

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

MANITOBA PUBLIC UTILITIES BOARD

Re: MANITOBA HYDRO  
COST OF SERVICE STUDY

Before Board Panel:

- Graham Lane - Board Chairman
- Robert Mayer - Board Member
- Kathi Avery Kinew - Board Member
- Len Evans - Board Member

HELD AT:

Public Utilities Board  
400, 330 Portage Avenue  
Winnipeg, Manitoba  
May 29th, 2006  
Volume X  
Pages 2113 to 2417

APPEARANCES

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

R.F. Peters ) Board Counsel  
  
Patti Ramage ) Manitoba Hydro  
Odette Fernandes )  
  
Byron Williams ) CAC/MSOS  
Myfanwy Bowman )  
  
Doug Buhr ) City of Winnipeg  
  
Peter Miller ) TREE  
  
Tamara McCaffrey ) MIPUG  
Patrick Bowman )  
Andrew McLaren )  
  
Jurgen Feldschmid ) CCEP  
  
Michael Anderson ) MKO

TABLE OF CONTENTS

1		
2		Page No.
3	List of Exhibits	
4	Opening Comments	
5		
6	Closing Comments by Mr. Bob Peters	2122
7	Closing Comments by Mr. Byron Williams	2142
8	Closing Comments by Ms. Myfanwy Bowman	2202
9	Continued Closing Comments by Mr. Byron Williams	2231
10	Closing Comments by Mr. Jurgen Feldschmid	2256
11	Closing Comments by Mr. Doug Buhr	2273
12	Closing Comments by Ms. Tamara McCaffrey	2280
13	Closing Comments by Dr. Peter Miller	2319
14	Closing Comments by Mr. Michael Anderson	2377
15		
16	Certificate of Transcript	2417
17		
18		
19		
20		
21		
22		
23		
24		
25		

	LIST OF EXHIBITS			
	Number	Description	Page No.	
1				
2				
3	MIPUG-9	Response to Undertaking 24.	2120	
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

1 --- Upon commencing at 9:06 a.m.

2

3 THE CHAIRPERSON: Good morning everyone.  
4 Before I turn it back to Mr. Peters to give us an outline  
5 of today's proceedings, I'll ask Ms. McCaffrey -- she has  
6 another exhibit to enter.

7 MS. TAMARA MCCAFFREY: And good morning,  
8 everybody. With respect to Undertaking number 24 that  
9 was given on Friday to Ms. Ramage, the transcript  
10 reference is page 2029, in which we were asked to confirm  
11 the current obligation of Quebec Hydro to its intensive  
12 load customers, Mr. Bowman was able to obtain some  
13 information on that this weekend and he'd like to have an  
14 opportunity to respond to that undertaking now.

15 THE CHAIRPERSON: Mr. Bowman...?

16 MR. PATRICK BOWMAN: Thank you. Good  
17 morning. The undertaking was with regards to Hydro  
18 Quebec's obligation to serve for large industrial  
19 customers.

20 Their -- a document was handed out which  
21 is the selected page from Hydro Quebec's tariff that is,  
22 as far as we are aware, still in place. It's dated April  
23 1st, '06, and it's from Hydro Quebec's website yesterday,  
24 which sets out that the -- the existing limit on -- on  
25 rate schedule -- the industrial rate schedule is 175,000



1 that's released, and recognize it's government policy  
2 document so it's not necessarily written in the language  
3 of a rate schedule, but that would be 50 megawatts per  
4 increment.

5                   So any customer seeking to -- new customer  
6 or a customer seeking to add more than 50 megawatts in  
7 one (1) increment would not necessarily have automatic  
8 access to the Rate Schedule L, if I remember correctly,  
9 which is the industrial rate schedule.

10                   Were a customer seeking -- a new customer  
11 above 50 megawatts or an existing customer seeking to add  
12 more than 50 megawatts, to want access to that rate  
13 schedule, they would need to deal with the -- the  
14 Government of Quebec, who would make a determination as  
15 to whether they would receive power on the same  
16 industrial rate schedule or at less favourable rates, and  
17 it would be dependent on the economic benefits they bring  
18 to the Province and their employment.

19                   And that would be a determination made by  
20 the Government as far as we can tell from the -- the  
21 policy document that's been released. And I believe the  
22 date on that document is May 4th, but it's early May,  
23 it's quite recent.

24                   THE CHAIRPERSON: Thank you, Mr. Bowman.  
25 If Manitoba Hydro has a comment on it, they can do it on

1 Friday. It might be the best way to proceed.

2 Ms. McCaffrey, do you remember the exhibit  
3 number it would be?

4 MR. BOB PETERS: MIPUG number 9 would be  
5 the exhibit --

6 THE CHAIRPERSON: Thank you, Mr. Peters.

7 MR. BOB PETERS: -- according to my  
8 record. Yes.

9 THE CHAIRPERSON: MIPUG number 9.

10 MS. TAMARA MCCAFFREY: Thank you, Mr.  
11 Peters.

12

13 --- EXHIBIT NO. MIPUG-9: Response to Undertaking 24.

14

15 THE CHAIRPERSON: Mr. Peters...?

16 MR. BOB PETERS: While we are on matters  
17 of housekeeping -- and good morning, Mr. Chairman and  
18 Board Members, Ladies and Gentlemen -- there is a matter  
19 that arose Friday relative to some documents that Mr.  
20 Anderson on behalf of MKO wanted to refer to in his  
21 closing submission.

22 And Mr. Anderson made the request and  
23 parties spoke to it on the record on Friday and Mr.  
24 Anderson was notified that he should attend early this  
25 morning so that he could share with the parties his



1 documents and parties could have an idea as to whether or  
2 not, they have any concerns or issues.

3           As it appears, Mr. Anderson is not  
4 available this morning but, he will be available after  
5 the lunch recess. And he did forward by email to the  
6 Board office this morning a number of documents that have  
7 been photocopies and circulated to -- I believe all  
8 parties.

9           At this point in time, Mr. Chairman, I'm  
10 suggesting that the documents in question simply be  
11 reviewed and taken by the parties who have received them.  
12 They can review them between now and after the lunch  
13 break. And if they have any questions or comments it may  
14 be appropriate to address those once Mr. Anderson is in  
15 attendance and then he can respond to any concerns that  
16 are raised.

17           So at this point in time, those documents  
18 are taken for information and will be reviewed and spoken  
19 to when Mr. Anderson arrives after the lunch hour.

20           The last matter that I think is  
21 housekeeping in nature is that in terms of undertakings  
22 from Manitoba Hydro, I believe those have also been  
23 attended last Friday afternoon and have been put on the  
24 record so there are no further undertakings to be filed.

25           I'll look to My Friend, Ms. Ramage, just

1 for confirmation.

2 MS. PATTI RAMAGE: That's correct.

3 MR. BOB PETERS: Having said that, Mr.  
4 Chairman, I believe we're at the time in the schedule for  
5 the closing submissions and I'm prepared to proceed with  
6 my brief, closing comments if it suits the Board at this  
7 time.

8 THE CHAIRPERSON: It does.

9

10 CLOSING COMMENTS BY MR. BOB PETERS:

11 MR. BOB PETERS: Thank you and good  
12 morning again.

13 We have now completed a lengthy public  
14 hearing process with respect to Manitoba Hydro's cost of  
15 service methodology. The oral evidence portion began on  
16 May the 4th, 2006.

17 As Board Counsel, it is not my intention  
18 to take any particular position on behalf of the Board  
19 with respect to the many matters and issues that have  
20 been raised in this application. Rather, I will attempt  
21 to summarize for the Board the key issues in this  
22 application and to identify certain other matters that I  
23 suggest may be referred to by the various Intervenors in  
24 their respective closing submissions.

25

1                   Mr. Chairman, Members of the Board, you've  
2 heard from several of the participants that the purpose  
3 of this particular cost of service public hearing process  
4 is to examine the cost of service methodology proposed by  
5 Manitoba Hydro and to consider possible modifications or  
6 alterations to the recommended methodology.

7                   I believe that all parties are in  
8 agreement that this application is not a General Rate  
9 Application and Manitoba Hydro is not requesting any  
10 change to current sales rates as a result of this  
11 process.

12                   At the conclusion of these proceedings,  
13 the Board's challenge will be to issue a Board order or  
14 orders directing Manitoba Hydro with respect to the cost  
15 of service methodology to use in future cost of service  
16 studies.

17                   We have heard that a cost of service study  
18 is but one (1) tool that may be used in designating and  
19 designing rates for service of Manitoba Hydro's  
20 customers. Therefore, the Board's decisions resulting  
21 from this Hearing with respect to cost of service  
22 methodology, may or may not, have an impact on future  
23 rate applications.

24                   Specific rate changes and specific rate  
25 impacts on customer classes, if any, resulting from any

1 changes in the cost of service study methodologies  
2 approved as a result of this hearing will be considered  
3 and dealt with by the Board in future general rate  
4 hearings.

5           Even though there are no immediate rate  
6 impacts the decisions resulting from this proceeding are  
7 nevertheless vitally important for at least two (2)  
8 reasons.

9           First, the resulting methodology may be  
10 used as a tool in the design of future rates.

11           And secondly, the cost of service  
12 methodology approved as a result of this proceeding may  
13 be in place for some time since the timing of the next  
14 GRA is uncertain and an indepth review of cost of service  
15 methodologies such as the process we have just completed  
16 does not necessarily occur at every General Rate  
17 Application.

18           The evidence filed by Manitoba Hydro in  
19 support of this application, as well as the evidence  
20 filed by Intervenors suggests that traditionally the  
21 purpose of a cost of service study is attempt -- is an  
22 attempt to allocate the utilities embedded costs or  
23 historic costs to various customer classes based on known  
24 customer characteristics, which reflect cost causation,  
25 and by so doing to help determine a fair sharing of a

1 Utility's revenue requirement among the customer classes.

2           As previously stated, the results of a  
3 cost of service study can be used as one (1) tool in the  
4 rate design process and rate changes, if any, are  
5 generally considered separate and apart from a cost of  
6 service methodology process.

7           Manitoba Hydro's 2006 prospective cost of  
8 service study, the subject of this hearing, is an  
9 embedded cost of service study where costs to serve  
10 customer classes are based on historic accounting costs  
11 including forecast net income.

12           The costs allocated in PCOSS '06 are  
13 forecasted costs for the fiscal year ending March 31,  
14 2006, taken from the integrated financial forecast for  
15 the fiscal years 2004/'05 through to 2014/'15. That IFF  
16 was prepared in October of 2004 and has been adjusted as  
17 required for cost of service purposes.

18           We have heard that the allocation of costs  
19 by Manitoba Hydro is approximate and that, although the  
20 cost of service study appears to be exact, there is in  
21 fact judgment involved. The evidence also indicates that  
22 there is no right or wrong way to allocate costs and  
23 Manitoba Hydro's fundamental objective is to select cost  
24 allocation methods that best reflect cost causation and  
25 an equitable sharing of costs among customer classes.

1                   One of the key decision that the Board  
2 must make, based on the evidence, is whether Manitoba  
3 Hydro's recommended cost of service methodology does in  
4 fact reflect cost causation and does result in a  
5 equitable sharing of costs between all customer classes.

6                   The Board has heard that Manitoba Hydro  
7 has conducted embedded cost of service studies since the  
8 mid 1970's and although there have been changes to  
9 allocation methodologies over the years, those changes  
10 have been related mostly to availability of more current  
11 and better data, such as customer load data, load factor  
12 information and the like.

13                   We've heard that most of the key features  
14 of Manitoba Hydro's cost of service study methodology  
15 have remained relatively constant over the years.  
16 Manitoba Hydro has testified that the key issue driving  
17 the need for change in the current cost of service  
18 methodology is the increasing significance of export  
19 revenue and the resulting impact of allocating net export  
20 revenue to the -- to the domestic customer classes.

21                   The Board has heard extensive evidence  
22 with respect to how the unit value of export revenue has  
23 increased significantly over recent years and evidence  
24 around the key issues in this application, which include  
25 the creation of an export class of customer, how costs

1 should be directly or indirectly assigned to the export  
2 class, and how the resulting net export revenue should be  
3 allocated to the domestic customer classes.

4           We have also heard that Manitoba Hydro is  
5 unique compared to other Utilities in North America with  
6 respect to the magnitude of its net export revenue.  
7 Several Intervenors have stated that once the appropriate  
8 costs have been allocated to the export class, the  
9 appropriate method to allocate the -- the resulting net  
10 export revenue to domestic customer classes is getting  
11 outside the realm of cost of service and is perhaps more  
12 a matter of policy and fairness.

13           Other Intervenor evidence suggests that  
14 cost causation principles should be applied within the  
15 cost of service study to allocate the net export revenue.

16           Mr. Chairman, Members of the Board, there  
17 is considerable detailed information on the record with  
18 respect to the background of the Hearing. The summarized  
19 version of that information can begin with Board Order 07  
20 of 03 which denied Manitoba Hydro's then requested change  
21 in the method of allocating net export revenue but  
22 directed Manitoba Hydro to carry out a study of  
23 generation cost classification techniques.

24           As a result, Manitoba Hydro engaged  
25 National Economic Research Association -- Associates, who

1 we've referred to as NERA, to conduct a study which was  
2 subsequently submitted to the Board as part of Manitoba  
3 Hydro's 2004/'05 General Rate Application.

4                   The NERA study recommended a number of  
5 significant changes to Manitoba Hydro's cost of service  
6 study, most notably that:

7                   1. Generation costs be classified and  
8 allocated on the basis of time differentiated marginal  
9 costs.

10                   2. Line-specific classification of  
11 transmission costs be used.

12                   Thirdly, costs be separated and allocated  
13 to an export class.

14                   And fourth, net export revenue be credited  
15 to domestic customers based on total allocated costs  
16 rather than only generation and transmission costs.

17                   During the 2004/05 GRA Manitoba Hydro took  
18 the position that the NERA report needed more study and  
19 did not suggest implementation of the NERA  
20 recommendations at that time. Subsequently, Board Orders  
21 101/04 and 143/04 resulting from Manitoba Hydro's 2004/05  
22 GRA directed Manitoba Hydro to file four (4) different  
23 cost of service studies being the current methodology,  
24 the NERA methodology, vintaging methodology and Manitoba  
25 Hydro's preferred methodology.



1                   In response to those directives Manitoba  
2 Hydro filed certain summary information but didn't  
3 include any detailed supporting information in February  
4 of 2005. At that time Manitoba Hydro indicated a  
5 preference to the NERA methodology.

6                   On -- on November 1st, 2005, in response  
7 to directives by the Board in Order 101/04, Manitoba  
8 Hydro filed a 2006/'07 and a 2007/'08 General Rate  
9 Application that included four (4) versions of the  
10 prospective cost of service study '06. Manitoba Hydro  
11 advised that the PCOSS '06 includes the revenue impacts  
12 of an October 1st, 2005 conditional rate increase which  
13 was not sought by the Utility nor granted by the Board.

14                   However, Manitoba Hydro has also stated  
15 that the inclusion of this additional revenue in the  
16 PCOSS '06 does not materially affect the cost of service  
17 study results.

18                   The NERA recommended methodology  
19 incorporated for cost of service study '06 differentiated  
20 from the previous NERA methodology that was filed in 2004  
21 in two (2) ways.

22                   Firstly, net export revenue was applied to  
23 fund the uniform rate adjustment as directed by the Board  
24 in Order 101/04. This uniform rate adjustment of  
25 approximately \$16.8 million is applied similarly in all

1 four (4) scenarios as a first charge against net export  
2 revenue.

3                   Secondly, the source data used to  
4 calculate the marginal cost indicators for generation  
5 costs is the inflation adjusted surplus energy program  
6 information for the period of January 1st, 1999 to  
7 October of 2005. In the PCOSS '04 commercially available  
8 Platts data was used.

9                   In the 2004 filing Manitoba Hydro adopted  
10 the NERA method as their preferred method. In the  
11 current filing Manitoba Hydro's recommended method  
12 modifies the NERA recommended method in two (2)  
13 significant ways.

14                   Firstly, two (2) classes of export  
15 customers, firm and opportunity, are created rather than  
16 the one (1) export class suggested in the NERA report.

17                   And, secondly, only variable costs are  
18 assigned to the opportunity export class.

19                   Subsequent to the November '05 GRA filing  
20 the Board determined that the cost of service methodology  
21 should be considered separate from the GRA and directed a  
22 separate public hearing process from which we are now in  
23 the process of completing.

24                   As I understand it, the GRA for 2005/'06  
25 has been cancelled and the GRA for 2006/'07 has been put

1 on hold by Manitoba Hydro pending resolution of the cost  
2 of service matters and may be further deferred pending a  
3 decision of Manitoba Hydro's board in the fall of 2006.

4 Mr. Chairman and members of the Panel, as  
5 I stated in my opening comments there are a lot of  
6 numbers, a lot of allocation methodologies and a lot of  
7 detail in the application before you. In addition, the  
8 Board has heard a great deal of detailed evidence from  
9 Manitoba Hydro and from the interested parties.

10 I suggest that at the end of the day there  
11 are key questions that the Board will need to answer and  
12 these include, firstly; should there be any export  
13 classes; should there be one (1); should there be two  
14 (2); or should there be some other number?

15 We have heard evidence that a customer  
16 class represents a group of customers who have roughly  
17 the same service requirements and therefore the Board  
18 will need to consider whether there is enough of a  
19 distinction in service requirements between firm and  
20 opportunity export customers as it considers Manitoba  
21 Hydro's recommendation for two (2) classes of export  
22 customers.

23 Number 2. Once the appropriate number of  
24 export classes has been determined, if there is to be any  
25 export class, what costs should be either directly or

1 indirectly assigned or allocated to each of the export  
2 customer classes.

3                   We have heard evidence that there are  
4 conflicting considerations and determinations for cost  
5 causation and that the objective is not to determine the  
6 actual costs of export for purposes of setting export  
7 prices, but rather to arrive at a fair allocation of  
8 costs to domestic customers.

9                   We have also heard that even though some  
10 costs that are intuitively directly related to export are  
11 not directly assigned to export. The Manitoba Hydro  
12 recommended method of treating firm exports is in a  
13 similar fashion to domestic loads and allocating them a  
14 full share of embedded costs, while excluding an  
15 allocation of embedded costs to opportunity sales.

16                   We have also heard that the usage of  
17 certain generation and transmission assets may be  
18 different than cost causation.

19                   Number 3. Once the appropriate costs if  
20 any, to charge either directly or indirectly against any  
21 export revenue has been determined, how should the  
22 resulting net export revenue benefit be credited or  
23 allocated to the domestic customer classes.

24                   On this point, I should note that before  
25 the allocation of net export revenue, no domestic

1 customer classes appear to pay sufficient rates to cover  
2 all of their allocated costs. We have heard evidence  
3 that the current method of allocating the credit, based  
4 on allocated generation and transmission costs was  
5 appropriate and acceptable in prior years when the unit  
6 price to export revenue was close to embedded cost.

7                   Manitoba Hydro and certain Intervenors  
8 have stated that in today's world, when the unit price of  
9 export sales exceeds the fixed cost of generation and  
10 transmission this method is no longer appropriate.  
11 Unfortunately, the Board can draw no guidance from other  
12 jurisdictions on this matter since, as we have heard,  
13 Manitoba Hydro is unique with respect to the magnitude of  
14 its net export profits.

15                   Based on the body of evidence it appears  
16 that those three (3) issues will have the potential to  
17 have the greatest impact and effect on cost of service  
18 results.

19                   However, there are a number of other  
20 issues that have been touched on and examined during the  
21 Hearing. Although I don't intend to discuss each in  
22 detail, I do wish to identify some of the more  
23 significant ones that may be addressed in more detail by  
24 Manitoba Hydro and the various Intervenors.

25                   Some of these matters in no particular

1 order of importance would include:

2                   Number 1, the use of embedded costs versus  
3 marginal costs. We have heard the embedded cost of  
4 service study are the norm in the North America and  
5 although Manitoba Hydro could prepare a marginal cost of  
6 service study, it would require at least six (6) to eight  
7 (8) months of effort and raises other issues. The Board  
8 is interested in each of the parties views with respect  
9 to the merits, if any, of a marginal cost of service  
10 study as opposed to an embedded approach.

11                   Number 2. The relevance if any, of other  
12 cost considerations such as replacement costs, inflation  
13 adjustment cost, et cetera, for cost allocation purposes.  
14 My recollection of the record is that most parties agree  
15 that other cost considerations likely have some  
16 importance in energy pricing and matters relating to  
17 inter-generational equity, but likely have limited if any  
18 application in the cost allocation process. Various  
19 parties may want to cover this in their closing  
20 arguments.

21                   Number 3, other requested changes to the  
22 functionalization classification and allocation of costs.  
23 We have heard that except for the creation of an export  
24 customer class and the proposed change in allocation of  
25 net export revenue, the balance of the proposed

1 methodology changes have a minimal impact on the cost of  
2 service study results.

3                   And in some ways approval by the Board is  
4 supported for some of all of these by the various  
5 parties.

6                   The impact of various proposed changes is  
7 clearly demonstrated in the material that is included  
8 under Tab 11 of the PUB book of documents. And in spite  
9 of general acceptance of some of these methods by the  
10 Intervenors, I believe there are a few areas of proposed  
11 changes that were specifically objected to by the  
12 Intervenors, including the treatment of transmission  
13 lines and the number of periods used for weighted energy.

14                   Manitoba Hydro in their rebuttal evidence  
15 has agreed to modify some of these items and Intervenors  
16 should be clear in their closing arguments as to their  
17 remaining concerns, if any.

18                   Number 4, the key difference between the  
19 NERA method and the Manitoba Hydro recommended method.  
20 And as I understand it, the two (2) differences between  
21 the NERA method and the recommended method are firstly,  
22 the use of surplus energy program as a proxy for marginal  
23 cost pricing, and number 2, the creation of two (2)  
24 export classes as previously discussed.

25                   Number 5, the merits of -- if any, of the

1 generation vintaging methodology. We have heard from Mr.  
2 Lazar who, I think, originally recommended consideration  
3 of this method, that his recommendation was more from the  
4 prospective of assigning low cost, older generation to  
5 provide low cost first rate block power to residential  
6 customers.

7 I understood Mr. Lazar to say that he  
8 considers this approach to introduce unnecessary  
9 complications to the cost of service process with little  
10 or no difference in results.

11 Number 6, the use of surplus energy  
12 program rates as a proxy for marginal costs. I  
13 understand that all parties appear in agreement that the  
14 surplus energy program rates are a reasonable proxy and  
15 Manitoba Hydro's offer in their rebuttal evidence to  
16 extend the number of periods to twelve (12) may deal with  
17 the concerns raised by other Intervenors.

18 Number 7, the treatment of deferral --  
19 deferred costs such as planning studies in the cost of  
20 service study. Although this matter was not specifically  
21 contested by any of the Intervenors the question facing  
22 the Board is whether these costs, in excess of \$150  
23 million, have any future benefit and are appropriate to  
24 include in future cost of service studies as these costs  
25 are presently amortized over ten (10) or fifteen (15)



1 years.

2                   Number 8, the treatment of mitigation  
3 costs. This item is similar to the deferred cost issue  
4 except that it represents expenditure by Manitoba Hydro  
5 in excess of half a billion dollars.

6                   Number 9, the impact both now and in the  
7 future of Bill 11 and the uniform rate adjustment.  
8 Manitoba Hydro has reflected the uniform rate adjustment  
9 in all four (4) methodologies filed in accordance with  
10 the direction of the Board in Order 101/04.

11                   I understand Manitoba Hydro has indicated  
12 that the requirements of Bill 11 will be dealt with by  
13 Manitoba Hydro once the legislation is passed.

14                   Number 10, the water rental calculations.  
15 There has been some discussion concerning the water  
16 rental calculation and certain adjustments that may be  
17 required if other charges to the firm export class are  
18 adjusted. Intervenors should be clear in their arguments  
19 as to what adjustments they are supporting.

20                   Number 11, class consolidation  
21 considerations. Manitoba Hydro has suggested that class  
22 consolidation might simplify the COSS process by reducing  
23 the number of customer classes but has deferred this  
24 matter for another day pending more research and study.

25                   Number 12, issues related to building for

1 export, both past, present and in the future. This  
2 important issue ties directly to the issue of charging  
3 all appropriate costs to the export class. Manitoba  
4 Hydro has supported the position that, to date, no plant  
5 has been built specifically for export although Manitoba  
6 Hydro has taken advantage of the export market to advance  
7 the in service date or increase the capacity of certain  
8 generation.

9                   13, adjustment of demand and energy  
10 charges. Manitoba Hydro filed a copy of a report in  
11 support of this topic but did not address the report as  
12 part of the cost of service process. And my  
13 understanding that -- that this report will be dealt with  
14 as part of the next rate hearing process.

15                   Number 14, time of use and inverted rates.  
16 Although some references were made during the course of  
17 the hearing with respect to inverted and time of use  
18 rates those discussions were generally around the ability  
19 or otherwise of these types of rates to give more  
20 efficient pricing signals.

21                   As previously stated, this is not a rate  
22 hearing and I believe most parties are prepared to defer  
23 the debate on inverted and time of use rates to a future  
24 GRA.

25                   Number 15, terms and conditions of export

1 contracts. This topic ties directly to the question of  
2 whether there should be any export class and, if so,  
3 whether there is a distinction between firm and  
4 opportunity sales sufficient to support two (2) export  
5 customer classes.

6 Manitoba Hydro has provided information as  
7 to the current terms of most firm and opportunity sales  
8 and the current requirements of the MISO and MAPP  
9 entities. The Board will be interested in the respective  
10 views of each party with respect to whether there should  
11 be no export classes, one (1) export class, two (2)  
12 export classes or some other number for cost of service  
13 purposes.

14 Number 16, treatment of the costs related  
15 to the Brandon and Selkirk thermal plants together with  
16 the treatment of purchase power. The debate around the  
17 Brandon and Selkirk thermal plants centered on the  
18 question of what level of use relates to export sales and  
19 more specifically what costs from these units should be  
20 directly or indirectly charged to the export customer  
21 class.

22 Intervenors should specifically state  
23 their views with respect to the treatment of these costs.

24

25 17, the treatment of transmission lines

1 and losses. Manitoba Hydro has acknowledged that a  
2 significant amount of transmission losses relate to  
3 export sales yet the cost of transmission losses are  
4 included in generation costs and allocated to both  
5 domestic and firm customers.

6

7 (BRIEF PAUSE)

8

9 MR. BOB PETERS: Number 18, and almost  
10 the end. The power resource plan was mentioned and  
11 examined only in reference to dependable energy resources  
12 and allocations of purchase power and fuel costs to the  
13 export class.

14 The last item that I have here is the zone  
15 of reasonableness. And we have heard that there is a  
16 significant amount of judgment required in a cost of  
17 service study and because of that significant amount of  
18 judgment a zone between decimal ninety-five (.95) and one  
19 point zero five (1.05) is considered a zone in which if  
20 the rate of the RCC's are achieved is sufficient for  
21 rate-setting purposes.

22 The Board may be interested to hear from  
23 parties as to the appropriateness of the current zone of  
24 reasonableness and whether reducing the range is  
25 something that should be considered.

1                   Mr. Chairman, subject to my voice holding  
2 out because of yelling in an arena all weekend, I'm  
3 wondering if you have any further questions of me. And  
4 if you don't, I would suggest that you would call on the  
5 Intervenors in the order listed in the proceedings,  
6 starting with the Consumer's Association of Canada and  
7 the Manitoba Society of Seniors and follow for their  
8 closing comments.

9                   Thank you.

10                  THE CHAIRPERSON:    Thank you Mr. Peters.

11

12                                       (BRIEF PAUSE)

13

14                  THE CHAIRPERSON:    Thank you. We have no  
15 further questions for you.

16                  Mr. Williams, Consumers Association of  
17 Canada Manitoba Society of Seniors...?

18                  MR. BYRON WILLIAMS:    Good morning, Mr.  
19 Chairman and Members of the Board. I fear that I haven't  
20 been in a hockey arena all weekend but, I have been  
21 working on my closing argument so I do have some fear  
22 that my voice will not last the entire morning, as well.

23                  I'm going to move directly into the oral  
24 argument. We do have a couple of handouts; one (1), Mr.  
25 Barron, I don't know if you've handed out already the

1 CAC/MSOS outline. Well perhaps you could hand that out  
2 to the Board at this time.

3

4 (BRIEF PAUSE)

5

6 THE CHAIRPERSON: Yes, we'll just take  
7 this as a pause for thirty (30) seconds.

8

9 (BRIEF PAUSE)

10

11 THE CHAIRPERSON: Okay, Mr. Williams.

12

13 CLOSING COMMENTS BY MR. BYRON WILLIAMS:

14 MR. BYRON WILLIAMS: Thank you. And  
15 before proceeding I do want to thank My Friend Mr.  
16 Peters, for the job he's done in this proceeding and  
17 herding his group of cats toward hopefully which will be  
18 an effective and positive resolution.

19 I concur with his observation that on the  
20 record there are lots of numbers and lots of allocation  
21 methods and lots of detailed evidence. And I agree that  
22 there are lots of questions to be asked, as well. I  
23 think he numbered nineteen (19). Massive as my ego is,  
24 I'm not sure I'm prepared to go, or capable of going  
25 through all nineteen (19) in detail in our closing







1 there been a fundamental change? I think it's noteworthy  
2 that in a hearing marked, generally, by sharp  
3 disagreements on a variety of issues, there's rare  
4 unanimity amongst Mr. Harper, Mr. Weins and Mr. Bowman,  
5 that there has been a fundamental change with regard to  
6 the relationship between the prices Manitoba Hydro can  
7 secure on the export market for both firm and opportunity  
8 sales, and the relationship to the prices it can secure  
9 on the domestic market.

10 At least at that point, I think there's an  
11 agreement.

12 Put simply, during the 1980's, and a good  
13 deal of the 1990's, average revenues per kilowatt hour  
14 from firm and opportunity sales, tended to be less than  
15 average revenue per kilowatt hour for domestic sales.  
16 Given the surplus energy and capacity on the system at  
17 that time, an increase in domestic consumption was, in  
18 the financial sense, a good deal for Manitoba Hydro, in  
19 that it directed those diverted kilowatt hours away from  
20 the export market, less lucrative export sales, towards  
21 more beneficial domestic sales.

22 So at that point in time a diversion, an  
23 increase in consumption domestically, worked to the  
24 benefit of all ratepayers by improving the financial  
25 performance of the Corporation.

1                   And a good example of this was made --  
2 noted at page 651 of the transcript, in my cross-  
3 examination of Mr. Weins, when we talked about how in the  
4 1980's the average export revenue was only about one  
5 point five (1.5) cents per kilowatt hour, while the  
6 average domestic revenue was three point eight (3.8)  
7 cents per kilowatt hour. And at that point -- with those  
8 kind of numbers you can see why an increase in domestic  
9 consumption was a good deal from a financial perspective  
10 of Manitoba Hydro consumers.

11                   Today, of course, the converse is true.  
12 An increase in domestic sales at the expense of the lost  
13 opportunity to realize export sales, on average, leaves  
14 the Corporation with less revenue.

15                   And this, again, was a point well made by  
16 Mr. Wiens in my cross-examination of him at page 651 of  
17 the transcript. He noted that currently the average  
18 price per kilowatt hour for exports sales is in the range  
19 of six point one (6.1) cents a kilowatt hour. Whereas,  
20 when you look at general service large surrogate  
21 transmission, you're talking about only three point one  
22 (3.1) cents a kilowatt hour.

23                   So in these times of surplus energy and  
24 capacity, an increase in consumption by a class such as  
25 GSL, greater than 100 KV, for every kilowatt hour of that

1 increase in consumption, it earns the Corporation, on  
2 average, about three point one (3.1) cents a kilowatt  
3 hour, but results in a lost opportunity to earn revenues  
4 in the export market of about six point one (6.1) cents  
5 per kilowatt hour.

6 So from the financial perspective, the  
7 reality is, today, that an increase in domestic  
8 consumption, at the expense of export sales, results in a  
9 decrease in overall revenue.

10 This simple fact is not offered as a  
11 judgment on whether an increase in domestic consumption  
12 is a good thing or a bad thing, but it does mean that we  
13 have to recognize for the cost of service methodology,  
14 that an increase in domestic consumption effectively  
15 reduces the revenue of the system as a whole. And that  
16 raises the question of whether the current methodology  
17 appropriately deals with that reality.

18 Is this observation of fundamental change  
19 controversial? Well, not to Mr. Wiens. In our cross-  
20 examination of him, it's page 648 to 653, he made his  
21 views on that clear.

22 And it's also concurred with by Mr.  
23 Harper, and he made that clear both in his direct  
24 evidence and his written evidence. As he puts it, if  
25 available generation is diverted from exports through an

1 increase in domestic loads, the net effect would be an  
2 increase in costs for all customers.

3                   What about Mr. Bowman? To his credit Mr.  
4 Bowman implicitly accepted the premise of fundamental  
5 change, even in his written evidence, and he explicitly  
6 accepted it during his conversation with me on Friday  
7 afternoon.

8                   His implicit recognition of fundamental  
9 change can be found in footnote 25 of his evidence, when  
10 he notes that the volume of export sales is not driving  
11 the increase in export revenues. In his words:

12                   "The major difference in the export  
13 revenues is from the increase in  
14 price."

15                   And he also identified, on that same page,  
16 lines -- which is page 12, lines 18 and 19, the fact  
17 that:

18                   "Opportunity as well as firm export  
19 sales have recently secured prices in  
20 excess of domestic rates."

21                   Now, I want to be careful in how I  
22 characterize Mr. Bowman's evidence, because he'll -- I  
23 think he's prepared to walk part way down the fundamental  
24 charge argument with Mr. Harper and Mr. Wiens, in that he  
25 recognized that there's been a fundamental change in the

1 price per unit.

2 I'm not trying to suggest that he would  
3 concur with the second part of their conclusions in terms  
4 of fundamental change; that an increase in domestic  
5 consumption, at the expense of export sales, leads to a  
6 net decrease in the financial position of the  
7 Corporation.

8 But he clearly accepts the fundamental  
9 change in the price per kilowatt hour, and in fact, in my  
10 cross-examination of him on Friday, he used those words  
11 "fundamental change" in discussing the rise in the price  
12 per kilowatt hour of export sales. So while he might not  
13 go as far as Mr. Wiens and Mr. Harper, he may go -- he's  
14 certainly going part way down their line.

15 Just one (1) other small point. I think  
16 Mr. Wiens in that same conversation -- or Mr., excuse me,  
17 Bowman in that same conversation, also identified what he  
18 considered to be at least one (1) other fundamental  
19 change. And I'm certainly not quoting him directly but  
20 he was referring to the changes in the MISO market, M-I-  
21 S-O, as of 2005, which, in his view, enabled Manitoba  
22 Hydro to sharpen its pencils and take advantage of  
23 geographic arbitrage opportunities in markets such as  
24 Ontario, where in the past it had only been able to take  
25 advantage of time of use opportunities.



1 say we need to change the current cost of service  
2 methodology, I believe that there is an important and  
3 subtle distinction in their reasons for advocating  
4 change, that I want to talk about quite briefly.

5           As I understand Mr. Wiens' position, and I  
6 believe it's set out well at page 649 of the transcript,  
7 his concern is that the current method of exclusively  
8 allocating export revenues back to generation and  
9 transmission costs -- net export revenues, is  
10 inconsistent with cost of services best practices because  
11 it is both unfair and inefficient.

12           And again, as noted at page 649, it is  
13 unfair to allocate export revenues back to 'G' and 'T'  
14 exclusively, because an increase in class consumption  
15 increases that class's share of net export revenues,  
16 notwithstanding the fact that increased domestic  
17 consumption actually reduces systems revenues, if it  
18 comes at the expense of export sales.

19           And I hesitate to raise the example of the  
20 garage owners, but it is like the example of the garage  
21 owners, which Mr. Wiens talked about at page 625 of the  
22 transcript, where one (1) partner's increased usage was  
23 taking money out of his partner's pockets by depriving  
24 them of the opportunity to earn more lucrative income  
25 from renting it to others.

1                   With Mr. Wiens conclusions in terms of  
2 fairness, I believe it's clear that Mr. Harper hardly  
3 concurs. And it's important to note that, from his  
4 perspective, the primary objective of cost of service  
5 methodology should be fairness, as achieved by the  
6 acknowledgement of the principles of cost causation.

7                   In Harper's views, and he set this out  
8 well, both in his direct and written evidence, the  
9 current allocation of all net export revenues to 'G' and  
10 'T' is unfair. And his concern with the current cost of  
11 service methodology is that it disproportionately rewards  
12 those who are reducing overall system revenue by  
13 increasing consumption.

14                   And I think he said it very well in his  
15 direct evidence:

16                   "Given that customer use can impair the  
17 ability to make more lucrative export  
18 sales, it is now counter-intuitive to  
19 the principle of cost causality to  
20 allocate net export revenues on the  
21 basis of generation and transmission  
22 usage.

23                   It isn't the use of the generation and  
24 transmission that allows for net export  
25 revenues, but rather such use impedes



1 the ability to make exports and leads  
2 to increased costs for all domestic  
3 consumers. This would suggest that the  
4 current allocation is inconsistent with  
5 the principle of fairness based on cost  
6 causality."

7 In Harper's view, the current method sends  
8 the perverse signal that use of 'G' and 'T' assets causes  
9 net export revenues to increase, when the opposite is  
10 true. And again, I want to emphasize that Mr. Harper is  
11 not saying or arguing that we should be restricting or  
12 deterring domestic consumption.

13 He's just saying that for the purposes of  
14 the cost of services methodology, something fundamental  
15 has changed, and so the methodology that we use to  
16 consider net export revenues, also has to change. From  
17 his perspective, from the fairness perspective, the  
18 current system is not analytically sustainable.

19 This is where I'm going to move onto Mr.  
20 Wiens' comments on efficiency, because here's where the  
21 distinction between Harper and Wiens, I believe, is on  
22 this issue.

23 Harper's primary focus is on fairness and  
24 cost causality. I think in terms of the cost of service  
25 methodology, Mr. Wiens goes a bit further and he argues

1 that the current system raises material efficiency  
2 concerns.

3 And he points to the example of the GSL  
4 large, greater than 100 kV class, where incremental rates  
5 run significantly below short run marginal costs. And he  
6 makes this point well at page 644 of the transcript.

7 And I believe Mr. Wiens is on the same  
8 ground as NERA on this point, and this point is made at  
9 page 631 of the transcript, where we summarize NERA's  
10 concerns that allocating net export revenues solely  
11 across generation and transmission, raises the concerns  
12 of energy charges for certain classes being below short  
13 run marginal costs.

14 Mr. Wiens goes on to note that these  
15 concerns also trickle over into rate design, and he does  
16 that at pages 654 to 656 of the transcript. I'm not  
17 suggesting that Mr. Harper disagrees with him on these  
18 points, but the distinction between the two (2), as I  
19 understand it, is that Mr. Wiens says that the current  
20 method of allocating costs -- net export revenues across  
21 generation transmission is unsustainable, both for  
22 fairness reasons and efficiency reasons.

23 Mr. Harper, instead, would argue, that  
24 when you're talking cost of service, it is primarily a  
25 fairness test. In his words and in his view, the current

1 methodology fails the fairness test. But that's what  
2 he's focused on at this part of the test.

3

4 (BRIEF PAUSE)

5

6 MR. BYRON WILLIAMS: So on this point,  
7 being point two (2) of our argument, we would urge the  
8 Board to find that the current system of allocating net  
9 export revenues to generation and transmission, is not  
10 sustainable on the grounds of fairness.

11 In other words, it's not fair to allocate  
12 all net export revenues to generation and transmission  
13 because it sends the wrong message about cost causation,  
14 because the reality is, that for every kilowatt hour  
15 consumed domestically, there was one (1) less kilowatt  
16 hour for export, and from an overall system perspective,  
17 less revenues.

18 But what are Mr. Bowman's views, because  
19 his views on this matter are important and I do want to  
20 address them. He deals with Mr. Wiens efficiency  
21 argument by suggesting that that's more a matter for rate  
22 design.

23 But his comments on fairness are more  
24 subtle and more complex. And our understanding of Mr.  
25 Bowman's position on this point is that he would leave

1 open the theoretical possibility that the current method  
2 is unfair, in terms of the allocation of net export  
3 revenues, but he is not yet persuaded of that fact.

