree, but by having Manitoba's transmission assets,  
20 sometimes electrons being shipped by another party and  
21 destined for someone other than Manitoba Hydro will end  
22 up crossing Manitoba Hydro's transmission assets.

23 MR. HAROLD SURMINSKI: Yes, that could  
24 happen.

25 MR. BOB PETERS: And when that happens,

1 there's a paycheque in it for Manitoba Hydro?

2 MR. HAROLD SURMINSKI: Yes.

3 MR. BOB PETERS: All right, and that  
4 transmission credit is one of the places that that would  
5 go?

6

7 (BRIEF PAUSE)

8

9 MR. HAROLD SURMINSKI: Being Manitoba  
10 Hydro is a coordinating member -- it's not a full member  
11 of MISO, but we do get to share in -- in the transmission  
12 revenues, and it is more the transmission business unit,  
13 that it is in fact the transmission business unit that  
14 derives these revenues.

15 MR. BOB PETERS: And would the Board be  
16 correct in assuming that that -- the reason you derive  
17 those revenues is because someone's electrons are using  
18 your transmission assets?

19 MR. HAROLD SURMINSKI: That is only a  
20 small component.

21 MR. BOB PETERS: All right.

22 MR. HAROLD SURMINSKI: It's just being a  
23 member, a coordinating member of that organization that  
24 allows these revenues.

25 MR. BOB PETERS: All right. And you also

1 told the Board that netted against those transmission  
2 credits would be transmission costs, correct?

3 MR. HAROLD SURMINSKI: Yes, that's  
4 correct.

5 MR. BOB PETERS: And what would be an  
6 example of those transmission costs, or the major  
7 component of them?

8 MR. HAROLD SURMINSKI: Manitoba Hydro  
9 pays tariffs based on point-to-point transmission. There  
10 are tariffs set out for that and -- and any time our --  
11 our power flows across these transmission lines that have  
12 these tariffs we have to pay those costs.

13 MR. BOB PETERS: Are those -- and those  
14 are not costs that are charged through to your export  
15 customer?

16

17 (BRIEF PAUSE)

18

19 MS. MARLA BOYD: Mr. Peters, I think  
20 there's probably some fine points in here that we'd  
21 benefit from having Mr. Cormie speak to rather than  
22 trying to piece it together here.

23 MR. BOB PETERS: All right. Thank you.  
24 I'll put a note in my binder to await Mr. Cormie.

25 MR. HAROLD SURMINSKI: And it even goes



1 further than that. It's people in our transmission  
2 business unit also that -- that provide the estimates to  
3 us.

4

5 CONTINUED BY MR. BOB PETERS:

6 MR. BOB PETERS: Okay. Mr. Cormie may  
7 want to bring friends. The -- Mr. Surminski, don't go  
8 away. You mentioned to the Board that ancillary services  
9 market also provides revenue to Manitoba Hydro, did I  
10 have that right?

11 MR. HAROLD SURMINSKI: Yes, that's  
12 correct.

13 MR. BOB PETERS: Somewhere in the back of  
14 my mind I seem to recall that ancillary services used to  
15 be a more lucrative market for Manitoba Hydro than it  
16 currently is as a result of what's happened at MISO.

17 Is that factually correct?

18 MS. HAROLD SURMINSKI: No. We never sold  
19 ancillary services before MISO, before -- and that's a  
20 relatively new phenomenon in the last year or so, that  
21 the ASM ancillary services market has actually been  
22 formed.

23 MR. BOB PETERS: What would be some  
24 examples of ancillary services that you would sell into  
25 the -- the market are -- in the MISO market?

1 MS. HAROLD SURMINSKI: Reserves,  
2 particularly regulation, spinning, and supplemental,  
3 there's various categories of reserves, and we can bid  
4 reserves into the pool, and -- and the pool decides  
5 whether Manitoba Hydro reserves should be accepted for  
6 use by the pool.

7 So we -- we can bid our -- and that's  
8 capacity. Reserves are -- are always megawatts in  
9 capacity, so we can bid in our -- our megawatts, or our  
10 megawatt hours energy. So one (1) or the other. You  
11 can't do both for a particular resource.

12 MR. BOB PETERS: Are you providing those  
13 ancillary services, such as capacity reserves, for the  
14 entire or a portion of the MISO market, or are you  
15 providing it for a -- a -- for a counterparty?

16 MS. HAROLD SURMINSKI: It is -- it is to  
17 the market. That's -- that was the reason for forming  
18 the market for -- for sharing reserves across a -- a wide  
19 footprint. There's advantages to -- to many utilities  
20 sharing reserves.

21 MR. BOB PETERS: And the advantage is  
22 that they don't have to pay the capital costs to have  
23 their own reserves where they can -- where they can buy  
24 them on the market?

25 MS. HAROLD SURMINSKI: Yes. That -- that

1 would mean that you might have to hold your unit idle if  
2 you're using it for reserves, where -- whereas you could  
3 be running it, and producing energy, and -- and getting  
4 revenues for that.

5 MR. BOB PETERS: But the revenues for --  
6 for running that would be the capacity reserve revenue,  
7 not export sales revenue?

8 MS. HAROLD SURMINSKI: In -- in our case,  
9 it -- it would be in capacity value; is that what you're  
10 --

11 MR. BOB PETERS: Yes.

12 MS. HAROLD SURMINSKI: -- saying? Yes,  
13 correct.

14 MR. BOB PETERS: As opposed to energy  
15 value.

16 MS. HAROLD SURMINSKI: Yes, correct.

17 MR. BOB PETERS: Okay. You also  
18 mentioned summer capacity is a -- is a factor that goes  
19 into the extraprovincial revenue line.

20 What is summer capacity, recognizing it's  
21 not an energy value?

22 MS. HAROLD SURMINSKI: It is -- we can --  
23 we can sell forward on a monthly basis summer capacity  
24 into -- I believe it's into the pool. No, sorry, it is a  
25 counterparty. It's -- it's bilateral.

1 MR. BOB PETERS: Why would you sell  
2 capacity and no energy?

3 MS. HAROLD SURMINSKI: Because Manitoba  
4 Hydro is often capacity rich and we do have surplus  
5 capacity that's -- that's sitting there, and we don't  
6 have the -- the water to -- to drive and produce energy  
7 at times.

8 MR. BOB PETERS: Maybe help me out then.  
9 What would the counterparty do with your capacity, but  
10 not with energy coming from that capacity?

11 MS. HAROLD SURMINSKI: Again, it's --  
12 it's -- in order to do their -- their balancing on -- for  
13 example, this is on a monthly basis, they have to show  
14 that they have this capacity available to them.

15 MR. BOB PETERS: So just -- Manitoba  
16 Hydro could have it sitting there, and it's worth money  
17 to Manitoba Hydro?

18 MS. HAROLD SURMINSKI: Yes, correct.

19 MR. BOB PETERS: All right. When we --  
20 when we did the math and I got you to agree with my math,  
21 and I thank you for that, that, you know, there was \$80  
22 million at play, and then maybe only \$2 million net  
23 profit at the end of it, you corrected me in telling the  
24 Board that that isn't related to merchant functions  
25 because you assume zero net dollars of merchant functions

1 after the test years, correct?

2 MS. HAROLD SURMINSKI: That's correct.

3 MR. BOB PETERS: So when I see \$80  
4 million being expended, and \$78 million...

5

6 (BRIEF PAUSE)

7

8 MR. BOB PETERS: I am corrected that the  
9 80 million becomes revenue under your export line, and  
10 the 78 million ended up being under your fuel and power  
11 purchase expenditures.

12 The net is \$2 million, correct?

13 MS. HAROLD SURMINSKI: That was the  
14 difference that you had --

15 MR. BOB PETERS: Yes.

16 MS. HAROLD SURMINSKI: -- derived.

17 MR. BOB PETERS: And when we look at that  
18 difference, Manitoba Hydro is spending a lot of money for  
19 a relatively small return.

20 Would that be fair to say?

21 MR. HAROLD SURMINSKI: No, I don't know  
22 how you're getting to that, because we established that  
23 system merchant is not a factor there.

24 MR. BOB PETERS: Well, do we also  
25 establish that by spending -- sorry, by spending 78

1 million, you make \$80 million?

2 Would that be another way to say it?

3 MR. HAROLD SURMINSKI: You are talking  
4 about 2019/20?

5 MR. BOB PETERS: I am.

6 MR. HAROLD SURMINSKI: Yes.

7 MR. BOB PETERS: I'm way out in the  
8 future.

9 MR. HAROLD SURMINSKI: Right. No, I -- I  
10 clarify that these were due to these additional factors  
11 of transmission credits and revenues, ASM, summer  
12 capacity; all these other factors that create the  
13 impression that there is that difference in costs and  
14 revenues.

15 MR. BOB PETERS: But don't they net out  
16 to \$2 million, Mr. Surminski?

17 MR. HAROLD SURMINSKI: Yes, but when  
18 you're saying that you have to spend seventy-eight (78)  
19 to get eighty (80), it's -- it's not spending, it's not  
20 discretionary; those are things that are required in  
21 order to participate in the transmission market, in order  
22 to sell ASM. I don't think you can make that conclusion.

23 MR. BOB PETERS: Well, to the -- to --  
24 okay. Some of those -- like ancillary services, that's  
25 discretionary in the -- in the case that you -- you don't

1 want to partake in that market, correct?

2 MR. HAROLD SURMINSKI: Yes, it is, but  
3 you're -- there was no cost associated with that.

4 MR. BOB PETERS: All right. And -- and  
5 the costs are associated with the transmission credits  
6 and transmission costs only?

7 MR. HAROLD SURMINSKI: There's credits  
8 and -- and revenues on the transmission components.

9 MR. BOB PETERS: Can you provide for that  
10 2019 and 2020, as well as the test years, an undertaking  
11 to quantify those transmission and ancillary service  
12 costs that you've put in the formula -- or in the  
13 forecast?

14 MR. HAROLD SURMINSKI: Yes, I could do  
15 that.

16  
17 --- UNDERTAKING NO. 3: Manitoba Hydro to quantify  
18 transmission and ancillary  
19 service costs in forecast  
20 IFF-09 for the test years and  
21 2019/'20 and provide actuals  
22 for 2009/'10

23  
24 CONTINUED BY MR. BOB PETERS:

25 MR. BOB PETERS: And if I was to ask you

1 this question at the next GRA, Mr. Surminski, would I  
2 phrase my question better to -- to get at this data?  
3 Would I -- should I say, Show me all of your assumptions  
4 that go into those lines, and that would be available to  
5 me?

6 MR. HAROLD SURMINSKI: Yes.

7 MR. BOB PETERS: Okay.

8 MR. HAROLD SURMINSKI: This table is --  
9 is a work in progress. And, in fact, in 2010 we have  
10 further revised and tried to standardize where these  
11 credits and costs should go. Like we have that  
12 transmission in -- in the transmission costs there also  
13 like membership fees for being members of MISO, and  
14 members generally.

15 So where should those costs be allocated  
16 is the question. And -- and, are -- you know, are they a  
17 benefit of participating, or are they a cost? And so we  
18 have tried to allocate these costs to the appropriate  
19 source, or -- or category.

20 MR. BOB PETERS: And -- and don't take my  
21 question -- request as an undertaking as being critical,  
22 because I'm not. I appreciate all the work that's gone  
23 into that, and I was just trying to make it more  
24 meaningful. Next time we review it, we'll -- we'll be  
25 able to see that.



1                   But -- but costing it under fuel and power  
2 purchases may be a misnomer on some of these, but that's  
3 just where -- with deference, Mr. Rainkie has limited  
4 places to put it and that's where it ends up.

5                   MR. HAROLD SURMINSKI:     That's correct.  
6 There's very limited places in the IFF categories.  When  
7 we provide the inputs to that we do have the breakdown,  
8 and when they get summarized in the IFF they get hidden  
9 and combined with other quantities.

10

11   (BRIEF PAUSE)

12

13                   MR. BOB PETERS:     When I look at the items  
14 that you've given me -- transmission credits,  
15 transmission costs, ancillary services, market revenues,  
16 summer capacity -- would I be correct in saying that all  
17 of those items refer to Manitoba Hydro's extraprovincial  
18 activities?

19

20   (BRIEF PAUSE)

21

22                   MR. HAROLD SURMINSKI:     Not obviously,  
23 because we do derive benefits from being members on the  
24 import side.  So do you allocate being members of MISO to  
25 only extraprovincial is the question.  Or -- you know, it

1 allows us to import, so what's the appropriate  
2 proportioning of costs like that?

3 MR. BOB PETERS: Are those imports needed  
4 to support exports or are they needed for domestic load?

5 MR. HAROLD SURMINSKI: No, they are --  
6 they are useful for -- for domestic purposes.

7 MR. BOB PETERS: Maybe in your answer  
8 when you're looking at that you'll provide me with,  
9 perhaps, if you have it, the same data for -- I asked for  
10 -- I think I picked 2020 as well as the two test years.

11 Those would all be forecast information,  
12 would they not, Mr. Surminski?

13 MR. HAROLD SURMINSKI: Yes, that's  
14 correct, so --

15 MR. BOB PETERS: Would -- would you have  
16 the actual information for 2010 that you could present to  
17 the Board in the same -- the same table?

18 MR. HAROLD SURMINSKI: Yes, I would think  
19 so.

20 MR. BOB PETERS: It think that would be  
21 helpful, and thank you for that.

22 So running back to merchant sales, once we  
23 get past the test years, we will assume that the -- the  
24 netting is zero or breakeven, correct?

25 MR. HAROLD SURMINSKI: For merchant

1 sales? That's correct.

2 MR. BOB PETERS: Yeah. And is it the  
3 case, Mr. Surminski or Mr. or -- or Mr. Warden, that the  
4 margins on the merchant sales tend to be small?

5 MR. HAROLD SURMINSKI: I would agree they  
6 tend to be small, and that is one (1) reason that we  
7 decided not to project those out in time. And we're not  
8 sure that they will continue out into the future, so we  
9 assumed after two (2) years that there was -- there was  
10 no net revenue from that.

11 MR. BOB PETERS: But in those merchant  
12 sales do you know the margins have disappeared?

13 MR. HAROLD SURMINSKI: It's not that they  
14 have disappeared; they -- they never were very large. I  
15 don't think we've ever expected to get more than \$5  
16 million a year out of those.

17

18 (BRIEF PAUSE)

19

20 MR. BOB PETERS: Are the transmission  
21 costs for those merchant sales, Mr. Surminski, deducted  
22 from the revenues of the merchant sales?

23

24 (BRIEF PAUSE)

25

1 MR. HAROLD SURMINSKI: Mr. Peters, our  
2 conclusion on the transmission costs, they are all --  
3 when -- when we categorized the merchant function, the  
4 transmission costs counterparty -- like we have a broker  
5 in the US who -- who partners and -- and does the  
6 transactions for us. All those costs are -- are in that  
7 merchant function cost side of things.

8 MR. BOB PETERS: And it gets netted  
9 against the merchant function revenues, which, on an  
10 annual basis, Hydro doesn't expect to exceed \$5 million?