4           And in my view, Mr. Bowman's points on  
5 this area were subtly expressed in his response to  
6 CAC/MSOS Interrogatory 7, but became more apparent during  
7 his direct evidence on Friday, and during his cross-  
8 examination both by CAC/MSOS and by Board Counsel.

9           And as I understand Mr. Bowman's argument,  
10 he's prepared to accept that the worm has turned on the  
11 revenue side, with the price for both firm and  
12 opportunity exports now surpassing, on average, the price  
13 for domestic rates.

14           But he would also argue that, on average,  
15 the cost associated with exports are likely to be higher  
16 than the cost associated with domestic sales. To put it  
17 succinctly, in Mr. Bowman's views, all the low hanging  
18 fruit has been picked, and now the costs associated with  
19 energy resources for exports, such as DSM, SSE Wuskwatim,  
20 are likely to be higher than average and closer to  
21 avoided marginal costs.

22           If I have not said so before I should say  
23 that certainly on behalf of CAC/MSOS we consider Mr.  
24 Bowman to be a talented and often innovative analyst.  
25 But on this particular point we must respectfully point

1 out that his low hanging fruit argument is fundamentally  
2 undermined.

3                   It's undermined by the evidence before  
4 this tribunal and by the findings of the Clean  
5 Environment Commission relating to the relative costs of  
6 new power options such as DSM and SSE. It's undermined  
7 by the evidence within the Power Resource Plan of  
8 Manitoba Hydro regarding the large amounts of old surplus  
9 dependable energy to support export sales.

10                   It's undermined by the evidence of system  
11 planners, such as Mr. Surminski, who are intimately  
12 familiar with the day-to-day operation of Manitoba Hydro.  
13 And in our view his position on this point is undermined  
14 by his own evidence that he gave on Friday and I'll go  
15 through each of these in detail.

16                   Together though this information  
17 effectively refutes the suggestion by Mr. Bowman that  
18 resource options such as SSE and DSM are being brought  
19 into service at costs close to marginal costs as well as  
20 his suggestion that there is no low hanging fruit and,  
21 above all, they refute his refusal to accept that an  
22 increase in domestic consumption leads to a decrease in  
23 revenues.

24                   The first point I want to talk about on  
25 this area in terms of the low hanging fruit argument is

1 Mr. Bowman's suggestion that resource options such as DSM  
2 and SSE are not low hanging fruit and in our view that  
3 can't survive the white light of regulatory scrutiny.

4 At your leisure, you don't have to turn to  
5 it now, but the CAC/MSOS book of references at Tab 8 you  
6 can see there, and Mr. Harper talked about this in his  
7 direct evidence, you can see the cumulative results of  
8 the DSM programming to date based on the broad total  
9 revenue cost test.

10 And you can see that the ratio is an  
11 extremely positive ratio of two point five to one  
12 (2.5:1). And the -- and over the long-term the ratio is  
13 expected, and experience is expected to be one point  
14 seven (1.7).

15 As Mr. Harper noted these returns and  
16 ratios suggest that Manitoba Hydro will be, on average,  
17 paying significantly less than avoided costs for DSM  
18 benefits. And this point was made in -- at least in my  
19 understanding, the decision by the Clean Environment  
20 Commission in its decision on Wuskwatim and, again, you  
21 don't need to turn there, but if you're looking for  
22 reference that's inserted at Tab 16 of the CAC/MSOS book  
23 of references.

24 And if you turn to that tab you'll observe  
25 that the Clean Environment Commission also spoke directly

1 to the great value of demand side management as a  
2 resource option and urged Manitoba Hydro to do more than  
3 increase its DSM targets by one (1) -- by one point five  
4 to two (1.5:2).

5                   It said and expected that Hydro can do  
6 better than two (2) times DSM. The implication from that  
7 being certainly that there's a lot of ripe fruit to pluck  
8 in terms of DSM.

9                   When one turns to the issue of SSE, or  
10 supply side enhancements, again, the point is that there  
11 was much ripe low hanging fruit yet to pluck is -- is  
12 made. And if you go to the -- and, again, you don't need  
13 to do this now, but in the CAC/MSOS book of references  
14 Tab 9, there is an excerpt from the Wuskwatim proceeding  
15 which Mr. Harper referred to in his direct evidence.

16                   And you'll see there internal rate of  
17 returns for future supply side enhancement options  
18 ranging from 10 to 30 percent. And the best example of  
19 this is the example of Kelsey: Supply side enhancements  
20 of 96 million with an in service date of 2011 and with a  
21 projected internal rate of return of 20.5 percent. And  
22 certainly that would come within even the most rigid  
23 definition of low-hanging fruit

24                   I do note that this point was also made by  
25 -- by the Clean Environment Commission during the -- the

1 Wuskwatim proceeding. And it was almost a given that the  
2 ultimate in low-hanging fruit in that proceeding were  
3 future supply site enhancements.

4                   And again that excerpt from Tab 16 of the  
5 -- of the CAC/MSOS book of references from the CE'S --  
6 the Clean Environment Commission executive summary, just  
7 provides a bit of insight into the Clean Environment  
8 Commission's thinking on that point. If you want further  
9 evidence you can -- of the Commission's finding you can  
10 certainly refer to the full decision.

11                   I note that, just briefly on -- on the  
12 issue of -- of supply side enhancements, Mr. Bowman  
13 seemed to be somewhat disparaging of the -- or -- of the  
14 Pointe de Bois proposal and suggesting that there was  
15 some pretty significant costs associated with it.

16                   And I don't want to belabour this point  
17 but if you note at Tab 9 of the CAC/MSOS book of  
18 references, there is some reference to Pointe de Bois and  
19 there's a note that they haven't actually made a decision  
20 on whether to refurbish that plant. So there's -- they  
21 haven't made a decision in terms of whether to walk down  
22 that path and that there's no internal rate of return  
23 projected. So I think it's premature to offer any  
24 judgment on Pointe de Bois, especially based on the  
25 evidence in this proceeding.



1                   A second point that Mr. Bowman seemed to  
2 be making in terms of the -- his suggestion that the  
3 costs associated with exports were going to be on average  
4 higher than the costs associated with domestic sales, was  
5 the suggestion, well look -- look at the future,  
6 Wuskwatim is coming on line and look at the fact that the  
7 costs associated with Wuskwatim are higher than -- than  
8 the embedded costs for Manitoba Hydro currently.

9                   Now, I guess there is two (2) important  
10 points to understand about this. First of all,  
11 Wuskwatim, while in its early years will be used  
12 primarily to -- to provide additional surplus capacity  
13 for export sales. Certainly by 2018 or so there will be  
14 a cross-over date when it's needed for domestic purposes.

15                   But even -- even leaving aside that point,  
16 there's also another critical point, and this was made by  
17 Mr. Surminski at page 671 of the transcript. He pointed  
18 out that when you're looking at where export costs are  
19 coming -- or export revenues are coming from today, he  
20 noted that current exports are from excess supply from  
21 Hydro's facilities built many years ago. And he also  
22 confirmed at page 671 of the transcript that even when  
23 Wuskwatim is in service over one half (1/2) of firm  
24 exports will still be flowing from these older  
25 facilities.

1                   And this is a point supported by Mr.  
2 Harper, and he noted this in his direct evidence, that  
3 Manitoba Hydro's most recent power resource plan which is  
4 set out at PUB 1-22, indicates that for the next few  
5 years there will be roughly 4,000 gigawatt hours of  
6 surplus dependable energy available, much of which will  
7 come from older power.

8                   I think it's also important to note that  
9 Mr. Bowman's suggestion that the costs associated with  
10 export sales are likely to be higher than the costs  
11 associated with domestic sales has been directly refuted,  
12 in my understanding of the evidence, by experienced  
13 system planners, such as Mr. Surminski, who have an  
14 intimate day-to-day familiarity with the hydro system.

15                   And I would ask the Board to recall that  
16 when Mr. Harper -- when Bill Harper was expressly asked  
17 to offer his opinion on the relative costs associated  
18 with certain capital expenditures, he quite rightly  
19 pointed out that he had not been qualified in this  
20 proceeding as an expert in that area.

21                   Given Mr. Bowman's candid admission on  
22 Friday of his absence of experience with the day-to-day  
23 operations of Manitoba Hydro, in weighing Mr. Bowman's  
24 evidence we would recommend that a similar caveat should  
25 be observed.

1                   Finally, in our view Mr. Bowman's argument  
2 that the costs associated with experts (sic) should  
3 consid -- should be considered to be higher than embedded  
4 costs are also refuted by his own direct evidence in  
5 terms of the value of new industrial developments, as  
6 well as by his comments to Counsel for CAC/MSOS and Board  
7 Counsel on cross-examination.

8                   And you'll recall that on Friday, during  
9 cross-examination Mr. Bowman spoke of Limestone. And he  
10 talked about how today's customers are benefitting from  
11 the investments in the past and how future customers can  
12 be expected to benefit from the investments of today.

13                   And the point that he confirmed in cross-  
14 examination with CAC/MSOS was that bringing in service  
15 new generation to meet increased loads will in the short  
16 term certainly lead to lower financial results, but  
17 however he noted that today's customers are the  
18 beneficiaries of facilities that were installed in the  
19 past and they're now benefitting from the lower cost, as  
20 a result of past customers facing poor financial results.

21                   And he noted that similarly, tomorrow's  
22 customers, while they may experience short term financial  
23 pressure from the need to add facilities at that future  
24 point in time, at the same time will be benefitting from  
25 the facilities that today's customers put into place even

1 while experiencing these shorter term financial -- poorer  
2 financial results.

3           Essentially, each generation is  
4 benefitting from the investments made in the past and to  
5 some extent at least in terms of poor financial results  
6 paid for by customers in the past. But then each  
7 generation is paying for the -- the institution --  
8 installation of new facilities that will benefit future  
9 customers.

10           Mr. Bowman noted that this represented a  
11 form of inter-generational equity, in that each  
12 generation benefits from past investments and initiates  
13 new investments that will benefit the next generation of  
14 customers. And as I understand his argument, he -- he,  
15 in terms of new industrial development, he was making the  
16 point that new industrial development should be  
17 encouraged to support the development of new generation.

18           And he was arguing that new generation  
19 today will be the source basis of -- or basis or lower  
20 cost power for future customers. Given Mr. Bowman's  
21 position on this, how can he then assert that new  
22 resource initiatives allocate -- for export expenditures  
23 somehow have a higher cost associated only with exports?  
24 It's the same argument both ways.

25           And while there may be poor short term

1 financial results in terms of a decision to initiate new  
2 generation there's long term benefits. And to attribute  
3 all the cost associated with poorer short-term financial  
4 results fails to recognize the future benefit to domestic  
5 consumers in the future.

6           And if I'm not being clear, Wuskwatim will  
7 initially be used for export but, it will certainly be  
8 used for domestic customers post 2020. The fact is  
9 already --already been in service for eight (8) to nine  
10 (9) years means that the impact on domestic customers  
11 will be less in those years, post 2020 than if it had not  
12 been advanced for export.

13           Assuming that all costs prior to 2020 are  
14 for exports, does not acknowledge the benefit that  
15 domestic customers will receive from this advancement.  
16 And I think Mr. Bowman made this point quite well. With  
17 a natural resource such as oil, eventually low cost oil  
18 is replaced by high cost oil. But, low cost  
19 hydroelectricity is endless.

20           In sum, while Mr. Bowman remains to be  
21 convinced, his argument suggesting that the higher on  
22 average revenues garnered by export sales are somehow  
23 cancelled out by higher than average costs, are refuted  
24 by four (4) points.

25           A) First, the fact that a great deal of

1 future surplus capacity will flow from older facilities.

2 2. The fact that many low cost power  
3 resources remain such as SSE and demand side management.

4 3. The evidence of system planners with  
5 day-to-day familiarity with the operations of Hydro.

6 And, 4, his own evidence on inter-  
7 generational equity and the benefits of new generation.

8 Mr. Chairman, I'm just moving to a new  
9 area and I was -- which is -- I'm approximately halfway  
10 through so I thought this might be a convenient breaking  
11 point.

12 THE CHAIRPERSON: Very good, Mr.  
13 Williams, we'll come back at 10:30.

14 MR. BYRON WILLIAMS: Okay.

15  
16 --- Upon recessing at 10:15 a.m.

17 --- Upon resuming at 10:31 a.m.

18

19 THE CHAIRPERSON: Any time you're ready,  
20 Mr. Williams.

21

22 CONTINUED BY MR. BYRON WILLIAMS:

23 MR. BYRON WILLIAMS: When we left off I  
24 was asking the Board to reject the position of Mr. Bowman  
25 and find that the fundamental changes requires a change

1 in the current cost of service methodology for allocating  
2 net export revenues on the grounds of fairness, which  
3 leads us to the third issue outlined in our outline.

4           If a change in the cost of service  
5 methodology is required does Hydro's proposal justly and  
6 reasonably accomplish this goal or have there been  
7 superior options proposed?

8           In terms of what's currently on the table,  
9 leaving aside the current method which I believe only Mr.  
10 Bowman remains attached to, and pearl vintaging which I'm  
11 not sure that even Mr. Lazar is proposing. Although I --  
12 I think it was a very interesting idea which -- which  
13 might have been interesting to have a bit more discussion  
14 about. It appears we have four (4) remaining options on  
15 the table in terms of how best to address this  
16 fundamental change.

17           There's the Hydro method. And by "the  
18 Hydro method" I mean the export class with the two (2)  
19 sub-classes and the allocation along generation -- excuse  
20 me and the allocation of net export revenues along the  
21 generation, transmission and distribution costs.

22           There's the NERA method which is primarily  
23 distinguished from the Hydro recommended method by the  
24 existence of only one (1) export class.

25           There's the threshold proposal advocated

1 by Mr. Bowman which he describes as a matter most  
2 appropriately address -- dealt with at a General Rate  
3 Application.

4                   And there's something which I would call  
5 the pre-export credit approach which was mentioned by Mr.  
6 Warden during direct evidence and then discussed at some  
7 length during the hearing.

8                   At a starting point for this discussion,  
9 again at a high level, it appears that the Hydro  
10 recommendation is endorsed by Mr. Wiens, Mr. Harper, by  
11 Mr. Lazar, although my understanding -- well, from our  
12 perspective we might put a little bit less weight on his  
13 endorsement because his sole focus is efficiency. And  
14 that the cost of service level we think the key criteria  
15 should be fairness.

16                   And even NERA, and this is noted at page  
17 796 of the transcript, seems to endorse the Hydro two (2)  
18 subclass approach. And that's from an e-mail to Mr.  
19 Wiens of August 2, '05, which indicated an analytical  
20 preference for two (2) subclasses rather than one (1)  
21 export class. And I -- and I think I'm quoting  
22 directly, "it makes a lot more sense."

23                   And although he disagreed with me about  
24 this on Friday, I think that if one goes back to the  
25 evidence provided by Mr. Osler and Mr. Bowman from the



1 2002 status update proceeding, you may come across some  
2 analytical support for the idea of an export class in  
3 that evidence as well.

4           And I'd urge you -- Mr. Bowman took issue  
5 with my suggestion to him on that point, so I would urge  
6 you to go back and see whether or not there's analytical  
7 support for that idea in his evidence. You can draw his  
8 -- own conclusions. And that evidence certainly is on  
9 the record in this proceeding.

10           In terms of the key reasons for supporting  
11 the concept, the Hydro recommendation, I think Mr. Wiens  
12 evidence on this point is fairly well set out at page 659  
13 to 659 (sic) of the transcript. And he appears to  
14 endorse the proposal on the grounds that it best achieves  
15 the objectives of fairness, efficiency and stability. He  
16 sees it as a change from the current methodology but not  
17 too radical of a change.

18           In his view, it achieves the fairness  
19 objective by assigning a reasonable share of joint costs  
20 to the export class. Then once exports have paid their  
21 dues the cost cause -- and the cost causation link has  
22 been broken, one can look to a wider allocation, such as  
23 the 'G', 'T' and 'D' allocation proposed by Mr. Weins.

24           Again, Mr. Harper supports this  
25 proposition but on a bit more narrow basis because he's

1 focused on the cost of service objective of fairness  
2 based upon cost causality. And he sees Manitoba Hydro's  
3 proposal as a reasonable attempt to try and balance two  
4 (2) key considerations.

5                   First, by allocating a share of both  
6 variable and fixed cost exports the method provides  
7 explicit recognition of the fact that the costs were  
8 incurred by Hydro to secure export revenues and seeks to  
9 allocate them in a reasonable share of such costs. To  
10 that extent, it recognizes directly the principle of cost  
11 causation in dealing with exports.

12                   The second reason Mr. Harper endorses his  
13 proposal is by allocating the -- what he calls excess  
14 revenue on a more neutral basis. It attempts to  
15 ameliorate the perverse signal sent by the current method  
16 that the use of 'G' and 'T' assets causes net export  
17 revenues to increase when the reverse is true.

18                   So that's why Harper and Wiens say this is  
19 a proposal that -- the Hydro recommended approach is a  
20 way -- the way to go. Well, what about the other great  
21 competitors?

22                   Early in this proceeding some currency was  
23 attached to the idea of simply moving to an RRC based  
24 upon a pre-export credit as a way of avoiding the  
25 controversy. But in our respectful view it's -- it's not

1 possible to deduct -- to -- excuse me, it's not possible  
2 to duck the issues raised in this proceeding by going to  
3 some sort of pre-export credit RCC and it's important to  
4 understand why this is the case.

5           Even if you try to go to some sort of pre  
6 export RCC as a way to duck the issue, the results for  
7 the RCC would depend upon which cost of service  
8 methodology you use. Would you use the current method of  
9 assigning only variable cost exports? Would you use a  
10 recommended method? Or, for that matter, would you use  
11 the NERA method?

12           So if you -- if some reason one wanted to  
13 go down that path, many of the same questions would still  
14 be before you. You'd have to decide whether the cost of  
15 service should include an export class and if so, how  
16 many.

17           Secondly, the pre-allocation of RCC's is  
18 not really avoiding the issue of how best to allocate  
19 excess revenues; whether to do it on the basis of  
20 generation transmission or on the basis of generation  
21 transmission and distribution.

22           Implicit in the indexing to 100 percent is  
23 an allocation of the difference between domestic revenues  
24 and costs, which is simply the net export revenue. And  
25 by using the pre-export allocation RCC, one (1) has

1 effectively made a decision as to how net export revenues  
2 will be allocated.

3                   The use of a pre-export allocation RCC is  
4 effectively the same as allocating net export revenues to  
5 customer classes, based upon their relative revenues.  
6 And that's not very different from Hydro's recommended  
7 method, which does that allocation based upon their  
8 allocated cost.

9                   So we don't recommend this method for the  
10 Board, and we would also point out that it's not a very -  
11 - it's a less transparent method than explicitly  
12 acknowledging that they're -- and trying to assign the  
13 costs associated with exports, at least on some sort of  
14 fair basis.

15                   What about the other great competitor, the  
16 threshold idea? As a starting point, it's interesting  
17 that Intergroup, in its written evidence, despite  
18 correctly noting that the real fundamental change is a  
19 change in export prices, did not employ that price per  
20 unit value in attempting to determine an appropriate  
21 threshold.

22                   If you thought that was a key issue, why  
23 wouldn't you use that threshold? Instead, Intergroup  
24 used a percentage of bulk power costs covered by net  
25 exports. And that's an approach, and I give Mr. Bowman

1 credit on this, in his direct evidence he described it as  
2 simplistic and intended for illustrative purposes.

3           And just as candidly, he admitted that the  
4 proposed threshold approach, based upon bulk power costs  
5 -- the percentage of bulk power cost covered by net  
6 exports, in cross-examination by CAC/MSOS, he agreed that  
7 it was likely to be a poor measure over time.

8           We concur and would ask the Board to  
9 explicitly reject this threshold. Mr. Bowman, in both  
10 his direct and cross-examination, seemed to suggest that  
11 a more apt threshold might be one (1) based upon the  
12 change in the relative price per kilowatt hour. And that  
13 would seem to follow logically from his recognition that  
14 the fundamental change has been the relative change in  
15 the price per kilowatt hour.

16           However, and again to his credit, he was  
17 candid in his observations that there were very  
18 complicated issues associated with such a threshold, and  
19 that the debate was likely to be controversial.

20           We concur with his observation and would  
21 also note, that in addition to the complications candidly  
22 identified by Mr. Bowman, there are likely to be  
23 contentious issues surrounding the question of which  
24 prices to be used, because there are a range of domestic  
25 prices, both by customer class and by make-up, and a

1 range of export prices. At the end of the day, once  
2 we've -- we're essentially left with two (2) options.

3 Some sort of version of the Hydro NERA  
4 approach, which was first considered in 2002, which was  
5 studied to a certain degree in 2004, and then intensively  
6 tested in this proceeding.

7 Or the other option is the threshold  
8 approach, which stands outside the cost of service  
9 methodology, which Mr. Bowman has indicated is at a  
10 tentative illustrative stage, which -- the current  
11 version of which is, in his words, is likely -- is  
12 admittedly simplistic and likely to be a poor measure  
13 over time.

14 And even if we move to other, perhaps more  
15 refined measures, it's likely to be just as contentious  
16 as the issues currently before the Board in this hearing.

17 Put bluntly, the Board can accept a  
18 version of a method that is endorsed by NERA by Mr. Wiens  
19 and Mr. Harper, or it can defer its decision for another  
20 proceeding at some distance point in the future.

21 We would ask the Board to explicitly adopt  
22 the creation of an export class, or classes, as a  
23 reasonable and just way to identify and address the  
24 fundamental changes identified in this proceeding.

25 A related sub-question, and I have noted

1 it on our outline, and it was also raised by Mr. Peters  
2 when he went through his list of nine thousand, five  
3 hundred and eighty-three (9,583) questions, is whether  
4 there should be one (1) export class or two (2) sub-  
5 classes.

6 In favour of the two (2) sub-classes are  
7 Manitoba Hydro, Mr. Harper and NERA.

8 Intergroup is opposed.

9 And I would also note that on this subject  
10 Board counsel, quite properly, chose to address --  
11 aggressively test Hydro's recommendation that there be  
12 two (2) sub-classes.

13 I followed the cross-examination, both of  
14 Board counsel and MIPUG's counsel on this point, with  
15 some interest, although admittedly I had some difficulty  
16 following it. But they seemed to be raising concerns  
17 about the Hydro proposal to have two (2) sub-classes on  
18 two (2) key grounds.

19 First, the suggestion was made, and I  
20 think directly by My Friend Mr. Peters, that opportunity  
21 sales could be just as firm as export sales.

22 Secondly, and I believe this suggestion  
23 was again made by both My Friend Ms. McCaffrey and My  
24 Friend Mr. Peters, the suggestion was made that the  
25 incremental costs associated with opportunity sales could

1 -- could be the same as or greater than those associated  
2 with firm.

3                   As a starting point to analytically  
4 addressing the issue of whether there should be one (1)  
5 class or two (2) sub-classes, it should be noted and  
6 acknowledged that domestic firm and opportunity sales all  
7 play a role in system planning and design.

8                   But I -- I would respectfully suggest that  
9 anyone who sat through the many hours of testimony  
10 regarding system planning at the Wuskwatim proceeding,  
11 would be stunned by the suggestion that somehow domestic,  
12 firm and opportunity sales played an equal role in  
13 contributing to the costs associated with system planning  
14 design and operation.

15                   And that's why we presented to Manitoba  
16 Hydro, through cross-examination, the excerpt -- and  
17 that's at pages 674 to 690 of the transcript, the excerpt  
18 from the Power Resource Planning evidence presented in  
19 Wuskwatim hearing, and that's at Tab 12 of the CAC/MSOS  
20 book of references.

21                   And I won't take you there but I'd urge  
22 you to carefully review the transcript on this point as  
23 well as the excerpt from Wuskwatim that was -- that is  
24 presented at Tab 12.

25                   We believe that this except is telling for



1 two (2) reasons. First, it provides insight into the  
2 central role that providing for the reliability of  
3 dependable energy and capacity has in informing Manitoba  
4 Hydro's thirty-five (35) year power resource sequence and  
5 its long-term capital plan.

6 I think the inference you can draw --  
7 well, not the inference, the -- the conclusion you can  
8 draw, both from this excerpt and from Mr. Surminski's  
9 testimony on this point, is that the key driver of its  
10 capital resource plan and of its investment decisions,  
11 are decisions relating to -- to the provision of a  
12 reliable supply of electrical power for Manitobans, in  
13 terms of dependable power.

14 Why I think this excerpt from Wuskwatim is  
15 also helpful, because it provides this Board with some  
16 assurance that Hydro's position on this point is not  
17 something that was created for the purposes of -- of this  
18 proceeding; not that the Board would ever take this.

19 But it comes from another proceeding where  
20 the issue of whether or not there should be an export  
21 class wasn't on the table, and it gives insight into  
22 Hydro's position, and it provides insight into the  
23 consistency of Hydro's positions over time. So we would  
24 urge the Board to review this document very carefully.

25 We'd also ask you to consider the evidence

1 of Mr. Harper on this point and his succinct testimony in  
2 direct evidence. He identified two (2) key ways to  
3 distinguish between customers, such as between different  
4 classes.

5                   1, is in terms of how their loads impact  
6 on the planning of the Utility and the Utility's  
7 willingness to commit funds to support this load.

8                   The second, and somewhat related way, is  
9 to look at the reliability of service that the Utility is  
10 committing to supply.

11                   And Harper's -- Mr. Harper's evidence that  
12 is, when considering customer classes it is reasonable to  
13 group, separately, customers who impose different  
14 obligations and therefore costs on a utility from a  
15 planning perspective, and are based on the level of  
16 reliability they are assured. And that's based upon his  
17 twenty-five (25) years of experience with cost of service  
18 design.

19                   In the case of exports, Mr. Harper makes  
20 the observation that there are fundamental differences  
21 between firm exports, which he defines as exports with  
22 contracts of longer than a year, and opportunity exports,  
23 in -- both in terms of resource planning decisions and  
24 also in terms of the level of reliability.

25                   And he goes back, not explicitly but

1 implicitly, to the power resource plan of Manitoba Hydro  
2 filed in this -- at Tab 12 of the CAC/MSOS book of  
3 references. And he notes that a number of times during  
4 the proceeding we've heard that firm exports are backed  
5 by dependable energy resources, generation capacity  
6 commitments and available transmission.

7           For planning purposes they are treated  
8 exactly the same as domestic load and the -- was prime --  
9 and the resources required to serve them are not  
10 considered to be available to meet domestic requirements,  
11 should circumstances change.

12           In contrast, opportunity sales, even short  
13 term, firm commitments, are based on the availability of  
14 surplus energy, over and above dependable resources.

15           Moreover, the shorter time frame of less  
16 than one (1) year means that such commitments are based  
17 on existing capacity and don't impact Hydro's capital  
18 planning process to the same extent as domestic or firm  
19 sales.

20           And in terms of consistency we would also  
21 note that this has been a point made by Mr. Harper in  
22 2002, 2004 and 2006. Indeed, one (1) of the reservations  
23 he made about the creation -- or he offered about the  
24 creation of an export class, way back in 2002, was he was  
25 concerned with the -- what seemed to be an assumption

1 that it was reasonable to attribute the same degree of  
2 cost causality to a kilowatt hour of export, even firm  
3 export, as it was a kilowatt hour of domestic load.

4 So Mr. Harper has been very consistent,  
5 like Manitoba Hydro, on this point, from 2002 moving  
6 forward, clearly distinguishing between the impact in  
7 terms of investment planning decisions of firm sales  
8 versus opportunity sales.

9 So certainly, on behalf of my clients,  
10 we'll be -- I'll be asking the Board to endorse the two  
11 (2) subclasses and -- based upon a finding on their  
12 relative impact on system design, and also in terms of  
13 the finding in terms of the reliability of the service  
14 that the Utility is committed to supply.

15 In making this recommendation my clients  
16 certainly recognize that allocating the same amount of  
17 costs to firm exports, as to domestic, probably somewhat  
18 overstates the amount of costs they should be incurring.  
19 At the same time, they recognize that -- that the current  
20 -- the recommended method, in terms of the allocation for  
21 opportunity sales, probably understates the amount of  
22 costs that should be allocated to them.

23 They see this as the best and the most  
24 reasonable compromise, over-allocating a bit on -- to the  
25 firm side, under-allocating a bit to the opportunity

1 class -- subclass, because they -- they believe that it  
2 would be inefficient and extremely time consuming to  
3 delve further into a more precise division. And I think  
4 Mr. Weins offered evidence to that point as well.

5                   The final related sub-question, under our  
6 third point, deals with the allocation and the  
7 appropriateness of allocating net export revenues,  
8 however they are defined, to generation transmission and  
9 distribution. And an approach which has been assigned --  
10 has been endorsed by NERA and Mr. Wiens on efficiency  
11 grounds, and by Mr. Harper on the grounds of fairness.

12                   Counterposed against the expert advice of  
13 NERA, Mr. Wiens and Mr. Harper are, at least, in our  
14 understanding, two (2) competing suggestions.

15                   There's been the suggestion made in this  
16 proceeding that surplus revenues ought to be somehow  
17 refunded to the Province via a dividend.

18                   There's also been the suggestion, by Mr.  
19 Bowman, that a new cost should be created with an  
20 appropriation, or via an appropriation for a drought  
21 reserve. And with the shortfall in net income being met  
22 by domestic rate increase.

23                   It's notable that of these two (2)  
24 competing suggestions, first the payment of dividends to  
25 the Province is, at least in my respectful submission,

1 simply beyond the jurisdiction of this Board.

2                   And while the determination of whether new  
3 costs should be created, is, and Mr. Bowman candidly  
4 admitted this, outside the scope of this proceeding.

5                   What is interesting about both suggestions  
6 though, is that they flow from fundamentally different  
7 conclusions as to the nature of the net export revenues  
8 earned by Manitoba Hydro.

9                   TREE, T-R-E-E, perhaps aided by an  
10 unfortunate choice of words by Manitoba Hydro, seems to  
11 see net export revenues as a windfall, monies which can  
12 be happily couriered to the Province, the statutory  
13 regime notwithstanding.

14                   On the other hand, Intergroup, at least in  
15 my understanding, sees these resources as something to  
16 which the generation and transmission function can  
17 somehow claim ownership.

18                   In the respectful view of CAC/MSOS, the  
19 argument espoused by TREE is historically inaccurate --  
20 accurate and undermined by the fundamental economic  
21 realities of Manitoba Hydro.

22                   The suggestion that this is somehow a  
23 windfall is one (1) that they suggest should not be  
24 endorsed by this Board.

25                   In explaining the reasoning of my client,

1 why, we have to look at the source of these net export  
2 revenues, which is the surplus capacity found in Manitoba  
3 Hydro's generating and transmission system.

4                   And this point was made better by Mr.  
5 Bowman in cross-examination than I could make directly.  
6 But it's important to understand that when we look at how  
7 these facilities were built in the first place, the risk  
8 for their failure, or for their success, was collectively  
9 borne by Manitoba ratepayers.

10                   They were told they would pay for those  
11 projects, whether they turn out to be good projects or  
12 bad projects. And we only have to look to the example of  
13 Ontario Hydro to see what happens to electricity  
14 ratepayers when they turn out to be bad projects instead  
15 of good projects.

16                   That was in the past, but look at even  
17 today. Look at how Wuskwatim was sold to consumers in  
18 the Clean Environment Commission proceeding. We were  
19 told that the development of Wuskwatim would help to keep  
20 rates low. And that's set out in an excerpt from -- that  
21 is found in the CAC/MSOS book of references.

22                   Wuskwatim wasn't sold to Manitobans on the  
23 basis that we would be developing a plan to pay major  
24 dividends to the Government. And that stands in sharp  
25 contrasts to projects like Churchill Falls, which were

1 explicitly developed to provide dividends to the  
2 shareholder.

3                   Just examining this idea of a windfall a  
4 bit more, I want to go back to a deeper understanding of  
5 where the quantum of net export revenues comes from.  
6 It's a result of a combination of three (3) factors:

7                   First of all, Hydro's investment in  
8 facilities that will facilitate or increase the  
9 opportunity for exports.

10                   Secondly, a surplus of energy and capacity  
11 on Manitoba Hydro's system.

12                   And third, market conditions elsewhere.

13                   But when you look at that second reason,  
14 the surplus of energy and capacity on Manitoba Hydro's  
15 system, that's a function in part of the investments that  
16 Hydro's made, but it's also a reflection of water flows.  
17 And those cannot be guaranteed. Indeed, in low flow  
18 periods they will drop.

19                   And if you look at that third factor,  
20 which is market conditions elsewhere, that, too, is a  
21 function of external events, such as supply and demand  
22 elsewhere, natural gas prices, et cetera.

23                   And as a result of these factors,  
24 especially factors 2 and 3, export revenues can vary from  
25 year to year, and it's absolutely inappropriate to think



1 of one year's good result as a windfall because as system  
2 conditions and markets in subsequent years could produce  
3 lower revenues.

4                   And when Manitoba Hydro invests in  
5 facilities to support exports; that's based upon a  
6 consideration of the range of water flows and on the fact  
7 that on average revenues will exceed costs. And as Hydro  
8 acknowledged in this proceeding there was a high cost of  
9 meeting exports commitments during the recent drought but  
10 that such a possibility was factored into its decision  
11 when making the commitment and that the profits in the  
12 good year offset the bad year.

13                   So in my client's respectful position it  
14 would be inappropriate for some third party to lay claim  
15 to the profits in the good years unless they were willing  
16 to compensate Manitoba Hydro and its ratepayers for the  
17 low flow years. Otherwise, such claims would totally  
18 change the economic evaluation of export opportunities.

19                   And as Mr. Bowman helpfully acknowledged  
20 in cross-examination on Friday, and I think we're a -- my  
21 clients are on all fours with him on this point, there's  
22 a great risk -- or there is some risk associated with  
23 investing for exports. And Manitoba Hydro's explicit  
24 decision to invest in facilities to support exports  
25 recognizes this risk by requiring a higher internal rate

1 of return than for standard investments to meet domestic  
2 loads.

3 And that -- this was discussed and  
4 confirmed in the Wuskwatim proceeding and also in cross-  
5 examination with Mr. Bowman.

6 So when higher returns do emerge they are  
7 compensation for that risk. Since Hydro and its  
8 customers are bearing the risk it's appropriate that they  
9 benefit from returns. So if a third party were to lay  
10 claim -- claim to any long-term return considered excess,  
11 this would mean there would be no premiums available to  
12 Hydro and economic evaluation would not yield as high of  
13 an internal rate of return.

14 Alternatively, the third party would have  
15 to indemnify Manitoba Hydro and Manitoba ratepayers for  
16 any risk.

17 MR. ROBERT MAYER: Mr. -- you talk about  
18 a third party; is that third party you're talking about  
19 the shareholder?

20

21 CONTINUED BY MR. BYRON WILLIAMS:

22 MR. BYRON WILLIAMS: Yes, Mr. -- I  
23 thought I might get a question or two (2) from you on  
24 this point.

25 So on this point we're going to ask the

1 Board to reject the dividend concept as beyond the scope  
2 of this proceeding and clearly beyond its jurisdiction.

3 And I'll get to this, I guess, just before  
4 our recommendations. But the Board, we note in this  
5 proceeding, has been presented with a number of arguments  
6 which are well beyond its jurisdiction and been asked  
7 implicitly to provoke debate by making overture comments  
8 far outside its jurisdiction. And, again, I'll refer to  
9 this a bit closer to the closing.

10 Well, what about the drought surcharge  
11 proposed by MIPUG? In our view it's a wrong forum. The  
12 Board has expressly said that this is not a General Rate  
13 Application and it's outside the scope of this proceeding  
14 to create new costs in a meth -- methodological hearing.

15 We would also argue that given Mr.  
16 Bowman's advice to the Board during the last hearing,  
17 2004 General Rate Application, his advice in this hearing  
18 is somewhat ironic. If you recall from that hearing he  
19 recommended that rate increases be below inflation  
20 despite a drought and to be recommending rate increases  
21 over and above inflation in a record net income year  
22 seems -- is somewhat inconsistent.

23 In our view, that's particularly the case  
24 when Mr. Bowman quite rightly express mat -- material  
25 concerns during the 2004 General Rate Application as well

1 as during cross-examination by CAC/MSOS in this  
2 proceeding, with Manitoba Hydro's estimate or guesstimate  
3 of the -- the overall costs of a drought. He expressed  
4 concerns about the absence of substantive quantification.

5 A third point on this point is that Mr.  
6 Bowman has provided to the Board, or in -- in the  
7 response through -- to Manitoba Hydro Interrogatory  
8 Number 5, excerpts from two (2) tri -- two (2) tribunals  
9 which he suggests are analogous to his proposal to create  
10 an appropriation for a drought reserve.

11 In terms of those two (2) excerpts, it's  
12 important to notice he was candid enough to in -- note in  
13 cross-examination that neither of these were pre-funded  
14 reserves. There was no surcharge associated with either  
15 of them or appropriation to -- to build up costs in  
16 advance. Now, in fairness, Mr. Bowman I did believe,  
17 noted that the Yukon example may have been -- had some  
18 pre-funding.

19 The last point in terms of Mr. Bowman's  
20 decision, and I think was better made, again, by Mr.  
21 Harper and Mr. Warden then myself, is that the rate  
22 decisions made by the Public Utilities Board in relation  
23 to Manitoba Hydro's GRA's already involve a careful  
24 consideration of Hydro's required net income based on its  
25 current financial position, financial risk and targets.

1                   And if any such appropriations were to be  
2 made in the future, the Board may need to rethink their  
3 criteria used in determining Hydro's net income level  
4 since the issue of drought risk would be addressed  
5 separately. Again, in our view, that's an issue better  
6 left for a General Rate Application.

7                   A last comment on this point, and I  
8 believe the Chairman made a suggestion in terms of  
9 allocating some portion of net export revenues towards  
10 demand side management, and -- I thought you did anyways.  
11 I see a puzzled look on your face. So I'm going to  
12 assume that you did. And if you didn't, you'll just  
13 totally ignore my comments on this point.

14                   But in terms of that point, I think it's  
15 important to understand -- and this certainly was, I  
16 believe, the finding of the Clean Environment Commission  
17 in Wuskwatim -- with -- and, at least, this is how I am  
18 interpreting it -- the issue with demand side management  
19 from the perspective of -- in the Clean Environment  
20 Commission, wasn't with an absence of funds to -- for  
21 that -- those opportunities.

22                   In fact, the Clean Environment Commission  
23 said that there was, you know, there was more and more  
24 opportunities for Manitoba Hydro to make economic  
25 investments in demand side management that were -- that

1 were -- that it cert -- just wasn't realizing it at that  
2 point in time. Hydro had said, Well we'd like to get the  
3 one point five (1.5) to two (2) of current DSM and the --  
4 the Clean Environment Commission said, You should be  
5 going for above two (2). So that's one (1) point.

6                   So I think the issue in terms of demand  
7 side management which my clients believe very strongly in  
8 is -- is not an absence of funds. There's perhaps  
9 institutional energy, although we see that Hydro has  
10 worked hard on that issue and is moving more aggressively  
11 on that area. So I'm not suggesting it as a criticism,  
12 I'm just suggesting, as I look to Mr. Warden, but just  
13 suggesting I'm not sure that an absence of funds if the  
14 issue associate with it.

15                   The other just -- comment, Mr. Chairman,  
16 on that point is if I would have known that DSM was going  
17 to be on the table, I probably would have bought --  
18 brought Dr. Higgins (phonetic) with me from Mr. Harper's  
19 firm, ESC.

20                   And we'd be happy to engage in that  
21 discussion at the next General Rate Application if that's  
22 something the Board is looking for. I think regulators  
23 in Manitoba in the past have found that he's got a lot of  
24 insight on those issues. We weren't prepared for that  
25 issue in this proceeding, so I don't have a lot of

1 guidance to offer. But if that's something that Board is  
2 looking at in future, I think certainly my clients would  
3 be happy to engage in that discussion.

4           Just to sum up on this point, we'll be  
5 asking the -- the Board to endorse an allocation of net  
6 export revenues based upon generation, transmission and  
7 distribution costs. It's certainly consistent with the  
8 recommended proposals of Mr. Harper, Mr. Wiens and NERA.  
9 It's certainly, in our respectful view, better than the  
10 alternatives proposed in this proceeding.