11 MR. HAROLD SURMINSKI: Experience has  
12 shown that they're not more than \$5 million.

13 MR. BOB PETERS: How many individual  
14 transactions do you think take place -- or does Manitoba  
15 Hydro estimate takes place on a merchant sales side of  
16 the business on an annual basis?

17

18 (BRIEF PAUSE)

19

20 MR. HAROLD SURMINSKI: We cannot estimate  
21 that, what a transaction is. They are hourly energy  
22 flows, so I don't know how one would classify that as  
23 transactions.

24 MR. BOB PETERS: You're going to have to  
25 help the Board understand what that means, Mr. Surminski.

1 Some of these transactions take place on an hourly basis  
2 is what you're telling the Board.

3

4 (BRIEF PAUSE)

5

6 MR. HAROLD SURMINSKI: We've come to the  
7 conclusion that Mr. Cormie would be in a better position  
8 to -- to answer these. These transactions, you know,  
9 they are -- have a balance over a time of a day or up to  
10 three (3) days, so, like where the purchase is made and  
11 when the sale is made, and Mr. Cormie would be in a  
12 better position to give you details of numbers and  
13 quantities.

14 MR. BOB PETERS: Okay. I mean, I would  
15 have settled for a handful, a couple of dozen, a hundred,  
16 a --

17 MR. HAROLD SURMINSKI: Thousand.

18 MR. BOB PETERS: -- thousand. Thousand?

19 MR. HAROLD SURMINSKI: Of hours, yes.

20 MR. BOB PETERS: So these are -- are  
21 these done -- maybe you can help me on this, and if not,  
22 Mr. Cormie will, but are -- are these done automated by  
23 computers or is it -- are people involved in doing each  
24 and every one of these transactions?

25 MR. HAROLD SURMINSKI: It would not be

1 automated. We have a -- a broker, a middle party that --  
2 that does the transactions.

3 MR. BOB PETERS: Mr. Warden, can you tell  
4 the Board whether some merchant transactions during the  
5 year lose money?

6 MR. VINCE WARDEN: Yes. Yes, some  
7 transactions do lose money.

8 MR. BOB PETERS: On an individual basis,  
9 a transaction could end up costing more than the revenue  
10 received?

11 MR. VINCE WARDEN: That's correct.

12 MR. BOB PETERS: And how does that occur?  
13 Do you understand how that occurs?

14 MR. VINCE WARDEN: Well, it's largely due  
15 to the timing between the purchase and the sale. The  
16 market can move, as Mr. Surminski mentioned. Typically,  
17 the transaction takes place within two (2) or three (3)  
18 days, or normally the -- probably the same day, but there  
19 can be as much as two (2) or three (3) days between  
20 transactions and the market moves against us and we can  
21 lose.

22 MR. BOB PETERS: On an annual basis, Mr.  
23 Warden, has Manitoba Hydro's merchant trading lost money  
24 in any particular year?

25 MR. VINCE WARDEN: I believe there was

1 one (1) year, to my recollection, where there was a very  
2 minimal loss incurred. I'd have to confirm that, though.

3 MR. BOB PETERS: And -- and a minimal  
4 loss, what are we talking about here?

5 MR. VINCE WARDEN: Less than a hundred  
6 thousand dollars (\$100,000), I believe the number was.

7 MR. BOB PETERS: On an individual  
8 transaction, you wouldn't see, Mr. Warden, the results of  
9 each and every individual transaction, would you? That  
10 wouldn't make its way to your office?

11 MR. VINCE WARDEN: No.

12 MR. BOB PETERS: You'd see a summation of  
13 them?

14 MR. VINCE WARDEN: That's right.

15 MR. BOB PETERS: And what you're telling  
16 the Board is that, for every year except the one that  
17 comes to your mind at this point, after you take what you  
18 lose on the swings and you make on the merry-go-round,  
19 you've come out profitable in all but one (1) year on  
20 merchant transactions?

21 MR. VINCE WARDEN: Subject to  
22 confirmation --

23 MR. BOB PETERS: Sure.

24 MR. VINCE WARDEN: -- Mr. Peters.

25 MR. BOB PETERS: Well, that's fair. When

1 you see those internal management financial reports, Mr.  
2 Warden, how long after the fact are you made aware of the  
3 results of the merchant trading activities? Is it -- is  
4 it a month in arrears? Is it three months?

5 MR. VINCE WARDEN: Typically, a report  
6 would be produced. Well, a report is definitely produced  
7 frequently, and so I could see those transactions when --  
8 whenever I would have a question, but in a normal course  
9 they would be presented to our export power risk  
10 management committee on a quarterly basis.

11 MR. BOB PETERS: What is the magnitude of  
12 the transactions that yield -- that you're involved with  
13 on this, Mr. Warden?

14 When you do one (1) transaction, you might  
15 make X millions of dollars, and another one (1) you might  
16 make five (5) 'X' millions of dollars?

17 MR. VINCE WARDEN: No, typically the tran  
18 -- individual transactions would be nowhere near the  
19 millions of dollars. They're all, as Mr. Surminski  
20 indicated, there's thousands of these transactions, so  
21 they're typically a very small margin.

22 MR. BOB PETERS: Why does Manitoba Hydro  
23 in that business, sir?

24 MR. VINCE WARDEN: Well, there -- there is  
25 money to be made, so -- so long as there is money to be



1 made for the benefit of ratepayers, we're in the  
2 business.

3 We don't include it beyond the first  
4 couple of years because we may very well come to the  
5 conclusion that it's not worth our while to participate  
6 in this, but to date this market is evolving and -- and  
7 it has been worthwhile for us to participate as we have.

8 MR. BOB PETERS: Where will the Board  
9 find, on an annual basis, say for the last ten (10)  
10 years, the --the net results of the -- the merchant  
11 trading function?

12 Is that anywhere reported in the  
13 materials, that you're aware of?

14

15 (BRIEF PAUSE)

16

17 MR. VINCE WARDEN: I -- I'm not aware of  
18 a report filed in these proceedings that would give that  
19 information, but there's no reason why we couldn't  
20 provide it.

21 MS. HAROLD SURMINSKI: Mr. Peters, the --  
22 this is a relatively new type of transaction. I don't  
23 think there's more than five (5) years of history  
24 associated with this.

25 MR. BOB PETERS: Well, then make it five

1 (5) years. Cut your work in half, Mr. Surminski.

2 Do I take it, Mr. Warden, from your  
3 comments that Manitoba Hydro is thinking of getting out  
4 of this merchant trading business?

5 MR. VINCE WARDEN: No, I didn't meant to  
6 imply that. I'm not sure whether we really talked about  
7 getting out of it.

8 We're -- there's dollars that do flow to  
9 the bottom line as a result of merchant transactions.  
10 There may come a point where it's not worth our while.  
11 As the market matures, there may -- these opportunities  
12 may disappear.

13 MR. BOB PETERS: Are Manitoba Hydro's  
14 internal costs netted against this merchant sales revenue  
15 numbers, Mr. Warden?

16 MR. VINCE WARDEN: For the...

17

18 (BRIEF PAUSE)

19

20 MR. VINCE WARDEN: Our internal costs  
21 would be -- would be quite minimal because we do -- most  
22 of this business is conducted through a broker, so our  
23 internal costs would not be large, but it wouldn't be  
24 difficult to quantify it and we could -- we could do  
25 that.

1                   MR. BOB PETERS:    All right.  I think that  
2 would be helpful to the Board, if you'd undertake to do  
3 that.

4  
5   --- UNDERTAKING NO. 4:           Manitoba Hydro to provide the  
6                                       net results of the merchant  
7                                       trading function on an annual  
8                                       basis for the last five (5)  
9                                       years

10  
11 CONTINUED BY MR. BOB PETERS:

12                   MR. BOB PETERS:    And when you say  
13 internal costs, you're talking employee costs?  You're  
14 cola -- you're fully costing out the employee and  
15 Manitoba Hydro resources to do these transactions?

16                   MR. VINCE WARDEN:    Yes.

17                   MR. BOB PETERS:    All right.  I take from  
18 your answers then, Mr. Warden, that Manitoba Hydro is  
19 continuing with their existing merchant sales program  
20 unabated, at least now as planned through the test years?

21                   MR. VINCE WARDEN:    Yes.

22

23                                       (BRIEF PAUSE)

24

25                   MR. BOB PETERS:    I'd like to turn to a --

1 a new subject matter, if I could -- oh, before I do, when  
2 I'm looking -- Mr. Surminski alerted me to this, or at  
3 least maybe I to him.

4 When we look at Tab 6 of the book of  
5 documents on page 25, there's a Manitoba thermal  
6 generation line shown probably right in the middle of the  
7 page on the IFF-09 export revenue assumptions.

8 Have you located that, Mr. Surminski, on  
9 Tab 6, page 25, of Board counsel's book of documents?  
10 Manitoba thermal energy line.

11 MS. HAROLD SURMINSKI: Yes, I have that.

12 MR. BOB PETERS: Help me out with that.  
13 That thermal generation would reflect natural gas  
14 purchases and, if needed, coal purchases, is that what it  
15 shows?

16 MR. HAROLD SURMINSKI: Yes, that should  
17 be the category.

18 MR. BOB PETERS: And the forecast for the  
19 first test year is \$8 million of thermal generation  
20 costs, is that correct?

21 MR. HAROLD SURMINSKI: Yes --

22 MR. BOB PETERS: And --

23 MR. HAROLD SURMINSKI: -- and that is  
24 based again on a single flow year or on a particularly  
25 favourable flow year as it is for the next year.

1 MR. BOB PETERS: Well, no, just not so  
2 quick. For the first test year, it's \$8 million, but for  
3 the second test year, it shows up as \$41 million.

4 MR. HAROLD SURMINSKI: Okay. Test year.  
5 I was --

6 MR. BOB PETERS: Yeah.

7 MR. HAROLD SURMINSKI: -- assuming the  
8 first two (2) years.

9 MR. BOB PETERS: No, no. I'm looking at  
10 the test years, please. So the \$8 million assumes a  
11 favourable year. Did -- and when we look back it's the  
12 same number as in 2010, correct?

13 MR. HAROLD SURMINSKI: Correct.

14 MR. BOB PETERS: Did -- did Manitoba  
15 Hydro have to fire up the gas turbine in 2010?

16 MR. HAROLD SURMINSKI: Manitoba Hydro  
17 fires up the turbines for proficiency testing, not for --  
18 for requirements for energy production but just to make  
19 sure that they run when we expect them to run.

20 MR. BOB PETERS: And that's \$8 million in  
21 the gas tank for that?

22

23 (BRIEF PAUSE)

24

25 MR. ROBERT MAYER: And apparently 159

1 million gigawatt hours of generation? Yeah, 159 gigawatt  
2 hours of generation.

3

4

(BRIEF PAUSE)

5

6 MR. HAROLD SURMINSKI: There's an  
7 additional factor that our coal plant was also operating.  
8 It's only in January in 2010 that -- that we have been  
9 restricted in our coal operation and our natural gas  
10 operation, there are times for local area support for --  
11 for more short-term emergency type of purposes our -- our  
12 natural gas turbines would also operate for -- for some  
13 hours.

14

15

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21

MR. ROBERT MAYER: But, Mr. Surminski,  
the numbers go up. I mean, you're talking -- I'm looking  
at -- at Manitoba Hydro thermal generation. You start at  
one fifty-two (152), but you go out to five ninety-one  
(591). What are we generating power for? By -- by the  
time we get to 2018/'19, we -- your coal plant would have  
been retired in any event, if I recall correctly. What  
are we using to generate?

22

23

24

25

MR. HAROLD SURMINSKI: I think Mr. Peters  
was going to go there next with the -- with the next  
year, and -- and -- and on, trying to resolve the four  
thirty-two (432) and -- and the higher numbers. We could

1 go there now.

2 MR. BOB PETERS: My boss said so.

3 MR. HAROLD SURMINSKI: All right. As I  
4 mentioned earlier today, years '11 and on, '11/'12, are  
5 derived from ninety-four (94) flow conditions, the  
6 consequences of ninety-four (94) flow conditions. In  
7 those flow conditions, there are the low -- the lowest  
8 flow conditions we have where we require significant use  
9 of our gas turbines, and -- and coal to some degree, but  
10 even -- but neglecting the coal.

11 So when you average sort of maximum -- and  
12 the maximum generation from our gas turbines could be up  
13 to 4,000 gigawatt hours in a year. So there's some years  
14 where we are near maximum or significant 3 to 4,000  
15 gigawatt hours when you average overall flow conditions,  
16 so this is why, you know, on average, these numbers  
17 appear higher than what you do get when you use a single  
18 flow year and a high flow year like we have in the last  
19 couple of years.

20 We've had high flow years where we have  
21 not required energy. The numbers in our long term  
22 reflect the possibility of all events occurring.

23 MR. BOB PETERS: Reflects the average of  
24 all events occurring.

25 MR. HAROLD SURMINSKI: That's right, the

1 average, exactly what I said earlier this morning.

2 THE CHAIRPERSON: But assumes that coal  
3 generation is still occurring as late as 2019/20?

4 MR. HAROLD SURMINSKI: Yes, we assume in  
5 the very lowest flow condition, because that's what our  
6 legislation allows us, to operate for emergency purposes.  
7 And we consider our lowest flow case, and -- and maybe a  
8 second lowest, two (2) or three (3) flow years in our  
9 ninety-four (94) to be emergency situations.

10

11 CONTINUED BY MR. BOB PETERS:

12 MR. BOB PETERS: Just refresh, and you're  
13 probably doing my job, Mr. Surminski, but the  
14 legislation, as of January 1 of 2010, restricted Manitoba  
15 Hydro from running the coal plant except for emergency  
16 situations, correct?

17 MR. HAROLD SURMINSKI: Yes, there are  
18 special words --

19 MR. BOB PETERS: And -- and --

20 MR. HAROLD SURMINSKI: -- for that.

21 MR. BOB PETERS: -- and then emergency  
22 was subsequently perhaps redefined or otherwise by either  
23 regulation -- I think by regulation?

24 MR. HAROLD SURMINSKI: Yes, the  
25 regulation specifies it.



1                   MR. BOB PETERS:     And the regulation on  
2 emergency was that you -- you -- you're not allowed to  
3 use coal for your firm export contracts.  Is that  
4 correct?

5                   MR. HAROLD SURMINSKI:   They can be  
6 utilized to support existing export contracts.  They  
7 cannot be -- the coal cannot be used to enter into new  
8 export contracts.

9                   MR. BOB PETERS:     All right.  I was  
10 thinking of the two (2) term sheets that -- that are  
11 disclosed on the record of this proceeding.  You're not  
12 allowed to use coal to support the Wisconsin public  
13 service or the Minnesota power sales?

14                   MR. HAROLD SURMINSKI:   Yeah, and those  
15 sales are after the expected retirement date of the coal  
16 plant anyway.

17                   MR. BOB PETERS:     All right.

18

19   (BRIEF PAUSE)

20

21                   MR. BOB PETERS:     When we turn to export  
22 revenues and some of the prices that Mr. Warden talked  
23 about in his direct evidence through Ms. Ramage  
24 yesterday, one (1) of the terms Mr. Warden used was firm  
25 export prices, at least that's what I wrote down.  I take

1 it firm export prices are exports that are sold from firm  
2 resources. Would that be a way of considering it?

3 MR. HAROLD SURMINSKI: Yes, we call them  
4 dependable resources.

5 MR. BOB PETERS: All right. And the word  
6 "dependable" is used because it reflects the lowest of  
7 Manitoba Hydro's hydraulic generation in those ninety-  
8 four (94) years of history?

9 MR. HAROLD SURMINSKI: Yes, the hydraulic  
10 component is comprised of the lowest in our history. We  
11 do also include thermal and -- or non-hydro resources in  
12 our dependable energy calculation.

13 MR. BOB PETERS: Yeah, we'll -- we'll  
14 come to that. In terms of the lowest hydraulic  
15 generation, what you're telling the Board and others is  
16 that you can depend on having that minimum level year in,  
17 year out, regardless of whether you're in a drought or  
18 not. That's dependable in Manitoba Hydro's planning  
19 purposes?

20 MR. HAROLD SURMINSKI: Yes, a drought of  
21 magnitude and severity are equal to the lowest that we've  
22 had on record.

23 MR. BOB PETERS: And because you know  
24 what the lowest hydraulic generation is that you have on  
25 record you can embed that into your power resource plan

1 and plan to have that minimal amount available each and  
2 every year?

3 MR. HAROLD SURMINSKI: Yes, that's how we  
4 do our resource planning.

5 MR. BOB PETERS: Am I correct -- well,  
6 let me ask it this way, can Manitoba Hydro buy energy in  
7 the United States to meet a United States firm contract  
8 commitment?

9

10 (BRIEF PAUSE)

11

12 MR. HAROLD SURMINSKI: Perhaps Mr. Cormie  
13 would be, again, in a better position, but, you know, on  
14 a simple basis, we do not have a power marketer's licence  
15 so we cannot transact into US. But you're specifically  
16 saying for our export contracts; that becomes a little  
17 more complicated, so perhaps he could -- he will clarify  
18 that whole aspect for you.

19 MR. BOB PETERS: All right, thank you,  
20 Mr. Surminski, and thank you for making the effort to  
21 provide that information. What I was trying to  
22 understand and get the Board to understand is that if  
23 Manitoba Hydro has a firm or dependable contract with a  
24 US counterparty -- and you have a number of those at this  
25 time, do you not?

1 MR. HAROLD SURMINSKI: Yes, we do.

2 MR. BOB PETERS: And in addition -- we're  
3 not going to talk about the -- the term sheets; we'll  
4 talk about those later. But the dependable contracts you  
5 presently have, do the electrons have to come from  
6 Manitoba assets in generation or can those electrons, to  
7 meet that contract, be purchased on the US market? And  
8 I'll -- I'll defer that to Mr. Cormie if the panel's not  
9 comfortable with that.

10

11 (BRIEF PAUSE)

12

13 MR. HAROLD SURMINSKI: The whole  
14 settlement of -- of contracts is -- is rather complex.  
15 Now, with the -- with the MISO market, it is possible to  
16 settle financially. There are mechanisms for meeting  
17 obligations. And although Manitoba Hydro does not expect  
18 to serve contracts through purchases in the US it has the  
19 right to do that. But Mr. Cormie is definitely in a  
20 better position to give you more information on that.

21 MR. BOB PETERS: All right. Thank you.  
22 I will take that up with -- with Mr. Cormie. What --  
23 what I suppose you're telling the Board is that when  
24 Manitoba Hydro plans dependable energy commitments and  
25 includes in that some export contracts, Manitoba Hydro is

1 planning on fulfilling those contracts with Manitoba  
2 generated electrons.

3 MR. HAROLD SURMINSKI: Yes, that's  
4 correct.

5 MR. BOB PETERS: And in Tab 6 of the book  
6 of documents, Mr. Cormie -- sorry. Maybe Mr. Cormie will  
7 need to assist on this. But pages 27 and 28, we've  
8 already referred to them once, but if we look to see what  
9 happened in 2010, and I'm looking on the PUB massaging of  
10 PUB MH Second Round 193b and c, you will on those sheets,  
11 Mr. Surminski, that the -- the totals were -- were summed  
12 up and average unit prices were provided, correct?

13 MR. HAROLD SURMINSKI: Yes, that's  
14 correct.

15 MR. BOB PETERS: And if I'm talking avera  
16 -- average unit prices -- I should ask Ms. Boyd and Ms.  
17 Fernandes to make sure that I'm not straying here, but I  
18 -- but using of these average prices is not seen by the  
19 Corporation as confidential information.

20 MR. HAROLD SURMINSKI: No, generally,  
21 historic information such as this is -- is not considered  
22 confidential.

23 MR. BOB PETERS: All right. And like  
24 I've alerted Mr. Warden, if I do encroach in that area,  
25 call me up short on that, please, sir. Will you do that?

1 MR. HAROLD SURMINSKI: Yes.

2 MR. BOB PETERS: And so when I look at  
3 2010, that's the right-hand part of the chart, it would  
4 be correct for the Board to conclude that in Manitoba  
5 Hydro's fiscal 2010 year, Manitoba Hydro sold dependable  
6 energy at an average price of five point seven (5.7)  
7 cents?

8 MR. HAROLD SURMINSKI: Yes. That is  
9 calculated from the revenue and the volumes that were  
10 provided. It's just a back calculation to -- to get that  
11 unit value.

12 MR. BOB PETERS: That's correct, and in  
13 fact I didn't go back and check the transcript, but I  
14 think that was the same number Mr. Warden put on the  
15 record yesterday.

16 MR. VINCE WARDEN: That's right.

17 MR. BOB PETERS: And what we also see is,  
18 in 2010, Manitoba Hydro sold on the opportunity market  
19 what they call opportunity bilateral at two point two  
20 eight (2.28) cents a kilowatt hour on average, correct?

21 MR. HAROLD SURMINSKI: Yes, that's  
22 correct.

23 MR. BOB PETERS: And just to remind the  
24 Board, a bilateral opportunity is -- it's not a sale into  
25 the MISO market; it's a sale to a counterparty in the

1 States pursuant to either an oral or a written agreement?

2 MR. HAROLD SURMINSKI: Yes, and these are  
3 generally six (6) months and less.

4 MR. BOB PETERS: Yeah, six (6) months or  
5 shorter --

6 MR. HAROLD SURMINSKI: Yes.

7 MR. BOB PETERS: -- in the outlook.

8 MR. HAROLD SURMINSKI: M-hm.

9 MR. BOB PETERS: And then real time -- my  
10 kids tell me that real time means right here, right now,  
11 instantly, not later but right now. That's what real  
12 time means. It's as we're speaking, you could be doing a  
13 transaction and that would be a real time market sale.

14 MS. MARLA BOYD: I think you'll find  
15 Hydro's definition in the 'A' part of that response.

16 MR. BOB PETERS: Please read it in, Ms.  
17 Boyd. I don't have it.

18 MS. MARLA BOYD:

19 "Market real time: Export sales  
20 transactions in a market operated by an  
21 independent system operator for the  
22 purchase and sale of power-related  
23 products during the operating day."

24 Not quite as quick as your kids.

25

1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Well, when you talk real  
3 time market, though, it's during an operating day, but  
4 it's instantaneous, is -- that's what I'm trying to get  
5 at.

6 MR. HAROLD SURMINSKI: In the MISO  
7 market, for example, it's -- it's for a hour.

8 MR. BOB PETERS: That means -- sorry.

9

10 (BRIEF PAUSE)

11

12 MR. BOB PETERS: You're still satisfied  
13 with that answer, that it -- real time in the MISO market  
14 means within the hour?

15 MR. HAROLD SURMINSKI: Yes. The -- the  
16 transaction may be started a half hour before the hour,  
17 because in order to be effective what would have had --  
18 there has to be some lead time. But it's -- it's  
19 generally, you know, for the next hour you have -- have  
20 sort of a half hour before when you're -- you're actually  
21 putting your bid in.

22 MR. BOB PETERS: And those transactions  
23 were, on average in 2010, about three point eight (3.8)  
24 cents a kilowatt hour?

25 MR. HAROLD SURMINSKI: Yes, according to



1 this summary of using revenues and volumes.

2 MR. BOB PETERS: Your answer leads me to  
3 pause. Do you believe it to be incorrect data?

4 MR. HAROLD SURMINSKI: Yes. The  
5 categories that -- that are combined into real time are -  
6 - are not exactly what -- what we've been talking about  
7 here, so there are certain transaction types that are  
8 thrown into the pot of revenues here that don't  
9 necessarily follow the -- the concept that you've been  
10 describing. So these are -- these prices are distorted,  
11 I would say.

12 MR. BOB PETERS: All right. Tell me how  
13 I would un-distort them for the Board.

14

15 (BRIEF PAUSE)

16

17 MR. HAROLD SURMINSKI: For example, 30  
18 percent of the revenues in that year were derived from  
19 Ontario Hydro or Ontario market congestion management  
20 revenues that we attained.

21 There are no volumes associated with that,  
22 and they are included in the revenue side of the equation  
23 here. So they're not necessarily real time but they have  
24 been thrown into the pot of real time.

25 So that's why I say the -- the -- when you

1 see the -- the unit values here, they're -- they're not  
2 really reflective of -- of the unit values of the market.

3 They're -- they're distorted because there  
4 have been revenues thrown into the pot, and no energy, no  
5 volumes associated with that. So it appears to be a high  
6 value as a result.

7 MR. BOB PETERS: Thank you for that, Mr.  
8 Surminski, and I certainly apologize if -- if there's a  
9 distortion here that isn't accurate, but if anything,  
10 what you're telling the Board is that these prices --  
11 that the real time prices are -- are even lower than  
12 what's shown here.

13 MS. HAROLD SURMINSKI: Yes, certainly.  
14 It -- they would be reflected -- the real time would not  
15 be greatly different than the -- than the day ahead.

16 There is very little difference in -- in -  
17 - on average overall of real time prices, and day ahead  
18 prices.

19 MR. BOB PETERS: Which means half of the  
20 revenue that was attributed to real time revenue actually  
21 comes from the Ontario Hydro congestion management  
22 payments.

23 MS. HAROLD SURMINSKI: Yeah, I said it  
24 was about 30 percent, and there are --

25 MR. BOB PETERS: Yeah.

1 MS. HAROLD SURMINSKI: -- you know,  
2 several other smaller factors that would -- that cause it  
3 to be more like half.

4 MR. BOB PETERS: Okay. And what would  
5 some of those other factors be, if you can provide that  
6 to the Board, sir?

7

8 (BRIEF PAUSE)

9

10 MS. HAROLD SURMINSKI: I'm informed  
11 additional revenues that are -- are placed in this  
12 category are ancillary service market revenues, so  
13 they're really are not real time but they have been  
14 classified and as -- and put into this category, so they  
15 further distort the average prices.

16 MR. BOB PETERS: You can -- this question  
17 isn't to try to attribute blame, but I just can't seem to  
18 get my computer fired up to find that direct Information  
19 Request, but was the grouping of the revenues done by  
20 Manitoba Hydro or was that done on my side of the room?

21 MS. HAROLD SURMINSKI: It has been by  
22 Manitoba Hydro. I think -- yes, there was an Information  
23 Request --

24 MR. BOB PETERS: Yes, Second Round 193b  
25 and c, but I -- I'm just turning to -- trying to get

1 those up to find the -- the data.

2 But -- but -- and not -- not trying to  
3 affix blame, but we'll apologize to each other, is the  
4 real time the only line item that has this distortion in  
5 it in terms of the average price?

6

7 (BRIEF PAUSE)

8

9 MS. HAROLD SURMINSKI: Yes, that would be  
10 the -- the major category that could be distorted. The  
11 others appear that they are reasonable.

12

13 (BRIEF PAUSE)

14

15 MR. BOB PETERS: As I understood your  
16 answer, Mr. Surminski, and I appreciate your -- your  
17 getting the Corporation's best answer to the Board, you  
18 indicated that some of the revenues under the real time  
19 line item, those revenues included not only the Ontario  
20 Hydro congestion management but they also contained  
21 ancillary services market revenue.

22 Correct?

23 MS. HAROLD SURMINSKI: Yes, correct.

24 MR. BOB PETERS: All right. What I don't  
25 understand is that I thought you told the Board that the

1 ancillary services market revenue was included in the  
2 revenue items we talked about before relative to merchant  
3 sales?

4

5

(BRIEF PAUSE)

6

7 MR. HAROLD SURMINSKI: Mr. Peters, you  
8 may have to clarify this further, because we were talking  
9 about extraprovincial revenues. These are also  
10 extraprovincial revenues, there's no distance between  
11 them. These are a subset of the total extraprovincial  
12 revenues.

13

14

15

16

17

MR. BOB PETERS: No, and I accept that  
answer, Mr. Surminski. After I asked I thought about the  
-- maybe what you've done is you've just repackaged it in  
-- in this answer under a different -- a different  
heading.

18

19

20

21

22

MR. HAROLD SURMINSKI: That's correct.

MR. BOB PETERS: Okay. And again, this  
is a -- this is a situation where you have a number of  
revenue sources that you have, in my words, lumped  
together under real time.

23

24

25

MR. HAROLD SURMINSKI: That's correct.

MR. BOB PETERS: All right. Recognizing  
that real time may be the one (1) that is distorted in

1 your words. If we go to 2010 and we look to the page on  
2 imports, which is page 28, under Tab 6 of the book of  
3 documents, it's reference to PUB Manitoba Hydro Second  
4 Round 193C. We see that on dependable energy, Manitoba  
5 Hydro imported dependable energy at about four point zero  
6 (4.0) cents a kilowatt hour, correct?

7 And I'm on this -- I'm on the last page of  
8 Tab 6 of the book of documents, which is the -- the  
9 import transactions page.

10

11 (BRIEF PAUSE)

12

13 MR. HAROLD SURMINSKI: Yes, sorry, I  
14 didn't relate the dependable to -- it is imports, and  
15 they are under the dependable category here.

16 MR. BOB PETERS: Well, then you've asked  
17 my next question. Is -- can you explain to the Board  
18 what a dependable import is?

19

20 (BRIEF PAUSE)

21

22 MR. HAROLD SURMINSKI: It -- it's  
23 probably a misnomer, just the way it's been categorized  
24 here. We'll have to get back to you why it's been  
25 categorized in this way. It didn't make sense to me

1 either when I looked at it.

2 MR. BOB PETERS: All right. Well, not so  
3 much worried about that, but can you tell the Board that  
4 other than your diversity agreements you do not have a  
5 dependable contract with an American counterparty?

6 MR. HAROLD SURMINSKI: Yes, that's  
7 correct.

8 MR. BOB PETERS: And this -- this  
9 dependable isn't there to depict diversity power, is it?

10

11 (BRIEF PAUSE)

12

13 MR. HAROLD SURMINSKI: We'll have to  
14 check to determine exactly what -- why this was  
15 categorized in this way.

16

17 --- UNDERTAKING NO. 5: Manitoba Hydro to determine  
18 what "dependable" depicts on  
19 page 28 of Board counsel book  
20 of documents (Exhibit PUB-15)

21

22 CONTINUED BY MR. BOB PETERS:

23 MR. BOB PETERS: All right. That's fair.  
24 When we look at the page before that, page 27, which is a  
25 response to PUB Manitoba Hydro 190 -- Second Round 193B,

1 we see on the day ahead market, you're selling  
2 opportunity energy for one point nine (1.9) cents,  
3 correct?