11           And it's also, in our view, consistent  
12 with the understanding that the risk borne by Manitoba  
13 Hydro ratepayers in terms of droughts are borne by all  
14 consumers and that when we had to recover from the costs  
15 of droughts, that was borne by a rate increase reflecting  
16 an increase on generation, transmission and distribution.

17           In terms --

18           MR. ROBERT MAYER: Before you leave that  
19 topic, Mr. Williams, I note that Professor Miller isn't  
20 here and I think I should give you an opportunity to  
21 respond to what I believe was a very unfair  
22 representation of Mr. Lazar's position with respect to  
23 distribution of excess revenue.

24           You've alleged that it should go -- that  
25 he recommended that it go to a third party who we now

1 know is the shareholder or the ratepayer or the taxpayers  
2 of Manitoba. But, that wasn't -- that wasn't Mr. Lazar's  
3 point.

4 Mr. Lazar's point as I understood it, is  
5 it should go just about anywhere but, to the  
6 subsidization of rates. And in fact, as I recall his  
7 evidence he suggested that the use of it for uniform  
8 rates was legitimate; that the use of it to increase  
9 Hydro's debt equity ratio was legitimate.

10 And he was the one who said the use of it  
11 to deal with DSM programs that were not otherwise --  
12 could not otherwise be justified by a business case, was  
13 legitimate, and the low income energy assistance programs  
14 was legitimate, and finally, the offset of basic  
15 distribution infrastructure costs that are hard to  
16 allocate.

17 So he was not arguing for what you suggest  
18 and it seems to be a very unpopular method of dealing  
19 with Hydro revenues and that is the third party taking  
20 them, but his argument was basically that we ought not to  
21 use this revenue to offset rates and thereby give the  
22 wrong signal to consumers.

23

24 CONTINUED BY MR. BYRON WILLIAMS:

25 MR. BYRON WILLIAMS: Mr. Vice Chair, I



1 think in your characterization of my comments you might  
2 have been a touch unfair yourself.

3 I think explicitly used the words, TREE,  
4 not Mr. Lazar. I -- so just in fairness -- and I've  
5 certainly heard TREE speak of dividends to the Province.  
6 So in fairness to myself I think that's an inaccurate  
7 characterization. I think I even spelled TREE when I did  
8 that.

9 So in terms of certainly My Friend, Ms.  
10 Bowman will speak more directly to Mr. Lazar, I think Ms.  
11 Ramage has had it -- Ms. Ramage had an interesting cross-  
12 examination with him and outlined the fact that many of  
13 the proposals that he was making -- Manitoba Hydro was  
14 actually operating upon.

15 I think if I understand and I want to be  
16 responsive to your question, if I understand your  
17 concerns that -- that his point was that any -- the money  
18 should go anywhere but towards the subsidization of  
19 rates, I guess one (1) point is that in the cost of  
20 service methodology, your focus is on fairness issues  
21 rather than efficiency issues primarily.

22 But, let's look at -- in even the results  
23 of the cost of service methodology, and I went through  
24 this in my cross-examination of Mr. Wiens on this point,  
25 I think that primarily -- and I'm not as familiar with

1 Mr. Lazar's argument, but I do know that the primary  
2 efficiency concern outlined, both by Manitoba Hydro and  
3 by NERA, in terms of the allocation of revenues are in  
4 the cost of service methodology, is a result that leaves  
5 the incremental rates below short run marginal costs; not  
6 long run marginal costs but, short run marginal costs.

7                   And that's explicitly NERA's concern and  
8 that's -- as I understand Mr. Wiens' position, Ms. Ramage  
9 will slap me around if I've misstated it, that's also Mr.  
10 Wiens' concern.

11                   If you look at the numbers and that's a  
12 very rough -- the numbers on that point, if you look, and  
13 a rough reflection of that is found in CAC/MSOS Exhibit  
14 book, Tab 3 and -- I went through this in cross-  
15 examination with Mr. Wiens, the key observation from that  
16 cross-examination was that for customers, such as  
17 residential, or that clearly they were paying -- their  
18 incremental rates were above short run marginal costs and  
19 that the class which -- whose rates, on an incremental  
20 basis, were below short run marginal costs, Mr. Wiens  
21 provided a more refined example, but the class which was  
22 notably below short run marginal costs in terms of the  
23 incremental rates was GSL large.

24                   So to the extent that Mr. Lazar's concern  
25 is appropriate for a cost of service hearing rather than

1 a rate design hearing, I think his concern would be  
2 primarily focused on those classes whose short run --  
3 whose incremental costs were below short run marginal  
4 costs.

5 Now, again, I'm not as familiar with his  
6 evidence. So -- and I -- I think Mr. -- Mr. Harper would  
7 probably also have a concern in terms of a -- a certain  
8 class with incremental rates below short run marginal  
9 costs but he would say it's more properly dealt with in a  
10 rate design.

11 So -- and if I did do an injustice to Mr.  
12 Lazar's comment it was absolutely inadvertent. I thought  
13 I was pretty careful to characterize my words referring  
14 to TREE and that was how I understood their position. If  
15 I mischaracterized it, I certainly apologize to them.

16 MR. ROBERT MAYER: I don't understand how  
17 TREE's position would have been made known to this Board  
18 in the absence of the evidence of Mr. Lazar who was the  
19 only one who gave evidence on behalf of TREE, both  
20 written and oral.

21 MR. BYRON WILLIAMS: I sat through the  
22 pre-hearing conference and heard Mr. Miller's comments  
23 and I sat through their opening statement as well.

24 MR. ROBERT MAYER: Neither of which are  
25 evidence.

1 MR. BYRON WILLIAMS: It's a position that  
2 I'm anticipating will arise. Does that satisfy your --

3 THE CHAIRPERSON: I think the exchange  
4 has clarified the issue a bit.

5

6 (BRIEF PAUSE)

7

8 MR. BYRON WILLIAMS: The -- I thought  
9 that might provoke a little bit of discussion on that --  
10 that point in any event.

11 THE CHAIRPERSON: Are you saying you  
12 planned this, Mr. Williams?

13

14 (BRIEF PAUSE)

15

16 CONTINUED BY MR. BYRON WILLIAMS:

17 MR. BYRON WILLIAMS: I anticipated I  
18 might receive a few questions.

19 In terms of the cost of the cost of -- I'm  
20 moving to the fourth question and most of the comments on  
21 this point will be raised by My Friend, Ms. Bowman. But  
22 in terms of the cost of service treatment of GT and  
23 DCOSS, and we've asked what definition of costs should be  
24 employed. And we've broken this down into a couple of  
25 issues.

1                   What type of costs are we trying to  
2 recover for the purposes of rate recovery? What type of  
3 costs would it be most appropriate to recover in the --  
4 in the cost methodology -- I see I've made a typo there.  
5 And apart from the cost methodology, what role should the  
6 concepts of marginal costs and externalities play in the  
7 rate setting process?

8                   And I'm going to focus primarily on the  
9 first question which is: What type of costs are we  
10 trying to recover for the purpose of rate setting? And I  
11 think the -- the Board's primary guidance for this  
12 obviously comes from the three (3) pieces of legislation  
13 which affect its jurisdiction; the Crown Corporation and  
14 Accountability -- Public Review and Accountability Act,  
15 the Public Utilities Board Act and the Hydro Act.

16                   And I'm not going to dwell or read through  
17 all these clauses. But I think the key provision that  
18 you may want to pay attention to is Section 39(1) of the  
19 Hydro Act because that provides the Corporation is  
20 entitled to recover the full cost to the Corporation of  
21 necessary operating expenses as well as of interest and  
22 debt service charges along with a sum for reserves. And  
23 taken within the context of a just and reasonable rate,  
24 we would argue that a just and reasonable rate from the  
25 Corporation's perspective is one that allows it to

1 recover these costs.

2                   And we think it's significant, if you take  
3 a moment at some point in time to review Section 39, that  
4 the costs identified there are the costs of the  
5 Corporation. The costs -- the statute does not make  
6 provision for the collection of costs external to the  
7 Corporation in Hydro's rates. And similarly, and I  
8 hesitate to walk down this path, but a return on equity  
9 for the owner or some other form of dividend is not  
10 contemplated for Section 39.

11                   MR. ROBERT MAYER: But reserves clearly  
12 are?

13                   MR. BYRON WILLIAMS: Reserves are.

14                   MR. ROBERT MAYER: So, although some of  
15 Mr. Lazar's suggestions for use of this money, you are  
16 going to argue, and I think I might agree with you, are  
17 outside the provisions of the Act, Mr. Bowman's  
18 suggestion is clearly within it.

19                   MR. BYRON WILLIAMS: It certainly is but  
20 not within the scope of this proceeding. And we would be  
21 happy to get in that debate. At -- at the same time we'd  
22 be jumping at the chance to go after Manitoba Hydro's \$2  
23 billion drought reserve target. So that's something that  
24 will probably occur at a future date.

25                   THE CHAIRPERSON: Your opinion, sir.

1 Your opinions, Mr. Williams. And this is your closing  
2 statement.

3

4 CONTINUED BY MR. BYRON WILLIAMS:

5 MR. BYRON WILLIAMS: I'm kind of enjoying  
6 the discussion, Mr. Chairman. It's a little more  
7 interactive.

8 I'm -- so the -- again, my colleague Ms.  
9 Bowman will address the issues in terms of what types of  
10 costs would be most appropriate to recover in the cost of  
11 service methodology. And, also, what other roles  
12 marginal costs and externalities can play in the rate  
13 same (phonetic) process.

14 But I did want to be responsive to one (1)  
15 of the questions posed initially in interrogatory by the  
16 Board and then I think in, again, some questions by the  
17 Chairman dealing with replacement costs.

18 And when the question was first posed to  
19 Mr. Harper in the interrogatory process, in terms of PUB  
20 2 sub C -- and, again, you don't need to refer to it --  
21 but the -- he was asked:

22 "Under what circumstances, if any,  
23 should the historic costs of plant and  
24 other costs be adjusted to reflect  
25 replacement costs?"

1                   He provided some evidence on this -- this  
2 point. And essentially he said that he -- excuse me. I  
3 think the thrust of answer was that he was rejecting  
4 replacement costs because he considered them to be a poor  
5 proxy for marginal costs.

6                   And so from an efficiency perspective he  
7 was trying to be responsive to what he thought was a  
8 concern in terms of whether replacement costs would be a  
9 more efficient way of - of setting -- setting rates. And  
10 I think Mr. Harper's answer was if you were kind of  
11 walking down that path it would be better to, rather than  
12 use replacement costs as a proxy, it would be better to  
13 do an express marginal costs study, with all the  
14 complications that might ensue there.

15                   But as I listened to the Chairperson's  
16 exchange with Mr. Harper during Mr. Harper's day of  
17 testimony, it seemed to -- to me that you were getting at  
18 a different consideration and that is whether replacement  
19 costs should be used as a means to reflect inter-  
20 generational equity. And so I -- I think that was the  
21 point that you seemed to be suggesting.

22                   THE CHAIRPERSON: I wasn't stating  
23 positions, Mr. Williams. I was asking the witness what  
24 his thoughts were on some of the topics that have been  
25 raised from time to time.



1

2 CONTINUED BY MR. BYRON WILLIAMS:

3 MR. BYRON WILLIAMS: And that's fair  
4 enough. And I -- I was not suggesting anything further  
5 than that. But I just wanted to address that point. And  
6 I have to a certain degree already, both -- Mr. Harper  
7 addressed that question and I did so with Mr. Bowman in  
8 cross-examination.

9 And I think the thrust of the position of  
10 CAC/MSOS is if you're looking at that from a perspective  
11 of inter-generational equity, you can't just look at it  
12 on a foregoing basis. You have to understand that the  
13 low rates of today are a reflection of the wise  
14 investment decisions made in the past. And, similarly,  
15 consumers in the future will -- will benefit from the  
16 wise investments hopefully being made today. So we stand  
17 on the shoulders of past ratepayers.

18 So from a perspective in inter-  
19 generational equity, we think that the current system  
20 appropriately reflects it. It allows today's consumers  
21 to benefit from yesterday's decisions and it will allow  
22 future consumers to benefit from the decisions made  
23 today.

24 And we would have some concern, again,  
25 recognizing that this was just a theoretical discussion,

1 with a move to replacement costs because that -- for  
2 today's consumers, they would end up paying some of their  
3 future, you know, costs associated with future -- with  
4 today's developments, plus doubling up in the sense of  
5 having to pay for some of the costs associated with past  
6 developments. And from that perspective, it would be  
7 unfair.

8 I'm going to turn it over to -- to my  
9 colleague Ms. Bowman and I'll let her speak. I think Mr.  
10 Lazar's evidence, and I certainly wasn't trying to do it  
11 an injustice, raised some very valuable ideas, and we'd  
12 like to address them more directly and hopefully help to  
13 assist the Panel in its consideration of the role of  
14 marginal costs and externalities, as well.

15

16 THE CHAIRPERSON: Ms. Bowman...?

17

18 CLOSING COMMENTS BY MS. MYFANWY BOWMAN:

19 MS. MYFANWY BOWMAN: I'm just going to  
20 move the microphone a little bit closer since I've had  
21 trouble with that in the past.

22 Before I get started I would like to  
23 thank, on behalf of my clients, RCM/TREE for their  
24 contribution to this Hearing. As Mr. Williams pointed  
25 out, they have raised some important issues, they've

1 provoked some thought and some discussion and proposed  
2 some quite novel concepts.

3                   And certainly CAC/MSOS values that and  
4 wants to thank them for initiating that dialogue.  
5 However, my clients also have to point out that the Board  
6 and the parties must recognize the context of their  
7 contribution.

8                   And their contribution is exclusively  
9 focused on one (1) particular element of the debate, and  
10 that element is, of course, efficiency. And I'm not here  
11 to suggest to you that efficiency is not important,  
12 obviously it is.

13                   But, it is one (1) factor, and it must be  
14 tempered by consideration of other equally important  
15 factors. It must also be tempered by the reality that  
16 the Board is seeking practical solutions to real  
17 problems.

18                   And the Board must take a hard look at the  
19 proposals in front of it, to see if they will truly  
20 accomplish what it is that they set out to do.

21                   Will they solve the problems that the  
22 Board is trying to address? Or will they create more  
23 problems? The Board needs to know that the solutions it  
24 adopts are analytically sound, practical in application  
25 and will achieve an appropriate balance of various rate

1 making criteria.

2                   Now CAC/MSOS is very interested in issues  
3 pertaining to the environment and was very interested in  
4 what Mr. Lazar and what RCM/TREE have to say. And we're  
5 pleased for the opportunity to participate in that  
6 discussion.

7                   Unfortunately, for reasons related both to  
8 balance of the various factors and to problems with  
9 analytical rigour, CAC/MSOS must urge this Board to  
10 reject the proposals contained in Mr. Lazar's evidence.

11                   Now, Mr. Lazar is not a stranger to this  
12 Board, as I understand it he's appeared a couple of times  
13 here before. And as I understand it, in the past he was  
14 presenting the option of generation vintaging, which I  
15 believe caught the Board's imagination.

16                   And the Board, on that basis, directed  
17 Manitoba Hydro to prepare a study using the vintaging  
18 method. Unfortunately, at this Hearing, vintaging seems  
19 to have dropped off the screen, and that's too bad.  
20 Perhaps it would have been something that could have been  
21 useful to talk about.

22                   It does appear that the consensus,  
23 certainly amongst some of the other witnesses, is that  
24 vintaging perhaps is not as valuable as it would  
25 hopefully be for the time and energy it takes to

1 accomplish that kind of a study. And it's perhaps not a  
2 very practical solution.

3                   To some extent, some of the other  
4 solutions that are being proposed in Mr. Lazar's evidence  
5 might have similar problems of practical application.

6                   Before I go into them in some detail, I'd  
7 like to just comment in a general sense of some of the  
8 analytical difficulties that CAC/MSOS found with Mr.  
9 Lazar's evidence.

10                   I'm going to suggest to the Board that Mr.  
11 Lazar's evidence lacked, not only balance, but analytical  
12 rigour. There were a number of problems with -- what I  
13 will characterize as lack of care and attention.

14                   Mr. Lazar had difficulty with some of the  
15 numbers that he was presenting, and in cross-examination  
16 I presented the Board with CAC/MSOS Exhibit 6, which  
17 tracks the changes to the various tables and calculations  
18 that Mr. Lazar presented.

19                   Some of those tables had to be corrected  
20 more than once and the corrections flowed from table to  
21 table.

22                   THE CHAIRPERSON: Wasn't the concepts  
23 more important than the numbers?

24

25

(BRIEF PAUSE)

1 CONTINUED BY MS. MYFANWY BOWMAN:

2 MS. MYFANWY BOWMAN: Well certainly  
3 that's Mr. Lazar's position and in some ways that's true.  
4 But, the point that I'm trying to make to the Board is  
5 that there was a lack of care and attention.

6 And the reality for the Board is going to  
7 be that whatever you choose to do at the end of the day  
8 is going to have practical implications. And you need to  
9 be very conscious of those practical implications and  
10 what those details are going to be.

11 It's not just details. These are going to  
12 have real world consequences.

13

14 (BRIEF PAUSE)

15

16 MS. MYFANWY BOWMAN: Mr. Lazar,  
17 unfortunately, appeared to overlook the fact that  
18 Manitoba Hydro doesn't have the transmission capacity to  
19 export the volumes that he was proposing. Again, it's a  
20 detail, but it's an important detail.

21 On a couple of occasions Mr. Lazar mis-  
22 characterized some facts. I'm not suggesting there was  
23 any intention to mislead, I'm sure there wasn't. I'm  
24 going to suggest that it was a lack of care. He referred  
25 to the BC Hydro rate structure as an example of exposing

1 the load to marginal rates. When that was explored in a  
2 bit more detail it turned out that wasn't actually the  
3 case.

4 He referred to Denmark as an example of  
5 using a CO2 adder in a manner similar to what he  
6 proposed. And again, when that was proposed -- pardon  
7 me, when that was explored in a little bit more detail,  
8 it transpires that actually Denmark taxes CO2 that's  
9 actually emitted by their generation.

10 Again, these kinds of problems create  
11 difficulties for the Board on a practical level, in  
12 trying to implement the things that Mr. Lazar suggests.

13 More fundamentally, when we talk about  
14 rate making, and this is one (1) step in the process of  
15 rate making, the key is balance and balancing a number of  
16 different factors.

17 Mr. Lazar was here to talk about one (1)  
18 factor and that was efficiency; that was clear from his  
19 report, and I think he was quite direct about that in his  
20 evidence as well. And certainly his -- his Interrogatory  
21 responses -- his Information Request responses, pardon  
22 me, were quite explicit that his focus was efficiency.  
23 And there's nothing wrong with that; efficiency is  
24 important.

25 But, we're not here just to talk about

1 efficiency. And his evidence, unfortunately, didn't  
2 consider the other factors, which creates a problem for  
3 the Board in terms of how you use it.

4 I'm going to suggest that in some ways his  
5 analysis was overly simplistic, in that the evidence  
6 before the Board is quite clear that the environmental  
7 implications of hydro generation and electricity  
8 generation, in general, are quite complex. Now I don't  
9 think there's any question about that.

10 Many of the impacts of electricity  
11 generation by Manitoba Hydro are felt here at home. Not  
12 all of them, by any stretch of the imagination, but many  
13 of them.

14 Mr. Lazar focused on one (1) impact, and  
15 his reasoning was that he wanted to keep it simple. It's  
16 not simple. There are no easy answers here. And the  
17 Board is not going to solve any problems by trying to  
18 artificially simplify issues that are not simple.

19 MR. ROBERT MAYER: Ms. Bowman, that's not  
20 my understanding of Mr. Lazar's evidence as to why he  
21 chose CO2. If I heard him correctly, he said CO2 is  
22 measurable and quantifiable, put into monetary terms, in  
23 any event; that's why I understood his discussion -- or  
24 his suggestion that we fix on CO2 emissions, as opposed  
25 to the mercury and the other emissions that might come



1 from coal plants.

2

3 CONTINUED BY MS. MYFANWY BOWMAN:

4 MS. MYFANWY BOWMAN: I think that that is  
5 part of what he said and certainly he feels that CO2 is  
6 an important issue, and I'm not here to tell you that  
7 it's not important.

8 But on a larger level, it's focusing on  
9 one (1) impact of one (1) source of generation, as  
10 opposed to the myriad of other impacts that are out  
11 there, some of which may or may not be quantifiable, if  
12 we put our minds to it. But it's one (1) issue amongst  
13 many.

14 And I'm going to come back to that in a  
15 little bit more detail later on. But -- but the gist of  
16 my argument is going to be that if you focus on one (1)  
17 thing to the exclusion of others, you're not necessarily  
18 either painting an accurate picture or sending the price  
19 signal that ultimately you want to send. So I'll come  
20 back to that issue a little bit later, but hopefully I've  
21 addressed your question.

22 Mr. Lazar has told us that the most  
23 important environmental issue for Manitoba Hydro  
24 customers is greenhouse gas emissions in the United  
25 States, which could be displaced by conservation here.

1 I'm going to suggest that there are many  
2 members of the Manitoba community who might feel  
3 otherwise. And I suspect that Mr. Anderson's members  
4 might have something to say about that particular  
5 assertion.

6 And again, I'm not here to tell the Board  
7 that greenhouse gasses are not important; of course  
8 they're important, and they're going to affect everyone.

9 And I'm not trying to suggest that we  
10 shouldn't be encouraging efficiency; of course we should.

11 What I'm suggesting is that we have to  
12 look at more than one (1) thing. And I'm also suggesting  
13 that Mr. Lazar is not necessarily in a position to tell  
14 us what's best for Manitoba and that maybe we have to  
15 look closer to home.

16 There was another issue, before I move on,  
17 that arose in Mr. Lazar's evidence that concerned my  
18 clients very much and I want to just address briefly.

19 CAC/MSOS believes very strongly that the  
20 cost of service is about a fair allocation of costs and  
21 revenues as between customer classes, and that fairness  
22 requires transparency. Customers should be able to  
23 understand why they are being allocated particular costs  
24 and how those costs are being allocated. They may or may  
25 not take the trouble to find out, but that -- they should

1 be able to understand it should they want to put their  
2 minds to it.

3 And some of CAC/MSOS's concerns about Mr.  
4 Lazar's proposal relate to transparency, and that's  
5 particularly in the context of marginal costs, and I'll  
6 come back to that a little bit later.

7 THE CHAIRPERSON: Ms. Bowman, if you  
8 don't mind, we're just going to take a ten (10) minute  
9 break.

10 MS. MYFANWY BOWMAN: Of course.

11 THE CHAIRPERSON: Back at quarter to.

12

13 --- Upon recessing at 11:36 a.m.

14 --- Upon resuming at 11:43 a.m.

15

16 THE CHAIRPERSON: Thank you, Ms. Bowman.

17 MS. MYFANWY BOWMAN: Shall I go ahead or  
18 do you want to wait?

19 THE CHAIRPERSON: You can start.

20

21 CONTINUED BY MS. MYFANWY BOWMAN:

22 MS. MYFANWY BOWMAN: Okay. Before we  
23 left off -- and thank you for the break, by the way, I  
24 appreciated it.

25 Before we left off I was talking about how

1 the Consumers Association and the Society of Seniors  
2 believe very much that this process is about transparency  
3 and -- and accessibility. And they were concerned by  
4 some comments in Mr. Lazar's evidence which seemed to  
5 suggest that he didn't give transparency the same  
6 priority.

7 He seems to suggest, as I understood his  
8 evidence, that he didn't believe that consumers were that  
9 interested. And I believe the phrase he used was, As  
10 long as their electricity bill was less than the cost of  
11 their liquid refreshments, then most consumers wouldn't  
12 take a great deal of interest in this issues.

13 Certainly, my clients' view is that that  
14 is wrong, that that belief underestimates consumers in  
15 Manitoba and Manitoba Hydro customers in general.

16 THE CHAIRPERSON: You may have no fear on  
17 this point, Ms. Bowman.

18 MS. MYFANWY BOWMAN: Thank you. Quite  
19 frankly, if the customers -- if Manitoba Hydro customers  
20 were not interested in these issues, you wouldn't have  
21 all these faces lined up in front of you. All of these  
22 Intervenors represent people who care about process.

23 And more fundamentally, this Board and  
24 this process serves a public purpose. The Board's task,  
25 as I understand it, is to make this information, this

1 process as understandable as it's possible to make, given  
2 the complexity of the issues.

3 THE CHAIRPERSON: That is one of our  
4 goals in all of the hearings: Water and sewers,  
5 cemeteries, natural gas brokers, hydro, MPI, the works.

6

7 CONTINUED BY MS. MYFANWY BOWMAN:

8 MS. MYFANWY BOWMAN: Precisely, Mr.  
9 Chair. Thank you.

10 This process is about accountability,  
11 accessibility and transparency. And the Board looks for  
12 solutions that embody those principles.

13 At the end of the day I'm going to suggest  
14 to the Board that you can take steps, and Manitoba Hydro  
15 can take steps, and the parties before you can take steps  
16 to protect the environment without following the  
17 recommendations in Mr. Lazar's report.

18 I'm going to suggest that the evidence  
19 demonstrated that implementing his recommendations,  
20 certainly on the big picture, if you did all of the  
21 things he recommended, could potentially have devastating  
22 consequences, so complex and so far-reaching that they're  
23 almost impossible to predict.

24 And in my clients' view the evidence also  
25 showed that it's not clear that his recommendations will

1 be particularly helpful to the environment.

2                   If this Board and these parties want to  
3 protect the environment, the best tools and the most  
4 effective tools at your disposal are going to be DSM and  
5 rate -- and rate design.

6                   When I talk about the things that Mr.  
7 Lazar has proposed, I'm going to speak first about  
8 costing on the basis of some things he talked about, CO2  
9 marginal costs and so on. I appreciate that that was not  
10 the only thing he's proposing, but I'm going to start  
11 there and then move to the -- the weighting and so on  
12 afterwards -- pardon me, I'll move this a little closer -  
13 - so I'll move to weighting and so on afterwards.

14                   I think that the analytical issues that I  
15 want to bring out in his proposals will be easier to  
16 follow if I do it in that order. So that's what I  
17 propose to do.

18                   One of the things Mr. Williams asked me to  
19 speak about was: What cost do we want to recover in  
20 these proceedings? And one (1) of the costs proposed by  
21 Mr. Lazar is CO2.

22                   And Mr. Lazar attempted to calculate CO2  
23 emissions that could be avoided by decreased domestic  
24 consumption and increased exports. And one (1) of many  
25 things he proposes is that those costs could be imposed

1 on Manitoba Hydro ratepayers.

2 In my client's view, that is absolutely  
3 not appropriate. First of all -- I've got five (5) good  
4 reasons why that's not appropriate:

5 First of all, that's not a cost, an out of  
6 pocket expense that's incurred by Manitoba Hydro.

7 Second of all, Manitoba Hydro, under the  
8 statute, is entitled to recover the actual costs that it  
9 incurs.

10 Mr. Williams referred to section 39(1) of  
11 the Manitoba Hydro Act which indicates that:

12 "The prices payable for power supplied  
13 by the Corporation should be such as to  
14 return to it, in full, the cost to the  
15 Corporation of supplying the power,  
16 including..."

17 And it gives a number, it lists three (3)  
18 possibilities:

19 "...necessary operating expenses,  
20 interest in debt services and  
21 reserves."

22 The question asked by the Statute is:  
23 What did the Corporation spend?

24 Third, and more fundamentally, why would  
25 the Board ask Manitoba Hydro consumers to pay for CO2

1 that they are not emitting? The people in the United  
2 States who are generating that CO2 are not, at this  
3 point, being asked to pay for it.

4 Manitoba Hydro customers have invested  
5 heavily in hydro, a non-emitting resource. They have  
6 paid for those developments, they've taken on the risk of  
7 those developments, and to a significant extent, Manitoba  
8 customers are living with the environmental impacts of  
9 those developments.

10 Now, obviously, that's more true for some  
11 customers than for others, and I don't want to step on  
12 the toes of Mr. Anderson's members, but they are  
13 certainly living with the impacts of those developments.

14 Why should Manitoba Hydro customers pay  
15 for CO2 that they're not emitting? They shouldn't.

16 Number four (4), and this comes back to an  
17 issue that we were discussing earlier, this proposal does  
18 not actually send an effective price signal. And that's  
19 for two (2) reasons.

20 First of all, we have not captured, and we  
21 are not likely to capture all of the costs and benefits  
22 of all of the possible sources of generation, and all of  
23 the externalities associated with electricity supply.  
24 How do we send a clear and appropriate price signal based  
25 on a very small part of the information?



1                   And my second point is very similar to  
2 that. If we price to incorporate CO2, and the other  
3 alternatives available to consumers do not, we're skewing  
4 the playing field and potentially encouraging inefficient  
5 or undesirable choices.

6                   And I'll take the example just of heating.  
7 Mr. Lazar talked about electric heat versus natural gas  
8 heat and the idea being that he wanted to encourage  
9 natural gas heat, which is emitting here, as compared to  
10 electric heat which is not emitting here.

11                   His reasoning might or might not be  
12 correct, but let's take it -- let's accept it for the  
13 purposes of argument. If we increase electric rates by  
14 adding a CO2 cost artificially, what do we then do with  
15 the other options?

16                   Do we increase natural gas rates as well  
17 to reflect CO2? It does emit. Presumably we should.  
18 But then are we sending the price signal that we're  
19 trying to send, which is to encourage natural gas heat.

20                   What about propane? It's regulated, so  
21 there may well be a way to find an answer. I don't know  
22 what that answer is. But it's a complicated problem.

23                   But what about the unregulated options?  
24 There's wood, oil, et cetera.

25                   The Vice-Chair pointed out during Mr.

1 Lazar's evidence there are, I believe, two (2) houses in  
2 Thompson that are heated by oil. I'm going to suggest  
3 that's probably because oil is not economic right now.

4 But if we increase electricity prices,  
5 other options, including oil and wood, may become  
6 economic. And if that's not necessarily the price signal  
7 that we're trying to send, it comes back to how do you  
8 send a clear signal with partial information?

9 Pricing electricity to include CO2 is not  
10 necessarily going to send the signal that this Board  
11 wants to send. And it's a lot more complicated than  
12 perhaps was suggested in the evidence.

13 Reason number five (5), is that the  
14 calculations provided in Mr. Lazar's report will not  
15 necessarily be an accurate representation over time. He  
16 provided several pages of calculations and each one --  
17 each page depended entirely on the accuracy of the  
18 calculations coming before it.

19 I talked about the - the mathematical food  
20 chain, if you will, and changes early in the food chain  
21 are going to affect numbers later in the food chain.

22 The numbers on each page were variable  
23 depending on a number of different factors including  
24 changes in consumption choices, changes in technology,  
25 pricing of technology, DSM programming, industrial and

1 other user profiles, changes in where Manitoba Hydro  
2 exports to, fuel prices in export markets, environmental  
3 initiatives here and elsewhere, new generation plants  
4 that are available here and elsewhere.

5           And that's just in trying to quantify how  
6 much CO2 is actually being emitted in the export markets,  
7 much less trying to calculate what that's worth. It's  
8 not possible for this Board to be confident that it is  
9 making anything approaching a precise estimate.

10           Moreover, there's no CO2 tax currently in  
11 place and there is no clear indication when or if that's  
12 going to happen. We have no idea how much that tax will  
13 be, when and if it does occur.

14           And Mr. Lazar's calculations are a guess,  
15 at best, at what these values might be. I'm going to  
16 suggest that overall this analysis lacks rigour and it  
17 lacks practicality, and those are very important factors  
18 for the Board.

19           Turning to the idea of pricing at marginal  
20 cost. There are a number of compelling reasons why  
21 embedded costs are more appropriate and more practical  
22 for the cost of service than marginal costs. And I've  
23 referred the Board already to Section 39(1) of the Act.

24           The question asked by the statute is:  
25 What did the Corporation spend? The statute speaks to

1 embedded costs not marginal costs. Aside from the  
2 statutory framework, the use of marginal costs in the  
3 cost of service study presented several practical  
4 problems.

5                   Do we use short run or do we use long run?  
6 Well, short run sends the best price signal but it's  
7 unstable. Instability in prices is going to be  
8 impractical for the Board and for consumers and very  
9 disruptive. It's also, frankly, going to be a lot of  
10 aggravation for the Board because you can imagine how  
11 often you're going to see our faces.

12                   Long run costs are much more stable but  
13 they send a much less accurate price signal. How do you  
14 choose between those two (2), neither of which is very  
15 satisfactory? How do you determine what marginal costs  
16 actually are? There are a number of options and  
17 economists can disagree as to which is the most  
18 appropriate. How does the Board choose?

19                   Again, we're entering into areas where the  
20 Board is doing to spend a lot of time having to hear  
21 argument and evidence and debate choices that aren't  
22 necessarily going to result in a benefit that's  
23 commensurate with the effort involved.

24                   Manitoba Hydro has also indicated that it  
25 has marginal generation costs of approximately five point

1 three, five (5.35) cents per kilowatt hour; that's based  
2 on export price forecasts which Manitoba Hydro says are  
3 commercially sensitive; that creates a serious problem  
4 for the Board in terms of accountability and  
5 transparency. How do customers become satisfied that  
6 they're being asked to pay their fair share if they can't  
7 be told how that value is determined?

8 Another practical problem is that although  
9 currently marginal costs are higher than embedded costs,  
10 that has not always been the case, and it may not always  
11 be the case; that leads, again, to potential problems  
12 with instability. What happens when marginal costs are  
13 less than embedded costs? Does the Government pay the  
14 difference?

15 Another practical problem is that we don't  
16 currently have full marginal cost information available  
17 at this time. Hydro would have to do another cost of  
18 service study.

19 The reality is that virtually all  
20 regulated utilities use embedded costs, and they use them  
21 for good reason; they're clearer, they're more certain.  
22 And those are important benefits in the context of a  
23 regulated utility. How much time, money and energy  
24 should be spent wrangling about this issue?

25 The key objective of the cost of service

1 study is a fair apportionment of costs amongst the  
2 customer classes. The appropriate costs to allocate are  
3 those that make up the revenue requirement; and those are  
4 embedded costs.

5                   If using marginal -- if the Board chooses  
6 to use marginal costs in the cost of service study, but  
7 recover only embedded costs, which is another  
8 possibility, then Hydro, or the Board, or both, have to  
9 find a way to reconcile the cost of service study with  
10 the revenue requirement, which creates a whole other  
11 issue to fight about.

12                   I -- the final point is that as things  
13 stand now the export situation is win/win. Exports fill  
14 a demand in the US and displays emissions there. They  
15 make a profit that help keeps -- that helps to keep  
16 domestic rates low. And domestic ratepayers have an  
17 incentive to pay -- to build or to advance a new plant in  
18 order to maximize those opportunities. Everybody's  
19 happy.

20                   If we set domestic rates at or above the  
21 export price, and if we follow all of Mr. Lazar's  
22 recommendations on the long-term, that would mean that  
23 domestic customers do pay more than -- than export  
24 customers, then exports provide much less economic  
25 benefit to ratepayers and they become a lot less

1 important to Manitoba Hydro's financial circumstances.

2           If exports don't provide much of a benefit  
3 to ratepayers, there's less of a reason to build or  
4 advance generation for those purposes. Why would  
5 domestic customers want to take on the risks inherent and  
6 the costs inherent in building or advancing generation  
7 for export, if the payoff is low. If we decrease the  
8 incentive to take advantage of export opportunities,  
9 Manitoba ratepayers lose and so do export customers.

10           Several witnesses before this Board have  
11 suggested there may be good reasons to -- to price  
12 incremental use at or close to marginal costs. That may  
13 be the case. We haven't explored that issue fully yet,  
14 so it's hard for my clients to offer a position on that.

15           I suspect that that issue is going to  
16 arise at the next GRA and the issue can be explored  
17 there. But there's a significant difference between  
18 pricing incremental use at or close marginal -- to  
19 marginal costs, and pricing all use at marginal costs.

20           Mr. Williams has already talked about why  
21 export revenues are properly allocated to domestic  
22 customers on the basis of generation transmission and  
23 distribution, so I'm not going to repeat his comments.  
24 I'm simply going to say that choosing not to -- to do  
25 that, to take them out of the -- off the table, as it

1 were, doesn't consider the statutory framework or the  
2 Board's jurisdiction, and doesn't address the many  
3 compelling reasons to allocate to domestic customers.

4           The implications of these long-term  
5 recommendations are well beyond the scope of this hearing  
6 and well beyond the jurisdiction of this Board, in many  
7 cases. In fairness, Mr. Lazar himself does suggest that  
8 we implement 127 percent rate increase immediately, but  
9 he wants the Board to move in that direction. And if we  
10 go down that path, that's where, presumably, we're  
11 headed.

12           Even if that were done gradually, it would  
13 have significant implications. If you do that over a  
14 period of ten (10) years, you're still talking about more  
15 than 10 percent per year. It's hard to imagine the  
16 impact of that kind of rate increase. I believe the term  
17 that Mr. Warden used was, Unfathomable.

18           Balance that against the fact that the  
19 consumption changes predicted in their report are crude  
20 estimates, at best. The estimates depended on a -- a  
21 wide variety of factors that -- that we talked about  
22 already. They're based on elasticity estimates which are  
23 not likely applicable to price changes of that magnitude.  
24 The only thing that we can say for sure is that we cannot  
25 accurately predict the consequences of such a change,



1 only that they would be immense.

2 I'm going to suggest that implementing  
3 those long-term suggestions would be rolling the dice,  
4 creating tremendous risk for domestic ratepayers, without  
5 a clear environment benefit.

6 Perhaps on a more pragmatic level, Mr.  
7 Lazar's recommendations relate more to weighting. He  
8 wasn't suggesting doing these other things immediately,  
9 he was suggesting doing them over a long term and, to  
10 some extent, that they would require, in any event,  
11 statutory amendments.

12 So what about using these factors for  
13 weighting? In some ways it's hard for my clients to  
14 criticize that proposal because, to a significant extent,  
15 it benefits residential. If you look at the RRC's,  
16 residential do well on that basis. However,  
17 analytically, that analysis is still unsound.

18 If -- if you look at the idea of the CO2  
19 adder, as an example, there's no logic to that. And I'm  
20 not going to repeat the list of reasons that I gave you,  
21 but those reasons apply just as much to weighting as they  
22 do to pricing.

23 If we talk about marginal costs and  
24 weighting for marginal costs of generation, or marginal  
25 costs of all functions, again, all the problems we've

1 talked about before in terms of why marginal costs are  
2 not practical, they apply just as much.

3 Customers are legitimately entitled to ask  
4 why they should be paying for elaborate calculations and  
5 reconciliations in order to incorporate marginal costs  
6 which are not actually part of the revenue requirement.  
7 And at the end of the day, how much benefit does such a  
8 complicated system add to this process for the time and  
9 expense that are involved in implementing it?

10 Given the analytical problems and the  
11 analytical weaknesses, is it worth it? I'm going to  
12 suggest that the answer is no. I'm going to suggest that  
13 there are better ways to use marginal costs to advance  
14 the various rate criteria.

15 An example of that with Manitoba Hydro's  
16 proposal around allocating generation costs using  
17 marginal cost weighted energy used by time period.  
18 That's one (1) example and there may well be more that  
19 are going to come to us down the road.

20 If our goal is to send efficient price  
21 signals the tool is rate design. If our goal is protect  
22 the environment by encouraging efficiency in  
23 conservation, and those -- that goal is near and dear to  
24 the hearts of CAC/MSOS, then by far the most effective  
25 tool to do that is DSM.

1 I'm going to suggest that the  
2 recommendations around weighting RCC's to contemplate CO2  
3 costs and marginal costs add a significant degree of  
4 complication to the process, for little benefit and  
5 without any sound analytical basis.

6 Another option presented by Mr. Lazar was  
7 to use his analysis and evaluating DSM program --  
8 programming. It's beyond the scope of this Hearing but  
9 I'll provide a couple of comments.

10 First of all, the same analytical problems  
11 apply that I talked about before and I won't bore you by  
12 repeating them. But, analytically it doesn't make sense.  
13 I had provided to my various friends and I believe a left  
14 copy for Mr. Forrest, a copy of a decision from the Regie  
15 de l'energie du Quebec.

16 It is unfortunately in French, but the  
17 decision was left -- is available for everyone's review.  
18 They have considered an issue such as -- this issue  
19 including the cost of environmental externalities in the  
20 calculation of what it costs for DSM programming.

21 And this is a decision from 2004. It is  
22 in French and I don't have an official translation but, I  
23 can tell you what my understanding of the decision says  
24 on this issue.

25 Several Intervenors argued in favour of

1 including externality costs. And Hydro Quebec  
2 distribution argued that there was no basis upon which to  
3 conclude that other costs including externalities should  
4 be taken into account in the calculation of avoided  
5 costs.

6                   According to Hydro Quebec distribution  
7 avoided costs should reflect actual costs and an over  
8 estimation of those costs could lead to unjustified over  
9 spending on DSM programming which would have an  
10 unreasonable impact on rates.

11                   In the end the Regie concluded that  
12 avoided costs must adequately reflect both the cost  
13 structure and the upcoming level of costs to Hydro Quebec  
14 distribution. Over estimated avoided costs could lead to  
15 DSM expenditures for some programs that exceeded actual  
16 efficiency gains, derived from them.

17                   In those cases -- program -- those  
18 programs would have an unwarranted rate impact.  
19 Conversely, avoided costs that were too low could lead to  
20 rate increases if the required energy efficiency gains  
21 were not obtained.

22                   The Regie stated that although it was  
23 aware that energy efficiency is an important means to  
24 curtail GHG emissions and other pollutants, it found that  
25 it was not timely to evaluate the monetary value of the

1 greenhouse gasses with any precision and it therefore  
2 rejected the proposed monet -- monetization which was I  
3 believe about a third of a cent.

4                   The Regie found that the monetization of  
5 externalities should not be considered until clear  
6 parameters regarding the monetary value of greenhouse  
7 gasses were established. And it expressed concerns that  
8 the modalities for tradable emissions permits had not yet  
9 been determined.

10                   I'm going to suggest that the Regie  
11 analysis is applicable here. There is insufficient  
12 precision and accuracy to import these costs into avoided  
13 costs for DSM programming.

14                   And if we do not accurately assess the  
15 implications to DSM programming then our spending on  
16 those programs is not going to be appropriate. And we  
17 will then place the gains available from DSM at risk,  
18 while evaluating them incorrectly.

19                   If I can just have a minute please?

20

21                   (BRIEF PAUSE)

22

23                   MS. MYFANWY BOWMAN: In conclusion, my  
24 clients would like to recognize the contribution by  
25 RCM/TREE to this Hearing by raising important issues.

1                   It's with regret that my clients urge the  
2 Board to reject Mr. Lazar's recommendations. In their  
3 view the analysis presented lacks rigour and balance and  
4 it's unlikely to have the desired effects. Moreover it's  
5 almost certain to have undesirable effects.

6                   Efficiency is an important objective but  
7 it is one (1) objective which must be balanced by other  
8 considerations and this advice doesn't balance those  
9 considerations.

10                  Mr. Lazar was unable to identify any  
11 jurisdiction that considered a required environmental  
12 cost be incorporated into the cost of service. He was  
13 unable to identify any jurisdiction that employed an  
14 approach similar to the one he proposed. The simple  
15 reason for that is that his proposals, although well-  
16 intentioned, are complicated and don't add sufficient  
17 value to the process.

18                  If the concern is efficiency it's best to  
19 address through rate design and if the goal is to  
20 encourage conservation and maximize exports, by far the  
21 best alternative is DSM programming. It's the most  
22 effective way to influence domestic consumption and it  
23 doesn't have the extreme far-reaching negative impacts  
24 that we're looking at through some of these other  
25 alternatives.

1                   Subject to questions, those are my  
2 comments.

3                   THE CHAIRPERSON:    Thank you, Ms. Bowman.

4                   MR. BYRON WILLIAMS:    Mr. Chairman, I'm  
5 going to take you home.

6                   THE CHAIRPERSON:    Mr. Williams...?

7

8 CONTINUED CLOSING COMMENTS BY MR. BYRON WILLIAMS:

9                   MR. BYRON WILLIAMS:    Thank you.  Mr.  
10 Barron, perhaps our list of recommendations.  On our  
11 agenda there's three (3) items remaining but they're  
12 quite short ones.

13                   1, I've stated, is leaving aside -- or  
14 should the costs seek to reflect cost causation under a  
15 range of water flow conditions?  And, very briefly, Mr.  
16 Harper addressed this in his direct evidence and he was  
17 struggling with what he considered to be an inconsistent  
18 treatment of costs such as purchase power or thermo-  
19 generation associated with Brandon and/or Selkirk.

20                   And the thrust of his comments was that if  
21 you're trying to take a principled approach to these  
22 issues one should be looking not just at median water  
23 flows, you should be also looking at water flows on a  
24 range of conditions and that was -- that was the point  
25 that I'll elaborate upon in our recommendations.

1 Under the heading of "humble thoughts",  
2 it's just something that I want to raise for the Board  
3 and also we would appreciate their guidance in their --  
4 in their closing argument. In the -- I've mentioned  
5 before, or perhaps I haven't, but this is -- has been  
6 from our perspective a very interesting, creative  
7 proceeding. One of the things that's made it very  
8 interesting and creative is the fact that there's a lot  
9 of ideas that we would argue are out of the scope of this  
10 proceeding or perhaps beyond the Board's jurisdiction.

11 And something that we struggle with as  
12 Intervenors, and so I'm asking for the Board's guidance  
13 on this, is how do we respond to -- to matters which we  
14 consider may be outside the scope or outside the  
15 jurisdiction of the Board? Do we ignore them and run the  
16 risk that they're reflected in the Board's judgment? Or  
17 do we intensively engage in these debates and run the  
18 risk of being seen as operating outside the scope?

19 And so from an Intervenor perspective  
20 there's very much cost implications in terms of how we --  
21 we do this. So we're hoping for guidance from the  
22 Board's decision in terms of what matters it considered  
23 to be out of scope or out of jurisdiction because that  
24 will assist us in future proceeding in -- in the  
25 difficult judgment calls we have to make in terms of





1 basis for the cost of service methodology it should be  
2 focused on allocating the Utility's revenue requirement.  
3 And in cases such as Hydro where the revenue requirement  
4 is based on embedded, i.e., accounting, costs, the PUB  
5 should confirm that the costs to be allocated in the cost  
6 of service are embedded costs.

7           We also think, and this goes back to my  
8 discussion regarding purchased power and thermal  
9 generation, that the prospective cost of service study  
10 performed for Manitoba Hydro General Rate Applications  
11 should seek to reflect cost causation under a range of  
12 water flow conditions as opposed to just medium water  
13 flow conditions.

14           Ms. Bowman has spoken to the proper role  
15 of marginal costs and to summarize, certainly they can  
16 play a role in assisting the classification and  
17 allocation of embedded costs, and play an even more  
18 critical role perhaps in -- in rate design. And we're  
19 looking forward to exploring their role when Manitoba  
20 Hydro's rate proposals are considered by the Board.

21           In terms of externalities, we would  
22 respectfully submit that they should be out of the cost  
23 of service methodology because that is focused on  
24 fairness of rates, but it should be considered when the -  
25 - the Board is considering Manitoba Hydro's rate designs.

1                   In terms of the zone of reasonableness,  
2 we've indicated our position on that.

3                   In terms of the number of export classes,  
4 for the reasons indicated before we're advocating the  
5 adoption of two (2) exports classes. And I won't go  
6 through the details because this is enough to make me  
7 shudder but in the -- in terms of the initial assignment  
8 of costs to exports, we've set that out in -- in detail  
9 there. And I fear to walk any further down that path.  
10 We've all --

11                   THE CHAIRPERSON: We'll include this set  
12 of papers --

13                   MR. BYRON WILLIAMS: As an exhibit, yes.

14                   THE CHAIRPERSON: -- within the written  
15 record of the Hearing.

16

17 CONTINUED BY MR. BYRON WILLIAMS:

18                   MR. BYRON WILLIAMS: I would appreciate  
19 that, Mr. Chairman.

20                   And, likewise, I'm going to skip over  
21 directly assigning opportunity exports, the assignment of  
22 firm exports and the treatment of firm exports.

23                   We think that there's future work that  
24 needs to be done. Manitoba Hydro's proposed treatment of  
25 trading related costs and MAPP/MISO fees, we suggested

1 are reasonable as an interim solution but on a going-  
2 forward basis that that should be considered.

3           The -- the determination of net export  
4 revenue we believe should be determined as the difference  
5 between total export revenue and the costs directly  
6 assigned and allocated to the two (2) export classes, we  
7 would ask the Board to adopt Hydro's proposals for  
8 assigning a portion of net exports revenues to fund  
9 uniform rates.

10           And then a critical element of our  
11 proposal is the balance of the net export revenues should  
12 be allocated to all domestic customer class based on the  
13 total costs allocated to each cost -- to each class, per  
14 Hydro's recommended method. We also speak to 100 percent  
15 energy classification and the use of stepped rates as a  
16 proxy for marginal costs.

17           The final non-Harper recommendation we're  
18 hoping speaks to some of the concerns identified by  
19 MIPUG, but that the PUB should direct Hydro to provide by  
20 December 31st, 2006 its preferred approach with respect  
21 to the future rate design for each domestic customer  
22 class including an implementation strategy. And we would  
23 suggest that this could either be done as part of the  
24 '07/'08 GRA or -- or separately if a General Rate  
25 Application is filed with -- is not filed with the PUB by



1 Note: First three are Bonbright's primary criteria,  
2 while the fourth builds on a number of Bonbright's other  
3 criteria.

4

5 Purpose of COSS

- 6 - The MPUB should confirm that the purpose of the  
7 COSS is to provide guidance with respect to the  
8 "fairness" objective.  
9 - Fairness in rate setting means equal treatment of  
10 equals based on the principle of cost causality.

11

12 Cost Basis for COSS

- 13 - A COSS should allocate the utility's revenue  
14 requirement. In cases such as MH, where the  
15 revenue requirement is based on embedded (i.e.,  
16 accounting costs), the MPUB should confirm that  
17 the costs to be allocated in the COSS are the  
18 embedded costs making up the revenue requirement  
19 for the year in question (e.g. forward test year  
20 or actual historic year).  
21 - The prospective COSS study performed for Hydro's  
22 General Rate Applications should seek to reflect  
23 cost causation under a range of water flow  
24 conditions (as opposed to just median water flow  
25 conditions)

1 Role of Marginal Costs

- 2 - Marginal costs can play a role in assisting in  
3 the classification and allocation of the embedded  
4 cost based revenue requirement.
- 5 - COSS based on marginal costs can play a role in  
6 rate design. This role should be explored when  
7 MH's rate design proposals are considered by the  
8 MPUB.

9 Role of Externalities

- 10 - externality costs should not be included in COSS  
11 used to assess the "fairness" of rates.
- 12 - The role of externalities in rate design should  
13 be considered when MH's rate design proposals are  
14 considered by the MPUB.

15 Zone of Reasonableness

- 16 - The MPUB should reconfirm its acceptance of 95  
17 percent/105 percent as the "Zone of  
18 Reasonableness" for COSS results by Domestic  
19 Customer Class.

20 EXPORT TREATMENT

21 Export Classes

22 Number of Export Classes

- 23 - Adopt the two export classes (Opportunity and  
24 Firm) proposed by MH.

25 Initial Assignment of Costs to the Exports

- 1 - Initially assign to Exports
- 2 - 50 percent of Purchased Power Costs excluding
- 3 wind purchases (and other future purchase
- 4 commitments from sources inside Manitoba)
- 5 - 50 percent of Brandon fuel and related costs.
- 6 - 100 percent of Transmission Service Costs
- 7 (i.e., purchased transmission services)
- 8 - 100 percent of MISO and MAPP fees and related
- 9 legal costs.
- 10 - Water Rentals assuming Export sales not
- 11 sourced from 50 percent of Brandon's
- 12 production and 50 percent of Purchases
- 13 (excluding wind purchases) are from hydro-
- 14 generation.

15 Directly Assign to Opportunity Exports

- 16 - A share of each of the costs elements initially
- 17 assigned to Exports based on ratio of Opportunity
- 18 Exports to total Export Sales projected over next
- 19 five years (currently 45.23 percent)

20 Direct Assignment of Firm Exports

- 21 - Directly assign to Firm Exports the remaining
- 22 Transmission Service Costs.

23 Treatment of Firm Exports

- 24 - Allocate Total Transmission costs (including
- 25 Ancillary Service Costs) to Firm Exports and the



1 Domestic Customer Classes based on 2CP (i.e., the  
2 currently approved Method for allocating  
3 transmission costs).

- 4 - Allocate the remaining Generation Costs (i.e.,  
5 all Generation costs except those directly  
6 assigned to either Opportunity or Firm Exports)  
7 to Firm Exports and the Domestic Customer Classes  
8 based the Generation.

9 Future Work

- 10 - MH's proposed treatment of trading related costs  
11 (i.e., no direct assignment to exports) and  
12 MAPP/MISO fees (all initially assigned to  
13 exports) are reasonable as an interim solution,  
14 the COSS treatment of both should be reviewed  
15 going forward.

16 Treatment of Net Export Revenue

17 Determination of Net Export Revenue

- 18 - Determine Net Export Revenue as the difference  
19 between:  
20 a) Total export Revenue  
21 b) The costs directly assigned and allocated to  
22 the two Export Classes.

23 Treatment of Export Revenue - Uniform Rates

- 24 - The MPUB should adopt MH's proposals for  
25 assigning a portion of net export revenues to

1 fund uniform rates.

2 - The balance of the net export revenues should be  
3 allocated to all Domestic Customer classes based  
4 on the total costs allocated (i.e., excluding  
5 directly assigned costs) to each class, per MH's  
6 Recommended Method.

7 Classification and Allocation of Generation Costs

8 100 percent Energy Classification

9 - The MPUB should accept MH's proposal to use SEP  
10 rates averaged over a number of years and  
11 adjusted for inflation as a proxy for marginal  
12 cost (of both capacity and energy).

13 Rate Design

14 - The MPUB should direct MH to provide by December  
15 31, 2006 its preferred approach with respect to  
16 the future rate design for each Domestic customer  
17 class, including an implementation strategy.  
18 This can be done either as part of its 2007/08  
19 GRA or separately if not General Rate Application  
20 is filed with the PUB by December 31, 2006.

21

22 (WRITTEN SUBMISSION CONCLUDED)

23

24 QUESTIONS BY BOARD:

25 THE CHAIRPERSON: Thank you, Mr.

1 Williams, Ms. Bowman. I've got a few follow-up questions  
2 to the comments that were made. And we acknowledge the  
3 difficulties of the interrelated issues and the efforts  
4 to separate COSS off from rate setting, setting of  
5 revenue requirements.

6 I think that probably all here would  
7 acknowledge the difficulties of carrying on this  
8 particular Hearing in the context of a General Rate  
9 Application. And that was the idea of separating off the  
10 COSS, but there are a lot of related issues.

11 You suggested that each generation  
12 benefits from the investment of the past and that there's  
13 long-term benefits. So for all investments; for example,  
14 the Selkirk and Brandon gas turbines?

15 MR. BYRON WILLIAMS: The -- I think that  
16 was a general statement. I wish you would have asked  
17 that question to Mr. Harper instead of -- instead of  
18 myself.

19 THE CHAIRPERSON: It's fine. The  
20 qualifications --

21 MR. BYRON WILLIAMS: The -- certainly, by  
22 and large, I -- I think if you look in the past there  
23 were probably decisions that were imprudent but many  
24 decisions that were very prudent and we're benefitting  
25 from those today. And I think, likewise, the wise

1 investments in DSM and SSE and Wuskwatim, hopefully, will  
2 also benefit consumers in the future.

3 I think in terms of the merits of Selkirk  
4 and Brandon, in terms of the prudence of their  
5 investment, I think that would be -- we'd -- and that's  
6 certainly, in terms of Brandon, we're going to ask that  
7 question at the General Rate Application.

8 And I'm not sure that we've canvassed that  
9 properly here. I think the general point I was making is  
10 that overall we've benefitted from the investments in the  
11 past and we expect to in the future.

12 I wasn't suggesting that we can  
13 conclusively say that Brandon and Selkirk are prudent and  
14 reasonable investments.

15 THE CHAIRPERSON: Yes. And don't read  
16 that into my comment either. And often times prudence or  
17 imprudence is judged in the rear view mirror, is it not?

18 MR. BYRON WILLIAMS: It looks a lot  
19 different.

20 THE CHAIRPERSON: Circumstances change.  
21 You have suggested, as well, that exports are served in  
22 part from older plants, and of course, when you look at  
23 electrons, naturally it's the case.

24 But if all generation over time is built  
25 primarily for domestic use, is there not some support for

1 the low hanging -- the loss of low hanging fruit argument  
2 of Mr. Bowman's?

3 MR. BYRON WILLIAMS: If you're --

4 THE CHAIRPERSON: In other words, in  
5 time, plants serve domestic use. So therefore, one could  
6 -- Mr. Bowman's argument that export is served by newer  
7 generation and higher levels of cost.

8

9 (BRIEF PAUSE)

10

11 MR. BYRON WILLIAMS: The -- if -- just so  
12 I'm clear, in terms of the existence of low hanging  
13 fruit, just so I'm clear, we were speaking to the  
14 totality of all energy resource options, including DSM  
15 and SSE and also the conclusions of the Clean Environment  
16 Commission, which suggested that there was plenty of low  
17 hanging fruit still going forward.

18 If the question that you're asking is, and  
19 maybe I misunderstand the question, is a future  
20 generation going to more expensive than old generation,  
21 then that's certainly the case. I'm not sure I've quite  
22 got the question though.

23 THE CHAIRPERSON: That's close enough.

24

25 (BRIEF PAUSE)

1 THE CHAIRPERSON: Well, the suggestion  
2 was to explain it further. When you start talking in the  
3 context of low hanging fruit, if you assume that  
4 generation is constructed primarily in the long haul for  
5 domestic use, okay, and then in the absence of any  
6 further generation, eventually all generation would be  
7 for domestic use.

8 Could one not argue then that last in  
9 first out, type of basis? In other words the last  
10 generation built is the one that's costed against export?

11 MR. BYRON WILLIAMS: Well, first of all,  
12 I think that's a bit of a overly simplistic, with  
13 respect, suggestion of my understanding of Hydro's  
14 planning and resource planning.

15 First of all, that it's focused on  
16 dependable energy which flows both -- which sources both  
17 domestic and firm hydroelectricity. So I think that's  
18 one (1) part of it.

19 In terms of last -- you know, the --  
20 probably this is a question that Mr. Harper would be able  
21 to answer better than me. Beyond that I'm not sure I can  
22 offer much, Mr. Chairman.

23 THE CHAIRPERSON: Thanks, Mr. Williams.  
24 Mr. Williams, you also suggest that higher domestic use  
25 reduces aggregate net export revenue and aggregate

1 revenue. Conceptually does that -- does not DSM provide  
2 then more opportunities for export revenue?

3

4

(BRIEF PAUSE)

5

6

MR. BYRON WILLIAMS: Yes. And I think  
7 we're -- my clients are probably open to that --  
8 discussing that concept further when we're apprized of  
9 that -- when we can bring in someone like Dr. Higgins to  
10 give more thought to that concept.

11

THE CHAIRPERSON: Thanks, Mr. Williams.

12

13

(BRIEF PAUSE)

14

15

MR. LEN EVANS: Excuse me, maybe I'm a  
16 little slower than usual this morning, but I'm a little  
17 confused about reference to MC. Ms. Bowman was saying  
18 that -- was making a case against using MC, or rather,  
19 making a case for embedded costs, and yet there's  
20 material here, where you're making a case for using MC.

21

22

So it seems to me that there's a bit of a  
conflict. But maybe I'm misunderstanding you.

23

24

25

MR. BYRON WILLIAMS: I think what we're -  
- we're suggesting in terms of using marginal costs, just  
to back up, if you're looking at the overall revenue

1 requirement, that should be based upon embedded costs.  
2 And the starting point for the cost of service analysis  
3 should be the recovery of embedded costs.

4           What I believe Manitoba Hydro has proposed  
5 is to use some marginal cost values to weigh how embedded  
6 costs are allocated, and that's certainly something that  
7 we're supportive of. They're still using the basic  
8 embedded costs and that's their focus in their cost of  
9 service methodology.

10           But how they weigh them, the idea that not  
11 all kilowatt hours are created equal, is based upon the  
12 marginal costs weighting.

13           MR. LEN EVANS: All right. Thank you. I  
14 just have another question. It's more of a general  
15 question about the advantage, or lack of advantage to  
16 Manitobans, in reducing greenhouse gas emissions south of  
17 the border, in reference to CO2 and, you know, why should  
18 we be concerned about this.

19           And I always thought we'd been told, for  
20 some couple of years now, about the Kyoto goals. And  
21 we're living in one (1) world, and the whole matter of  
22 Kyoto credits, that we can do certain things in Canada  
23 for which we can get credit, and this is to our long-term  
24 advantage.

25           So it seems to me there's some argument to



1 be made to help reduce greenhouse gas emissions in the  
2 United States; would you agree with me?

3 THE CHAIRPERSON: In other words, is it a  
4 straight economic argument, which, get nothing for it, do  
5 nothing about it?

6 MS. MYFANWY BOWMAN: I wouldn't make that  
7 argument and I don't think that my clients would want me  
8 to make that argument. I don't know a lot about Kyoto  
9 and credits. My impression is that that's not fully  
10 implemented, so I don't know that Manitoba Hydro is  
11 necessarily getting credits for the majority of its  
12 exports. I think that that's something they're working  
13 towards, if I'm not mistaken. But I don't know that they  
14 necessarily do.

15 In a more general sense, I don't think my  
16 clients are trying to suggest that greenhouse gas  
17 emissions are a good thing, or that we shouldn't be  
18 trying to do something about them, or that exporting  
19 hydro power to the US is a bad idea. Quite the contrary,  
20 it's a good idea both for the environment and, frankly,  
21 economically it makes sense for Manitoba Hydro.

22 But, of course, we should try and do what  
23 we can to contribute to greenhouse emissions in the  
24 United States. I think that my clients might take --  
25 might be a little bit more cautious about agreeing that

1 Manitoba is responsible for providing the United States  
2 with clean power. But, as good neighbours, why would we  
3 not do it if we have it -- if we have it to give, why  
4 wouldn't we give it to them.

5 My client's concerns relate more to doing  
6 it in the fashion that is being proposed here. The  
7 proposals, I'm going to suggest, are not going to  
8 probably be as effective as we would like them to be, but  
9 they will potentially have devastating consequences for  
10 domestic customers.

11 Much better, in my client's view, to focus  
12 on things like DSM to encourage conservation and  
13 therefore increase the amount of power that can be  
14 exported; that's not only going to be more effective, but  
15 it's not going to be devastating to domestic customers.

16 MR. LEN EVANS: Again, from my bit of  
17 reading in the public press, most environmentalists would  
18 argue that the price mechanism is one of the most  
19 efficient ways to bring about conservation and the  
20 protection of the environment.

21 There's all kinds of literature and many  
22 statements made along those lines. So I gather your  
23 association doesn't believe that pricing has much of an  
24 impact, or should have much of an impact in terms of  
25 reducing the consumption of electricity, in this case?

1 MS. MYFANWY BOWMAN: I think that what my  
2 clients would probably say is that there are limits to  
3 the elasticity of certain kinds of use, and particularly  
4 for residential customers there are limited substitutes  
5 for a number of functions that electricity serves.

6 And that we are probably not going about  
7 this in the most appropriate and effective way, if we are  
8 imposing punishing rates on customers who need the power.  
9 My clients I think would say, instead, that price can  
10 play a role, but not necessarily -- it shouldn't be used  
11 in the way that's being proposed.

12 And that, for example, goes to the  
13 difference between exposing incremental use to marginal  
14 cost, or close to marginal cost pricing, as opposed to  
15 exposing all use to marginal cost pricing, if -- if you  
16 take my meaning.

17 MR. LEN EVANS: Thank you. Just one (1)  
18 more question, more or less along these lines. Have you  
19 heard of the organization, I think it's called the  
20 Frontier Institute for Public Policy?

21 MR. BYRON WILLIAMS: That -- that would  
22 be Mr. Holle's organization, H-0-L-L-E.

23 MR. LEN EVANS: Yes. And are you aware  
24 of their position on the matter of energy pricing --  
25 generally, energy pricing, in terms of effectiveness in

1 reducing excessive consumption and also to provide a net  
2 benefit to the Province of Manitoba, the taxpayers of  
3 Manitoba, by bringing in more revenue into this province  
4 via -- in this case, via Hydro?

5 MR. BYRON WILLIAMS: I think some of our  
6 comments -- at a very high level, I think we're aware of  
7 it. I think some of our comments would -- with regard to  
8 Mr. Lazar's submissions, we would also address to Mr.  
9 Holle's, H-O-L-L-E, submissions.

10 I think it's also interesting, those of  
11 you who are familiar in Wuskwatim, I want to come back to  
12 this issue because our clients push, very forcefully, in  
13 Wuskwatim, for a greater emphasis on demand side  
14 management.

15 And it's interesting, if you read  
16 carefully the words of the expert brought in by TREE/RCM  
17 in that proceeding, Mr. Ralph Torre, he makes a very  
18 powerful argument, that if your real objective is to  
19 achieve efficiency -- I mean, excuse me, is to reduce  
20 consumption, that demand side management is a much more  
21 effective tool. And -- but -- so I think that the debate  
22 -- I think that's something that Torre was very powerful  
23 on.

24 The last point I just want to make is that  
25 our clients haven't taken a position, as yet, on inverted

1 rates; they're struggling with the block -- the block  
2 heater issue. But they're certainly, you know, as part  
3 of their recommendations here, they're saying, Let's --  
4 Let's push Hydro to bring in, you know, some rate design  
5 proposals. And they're certainly open to the -- the  
6 thrust of your concern, which is -- or at least as I  
7 interpret it, which is consumption at the margins, and  
8 they're open to that debate.

9                   So I -- I think it's too early to tell  
10 exactly where they're going to come down on that  
11 position.

12                   Mr. Chairman, I have one (1) -- I didn't  
13 very adequately answer your last kilowatt hour in -- or  
14 last kilowatt hour outgoes to exports. I do want to --  
15 to be very clear, let's use Wuskwatim as an example. And  
16 we -- we went through this with my cross-examination of  
17 Mr. Warden.

18                   With Wuskwatim -- Wuskwatim, a business  
19 case was made for advancing it, based upon a favourable  
20 internal review, based upon the advantage of export  
21 sales. So domestic ratepayers in 2020 are going to be  
22 benefitting from lower costs associated with Wuskwatim  
23 because it was put in service at an earlier -- earlier  
24 date.

25                   And -- and I guess our point is that it's

1 -- would be unfair to assign all the costs of new  
2 generation to -- to the exports when it's recognized, A)  
3 that domestic customers in the future will benefit from  
4 those rates or lower costs associated with plant. And  
5 secondly, as soon as Wuskwatim comes on line, domestic  
6 customers will also benefit from additional reliability  
7 benefits from the very day it comes on.

8 And that's why we -- we think that your  
9 analysis perhaps is a bit overstated. Just a suggestion.

10 THE CHAIRPERSON: Thank you, Mr.  
11 Williams. Returning to the question that Mr. Evans asked  
12 Ms. Bowman, correct me if I'm wrong.

13 My assumption is, is that from your  
14 earlier comments, we know what Mr. Holle's suggestions  
15 were in his documents, without going into them, my  
16 reading of you and your clients is you're opposed to  
17 anything other than historically cost-based rates, you're  
18 not interested in the rate regime that's proposed by the  
19 Frontier Centre that would yield hundreds of millions of  
20 dollars of additional revenue, more along the lines of  
21 Mr. Lazar.

22 MR. BYRON WILLIAMS: We're certainly not  
23 interested in -- I don't think my clients would be  
24 interested in Mr. Holle's regime. I do want to make the  
25 clients have indicated some willingness to look at the

1 idea of -- of rates designed for efficiency for  
2 incremental use. And that's something that they're  
3 inviting a discussion on.

4 THE CHAIRPERSON: Thank you. One (1)  
5 last question. Given that any application of Manitoba  
6 Hydro's recommended COSS would be based on real events  
7 and circumstances in any given year, and just for  
8 clarification, do you feel that supply should be  
9 restrained for new energy intensive industry, such as  
10 apparently is the use in Quebec?

11

12 (BRIEF PAUSE)

13

14 MR. BYRON WILLIAMS: I'm not really sure  
15 that's for -- I don't have any instructions from CAC/MSOS  
16 on that point. If at some point in time, for example,  
17 there's some proposal by Hydro in terms of other rates  
18 for high intensity industries, I think the clients would  
19 approach that with an open mind.

20 I've never canvassed that with them. And  
21 if you give me one (1) second I'll just confer with Ms.  
22 Bowman whether she has.

23

24 (BRIEF PAUSE)

25

1 MR. BYRON WILLIAMS: I can't give you any  
2 insight.

3 THE CHAIRPERSON: Okay. Thank you, Mr.  
4 Williams.

5 Okay. Thank you everyone, we'll come back  
6 at, if we don't mind, 1:30.

7 And the order at that time will be CCEP,  
8 I'm just looking around to see the parties that are here,  
9 then the City of Winnipeg, then MIPUG and then finally  
10 RCM/TREE and then we would close with MKO.

11 So that would be the order and we would  
12 hope to finish off the Intervenors closing statement  
13 today, followed on Friday with Ms. Ramage and Manitoba  
14 Hydro.

15 Thank you, 1:30.

16  
17 --- Upon recessing at 12:34 P.M.

18 --- Upon resuming at 1:30 p.m.

19

20 THE CHAIRPERSON: Okay. Welcome back,  
21 everyone.

22 Mr. Peters, I believe CCEP and Mr.  
23 Feldschmid's up next; is that correct?

24 MR. BOB PETERS: It is.

25 THE CHAIRPERSON: Mr. Feldschmid, you may



1 begin at any time.

2

3 CLOSING COMMENTS BY JURGEN FELDSCHMID:

4 MR. JURGEN FELDSCHMID: Thank you very  
5 much, Mr. Chair, members of the Board panel, and to the  
6 Utility representatives and other Intervenors.

7 As all the participants in this room are  
8 aware, Canadian Centre for Energy Policy Inc., or CCEP,  
9 represents small commercial and non-residential  
10 ratepayers, primarily in the two (2) general service  
11 small classes.

12 Before I move on to a brief number of  
13 comments that are limited to their interests alone, let  
14 me make one (1) observation that may be of assistance, or  
15 at least I would submit is something that should be kept  
16 in mind to the extent that it isn't already kept in mind,  
17 and that is, there are issues that have been before this  
18 Board which are, I would submit, not only beyond the  
19 scope of the hearing as it is indicated to be by the  
20 Board in its -- in its procedural order.

21 But also there are issues that have been  
22 brought forth and given some consideration that may have  
23 -- be outside scope, as it were, in terms of prevailing  
24 legislation. And I'm thinking particularly in terms of  
25 some of the ideas brought forward by TREE, and their

1 expert Mr. Lazar, while in terms of the grand scheme of  
2 things, general philosophy, are -- are -- are meritorious  
3 ideas.

4                   They would require some substantial and  
5 some -- some fundamental rethinking of the legislative  
6 provisions that come into play for Manitoba Hydro and  
7 this Board in its proceedings.

8                   And I'm -- and I'm thinking in  
9 particularly of Sections 39 and 40 of the Manitoba Hydro  
10 Act, where it's quite clear that these sorts of broader  
11 notions of externalities, as understood in the branch of  
12 economics, are really not -- they were not mind -- they  
13 were not in the mind of the legislators that passed those  
14 provisions of the act.

15                   And so, therefore, I would suggest that a  
16 lot of the time that has been spent considering those  
17 ideas, while it may be useful to have this Board comment  
18 upon it and perhaps the legislature, at some point, may  
19 take up some of those comments and -- and even the  
20 executive branch may look at those comments and give some  
21 consideration to what, if any, changes should be made  
22 legislatively.

23                   But I think it's very important for us, in  
24 the context of this proceeding, before this body, that  
25 many of those suggestions are simply not within the legal

1 framework that's set out for us.

2           Moving on to things more focussed on the  
3 ratepaying groups that we represent, let me say that this  
4 Board has established a measurement and a benchmark to  
5 see if rates are fair in terms of revenue taken by a  
6 class of ratepayers through the rates that they pay  
7 versus the costs of serving them.

8           The measurement I am speaking of, of  
9 course, is the revenue to cost ratio, otherwise known as  
10 RCC.

11           The benchmark is the zone of  
12 reasonableness, often referred to as Z-O-R or ZOR. The  
13 ZOR for some time now has been established by this board  
14 to be between 95 percent and 105 percent. That is to say  
15 no class should contribute less revenue through the rates  
16 that they pay, the 95 percent of the value of the costs  
17 of serving that class, and no class should contribute  
18 more revenue, through the rates that they pay, than 105  
19 percent of the value costs serving that class.

20           General service small, non-demand and  
21 demand, are above the upper limit of the zone of  
22 reasonableness of 105 percent. And that means that, as  
23 best we can tell, with the methodology that is currently  
24 being considered by this Board, and I -- and I would put  
25 within the realm of setting aside some of the ideas

1 perhaps of TREE and -- and similar types of ideas, we're  
2 really looking at about two (2), at most four (4)  
3 scenarios that have been put forward by the Utility.

4           And they are set out -- or the results of  
5 them, in terms of RCC results, are set out, for instance,  
6 at page 6, I believe, at Tab 11 of the -- of the  
7 application by the Utility.

8           And if you look at those results, in my  
9 submission, general service small, both demand and non-  
10 demand, are at or above the zone of reasonableness,  
11 essentially whichever way you go, in whichever  
12 methodology you use.

13           This situation has existed historically.  
14 For instance, at Tab 11, Appendix 11.1, page 34, there is  
15 a table there that sets out historical RCC results. And  
16 one can see the consistent results, certainly above the  
17 zone of reasonableness as it is defined now.

18           Of course, the zone of reasonableness was  
19 somewhat broader in -- in years past, including some of  
20 the years that are dealt with in that table. But  
21 certainly in terms of the standard that the Board has --  
22 has set in the last few years and is applicable to this  
23 proceeding, general service small has been over-  
24 contributing, if I can put it that way.

25           Equally, it does not seem to matter what

1 method is employed. If you look again at page 6 of the  
2 application, looking across the various proposed methods,  
3 the ones that are most likely to be entertained by the  
4 Board based on the evidence before it, I would submit,  
5 again we see general service small being above the zone  
6 of reasonableness and often the highest contributor of  
7 revenue in relation to -- in relation to its costs.

8           And even looking at certain quick back-of-  
9 the-envelope checks, if I may refer to them in that way,  
10 such as looking at revenue cost ratios prior to the  
11 allocation of net export revenue, the same disparities  
12 are shown.

13           And I would submit even the results show  
14 an even greater disparity between general service small  
15 classes and other classes in that -- the analysis  
16 provided by Manitoba Hydro, that is now Exhibit Manitoba  
17 Hydro 25, shows a narrowing of the ratio difference after  
18 the allocation of net exports, suggesting that the  
19 analysis at the end of the day, post addition of net  
20 export revenue, tends to mute somewhat the divergence  
21 against the interest of general service small, in  
22 relation to other rate classes.

23           Now in setting out the terms of this  
24 hearing and its Order number 160/05, at page 10, this  
25 Board indicated, and I quote:

1 "Issues related to revenue requirement  
2 and specific rate design are outside  
3 the scope of this process. However,  
4 the Board anticipates the review of the  
5 costs may extend to consideration as to  
6 the uses or the use to be made of the  
7 costs in rate setting."

8 And so therefore, Mr. Chairman, I am here  
9 to ask, or suggest to the Board, to consider a particular  
10 use of the cost of service study in rate setting. And in  
11 particular, the use that I would suggest to the Board is  
12 that it be used to find that general service small is, in  
13 fact, over-contributing in terms of revenue versus costs  
14 of serving it and, in fact, to consider ordering a  
15 reduction, even in this hearing.

16 The -- I would suggest to the Board that  
17 there is precedent for this. I -- I think back to the  
18 status update on rates in the year 2002, there was no  
19 rate increase or changes to rates sought by Manitoba  
20 Hydro at that time, it was just simply a rate review.

21 The rate review resulted in order of this  
22 Board 7/03. And a number of conclusions which I think  
23 are interesting to the circumstances we find ourselves in  
24 in this hearing, I would like to bring to the attention  
25 of the Board.

1                   Firstly, in Order 7/03 at page 8, there is  
2 a finding with respect to the overall financial condition  
3 of Manitoba Hydro at that time, in relation to its net  
4 income. It's net income for 2001 was 267 million. And  
5 in the IFF being considered for the 2002 Hearing, it was  
6 projected to be 220 million for the period ending in  
7 2002.

8                   The RCC's in 2002, for general service  
9 small as a group, were 107.1 percent on the revised  
10 methodology, which was presented by Hydro at that time,  
11 not all of which was accepted by the Public Utility Board  
12 in its subsequent Order to which I referred.

13                   But even under the previously methodology,  
14 the RCC's for general service small as a total class were  
15 105.8. The position of Manitoba Hydro then, as now, was  
16 that the rates, as I've said, should not be lower, they  
17 should not be changed in any way.

18                   And again they said, well we can -- we  
19 realize that there's a disparity but we can always  
20 address it at the next rate increase. Notwithstanding  
21 that, this Board, as a result of that Hearing in 2002 and  
22 it's Order 7/03, ordered, and I'm quoting from page 103  
23 of the reasons for that Order:

24                   "Certain customer classes and sub-  
25 classes have consistently remained

1 outside the zone of reasonableness for  
2 long periods of time, in some cases  
3 more than ten (10) years. Therefore,  
4 the Board is convinced that directional  
5 rate adjustments are appropriate now to  
6 address these inequities. Accordingly,  
7 the Board will order a 1 percent  
8 decrease in rates for GSS customers.  
9 The Board will direct Hydro to file new  
10 rate schedules for Board approval,  
11 reflecting these rate adjustments."

12 So that decrease was ordered and was made.  
13 Unfortunately, did not appear to resolve the problem.  
14 Even in the immediately succeeding cost of service  
15 studies.

16 MR. ROBERT MAYER: Mr. Feldschmid...?

17 MR. JURGEN FELDSCHMID: Yes?

18 MR. ROBERT MAYER: This is not a rate  
19 Hearing. I don't think I have any doubt in telling you  
20 that there's been no evidence presented to this Hearing -  
21 - you presented no evidence, presented to this Hearing,  
22 with respect to rates.

23 This is a COSS hearing. You could  
24 probably save your breath if you are asking us to, at  
25 this Hearing, reduce rates, because that's not going to



1 happen.

2

3 CONTINUED BY MR. JURGEN FELDSCHMID:

4 MR. JURGEN FELDSCHMID: Well that's fine.  
5 I appreciate your candour, Mr. Mayer.

6 But my concern, of course, is that when is  
7 that going to happen, sir? When is that going to happen?  
8 We didn't -- there was an Order made at the end of 2003 -  
9 - or the beginning of 2003, as a result of the 2002  
10 Hearing process, as I'm sure you recall, because you  
11 remember that Panel.

12 And the Board, at that time, did make the  
13 reduction -- the 1 percent decrease that I just referred  
14 to. I was about to go on to suggest that the evidence  
15 that's before the Board in this Hearing, shows that,  
16 notwithstanding the Board's efforts at that time, in the  
17 immediately succeeding cost of service study, the actual  
18 results for 2003 which are available at Tab 11 --  
19 Appendix 11.1, page 34, continue to show GS -- GSS demand  
20 and non-demand above ZOR.

21 The same was the result for 2004 in the  
22 perspective cost of service study for -- going into that  
23 rate process, that we had a rate making process that we  
24 had in 2004. But here's my concern, on behalf of CCEP  
25 and the ratepayers that they represent.