4 MR. HAROLD SURMINSKI: Yes, in 2009/'10.

5 MR. BOB PETERS: All right. And then if  
6 we flip the page we see that you're buying it at four  
7 point zero (4.0) cents, correct?

8

9 (BRIEF PAUSE)

10

11 MR. HAROLD SURMINSKI: We were buying  
12 some energy, yes. It's not equal in volume, and it's --  
13 it's not necessarily, you know, corresponding. The two  
14 (2) don't necessarily correspond to each other.

15 MR. BOB PETERS: Well, let's talk about  
16 that. You're -- you're -- you're buying for four (4)  
17 cents at the same time as you're selling for two (2)  
18 cents? And I appreciate those are average prices, and  
19 it's -- but that's what the paper shows, isn't it?

20

21 (BRIEF PAUSE)

22

23 MS. MARLA BOYD: Mr. Peters, I think maybe  
24 we've got some lines crossed over there. Maybe you can  
25 just run through that one (1) more time.



1 CONTINUED BY MR. BOB PETERS:

2 MR. BOB PETERS: Well, would it -- would  
3 it be a correct interpretation, Mr. Surminski and Mr.  
4 Warden, that Manitoba Hydro is buying dependable energy  
5 at four (4) cents and bringing it into Manitoba, and it's  
6 also selling opportunity energy for one point nine (1.9)  
7 cents?

8

9 (BRIEF PAUSE)

10

11 MR. BOB PETERS: And to help Ms. --

12 MR. VINCE WARDEN: I'm not sure --

13 MR. BOB PETERS: -- just to help Ms.

14 Boyd, the -- the opportunity that I'm referring to is the  
15 day ahead price line -- the line item, just so there's no  
16 confusion.

17 MR. VINCE WARDEN: I guess what we're  
18 having difficult with, when you look at pages 27, 28 in  
19 the book of documents in -- in aligning the respective  
20 lines, for dependable we're -- we're buying at four point  
21 zero nine (4.09) cents and selling at five point seven  
22 zero (5.70) cents.

23 Does that -- do we agree on that?

24 MR. BOB PETERS: Those numbers exist,  
25 yes, we can agree on that. That's the average prices of

1 the sales and of the imports, I believe, Mr. Warden.

2

3

(BRIEF PAUSE)

4

5 MR. VINCE WARDEN: Does that answer the  
6 question?

7 MR. BOB PETERS: No, but the beauty of it  
8 is, I've got the easiest job in the room. I only have to  
9 ask them; I don't have to answer them, and I -- I do  
10 appreciate there's a considerable effort going into it,  
11 and if I don't ask it properly just -- or need  
12 clarification, please ask.

13 Mr. Warden, I'm not lining up dependable  
14 to dependable. I'm lining up that you -- you bought some  
15 energy and you called it dependable, for whatever reason,  
16 and you paid four (4) cents for it.

17 And then on the other side of the -- of  
18 the business, you're -- you're sending electrons down to  
19 the States and you're only charging one point nine (1.9)  
20 cents for them.

21 So I see a mismatch that you're -- you're  
22 buying at four (4) cents, you're selling at one point  
23 nine (1.9) cents, and I'm asking if -- if you have an  
24 explanation for why that would happen in the year.

25

1 (BRIEF PAUSE)

2

3 MS. MARLA BOYD: We're running into a bit  
4 of an issue with what can be disclosed on the public  
5 record at this point, so perhaps we can take that away,  
6 and provide you with an explanation that meets your  
7 needs, and doesn't cross any confidentiality boundaries.

8 MR. BOB PETERS: Certainly, Mr. Chairman,  
9 I -- I didn't recognize I was treading on that ground,  
10 but I thank Ms. Murphy for -- or sorry, Ms. Boyd for  
11 bringing it to my attention.

12 If that's a matter they wish to undertake  
13 to respond in writing so that any confidentiality issues  
14 can be addressed --

15 MR. VINCE WARDEN: Mr. Peters, perhaps to  
16 address the confidentiality issue. We can confirm that  
17 those numbers do include wind purchases as well as  
18 imports.

19 So yeah, and we can't go any further than  
20 that.

21

22 (BRIEF PAUSE)

23

24 MS. HAROLD SURMINSKI: Mr. Peters -- Mr.  
25 Peters, and -- and just as further clarification, or

1 warning, that you should not assume that you can compare  
2 these imports that occur at certain times, and -- and  
3 exports that occur at different times, and -- and give  
4 meaningful -- or try to derive meaning from that  
5 conclusion.

6

7 CONTINUED BY MR. BOB PETERS:

8 MR. BOB PETERS: Well, we'll explore that  
9 further, Mr. Surminski, with you perhaps and Mr. Cormie,  
10 but I'm still taken aback by -- by Mr. Warden's answer  
11 that imports in this response apparently includes  
12 purchase of wind energy.

13 My first question, and Ms. Boyd might want  
14 to be close to the mic on this, is: Is that purchase of  
15 wind energy from outside of Manitoba?

16 MR. HAROLD SURMINSKI: No.

17 MR. BOB PETERS: Is that the import?

18 MR. HAROLD SURMINSKI: No. It is  
19 Manitoba Hydro's St. Leon wind farm.

20 MR. BOB PETERS: So it's not truly an  
21 import; it's a purchase within the province then is -- is  
22 what you've classified it as?

23 MR. HAROLD SURMINSKI: Yes, and in order  
24 not to -- and for confidentiality purposes, we've lumped  
25 it together with other categories so that -- so that it's

1 not identified as a separate item.

2 MR. BOB PETERS: Well, you've succeeded.  
3 I think I'm going to leave that and I'll consider it  
4 further. I don't know, Ms. Boyd, if there was any  
5 further undertaking forthcoming, but you can reflect on  
6 this after to see if you can assist the Board in terms of  
7 the -- the natures of the transactions where the purchase  
8 appears to be at a higher price than the sale, respecting  
9 that there may be some confidentiality issues to -- to be  
10 considered.

11 MS. MARLA BOYD: Thank you.

12

13 (BRIEF PAUSE)

14

15 CONTINUED BY MR. BOB PETERS:

16 MR. BOB PETERS: Mr. Surminski, back to  
17 book of documents, Tab 6, PUB Manitoba Hydro Second Round  
18 193b, found at page 27 of the book of documents at tab --  
19 in Tab 6. If we look at the total for 2010 in terms of  
20 the exports, excluding the merchant sales, we come up  
21 with approximately 10,860 gigawatt hours. You'd agree  
22 with that, at least from a math point, and subject to  
23 check?

24 MR. HAROLD SURMINSKI: It is. Yeah, it  
25 is likely the sum of those categories of exports.

1                   MR. BOB PETERS:     It was intended to be,  
2     so you'll accept that?

3                   MR. HAROLD SURMINSKI:    I accept that.

4                   MR. BOB PETERS:     And then, when the  
5     average price is shown as three point four six (3.46)  
6     cents a kilowatt hour, that would be simply the  
7     mathematical derivation of that -- of that average price  
8     based on the sales revenue and the volumes?

9                   MR. HAROLD SURMINSKI:    Yes, that's  
10    correct.

11                   MR. BOB PETERS:     When we go back in the  
12    book of documents to page 25, also in Tab 6, under the  
13    assumptions, and we look to the very last line on the  
14    page, on page 25 found at Tab 6 of the book of documents,  
15    we see Manitoba Hydro's total export sales average price  
16    as three point six (3.6) cents on a forecast basis,  
17    correct?

18                   MR. HAROLD SURMINSKI:    Yes, that's  
19    correct.

20                   MR. BOB PETERS:     And the other number  
21    that you gave me, Mr. Surminski, the three point four six  
22    (3.46) cents, that was based on an actual basis, would  
23    that also be correct?

24                   MR. HAROLD SURMINSKI:    Yes, that would be  
25    correct.

1                   MR. BOB PETERS:     And just so we're clear,  
2 we've -- we've excluded what -- what has been called  
3 merchant sales from our numbers at this point in time?

4                   MR. HAROLD SURMINSKI:     Yes.

5                   MR. BOB PETERS:     And I think we've  
6 reached agreement, although I'm not totally certain, that  
7 merchant sales are sales of electrons that do not come  
8 from Manitoba assets.

9                   Did we agree on that?

10                  MR. HAROLD SURMINSKI:     Yes.

11                  MR. BOB PETERS:     Okay.  Now, when you  
12 have an average price, as you've shown on the assumptions  
13 to IFF-09 on page 25 of the book of documents, that  
14 average is weighted by volumes?

15                  MR. HAROLD SURMINSKI:     Yes.  That's how  
16 it's derived.

17                  MR. BOB PETERS:     And some of those  
18 prices, of course, because it's an average, would be  
19 higher and some prices would be lower, correct?

20                  MR. HAROLD SURMINSKI:     Correct.

21                  MR. BOB PETERS:     And I want Mr. Warden to  
22 respond to this, and I -- with Ms. Boyd's assistance,  
23 just to be clear and careful, I'm asking whether or not  
24 Hydro will acknowledge that, generally speaking, the  
25 long-term contract that Manitoba ha -- Hydro has are

1 priced higher than other export sales? And I want to  
2 make sure that there's no issues of confidentiality in  
3 going in that direction.

4

5

(BRIEF PAUSE)

6

7

MR. VINCE WARDEN: That's a fair general  
8 statement, Mr. Peters.

9

MR. BOB PETERS: And it's accurate?

10

MR. VINCE WARDEN: It is.

11

MR. BOB PETERS: And what's accurate is  
12 that Manitoba Hydro's long-term contracts are usually  
13 it's highest priced contra -- highest priced exports?

14

MR. VINCE WARDEN: There are historically  
15 exceptions to that, but that's generally the case, yes.

16

MR. BOB PETERS: And some of those  
17 historical exceptions could include on-peak sales that  
18 are opportunity sales during a time when prices peak for  
19 whatever reason in the MISO market?

20

MR. VINCE WARDEN: Yes.

21

MR. BOB PETERS: And in fact, I believe  
22 in your presentation in Manitoba Hydro Exhibit 12, you  
23 told the Board yesterday that your firm export prices  
24 were averaging five point seven (5.7) cents a kilowatt  
25 hour and your opportunity export prices were averaging



1 about two point three (2.3) cents a kilowatt hour?

2 MR. VINCE WARDEN: That's the case for  
3 the current fiscal year, yes.

4 MR. BOB PETERS: Wasn't that also the  
5 case for 2009 and '10, or do I -- I haven't got the  
6 transcript open at that point. But do you recall from  
7 your comments yesterday, sir?

8 MR. VINCE WARDEN: Yes. Yes, that would  
9 be the case for 2009/'10, yes.

10 MR. BOB PETERS: And would that also be  
11 the case for the current fiscal year --

12 MR. VINCE WARDEN: Yeah.

13 MR. BOB PETERS: -- 2010/'11?

14 MR. VINCE WARDEN: Yes, that's holding  
15 for the current fiscal year as well.

16 MR. BOB PETERS: And -- and I'm not  
17 holding myself out as a math genius, but the -- the five  
18 point seven (5.7) cents that you mentioned as being your  
19 firm export prices, and your opportunity only bringing in  
20 about two point three (2.3), when we see what's happened  
21 we see an average price of around three point six (3.6),  
22 and that seems to fit, that once you weight the long-term  
23 firm contracts with the opportunity export prices, you  
24 come somewhere between the two (2) on average?

25 MR. VINCE WARDEN: Yes.

1                   MR. BOB PETERS:     That's not confidential,  
2     that's probably Utility 101.

3                   MR. VINCE WARDEN:     Not confidential.

4                   MR. HAROLD SURMINSKI:     And, Mr. Peters,  
5     we -- we prefer not to release components of -- of our  
6     revenues, and divide up, you know, dependable and -- and  
7     opportunity but I think we found a middle ground here  
8     where -- where we said that we would provide, you know,  
9     some general breakdown of -- of revenue.

10                   So this was a -- sort of a middle ground  
11     between providing information and keeping information  
12     confidential.

13                   MR. BOB PETERS:     Noted, appreciated, and  
14     for that we thank you.     But we also recognize that your  
15     counterparties are sophisticated companies as well?

16                   MR. HAROLD SURMINSKI:     Yes, that's  
17     correct.

18                   MR. BOB PETERS:     They have access to  
19     probably their own hydraulic generation, their own  
20     thermal generation, their own coal generation.     They can  
21     -- they can do some cost scenarios on their own computers  
22     as to what it might cost them to do things under certain  
23     scenarios?

24                   MR. HAROLD SURMINSKI:     Yes, that's on  
25     their side, but we don't want to give our -- our value or

1 our costs away because it affects our negotiating  
2 position.

3 MR. BOB PETERS: They scour your material  
4 on your annual reports just like you scour their material  
5 on their annual reports?

6 MR. HAROLD SURMINSKI: Yes, certainly.

7 MR. BOB PETERS: When the Board looks at  
8 Board -- at book of documents, Tab 6, and looks at the  
9 IFF assumptions on page 25, we see that for the 2011  
10 year, the first test year, the average of Manitoba  
11 Hydro's export prices is forecast to be four point one  
12 (4.1) cents a kilowatt hour, correct?

13 MR. HAROLD SURMINSKI: Yes, that's  
14 correct.

15 MR. BOB PETERS: From what I heard Mr.  
16 Warden say yesterday, that number is probably high?

17

18 (BRIEF PAUSE)

19

20 MR. HAROLD SURMINSKI: Yes, this was  
21 prepared more than a year ago when we expected a recovery  
22 in the export market prices.

23 MR. BOB PETERS: And those prices haven't  
24 materialized to the extent that Manitoba Hydro forecast  
25 or hoped at this point in time.

1 MS. HAROLD SURMINSKI: Yes, indications  
2 are such.

3 MR. BOB PETERS: And so while this  
4 forecast, we -- we jokingly, although seriously  
5 acknowledge we'll be wrong, we generally don't know how  
6 much and in which direction.

7 This time it's fairly safe to conclude  
8 that it's probably on the high side as listed here on  
9 this -- this document.

10 MS. HAROLD SURMINSKI: Yes, that's a fair  
11 conclusion.

12 MR. BOB PETERS: All right. And then  
13 when we look to the second test year, we see a number for  
14 2011/'12, a year that is for you three (3) months away?

15 Your fiscal year will start in three (3)  
16 months, Mr. Surminski?

17 MS. HAROLD SURMINSKI: That's correct.

18 MR. BOB PETERS: And that forecast  
19 starting in three (3) months, shows six point six (6.6)  
20 cents approximately per kilowatt hour as an average  
21 export price.

22 Correct?

23 MS. HAROLD SURMINSKI: Correct.

24 MR. BOB PETERS: When the Board looks at  
25 them, and just accepting them at their face value, to go

1 from four point one (4.1) cent to six point six (6.6)  
2 cents, that's two point five (2.5) cents of an increase.