1                   We hear time and again this is cost, this  
2 is not a rate making exercise, fair enough. But when  
3 will the adjustment occur? The last time we adjusted  
4 rates, we were so, I would submit, concerned about the  
5 fiscal position of the Utility, that the whole idea of  
6 adjusting rates and who's paying a little too much and  
7 who's paying not enough, was just completely set by the  
8 boards. And that's not been addressed since that time.

9                   And I also, from my understanding and  
10 review of the transcript, and I've also spoken to some of  
11 my colleagues, I -- I -- my understanding is that the  
12 Utility is not at this time indicating what the timeframe  
13 is that they will seek to adjust rates, whether up, down  
14 or sideways.

15                   At which time they say, Well we'll get rid  
16 of all of these inequities that have existed for such a  
17 long period of time, next time we bring a full blown GRA.  
18 I might be a little bit more comfortable on behalf of my  
19 -- my client, and the ratepayers it represents, if Hydro  
20 were saying, We want to -- we were going to bring a GRA  
21 and it's going to happen within six (6) months or nine  
22 (9) months or twelve (12) months even. But we don't know  
23 that.

24                   What they're saying is, right now we've  
25 got a lot of revenue from exports, we don't really need

1 any more revenue from domestic ratepayers. Well that's -  
2 - that's terrific and we're all happy about that.

3 But at the same time there is inequities  
4 within whatever revenue is being drawn out of the rate --  
5 domestic ratepayers right now, and it's not being  
6 addressed. And so my concern is: When will it be  
7 addressed?

8 And I think the Board has the ability and  
9 the power, certainly there's no question that  
10 legislatively this Board could, notwithstanding  
11 everything that has transpired during this -- this --  
12 this hearing in terms of saying, well, it's just a cost  
13 hearing. It's just a cost hearing.

14 Okay, it's just a cost hearing. But I  
15 think the -- the Board has the ability to say, yes, it's  
16 just a cost hearing. But there are some -- one (1) or  
17 two (2) exceptions of -- of ratepayers who have  
18 historically been beyond ZOR, they continue to be beyond  
19 ZOR, and we're going to ask, particularly at a time when  
20 there is somewhat an embarrassment of riches, and I'm -  
21 and I'm -- I'm aware of what Mr. Warden says about, well,  
22 one (1) good year does not a healthy utility make. I  
23 understand that.

24 But if you look -- another point that I  
25 was going to make before the Vice Chair was assisting me,

1 was that -- that when -- when this Board made its rate  
2 reduction of 1 percent for GS small, back in 2002, one of  
3 the main financial indicators, the debt equity ratio, was  
4 very close to where it is right now. At that time it was  
5 about twenty eighty (20:80).

6 Now, it's nineteen eighty-one (19:81).  
7 Not the year, the ratio. So I guess what I'm saying, Mr.  
8 Mayer, and to the Board, is that if -- if that adjustment  
9 could have been made back then, it seems to me that  
10 adjustment could be made right now.

11 And I -- and I asked Mr. Warden, you know,  
12 I don't know and I may be anticipating what -- what Mr.  
13 Mayer may or not -- may or not be wanting to say next,  
14 but I did put the question to Mr. Warden: Is Hydro in a  
15 position, from a technical standpoint, of making, say, a  
16 1 percent or whatever percent decrease to rates?

17 And I'm not sure I got really a straight  
18 answer. But I certainly didn't get an answer from Mr.  
19 Warden saying, well, we haven't done this or we haven't  
20 done that in terms of analysis, so that even if the Board  
21 were to order us to make a reduction, that we're not  
22 really technically, or in terms of information or data,  
23 in a position to do that.

24 So -- so those are -- those are my  
25 concerns.

1                   MR. ROBERT MAYER:    Mr. Feldschmid, you've  
2 got to understand the difference between what is  
3 happening now and what happened in what Hydro chose to  
4 call a status update hearing.

5                   But I believe you were at the pre-hearing  
6 conference where we, in fact, converted it into a full  
7 GRA and permitted all -- everything to be brought  
8 forward; that was a substantially different process than  
9 we're doing today.

10

11 CONTINUED BY MR. JURGEN FELDSCHMID:

12                   MR. JURGEN FELDSCHMID:    When you say  
13 that, the pre-hearing conference, you're talking about  
14 the pre-hearing conference for the 2002 process? Thank  
15 you, Mr. Chair. Yes, I was there for that.

16                   And as I said, I mean, I think I've  
17 already come to the point where I've made the majority of  
18 my points, although slightly in a different order. It is  
19 up to counsel to make submissions. It is up to the  
20 Tribunal to accept or reject those submissions.

21                   I think, without saying a whole lot more,  
22 that the -- the Board understands where I'm coming from  
23 and it has my point and the Board will either act on it  
24 or not. I mean, perhaps one (1) alternative is to  
25 indicate to Hydro that they need to come in and make a

1 GRA within a certain specified period of time, rather  
2 than just going on and on saying, well, everything's  
3 fine, we're making lots of money outside the jurisdiction  
4 so we don't have to come back and have rates.

5 Well, that's overall a good thing but --  
6 but, as I've -- as I've indicated and I think as we all  
7 recognize, within whatever amount is being drawn out of  
8 the ratepayers as a whole, there are inequities among the  
9 various classes.

10 THE CHAIRPERSON: We hear you though, Mr.  
11 Feldschmid.

12 MR. JURGEN FELDSCHMID: Yes.

13 THE CHAIRPERSON: What you're  
14 recommending for your clients is that enough is enough,  
15 so to speak.

16 MR. JURGEN FELDSCHMID: Enough is enough.  
17 Enough is enough, particularly when the last time the  
18 Board did order a reduction, net income was somewhere in  
19 the low \$200 million range, now it's three seventy-five  
20 (375). I've made my comments with respect to comparison  
21 of the debt equity ratio, then versus now, and so forth.

22 And I think, again, I mean, certainly my  
23 clients will be happy to take half a loaf or even 10  
24 percent of a loaf. It doesn't have to -- the Board  
25 doesn't have to push things back to unity but, you know,

1 bringing it somewhere within ZOR would also be very, very  
2 nice.

3 And I think those are my comments, subject  
4 to any questions. Thank you very much.

5

6 QUESTIONS BY BOARD:

7 THE CHAIRPERSON: Thank you, Mr.

8 Feldschmid. I have one (1) question.

9 You speak of limited jurisdiction and  
10 scope, and you reference particular sections of Manitoba  
11 Hydro Acts, I think it was specifically 39 and 40.

12 Do you interpret those sections and Act  
13 and any other legislation as preventing a COSS that would  
14 incorporate externalities or marginal cost concepts, COSS  
15 per se, not being direct rate setting?

16 MR. JURGEN FELDSCHMID: I think, in terms  
17 of marginal cost, I -- I don't see marginal cost as being  
18 precluded. Even -- even pure marginal cost as opposed to  
19 marginal cost factorisation on -- on embedded costs.

20 However, externalities, I mean if you look  
21 at the categories in -- in 39(1), for instance, necessary  
22 operating expenses, all interest and debt service  
23 charges, the sum necessary to maintain reserves or a  
24 fund, I means, those -- those are all -- those seem to me  
25 -- any reasonable interpretation of those types of

1 words --

2 THE CHAIRPERSON: You're seeing it as  
3 applied --

4 MR. JURGEN FELDSCHMID: -- excludes  
5 externalities.

6 THE CHAIRPERSON: You're seeing it as  
7 being applied to a COSS? You're linking the COSS and  
8 rate setting pretty directly then?

9 MR. JURGEN FELDSCHMID: Yes, I would.

10 THE CHAIRPERSON: Thank you, Mr.  
11 Feldschmid.

12 MR. JURGEN FELDSCHMID: Thank you.

13 THE CHAIRPERSON: Do you have anything  
14 else?

15 MR. JURGEN FELDSCHMID: That's all.  
16 Thank you, Mr. Chair.

17 THE CHAIRPERSON: Thank you very much.  
18 We'll now move on to the City of Winnipeg.

19 Mr. Buhr, do you wish to sit there or do  
20 you wish to come up to the front?

21 MR. DOUG BUHR: If it's acceptable to the  
22 Panel, I'll stay where I am.

23 THE CHAIRPERSON: Wherever you're  
24 comfortable.

25



1 CLOSING COMMENTS BY MR. DOUG BUHR:

2 MR. DOUG BUHR: Thank you, Mr. Chair.

3 Mr. Chair, Members of the Panel, I'm  
4 convinced that the Board has understood the position of  
5 the City in regard to street lighting. You will  
6 therefore be relieved to note that I will meet the  
7 unspoken collective hope and be brief.

8 In my introduction I said that ratepayers  
9 had been paying far too much for street lighting for the  
10 last thirty (30) years. The evidence for that is City  
11 Exhibit 3, that's the chart, and also what the PUB has  
12 said in several of its orders.

13 In its 1989 Order, it said:

14 "The Board appreciates the concerns  
15 expressed by the City of Winnipeg with  
16 regards to the unusually high RCC for  
17 street lighting and the delays by Hydro  
18 in moving to correct the imbalance.  
19 The Board concurs with the City that a  
20 RCC range of one twenty (120) to one  
21 thirty-three (133) is unreasonably  
22 higher. Further, the bottom of the  
23 range is unlikely to fall within a zone  
24 of reasonableness, whatever such a zone  
25 might be. Therefore, the Board reduced

1 the proposed increase for street  
2 lighting to zero, in an effort to speed  
3 up the reduction of the high revenue to  
4 cost ratio."

5 In its 1994 order, the Board said:

6 "The Board finds unacceptable the fact  
7 that area and roadway lighting RCC  
8 ratio would still be outside the zone  
9 of reasonableness. The Board will  
10 therefore approve rates which will  
11 reduce this prospective RCC ratio of  
12 this class, after allocation of DSM  
13 costs, to approximately one ten (110)  
14 in 1994/'95, and approximately one-o-  
15 nine (109) in 1995/'96."

16 In '96, and in spite of what I just read  
17 from the Board's order, the RCC had gone up, not down.  
18 The Board ordered a 5 percent reduction.

19 Today, by Hydro's own numbers, the  
20 projected RCC is 107, the source of that is the PUB book  
21 of documents, 9. That 107 is two (2) points above even  
22 the top of the zone of reasonableness, and seven (7)  
23 above unity.

24 Put another way, in the ten (10) years  
25 since its 1994 Order, since the 1994 reference to an RCC

1 for '95/'96 of 109, we've gone down two (2) points,  
2 maybe. And I say, Maybe, because that number is  
3 conservative.

4           Every actual study Manitoba Hydro has  
5 done, has shown the RCC for street lighting to be higher  
6 than what any perspective study of theirs has predicted.  
7 In 2003 the actual was 110.

8           Now, it was said by Manitoba Hydro that  
9 nobody is paying too much when the RCC is over 100. Mr.  
10 Chair, we've been doing that for approximately thirty  
11 (30) years. I think we'd like a change, but given the  
12 past history you'll understand why I have some  
13 hesitation.

14           At least part of Manitoba Hydro's response  
15 to their own numbers is that we should be looking at the  
16 RCC pre-export allocation. I suggest, with respect, that  
17 this is disingenuous. Manitoba Hydro has proposed what  
18 it deems to be fair and equitable, and that proposal is  
19 post-export.

20           We've paid for our share of both  
21 historically and to date, and we reject any suggestion  
22 that Manitoba Hydro is giving us anything by allocating  
23 us export revenue.

24           That brings me to what I think has been  
25 mine and maybe one (1) of Mr. Mayer's favourite topics,

1 namely the number of customers for street lighting.

2 Our proposal is very simple: Use the  
3 actual number of customers and show the actual changes  
4 that result.

5 Manitoba Hydro has the right numbers  
6 readily available. Use them, and end this artificial ten  
7 (10) lights or six (6) lights or eight (8) lights equals  
8 one (1) customer scenario.

9 We are one (1) customer, send one (1) bill  
10 for a service that uses the same amount of electricity in  
11 all of its locations. The Domo Gas analogy that was  
12 suggested simply does not apply.

13 Now, Manitoba Hydro says that their cost  
14 of service methodology is accurate and that the resulting  
15 RCC is something that can only be looked at in the next  
16 rate application, whenever that will be.

17 Mr. Chairman, Members of the Panel, the  
18 City and its taxpayers are left saying, Please fix it.  
19 This has continued on far too long. It's not equitable  
20 or fair, by anyone's definition, and it shows no sign of  
21 ending anytime soon, absent this Board issuing some  
22 direction otherwise.

23 Thank you.

24

25 QUESTIONS BY BOARD:

1                   THE CHAIRPERSON:    Mr. Buhr, the one (1)  
2    item that you cite with respect to the specific ways that  
3    allocate costs, is the number of customers.  Is there  
4    anything else that you wish to comment on?

5                   MR. DOUGLAS BUHR:    No, Mr. Chairman, I've  
6    restricted my comments deliberately just to street  
7    lighting.

8                   THE CHAIRPERSON:    Now, when you get down  
9    to the number of customers, this is not something that  
10   we've received a great deal on, but we can all understand  
11   that you're one (1) customer and one (1) bill.

12                   Is there anything else that you're aware  
13   of that would account for the allocation that's being  
14   made?

15                   MR. DOUGLAS BUHR:    In our submission, no,  
16   Mr. Chairman.  It's an artificial scenario.  They have  
17   the numbers, use the right numbers.  Use the actual  
18   number of customers.  Use the actual RCC's.  Don't tell  
19   me it will go up or down slightly or by some minor  
20   percentage if you use the actual number.  Use the actual  
21   number.

22                   THE CHAIRPERSON:    Have you had -- has the  
23   City had discussions directly with Manitoba Hydro on this  
24   point of number of customers or number of streetlights  
25   equals one (1) customer?

1                   MR. DOUGLAS BUHR:    In terms of  
2 discussion, no, Mr. Chairman.  We're certainly aware that  
3 they have been doing it.  We have raised the issue,  
4 albeit in a minor context, I think previously.

5                   It simply -- bluntly, it's an irritant  
6 that's unnecessary.  There's no sound reason for it.  
7 It's simply -- it's simply doesn't cut it.

8                   THE CHAIRPERSON:    Mr. Mayer, you have  
9 something you wanted to add?

10                  MR. ROBERT MAYER:    I do.  I've been  
11 through all four (4) methods that are before this -- four  
12 (4) -- the four (4) different methods of assigning costs  
13 that have been set out.  Street lighting comes in above  
14 the zone of reasonableness under every single  
15 calculation.

16                  I happen to believe that cost of service  
17 methodology includes how those costs are assigned and,  
18 therefore, customer counts probably fall within the scope  
19 of a cost of service methodology, in my opinion.

20                  If the Board were to accept your  
21 recommendation have you -- do you have any idea what  
22 difference in numbers it would make if you are one (1)  
23 customer as opposed to being seven hundred (700) or  
24 whatever the real -- whatever the number is?

25                  MR. DOUG BUHR:    The short answer, Mr.

1 Vice Chair, is, no, we aren't because we've never had  
2 them. I accept what Manitoba Hydro says that the changes  
3 are minor. But I don't know what they are and some of  
4 them are up and some of them are down.

5 So where we -- where we end up in that, I  
6 don't know.

7 THE CHAIRPERSON: Mr. Buhr, similar to  
8 Mr. Feldschmid, you see a pretty tight link then between  
9 the COSS and rate-making?

10 MR. DOUG BUHR: Yes, Mr. Chair.

11 THE CHAIRPERSON: Thank you, sir. Do you  
12 have anything else?

13 MR. DOUG BUHR: No, Mr. Chair.

14 THE CHAIRPERSON: Mr. Evans...?

15 MR. LEN EVANS: I wonder if Mr. Buhr  
16 could tell us if he has other information on other cities  
17 and other utilities, how those utilities treat the  
18 customer count in those particular cities?

19 MR. DOUG BUHR: No, I don't have that  
20 evidence, Mr. Chair.

21 THE CHAIRPERSON: Thank you, Mr. Buhr.  
22 Thank you for participating in this Hearing.

23 Now, we move on to Ms. McCaffrey and  
24 MIPUG.

25

1 (BRIEF PAUSE)

2

3 MS. TAMARA MCCAFFREY: Good afternoon,  
4 everybody.

5 THE CHAIRPERSON: Good afternoon.

6 MS. TAMARA MCCAFFREY: We're currently  
7 distributing around the room, and I believe the Board  
8 already has been given, a copy of, essentially supporting  
9 documents; a book of supporting documents with respect  
10 to MIPUG's final argument. Okay, here it comes.

11 THE CHAIRPERSON: It's about to be  
12 delivered.

13 (BRIEF PAUSE)

14

15 THE CHAIRPERSON: We all have it.

16

17 CLOSING COMMENTS BY MS. TAMARA MCCAFFREY:

18 MS. TAMARA MCCAFFREY: Don't panic. I'm  
19 not going to be going through all those documents. Those  
20 documents are actually there as references of evidence  
21 with respect to the particular issues that are before the  
22 Board in Board counsel, Mr. Peters', list.

23 You'll notice on the green sheet, that's a  
24 summary of MIPUG recommendations regarding Manitoba's  
25 cost of service methodology proceeding. You'll notice in



1 bold, in the middle column, is the cost of service  
2 issues. Those that belong in -- properly in the cost of  
3 service that this board has all the evidence and  
4 information and debate that they need to make final  
5 decisions on cost of service for Manitoba Hydro today.

6                   You will also notice on either side there  
7 are other columns in terms of revenue requirement and  
8 rate design. These are matters that have also been  
9 discussed in the context of this hearing, though they are  
10 not cost of service matters.

11                   These are matters that are important  
12 ongoing. And, in fact, if you turn the green sheet over  
13 you'll see on the back the related outstanding Public  
14 Utility Board directives to Manitoba Hydro with respect  
15 to those areas; revenue requirement and rate design.

16                   These things will have to be dealt with at  
17 the next GRA and I will be dealing -- touching on those  
18 issues as well. So we've laid it out this way in terms  
19 of what's cost of service and what isn't and what can the  
20 Board deal with -- sorry.

21

22                   (BRIEF PAUSE)

23

24                   THE CHAIRPERSON: Are you going to read  
25 the green sheets right into the record or can we just

1 accept them as being read?

2 MS. TAMARA MCCAFFREY: I won't read  
3 everything into the record. They're there for your  
4 reference. I will read some of the recommendations into  
5 the -- the record.

6 THE CHAIRPERSON: For the sake of those  
7 who follow these proceedings through the transcripts, I  
8 think we'll just put it straight in. Thank you.

9 MS. TAMARA MCCAFFREY: It -- accepting it  
10 as it being read as part of the --

11 THE CHAIRPERSON: Is this being read as  
12 part of your closing statement?

13 MS. TAMARA MCCAFFREY: Yeah. That's  
14 fine.

15 THE CHAIRPERSON: And you can just refer  
16 to it as you wish.

17 MS. TAMARA MCCAFFREY: Thank you. Just  
18 to sum up what you have before you in the book of  
19 references, you'll have a tab that relates to each of the  
20 issues that Mr. Peters kindly laid out for us. And  
21 you'll have comments and MIPUG's position on each of  
22 them.

23 There are a few issues in which there's  
24 not sufficient evidence or debate that MIPUG has not  
25 taken a position on. But essentially you'll find that

1 there is a position, we hope is helpful, to the Board  
2 with accompanying evidence references for the Board to  
3 look at in term of preparing.

4                   And my thank to the consultants at  
5 InterGroup who've assisted me, without whose  
6 participation I -- my representation of MIPUG would not  
7 be nearly as effective as -- as I hope it has been.

8                   It's been an interesting Hearing, I think  
9 certainly unique in Manitoba. And the Board now is at  
10 the end of it and is faced with two (2) paths.

11                   The first path would have this Board  
12 restrict their consideration to the cost of service box  
13 and yield on first principles of cost, function,  
14 causation, linkage in the cost of service and ultimately  
15 adopt proposals puting forward by Hydro and endorsed by  
16 My Friend Mr. Williams on behalf of CAC/MSOS, that are  
17 ultimately divisive and pits customer class against  
18 another.

19                   More importantly however though they don't  
20 -- they don't deal with the alleged problem that Hydro  
21 has come to you with. Hydro says that they have two (2)  
22 problems and one (1) of them is they have too much export  
23 revenues.

24                   MIPUG isn't accepting that that's a  
25 problem. But should this Board be satisfied at some

1 future date, in the context of a revenue requirement  
2 review at a GRA that there is a problem, then let Hydro  
3 intelligently study the problem, identify where that  
4 problem arises, and let's look at a solution in the realm  
5 where the problem resides.

6 The proposal --

7 MR. ROBERT MAYER: Ms. McCaffrey, I don't  
8 recall every hearing anybody say, We have too much export  
9 revenue. I recognize in certain a context there's been  
10 discussion, but I haven't heard anybody say they want to  
11 get less.

12 MS. TAMARA MCCAFFREY: I'm hearing  
13 Manitoba Hydro say that there's a problem because they  
14 have so much export revenues that there's -- I've heard  
15 the term 'distortion' being kicked around, a gap. Too,  
16 it's -- it's kind of a funny -- funny way to frame it, to  
17 hear a Crown Utility saying they have too much money.  
18 But in the --

19 THE CHAIRPERSON: I think it's the effect  
20 of it, not the existence of it.

21

22 CONTINUED BY MS. TAMARA MCCAFFREY:

23 MS. TAMARA MCCAFFREY: My Friend Mr.  
24 Williams characterized Manitoba Hydro's approach versus  
25 the MIPUG approach in an interesting way. And what

1 struck me was that he characterised the MIPUG approach as  
2 -- as being this one that looks at the threshold.

3                   Members of the Board, the threshold exists  
4 and sweeping it under the rug isn't going to make it go  
5 away. If Manitoba Hydro truly says they have a problem,  
6 where does that problem arise? You -- how do you  
7 identify that?

8                   The threshold is simply just giving a word  
9 to what everybody's dancing around in this room in any  
10 event. It's not Mr. Bowman's idea. It's Hydro that's  
11 coming forward saying they have a problem. MIPUG isn't -  
12 - doesn't see the export revenues' success as being a  
13 problem. But Hydro is telling you that there's a  
14 problem.

15                   If they -- again, if they say there's a  
16 problem, let them deal with it and let's have an  
17 intelligent debate about how to solve it, not sweeping it  
18 under the rug.

19                   MIPUG has discussed possible uses of  
20 export revenues, that should the Board conclude in the  
21 context of revenue requirement, because that's where you  
22 have to have that debate, that in fact there is a level  
23 of export revenues at which point it's not appropriate to  
24 continue to credit within the cost of service study.  
25 Then we'll have an opportunity to look at that in the

1 context of Hydro's revenue requirement and debate  
2 possible solutions, should this Board be satisfied that  
3 there is in fact, a problem.

4 At that time, there's an opportunity to  
5 take into account prior issues that this Board has raised  
6 with Manitoba Hydro at the same time. And again that's  
7 the back side of the green sheet in terms of outstanding  
8 revenue requirement directive that deal with concerns  
9 with respect to risk.

10 Quantification not qualitative risk  
11 analysis, quantification of risks. A determination of  
12 what reserves ones going to rely on to manage the risks.  
13 Consideration to restriction of equity for the purpose of  
14 rate stabilization. These are the issues that require  
15 debate and they need to be debated in the context of the  
16 big picture including the export revenue picture.

17 We look forward to participating in that  
18 debate.

19 There's going to be no delay with respect  
20 to dealing with cost of service issues in this Hearing.  
21 As I've indicated at the outset all the information in  
22 evidence has been before you, there's been a great deal  
23 of debate and consideration with respect to appropriate  
24 cost of service methodology, and this Board is now in the  
25 position to make those decisions.

1                   Again, as part of the next decision on  
2 rates that this Board is asked to make the Board will --  
3 would want I would think, to direct Manitoba Hydro now in  
4 a way that ensure that Manitoba Hydro will provide all  
5 the information that the Board will require to make those  
6 decisions on the level of Manitoba Hydro's revenue  
7 requirement.

8                   That's why we've gone through and  
9 summarized -- there's no less than five (5) here  
10 outstanding Public Utility Board directives under the  
11 issue of revenue requirement from the Public Utility  
12 Board.

13                   And we urge the Board to take that into  
14 account when writing their Order and looking forward in  
15 terms of what we need to do tomorrow.

16                   MS. PATTI RAMAGE:   Excuse me, Mr. Chair,  
17 just at this point it might be of some assistance and I  
18 don't think -- perhaps My Learned Friend isn't aware --  
19 each of these items listed one (1) through five (5), have  
20 in fact been filed with the Board.  And if it would be of  
21 any assistance we could provide a list of filing dates or  
22 something to that effect, I don't know if that would  
23 help.

24                   THE CHAIRPERSON:   I think that probably  
25 would be helpful.  In fact, it would be helpful because

1 they've listed it here as being outstanding.

2 MS. TAMARA MCCAFFREY: I take My Learned  
3 Friend's comments and I appreciate them. These -- all  
4 these items then, if the information's before the Board,  
5 then the Board can certainly take that into account.  
6 But, they should all form part of the debate, in terms of  
7 Manitoba Hydro revenue requirement at the next General  
8 Rate Application.

9

10 (BRIEF PAUSE)

11

12 CONTINUED BY MS. TAMARA MCCAFFREY:

13 MS. TAMARA MCCAFFREY: You'll note there  
14 that the first bullet under the revenue requirement  
15 section is:

16 "That Hydro be directed to develop a  
17 means for determining if export  
18 revenues have grown beyond the point  
19 where they can reasonably be credited  
20 back to ratepayers in the year that  
21 they arise."

22 And secondly:

23 "Hydro be directed to bring forward  
24 proposals on how to determine on an  
25 ongoing basis the level of such a



1 threshold for review within a revenue  
2 requirement context. Such calculation  
3 of the threshold level must be durable  
4 such that it can evolve over time with  
5 changes to Hydro's system and changes  
6 to the level of export revenues."

7 And, thirdly:

8 "Hydro be directed to bring forward  
9 proposals as to how to account for any  
10 such excess export revenues should the  
11 Board be satisfied that they do, in  
12 fact -- that they are, in fact, excess  
13 to the long-term benefit of ratepayers.  
14 We would recommend focussed principally  
15 on rate stability through managing  
16 risks of drought and reducing the level  
17 of Hydro's debt."

18 When I hear My Friend, Ms. Ramage, says  
19 that a great deal of information has been filed in the  
20 form of responses to these five (5) directives, we'll  
21 look forward, again, to reviewing that and participating  
22 in the debate at that time.

23 At which point the Board can truly have  
24 the type of information it needs to determine (a) is  
25 there a surplus and, (b) what's the best use of that

1 surplus taking into account all the important principles  
2 of regulation of this Utility and the long-term benefit  
3 of ratepayers.

4

5

(BRIEF PAUSE)

6

7 MS. TAMARA MCCAFFREY: I'm going to now  
8 go to Mr. Peters' four (4) main issues. But the main and  
9 most important point that I want this Board to take away  
10 here is that these are important matters but they're not  
11 cost of service matters and this is not the place to make  
12 that decision. Cost of service is the wrong tool, to use  
13 Mr. Bowman's language, for dealing with the issue of  
14 whether there are, in fact, too much export revenues and  
15 what to do with them.

16

Dealing now with issue number 1, whether  
17 there should be one (1) or two (2) export classes. This  
18 would be Item 7 on page -- of the first page of the green  
19 sheet in the cost of service heading.

20

MIPUG's recommendation is that Hydro's  
21 proposal in respect of developing two (2) export classes  
22 be rejected. At the outset on the issue of whether there  
23 needs to be an export class at all, Mr. Bowman was asked  
24 that question.

25

And MIPUG's position is essentially

1 indifferent to the notion of whether one really needs an  
2 export class in the cost of service study; taking into  
3 account the purposes for which a cost of service tool is  
4 developed which is setting rates; not something that  
5 we're doing in the case of exports anyway.

6                   But dealing with respect to Manitoba Hydro  
7 in respect of developing two (2) export classes, we would  
8 recommend that that be rejected. Either the current  
9 method for addressing exports be retained or,  
10 alternatively, the NERA method for developing an export  
11 class be adopted.

12                   To the extent an export class is adopted  
13 the costs determined for the export class should not form  
14 the basis of any analytical assessment of the situations  
15 in which hydro should build new plant for export nor  
16 which plants should be built; (b) the situations in which  
17 Hydro should undertake to make an export sale, the prices  
18 for such a sale or the form of the sale; and (c) the  
19 determination of a threshold, again, as noted in the  
20 revenue requirement recommendation. It's not to be  
21 determined in the cost of service context.

22

23

(BRIEF PAUSE)

24

25

MS. TAMARA MCCAFFREY:   Appropriate

1 transcript references with certain evidentiary support  
2 for these propositions are provided for you and you may  
3 review them at your leisure with respect to that -- this  
4 item.

5                   Going to the second topic, what costs  
6 should be directly or indirectly assigned or allocated to  
7 export classes. MIPUG's position is that in the event  
8 that an export class is adopted similar to the NERA  
9 study, we would support the assignment of a share of  
10 embedded costs to opportunity exports, consistent with  
11 the fact that Manitoba Hydro considers opportunity  
12 exports in its decisions to acquire or advance new  
13 generation resources.

14                   In terms of the evidence there, I remind  
15 you -- and it's provided in our supporting documents to  
16 the discussion we had around Conawapa with Mr. Cormie;  
17 some \$500 million in additional capital expense which  
18 would enhance opportunity sales over and above what's  
19 required for dependable energy.

20                   In addition, the system supply enhancement  
21 such as Kelsey and -- and the discussion I had with Mr.  
22 Surminski on that top, with respect to the \$96 million  
23 expenditure. Again, that being considered in terms of  
24 opportunity -- providing opportunity power.

25                   Mr. Surminski confirmed, they look at the

1 bottom line, they don't break it down in terms of whether  
2 they're going to have firm contracts and -- or  
3 opportunity. They don't -- they don't partition it. I  
4 specifically asked him that question, and it's important.  
5 And he did indicate they look at the bottom line; they  
6 take into account all the exports. And to us that's why  
7 it just makes sense to have one (1) export class, as  
8 proposed by NERA originally, should the Board be  
9 satisfied that in fact an export class is preferred.

10 With respect to the third topic laid out  
11 by Mr. Peters --

12 MR. ROBERT MAYER: Please, before you go  
13 there.

14 MS. TAMARA MCCAFFREY: Yeah.

15 MR. ROBERT MAYER: Firstly, I'm really  
16 appreciating this document you gave us. But could you  
17 just -- or could you or Mr. Bowman answer me this  
18 question.

19 Mr. Bowman in his evidence spent time  
20 saying one of the problems with the export classes is  
21 that we tend to under-assign, and I think you just made  
22 that argument, under-assign costs to that export class.

23 The existing method virtually assigns none  
24 of the embedded costs to that export class. And yet on  
25 one hand you say we aren't properly assigning them to the

1 export class if we have an export class, and that's a  
2 concern. But if we don't assign them anything other than  
3 the water rentals and the power purchases, I don't quite  
4 understand. They seem to be diametrically opposed in  
5 principle.

6 MS. TAMARA MCCAFFREY: I understand your  
7 question and I think the best person to answer it most  
8 distinctly would be Mr. Bowman.

9

10 (BRIEF PAUSE)

11

12 MR. PATRICK BOWMAN: Vice Chairman Mayer,  
13 the simple point would be the export class as a class in  
14 the cost of service study is being proposed in order to  
15 measure something about the cost to serve exports. Under  
16 the existing method the directly variable costs are  
17 assigned against export, are not purported or held out as  
18 trying to measure all of the cost of serving export;  
19 they're very specifically not even trying to attract  
20 capital.

21 What -- what one would want to get careful  
22 about is -- is, such as under the Manitoba Hydro  
23 proposal, purporting that somehow we're measuring the  
24 costs to serve exports but then ignoring a substantial  
25 section of costs, which are the capital costs incurred to

1 serve opportunity.

2 MS. TAMARA MCCAFFREY: Moving on now to  
3 the powderkeg issue number 3, how should the net -- net  
4 export revenues -- and I'm using that term because that's  
5 the language that was used by Counsel for the Board --  
6 how should the net export revenues be credited back to  
7 customers?

8 Well, no surprise to anybody that MIPUG  
9 takes the position that when we're looking at a cost of  
10 service tool and we take into account what a cost of  
11 service instrument does, which is track cost and  
12 assigning the cost to the functions that give rise to  
13 that cost, our position continues to be that export  
14 revenues continue to be assigned to the generation and  
15 transmission functions of the system because, and there's  
16 no debate about this at all, these are the components  
17 that continue to give rise to the export.

18 Again, to the extent that this Board one  
19 day in the future in the context of reviewing the  
20 Utility's revenue requirement, is satisfied that domestic  
21 costs are sufficiently offset within the cost of service,  
22 the question in our view is: At what point can export  
23 revenues no longer be reasonably credited back to the  
24 cost of service?

25 But, again, in the context of revenue

1 requirement, this is not a surplus in the context of the  
2 overall system. Okay. We've heard talk about windfall  
3 and surplus. You have to look at the big picture here.

4           You don't have to be confined in this cost  
5 of service box and it would be a mistake, I think, to  
6 feel so constrained. You are not.

7           There's a notion here that general service  
8 large, greater than a 100 kilovolt -- well it would be  
9 easier just to say the industrial class, has been somehow  
10 unjustly enriched as a result of the increase in  
11 revenues. Why?

12           Because they use the greatest proportion  
13 of those bulk components of the system that give rise to  
14 the export revenues under the cost of function based cost  
15 of service method. This ignores the reality, of course,  
16 that this class, who uses the greatest share of those  
17 components, also pays the greatest share of their costs,  
18 and has done so long before there were any significant  
19 export returns. And no one had a problem with it at that  
20 time.

21           I remind the Board of the evidence in our  
22 cross-examination of Manitoba Hydro's Panel, where MIPUG  
23 Exhibit 6, that's the three (3) page table, 1(a), (b) and  
24 (c), was reviewed. And what -- the point that comes out  
25 of that portion of the evidence, and that table, is that



1 the general service large industrial class actually  
2 receives the smallest credit on a kilowatt hour basis,  
3 even under the existing, supposedly unfair, cost of  
4 service system.

5 Now, the difference is, I could use the  
6 word disparity, but the differences between classes  
7 become even more pronounced when one looks at the  
8 Manitoba Hydro proposal. And that was at table 1(c) of  
9 MIPUG 6.

10 When we think about risks, the major risks  
11 the Corporation faces are to the general and transmission  
12 components of the system. Again, no debate about that.

13 The industrial class also bears the  
14 greatest share of these risks, due to their greater  
15 proportion of usage of those components. These risks,  
16 we've heard, have increased, to some extent, as a result  
17 of the growing export market.

18 And in terms of that, it's important to  
19 keep these points in mind when one is asked to accept the  
20 notion that there's been some sort of unjust enrichment  
21 here at the expense of other ratepayers. It's just not  
22 borne out by the evidence.

23 I have a little more to say on that  
24 shortly, at the end of my submission, in the context of  
25 economic benefits that MIPUG members provide to

1 communities.

2 But, to sum up, on this third issue, we  
3 believe the allocation of exports, within the cost of  
4 service study context, should continue to generation,  
5 transmission, maintaining the functional link, the  
6 integrity -- functional integrity of the cost of service.

7 Manitoba Hydro's concern that exports are  
8 going so high, again goes to the issue of Manitoba Hydro  
9 is saying they have a problem. And if they do have a  
10 problem, let them define it properly and deal with in  
11 terms of the revenue requirement where it belongs.

12 I know I'm sounding a little bit like a  
13 broken record here, but it's such a critical point.

14 THE CHAIRPERSON: Your background paper,  
15 major topic one (1) says:

16 "MIPUG is relatively indifferent to the  
17 inclusion of an export class."

18 But if you followed that through, what  
19 you're also saying is, even if it wasn't in the cost of  
20 service study, you'd still be left with the problem of  
21 what to do with it.

22 And then you're back into your threshold  
23 discussion, are you not?

24

25 (BRIEF PAUSE)

1 THE CHAIRPERSON: I'm just trying to  
2 understand.

3 MS. TAMARA MCCAFFREY: I appreciate your  
4 question, as always, Mr. Chairperson, the issues are  
5 separate though. They're separate issues. There's a  
6 cost of service issue. And then there's a revenue  
7 requirement issue.

8 And to the extent that the export  
9 revenues, if this Board is satisfied one (1) day that the  
10 export revenues are beyond that which should reasonably  
11 be credited back to ratepayers in the cost of service in  
12 a particular year, then we should debate what's the best  
13 use to do with that.

14 And that is a revenue requirement  
15 question.

16 THE CHAIRPERSON: Agreed.

17 MS. TAMARA MCCAFFREY: And they're  
18 separate issues.

19 THE CHAIRPERSON: Yes, I was just reading  
20 off your topic 1, that's all.

21 MS. TAMARA MCCAFFREY: Thank you for  
22 that.

23

24 (BRIEF PAUSE)

25

1 CONTINUED BY MS. TAMARA MCCAFFREY:

2 MS. TAMARA MCCAFFREY: Manitoba Hydro is  
3 telling you they have a problem but they haven't directed  
4 their minds to how to define it or where it arises. They  
5 certainly haven't put forward a solution to that problem  
6 or even a part solution to that problem.

7 Again, dumping export revenues to the  
8 distribution system within the cost of service isn't a  
9 solution and it undermines the functional integrity of  
10 the cost of service with no offsetting benefits. There's  
11 ways to deal with that problem, if this Board's satisfied  
12 that's the case, but not within the cost of service tool.

13 With respect to the fourth major issue  
14 raised by Mr. Peters, the degree that cost of service  
15 studies drive further rate decision.

16 Again, in the context of our strongest  
17 possible recommendation that this Board approve the cost  
18 of service methodology that maintains a functional link  
19 in the cost of service context, and recognizing the  
20 importance of the achievement of fairness, with the  
21 primary objective of being -- of fairness, and the  
22 primary objective of rate setting is that each customer  
23 class rates reflect the costs that they impose on the  
24 system, the Board will review the cost of service of the  
25 Utility every time they sit to review Manitoba Hydro's

1 rates.

2                   And again, it's so critically important  
3 that that tool maintain the cost of service principles  
4 which give rise to it, and gives rise to an objective  
5 definition of fairness in terms of an allocation of costs  
6 to the appropriate customer classes.

7                   MR. ROBERT MAYER: Ms. McCaffrey, on your  
8 -- again on the book you provided us with major topic  
9 number four, second line, second paragraph, that  
10 'firmness' is supposed to be 'fairness,' right?

11                   MS. TAMARA MCCAFFREY: Sorry, Mr. Mayer,  
12 where are you?

13                   MR. ROBERT MAYER: I'm on your -- Tab,  
14 it's the red tab -- oh, different colours there. Okay.  
15 My red tab. Major topic four.

16                   MS. TAMARA MCCAFFREY: I have it.

17                   MR. ROBERT MAYER: Second paragraph,  
18 second line. "Determinate of..." that should be  
19 'fairness?'

20                   MS. TAMARA MCCAFFREY: Oh, it almost  
21 looks like 'firmness' doesn't it. "Fairness".

22

23                                           (BRIEF PAUSE)

24

25 CONTINUED BY MS. TAMARA MCCAFFREY:

1 MS. TAMARA MCCAFFREY: I keep turning the  
2 mic on at the wrong point and turning it off when I'm  
3 about to speak. Some in the room might be grateful for  
4 that, and probably not my client.

5 To sum up, with respect to Mr. Peters'  
6 laundry list, I don't propose to go through all eighteen  
7 (18) issues at this point. But I would like to sum up in  
8 terms of the cost of service recommendations that are  
9 before you.

10 These seven (7) points are the matters of  
11 which are properly within the cost of service box. And  
12 these are things that, in our view, there is sufficient  
13 evidence and debate to make final and long-term -- final  
14 decisions that will have long-term impacts in terms of  
15 how the utility does it's cost of service.

16 Again, we're recommending that Hydro  
17 continue to calculate its single cost of service study on  
18 the basis of embedded accounting costs. And in preparing  
19 the cost of service study, Hydro should maintain a  
20 primary focus on the core first principles for cost of  
21 service practice, including maintaining the functional  
22 integrity of the study and maintaining internal  
23 consistency in the cost of service study.

24 All export revenues, point 3, should be  
25 credited via the cost of service study and ultimately

1 allocated to firm domestic ratepayers via the functions  
2 that give rise to the revenues, again, generation and  
3 transmission.