3 That's about a 60 percent increase, Mr.  
4 Surminski?

5 MS. HAROLD SURMINSKI: Yes.

6 MR. BOB PETERS: Why would Manitoba Hydro  
7 forecast average export prices in the second test year to  
8 be 60 percent higher than they are in the first test  
9 year?

10 MS. HAROLD SURMINSKI: At the time of  
11 preparation of this IFF, Manitoba Hydro made the decision  
12 that -- that the export price forecast, previous export  
13 price forecast, was still valid and -- and there was no  
14 reason to -- to update it.

15 It lo -- it appeared that it was possible  
16 for prices to -- to be maintained at the previous export  
17 levels.

18 MR. BOB PETERS: And this was an export  
19 forecast of prices that Manitoba Hydro paid for?

20 MS. HAROLD SURMINSKI: Yes. This was --  
21 this was prepared in 2008 and we used -- we used several  
22 export price forecasters.

23 We use up to five (5) forecasters that we  
24 purchase, we have under contract, or have information  
25 that they provide us, and we get a consensus from those

1 forecasters.

2 MR. BOB PETERS: When you say you get a  
3 consensus on those forecast, Mr. Surminski, does Manitoba  
4 Hydro truncate out the high and the low and average the  
5 rest? Does it accept them all and average them? Or does  
6 it -- does it expect they're all going to be exactly the  
7 same?

8

9 (BRIEF PAUSE)

10

11 MS. HAROLD SURMINSKI: I'm just wondering  
12 if we're getting into confidentiality areas here, but --

13 MR. BOB PETERS: You'll tell us if we  
14 are, sir, will you?

15 MS. HAROLD SURMINSKI: -- yes.

16 MR. BOB PETERS: Okay. Thank you.

17 MS. HAROLD SURMINSKI: We don't -- we  
18 normally don't reject forecasts but we have changed  
19 forecasters over time.

20 We started this process in 2004, and  
21 particularly with the Wuskwatim CEC hearings, and -- and  
22 over time we -- we have dropped a forecaster or two (2)  
23 and have added additional ones.

24 And the consensus is derived generally by  
25 averaging, although there have been years where we have

1 provided weights to forecasters; ones that we thought  
2 were more reliable we gave a higher weight, and -- but --  
3 and the last forecast we generally averaged and got a  
4 consensus in that way.

5 MR. BOB PETERS: Do you ever back test  
6 those forecasts against actuals to see who's -- who's  
7 giving you the best advice?

8 MS. HAROLD SURMINSKI: Generally we are -  
9 - we are seeking long-term forecast here. We are -- what  
10 we are searching for is ten (10) years out and better.

11 So it's -- and -- and we've been only  
12 doing this for -- for six (6) years, so really it's --  
13 it's impossible to -- or it's not useful to try to rate  
14 the forecasters, or you know, to determine their -- their  
15 accuracy.

16 We've found that there just isn't enough  
17 of a -- a time record to do that.

18 MR. BOB PETERS: Are these forecasts  
19 purchased on an annual basis, or more regularly than  
20 that?

21 MS. HAROLD SURMINSKI: Not more regularly  
22 than annual. It's annual or biannual. Last year, in  
23 '09, we did not do a -- a comprehensive forecast, for  
24 example.

25 MR. BOB PETERS: And so the next forecast

1 is going to be compiled in 2011?

2 MS. HAROLD SURMINSKI: We have one (1)  
3 currently for -- for '10/'11, which -- which formed the  
4 basis of our IFF-10.

5 MR. BOB PETERS: All right. That's where  
6 I was going, is that the -- IFF-10, which is one (1) of  
7 the later appendices in this filing, it in -- includes  
8 the most current long-term export forecast of prices  
9 available to Manitoba Hydro.

10 MS. HAROLD SURMINSKI: That's right. And  
11 --

12 MR. BOB PETERS: And just because you get  
13 four (4), or five (5), or six (6), whatever the number  
14 is, Mr. Surminski, of these forecasts, does Manitoba  
15 Hydro not exercise some veto, or some judgment over them?

16  
17 (BRIEF PAUSE)

18  
19 THE CHAIRPERSON: Maybe we'll take the --

20 MR. ROBERT MAYER: This has to be --  
21 sorry -- this has to be a wonderful business to be in,  
22 giving -- give -- paying for -- getting paid for  
23 information that nobody gets to check up on whether or  
24 not you actually got it right. It sounds like the people  
25 who estimate the price of nickel.



1 THE CHAIRPERSON: On that note, we'll  
2 take the mid-afternoon break.

3 MR. BOB PETERS: Thank you, sir.

4

5 --- Upon recessing at 2:52 p.m.

6 --- Upon resuming at 3:17 p.m.

7

8 THE CHAIRPERSON: Okay, folks. When  
9 everyone's in their seat, Mr. Peters can start up again.

10 MR. BOB PETERS: Thank you.

11

12 (BRIEF PAUSE)

13

14 CONTINUED BY MR. BOB PETERS:

15 MR. BOB PETERS: Before the recess, we  
16 talked about Manitoba Hydro's forecasting process for  
17 future export prices.

18 And what I want to turn to specifically  
19 with the witnesses, if they're able to identify --  
20 provide an answer, is that when a forecast goes from four  
21 point one (4.1) cents on average for export prices up to  
22 six point six (6.6) over the course of one (1) year.

23 And I've suggested that's a two and a half  
24 (2 1/2), or approximately 60 percent increase, what is  
25 the underlying assumptions in that, if the panel is

1 aware, that would be helpful to the Board at this time.

2

3

(BRIEF PAUSE)

4

5 MS. HAROLD SURMINSKI: Mr. Peters, well  
6 first of all, our forecast, for example, for this year,  
7 the example year, for 2011/'12 using our updated 2010  
8 forecast will reduce that value to something like -- in  
9 the forties.

10 We're trying to get the number, but it was  
11 like forty-five dollars (\$45) a megawatt hour, or -- or  
12 in that order. So we have downgraded our forecast in the  
13 early years based on the new information that has become  
14 available.

15 So you are dealing with a -- an older  
16 forecast where -- where we had not updated the near term  
17 for -- near term forecast prices.

18 In the longer term, the forecasts are  
19 still relatively similar but the first five (5) to -- to  
20 eight (8) years have been downgraded.

21 MR. BOB PETERS: What is the reason for  
22 the downgrade? Can you disclose that, Mr. Surminski?

23 MS. HAROLD SURMINSKI: yes. It is -- the  
24 forecasters have -- have come back and -- and considered  
25 the -- the slow recovery in -- in the economy and that's

1 -- generally just new information as it becomes  
2 available.

3 THE CHAIRPERSON: Is it the slow recovery  
4 in the economy or is it a mixture of that and also the --  
5 the natural gas price situation?

6 MS. HAROLD SURMINSKI: Yes, Mr. Chairman,  
7 natural gas prices are -- are a big factor and -- and a  
8 fundamental in driving electricity prices, and -- and,  
9 correspondingly, the fore -- long term forecasts of  
10 natural gas prices are also reduced now compared to where  
11 they were two (2) years ago.

12 MR. BOB PETERS: Just to be clear on the  
13 record, Mr. Surminski, thank you for your answer to me  
14 prior to your addressing the question of the Chairman.  
15 On -- on a question that we've labelled pre-ask number 2,  
16 Manitoba Hydro provided us with the IFF-10 export revenue  
17 assumptions similar to what you see in Tab 6 of the book  
18 of documents, but upgraded for -- for IFF-10.

19 And I'll just indicate, Mr. Surminski,  
20 that the -- the revised number for 2010/'11 is thirty-two  
21 dollars and fifty-eight cents (\$32.58) a -- a megawatt or  
22 three point two six (3.26) cents a kilowatt hour. I'll  
23 also indicate that for the 2011/'12 test year it's  
24 reflected as a forecast of total export sales averaging  
25 forty-one dollars and thirty-eight cents (\$41.38) a

1 megawatt hour or four point one four (4.14) cents a  
2 kilowatt hour.

3                   You'll agree with those numbers, sir,  
4 coming from pre-ask 2, subject to check?

5                   MR. HAROLD SURMINSKI:    Yes, we have a  
6 copy of that behind us here, yes.

7                   MR. BOB PETERS:    All right.  And so when  
8 you said you downgraded them, that's to reflect for the  
9 two (2) test years instead of -- and we'll look in our  
10 Tab 6 of our book of documents, and instead of four point  
11 one (4.1) cents, you're thinking now it's going to be  
12 closer to three point three (3.3) cents?

13                   MR. HAROLD SURMINSKI:    Yes, that's  
14 correct.

15                   MR. BOB PETERS:    And instead of six point  
16 five nine two (6.592) -- or six five point nine two  
17 (65.92) it's going to be forty-one thirty-eight (41.38),  
18 forty-one dollars and thirty-eight cents (\$41.38), or  
19 four one four (414) per kilowatt hour, correct?

20                   MR. HAROLD SURMINSKI:    Yes, that's  
21 correct.  There's another factor that comes into play in  
22 -- in the early years.  It's the volumes that we have  
23 with the increased wa -- the water supply that we have.  
24 With the storage carryover you'll have a -- a different  
25 waiting between long-term and opportunity sales.  And as

1 we sell more opportunity sales, more go into off peak  
2 hours.

3 So it's not only -- the ap -- you're not  
4 comparing apples and apples if you're -- if you're -- if  
5 you're comparing different volumes that are sold into the  
6 market.

7 MR. BOB PETERS: What you're suggesting  
8 is that because there's excess volumes they will be sold  
9 on the opportunity market at a lower cost than would be  
10 the case if the volumes were lower?

11 MR. HAROLD SURMINSKI: Yes.

12 MR. BOB PETERS: You're assuming the  
13 greater the volumes you have, the more depressed the  
14 price will be?

15 MR. HAROLD SURMINSKI: And that's a fact  
16 for us.

17 MR. BOB PETERS: All right. And when we  
18 look at the forecast in pre-ask 2 and compare it to the  
19 book of documents, Tab 6, for some reason the total  
20 export sales, by the time you get to 2020, the forecast  
21 price has increased as opposed to decreased?

22

23 (BRIEF PAUSE)

24

25 MR. HAROLD SURMINSKI: Yes, there is a --

1 a new transmission tie line that -- that comes into play  
2 with the new term sheets. So that increases the volumes  
3 that we can sell at high prices, plus the -- the term  
4 sheets have -- have higher prices associated with them  
5 for the firm component, the dependable component.

6 MR. BOB PETERS: Are you able -- sorry,  
7 I'll wait.

8

9 (BRIEF PAUSE)

10

11 MR. HAROLD SURMINSKI: Just a  
12 clarification, Mr. Peters.

13

14 (BRIEF PAUSE)

15

16 MR. HAROLD SURMINSKI: As -- as the  
17 reason for volumes -- with higher volumes having lower  
18 prices, we just wanted to clarify it's -- it's not the  
19 Manitoba Hydro sales that are driving market prices down,  
20 it is -- it is how we sample the market. We sample many  
21 lower-priced hours, we're forced to, so -- in lower-  
22 priced hours.

23 I wasn't sure if your -- if your statement  
24 indicated that we are actually depressing market prices  
25 by selling bigger volumes.

1                   MR. BOB PETERS:     No, your point of  
2 clarification to the Board is that when you have excess  
3 volumes, that you -- you sell as much as you think you  
4 should, and generally those are all opportunity off-peak  
5 sales and the prices you have to take are lower than what  
6 they would be if you had fewer volumes and could sell  
7 them at -- or less volumes and sell them at peak prices.

8                   MS. HAROLD SURMINSKI:    Yes, correct.  
9 That -- that's what I call -- we sample the market in a  
10 different way. It's the same market, but our volumes  
11 cause us to sample that market sample at different hours  
12 and in different volumes.

13                   MR. BOB PETERS:     When you said that you  
14 had a 2008 forecast from your five (5) forecasters, what  
15 data period did they use to come up with their forecasts?

16                                 What -- over what period of time where  
17 they -- where they giving you that data?

18                   MS. HAROLD SURMINSKI:    I wouldn't call it  
19 data, but it's -- it's forecasts, and -- and they rely on  
20 -- on fun -- on fundamentals based on fuel prices, on  
21 coal prices, on natural gas prices, on costs of  
22 construction, on -- on the relative balance in the market  
23 of supply versus demand.

24                                 If you have a tight supply/demand balance  
25 situation you will -- you will have different prices in

1 the market. So they -- they try to forecast in  
2 equilibrium.

3 Currently, for example, the market is out  
4 of balance because load has dropped off -- load -- and --  
5 and supply is -- is high, so there's a -- when there's a  
6 lot of supply and not as much load prices will be low.

7 And generally, these forecasters try to --  
8 they -- they assume load growth, so that's another  
9 assumption they have to make, is what load growth is,  
10 what the build of plant is in -- in the system. This is  
11 all in the US.

12 And so it's all fundamentals based on the  
13 balance of supply/demand, cost of production, and what --  
14 the market clearing prices. And they all have models to  
15 -- to calculate the market clearing price, which is the -  
16 - the hourly price in the end in -- in a open market the  
17 way MISO operates.

18 MR. BOB PETERS: And what period of time  
19 is that 2008 forecast premised on, do you know?

20 MS. HAROLD SURMINSKI: It's long term.  
21 It's up to thirty (30) years.

22 MR. BOB PETERS: And -- and likewise, the  
23 2010 forecast is also a thirty (30) year forecast?

24 MS. HAROLD SURMINSKI: Yes.

25 MR. BOB PETERS: And where would they cut



1 off the data? How far out would they -- would they go  
2 before they say, Well this is our forecast to you --  
3 their -- their cutoff date for -- for gathering the data?

4 MS. HAROLD SURMINSKI: Again it's not  
5 gathering data. It's -- it's providing a forecast, and -  
6 - and how reliable it is. We've -- some of our  
7 forecasters only go fifteen (15) and twenty (20) years,  
8 and when we ask them to go longer, like fifteen (15) or  
9 twenty (20) years is their normal course of forecasting,  
10 we ask them to go longer, and -- and they say it's not  
11 possible, or it's not realistic, and -- and they don't  
12 provide a longer estimate.

13 So the reliability of a forecast twenty  
14 (20) years out is -- is not very great.

15 MR. BOB PETERS: Okay, and I may be not  
16 asking the question properly, but what is the -- what is  
17 the -- the date or the vintage of the latest information  
18 that they use in making their forecast?

19 You told us it was based on a number of  
20 factors, and you listed them, but at what point did the  
21 2008 forecast cut off?

22 MS. HAROLD SURMINSKI: It -- it varies.  
23 It would be six (6) months, maybe, before that time  
24 period. Some forecasters provide a forecast only once a  
25 year, and -- and they're out of sync.

1                   They're automatic dates that they have, a  
2 fall and a spring forecast, and they're out of sync with  
3 our time period, so we may be getting a more stale  
4 forecast from such a forecaster.

5                   But we normally contract at a particular  
6 time of year, for example, just last month for -- for  
7 next year, and -- and if they're doing a custom forecast  
8 they would be using the best information available up to  
9 -- to that date.

10                   So for example, if they're starting on  
11 their forecast now, and -- and they issue it in May and  
12 June for -- for our use, or we finalize it, and so when  
13 we label our forecast as completed in May the data may be  
14 six (6) months old. The -- the input information.

15                   I think that's the question?

16                   MR. BOB PETERS:     Yes, thank you. And --  
17 and the same answer would apply for the 2010 forecast  
18 that you've recently obtained?

19                   MS. HAROLD SURMINSKI:   That's what I was  
20 just giving as the example, yes.

21                   MR. BOB PETERS:     All right. And can you  
22 tell the Board whether in these forecast prices that we  
23 see for the -- for the test years in IFF-09, and you've  
24 now updated them, was IFF-09 including a carbon premium?

25                   MS. HAROLD SURMINSKI:   Yes. All our

1 forecasts since about 2004 have included a premium for --  
2 for consideration for -- for how legislation for carbon  
3 will unfold and it's not necessarily -- not necessarily a  
4 premium; it -- it can be a -- a factor that gets built  
5 into the market.

6 MR. BOB PETERS: And to the extent that  
7 was built into the 2008 forecast you obtained, it would  
8 have been removed from the 2010 forecast, speaking of the  
9 test years that are before the Board?

10 MR. HAROLD SURMINSKI: I don't understand  
11 what you mean by removed.

12 MR. BOB PETERS: All right. Does -- does  
13 Manitoba Hydro expect there to be a carbon premium or a  
14 carbon legislation in the United States for your 2011/'12  
15 fiscal year?

16

17 (BRIEF PAUSE)

18

19 MR. HAROLD SURMINSKI: Yes, Mr. Peters.  
20 If you're asking whether -- and the magnitude of the  
21 carbon premium, as you called it, what that is in -- in  
22 the current year, say in -- in 2010, basically, it's --  
23 it's zero. There -- there's really no factor. It's --  
24 it gradually builds up over time and so we didn't have it  
25 in before and we -- we don't have it in the current.

1 MR. BOB PETERS: You're speaking for the  
2 test years?

3 MR. HAROLD SURMINSKI: Yes.

4 MR. BOB PETERS: All right. After the  
5 test years, you may have it included in your forecasts?

6 MR. HAROLD SURMINSKI: It's a gradual  
7 consideration. It just doesn't happen suddenly. It's  
8 not a step; it's -- it's a gradual recognition and a  
9 gradual factor how it gradually gets factored into the  
10 economy and into the energy industry.

11 MR. BOB PETERS: But in any event, you're  
12 not forecasting it for the fiscal '11 or fiscal '12  
13 years?

14 MR. HAROLD SURMINSKI: Yes. It'd be  
15 negligible if it is at all.

16

17 (BRIEF PAUSE)

18

19 MR. BOB PETERS: Can you update this  
20 Board on what range of carbon pricing is forecast to come  
21 into the years before 2020?

22 MR. HAROLD SURMINSKI: No, that is  
23 confidential information. Our view of how carbon pricing  
24 will unfold is -- is proprietary, because it gives --  
25 gives an indication of -- of where we think market prices

1 are heading.

2 MR. BOB PETERS: In an answer you gave, I  
3 think it was to the Chairman, just a few minutes ago, to  
4 increase the average export price from the four point one  
5 (4.1) to the six point six (6.6) cents that's shown on  
6 the -- page 25 of Tab 6 of the book of documents, if the  
7 competitive product would have been natural gas, what  
8 would be the approximate increase in natural gas that you  
9 would expect to see to drive that kind of a 66 percent --  
10 or 60 percent increase in average export prices?

11 MR. HAROLD SURMINSKI: I don't have that,  
12 and I don't think anybody here has -- has that available  
13 directly. It would be -- you know, you'd have to assume  
14 a particular type of generation resource and combined  
15 cycle which would be more efficient. So there's various  
16 factors that one would have to consider in order to say  
17 what gas price, natural gas price, would correspond to  
18 six point six (6.6) cents per kilowatt hour.

19 MR. BOB PETERS: I was relying on what I  
20 thought Ms. Flynn taught me several months ago, so I may  
21 be incorrect on that, but I thought, if we assume from  
22 four point one (4.1) cents if gas is about four dollars  
23 (\$4) a gigajoule and you have your combined cycled gas  
24 turbine, you would have to go up to pretty much seven and  
25 a half dollars a gigajoule to -- to have corresponding

1 prices in that range.

2 And I appreciate there's some imprecision  
3 in my question, but does that sound even reasonable?

4

5 (BRIEF PAUSE)

6

7 MR. HAROLD SURMINSKI: It may be in that  
8 area, but we -- subject to check, we would like to -- to  
9 investigate exactly if that would follow.

10 MR. BOB PETERS: I've got a question or  
11 two (2) coming up that you can hold off that Undertaking,  
12 and we'll -- we'll come at it a different way later, but  
13 can you tell the Board whether natural gas is the fuel  
14 against which Manitoba Hydro competes for their peak  
15 energy sales to the United States?

16

17 (BRIEF PAUSE)

18

19 MR. HAROLD SURMINSKI: It certainly is  
20 for a portion of the time, but it certainly is not for  
21 100 percent of the peak hours. It's -- loads vary over  
22 the days of the week and hours of the year. So to have  
23 natural gas be the -- the marginal resource all of the  
24 time would not be realistic.

25 MR. BOB PETERS: All right. In terms of

1 percentage of the time, can you offer up an opinion on  
2 that, sir?

3

4 (BRIEF PAUSE)

5

6 MS. MARLA BOYD: Mr. Peters, I think this  
7 is an area that Mr. Cormie could probably offer more  
8 assistance.

9 MR. BOB PETERS: Okay. I don't...  
10

11 (BRIEF PAUSE)

12

13 MR. HAROLD SURMINSKI: Mr. Peters, we do  
14 not have that available. Perhaps in a few minutes we may  
15 be able to get some information in our back row here and  
16 be able to answer that.

17

18 CONTINUED BY MR. BOB PETERS:

19 MR. BOB PETERS: Well, Ms. Murphy has ask  
20 -- or sorry, Ms. Boyd has asked that I put that over to  
21 Mr. Cormie, and I'd be prepared to do that if that would  
22 be of assistance to the panel -- you. Is that a matter  
23 you think he would know or is that a matter that he'd  
24 still need to --

25 MR. HAROLD SURMINSKI: I'm -- I'm sure he

1 would not have any more direct information. He would  
2 still have to --

3 MR. BOB PETERS: All right. Then we'll--

4 MR. HAROLD SURMINSKI: -- consult.

5 MR. BOB PETERS: -- we'll keep Ms. Flynn  
6 hard at work while -- while we move on. Natural gas  
7 prices, Mr. Surminski, I think I heard Mr. Warden say  
8 that they're -- they're quite low at this point in time?

9 MR. HAROLD SURMINSKI: Yes, I heard Mr.  
10 Warden say that.

11 MR. BOB PETERS: You believed him?

12 MR. HAROLD SURMINSKI: Yes.

13 MR. BOB PETERS: And the Canadian Gas  
14 Association likewise says that?

15 MR. HAROLD SURMINSKI: Yes.

16 MR. BOB PETERS: It's the thirty-four  
17 (34) -- it's -- it's 34 percent lower than five (5) --  
18 than the five (5) year average if I understood one (1) of  
19 their -- their pamphlets. You don't disagree with that,  
20 do you?

21 MR. HAROLD SURMINSKI: I don't disagree,  
22 but probably some of -- one (1) of the other panel  
23 members will take over if you're getting into natural gas  
24 pricing.

25 MR. BOB PETERS: All right. Well, we'll



1 see who wants to pick that up, but the -- the forecast  
2 for natural gas pricing remains low? You're the man with  
3 the hands on the forecasts. Without giving dollars, it -  
4 - it's going to remain low?

5 MR. HAROLD SURMINSKI: Yes, we've got  
6 indications from -- from our forecasters, or one (1) of -  
7 - one (1) of our forecasters, an early indication in  
8 their forecast is that a continuing lower than they  
9 estimated two (2) years ago.

10

11 (BRIEF PAUSE)

12

13 MR. BOB PETERS: As I understood from Mr.  
14 Warden's direct evidence, the major development since you  
15 last appeared on a gen -- a general rate application  
16 before this Board is that there's technology to produce  
17 and access gas, what they call shale gas?

18 MR. ROBIN WIENS: Yes, that's a bigger  
19 factor today than it was two (2) years ago.

20 MR. BOB PETERS: And there are large  
21 shale gas reserves, Mr. Wiens?

22 MR. ROBIN WIENS: I'm not the expert on  
23 that, but, Mr. Peters, I'm told that there are  
24 substantial shale gas reserves in the United States  
25 today.



1 unconvesal -- unconventional  
2 development of North American gas  
3 supply is contingent on the interplay  
4 of technology, resource development  
5 cost, practices, natural gas commodity  
6 prices."

7 And they left out environmental  
8 constraints. That really is referenced earlier in the  
9 paper but all of those -- those are variables that are at  
10 play with shale gas and will affect the price.

11 But my understanding is that the price to  
12 develop shale gas is -- is actually higher than what the  
13 current market price is.

14 MR. BOB PETERS: If that was the case,  
15 then there'd be no shale gas on the market, Mr. Warden?

16 MR. VINCE WARDEN: No. It's -- there --  
17 there -- it's a complicated thing. Again, according to  
18 my understanding, is that some of the shale gas  
19 developments are being developed just to get into the  
20 market place, and ultimately once they're in there the  
21 price will start to go up.

22 MR. BOB PETERS: Is "ultimately" five (6)  
23 years out, ten (10) years out, fifteen (15) years out?  
24 Do you have any handle on that?

25 MR. VINCE WARDEN: Well, there -- there's

1 so many different opinions on this today, and I think I  
2 indicated in my presentation that over the next year the  
3 situation with shale ga -- shale gas should become  
4 clearer than it is today.

5 MR. BOB PETERS: You are prepared to  
6 acknowledge that it has put downward pressure on your  
7 export prices?

8 MR. VINCE WARDEN: There's no doubt about  
9 that.

10 MR. BOB PETERS: And so somebody's  
11 producing it at three (3) or four dollars (\$4) a  
12 gigajoule?

13 MR. VINCE WARDEN: It's being sold into  
14 the market at three (3) and four dollars (\$4) per  
15 gigajoule. There's information out there that it is  
16 being -- the cost to produce is higher than that.

17 MR. BOB PETERS: So somebody -- producers  
18 are selling it at a loss? Is that what the conclusion  
19 would be from your understanding?

20 MR. VINCE WARDEN: Again, my  
21 understanding is there's a lot of positioning taking  
22 place in the marketplace right now that -- that has  
23 resulted in the low prices we're seeing today.

24 And remember, too, this is a paper of the  
25 -- the paper that you've included in your book of

1 documents is produced by the Canadian Gas Association.

2 MR. BOB PETERS: Manitoba Hydro is a  
3 member?

4 MR. VINCE WARDEN: We are.

5 MR. BOB PETERS: Do you disagree with  
6 your --

7 MR. VINCE WARDEN: No.

8 MR. BOB PETERS: -- association?

9 MR. VINCE WARDEN: No. As a matter of  
10 fact, I sit on the Board of this -- of this Association  
11 and have -- do have some opportunity to critique the  
12 papers before they're produced.

13

14 (BRIEF PAUSE)

15

16 MR. BOB PETERS: Mr. Surminski, you're  
17 looking too comfortable. The -- you -- you told me a few  
18 minutes ago before you deflected me, or your counsel  
19 deflected me to Mr. Cormie, that natural gas sets the  
20 marginal price only a certain percentage of the time,  
21 correct?

22 MS. HAROLD SURMINSKI: Yes. We were just  
23 discussing that and trying to get more information for  
24 you there.

25 MR. BOB PETERS: Well --

1 MS. HAROLD SURMINSKI: We have some  
2 indications that -- that it could be up to 50 percent at  
3 a time, but it's -- it could vary like 10, 20, to -- to  
4 50 percent of the time.

5 MR. BOB PETERS: Can you tell the Board  
6 what other energy sources are setting the marginal price  
7 against which you can meet -- which -- against which you  
8 compete for your peak sales?

9 MS. HAROLD SURMINSKI: Yes. It would be  
10 primarily coal -- coal-fired generation.

11 MR. BOB PETERS: For peak sales you  
12 compete against coal?

13 MS. HAROLD SURMINSKI: Yes.

14 MR. BOB PETERS: And you think as often  
15 as 50 percent of the time?

16 MS. HAROLD SURMINSKI: Yes. That's --  
17 that's the most -- that's the second most common resource  
18 in -- in our market.

19 MR. BOB PETERS: Second to gas?

20 MS. HAROLD SURMINSKI: Well, I guess coal  
21 is primary because of the off-peak hours, and -- and gas  
22 in the very highest of hours. But if you're talking  
23 about the peak hours, it seems like it's -- it's  
24 relatively equal between coal and natural gas. There are  
25 no other resources that -- that are low -- you know, low

1 enough cost.

2 MR. BOB PETERS: Is Manitoba Hydro  
3 prepared to indicate that, when doing long-term  
4 contracts, which fuel you primarily compete against?

5

6 (BRIEF PAUSE)

7

8 MS. MARLA BOYD: Again, Mr. Peters, it  
9 would be Mr. Cormie's area responsible for negotiating  
10 those matters.

11 MR. BOB PETERS: All right. Appreciating  
12 he'd negotiate it, would the -- would he have -- if -- if  
13 he'd have better knowledge of it, I'll defer it, but if  
14 it resides with Ms. Flynn, I wouldn't mind -- and -- and  
15 her colleagues getting that information, but let me --

16 MS. MARLA BOYD: Well, it -- it does  
17 primarily reside with Mr. Cormie, so I'm not suggesting  
18 Ms. Flynn isn't trying to help you, but it would be  
19 preferable to have Mr. Cormie testify to these matters,  
20 as they're within his domain.

21

22 (BRIEF PAUSE)

23

24 CONTINUED BY MR. BOB PETERS:

25 MR. BOB PETERS: I'll try this question,

1 Mr. Surminski and Ms. Flynn, and see if it passes muster.  
2 Appendix 56 to these proceedings is a presentation from  
3 Ms. Joanne Flynn made at a workshop, and in that  
4 presentation there were various slides. And I'm  
5 wondering whether you can acknowledge and agree that, at  
6 three dollars (\$3) a gigajoule for natural gas, the  
7 corresponding electricity price per kilowatt hour would  
8 be approximately three (3) cents a kilowatt hour?

9 MS. MARLA BOYD: Can you direct us to  
10 which attachment you're looking at?

11 MR. BOB PETERS: I'm looking at page 8 of  
12 appendix 56, and I think it's a -- a graph that was  
13 provided.

14 MS. MARLA BOYD: Unless I'm in the wrong  
15 spot, my appendix 56 has several attachments, each of  
16 which would be numbered: 1, 2, 3 -- they go up to 7.

17 MR. BOB PETERS: I just have it here as  
18 loose. I don't have it in my -- in my binder, but it's  
19 May 31, June 1, 2010, Manitoba Hydro Market  
20 Considerations for Planning by Ms. Flynn, power planning.  
21 Sorry, Ms. -- Ms. Boyd. I can't be more of assistance.