4 Hydro's proposals in respect of  
5 classifying generation 100 percent to energy, be  
6 rejected.

7 And the current method of classifying  
8 generation to demand and energy based on the system load  
9 factor, be retained, to recognize the key role of  
10 coincident peak loads in driving system investment class.

11 With respect to the fifth bullet, Hydro's  
12 proposals in respect of allocating generation energy on  
13 the basis of marginal costs weighted energy, we recommend  
14 be accepted, subject to the number of time periods for  
15 the assessment being at least twelve (12).

16 Bullet six (6), transmission lines remain  
17 functionalized as a group and not sub-functionalized into  
18 export versus domestic related groupings.

19 And I've dealt with, again, bullet seven  
20 (7).

21

22 (BRIEF PAUSE)

23

24 MS. TAMARA MCCAFFREY: Those are the  
25 issues that can be decided today and those are the issues

1 that are properly cost of service matters.

2 I would like to -- MIPUG's position with  
3 respect to all of the laundry list issues, if I can put  
4 it that way, and I don't mean that in any way in a  
5 diminishing sense, are set out in their supporting  
6 documents, they have MIPUG's position with the supporting  
7 evidence behind it.

8 And I don't think I need to go through all  
9 of them. I've gone through many of them already.

10 So I want to conclude with -- given that  
11 I'm the advocate here, I want to say that MIPUG members  
12 are quite concerned with some of the things that we've  
13 been hearing in this Hearing.

14 This notion, again, that industrials,  
15 because of their increasing domestic load, are somehow  
16 picking the pockets of Manitoba ratepayers. If anybody  
17 wants to have a debate about the economic value of MIPUG  
18 industries in Manitoba, we say, Bring it on. And we  
19 would welcome an opportunity to participate in that.

20 But no one is actually debating that; just  
21 sort of tiptoeing around the suggestion. And if we want  
22 to look at the economic value of MIPUG industry versus  
23 the economic value of Manitoba Hydro's exports, one (1)  
24 can start by reviewing the economic impact assessment  
25 that Mr. Turner brought to your attention in his



1 presentation.

2                   And I know the Board has been given a copy  
3 and certainly Hydro has had a copy and has had an  
4 opportunity to review that.

5                   It's not -- it wasn't put forward in terms  
6 of the witnesses that we had testify. And -- but I don't  
7 think anyone would debate the suggestion that industry  
8 has a very significant contribution to Manitoba that  
9 eclipses -- I mean we're talking about a contribution to  
10 the gross domestic product here that's five (5) times  
11 that of Manitoba exports.

12                   And given that this Board has a very broad  
13 purview in terms of the matters they can take into  
14 account and public policy issues, when they consider the  
15 Hydro utilities rates, it's important to keep that  
16 perspective in mind.

17                   It's just not borne out. It's a very  
18 small narrow way of looking at things.

19                   MR. ROBERT MAYER: Ms. McCaffrey, again,  
20 I hesitate to interrupt argument, and I know I have most  
21 of it here, but I haven't had a chance to read it yet.

22                   Do you have any comment on Mr. Lazar's  
23 method of assessing the value of industry by basing -- at  
24 least making the comparison of kilowatt hours per job?  
25 Where he talks about, We don't want to see -- We don't

1 want to see the -- We like the kind of industry that  
2 actually provides something back, and he wants to make  
3 that assessment by basing his assessment on kilowatt  
4 hours per job.

5 Do you have any comment on that? I  
6 realize you're not going to be wildly excited about  
7 biggest piggy, most slop method. But, the other piece I  
8 thought might have some merit.

9

10 CONTINUED BY MS. TAMARA MCCAFFREY:

11 MS. TAMARA MCCAFFREY: I don't have  
12 specific instructions on that issue.

13 If I were to consult with Mr. Bowman here  
14 on my right, I might think about the question of the  
15 parameters of this Board's jurisdiction to take those  
16 things into account, versus the Government directing  
17 policy in terms of those matters.

18 I also -- it does raise, however, the  
19 interesting discriminatory rates issue. And I can tell  
20 you, I am not a consultant, I'm the advocate here, in the  
21 strongest possible terms MIPUG will fight any type of  
22 rate that is discriminatory in terms of a particular  
23 industry in this province, treating some industries in a  
24 different way than others.

25 If Manitoba Hydro is suggesting that they

1 might like some industry, maybe it provides more jobs,  
2 and don't like other industry, then have them put it on  
3 the table so that we can deal with it fair and square in  
4 -- in the proper forum, to have a public debate about  
5 that.

6                   But that's not -- that's the type of  
7 thing, when I hear Ms. Ramage's cross-examination on the  
8 issue of sodium chloride plants, and Hydro Quebec's  
9 government policy change, again, a gov -- not a  
10 regulatory -- that wasn't a regulatory decision here,  
11 this was coming from government, and presumably after, I  
12 think, a very lengthy public debate.

13                   When I hear questions along those lines,  
14 though, it causes very serious concerns for MIPUG's  
15 members in terms of any -- any such potential for  
16 discriminatory rates.

17                   It was -- it sort of struck us, in the  
18 first place, why Manitoba Hydro would ask questions with  
19 respect to the growing industrial load of a particular  
20 industry. It's an unusual situation when a Crown utility  
21 might be seen to be complaining about growing domestic  
22 load.

23                   But, again, I leave that for your  
24 consideration. It's not strictly germane to the types of  
25 considerations you have make here but, as an advocate, I

1 can tell you that MIPUG has some very significant  
2 concerns about that.

3                   And again, in the context of the letters  
4 that have been filed, all those things, a debate should  
5 be had if Hydro, indeed, wants to have that debate. We  
6 would -- we would like to see it brought out of the  
7 closet if they have the concern, if they -- if they'd  
8 like to start doing something different with rates,  
9 charging certain industry perhaps a discriminatory rate  
10 over others because they prefer some industries, then let  
11 Hydro bring it out so that we can deal with it in terms  
12 of which industries they like, which they don't want to  
13 see growing, and why. And then we can tackle that  
14 problem head on, instead of dancing around the suggestion  
15 here.

16                   Sometimes it's fun to be the advocate and  
17 not the consultant. But, in any event, in terms of the  
18 economic contribution, I don't want to go too far into  
19 that. I don't think there is really any real dispute  
20 about that, in any event. But I just, for the sake of  
21 the Board, if you haven't had an opportunity to review  
22 the economic impact statement, there is some useful  
23 information there, and I've already mentioned in terms of  
24 the contribution to Manitoba's gross domestic product.  
25 But there's also information about each of the MIPUG

1 member companies, and in particular, INCO.

2 INCO paid for the infrastructure of  
3 Thompson. I didn't know that until I -- until I review  
4 that. It's -- it's part and parcel of the history of  
5 development of that city, which is now diversified  
6 somewhat. But INCO remains an important corporate  
7 presence there.

8 Flin Flon, some might say, would you have  
9 Flin Flon if it wasn't for Hudbay, which -- formerly  
10 Hudson's Bay Mining and Smelting, it's essential to that  
11 community.

12 In terms of forestry, Tolko and Tembec --

13 MS. PATTI RAMAGE: Excuse me --

14 MS. TAMARA MCCAFFREY: -- maintaining  
15 forestry industries in -- in a very difficult market.

16 THE CHAIRPERSON: Yes. Ms. McCaffrey, I  
17 think we have that briefing and I think there was a note,  
18 I believe, that the Pine Falls operation, Tembec, wasn't  
19 included in the economic study.

20 Is that correct?

21 MS. TAMARA MCCAFFREY: You know, there  
22 was -- I'd have to check it, there was some information  
23 that wasn't available, I know, from some of the member  
24 companies, and that may have been one of them.

25 THE CHAIRPERSON: I believe that's what

1 it is, but we have it filed.

2 MS. TAMARA MCCAFFREY: Yeah.

3 THE CHAIRPERSON: We understand.

4 MS. TAMARA MCCAFFREY: Thank you. And --  
5 and I think everyone will be happy to hear that -- that  
6 that really summarizes our argument with respect to the  
7 issues.

8 If there's any questions from the Board  
9 with respect to any of the more ancillary issues that I  
10 haven't specifically averted to, certainly we would  
11 welcome them at this time.

12

13 (WRITTEN SUBMISSIONS BY MIPUG)

14

15 Summary of MIPUG Recommendations regarding Manitoba  
16 Hydro's Cost of Service Methodology Proceeding.

17

18 Revenue Requirement

19 In preparation for its next General Rate  
20 Application:

21 1) Hydro be directed to develop a means  
22 for determining export revenues have grown beyond the  
23 point where they can be reasonably credited back to  
24 ratepayers in the year they arise.

25 2) Hydro be directed to bring forward

1 proposals on how to determine on an ongoing basis the  
2 level of such a threshold for review within a revenue  
3 requirement context. Such calculation of the threshold  
4 level must be durable such that it can evolve over time  
5 with changes to Hydro's system and changes to the level  
6 of export revenues.

7                   3) Hydro be directed to bring forward  
8 proposals as to how to account for any such excess export  
9 revenues to the long-term benefit of ratepayers, focused  
10 principally on rate stability through managing risks of  
11 drought, and reducing the level of Hydro's debt.

12

13 Cost of Service

14                   1) Hydro continue to calculate its single  
15 cost-of-service study ("COSS") on the basis of "embedded"  
16 of accounting costs.

17                   2) In preparing the COSS, Hydro should  
18 maintain a primary focus on core first principles for COS  
19 practice, including:

20                   a) Maintaining the functional integrity  
21 of the study.

22                   b) Maintaining internal consistency in  
23 the cost-of-service study.

24                   3) All export revenues credited via the  
25 cost-of-service study ultimately be allocated to firm

1 domestic ratepayers via the functions that give rise to  
2 the revenues - the generation and transmission systems.

3 4) Hydro's proposals in respect of  
4 classifying generation 100 percent to energy be rejected,  
5 and the current method of classifying generation to  
6 demand and energy based on the system load factor be  
7 retained to recognize the key rate of coincident peak  
8 loads in driving system investment and costs.

9 5) Hydro's proposal in respect of  
10 allocating generation energy on the basis of marginal  
11 costs weighted energy be accepted, subject to the number  
12 of time periods for the assessment being no less than 12.

13 6) Transmission lines remain  
14 functionalized as a group, and not subfunctionalized into  
15 export versus domestic-related groupings.

16 7) Hydro's proposals in respect of  
17 developing two export classes be rejected. Either the  
18 current method for addressing exports be retained, or  
19 alternatively the NERA method for developing an export  
20 class be adopted. To the extent an export class is  
21 adopted, the costs determined for the export class should  
22 not form the basis of any analytical assessment of:

23 a) The situations in which Hydro  
24 should build new plant for export, nor  
25 which plant should be built;



- 1                   b) The situations in which Hydro  
2                   should undertake to make an export  
3                   sale, the prices for such sale, or the  
4                   form of the sale; and,  
5                   c) The determination of a "threshold"  
6                   as noted in the Revenue Requirement  
7                   recommendations.

8

9     Rate Design

10    In preparation for its next General Rate Application:

11                   1) Hydro be directed to investigate  
12    options to improve the efficiency signals in respect of  
13    its rates via measures such as Stepped Rates.

14                   2) In reviewing options for industrial  
15    rates, Hydro be directed to undertake detailed and  
16    meaningful conversation with customers prior to bringing  
17    forward rate design proposals in the GRA.

18                   3) Hydro be directed to apply to the  
19    Board for any changes it seeks with respect to higher  
20    rates in the form of ongoing or one-time charges for new  
21    industrial customers, regardless of the form or structure  
22    of such charges.

23

24    Relevant Outstanding PUB Directives (not yet filed or not  
25    yet specifically addressed by the PUB)

1 Revenue Requirement

2 1) Reserve Provision- Order 7/03: a  
3 study to quantify specific reserve provisions required to  
4 cover the major risks and contingencies faced MH.

5 2) Revised Risk Management - Order  
6 143/04: MH's revised risk management strategy that  
7 reflects the quantification of risks both separate and in  
8 combination.

9 3) Restricted Retained Earnings - Order  
10 143/04: a study on the implications of internally  
11 restricting retained earnings as a form of self-insurance  
12 reserve and rate stabilization fund, to restrict and  
13 future dividend payments until the 75:25 debt to equity  
14 ratio has been achieved and/or exceeded.

15 4) Financial Targets - Order 143/04: A  
16 report on the implications of returning the interest  
17 coverage financial indicator to a target of 1.2.

18 5) Drought Implications - Order 143/04: A  
19 study of MH's response to the 2002-2004 drought, with  
20 recommendations by an outside and independent expert.

21

22 Cost of Service

23 None following this proceeding.

24

25 Rate Design

1                   1) Zone of Reasonableness - Order 143/04:  
2 A proposal to utilize the Zone of Reasonableness concept,  
3 based on an amended COSS, moving all customer classes to  
4 "unity" (allocated revenue requirement equals allocated  
5 expenses) within five to seven years.

6                   2) Inverted Rate Structure - Order 7/03:  
7 a study on the merits of implementing an inverted rate  
8 structure for all customer classes.

9

10                   (WRITTEN SUBMISSIONS CONCLUDED)

11

12 QUESTIONS BY BOARD:

13                   THE CHAIRPERSON: Ms. Ramage, did you  
14 have --

15                   MS. PATTI RAMAGE: I was simply concerned  
16 with the degree of reference to some materials that were  
17 filed by -- in the form of presenters' materials which  
18 are not properly evidenced in this proceeding and haven't  
19 been subjected to the same degree of scrutiny as --

20                   THE CHAIRPERSON: We understand, Ms.  
21 Ramage.

22                   MS. PATTI RAMAGE: -- for example, Mr.  
23 Bowman's evidence.

24                   THE CHAIRPERSON: Yes. I think Ms.  
25 McCaffrey was relatively brief when she got into that

1 because she knew what the status of that material was.

2 Ms. McCaffrey, when you're talking about  
3 the background material, if you like, Mr. Peters'  
4 eighteen (18) points, just to highlight one (1) of them  
5 on a quick read, your position with respect to Mr.  
6 Lazar's points on externality is that they don't have any  
7 role to play in a COS study; is that correct?

8 MS. TAMARA MCCAFFREY: That's correct.

9 THE CHAIRPERSON: Thank you. Thank you  
10 very much, Ms --

11 MS. TAMARA MCCAFFREY: Okay -- I'm sorry.  
12 Mr. Bowman has quite rightly pointed out, and it was in  
13 his evidence as well, I believe he was asked this  
14 question, but to the extent that the costs have actually  
15 been something that have been paid out by Manitoba Hydro  
16 they are quite properly reflected in the cost of service.

17 THE CHAIRPERSON: I was talking about the  
18 CO2 emissions element.

19 MS. TAMARA MCCAFFREY: -- you are correct  
20 in our -- in our position.

21 THE CHAIRPERSON: Thank you. Okay, I  
22 think what we'll do is we'll have a break now until 3:00  
23 and when we come back, based on the understanding of this  
24 morning, Professor Miller would be up and then we would  
25 close with Mr. Anderson. Thank you.

1 --- Upon recessing at 2:47 p.m.

2 --- Upon resuming at 3:06 P.M.

3

4 THE CHAIRPERSON: Okay, welcome back  
5 everyone.

6 MS. TAMARA MCCAFFREY: Mr. Chairperson,  
7 with respect to one (1) undertaking I'm advised by Mr.  
8 Bowman that we can provide a response to the Board if  
9 this is an appropriate time?

10 THE CHAIRPERSON: Yes it is.

11 MS. TAMARA MCCAFFREY: The transcript  
12 reference is page 2028, Undertaking 23, MIPUG was asked  
13 to confirm the percentage increase in the load of energy  
14 intensive industry in Manitoba in the last five (5)  
15 years.

16 Okay. And I'm going to turn it over to  
17 Mr. Bowman now to provide a response to that Undertaking.  
18 Go ahead Mr. Bowman.

19 MR. PATRICK BOWMAN: Thank you. Manitoba  
20 Hydro had provided a number in respect of this  
21 Undertaking already which was 170 percent load growth.  
22 We don't have exactly the same figures but, on an energy  
23 basis we would come up with 160. So it's in the same  
24 range.

25 I would note that that was during a period

1 that we went from one (1) to two (2) facilities who would  
2 fall into that category. So there was an addition of a  
3 new facility. And the original facility went through its  
4 own expansion.

5 So one was an addition of about a 30  
6 megawatt facility and the other was an expansion by about  
7 45 megawatts of the original energy intensive industry  
8 that was there at the start of that period.

9 THE CHAIRPERSON: Thank you Mr. Bowman.  
10 Okay, Professor Miller --

11 DR. PETER MILLER: Thank you very much--

12 THE CHAIRPERSON: -- for TREE/RCM?

13 DR. PETER MILLER: -- Mr. Chair and  
14 Panel and all the assembled folks. I guess I should start  
15 off by -- I hope you all have a written copy of my brief  
16 and an extract from the Centra Hearing of last year.

17 Does everyone have that? And --

18 THE CHAIRPERSON: Professor Miller, just  
19 give us a second --

20 DR. PETER MILLER: Yes.

21 THE CHAIRPERSON: -- we're missing one  
22 (1).

23 DR. PETER MILLER: Sure.

24

25 (BRIEF PAUSE)

1 THE CHAIRPERSON: Okay. We're fine  
2 again.

3

4 CLOSING COMMENTS BY DR. PETER MILLER:

5 DR. PETER MILLER: I guess procedurally,  
6 I should ask leave to include the one (1) point I wanted  
7 to extract from last years Board Order in the Centra  
8 hearing. Most of this is for context. The one (1) point  
9 that I wanted to refer to was number five (5) on page 24  
10 which is three (3) sheets in.

11 Basically, it's one (1) of a number of  
12 suggestions that our consultant had for administering DSM  
13 programs. Now, various parties will say, well that's way  
14 out of scope. But, the Chair invited a contextual  
15 treatment of costs and I'll get to that.

16 But, I guess the question is, can I refer  
17 to the concept of self-directing a portion of DSM in this  
18 proceeding? If I can't refer to it here, I'll make it  
19 up.

20 THE CHAIRPERSON: It's your closing  
21 statement, Professor Miller.

22 DR. PETER MILLER: Thank you. And I  
23 guess the second question is, can I highlight with the  
24 assumption that this written document will be read or --

25 THE CHAIRPERSON: We'll put your

1 presentation into the record so that you can just  
2 highlight it, yes.

3 DR. PETER MILLER: Okay. Thanks. I'm  
4 aware that the day is moving on.

5 MR. ROBERT MAYER: You have my  
6 undertaking to read it.

7

8 CONTINUED MY DR. PETER MILLER:

9 DR. PETER MILLER: Thanks. I -- there's  
10 some introduction material on the front page. Just to  
11 kind of set the tone though, I talk about the concept of  
12 eco efficiency which is the ratio of social benefits to  
13 environmental cost or resource depletion.

14 And eco efficiency can be improved if you  
15 can increase the benefits or if you can reduce the  
16 environmental harms. And a proposal that will do both at  
17 once is particularly to be recommended. If you can  
18 increase social benefits and reduce environmental harms  
19 both together, that's what I -- in the context of Hydro  
20 want to call the power-smartest goal as opposed to the  
21 current lowest-rate goal. So that's the only point  
22 there.

23 What I've done is to summarize up front a  
24 series of recommendations and then I'll have some  
25 discussion to follow. So the -- the recommendations fall



1 under a number of categories.

2                   How should we look at this material? The  
3 -- the Chair asked for criteria for making decisions;  
4 that maybe a way of looking at it. And our -- our  
5 position of course, as we've reiterated in a number of  
6 these hearings, is that the -- the various legalities and  
7 precedents and all the rest should be evaluated in the  
8 light of a more fundamental social principles of justice  
9 and sustainability.

10                   And another point would be that when  
11 you're looking at direction to the Corporation, you could  
12 look at the Manitoba Hydro Act but you should stop there.  
13 You should beyond it, to the Sustainable Development Act  
14 as a supplement.

15                   Then we support the creation of an export  
16 class or two (2). We don't take a position between those  
17 two (2). And it recommends -- it is a fair assignment of  
18 costs.

19                   Vintage pricing. We accept Manitoba  
20 Hydro's arguments for the Winnipeg River based vintage  
21 pricing; it's more trouble than it's worth. But there  
22 may be some basis, as was done in BC, when you're looking  
23 at new load and from this point forward the notion of  
24 vintage pricing may have a role.

25                   Under full cost accounting, we believe

1 that for each General Rate Application Manitoba Hydro  
2 should produce a full cost accounting cost, and that  
3 should be refined and updated over time. We would expect  
4 the first one that Manitoba Hydro submits to be an  
5 improvement upon Lazar's initial attempt at that.

6                   And it should capture, initially or  
7 minimally, the marginal cost of electricity supply and  
8 consumption and the opportunity costs for mitigating  
9 global damage from climate change caused by greenhouse  
10 gases. That's just the starting point.

11                   Furthermore, this would not be just an  
12 idle exercise but it's something to be taken into account  
13 in decisions regarding the determination of Manitoba  
14 Hydro's revenue requirement, the allocation of costs  
15 between classes, rate design, resource planning, the  
16 evaluation of potential DSM investments, and the  
17 allocation of net export revenues. In other words, it  
18 should have a function in the deliberations.

19                   The cost can serve as a measure of  
20 economic efficiency and environmental impacts of Hydro's  
21 rate policies and proposals and provide one (1) kind of  
22 definition of rate subsidy; how much is Manitoba -- are  
23 Manitoba ratepayers being subsidised. The cost could be  
24 standalone. In other words, it's conceivable that this  
25 would be the only cost that you'd need.

1                   Or, another alternative, conjectured by  
2 the Board, put to Manitoba Hydro, I don't know that I've  
3 heard their response yet, what about two (2) costs and  
4 averaging the result somehow. I think of, you know,  
5 either of those is worthy of consideration but we would  
6 want to investigate the output of either the resulting  
7 synthesis, as Mr. Lazar proposes, or how the two (2) were  
8 used in combination.

9                   We do not think that the full cost  
10 accounting cost necessarily is full cost pricing, to use  
11 Manitoba Hydro's distinction. And if the revenue  
12 requirement is determined to be less than that, as almost  
13 certainly it would be, then you need a method to  
14 reconcile that and several jurisdictions where that is  
15 done are cited, California and New Mexico and Illinois  
16 and they use the equal proportion of marginal cost.

17                   So presumably you do your full cost  
18 accounting and then take, I don't know, 30 percent of  
19 that or whatever as the amount that you're asking  
20 ratepayers to pay.

21                   Other recommendations are that Hydro  
22 should consider adopting a power at cost revenue target  
23 for domestic customers equal to 100 percent of the costs  
24 allocated to the domestic classes and gradually increase  
25 domestic rates from the current 78.2 percent to -- to

1 that figure to eliminate the export subsidy to rates and  
2 increase the potential for efficient rate design.

3 We find somewhat anomalous the fact that  
4 Hydro has targets for lots of things, like debt equity  
5 and so on, but it doesn't have any real constraints on  
6 how far the -- the revenue can deviate from either the  
7 embedded costs or the marginal costs.

8 It can go all over the place and we had  
9 some examples of how, I think Mr. Peters raised the  
10 question, mathematically isn't it the case that, you  
11 know, if we really luck out in the export market and  
12 domestic load doesn't grow at all that we end up giving  
13 people money in terms of how much power they consume.

14 You know, if it -- if it all is refunded  
15 to the functions or whatever and we obviously recognize  
16 that there are certain absurd limits to this but the  
17 question is, does the distortion enter before we reach  
18 those absurd limits.

19 And I think it's worthy of -- to have some  
20 kind of target or zone. I mean, you might take the  
21 present one, 78 percent of -- of embedded costs is the  
22 average. Well, okay, it shouldn't go any lower than  
23 that. It might be, you know, a status quo target. But  
24 whatever, it should be -- there should be a target and  
25 we're suggesting it should be 100 percent of embedded

1 costs.

2 Mr. Lazar made some recommendations  
3 regarding those net export revenues which he and we think  
4 it's a mistake to subsidize the actual consumption.  
5 Offsetting uniform rates legislation is appropriate.  
6 Increasing the reserves; almost everyone seems to agree  
7 on that as an important objective.

8 Funding DSM programs further; we realize  
9 that Hydro has stepped up its level of investment in DSM  
10 but you can take it a step further. You look at current  
11 rates as being, say, a 30 percent subsidy in the old  
12 method or a 20 percent subsidy in the revised recommended  
13 method.

14 Well, what about a comparable level of  
15 subsidy of DSM. By subsidy I mean going beyond that cost  
16 effective threshold. I mean, that's something to  
17 consider.

18 Fourth, funding low income energy  
19 assistance programs to provide basic essentials of modern  
20 life to individuals who are destitute will have a minimal  
21 effect on total consumption and will provide a modicum of  
22 21st Century lifestyle to those who cannot now afford it.

23 And I think I heard some discussion from  
24 Mr. Warden that -- or Mr. Wiens, one or the other, that  
25 one (1) of the funding options that they're contemplating

1 would be that this would come out of export revenue as  
2 opposed to being assigned to the residential class.

3           And then whatever it was that Mr. Lazar  
4 and Mr. Wiens had a conversation over about unallocable  
5 parts of the distribution plant we'll accept somewhat  
6 blindly Mr. Lazar's recommendation that that's a suitable  
7 place to invest the export earnings. I can't say that I  
8 fully understand it.

9           And the point is that what these do is  
10 still money going back to people of Manitoba, but it's  
11 not going back into the form of subsidies to consumption.

12           It's going back in ways that will benefit  
13 Manitobans. They'll have more efficient residences and  
14 businesses. Their bills may be no higher even if their  
15 rates are somewhat higher absent the subsidy because they  
16 are operating more efficiently.

17           And the question is, how can we make  
18 basically the Manitoba economy a more efficient operation  
19 than it is?

20           We agree that Manitoba needs an  
21 industrial strategy. I've had extensive involvement with  
22 Tembec through the model forest and I sit on an advisory  
23 committee that they have.

24           And I know how they're looking at costs  
25 and looking at mills closing in Kenora and so on. And

1 you know, there's -- we're not asking for any throats to  
2 be slit here. But, at the same time there have got to be  
3 better ways than just subsidizing low rates.

4                   And so here are just some suggestions that  
5 Mr. Lazar tossed out. First, the power smartest goal as  
6 opposed to the lowest rate strategy. Mr. Lazar outlined  
7 some of the threats from a lowest rate strategy that it  
8 may not be to the economic benefits of Manitobans in the  
9 end.

10                   Of course, that requires its own  
11 discussion as Ms. McCaffrey brought out. But, it's a  
12 consideration I think, should it operate here?

13                   A modest rate increase to cover more of  
14 the embedded costs in order -- and here's the -- if you  
15 will the discrimination, discourage new large electro-  
16 process loads that can force a much higher increase on  
17 all customers.

18                   Inverted rates. Vintage rates going  
19 forward from this point, rather than you know, trying to  
20 go back to the Winnipeg River. Long term energy supply  
21 contracts with customers having long term resource  
22 supplies within Manitoba and long term labour contracts.

23                   Or linking rates to commodity prices, that  
24 has been done in some jurisdictions. So that when the  
25 commodity is high in the markets -- well you collect a

1 reasonable revenue for the hydro sales, when it drops you  
2 reduce the rates.

3                   Currently, Inco's business is booming from  
4 high metal prices, so you expect them to pay the full  
5 shot. But, Tembec and Tolco, more appropriately Tolco,  
6 are really struggling and so you would adjust them  
7 downwards.

8                   And then here's where my little reference  
9 to last year's GRA. If we're going to subsidize  
10 industry, why not create a DSM investment fund? And make  
11 that available at times that the plant is undergoing  
12 reconstruction or whatever.

13                   It could be something that could be banked  
14 over time and contribute to making the plant more  
15 efficient. That would improve its survivability.

16                   Besides an industrial strategy we need a  
17 low income strategy. And a lot has been said about that,  
18 not so much in this Hearing but, in other ones. But, we  
19 have to address and indeed the Board is aware of this and  
20 Hydro's aware of it and Hydro has hired, I guess, someone  
21 to work in this area, look at the folks who might be  
22 hardest hit.

23                   And now not every low income person is  
24 going to be hard hit. If they live in an apartment, they  
25 would benefit from inverted rates because the first block





1 DR. PETER MILLER: Yes.

2 MR. ROBERT MAYER: -- I'm having some  
3 problem with this. You say, Go to 100 percent of costs,  
4 bill that across the board and then target.

5 Well, I see some really practical  
6 problems. That was identified very well when it came to  
7 gas. Well, let's identify it when it comes to  
8 electricity because where I live electricity is gas, I  
9 mean, we've got to heat.

10 DR. PETER MILLER: Hmm hmm.

11 MR. ROBERT MAYER: And are you going to  
12 target the particular apartment buildings where you have  
13 some people barely making subsistence living,  
14 understanding that landlords are entitled to pass through  
15 their actual cost increases.

16 When you say "target," do you want to  
17 target each individual building or do you want to go down  
18 to targeting suites because that's what you're going to  
19 have to do if you're going to do a means test in  
20 distributing this money. It sounds to me that that's  
21 what you're asking for, and I don't see how that's  
22 feasible.

23 DR. PETER MILLER: I don't know the  
24 details of it but it's standard practice in most US  
25 jurisdictions, particularly in the West Coast to have a

1 series of things including emergency assistance,  
2 including targeted DSM. I don't know what they do about  
3 apartment buildings.

4           But there's a lot of experience that I  
5 don't have in this, it's been done in part because there  
6 have been federal programs that encouraged it with  
7 matching funds from public benefit charges on -- on the  
8 utilities.

9           Everyone pays an extra 2 percent or  
10 something like that, to create a fund to match the  
11 federal funds, that then usually is not administered by  
12 the utility but by various social agencies who are aware  
13 of these problems and -- and know -- I don't know how  
14 they create their list of eligible parties but, you know,  
15 who's -- who's eligible for a GST rebate?

16           I don't know how you determine that but  
17 there -- there are way within the broader political  
18 system and social agencies that this is done.

19           And to say that there are problems with  
20 it, well, I wouldn't deny that. I mean, I can imagine  
21 problems too. But shouldn't we look at the practices in  
22 other jurisdictions where they've overcome those problems  
23 because they had to with spiralling rates, several times  
24 the rates that we pay.

25           MR. ROBERT MAYER:     Professor Miller,

1 firstly, I do understand how they determine who get a GST  
2 rebate, and that's not a complicated program, and it's  
3 done by the Government of Canada. We are not the  
4 Government of Canada. Hydro is not the Government of  
5 Canada. Hydro is not the Government of Manitoba.

6           What you are asking for here is something  
7 so specific that I suspect that all your cost savings  
8 would be evaporated in the amount of infrastructure you  
9 would need to make sure people don't damn well starve or  
10 freeze to death in some building in Thompson, Manitoba,  
11 or Cross Lake that's had its heat cut off.

12           And there has -- time and time again the  
13 argument has been made over means testing or universal  
14 programs. And the argument for universal programs, as I  
15 understand it, is you can save as much in the cost of the  
16 infrastructure as you would by trying to target people  
17 specifically.

18           And when it comes to providing hydro power  
19 it strikes me that that is a much better argument than  
20 going down determining each and every individual home in  
21 Cross Lake and who gets subsidized and who doesn't.

22           DR. PETER MILLER: Part of the -- one (1)  
23 -- one (1) aspect of the proposal is inverted rates and  
24 perhaps with a larger first block for people who are  
25 electrically heated without a gas alternative and that's

1 a universal program.

2                   So everyone gets a benefit provided they  
3 can keep their heating down to a -- a reasonable level.  
4 If they start adding on gadgets and TV's and Jacuzzi's  
5 and -- and so on, well, it might get -- it might get  
6 higher. Or if they have a very large house it might get  
7 higher.

8                   So, I mean, there are more universal  
9 programs in terms of rate structure.

10                   MR. ROBERT MAYER: But, Professor Miller,  
11 inverted rates don't bring things down if you're going to  
12 100 percent. Inverted rates at the present time would  
13 bring your first block down.

14                   You go to 100 percent, I suggest to you,  
15 that your -- your first block rate will not be lower. In  
16 fact, it will be higher than what it is now,  
17 significantly. The inverted rate, and the Board has  
18 already indicated on a number of occasions, its belief in  
19 inverted rates, or at least some feeling there.

20                   But that is not going to solve the problem  
21 when it comes -- when you -- once you go to 100 percent  
22 of costs. And I'm wondering how you answer that problem?  
23 I mean, not everybody lives in River Heights and not  
24 everybody has a Jacuzzi and some people have to have  
25 power or they will not survive.

1 DR. PETER MILLER: Well, I grant that.

2 THE CHAIRPERSON: With due respect to the  
3 whole discussion, I suggest we're not going to solve all  
4 the low income strategy here today. Perhaps you can move  
5 on with the rest of the presentation.

6

7 CONTINUED BY DR. PETER MILLER:

8 DR. PETER MILLER: Sure. Now, those were  
9 the specific recommendations and at this point I'm moving  
10 to commentary to elaborate a few of those points. The  
11 applicable principles, we've heard about Bonbright.  
12 We've heard about the Regulatory Utility Commissioners  
13 Manual which says:

14 "Other revenues that can be generated  
15 by utility assets are typically  
16 credited against the utility assets  
17 that give rise to those revenues."

18 And that's a quote from the transcript.  
19 Fine. But this is where the recommendation that you have  
20 to interpret these -- these principles in terms of -- of  
21 justice and sustainability. Those are the -- the -- the  
22 tests that sustainability, justice is, I submit, a social  
23 value that is extensive.

24 But sustainability is legislated and so  
25 those are the -- what you do with those precedents and

1 principles from the manuals has to be sifted through the  
2 values that Manitobans hold and, in particular, the  
3 legislated ones in the Sustainable Development Act.

4 Justice includes the cost responsibility  
5 of assessment but also would include, I submit, since  
6 this is a Crown Corporation an equitable and optimal  
7 distribution of the benefits that our common asset  
8 generates. Why should they go to customers in proportion  
9 to the levels of consumption?

10 Inter-generational equity. I raised some  
11 questions along the way about that. Are we fairly  
12 balancing what we're demanding of the present generation  
13 and what will be available to future generations.

14 The social justice principle of addressing  
15 basic energy needs, the point that Mr. Mayer was talking  
16 about. If my proposals don't meet that, they're  
17 unacceptable. And the question is, what's the best way  
18 to meet them?

19 And then, finally, compliance with the  
20 just laws of the land and the two (2) cited are the Hydro  
21 Act and the Sustainable Development Act.

22 Talked about possible bias of -- of  
23 experts or Intervenors and ours is towards generations to  
24 come. But, we think our proposals are for the welfare of  
25 the current generation especially a few years down the

1 road.

2                   Specifically, I want to make an  
3 application here referring to a point that Mr. Warden  
4 said in reply to Byron William's cross-examination and  
5 I'm quoting here:

6                   "Furthering the well being of the  
7 Province is of course, not part of the  
8 Manitoba Hydro Act and although we may  
9 have -- all have personal views on that  
10 matter, it's probably not appropriate  
11 to express those views."

12                   And this is -- the point is don't just  
13 stick with the Hydro Act, look at the Sustainable  
14 Development Act and it applies and it provides solid  
15 ground for affirming that long run social well being  
16 provincially and globally as defined by those principles,  
17 is indeed a legitimate, in fact, mandated objective for  
18 the utility.

19                   There is no justification for narrowly  
20 following procedures or precedents harmful to Manitoba  
21 and beyond. And that is not a private opinion.

22                   I list some of the relevant values from  
23 the Schedules A and B at the end which you can read and  
24 of course you've heard a number of times about the  
25 efficient use of resources and the full cost accounting.



1                   And these principles are also reflected in  
2 a -- Hydro has adopted some sustainable development  
3 principles which in our evidence is found at the end of  
4 the voluntary challenge and registry program, which is  
5 the updated, the 2003 update, which is Appendix 11.6 of  
6 the Round 2 responses.

7                   We've already agreed that we're not  
8 proposing full cost pricing and accept the distinction  
9 between full cost pricing and full cost accounting. But,  
10 where we would disagree is the idea that full cost  
11 accounting has no specific place in the deliberations of  
12 this body or in the rate setting activities of Manitoba  
13 Hydro.

14                   And furthermore that that place is not  
15 just because the DSM department or the resource  
16 acquisition department considers these principles and  
17 makes decisions and incurs costs which then get over  
18 here. Which seems to be the pattern that Hydro has  
19 followed.

20                   We maintain that the Sustainable  
21 Development Act has a place in these deliberations not in  
22 the resource acquisition -- not just in the resource  
23 acquisition deliberations or the power smart  
24 deliberations. It has a place here.

25                   Decisions and actions are taken here. And

1 with respect to early questionings from Mr. Peters to --  
2 suggesting that Hydro could be indifferent to what kind  
3 of a cost is developed here because it just refers to,  
4 you know, who is going to pay the bill, and it may be of  
5 interest to Intervenors but Hydro will get its money in  
6 the end, they rejected that.

7                   Because decisions that are made here have  
8 an affect on the -- what happens to the system, even the  
9 physical plant that might be built and the timing of the  
10 building of plant and so on, if it effects consumption  
11 levels of various parties, or available export income.

12                   And so very significant decisions are made  
13 here for the utility as a whole and I would simply add to  
14 that and globally. And that's the point of bringing the  
15 full cost accounting into these deliberations as  
16 recommended by the Guideline 1 of the Sustainable  
17 Development Act.

18

19                   (BRIEF PAUSE)

20

21                   DR. PETER MILLER:     Now, the PUB's powers  
22 and responsibilities. I'm basically presenting material  
23 that was presented to the CENTRA hearing and -- but only  
24 the Chair I think was part of that, so.

25                   The point is that the PUB can require the

1 owner of a public utility to comply with the laws of the  
2 Province and the Sustainable Development Act is the law  
3 of the Province binding on Manitoba Hydro.

4                   And the Crown Corporations Public Review  
5 and Accountability Act gives a heck of a lot of  
6 discretion to the Board, which they've reiterated from  
7 time to time, and I think right at the opening of these  
8 proceedings that you may have a cost but we don't  
9 necessarily have to follow that cost.

10                   And so our point is that the Sustainable  
11 Development Act and these principles in particular are --  
12 do form a legal and a policy basis for consideration in  
13 the determination of -- of rates and the steps that go  
14 into that.

15                   The Hydro Act, as we've learned, talks  
16 about the continuance of supply of power adequate for the  
17 needs of the Province, to engage in and promote economy  
18 and efficiency in the development generation transmission  
19 distribution supply and use of power.

20                   We believe that the terms 'economy and  
21 efficiency' need to be interpreted in the light of the  
22 Sustainable Development Act.

23                   And, furthermore, the Act defines a  
24 customer as any user or purchaser of power or any  
25 potential user of purchaser of power, which is broad



1 subsidy to Manitoba ratepayers is on the order of \$1.3  
2 billion a year relative to that full cost accounting  
3 value. And he thinks that represents the full social  
4 value of the power that we consume.

5           We're familiar, because we've gone over it  
6 once or twice, with the \$388 million figure that comes  
7 out of increased export revenues if domestic prices were  
8 raised to a point where consumption shrank by 32 percent.  
9 And whatever extra was taken from customers beyond, say,  
10 the embedded costs, if it were returned to them but in  
11 ways that didn't subsidise their rates, on average  
12 Manitobans would come out even. You'd take more in rates  
13 and give it back in other ways.

14           But Manitoba as a whole would be \$388  
15 million richer; that's the hypothetical analysis that he  
16 provides. Now I stress the word 'hypothetical' because  
17 neither Mr. Lazar nor ourselves, RCM/TREE, are  
18 recommending setting rates at that level.

19           But it is a framework that you should  
20 consider. What is the efficiency result? What is the  
21 level of subsidy? And is -- is there any way that we can  
22 affect that result.

23           So I give a quote there in which the  
24 various other considerations are there including the  
25 perceptions of equity and fairness, impacts on the

1 regional economy and impacts on disadvantaged citizens  
2 and at this point he says, I don't make a recommendation  
3 on how these non-cost considerations should be applied.

4           Although in his oral testimony he did  
5 offer more advice on what to do with export revenue if  
6 you didn't just put it to rate subsidy.