22

23 (BRIEF PAUSE)

24

25 MR. BOB PETERS: Page 8.



1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: I think we've located  
4 it, Mr. Surminski.

5 MR. HAROLD SURMINSKI: Yes, I've --

6 MR. BOB PETERS: You were ahead of us,  
7 were you?

8 MR. HAROLD SURMINSKI: Yes. Well, I've  
9 seen it a few minutes ago actually and I can confirm that  
10 number, yes.

11 MR. BOB PETERS: Then -- then you missed  
12 a good presentation, but -- so you've confirmed that, at  
13 three dollars (\$3) a gigajoule, the electricity price  
14 would be roughly three (3) cents a kilowatt hour?

15 MR. HAROLD SURMINSKI: Yeah. Yes, I can  
16 confirm that.

17 MR. BOB PETERS: And at seven dollars  
18 (\$7) a gigajoule, it looks to go up to about five point  
19 eight (5.8) cents per kilowatt hour?

20 MR. HAROLD SURMINSKI: Yes, that appears  
21 correct on the graph.

22 MR. BOB PETERS: And if natural gas gets  
23 to about twelve dollars and fifty cents (\$12.50) a  
24 gigajoule, that would translate into ten (10) cents a  
25 kilowatt hour for electricity?

1 MR. HAROLD SURMINSKI: Yes, that's  
2 correct, and -- and all of these are for the most  
3 efficient units, the highest efficiency the -- the gas  
4 turbines can -- can operate, or the type of turbines at  
5 high -- highest efficiency.

6 MR. BOB PETERS: You don't have one (1)  
7 of those, or Manitoba Hydro doesn't have one (1) of  
8 those, do they?

9 MR. HAROLD SURMINSKI: That's correct,  
10 yes. We chose not to -- not to have the -- the -- a  
11 combined cycle high-efficiency plant.

12 MR. BOB PETERS: You have a single-cycle  
13 combustion turbine?

14 MR. HAROLD SURMINSKI: That's correct.

15 MR. BOB PETERS: It's lower efficiency?

16 MR. HAROLD SURMINSKI: That's correct.

17 MR. BOB PETERS: More expensive to  
18 operate?

19 MR. HAROLD SURMINSKI: Yes, but lower  
20 capital costs.

21 MR. BOB PETERS: And -- okay. For -- for  
22 every -- I'm going to make this up before someone over  
23 here kicks me, but the -- for every megawatt of -- of  
24 combined cycle combustion turbine, you're paying about \$1  
25 million, is that --

1                   MR. HAROLD SURMINSKI:    Yes.  For capital  
2 costs, that's correct.

3                   MR. BOB PETERS:     Yes.

4                   MR. HAROLD SURMINSKI:    Yes.

5                   MR. BOB PETERS:     So 1,000 megawatt, CCCT  
6 would be a billion dollars?

7                   MR. HAROLD SURMINSKI:    Yes, and today  
8 probably even higher.

9                   MR. BOB PETERS:     And you don't have the  
10 Cadillac, you have the more economical version.  What's  
11 the capital cost of the -- of the plants you have, and I  
12 don't recognize it's capacity offhand.

13

14   (BRIEF PAUSE)

15

16                   MR. HAROLD SURMINSKI:    The plant's in the  
17 order of 260 megawatts, and our cost was in the \$200  
18 million range.

19                   MR. ROBERT MAYER:     Does at least your  
20 single-cycle equipment have the advantage of being able  
21 to be dispatched quicker than if you had to start this --  
22 the combined cycle up from scratch?

23                   MR. HAROLD SURMINSKI:    You're correct,  
24 because of the -- the second heat cycle requires boilers  
25 that cannot -- cannot come up to -- to full power in a

1 short time, whereas this simple cycle is like a jet  
2 engine that can just fire up in very short notice.

3

4 CONTINUED BY MR. BOB PETERS:

5 MR. BOB PETERS: Can you just answer --  
6 complete that answer to the Vice-Chair in terms of how  
7 long does it take to fire up a CCCT compared to an SCCT,  
8 for those of us who don't own one (1).

9

10 (BRIEF PAUSE)

11

12 MR. HAROLD SURMINSKI: No, we do not have  
13 knowledge here. It's -- we don't have a -- a facility  
14 like that. I imagine it's -- it's an hour, several  
15 hours.

16 MR. BOB PETERS: When you answered the  
17 Chairman -- or the Vice-Chair's question or my question  
18 on pricing, I thought they were both coming in at a  
19 million dollars a megawatt? Yours was 260 megawatts,  
20 roughly 200 million, and I threw out a 1,000 megawatts at  
21 a billion, and you seemed to think that was in the  
22 ballpark, maybe a little low.

23 MR. ROBIN WIENS: Mr. Peters, my math is  
24 about seven hundred and fifty thousand (750,000).

25 MR. BOB PETERS: On the two (2) -- on the

1 single-cycle, Mr. -- Mr. Wiens?

2 MR. ROBIN WIENS: Yes.

3 MR. BOB PETERS: All right. So 25  
4 percent savings on the model you acquired?

5 MR. HAROLD SURMINSKI: I wouldn't say  
6 that's a firm number but it's -- yeah, I would say it  
7 might be larger than that in actual fact, if we actually  
8 compared the two (2) costs.

9 MR. BOB PETERS: And can you remind --  
10 can you remind, Mr. Surminski, the Board, what is the  
11 efficiency rating on Manitoba Hydro's single-cycle  
12 combustion turbine?

13

14 (BRIEF PAUSE)

15

16 MR. HAROLD SURMINSKI: Manitoba Hydro's  
17 efficiency is -- consists of a heat rate of about twelve  
18 (12), whereas a combined cycle efficient would be in the  
19 seven (7) to eight (8) range, seven and a half (7 1/2)  
20 was what we had used in -- in the graphics.

21 MR. BOB PETERS: I'm going to have to ask  
22 you one (1) more question to explain what you mean by a  
23 heat rate. I thought you were going to give me a  
24 percentage, one (1) was 80 percent efficient, one (1) was  
25 40 percent efficient.

1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: Maybe you did, but it's  
4 just in engineering language so far.

5

6 (BRIEF PAUSE)

7

8 THE CHAIRPERSON: Maybe they should just  
9 take it under advisement, Mr. Peters.

10 MS. MARLA BOYD: We can certainly do  
11 that.

12

13 (BRIEF PAUSE)

14

15 CONTINUED BY MR. BOB PETERS:

16 MR. BOB PETERS: Mr. Surminski, we'll  
17 move on. Can you tell the Board whether in IFF-09, in  
18 your forecast, there's been a reflection of the recent  
19 shale gas development and prices. Is that reflected in  
20 IFF-09 or does that not get reflected until IFF-10?

21 MR. HAROLD SURMINSKI: No, it would not  
22 be reflected in -- in '09. That's -- it's a relatively  
23 new phenomenon as -- as, you know -- to be considered  
24 part of the new -- new regime for gas prices.

25 MR. BOB PETERS: How will that be

1 visible, if at all, to the Board when it looks at your  
2 IFF-10? How will they see that Manitoba Hydro has taken  
3 into account the depression of the market prices because  
4 of shale gas being available?

5

6

(BRIEF PAUSE)

7

8 MR. HAROLD SURMINSKI: Yes, Mr. Peters,  
9 it will be -- natural gas prices are one (1) of the  
10 drivers of the export price forecast, so -- and one (1)  
11 of the -- the major inputs along with coal prices, but  
12 natural gas are the prices that vary more significantly,  
13 so you would expect lower export -- long-term export  
14 prices with lo -- a forecast of lower natural gas prices  
15 in the long-term.

16

17 MR. BOB PETERS: It'll show up on the  
18 bottom line of your IFF assumption tables, where it shows  
19 total export sales on a dollars per megawatt hour basis,  
20 Mr. Surminski?

21

22 MR. HAROLD SURMINSKI: Yes, both in  
23 dollars per megawatt hour and in total revenues.

24

25

(BRIEF PAUSE)

26

27 MR. BOB PETERS: Mr. Warden, in the

1 corporate risk management report, Appendix 77 filed -- or  
2 dated October of 2010, you refer to shale gas as a new  
3 threat or a new risk. Would that be fair?

4 MR. VINCE WARDEN: Yes, we do identify it  
5 there.

6 MR. BOB PETERS: And how is it that shale  
7 gas came out to surprise Manitoba Hydro that -- that it  
8 appeared and nobody knew it was coming or nobody knew  
9 that it was --

10 MR. VINCE WARDEN: I think it surprised  
11 the world really. It's -- it's something that nobody was  
12 forecasting to -- as --

13 MR. BOB PETERS: But it was always --  
14 there was always shale gas available, it was just a  
15 matter --

16 MR. VINCE WARDEN: Well --

17 MR. BOB PETERS: -- of cost and  
18 technology to get it out?

19 MR. VINCE WARDEN: That's true. I --  
20 although, I -- I'm not sure that there was an awarent --  
21 awareness of the magnitude of the shale gas deposits, but  
22 there has been technology that makes those deposits more  
23 accessible at a lower production cost than was previously  
24 available.

25



1 (BRIEF PAUSE)

2

3 MR. BOB PETERS: You've identified in the  
4 book of documents, Mr. Warden, at Tab 7, the -- the paper  
5 supply bulletin by the Canadian Gas Association dated  
6 2010, Supply Bulletin. Just a few questions related to  
7 that, and if it's something that you feel that I should  
8 direct better to Mr. Cormie, you'll tell me that, please.

9 Would Manitoba Hydro agree, and Mr.  
10 Surminski, you can help us, that Manitoba Hydro exports -  
11 - you've told me, compete directly with coal and with  
12 gas, correct?

13 MR. HAROLD SURMINSKI: Yes, that's  
14 correct.

15 MR. BOB PETERS: Would it not be  
16 intuitively correct that the coal-generated electricity  
17 would be at a lower cost than the gas-generated  
18 electricity?

19 MR. HAROLD SURMINSKI: Well, it depends  
20 on the -- on the relative balance of the fuel cost  
21 between coal and natural gas. Coal prices have not been  
22 varying very much. Natural gas prices have dropped 50  
23 percent, so it's the relative balance between those.

24 MR. BOB PETERS: Well, if I was to  
25 suggest that coal-generated electricity, I would consider

1 it to come in somewhere in the two (2) to three (3) cent  
2 range from a reasonably efficient coal plant. Would that  
3 -- would that be objectionable?

4 MR. HAROLD SURMINSKI: No. Yeah, it's --  
5 it's probably -- it used to be on the two (2) to three  
6 (3). It's probably at least three (3) now, yeah.

7 MR. BOB PETERS: All right. And -- and  
8 then, if we go to natural gas with the combined cycle  
9 combustion turbine, even at the price of gas now and  
10 using Ms. Flynn's table, we're looking at somewhere  
11 between four (4) and six (6) cents a kilo -- a kilowatt  
12 hour for electricity generated from a CCCT?

13 MR. HAROLD SURMINSKI: Yes.

14 MR. BOB PETERS: And I'm not sure -- Mr.  
15 Warden said this, and where's Mr. Stephens when we need  
16 him is what my question is. Is -- is gas now at a ten  
17 (10) year low in Manitoba?

18 MR. VINCE WARDEN: Yes, it is.

19 MR. BOB PETERS: Maybe even longer, or is  
20 it -- certainly ten (10) years --

21 MR. VINCE WARDEN: It was -- it would --

22 MR. BOB PETERS: -- maybe not much  
23 longer?

24 MR. VINCE WARDEN: It would be about ten  
25 (10) years --

1 MR. BOB PETERS: All right.

2 MR. VINCE WARDEN: -- that's right.

3 MR. BOB PETERS: And we see in Centra  
4 Gas's offerings on the market that Centra's prices are  
5 below twenty (20) cents a cubic metre.

6 MR. VINCE WARDEN: Correct.

7 MR. BOB PETERS: And there's no carbon  
8 tax or cap-and-trade regime into which Manitoba Hydro  
9 buys or sells right now, is that true?

10 MR. VINCE WARDEN: Yes.

11 MR. BOB PETERS: Would it also be true  
12 that Manitoba Hydro is not aware of any pending federal  
13 US legislation that would impose a carbon tax or a cap-  
14 and-trade regime?

15 MR. VINCE WARDEN: I -- I think that's  
16 fair to say, yes.

17 MR. ROBERT MAYER: Now, maybe I'm  
18 listening -- I listen to CBC Radio, so -- but it would  
19 appear that the President of the United States is now  
20 determined that he has the power under that Climate Act  
21 of 1970 some odd to in fact impose environmental  
22 protection. It's an environmental protection  
23 legislation, and they're now talking -- at least they  
24 were about a week ago -- of actually attempting to use  
25 that legislation to deal with -- with emissions. They

1 did successfully use it to deal with car emissions.  
2 They're now talking about being able to do that with  
3 respect to greenhouse gas emissions for -- greenhouse gas  
4 emissions generally.

5 MR. HAROLD SURMINSKI: Yes. Our  
6 information is that also. After -- after the US  
7 government failing to come to any agreements, they're  
8 falling back on -- on that -- on that act to try to take  
9 care of carbon, yes.

10

11 CONTINUED BY MR. BOB PETERS:

12 MR. BOB PETERS: Mr. Surminski, at tab --  
13 at -- at the book of documents that I think we're looking  
14 at, I'd asked you before about some efficiencies of the  
15 turbines, and it's been brought to my attention that, I  
16 think on page 7 of the same presentation, there's some  
17 heat rate values that are translated to BTUs -- yeah,  
18 BTUs per kilowatt hour. And I suppose by just taking the  
19 relative percentages we can get the efficiencies based on  
20 those numbers. Would that be a fair way to do it?

21 MR. HAROLD SURMINSKI: Yes, that's --

22 MR. BOB PETERS: Yeah.

23 MR. HAROLD SURMINSKI: -- that's what was  
24 required to do that conversion.

25 MR. BOB PETERS: All right, then. Then

1 I'll -- I'll save you the work and you need not perform  
2 that as any undertaking or otherwise.

3 MR. HAROLD SURMINSKI: Okay. Thank you.

4 MR. BOB PETERS: And I don't think you've  
5 agreed with this yet, Mr. Surminski or Mr. Warden, but I  
6 -- I was suggesting that carbon tax or a cap-and-trade  
7 regime would suppress Manitoba Hydro's export price.  
8 Would that be true or false?

9 MR. HAROLD SURMINSKI: This is the first  
10 I've heard of your suggestion of that. I don't know the  
11 mechanism of how that would happen.

12 MR. BOB PETERS: So if there was a carbon  
13 tax or a cap-and-trade regime in place, do you think that  
14 would increase or decrease Manitoba Hydro's export price,  
15 or can you tell me that?

16 MR. HAROLD SURMINSKI: We think that it  
17 would increase the price.

18

19 (BRIEF PAUSE)

20

21 MR. BOB PETERS: All right, we'll come  
22 back a bit more on that. In the document that's found at  
23 Tab 7 of the book of documents, the Canadian Gas  
24 Association Report, there's also a lot of and a large  
25 amount of unused capacity for liquid natural gas.