7           There has been a discussion of embedded  
8 versus marginal costs and most jurisdictions used  
9 embedded costs but in -- in one (1) of the responses  
10 Manitoba Hydro points out that California and New Mexico  
11 and Illinois have adopted marginal cost analysis.

12           Besides the relative ease, I guess, of  
13 looking at the books and coming up with the -- the value  
14 of embedded costs there is the view abroad that, and I  
15 think Consumers Association was particularly trying to  
16 press that view, that embedded costs -- allocations based  
17 on embedded costs are somehow fairer or more equitable.

18           Well, that view has been challenged. It  
19 was challenged, I think, in the rebuttal evidence and in  
20 oral testimony by -- by Mr. Wiens who was citing  
21 Bonbright and talking about getting the correct marginal  
22 cost analysis as -- as fundamental to fairness.

23           So, at least there's a -- a case to be  
24 made that allocating strictly on the basis of embedded  
25 costs ain't fair because it doesn't capture some of the

1 cost drivers in the system, basically from load growth.

2 And finally the NERA report on inverted  
3 rates said, if you're going to go this route you really  
4 ought to have a marginal cost based cost of service study  
5 and for these reasons I suggest we opt for a marginal  
6 cost based cost of service study.

7 Whether in addition an embedded cost of  
8 service study is created and that somehow the two (2) are  
9 averaged or some other procedure I'll -- I'll leave for  
10 people who know more about these things to deliberate on.  
11 But at a minimum we want that full cost of service and  
12 that has to reflect the marginal costs.

13 So, I think I've said enough about the --  
14 the other points so I'll -- I'll leave my comments there  
15 and see if the Board has any questions.

16

17 (WRITTEN SUBMISSIONS BY TREE/RCM)

18

19 Final Argument for the Manitoba Hydro COSS hearing

20 May 29, 2006

21

22 Submitted by Peter Miller on behalf of  
23 Resource Conservation Manitoba (RCM) and  
24 Time to Respect Earth's Ecosystems (TREE)

25

1 Introduction

2

3 Time to Respect Earth's Ecosystems (TREE) and Resource  
4 Conservation Manitoba (RCM) are non-government  
5 organizations committed to the advancement of a more  
6 sustainable society in which our planet's natural  
7 endowments of living and non-living systems and resources  
8 are valued, respected and conserved. Recognizing that  
9 this natural legacy is finite and subject to degradation  
10 and depletion, we promote eco-efficiency - improving the  
11 ratio of social benefits to environmental harms and  
12 resource depletion - as an essential pillar of a  
13 sustainable society. Taken by itself, eco-efficiency can  
14 be enhanced either by improving the social benefits or  
15 reducing the resultant harms from the use of resources. A  
16 policy that can do both at once is particularly to be  
17 recommended. For Manitoba Hydro, we can call that the  
18 power smartest goal, recommended to replace the current  
19 lowest rate goal.

20

21 TREE and RCM welcome the opportunity provided by this  
22 hearing to review Manitoba Hydro's COSS methodology.

23 - We note that, since 2002, Manitoba Hydro  
24 has been without a COSS methodology that MH, CAC/MSOS,  
25 and TREE/RCM could support, and, since 2004, without one



1 that the PUB could support.

2 - We note further that in this review, for  
3 the first time, export customers are treated as a  
4 separate customer class (or two), in accordance with a  
5 long-standing request of the Board.

6 - Finally, we note that the Board has wisely  
7 decided that the issues in designing a COSS methodology  
8 are sufficiently complex, fundamental and contentious to  
9 be deserving of separate review prior to the more  
10 detailed application and audit of a COSS in a  
11 rate-setting exercise. We believe that this decision has  
12 borne fruit in a creative exchange of views that have  
13 plumbed basic principles of cost determination and  
14 rate-making.

15

16

17 Summary of recommendations

18

19 Let me first summarize our recommendations and then  
20 provide some additional commentary.

21

22 Principles of interpretation

23

24 Principles, methods, and precedents from the regulatory  
25 literature and past proceedings and the evidence and

1 argument in this proceeding ought to be evaluated in the  
2 light of the more fundamental social principles of  
3 justice and sustainability.

4

5 The Manitoba Hydro Act ought to be interpreted in light  
6 of The Sustainable Development Act.

7

8 Creation of an export class (or two)

9

10 Future COSS's should include the creation of an export  
11 class (or two) with the direct assignment or allocation  
12 of a fair share of the total costs of the utility to the  
13 export class(es). RCM and TREE take no position with  
14 respect to whether the NERA or the Recommended method  
15 represents a fairer assignment of costs to the export  
16 class. And, while vintage pricing may have a role in  
17 addressing the treatment of new large customer loads from  
18 this point forward, we accept the analysis of MH that it  
19 may be more trouble than it is worth to vintage price the  
20 historic Winnipeg River resources.

21

22 Full Cost Accounting

23

24 Manitoba Hydro should be ordered to produce for each  
25 General Rate Application, and continue to update and

1 refine over time, a COSS that incorporates a full cost  
2 accounting (FCA) analysis of the production and  
3 consumption of electricity in Manitoba that captures,  
4 initially, (a) the marginal costs of electricity supply  
5 and consumption and (b) the opportunity costs for  
6 mitigating global damage from climate change caused by  
7 greenhouse gases.

8

9 Manitoba Hydro and the PUB should take into account the  
10 FCA COSS in decisions regarding the determination of MH's  
11 revenue requirement, the allocation of costs between  
12 classes, rate design, resource planning, the evaluation  
13 of potential DSM investments, and the allocation of net  
14 export revenues.

15 - The FCA COSS can serve as a measure of the  
16 economic efficiency and environmental impacts of MH's  
17 financial management and rate policies and provide one  
18 definition of the level of rate subsidies.

19 - The FCA COSS could stand alone or be used  
20 in conjunction with an embedded cost COSS, as conjectured  
21 by the PUB (1018:12-18). Mr. Lazar recommends a single  
22 COSS that incorporates the desired principles (RCM and  
23 TREE would wish to review any resulting synthesis or  
24 joint use of two COSS's.

25 - In the absence of full-value pricing of

1 electricity to cover all societal costs identified in the  
2 FCA COSS, methods to reconcile marginal values with  
3 revenue requirement will be required, as discussed in  
4 PUB/MH II-1 (a) and (b). The response reports that  
5 California, New Mexico, and Illinois all employ the Equal  
6 Proportion of Marginal Cost method.

7

8 Other recommendations

9

10 Revenue target

11 For the medium term, Manitoba Hydro should consider  
12 adopting a "power at cost" revenue target for domestic  
13 customers equal to 100 percent of the costs allocated to  
14 the domestic classes and gradually increase domestic  
15 rates from the current 78.2 percent average (under the  
16 Recommended method - RCM/TREE/MH II-42(b)) to eliminate  
17 the export subsidy to rates and increase the potential  
18 for efficient rate design. Currently Manitoba Hydro has  
19 no targets for the domestic revenue requirement in  
20 relation to either embedded or marginal costs  
21 (RCM/TREE/MH II-42(e)).

22

23 Net export revenues

24 As recommended by Mr. Lazar in his oral testimony,  
25 instead of subsidizing domestic consumption of

1 electricity, export revenue should be applied in ways  
2 that do not increase electricity consumption in Manitoba,  
3 such as the following.

4

5 - First, the current use to offset the  
6 uniform rates legislation is appropriate. Neither  
7 industrial customers in the North nor residential  
8 customers in Winnipeg should subsidize these rural costs.  
9 The export dividend is an appropriate way to fund it.

10

11 - Second, I think it's important to get the  
12 Manitoba Hydro finances up to the point where they can  
13 handle a serious drought without having to resort to  
14 drastic rate increases. Whether this is done by raising  
15 the equity ratio to 25 percent or 35 percent (utilities  
16 in the US seek to have 40-50 percent equity), or by  
17 building up a segregated "drought reserve fund" is not  
18 really important. But, a significant part of the export  
19 dividend should go to building financial reserves.

20

21 - Third, funding DSM programs is a natural  
22 application of this fund, since doing so not only reduces  
23 electric bills in Manitoba, and creates jobs for  
24 conservation installation companies in Manitoba, it also  
25 increases the revenue from export sales, which to some

1 extent is self-financing if the fund is invested in DSM.

2

3 - Fourth, funding low-income energy  
4 assistance programs to provide basic essentials of modern  
5 life to individuals who are destitute will have a minimal  
6 impact on total consumption, and will provide a modicum  
7 of a 21st Century lifestyle to those who cannot now  
8 afford it.

9

10 - Fifth, Mr. Lazar recommends following the  
11 example of the Oregon PUC by removing some "unallocable"  
12 inelastic infrastructure costs from the COSS altogether  
13 and paying for them from export earnings. He had in mind  
14 elements of the distribution and customer system.

15

16 Mr. Lazar points out that these expenditures would absorb  
17 substantially all of the current export dividend. All  
18 classes would then pay rates based on their allocated  
19 share of the embedded cost of the service they receive,  
20 except for those portions specifically subsidized.

21 Basically, at that point, rates would equal embedded  
22 cost, which is still a lot lower than marginal cost for a  
23 utility like MH.

24

25 Most important, the tremendous benefit to the MH economy

1 of the current level of export earnings would be retained  
2 for the benefit of the population of Manitoba.

3

4 The alternative, flowing it back to customers based on  
5 usage, would likely attract a large electroprocess  
6 industry making aluminum for export, resulting in very  
7 few jobs, as has happened elsewhere in the world.

8

9 Industrial strategy

10 Manitoba needs a power smartest industrial strategy to  
11 replace its current lowest rate strategy, which, as Mr.  
12 Lazar has pointed out and MH has experienced, may attract  
13 uneconomic load. A variety of strategies are available,  
14 including the following.

15 - A modest rate increase to cover (more of)  
16 embedded costs, in order to discourage new large  
17 electro-process loads that could force a much larger  
18 increase on all customers.

19 - Inverted rates

20 - Preserving vintage rates for existing  
21 energy-intensive customers who demonstrate they are  
22 employing all available cost-effective efficiency options  
23 and new customers demonstrating a minimum  
24 employment/energy ratio to get an initial lower-cost  
25 block.

1 - Long-term energy supply contracts with  
2 customers having long-term resource supplies within  
3 Manitoba and long-term labour contracts.

4 - Linking rates to commodity prices of  
5 Manitoba resources, to provide a cushion of reduced costs  
6 at the bottom of the commodity cycle but collect full  
7 value for electricity when commodity prices are high.  
8 (E.g., currently Inco's business is booming from high  
9 metal prices, but the forest companies are suffering from  
10 the low prices of their products.)

11

12 And, from Centra's GRA hearing last year:

13 - Permitting industrial and commercial  
14 customers to "self-direct" a portion of DSM funds to  
15 invest in approved efficiency improvements in their  
16 process (PUB Order 103/05, page 24, point 5).

17

18 Low-income strategy

19 Finally, there is a need to mitigate the energy burden of  
20 the poor with special DSM programs, emergency bill  
21 assistance, and possibly special rates.

22

23 The point is to address the special cases in the  
24 industrial sector and low-income residential sector -  
25 those who might be hardest hit by rate increases - with



1 tailored measures rather than unsustainable low-cost  
2 power across the board.

3

4 Commentary

5

6 In the remainder of this brief, I wish to elaborate on a  
7 number of these points.

8

9 Applicable principles

10

11 A number of participants in this hearing have confessed  
12 that their favorite bedtime reading is Bonbright's text  
13 on rate-making, which identifies rate-making principles  
14 of fairness, efficiency, stability, and so on. Patrick  
15 Bowman prefers the National Association of Regulatory  
16 Utility Commissioners' cost allocation manual as having  
17 more to say about the "science" of cost allocation  
18 (1840:2-13). He also thinks that looking to regulatory  
19 precedent in this and other jurisdictions is important,  
20 so as not to discard the wisdom of past deliberations  
21 (1841). From these he singles out, specifically, the  
22 principle that "other revenues that can be generated by  
23 utility assets are typically credited against the utility  
24 assets that give rise to those revenues" (1847:13-16).

25

1 RCM and TREE contend, however, that the above principles  
2 and precedents ought to be evaluated and interpreted in  
3 the light of the more fundamental social principles of  
4 justice and sustainability.

5

6 The concept of justice has a number of different elements  
7 relevant to these proceedings, including:

- 8 - an equitable assessment of revenues  
9 between customer classes in proportion to  
10 cost-responsibility (which raises the issue of defining  
11 the relevant costs); but also  
12 - equitable and optimal distribution of  
13 benefits of Manitoba Hydro as an asset that is publicly  
14 owned by Manitobans through their government (which poses  
15 the question: why should net earnings of our collective  
16 asset go to customers in proportion to their levels of  
17 consumption?);  
18 - intergenerational equity (which asks, are  
19 we imposing unfair levels of debt, environmental damage,  
20 or consignment of more costly resources on future  
21 generations in meeting our needs today?);  
22 - social justice (i.e. addressing the basic  
23 energy needs of all citizens and in particular the poor,  
24 and assigning the costs to do so), and finally  
25 - compliance with just laws of the land

1 (e.g., what must we do to be faithful to the Manitoba  
2 Hydro Act and Sustainable Development Act?).

3

4 The Board and its counsel have asked the experts retained  
5 by intervenors to comment on possible bias towards one  
6 class or another in their recommendations. Without  
7 speaking for Mr. Lazar, the bias of this intervention  
8 might be construed as towards generations to come, but  
9 our intent is to propose policies favorable to the  
10 economic, social and environmental well-being of the  
11 current generation as well, particularly a few years down  
12 the road. We agree with Mr. Bowman and Mr. McLaren that  
13 the principles and guidelines of sustainable development  
14 need to be looked at together (RCM/TREE/MIPUG IR #2) and,  
15 we would add, in combination with the above elements of  
16 justice.

17

18 The concept of sustainability has legal force in Manitoba  
19 through the Sustainable Development Act, which includes a  
20 number of principles, guidelines, and definitions. The  
21 Act provides a framework to promote sustainable  
22 development in Manitoba and applies specifically to  
23 public sector organizations such as Manitoba Hydro and  
24 the PUB. Presumably the applicability of the Act is not  
25 in contention in this hearing, as it was in last year's

1 Centra Gas hearing, although interpretations of the  
2 implications of the Act might differ.

3

4 We note in passing that at transcript page 600, lines  
5 17-21, Mr. Warden replies to Mr. Williams that  
6 "furthering the well-being of the Province is of course  
7 not part of the Manitoba Hydro Act, and although we may  
8 all have personal ideas on that matter, it's probably not  
9 appropriate to express those views." However, if we  
10 extend our gaze beyond the Manitoba Hydro Act to the  
11 Sustainable Development Act, to which MH is subject, we  
12 have solid ground for affirming that long-run social  
13 well-being provincially and globally, as defined by the  
14 principles of the SDA, is indeed a legitimate, in fact  
15 mandated, objective for the utility. There is no  
16 justification for narrowly following procedures or  
17 precedents harmful to Manitoba and beyond, and that is  
18 not a private opinion.

19

20 Schedules A and B of the Sustainable Development Act  
21 contain 13 principles and guidelines. In reviewing  
22 candidates for a COSS methodology, several of the  
23 principles the Board should keep in mind are:

24

25 Principle 1, Integration of Environmental and Economic

1 Decisions

2

3 Principle 2, Stewardship, which speaks of  
4 intergenerational equity;

5

6 Principle 5, Conservation and Enhancement, which says,  
7 among other things, that "Manitobans should (a) maintain  
8 the ecological processes, biological diversity and  
9 life-support systems of the environment;" and "(c) make  
10 wise and efficient use of renewable and non-renewable  
11 resources;"

12

13 Principle 7, Global Responsibility, which says,  
14 "Manitobans should think globally when acting locally,  
15 recognizing that there is economic, ecological and social  
16 interdependence among provinces and nations, and working  
17 cooperatively, within Canada and internationally, to  
18 integrate economic, environmental, human health and  
19 social factors in decision-making while developing  
20 comprehensive and equitable solutions to problems;" and

21

22 Guideline 1, Efficient Use of Resources, which means

23

24 (a) encouraging and facilitating development and  
25 application of systems for proper resource pricing,

1 demand management and resource allocation together with  
2 incentives to encourage efficient use of resources; and  
3

4 (b) employing full-cost accounting to provide better  
5 information for decision makers.

6  
7 Note: "full-cost accounting" means accounting for the  
8 economic, environmental, land use, human health, social  
9 and heritage costs and benefits of a particular decision  
10 or action to ensure no costs associated with the decision  
11 or action, including externalized costs, are left  
12 unaccounted for (SDA section 1).

13  
14 Note too that the substance of these principles from the  
15 SD Act also appears in Principles 1, 3, 5, 7, and 10 of  
16 Manitoba Hydro's 1993 SD Principles found on pages 67-68  
17 of their Voluntary Challenge and Registry Program 2003  
18 Update (Appendix 11.6 of Round II IR responses in Volume  
19 5).

20  
21 Regarding the concept of full-cost accounting, note that  
22 MH, in its Rebuttal on p. 24, distinguishes full-cost  
23 accounting from full-cost pricing and argues that the SDA  
24 supports the former but not the latter. We agree, as our  
25 recommendations indicate.

1 But at the same place, MH also appears to argue that the  
2 FCA concept applies only to other activities of the  
3 utility than rate-making, such as DSM and resource  
4 planning. They emphasise that it is to decisions or  
5 actions in these areas that FCA applies, but they appear  
6 to think that the decisions and actions involved in  
7 rate-making after these other decisions have been taken  
8 merely deal with the accounting fall-out of the other  
9 decisions and need not apply FCA anew, as this exchange  
10 with Mr. Warden indicates.

11

12 24 DR. PETER MILLER: Great. Thanks. Let  
13 25 me try a characterization of what you do and you tell  
14 me

15 Page 966

16 1 if it's an appropriate one (1)?

17 2 Other departments than the rates

18 3 department do full cost accounting in evaluating  
19 various

20 4 resource possibilities and whittling them down and then

21 5 ultimately making a decision when you need to acquire

22 6 them. And then -- and then your legal department or

23 7 whoever negotiates compensation agreements if that's

24 part

25 8 of the mitigation, and your engineering and the clean

1 9 environment commission will indicate what physical  
2 10 alternations are need to mitigate the impacts further.  
3 11 And then basically accounting and rates  
4 12 deal with the fallout of the decisions and actions  
5 that  
6 13 occur elsewhere in the Corporation; is that a fair  
7 14 characterization?

8 15 MR. VINCE WARDEN: Yes, I agree with  
9 16 that.

10

11 We argue, on the contrary, FCA applies to rate-making  
12 decisions as well. In an early exchange Mr. Warden  
13 rejected Mr. Peters' suggestion that the corporation  
14 would be indifferent to cost allocation decisions, in  
15 part because those decisions could have significant  
16 consequences for the evolution of the financial  
17 condition, rates, and physical plant of the system. To  
18 that, we would add that these decisions also affect  
19 Manitoba's contributions to the mitigation of climate  
20 change damage as well.

21

22 We submit that the SDA applies to decision-making with  
23 respect to rate-making and that a FCA COSS is an  
24 important instrument in that process, as indicated in  
25 Guideline 1.



1

2 The PUB's powers and responsibilities

3

4 We remind the Board of its powers and responsibilities  
5 with respect to the SDA and other relevant legislation.

6

7 Section 78(1) (a) of The Public Utilities Board Act  
8 states:

9

10 78(1)                   The board may, by order in writing and  
11 notice to, and hearing of, the parties interested,  
12 require every owner of a public utility

13

14 (a)                   to comply with the laws of the province  
15 and any municipal by-law affecting the public utility or  
16 its owner, and to conform to the duties imposed thereby,  
17 or by the provisions of its own charter, or by any  
18 agreement with any municipality or other owner.

19

20 The Sustainable Development Act is a law of the province  
21 binding on Manitoba Hydro.

22

23 In addition, The Crown Corporations Public Review and  
24 Accountability Act gives the Public Utility Board broad  
25 discretion to consider a wide range of factors when

1 reviewing Crown corporations' charges. Section 26(4) of  
2 the Act states:

3

4 Factors to be considered, hearings

5 26(4) In reaching a decision pursuant to this  
6 Part [Public Utilities Board Review of Rates], The Public  
7 Utilities Board may

8

9 (a) take into consideration . . .

10

11 (viii) any compelling policy considerations that the  
12 board considers relevant to the matter, [and]

13

14 (ix) any other factors that the board considers relevant  
15 to the matter.

16

17 RCM and TREE submit that the principles and guidelines of  
18 sustainable development found in Schedules A and B at the  
19 end of the SDA, the province's commitment and national  
20 political leadership to promote a Kyoto regime and exceed  
21 Kyoto targets, and provision for the basic energy needs  
22 (including conservation) of Manitoba citizens as a matter  
23 of social justice are compelling policy considerations  
24 that should guide the Board in determining for Manitoba  
25 Hydro "just and reasonable... rates, ...charges, ...standards,

1 classifications, regulations, practices, measurements, or  
2 service to be furnished..." under 77 (a) and (b) of the  
3 Public Utilities Board Act. Indeed the discretionary  
4 powers of the Manitoba PUB may well exceed those of  
5 Quebec's Regie de l'energie (discussed in RCM/TREE/MIPUG  
6 IR No. 1). In any case, the SDA provides legislated  
7 guidance to both the PUB and Manitoba Hydro.

8

9 I have paid less attention to the Manitoba Hydro Act,  
10 except to note that:

11

12 The purposes and objects of this Act are to provide for  
13 the continuance of a supply of power adequate for the  
14 needs of the province, and to engage in and to promote  
15 economy and efficiency in the development, generation,  
16 transmission, distribution, supply and end-use of power  
17 (section 2);

18

19 "Economy and efficiency," we believe, ought to be  
20 interpreted in the light of the SDA. Note also that the  
21 promotion of economy and efficiency in the end-use of  
22 power is within the scope of the utility's mandate.

23

24 The act also provides for the marketing of services and  
25 the extra-provincial marketing of power, but is silent on

1 the handling of proceeds from these sales.

2

3 Finally, the act defines "customer" in section 1 as:

4

5 "customer" includes any user or purchaser of power or any  
6 potential user or purchaser of power;

7

8 This definition is broad enough to contemplate non-users  
9 or conservers of power. It is also broad enough to  
10 encompass the "future generations" referred to in the  
11 definition of "sustainable development" in section 2 of  
12 The Sustainable Development Act.

13

14 In summary, the principles and precedents from the  
15 regulatory literature and processes and The Manitoba  
16 Hydro Act ought to be interpreted in light of The  
17 Sustainable Development Act. We ask the PUB to adopt this  
18 perspective in weighing the evidence and alternatives put  
19 before it.

20

21 Recommendation - Creation of an export class (or 2)

22

23 This (along with our FCA proposal) may be the most  
24 significant innovation in COSS methodology that is before  
25 the PUB. It takes us beyond the NARUC principle of

1 crediting ancillary revenues back to the infrastructure  
2 that made them possible to a reallocation of costs.  
3 Export customers are no longer like cable-vision using  
4 Hydro's poles. The whole conversation has changed to  
5 recognize a limit or threshold to the NARUC kind of  
6 revenue crediting. We now have a revenue excess or  
7 surplus from exports once their legitimate share of the  
8 costs is covered off. Export revenues can no longer be  
9 treated in a blind mechanical fashion but are a subject  
10 of policy decisions.

11

12 Future COSS's should include the creation of an export  
13 class (or two) with the direct assignment or allocation  
14 of a fair share of the total costs of the utility to the  
15 export class(es). RCM and TREE take no position with  
16 respect to whether the NERA or the Recommended method  
17 represents a fairer assignment of costs to the export  
18 class. And, while vintage pricing may have a role in  
19 addressing the treatment of new large customer loads from  
20 this point forward, we accept the analysis of MH that it  
21 may be more trouble than it is worth to vintage price the  
22 historic Winnipeg River resources.

23

24 Recommendation - Full Cost Accounting

25

1 In this COSS proceeding, our central recommendation is  
2 that Manitoba Hydro produce for each rate hearing, and  
3 continue to update and refine over time, a full cost  
4 accounting (FCA) analysis of the production and  
5 consumption of electricity in Manitoba that captures,  
6 initially, (a) the marginal costs and (b) the opportunity  
7 costs for mitigating global damage from climate change  
8 caused by greenhouse gases.

9  
10 This will make the environmental and full market values,  
11 levels of subsidy, and foregone environmental and  
12 economic benefits a visible part of every rate review.  
13 Even if the PUB or MH (or RCM/TREE) have their reasons  
14 for not going to full-value pricing, rate decisions will  
15 become matters of informed choice, as is the stated  
16 intention of SDA Guideline 1, rather than simply  
17 number-crunching.

18  
19 Mr. Lazar has constructed an example of such an analysis  
20 by substituting marginal generation costs (based on  
21 market values for electricity) for embedded generation  
22 costs in Manitoba Hydro's Recommended COSS and adding a  
23 value for potential CO2 displacement in export markets.  
24 The outcome of this analysis is displayed in Exhibit JL-5  
25 of his March 15th evidence, which shows that domestic

1 customers are paying, on average, only 44 percent of the  
2 full value of electricity, which is equivalent to a  
3 subsidy of \$1.3 billion dollars a year. Mr. Lazar has the  
4 following to say about this scenario.

5

6 Q. In your opinion, which of the analyses you have  
7 provided best reflects the total societal costs of  
8 providing service to MH customers?

9

10 A. I believe that the last of these is the most  
11 accurate. First, it includes CO2 costs at \$20 (Canadian)  
12 per metric tonne, a value that I believe is reasonable.  
13 Second, it includes marginal energy costs, which are the  
14 real opportunity costs caused by consumption of power in  
15 Manitoba. It includes the allocation of the costs of  
16 providing export service to the export class, consistent  
17 with the MH Recommended Method. Finally, it excludes the  
18 net revenue from export, which is a benefit that Manitoba  
19 can enjoy, but it is not necessarily appropriate to  
20 distribute that benefit on the basis of utility power  
21 consumption (the previous method) or total utility costs  
22 (the proposed new method) (page 15, lines 19-29).

23

24 It is also instructive to estimate the theoretical  
25 economic returns if electricity were priced at full value

1 for domestic customers. The last column of Exhibit JL-6  
2 (corrected), page 1 (filed as Exhibit RCM/TREE-6 and  
3 explained by Robin Wiens on pages 977-980 of the  
4 transcript) shows the projected impacts of full-priced  
5 electricity. Domestic rates would increase by 127  
6 percent, i.e., more than double, causing consumption to  
7 shrink by 32 percent (assuming -0.25 elasticity). If that  
8 saved electricity was sold into the export market at  
9 average market value, it could bring an additional \$388  
10 million a year into Manitoba. The extra money collected  
11 from Manitoba customers through full price rates could be  
12 returned to them in some fashion unrelated to their  
13 levels of electricity consumption, still leaving the gain  
14 from the additional export income as an indication of the  
15 extent of new wealth possible for Manitoba from efficient  
16 pricing.

17

18 Note that the analysis in the preceding paragraph is  
19 HYPOTHETICAL to illustrate possible efficiency gains, not  
20 a rate recommendation from Mr. Lazar or from RCM/TREE. As  
21 pointed out earlier, and as Mr. Lazar points out in the  
22 following passage from his written testimony, many  
23 considerations are relevant to rate-making:

24

25 Q. Should the MPUB use these marginal costs and



1 environmental costs for setting rates for MH customers at  
2 this time?

3

4 A. No. If cost were the only consideration in  
5 ratemaking, and CO2 costs were included in the COSS, but  
6 MH was limited to recovering its embedded revenue  
7 requirement, this would result in slightly lower rates  
8 for residential customers, and slightly higher rates for  
9 large-use general service customers. However, in my  
10 opinion, cost should be only one element of the MPUB  
11 decisions on cost allocation. Other factors, including  
12 perceptions of equity and fairness, impacts on the  
13 regional economy, and impacts on disadvantaged citizens  
14 are also legitimate regulatory considerations, and I do  
15 not make a recommendation on how these non-cost  
16 considerations should be applied (page 12, lines 19-29).

17

18 In his oral testimony, however, Mr. Lazar did in fact  
19 offer further advice regarding the application of export  
20 revenues, to which we shall return shortly.

21

22 Embedded vs. marginal costs

23

24 Most jurisdictions use embedded costs, but California,  
25 New Mexico, and Illinois have adopted marginal cost COSSs

1 (PUB/MH II-1 (b)).

2

3 The conventional view, expressed by Mr. Harper at  
4 1502-1505 is that a COSS based on embedded costs best  
5 represents a fair allocation of costs, whereas one based  
6 on marginal costs is focused more on efficiency  
7 considerations. However Mr. Wiens challenges the accuracy  
8 of that view, citing Bonbright's focus on a fair  
9 distribution of marginal costs as a central consideration  
10 for fairness (608:13-609:25). We suggest that in  
11 Manitoba's system, with a growing subsidized domestic  
12 load and a lucrative export market, a marginal cost COSS  
13 provides the more accurate picture for the fair  
14 allocation of costs.

15

16 Furthermore, marginal costs are more likely to reflect  
17 the costs of plant replacement or extension than  
18 historic, depreciated embedded costs. Thus  
19 intergenerational fairness or equity would appear to  
20 favor the adoption of a marginal cost basis for the COSS.

21

22 Finally, NERA in its report on inverted rates also  
23 recommends completing the task of creating a marginal  
24 cost COSS as a basis for such rates.

25

1 In our interventions to date RCM and TREE have adopted  
2 principles of social justice along with sustainability  
3 and previous discussions have confirmed general agreement  
4 on these principles. In particular, social justice means  
5 the recognition that a limited amount of energy is a  
6 basic need of Manitobans that the energy system should  
7 make available at affordable prices. Somehow we have to  
8 separate that from the idea of making unlimited amounts  
9 of energy available at subsidized prices, as the  
10 residential and industrial consumer groups appear to  
11 advocate, which is unsustainable. This distinction can be  
12 implemented through a combination of strategies.

13 a. Through inverted rates, with a lower first  
14 block to meet basic needs and higher subsequent blocks  
15 that better reflect in their rates the full social,  
16 environmental and marginal value of electricity.

17 b. Through aggressive DSM programs open to  
18 all that help those willing to act to reduce consumption  
19 to something closer to the basic initial block. Those who  
20 don't respond will be paying the full environmental and  
21 social costs of their excess usage.

22 c. Through targeted programs for the poor  
23 that include even more intensive DSM efforts and possibly  
24 special reduced rates and bill assistance. Upgrading of  
25 housing stock and training and jobs creation in

1 renovations may be economic spinoffs of these special  
2 efforts.  
3 Although specific programming and rate design might be  
4 considered beyond the scope of the current hearing, a  
5 general discussion of these ideas sets a context for our  
6 recommendations.

7

8 (WRITTEN SUBMISSIONS CONCLUDED)

9

10 QUESTIONS BY BOARD:

11 THE CHAIRPERSON: Thank you, Professor  
12 Miller. I have one (1) question and I'm sorry I have to  
13 make it so direct but I think it's significant. You  
14 weren't here this morning were you, no?

15 DR. PETER MILLER: No, I wasn't.

16 THE CHAIRPERSON: And I don't believe any  
17 transcript's out and if I'm incorrect it's just what I  
18 heard.

19 This morning I heard CAC/MSOS in their  
20 closing comments suggested that the Board should  
21 disregard Mr. Lazar's recommendations, which largely are  
22 encapsulated by yourself, for a variety of reasons.

23 And I believe I have the four (4) key ones  
24 in my head.

25 1, was a lack of rigour as to the support

1 for his FCA/COSS table.

2 2, was the omission of consideration of  
3 other emissions and like environmental factors; in other  
4 words, the focus on CO2.

5 Third reason was portrayed as a  
6 demonstrated lack of care in his preparation of his  
7 expert advice and that was based on large part, I believe  
8 on errors that were later corrected in the tables.

9 And finally, I believe a suggestion was,  
10 was that there was no jurisdiction that employed marginal  
11 cost in a COSS.

12 So, in your views are these criticisms  
13 valid?

14 DR. PETER MILLER: Well, the last one  
15 (1) is clearly false because Manitoba Hydro presented  
16 contrary evidence.

17 It perhaps may -- I don't know if they  
18 could have said no CO2 because I think Mr. Lazar agreed  
19 with that, CO2 costs are used in other ways, say DSM and  
20 resource planning.

21 THE CHAIRPERSON: I think the comment was  
22 just on the focus on -- and that as being the sole  
23 emission that was damaging to the environment was the  
24 flaw in the --

25 DR. PETER MILLER: Yeah, well that's --

1 well I mean obviously -- obviously this is a conceptual  
2 piece. It is meant to take a few values to illustrate a  
3 point. And the -- he gave his reasons for picking the  
4 CO2, that some of the others are already internalized to  
5 some extent or he expects they will be shortly or they're  
6 harder to quantify.

7                   But, there has been a lot of discussion of  
8 the CO2 and there are public policy considerations in  
9 Manitoba that it has been an issue. So he picked that  
10 one (1) to illustrate the point.

11                   I would certainly agree that this is not a  
12 finished cost of service study that he has presented.  
13 The point -- this is a methodological discussion. We're  
14 not dealing with the details. We're dealing with the  
15 concepts of how you go about it and whether you use  
16 marginal costs, or not. And whether you use  
17 environmental externalities or not.

18                   Those are the conceptual issues that he  
19 was presenting. So I would agree that it would be wrong  
20 to take his results and then go immediately into a rate  
21 hearing and I don't think he would intend that to be the  
22 case.

23                   THE CHAIRPERSON: Thank you, Professor  
24 Miller.

25

(BRIEF PAUSE)

1

2

3

4

5

THE CHAIRPERSON: Mr. Anderson, I wonder if you could give us some idea of the length of your closing statement?

6

7

MR. MICHAEL ANDERSON: Mr. Chair, probably not more than an hour --

8

9

10

11

THE CHAIRPERSON: Okay. We'll take a --  
MR. MICHAEL ANDERSON: -- with any luck. Less -- I prepared it to time out at less than an hour, Mr. Vice Chair, thank you.

12

13

14

THE CHAIRPERSON: Okay. So we'll go on the basis then if we have a break come back at 5 after 4:00, we can be done by 5:00, let us hope then.

15

16

17

18

MR. MICHAEL ANDERSON: I would think --  
THE CHAIRPERSON: Does that sound fair?  
MR. MICHAEL ANDERSON: Yes, Mr. Chair. Thank you.

19

20

21

22

23

24

25

THE CHAIRPERSON: Okay. We'll have a break now, thanks again Professor Miller.

--- Upon recessing at 3:54 P.M.

--- Upon resuming at 4:05 P.M.

THE CHAIRPERSON: Okay. Welcome again,

1 Mr. Anderson. Anytime you wish to begin.

2 MR. MICHAEL ANDERSON: Thank you, Mr.  
3 Chair. I did have one (1) matter that I had raised this  
4 morning, well Friday and again this morning I had  
5 requested certain materials just for making contextual  
6 references. I don't consider them to be evidence at this  
7 stage.

8 THE CHAIRPERSON: Mr. Peters do you have  
9 any further guidance on that?

10 MR. MICHAEL ANDERSON: I just wanted to  
11 make some brief --

12 MR. BOB PETERS: They've been circulated  
13 and I'm not aware of anybody having concerns, although I  
14 haven't spoken to My Friend, Ms. Ramage. I have spoken  
15 to Ms. McCaffrey and she raises no objections. She does  
16 say that if anything arises as a result of what is in Mr.  
17 Anderson's submissions, that her clients feel needs to be  
18 addressed, she would address it in writing prior to  
19 Friday but doesn't anticipate having to do so.

20 So, at this point, I would suggest just  
21 turning to Mr. Williams and Ms. Ramage and seeing if  
22 there are any concerns raised with respect to the  
23 materials.

24 THE CHAIRPERSON: Mr. Williams...?

25 MR. BYRON WILLIAMS: We're not raising



1 any objections on behalf of our clients.

2 THE CHAIRPERSON: Thank you, sir.

3 Ms. Ramage...?

4 MS. PATTI RAMAGE: We're not raising any  
5 objections at this time. Similar to Ms. McCaffrey, if we  
6 hear something along the -- the way, because it's not  
7 clear to me at this point how these will be used, I would  
8 either interject or deal with it in our submission  
9 Friday.

10 THE CHAIRPERSON: Yes. He's going to  
11 reference it but it's not evidence.

12 Okay, Mr. Anderson?

13

14 CLOSING COMMENTS BY MR. MICHAEL ANDERSON:

15 MR. MICHAEL ANDERSON: Thank you, Mr.  
16 Chair. Just as a matter of reference -- the Board's  
17 rules of course -- had the record been open and had I  
18 been available under Rule 17, I could have requested --  
19 my intention was to request leeway with respect to the  
20 regulatory materials that are included.

21 But being that here we are on Monday and  
22 the record is closed, and I'm happy for my colleagues'  
23 concurrence in at least allowing them to be referenced as  
24 I proceed with my final summation. Thank you, Mr. Chair.

25

(BRIEF PAUSE)

1

2

3

MR. MICHAEL ANDERSON: Of course, as was  
4 mentioned in our opening statement on November 24th and  
5 again at the onset of the proceedings on May 4th, the  
6 thirty (30) First Nations and fifty-three thousand  
7 (53,000) treaty First Nation citizens of the Manitoba  
8 Keewatinook Ininew Okimovin have an extremely close  
9 relationship with Manitoba Hydro and a keen interest in  
10 these proceedings in particular in respect of the -- the  
11 allocation of the net export revenues of the Corporation,  
12 which, for the most part, essentially is the heart of  
13 much of the discussion here.

14

15

16

17

18

19

20

21

22

23

24

25

While there's been considerable discussion  
through the application of various differences in  
allocators, concepts of efficiencies, it remains that Mr.  
Harper and Mr. Lazar and Mr. -- and Manitoba Hydro's  
witnesses each recommend, although with some variances,  
that the Public Utilities Board adopt the recommended  
method as being the fairest and perhaps most improved  
means of including all costs and allocating that export  
revenues amongst Manitoba Hydro customers.

I would say at the outset that MKO concurs  
with all of our colleagues that have so recommended. And  
we note that although we had set it out as a transcript

1 reference, MKO-3, the comments that Mr. Warden made in  
2 his opening statements of November 24th, of course they  
3 are restated almost entirely at PUB/MH-124.

4 In essence, the key word that we look to,  
5 and that as indicated during our brief cross-examination  
6 of Hydro's witnesses, was the concept of fairness and  
7 really to -- to highlight that this proposal that  
8 Manitoba Hydro has made in respect to the recommended  
9 methods is its view of the fairest way to allocate.

10 And from our analysis of the materials  
11 filed, we agree. MKO concurs, with some adjustments that  
12 I will discuss as I proceed.

13 The final submission that I'd like to  
14 share at this time really is broken into four (4)  
15 different areas.

16 The first is the treatment of the diesel  
17 class. Of course, you would expect that we would have  
18 some comments on the cost of service methodology that's  
19 proposed for the diesel class under the recommended  
20 method.

21 Treatment of grid customers. As I had  
22 mentioned on May 4th, MKO has -- represents and has an  
23 interest in residential rates and the cost of service, as  
24 well as mainly general service small, for the stores,  
25 businesses and other activities that take place within

1 our community. So in that way we have an interest that  
2 is perhaps unique to the other parties that are  
3 participating in the proceedings.

4 We share, however, the interest in  
5 affordable electricity and certainly the manner in which  
6 the allocation of net export revenues assists in  
7 achieving that. The customers thinking of the discussion  
8 that the Vice Chair had had with Doctor Miller with  
9 respect to the application of incremental and marginal  
10 cost pricing for rates, our customers are extremely price  
11 sensitive.

12 The Vice Chair made reference to the costs  
13 of individuals occupying suites. We have a very great  
14 concern about the ability to afford electrical bills.  
15 The importance of electricity in providing for services  
16 within our members' homes, communities and businesses.

17 And so while in terms of some of the  
18 economic principles that have been presented, our  
19 interest in affordable electricity may not appear on the  
20 surface to be the most efficient approach it nonetheless  
21 remains that the demographics of our citizens require  
22 that we receive electrical supplies at rates that we can  
23 afford.

24 And so with that comes our interest in  
25 demand side management and conservation which is a matter

1 we would take up during a different proceeding. But we  
2 see that as the balance. To be efficient in our use of  
3 energy, consistent with the customary principles of our  
4 citizens and to ensure that energy is affordable.

5 To some extent MKO's recommendations in  
6 the early 1990's to create an export customer class were  
7 to assist in identifying both costs and benefits to  
8 ensure that there would be an equitable distribution of  
9 the net benefits and the net revenues of these  
10 developments to those First Nations that are most  
11 directly affected by Manitoba Hydro's operations.

12 When Mr. Williams and Ms. McCaffrey were  
13 discussing, of course, the ratemaking principles that  
14 we've discussed at length in this and earlier  
15 proceedings, the one (1) of these principles that we key  
16 on in this proceeding is equity.

17 And this has been turned into the language  
18 in this proceeding by many parties, including Manitoba  
19 Hydro, as the phrase 'fair and equitable'. But in  
20 addition to the basic rate making principles of ensuring  
21 rates are just and reasonable and in the case of cost of  
22 service that there is an equitable distribution in costs  
23 to the various customer classes.

24 As I had mentioned it's significant to  
25 MKO that there is an equitable distribution that takes

1 into account what we view as the commitment and  
2 contribution of MKO First Nations in respect of the  
3 development of the Manitoba Hydro system that is also  
4 equitable and acknowledges that contribution on an  
5 ongoing basis.

6 That is when I speak of this is the very  
7 close relationship between many of our communities and  
8 the Corporation's in terms of being affected daily by the  
9 ongoing operations of the company.

10 The rate making principles, purely and  
11 simply, typically don't take the types of treaty based  
12 and social values of concern to MKO into account, but in  
13 Manitoba they necessarily remain and this relationship is  
14 certainly and firmly established.

15 One (1) of the matters that's been  
16 discussed by parties, however, is that Manitoba Hydro  
17 moves toward recognizing the full marginal value, as I  
18 put it, of electrical sales in the marketplace, full  
19 consideration of marginal costs including these social  
20 and incremental environmental values will inevitably and  
21 necessarily come squarely before us as we proceed to  
22 develop cost of service and evolve toward a better  
23 understanding.

24 Of course, Mr. Wiens and others have  
25 discussed that that is a change in our understanding,

1 that there is an issue that by pricing our power at an  
2 embedded cost -- on an embedded cost basis while it meets  
3 the process that we have followed, well, since we've  
4 adopted cost of service in rate making, it doesn't really  
5 match the manner in which the energy is being valued in  
6 the marketplace.

7                   And with the shift toward selling more  
8 than half of our physical output on the export  
9 marketplace where the value of energy per kilowatt hour  
10 is greater than the value of a kilowatt hour sold  
11 domestically, this type of consideration becomes eve more  
12 important.

13                   In respect of the treatment of the diesel  
14 class, during the diesel application you'll recall in my  
15 final summation I -- I spoke of the three (3) wolverines  
16 that were keeping us distracted from being able to  
17 concentrate on providing service to the communities, at  
18 least from MKO's perspective.

19                   The little wolverine, as I described it,  
20 was the unpaid surcharge which at that time was \$3.2  
21 million which is not a little -- a small sum of monies  
22 but compared to the larger of the two (2), the other two  
23 (2) large wolverines it was.

24                   Of course, we had the amount of the  
25 accumulated deficit that was nearly \$20 million and the

1 undepreciated capital notes; those being the two (2)  
2 large wolverines.

3 I'm pleased to say that the final approval  
4 and ratification of the tentative settlement amongst the  
5 parties; that is Manitoba Hydro and Indian and Northern  
6 Affairs Canada, the four (4) diesel communities and MKO  
7 would have the result of sending these three (3)  
8 wolverines into the bush which is what our hope was in  
9 our final submission.

10 So that then we can concentrate on the  
11 provision of -- of affordable and efficient energy  
12 supplies to these four (4) communities. In the prior  
13 PCOSS and under the current method in the 2005/'06 PCOSS  
14 that's NH-1 in the allocation program at pages 79 to 150.

15  
16 Diesel costs were, and are not included,  
17 as Manitoba Hydro was of the view that only customers  
18 connected to the grid contributed to grid related costs  
19 and should be entitled to an allocation of net export  
20 revenues.

21 You'll recall that our submission in the  
22 diesel proceeding was for the Board to direct that Hydro  
23 make an allocation of net export revenues to the diesel  
24 customers. We are very pleased that Manitoba Hydro has  
25 recognized that diesel customers are Manitoba Hydro



1 customers, and in this -- for the purposes of allocation  
2 and export revenues, and that they should be allocated a  
3 share of net export revenues.

4 Board Order 159/04 notes the fundamental  
5 negotiated -- the fundamental premise of the tentative  
6 settlement is that an allocation of net export revenues  
7 to the diesel class will be used to pay down, at first,  
8 the diesel zone accumulated deficit over time.

9 And Mr. Warden and I discussed this during  
10 my cross-examination. And it's also referred to in  
11 Volume I in the executive summary at page II. This is  
12 Manitoba Hydro's first opportunity to seek PUB approval  
13 for an allocation of the export revenues to the diesel  
14 class, which would allow the diesel zone accumulated  
15 deficit to be retired over time in accord with the terms  
16 of the tentative settlement.

17 Without an allocation of a net export  
18 revenues to the diesel class, the diesel rates would need  
19 to be much higher, and we believe unacceptably higher, in  
20 order to pay down the diesel zone accumulated deficit  
21 should Manitoba Hydro seek to try to recover the  
22 accumulated deficit on tariff.

23 And you will recall from the previous  
24 proceedings that there was a suggestion that that may  
25 occur.

1           The allocation of the export revenues to  
2 the diesel class is, in our view, fundamental to the  
3 successful implementation of the tentative settlement and  
4 the Board Order 159/04.

5           While the -- what appear to be delays in  
6 final Federal Government authorization to execute the  
7 negotiated settlement, due to the timing of recent  
8 elections and so forth, MKO is firmly of the view that  
9 the tentative settlement will be ratified in due course,  
10 and in a timely due course. And continues to believe  
11 that the tentative settlement is a win/win/win for  
12 Manitoba Hydro, Indian and Northern Affairs Canada, the  
13 four (4) diesel communities and, of course, for MKO.

14           We believe that Manitoba Hydro has  
15 appropriately included diesel costs in the PCOSS, through  
16 the direct assignment of diesel costs related to  
17 generation distribution costs in the PCOSS under the  
18 recommended method.

19           And that would be at MH-1, Tab 11.1,  
20 allocation program, at pages 5 through 78.

21           So in other words, we believe that the  
22 basic core principle of a direct allocation of diesel  
23 cost is the appropriate way to proceed. That's  
24 consistent with the terms of the tentative settlement and  
25 ensures that a sufficient sum is allocated.

1                   MKO is of the view that allocating diesel  
2 costs in a manner other than a direct consignment would  
3 be problematic, due to the lack of allocation parameters  
4 for diesel zones in terms of what we understand to be the  
5 level of information on peak demand allocators that  
6 really don't exist for diesel, and so forth.

7                   It's important that the diesel costs  
8 reflect the pre-settlement costs for the allocation of  
9 net export revenue. Manitoba Hydro's confirmed that the  
10 10.84 million in annual revenue requirement for the  
11 diesel class are pre-settlement amounts. Of course  
12 that's at transcript 1278, lines 17 to 21.

13                   It is appropriate to use pre-settled  
14 amounts for the PCOSS 06 and for future prospective cost  
15 of service studies.

16                   Under the negotiated -- under the  
17 tentative settlement, Federal and Provincial Government  
18 agencies and Manitoba Hydro are doing this on behalf of  
19 the provincial agencies, will prepay specific and certain  
20 capital amounts instead of paying the annual revenue  
21 requirements on the capital amounts each year. This  
22 function was, in essence, summarized in Order 159/04.

23                   The prepayment of capital amounts allows  
24 for the diesel rates to be set at a level that is  
25 tolerable for the customers in the diesel communities,

1 although the rates for larger diesel class customers are  
2 still at a very high level compared to other Manitoba  
3 Hydro customers, these being the First Nation education  
4 account customers and the other government-class  
5 accounts.

6                   So even though the capital is prepaid, the  
7 assets still exist and Manitoba Hydro still owns the  
8 assets. The value of the assets is not diminished by the  
9 fact that the Federal Government has elected to prepay.

10                   Therefore, Manitoba Hydro needs to  
11 continue to track diesel costs as they have in the past,  
12 and include the revenue requirement for diesel in future  
13 PCOSS for the allocation of export revenues. That is,  
14 when allocating net export revenues to include the full  
15 cost of diesel, as presented in the schedules.

16                   What -- what we are suggesting is that  
17 once the -- the tentative settlement is ratified and  
18 capital payments are made, that the capital payments  
19 should not reduce the capital rate base of the diesel  
20 class capital assets for the purpose of allocating net  
21 export revenues.

22                   Again, a fundamental premise of the -- of  
23 the tentative settlement is the ongoing allocation of net  
24 export revenues to the diesel class to reduce diesel's  
25 own accumulated deficit. It follows that if the annual

1 diesel class revenue requirement was reduced to only  
2 reflecting operating costs, which is, of course the  
3 objective in terms of setting rates, the quantitative net  
4 export revenues allocated to the diesel class would not -  
5 - would be sufficient -- would be sufficiently diminished  
6 and the diesel's own accumulated deficit would not be  
7 retired as contemplated in the tentative settlement.

8                 So, in essence, we would use the pre-  
9 settlement capital base for the purposes of -- of  
10 allocating net export revenues, and then the post-  
11 settlement cost base, mainly variable costs, for the  
12 purpose of setting rates.

13                 If we look at a summary of the PCOSS  
14 allocation method that is in the application, the --  
15 under the current method, of course, there are zero  
16 dollars allocated of net export revenue. Under the NERA  
17 method there is \$1.848 million allocated annually. Under  
18 the generation vintaging model there is 1.749 million  
19 allocated. And under the recommended method there is  
20 \$2.405 million allocated annually.

21                 If diesel costs were included as a direct  
22 assigned cost under the current method, an allocation of  
23 net export revenues could still occur.

24                 So therefore, if the PUB approves the  
25 current method, if in its consideration of various models

1 it chooses to continue the current method, with some  
2 variations for other grid customers, MKO submits that  
3 diesel costs of 10.8 million -- again as indicated in MH-  
4 1, the allocation program at page 80 under the directs,  
5 line 2, and at page 82 under line CO-1 -- should be  
6 included as a direct assignment of cost in PCOSS, even  
7 under the current method.

8           So that's essentially what we had  
9 recommended in our final summation on the diesel  
10 proceedings. So that either way this advancement would  
11 proceed. And under any option that the Board may choose  
12 to implement with respect to the four (4).

13           In terms of the treatment of grid  
14 customers, we note that the two (2) major changes in  
15 PCOSS-06, as proposed by Manitoba Hydro, are, of course,  
16 the creation of an export customer class, and then the  
17 recommended method for allocating net export revenues for  
18 export customer class to all the Manitoba Hydro  
19 customers, reflecting the full costs of providing  
20 service, notably, and most importantly, including  
21 distribution costs. This is really the most significant  
22 change in that aspect of the proposal.

23           And as I had indicated earlier, the  
24 recommended method is the method preferred by MKO and is  
25 recommended to this Board for adoption and approval, and

1 direction to be applied to the application of cost of  
2 service for the purposes of establishing rates in future  
3 proceedings.

4 MKO believes that Manitoba Hydro's  
5 recommended method -- at Manitoba Hydro 1 -- Exhibit 1,  
6 Appendix 11.1, Section A-3, page 17, should be approved  
7 in this proceeding. The recommended method is supported  
8 by Mr. Harper, who states the recommended method is an  
9 improvement over the current method and we see that in  
10 CAC/MSOS-1, page 21.

11 And MKO has no objections to Mr. Harper's  
12 proposal to increase the number of time periods used in  
13 the allocation of generation costs, in terms of that as a  
14 refinement.

15 The recommended method addresses a number  
16 of deficiencies that the PUB has identified in the prior  
17 PCOSS, including the prior exclusion of distribution  
18 costs and the use of time -- of use billing determinants  
19 for the allocation of power supply costs.

20 The high level of support from the  
21 applicant and several Intervenors, MKO recommends that  
22 the recommended method be approved as filed with  
23 direction for further enhancements in future proceedings.

24 Notwithstanding, of course the comments of  
25 my colleague CAC/MSOS this morning, Mr. Lazar also

1 supported the recommended method and states at page 2 of  
2 his pre-filed evidence that:

3 "I find the recommended method of  
4 computing cost of service as advocated  
5 by Manitoba Hydro as a progressive  
6 step forward and improves the accuracy  
7 of cost determination and allocation in  
8 Manitoba."

9 Now, in respect of some of the discussion  
10 that I had with Mr. Warden briefly during cross-  
11 examination we are interested in the treatment of what we  
12 had described then in the cross-examination as hydro  
13 affected customers.

14 And our interest in hydro affected  
15 customers really fall into two (2) broad areas. One (1)  
16 is the treatment and mitigation costs and the Vice Chair  
17 had asked me a question regarding our disposition about  
18 that and I'd like to touch on that for a moment.

19 And then a second broad area, treatment of  
20 incremental and environmental costs. It's an interesting  
21 phenomenon that we've noticed that the payment of  
22 mitigation costs through hydro tariffs occur by those  
23 customers who are directly affected by Manitoba Hydro's  
24 operations.

25 It's noted in the materials that the



1 mitigation costs are classified to generation and then  
2 applied to be paid by all customers. But that includes  
3 those for whom the mitigation is intended to be -- for  
4 those that are intended to be beneficiaries in the  
5 mitigation investments.

6                   It appears to MKO that currently those  
7 Hydro customers who are recipients in that beneficiary as  
8 a mitigation expenditures are also paying for a portion  
9 of the same mitigation expenses through their hydro  
10 tariffs.

11                   This seems counter intuitive for Hydro to  
12 make a payment to offset the damages or adverse affects  
13 caused by their operations and then collect a portion of  
14 these same mitigation costs from the impacted parties  
15 through their Hydro power bills.

16                   One (1) very complex way to resolve this,  
17 of course, would be to do some direct assignment of  
18 costs, mitigation costs to a customer class or sub-class  
19 created for this purpose that would exactly match the  
20 mitigation costs they were otherwise being requested to  
21 pay so that it creates an offset.

22                   But, we believe that a simpler way of  
23 doing it would be to suggest that Manitoba Hydro affected  
24 customers should be exempt from paying for mitigation  
25 costs through their Hydro bills and then a simple on

1 tariff -- rebate rider of about probably 4 percent we  
2 calculate would be appropriate to exclude hydro affected  
3 customers for paying for mitigation costs through a hydro  
4 tariff.

5                   Now, I recognize that when we start  
6 talking about refund riders we're off into rate design  
7 proceedings and have moved away from cost of service.  
8 But, I wanted just to point it out that there would be a  
9 mechanism in creating a class and allocating sufficient  
10 costs to do a net out or an offset.

11                   But, really when you work it down to  
12 effectiveness and administrative efficiency it works out  
13 it would be probably a refund rider.

14                   While the mechanism to exclude hydro  
15 effected customers from paying mitigation costs is more  
16 appropriately for a topic of the tariff proceeding, we  
17 thought it was important to raise it as a concern here  
18 because we think it's important to resolve this apparent  
19 conundrum. The beneficiaries of mitigation are paying --  
20 helping to assist all other customers in paying for it in  
21 their rates.

22                   Leading to the treatment of incremental  
23 environmental costs and to MKO's interest in the growing  
24 concerns and distinction is being made between an  
25 embedded cost based cost of service approach and of

1 course, the marginal values and costs in the export  
2 marketplace, as well as those values and costs that have  
3 been raised by other witnesses.

4                   When Manitoba Hydro's projects were built,  
5 the government and Manitoba Hydro justified the adverse  
6 environmental affects, the ongoing environmental affects  
7 and changes to the lives of First Nations people on the  
8 basis the electricity was required to provide for the  
9 needs of the province for industry, schools, homes and  
10 hospitals.

11                   Now one of the simplest references that I  
12 could refer to, in a document that I don't believe would  
13 be controversial in any way, of course, is the Northern  
14 Flood Agreement.

15                   Article 18, article 18.2 sets it out very  
16 clearly.

17                   "Canada and Manitoba recognize that the  
18 project is intended to benefit all  
19 citizens of Canada, and most  
20 particularly of Manitoba, on the one  
21 hand. And that the resource users have  
22 been and may continue to be adversely  
23 effected, on the other hand. And that  
24 it is in the public interest to ensure  
25 that any damage to the interests,

1                   opportunities, lifestyles and assets of  
2                   those adversely effected, be  
3                   compensated appropriately and justly."

4                   So in essence, when we're considering some  
5                   of the changes that have taken place, it's -- MKO  
6                   measures it against this beginning point, in terms of the  
7                   justification and rationale for the initial construction  
8                   of the system and the theory of compensation as it was  
9                   explained, at least in the Northern Flood Agreement.

10                   And of course, I discussed this with Mr.  
11                   Warden, in terms of my phrase, No worse off, as a  
12                   determinative standard which Mr. Warden had indicated  
13                   wasn't necessarily applied by the Corporation, but the  
14                   principles of compensation were certainly applied. And  
15                   here's an example of that.

16                   In Exhibit MKO-2, which of course is the  
17                   summary of the annual reports and the financial and  
18                   operations performance, in Manitoba Hydro 10, which I  
19                   understand was requested to be filed by Dr. Avery-Kinew,  
20                   as materials that had appeared before Mr. Mayer and Dr.  
21                   Kinew -- Avery-Kinew at the CC Hearings.

22                   And then I point to pages 13 and 14 of the  
23                   document that I've provided, which was CAC Exhibit MHNCN-  
24                   1032, and mainly just to the listing and the dates of  
25                   those settlements.

1                   It indicates when the first to the post  
2 NFA settlement agreements, that were paying lump sums as  
3 compensation, were entered into between Manitoba Hydro  
4 and First Nations in 1990/'91, those would be the Forbet  
5 agreement specifically, Manitoba Hydro made a  
6 comparatively modest 18 million in net income, while in  
7 export revenues of \$97 million, while exporting about 31  
8 percent of total electricity production.

9                   At transcript 1285 to 1286, Mr. Wiens  
10 discussed that since at least 1996 the average value of a  
11 kilowatt hour sold on the export market has exceeded the  
12 average value of a kilowatt hour sold to customers in  
13 Manitoba.

14                   And as market deregulation in the United  
15 States has moved forward, the pricing of exports from  
16 incremental cost to full costs, the value of exports has  
17 increased significantly.

18                   At transcript 1290, I was talking with Mr.  
19 Warden about the most recent forecast and it's clear that  
20 by the late spring of 2006, electricity exports will  
21 balloon Manitoba Hydro's net income almost twenty-one  
22 (21) times, as compared to that in 1991, to a corporate  
23 record of, and Mr. Warden corrected me on this, in excess  
24 of \$375 million for more than one-half of total  
25 production being sold as exports.

1                   And for the first time in Manitoba Hydro's  
2 history, more revenues were being made from exports than  
3 from sales of electricity within the Province.

4                   The significant changes in the export  
5 market, and particularly the export price, we believe,  
6 would be expected to result in changes in the operation  
7 of Manitoba Hydro's system in order to achieve maximum  
8 export sales.

9                   Although there isn't a considerable amount  
10 of discussion on this, and we can certainly advise the  
11 Board we intend to pursue this more -- in revenue  
12 requirement proceedings as we continue on, there was a  
13 reference to it in a discussion with Mr. Lazar at  
14 transcript 1607, in the transcript of May 25th.

15                   And in this case he's talking about a  
16 carbon tax, but he makes a reference. He says:

17                   "Depends on where and it depends on  
18 what hours. The hours at which they  
19 can get the highest prices are  
20 typically the hours when gas generation  
21 is operating and they seek to manage  
22 their system to take advantage of that  
23 market opportunity. If there was a  
24 carbon tax imposed, the cost structure  
25 would change, the dispatch order would

1 change, and the operation of the  
2 Manitoba Hydro system would probably  
3 change in response to a changing market  
4 dynamic."

5 While MKO is keenly interested in those  
6 drivers that would cause the Corporation to modify its  
7 system operation in order to maximize export revenues, as  
8 would clearly be presented to the Corporation, it is  
9 interesting that MIPUG had referred to effects directly  
10 on their consumption for the purposes of releasing energy  
11 for export and so forth, but it's clear that the  
12 operation of the systems shifts to maximize profits in  
13 multiple ways.

14 As set out in transcript 1126 to 1128 of  
15 the 2004 General Rate Application -- this is another one  
16 of the documents that I had circulated. And you'll  
17 recall this is my discussion with Mr. Cormie regarding  
18 the water levels on Cedar Lake, Manitoba Hydro can shape  
19 its -- can shape its reservoirs to higher than long-term  
20 average water levels, even under low flow conditions, by  
21 -- and plan its system operations by taking into  
22 consideration that there are eighteen (18) reservoirs in  
23 the water shed. Manitoba Hydro has a considerable degree  
24 of control over its system as a result of this.

25 There is also a discussion in respect of

1 predetermined compensation in these proceedings. The  
2 Public Utilities Board asked questions about that. It --  
3 the indication was that any environmental effects that do  
4 occur are actually tied to Manitoba Hydro's ability to  
5 determine absolute water levels resulting from its  
6 operations. And this is confirmed at PUB/MH-2-7(B) in  
7 the second part of the response, where Manitoba Hydro  
8 says:

9                   "Mitigation payments due to extreme  
10                   high or low water levels are directly  
11                   related to reservoir operations under  
12                   the control of Manitoba Hydro."

13                   So the evidence would be, is if there are  
14 any payments for predetermined compensation, and there  
15 was of course a schedule filed, they are directly as a  
16 result of a conscious set of system operating decisions  
17 that were made by the Corporation.

18                   So in these expected changes to optimize  
19 export revenues, there would also be expected environment  
20 and other effects, some of which are provided for in  
21 compensation in -- in provisions of the existing  
22 settlement agreements. Not all may be.

23                   There must be a full cost accounting of  
24 the costs arising from the ongoing incremental adverse  
25 environmental effects directly associated with the



1 changes and the operation of the developed waterway,  
2 reservoirs and generating facilities, arising from this  
3 change in focus -- or and increased focus to produce  
4 hydroelectricity for the purpose of maximizing export  
5 revenues.

6                   In Exhibit MH/NCN-1032, which was actually  
7 Undertaking 55 from the CAC proceedings, and to some  
8 extent expands on Exhibit MH-10 in this proceeding, it's  
9 my understanding from reading the request during -- in  
10 the transcript, that the same pamphlets that are part of  
11 MH-10 are actually embodied in this same exhibit, and --  
12 but there is a bit more detail in MH/NCN-1032.

13                   This document, and it is particularly the  
14 speaking notes that are attached at the end and which  
15 were read when this undertaking was brought to the  
16 record, confirmed Manitoba Hydro's real -- Manitoba  
17 Hydro's realization that quantification responsibilities  
18 regarding adverse environmental effects have evolved  
19 considerably over the last three (3) decades.

20                   And just using a couple of the passages at  
21 page 15 of MH/NCN-1032:

22                   "The early activities of the  
23 Corporation occurred in an era when  
24 there was very little understanding or  
25 appreciation for the effects of

1 development either on people or on the  
2 environment, and when there was a  
3 marked absence of any form of  
4 environmental regulation or  
5 legislation.  
6 Developments along the Winnipeg River  
7 and at the Grand Rapids, Kelsey and  
8 Kettle sites, were subject to little  
9 societal interest despite the  
10 significant amount of flooding  
11 associated with these projects.  
12 Manitoba Hydro and the Manitoba  
13 Government engaged aboriginal  
14 communities in discussions regarding  
15 mitigation, compensation and  
16 relocation, but there was no general  
17 recognition of a need for continuing  
18 relationships with aboriginal  
19 communities."

20 Now it's the last phrase about the need  
21 for continuing relationships with aboriginal communities  
22 that we're interested in in this context because MKO  
23 believes that the process of full cost accounting is a  
24 portion -- a part of this relationship and that it  
25 continues to evolve.

1                   And perhaps the Sustainable Development  
2 Act, as was discussed by RCM/TREE and their witness, Mr.  
3 Lazar, can provide the foundation for the full cost  
4 accounting of the incremental costs associated with the  
5 modified operation of the Hydro system to maximize export  
6 revenues.

7                   Now, I talked with Mr. Warden, of course,  
8 a bit about the quantification and identification of  
9 these incremental costs and was pointed to, of course, a  
10 note in the financial statements regarding future  
11 liability.

12                   The distinction that we make between these  
13 two (2) amounts, however, is that the settlement  
14 agreements described in MH/NCN-1032 and elsewhere in this  
15 proceeding as well as the note to the financial statement  
16 refer to settlement of claims related to Hydro  
17 development, in essence, full and final settlement of  
18 claims as many of these documents are worded. The  
19 Northern Flood Agreement is an exception to its language.

20                   But what we're talking about are these  
21 continuing and evolved relationships with aboriginal  
22 communities, some of which are described in ongoing  
23 programs that are in Exhibit MH/NCN-1032 which are not  
24 necessarily fully captured within the scope of the  
25 settlement agreements but are part of the Corporation's

1 commitment to its relationships between itself and its  
2 customers, particularly the aboriginal customers, First  
3 Nation customers affected by its operations.

4           So there are mitigation expenditures that  
5 fall into categories in respect of settlement and those  
6 that are ongoing and we're keenly interested in  
7 determining, at some time, the distinction between these.

8           These incremental costs associated with  
9 the change in operations must be identified, quantified  
10 and, we believe, reflected in the costs. As noted by Mr.  
11 Lazar, there are experts who can quantify these costs and  
12 that was noted at transcript 1649 line 20, and at 1650 at  
13 line 12.

14           A Hydro affected customer class or sub-  
15 class of those residential and general service customers  
16 who are most directly affected by -- by Manitoba Hydro's  
17 modified operations should be created in the cost of  
18 service study when it's possible to quantify and identify  
19 these costs.

20           When the cost of service study is applied  
21 for the purpose of designing rates the Hydro affected  
22 customer class or sub-class should be excluded from any  
23 allocation of these incremental environmental costs real  
24 or notional with these costs being shared by an allocated  
25 to all other customer classes.

1                   When the cost is applied for allocating  
2 net export revenue however, a direct allocation of the  
3 incremental environmental costs, real or notional, should  
4 be made to the Hydro affected customers for the purpose  
5 of attracting net export revenue.

6                   Now, we don't have a mechanism nor do we  
7 have evidence before you on this matter. But it's a  
8 matter to proceed with and to develop information and  
9 evidence on. Mr. Lazar states at page 2 of his evidence  
10 that:

11                               "I present alternatives built upon this  
12 recommended method that incorporate  
13 marginal environmental costs associated  
14 with energy consumption during the  
15 various rate periods used in the  
16 recommended method."

17                   Well, as CAC/MSOS pointed out earlier,  
18 while Mr. Lazar had limited his recommendations of  
19 marginal environmental costs associated with "energy  
20 consumption" in quotes, to notional costs associated only  
21 with carbon dioxide in this proceeding, and that's at  
22 transcript 1641, line 25 and, of course, again at 1642 at  
23 line 2.

24                   He also stated that other notional  
25 environmental costs in my discussion with him, as well as

1 others, at transcript 1645 and line 22 and 1646, line 3,  
2 can be quantified and it would be appropriate to include  
3 them in the PCOSS, at transcript 1650, line 16.

4           So in essence, while we don't have it  
5 completely before us here, we believe that this is the  
6 leading edge of investigation as the Corporation  
7 continues to evolve with a sharpened focus on maximizing  
8 its export revenues and something to pursue at we proceed  
9 in further proceedings.

10           The last area that I had that I wanted to  
11 discuss was the system development and distribution  
12 costs; that is the use of distribution costs within the  
13 recommended method as a -- as a means of allocating net  
14 export revenues.

15           We note that the evidence prepared by  
16 MIPUG raises concerns with the inclusion of distribution  
17 assets in PCOSS on the basis that they have no cost base  
18 linkage to returns for export sales, and that's at MIPUG-  
19 1, page 2, line 5. The MIPUG witnesses also suggest that  
20 excess export revenues be applied in a manner to keep  
21 existing rates stable.

22           One (1) of the things that we believe is  
23 important in running through this analysis, of course, is  
24 that the Limestone generating station, as it was  
25 discussed in this proceeding, was the last plant added to

1 the Manitoba Hydro system.

2 I've provided for -- just information an  
3 extract from the National Energy Board's decision in EH  
4 6/84, February 1985, which was with respect to a licence  
5 to export the advanced energy from the Limestone sale.

6 You'll recall that Mr. Peters and Mr.  
7 Warden discussed the advancement of Limestone as being  
8 one (1) year in advance of its requirements domestically.  
9 And that's at transcript 222 and 223, where Mr. Warden  
10 confirmed that Limestone is required for domestic  
11 purposes and advanced one (1) year to produce an export  
12 sale.

13 The point of this only at page 9 of the  
14 NEB extract, is that when Manitoba Hydro submitted its  
15 application to the National Energy Board it described the  
16 load increase that was necessary to be met with the  
17 Limestone project as applying to load across the system,  
18 to residential, general service, agricultural and  
19 industrial loads.

20 So the Limestone project was intended by  
21 Manitoba Hydro to serve all of the loads of the province,  
22 all customers classes in the PCOSS. The information in  
23 the Footnote number 2 and the paragraph description under  
24 Item 5.2 Load Forecast clearly discuss it.

25 So the -- the rationale for Limestone

1 wasn't to meet a particular industrial load or an  
2 expansion that was not going to materialize, it was for  
3 all of the needs of the Province.

4                   And of course this is noted by Manitoba  
5 Hydro itself in PUB/MH1-17, the information response,  
6 Item B, and the answer is:

7                   "Their rationale, as outlined in PCOSS-  
8 06, is that Manitoba Hydro's system was  
9 not built with the explicit purpose of  
10 serving extra-provincial customers and  
11 is built first and foremost to provide  
12 reliable power to domestic customers  
13 with any excess available to serve  
14 export markets."

15                   And I only briefly touch on the  
16 interesting historical piece from the IEEE Canadian  
17 Review for last winter, from former Chairman of Manitoba  
18 Hydro, Mr. Leonard Bateman, in which he comments that the  
19 development of the system, both for Grand Rapids and the  
20 early Nelson River plants were also to meet provincial  
21 loads.

22                   In fact, it's interesting that he notes  
23 that the first tie line was built to the United States,  
24 not to make an export sale but to make an energy purchase  
25 because of the burgeoning load in Manitoba as the Kettle



1 River plants were under construction.

2                   So I only leave this as a piece of  
3 information that, again, a former Chair who is in the  
4 Chair during a time of great expansion said that the  
5 plants were being constructed for domestic need and for  
6 domestic purposes. And I invite you to read it at your  
7 leisure, it's an interesting historical document.

8                   Clearly, the system is built to serve all  
9 customers and hence it follows that all customers and all  
10 costs should be included in the determination of the  
11 allocation of net export revenues. Lazar refers to this  
12 at transcript 1659, lines 4 to 7, and of course again in  
13 his pre-filed testimony, at page 5, lines 34 to 37.

14                   In an exchange with Mr. Williams, MIPUG  
15 suggested distribution costs should be excluded, and this  
16 is at transcript 1965 on May 26th. Mr. Williams:

17                   "As I understand your evidence, and  
18 just to summarize that point, you're  
19 suggesting that all export revenues in  
20 the cost of service study should be  
21 allocated back to generation and  
22 transmission; correct?"

23                   And Mr. Bowman replied:

24                   "Ultimately, either via an export class  
25 or via credit of the form done in the

1 current method, yes, that's correct."

2 What these witnesses are suggesting is  
3 that the favourable treatment that has been enjoyed  
4 should be continued to help keep industrial customer  
5 rates at a level, because clearly one of the things that  
6 affects the current allocation of costs, and potentially  
7 the rates for industrial class, is the addition of the  
8 distribution costs as an allocator for net export revenue  
9 purposes.

10 The witnesses state that, of course, the  
11 Hydro's proposed PCOSS would not allow for the  
12 development of suitable modern rate designs, and that was  
13 at MIPUG-1 page 2, lines 14 to 18. But as Mr. -- as the  
14 Vice Chair and others have pointed out, that's for a rate  
15 design hearing to pursue.

16 We believe that the rates that would  
17 emerge from the recommended method would, in fact, be  
18 reasonab -- just and reasonable, fair and stable. And  
19 for this regard for -- in terms of the historical basis  
20 on which capacity has been added to the Manitoba Hydro  
21 system, based on Manitoba Hydro's own comments,  
22 primarily, of course, on the record in PUB/MH1-17, and  
23 the historical record, which is evident, that the notion  
24 of rejecting distribution costs as a means of allocating  
25 net export revenue, we believe, should be rejected by the

1 Board and that the recommended method should be adopted.

2           So in summary, MKO recommends that diesel  
3 class annual revenue requirements should be included as a  
4 direct assigned cost in the PCOSS under any of the four  
5 (4) methods. So we realize that technically that would  
6 no longer be, strictly speaking, the current method if  
7 that was done.

8           But, in essence, if the Board chose to  
9 continue the current method, it would be with this  
10 variation in respect of diesel costs, because it's  
11 essential that that -- that be adopted and approved by  
12 the Board in order to provide for the tentative  
13 settlement.

14           We also recommend that the diesel cost  
15 annual revenue requirement, for the purpose of setting  
16 rates, be based on post-settlement costs; that is, with  
17 the capital costs effected by the pre-payment of those  
18 costs, but for the purposes of allocating net export  
19 revenue, that the full cost remain.

20           It's simply an option as part of the  
21 tentative settlement to pay them in advance, so the  
22 customer should still continue to receive the credit for  
23 those amounts in terms of net export revenue allocation.

24           That the Public Utilities Board should  
25 approve the recommended method as proposed by Manitoba

1 Hydro for PCOSS-06 for the treatment of grid customers.  
2 In so doing, the PUB will approve the allocation of net  
3 export revenues to the diesel class as contemplated in  
4 Order 159/04. So by adopting the recommended method we  
5 still get back to where we need to be in terms of diesel  
6 customers in the tentative settlement.

7           The PUB should direct Manitoba Hydro to  
8 identify and quantify incremental costs associated with  
9 the changes in operation to maximize export revenues.  
10 Based on the principle that I had mentioned briefly, or  
11 quoted from Article 18.2, the original Northern Flood  
12 Agreement, and certainly the principles adopted and  
13 espoused by the company, these changes should be tracked  
14 and studied, and, if necessary, incorporated into the  
15 cost of service study once they're identified. But we  
16 need to know what they are first before we can determine  
17 what to do with them.

18           The Public Utilities Board should direct  
19 Manitoba Hydro to review and report on the concept of  
20 creating a hydro effected customer class or sub-class, to  
21 which customer class or sub-class, a direct allocation  
22 would be made of the incremental environmental costs,  
23 real or notional, in order to attract an allocation of  
24 net export revenues to provide additional recognition for  
25 the incremental costs and compensation for them.

1           In essence, going back to Manitoba Hydro's  
2 comments on the original rationale for the system and,  
3 again, back to Article 18-2 of the Northern Flood  
4 Agreement, the original basis for the development of the  
5 system has fundamentally changed from providing for the  
6 needs of the province, purely. Mr. Warden, of course, in  
7 his discussion with Mr. Peters, had indicated that  
8 Section 2 of the Hydro Act had been modified to more  
9 clearly provide Manitoba Hydro with the direct authority  
10 to bill for export.

11           This was clearly not the case at the time  
12 the projects, that we're now enjoying, the export and  
13 generation of, were built.

14           And finally, the Public Utilities Board  
15 should direct Hydro to exclude Hydro effected customers  
16 from paying for mitigation costs through their own bills,  
17 through Hydro's tariff, potentially through a mechanism,  
18 the most simply, as we'd indicated, which would be a  
19 refund rider which we calculated approximately 4 percent.

20           We don't have -- we would have tried to  
21 take a more deliberate calculation of what we thought  
22 that would do in rate impacts, but we don't have the  
23 billing determinants, number of customers and sort of  
24 things we would need to do that. That's for a rate  
25 design hearing.

1 I had a final matter, if I might have an  
2 additional minute? All right. You said five (5) minutes  
3 to 5:00 and I'm just about --

4 THE CHAIRPERSON: You're doing very well,  
5 Mr. Anderson.

6 MR. MICHAEL ANDERSON: Thank you very  
7 much, Mr. Chair. I had timed it out and tried to give my  
8 estimate to Mr. Peters accurately.

9 I wanted to, as I said in my opening  
10 comments, to thank all of the parties, the Board and  
11 Manitoba Hydro for engaging in electronic filing. As you  
12 can see, I'm travelling somewhat lighter. It also  
13 permits us to be, you know, searching the records and  
14 frankly saves us the time from creating PDF files out of  
15 large volumes in binders, although they do come in handy  
16 at times.

17 But I want to acknowledge the effort  
18 that's gone into it and the exploration of doing  
19 something different. And just to say, for one (1)  
20 participant in the proceedings, I appreciate it very  
21 much.

22 With that -- in that sort of vein, though,  
23 I wanted to comment on the reply to MKO/MH2-4, in which  
24 we had requested spreadsheets for many of the tables that  
25 appear in the proceeding, particularly the cost of

1 service studies, crucial tables like B-4 and others.

2 In declining to respond to our request to  
3 provide an active Excel or other spreadsheet, Manitoba  
4 Hydro claimed it would be time consuming, proprietary,  
5 and that commercial value may effected.

6 Well, we would say, firstly, time  
7 consuming for whom? It's our understanding that the  
8 Corporation prepares these spreadsheets -- these exhibits  
9 based on their own use of spreadsheets internally.

10 And so then the time consuming aspect of  
11 it is imposed on the participants to basically  
12 deconstruct and regenerate tables by analysing them. And  
13 we may not entirely get it correctly, although the  
14 numbers are self-evident in terms of the calculation in  
15 most cases.

16 The comment that the Manitoba Hydro models  
17 are proprietary, is a matter of interest. And I realize  
18 that perhaps these should have been matters for cross-  
19 examination, and I did, in fact, have them to go, but I  
20 wanted to raise it as an issue to ask the Board its  
21 interest in its order as to what would be so unique about  
22 these models that other utilities aren't using them. So  
23 we're interested in what that would be.

24 And in terms of the commercial value that  
25 these spreadsheets may have, value to whom? Are they

1 being, for example, sold to others and so forth.

2                   So as we progress to electronic filing,  
3 MKO recommends that that include the tools that we need  
4 for running simulations, sensitivity analyses and so  
5 forth, by having the principal schedules and so forth  
6 that are in the filings provided to the applicants in  
7 electronic format, so that when there's a question  
8 raised, or a query that may be raised either by the  
9 participants, by the Board or by the Intervenors, we can  
10 run the math and be fairly accurate.

11                   And then by building a database through  
12 successive proceedings, we all become better informed  
13 about the operations, and certainly become more intimate  
14 in terms of the specific considerations that Manitoba  
15 Hydro's witnesses take such great care to explain to us  
16 so that we get everything right.

17                   And with that I would also like to thank  
18 the Board, Board Counsel, Manitoba Hydro and all  
19 participants for their engagement in this very important  
20 and interesting proceeding, for the level of detail and  
21 thoughtfulness that they've all shared in this, and of  
22 course, not least and last, for the patience of all in  
23 accommodating the participation of the Manitoba  
24 Keewatinook Ininev Okimovin in this proceeding.

25                   And with that, Agu Sonni (phonetic).



1 Thank you very much.

2 THE CHAIRPERSON: Thank you, Mr.  
3 Anderson, for an interesting closing statement.

4

5 (BRIEF PAUSE)

6

7 THE CHAIRPERSON: Well, that concludes  
8 the Intervenors' closing statements and we'll look  
9 forward to Ms. Ramage and Manitoba Hydro on Friday  
10 morning at nine o'clock. Thank you everyone.

11

12 --- Upon adjourning at 5:02 p.m.

13

14

15 Certified Correct,

16

17

18

19

20 \_\_\_\_\_  
Ryan Pickering

21

22

23

24

25