1                   Would that be understood by Manitoba  
2 Hydro?

3

4                   (BRIEF PAUSE)

5

6                   MR. VINCE WARDEN:     Well, I think there  
7 was capacity being planned, more capacity being planned  
8 for LNG that is not going ahead due to the shale gas  
9 coming onstream. There is, however, a very large plant  
10 being built in Kitimat, which I think is also referenced  
11 in this paper.

12                  MR. BOB PETERS:     Generally, Mr. Warden,  
13 that LNG is not seen at this time as needed for North  
14 America.

15                  MR. VINCE WARDEN:     That's right.

16                  MR. BOB PETERS:     And LNG would command  
17 prices somewhere in the five (5) to seven dollars (\$7) a  
18 gigajoule range, maybe even higher; maybe much higher.

19                  MR. VINCE WARDEN:     Yeah, I think the  
20 world price has been much higher than that.

21                  MR. BOB PETERS:     And in fact, Europe  
22 would be a stronger market for LNG because that's where  
23 the -- the market price is set.

24                  MR. VINCE WARDEN:     Europe and -- and  
25 Asian markets espec -- especially, yeah.

1 MR. BOB PETERS: It is correct that the  
2 gas reserves are now greater with shale gas availability  
3 and coalba -- coalbed methane available than they've ever  
4 -- ever been before.

5 MR. VINCE WARDEN: Yes, that's my  
6 understanding as well.

7 MR. BOB PETERS: Would you go so far, and  
8 I think I took this from page 32 of that report, top  
9 right-hand corner, page 32, that -- that essentially the  
10 natural gas reserves have doubled?

11

12 (BRIEF PAUSE)

13

14 MR. VINCE WARDEN: Yeah, I -- I would  
15 have thought it had been more than doubled, but are you  
16 ta -- are you interpreting that graph to mean -- mean  
17 that they've doubled?

18 MR. BOB PETERS: Yes. You'll say at  
19 least doubled.

20 MR. VINCE WARDEN: I'll certainly go  
21 along with that, yes.

22 MR. BOB PETERS: And while you've told  
23 the Board of some concerns you have over the long-term  
24 viability of shale gas, there's no near-term reversal of  
25 natural gas prices seen as likely.

1                   Would that be fair?

2                   MR. VINCE WARDEN:    You know, again,  
3   there's so much literature out there on this and so many  
4   different opinions, but the consensus opinion appears to  
5   be that the near-term price will probably remain low  
6   possibly for the entire 2011, and then start to escalate  
7   after that.

8                   MR. BOB PETERS:    And one of the  
9   unfortunate side effects of that will be to suppress  
10  Manitoba Hydro's export prices.

11                  MR. VINCE WARDEN:    Yes, that's right.

12                  MR. BOB PETERS:    We talked earlier and  
13  the Vice-Chairman mentioned US carbon legislation.  And I  
14  supposed the last time Manitoba Hydro testified at a  
15  general rate hearing there was a new United States  
16  president, I think, coming into power, and I think there  
17  was an expectation of substantial greenhouse gas  
18  penalties through carbon legislation, and would that be -  
19  - would that be history or would that -- would I be  
20  revising it if I said -- suggested that, Mr. Warden?

21                  MR. VINCE WARDEN:    I -- I'd agree with  
22  that statement, yes.

23                  MR. BOB PETERS:    That's what the  
24  expectation was back a couple years ago.

25                  MR. VINCE WARDEN:    Yes.



1                   MR. BOB PETERS:     And Manitoba Hydro has,  
2     in its workshops, suggested that fifteen dollars (\$15) a  
3     tonne as a greenhouse gas penalty on -- on natural gas  
4     would equate to about a half a cent increase in the  
5     kilowatt hour.

6

7                                   (BRIEF PAUSE)

8

9                   MR. HAROLD SURMINSKI:     Yeah, generally  
10    that sounds correct.

11                   MR. BOB PETERS:     And if it was to be with  
12    -- if you were competing on coal and a fifteen dollar  
13    (\$15) a tonne penalty on greenhouse gases, that would  
14    probably add an extra two (2) cents a kilowatt hour to  
15    the coal price?

16

17                                   (BRIEF PAUSE)

18

19                   MS. HAROLD SURMINSKI:     Mr. Peters, it  
20    sounds like you're quadrupling, you're multiplying by  
21    four (4) to go from natural gas to coal, and that sounds  
22    like it's -- it's much too high a multiple.

23                   MR. BOB PETERS:     I was actually trying to  
24    interpret, I think, page 7 of the -- the chart on page 7  
25    from the presentation that was made by Manitoba Hydro,

1 and found at appendix 56, although not easily found.

2

3

(BRIEF PAUSE)

4

5 MS. HAROLD SURMINSKI: We have the chart.

6 I cannot interpret that one (1) --

7 MR. BOB PETERS: You can't --

8 MS. HAROLD SURMINSKI: -- just by -- by

9 looking at it.

10 MR. BOB PETERS: All right. Just for --

11 for purposes of this record then, Mr. Surminski, I'm

12 going to ask an undertaking. That you provide, if you

13 will and are able to, Manitoba Hydro's estimate of the

14 increase in gas-generated electricity as well as coal-

15 generated electricity if there was a fifteen dollar (\$15)

16 a tonne greenhouse gas penalty.

17 MS. HAROLD SURMINSKI: We would have to

18 assume on the gas the efficiency of -- of the units.

19 MR. BOB PETERS: I think you can use the

20 same data that was presented in the charts at appendix --

21 appendix 56.

22 MS. HAROLD SURMINSKI: Yes, for several -

23 - or a range of efficiencies, perhaps.

24 MR. BOB PETERS: There -- there was, and

25 would it be incorrect to just double the -- the

1 additional cost on gas-generated electricity and coal-  
2 generated electricity if the penalty went from fifteen  
3 dollars (\$15) a tonne to thirty (30)?

4 Is it directly proportionate?

5 MS. HAROLD SURMINSKI: The increment? I  
6 would think it would be, yes.

7 MR. BOB PETERS: Maybe just examine that,  
8 while you're giving me the fifteen (\$15) dollar a tonne,  
9 and make sure it just doubles if it was thirty (30).

10 MS. HAROLD SURMINSKI: Yes, we can check  
11 that.

12 MR. BOB PETERS: All right. Thank you.

13

14 --- UNDERTAKING NO. 6: Manitoba Hydro to provide  
15 estimate of the increase in  
16 gas generated electricity, as  
17 well as coal generated  
18 electricity, if there was a  
19 fifteen dollar (\$15) a tonne  
20 greenhouse gas penalty, and  
21 double for thirty (30)

22

23 CONTINUED BY MR. BOB PETERS:

24 MR. BOB PETERS: And I think where we  
25 left off, Mr. Warden, is that the Corporation is not

1 aware of the introduction of any United States  
2 legislation, nothing current and not aware of anything  
3 pending?

4 MR. VINCE WARDEN: That's -- that's  
5 correct, Mr. Peters, other than -- than the, as Mr. Mayer  
6 brought to our attention, the existing legislation that  
7 may be used, but that's uncertain as well at this point  
8 in time.

9 MR. BOB PETERS: Is it also correct, Mr.  
10 Warden, that the Chicago climate exchange has or is  
11 shutting down?

12 MR. VINCE WARDEN: If it hasn't already,  
13 it's in the process of shutting down, yes.

14 MR. BOB PETERS: And there will be no  
15 voluntary trading then on GHG credits, or...

16 MR. VINCE WARDEN: Not on the Chicago  
17 exchange.

18 MR. BOB PETERS: Is there any other  
19 exchange in North America that you can think of?

20 MR. VINCE WARDEN: There is an exchange  
21 in Alberta, but I --- you know, I'm not certain how  
22 active it is at this point.

23 MR. BOB PETERS: All right. Would  
24 Manitoba Hydro agree that without carbon legislation, US  
25 coal-generated electricity remains the base load supply

1 for most American utilities?

2 MR. VINCE WARDEN: Yes.

3 MR. BOB PETERS: It remains the least  
4 cost option?

5 MR. VINCE WARDEN: At this time, yes.

6 MR. BOB PETERS: Okay. And your answer  
7 was to suggest that if there was a carbon penalty that  
8 may change the -- the economics?

9 MR. VINCE WARDEN: Yes.

10 MR. BOB PETERS: Okay. But at this time  
11 it could be in that two (2) to three (3) cent range that  
12 I suggested to Mr. Surminski, and I believe he agreed  
13 with?

14 MR. VINCE WARDEN: Yes.

15 MR. BOB PETERS: Would it be a fair  
16 conclusion, Mr. Warden, that Manitoba Hydro's hydro-  
17 generated electricity will not displace coal-generated  
18 electricity unless Manitoba Hydro undercuts the price?

19 MR. VINCE WARDEN: No, I don't think  
20 that's -- well, certainly not as -- as -- with respect to  
21 our long-term firm contracts. Opportunity sales, of  
22 course, are competing with -- with that coal and -- and  
23 gas-fired generation.

24 MR. BOB PETERS: Fair clarification, but  
25 let's assume that I'm not talking any long-term contracts

1 that -- that you have in place or are negotiating. But  
2 in terms of displacing coal legis -- sorry, coal  
3 generation, the only way Manitoba Hydro can compete is on  
4 price. Is that not true?

5

6

(BRIEF PAUSE)

7

8 MR. HAROLD SURMINSKI: Yeah, Mr. Peters,  
9 there is another factor on the dispatchability of -- of  
10 hydro versus coal. If you only need energy for a few  
11 hours in a day, it's not practical to start up and shut  
12 down a coal plant, whereas the hydro energy can -- can  
13 serve that purpose.

14 MR. BOB PETERS: But that doesn't  
15 represent a lot of your exports does it, Mr. Surminski?

16 MR. HAROLD SURMINSKI: We don't know. It  
17 certainly can. If -- if a utility has coal as it's --  
18 almost, you know, complet -- completely satisfying or --  
19 in its portfolio, if it means turning on a coal plant for  
20 a few hours that -- that energy price of two (2) to three  
21 (3) quickly becomes double or triple that.

22 MR. BOB PETERS: But if that utility  
23 wants to go to the market and buy coal from the MISO  
24 market, buy coal-generated electricity, it would be  
25 available cheaper than Manitoba Hydro's hydro-generated

1 electricity. Wouldn't that generally be the case?

2 MR. HAROLD SURMINSKI: Yeah. Yes, it's -  
3 - the market is -- is determined -- or the price is  
4 determined by the market clearing price so it's hard to  
5 say. It probably -- it probably would be that. The --  
6 the market clearing price may be set by -- by coal.

7 MR. BOB PETERS: But Manitoba Hydro can  
8 compete with coal, but it needs to do that on a price  
9 basis, correct?

10 MR. HAROLD SURMINSKI: Yes, generally  
11 correct.

12 MR. BOB PETERS: And Manitoba Hydro can  
13 control the price at which it bids into the market. Is  
14 that something you can speak to?

15 MR. HAROLD SURMINSKI: Yes, Manitoba  
16 Hydro has complete control on -- on the bid.

17 MR. BOB PETERS: And so if Manitoba Hydro  
18 knows approximately what coal is in the market for,  
19 Manitoba Hydro can either choose to price below or above  
20 the coal price when it bids into the market?

21 MR. HAROLD SURMINSKI: Yes, that's  
22 correct.

23 MR. BOB PETERS: And if it bids into the  
24 market above the coal price, all the coal electrons will  
25 get snapped up before Manitoba Hydro's electrons will be

1 -- will be purchased by a prospective market participant?

2 MR. HAROLD SURMINSKI: Yes, that's  
3 correct.

4 MR. BOB PETERS: That's just generally  
5 how that market would work?

6 MR. HAROLD SURMINSKI: That's correct.

7 MR. BOB PETERS: And if somebody bid in,  
8 I don't know what nuclear costs, but I'm just saying, if  
9 it was a high price it would be at the other end of the  
10 spectrum. It would be at the -- at the expensive end?  
11 Maybe I'm not using a very good example.

12 MR. HAROLD SURMINSKI: Yeah, nuclear is -  
13 - is -- the incremental cost is very low.

14 MR. BOB PETERS: Yeah. All right. But  
15 you tell me the capital costs are huge though.

16 MR. HAROLD SURMINSKI: That's right.

17 MR. BOB PETERS: Well, the Board -- Mr.  
18 Surminski, the Board will have seen examples where  
19 Manitoba Hydro has been exporting off peak energy at less  
20 than one (1) cent a kilowatt hour, correct?

21 MR. HAROLD SURMINSKI: Yes, correct.

22 MR. BOB PETERS: And those would be off  
23 peak sales?

24 MR. HAROLD SURMINSKI: Yes, those are  
25 times when there is no other alternative. The water



1 either gets spilled or -- or you get whatever you can for  
2 it.

3 MR. BOB PETERS: And -- and you are  
4 prepared to sell them at -- at or below the price that  
5 coal would command for generating electricity?

6

7 (BRIEF PAUSE)

8

9 MS. HAROLD SURMINSKI: Yes, Manitoba  
10 Hydro is a price taker, and -- and if that's -- that's  
11 the most that you can get for your product that's what  
12 you take.

13 MR. BOB PETERS: Would it also be correct  
14 that there's no expected change in pricing for coal-  
15 generated electricity unless or until coal legislation  
16 surfaces -- or sorry, carbon legislation surfaces.

17 MS. HAROLD SURMINSKI: I -- I think --  
18 yeah, your -- your question implies that cost of  
19 generation from coal is rather stable and I would agree  
20 with that.

21 MR. BOB PETERS: I was trying to suggest  
22 that when you're in your planning meetings, you're not  
23 expecting coal to be displaced as a base load supplier  
24 for the mer -- for the many American utilities that are  
25 in the MISO market.

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(BRIEF PAUSE)

MR. VINCE WARDEN: Mr. Peters, it is largely a question of supply and demand, and as we've been talking about the demand has been depressed because of the economic conditions.

When that recovery takes place there will be a higher demand and consequently the price will rise accordingly.

MR. BOB PETERS: Ex -- except that the cost to produce from coal won't rise accordingly, just the market price for electricity will rise.

MR. VINCE WARDEN: Sure, but if there's a demand there, the price -- you know, those that are producing from coal will be able to command higher prices as well.

MR. BOB PETERS: And you expect Manitoba Hydro will then be able to command higher prices for its hydro-generated electricity.

MR. VINCE WARDEN: As we have done in the past, yes, when eco -- economic conditions are better in the US.

MR. BOB PETERS: And until that change happens it'll keep downward pressure on Manitoba Hydro's

1 export prices.

2 MR. VINCE WARDEN: Yes, that's the  
3 expectation.

4 MR. BOB PETERS: Mr. Chairman, this might  
5 be an opportune time to adjourn for the day, and I'll  
6 quickly complete some areas and I'll also look ahead and  
7 make sure that I'm not reading on Mr. Cormie's area. And  
8 we have to look forward to some OM&A discussion tomorrow.  
9 Thank you.

10 THE CHAIRPERSON: Okay. Thank you to the  
11 panel, thank you to Mr. Peters. We'll see you all  
12 tomorrow at 9:30.

13

14 (PANEL RETIRES)

15

16 --- Upon adjourning at 4:24 p.m.

17

18 Certified Correct,

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21 -----

22 Cheryl Lavigne, Ms.

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